

PowerFlex 750-Series Products with TotalFORCE Control

Bulletin Numbers 20G, 20J

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Summary of Changes

This publication contains the following new or updated information. This list includes substantive updates only and is not intended to reflect all changes. Translated versions are not always available for each revision.

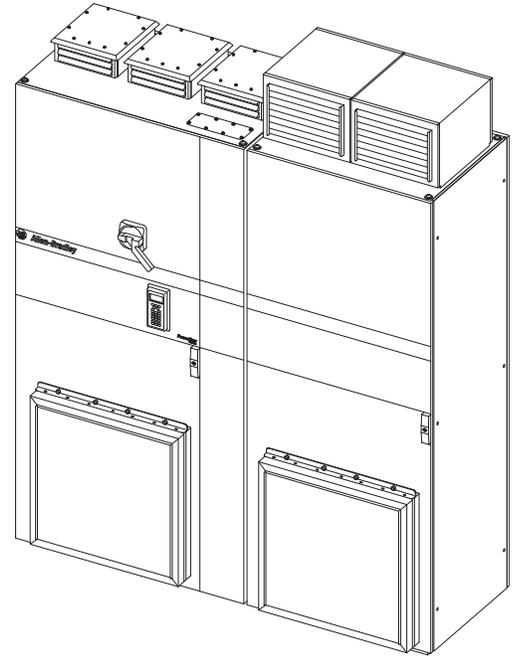
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Added the PowerFlex 755TR liquid cooled frame 6L drive to this publication.	Throughout
Added Code 4 to Table B - Corrosive Gas Protection and Cooling Type for the PowerFlex 755TR liquid cooled frame 6L drive.	6
Added PowerFlex 755TR liquid cooled frame 6L drive rating to Tables F1 and F2.	7
Added PowerFlex 755TR liquid cooled frame 6L drive to Product Selection—400V AC PowerFlex 755TL and 755TR Drives.	14
Added PowerFlex 755TR liquid cooled frame 6L drive ratings to Product Selection—480V AC PowerFlex 755TL and 755TR Drives.	15
Added PowerFlex 755TR liquid cooled frame 6L drive to Certifications and Specifications.	25
Added Liquid Cooling Loop Requirements.	39
Added PowerFlex 755TR liquid cooled frame 6L drive to the Minimum Mounting Clearances section.	42
Added PowerFlex 755TR liquid cooled frame 6L drive Accessory Kits.	62
Added PowerFlex 755TR liquid cooled frame 6L drive to the Fuses and Circuit Breakers section.	69
Added PowerFlex 755TR liquid cooled frame 6L drive to the PowerFlex Products Approximate Dimensions section.	115
Added PowerFlex 755TR liquid cooled frame 6L drive derating curves to the Derating Guidelines section.	148

Introduction

PowerFlex® 750-Series products with TotalFORCE® technology offer precise motor control along with solutions for harmonic mitigation, regeneration, and common-bus system configurations. TotalFORCE technology delivers exceptional motor control through precise, adaptive control of position, velocity, and torque for electric motors. It incorporates several patented features that are designed to help optimize your system and maintain productivity.

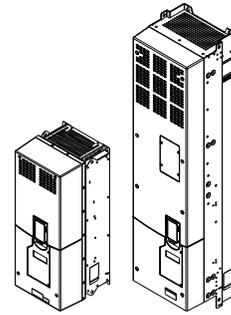
Maximize your productivity by taking advantage of the following key features that are offered in the PowerFlex 750-Series products with TotalFORCE technology:

- **PowerFlex 755TL Drive** – Provides harmonic mitigation and power factor correction by using active front end technology.
- **PowerFlex 755TR Drive** – Features built-in regeneration capability that helps reduce energy consumption by delivering regenerative energy from motors back to the incoming supply. Line regeneration can reduce the need for braking resistors and associated cooling equipment and helps avoid wasteful dissipation of energy. The drive also offers harmonic mitigation.
- **PowerFlex 755TM Drive System** – Select from a series of configurations for regenerative bus supplies and common bus inverters to optimize your system design and power consumption. Gain energy efficiency with motors that share energy between regenerating and motoring loads. A common bus drive system offers advantages such as design flexibility, energy optimization, and reduced installation costs. Systems provide harmonic mitigation and built-in regeneration capability.
- **PowerFlex 755T Drives Configured to Order Program** – Combines configured input bay and configured output bay options with standard PowerFlex 750-Series Drives with TotalFORCE Control.
- **Corrosive Gas Protection (XT)** – The PowerFlex TL, TR, and TM products are now manufactured with corrosive gas protection (XT) as a standard. Our drives with XT combine conformal coating with several additional design enhancements to provide improved performance in environments with corrosive gases such as tire and rubber, wastewater, pulp and paper, and metals to name a few.
- **Built-in Reflected Wave Filter** – This option provides improved motor protection in a cost effective, built-in, space-saving package that eliminates the need for wiring to an external device.
- **Predictive Maintenance** – Helps improve productivity by estimating the remaining life span of drive components so preventive action can be taken before component wear-out causes unplanned downtime.
- **Market-leading power density** – High power ratings in a relatively compact footprint.
- **Serviceability** – Fast and easy servicing of drive helps save you time and reduce costs.
- **Roll in/roll out design** – Makes the drive easy to install and service. Power wiring can stay connected while unit is rolled out.
- **Patented slot-based hardware structure** – Allows you to select option modules for safety, feedback, communications, and I/O.
- **Safe Torque Off and Safe Speed Monitor** – Provide a choice for safety levels depending on your application requirements.
- **Load Observer** – Maintain productivity with control that adapts to operating conditions.
- **Voltage Boost** – Provides full voltage to the motor in applications where less than motor rated voltage is available.
- **Ride-Through** – Helps keep equipment running through power quality disturbances.
- **TorqProve™ Control** – Patented control coordinates motor torque and brake operation in hoist applications.
- **Communications** – The PowerFlex 755T products feature built-in dual EtherNet/IP™ ports.



PowerFlex 755TL Low Harmonics Drives

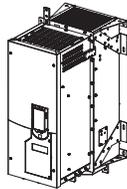
- Low harmonics drive non-regenerative applications from 10...1800 Hp, 7.5...1400 kW, 400/480/600/690V
- IP20, UL Open Type/IP21, UL Type 1/IP54, UL Type 12



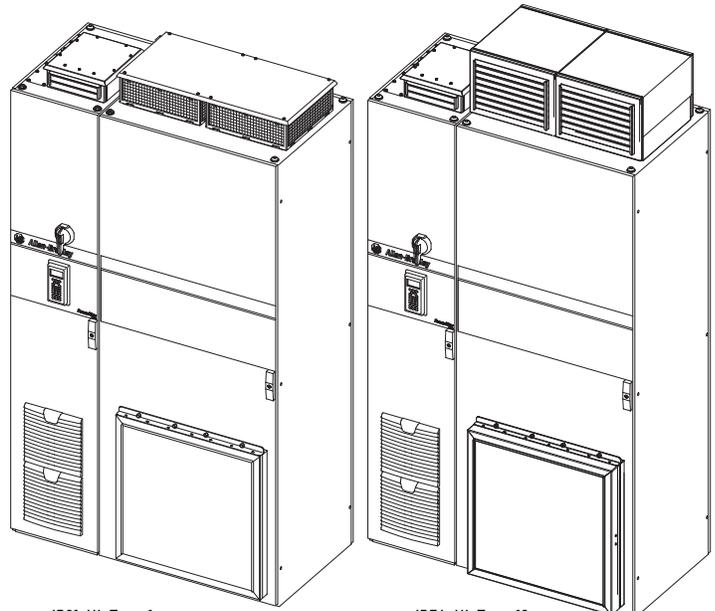
IP20, UL Open Type

PowerFlex 755TR Regenerative Drives

- Regenerative applications from 10...6000 Hp, 7.5...4500 kW, 400/480/600/690V
- Reduction of Harmonic content
- IP20, UL Open Type/IP21, UL Type 1/IP54, UL Type 12/IP00, UL Open Type



IP00, UL Open Type
(Liquid cooled drive.)

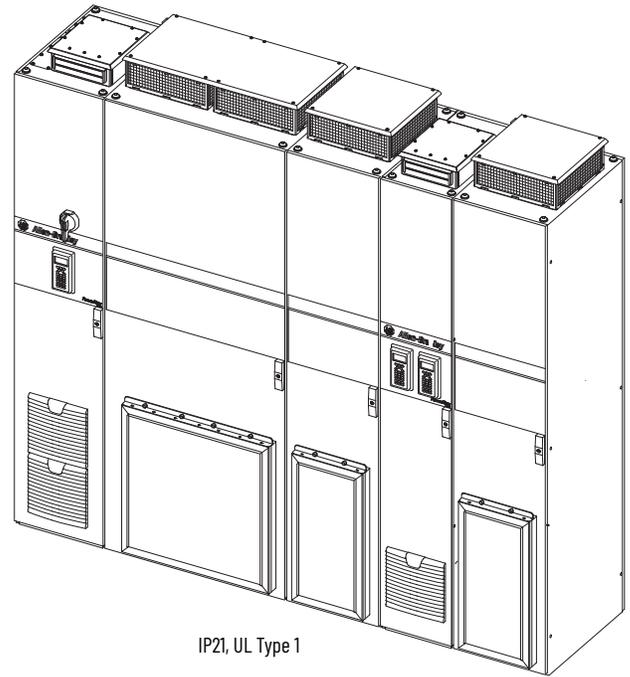


IP21, UL Type 1

IP54, UL Type 12

PowerFlex 755TM Drive Systems

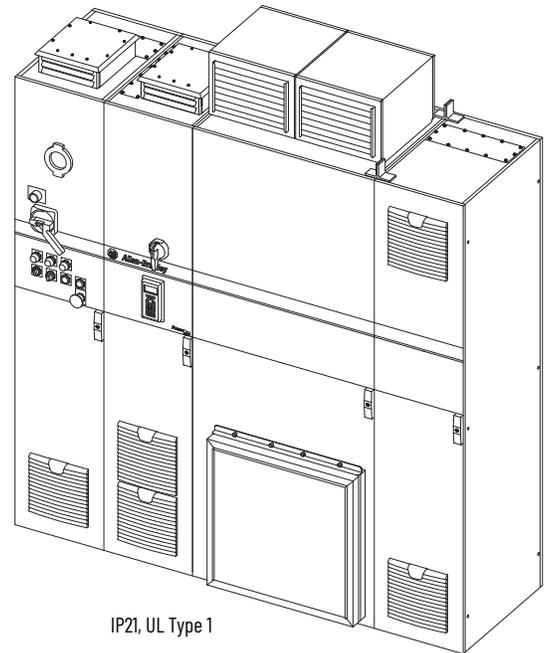
- Low harmonics drive non-regenerative applications from 250...6000 Hp, 160...2300 kW (AC), 70...4800 kW (DC)
- Regenerative bus supplies
- Common bus inverters
- IP21, UL Type 1/IP54, UL Type 12/IP00, UL Open Type



IP21, UL Type 1

PowerFlex 755T Drives Configured to Order Program

- Available for PowerFlex 755TM, 755TL, and 755TR drives in frames 7, 8, and 9 (at publication).
- Configured bays are floor-mounted IP21, UL Type 1, or IP54, UL Type 12 enclosures.
- Input protection options include circuit breaker, fuses, or fused disconnect.
- Output options include output contactor, output sine-wave filter, or output sine-wave filter with contactor.
- Also choose options like door-mounted push buttons, pilot lights, selector switches, and more.
- CTO drives are configured in the Advisor tool, allowing them to meet precise application requirements. Refer to the tool for the latest available CTO options.



IP21, UL Type 1

Catalog Number Explanation

Catalog number positions 1..7 identify the product type and voltage rating.

1...3	4	5	6	7	8...10	11	12	13	14	15	16	17	18	
20G	E	G	3	D	740	L	N	A	N	N	N	N	N	-CO-P15...
A	B	C	D	E										

A

Drive

Code	Type	Frames
20G	PowerFlex 755TL Drives	5...10
	PowerFlex 755TR Drives	5...15, and 6L
	PowerFlex 755TM Common Bus Inverters	8...15
20J	PowerFlex 755TM Bus Supplies	6...15

B

Corrosive Gas Protection and Cooling Type

Code	Description	Frames	Firmware
E	Corrosive Gas Protection (XT), Forced Air	5...15	10.xxx and later
4	Corrosive Gas Protection (XT), Liquid Cooled	6L	13.xxx and later

C

Input Type

Code	Description	Frames
6	Regenerative and Low Harmonic AFE, 755TR Drives	5, 6, 6L, and 7
	Regenerative and Low Harmonic AFE, 755TM Bus Supplies	6 and 7
7	Low Harmonic AFE, 755TL Drives	5, 6, and 7
D	Common Bus with DC Precharge	8...15
E	Common Bus without DC Precharge	8...15
F	Regenerative and Low Harmonic AFE, 755TR Drives	8...15
	Regenerative and Low Harmonic AFE, 755TM Bus Supplies	8...15
G	Low Harmonic AFE, 755TL Drives	8...10

D

Enclosure

Code	Description	Frames
N	IPO0, UL Open Type	5, 6, and 6L
	IP20, UL Type 1; Floor Mount	7 ⁽¹⁾
3	IP21, UL Type 1; Floor Mount	7...15
4	IP54, UL Type 12; Floor Mount	7...15

(1) Only select code N for frame 7 drives when selecting the EMC C2 solution in [Table I](#).

E

Voltage Rating

Code	Voltage
C	400V AC; 3 PH
D	480V AC; 3 PH
E	600V AC; 3 PH
F	690V AC; 3 PH

Catalog number positions 8...10 identify the product normal duty rating.

1...3 4 5 6 7 8...10 11 12 13 14 15 16 17 18
 20G E G 3 D 740 L N A N N N N N -C0-P15...

F1...F4

F1

PowerFlex 755T ND Drive Ratings 400V, 50 Hz Input			
Code	Amps	kW	Frame
015	15.4	7.5	5
022	22	11	
030	30	15	
037	37	18.5	
043	43	22	
060	60	30	
072	72	37	
085	85	45	
104	104	55	
140	140	75	
176	170	90	6
205	205	110	
260	260	132	
360	361	200	
302	302	160	6L
367	367	200	7
460	460	250	
540	540	315	
585	600	315	
302	302	160	
367	367	200	
460	460	250	8
540	540	315	
585	585	315	
650	650	355	
750	750	400	
770	770	400	
920	920	500	9
1K0	1040	560	
1K1	1112	630	
1K2	1175	710	
1K4	1463	800	
1K6	1590	850	10
1K7	1715	1000	
2K1	2156	1250	
2K8	2849	1650	11
3K5	3542	2000	12
4K2	4235	2200	13
5K6	5621	2920	14
7K0	7007	3640	15

F2

PowerFlex 755T ND Drive Ratings 480V, 60 Hz Input			
Code	Amps	Hp	Frame
014	14	10	5
022	22	15	
027	27	20	
034	34	25	
040	40	30	
052	52	40	
065	65	50	
077	77	60	
096	96	75	
125	125	100	
156	156	125	
186	186	150	
248	248	200	
360	361	300	6L
302	302	250	7
361	361	300	
430	430	350	
505	505	400	
617	600	500	
302	302	250	
361	361	300	8
430	430	350	
505	505	400	
545	545	450	
617	617	500	
710	710	600	
740	740	650	9
800	800	700	
960	960	800	
1K0	1045	900	
1K1	1135	1000	
1K3	1365	1100	10
1K4	1420	1250	
1K6	1655	1500	
2K0	2072	1800	11
2K6	2738	2400	12
3K4	3404	3000	13
4K0	4070	3600	14
5K4	5402	4800	15
6K7	6734	6000	15

F3

PowerFlex 755T ND Drive Ratings 600V, 60 Hz Input			
Code	Amps	Hp	Frame
011	11	10	5
017	17	15	
022	22	20	
027	27	25	
032	32	30	
041	41	40	
052	52	50	
062	62	60	
077	77	75	6
099	99	100	
125	125	125	
144	144	150	
192	192	200	7
242	242	250	
295	295	300	
355	355	350	
395	395	400	
242	242	250	8
295	295	300	
355	355	350	
395	395	400	
435	435	450	
545	545	550	9
595	580	600	
690	690	700	
760	760	800	
825	825	900	
980	980	1000	
1K1	1045	1100	10
1K2	1220	1250	
1K5	1430	1500	
2K0	1946	2000	11
2K4	2420	2500	12
2K9	2998	3100	13
3K9	3979	4100	14
4K9	4960	5100	15

F4

PowerFlex 755T ND Drive Ratings 690V, 50 Hz Input			
Code	Amps	kW	Frame
015	15	11	5
020	20	15	
023	23	18.5	
030	30	22	
034	34	30	
046	46	37	
050	50	45	
061	61	55	
082	82	75	6
098	98	90	
119	119	110	
142	142	132	
171	171	160	7
215	215	200	
265	265	250	
330	330	315	
370	370	355	
215	215	200	8
265	265	250	
330	330	315	
370	370	355	
415	415	400	
505	505	500	9
565	565	560	
650	650	630	
735	735	710	
820	820	800	
920	920	900	
1K0	1030	1000	10
1K1	1150	1100	
1K4	1419	1400	
1K8	1865	1800	11
2K3	2318	2300	12
2K7	2778	2750	13
3K6	3687	3650	14
4K5	4596	4550	15

Catalog number positions 8...10 identify the product normal duty rating.

1...3 4 5 6 7 8...10 11 12 13 14 15 16 17 18
 20J E F 3 C 1K6 L N A N N N N N -C1-P16...

G1...G4

G1

PowerFlex 755TM ND Bus Supply Ratings 400V AC, 50 Hz Input 580V DC Output			
Code Rated AC Input Amps	DC Amps	DC kW	Frame
140	150	87	6
176	182	106	
205	220	128	
260	279	162	
302	324	188	7
367	394	228	
460	494	286	
540	579	336	
585	644	373	
302	324	188	8
367	394	228	
460	494	286	
540	579	336	
585	628	364	
650	698	405	
750	805	467	
770	826	479	
920	987	572	9
1K0	1116	647	
1K1	1193	692	
1K2	1261	731	
1K4	1570	910	
1K6	1697	984	10
1K7	1840	1067	
2K1	2314	1342	11
2K8	3057	1772	
3K5	3801	2204	12
4K2	4543	2634	13
5K6	6030	3496	14
7K0	7517	4358	15

G2

PowerFlex 755TM ND Bus Supply Ratings 480V AC, 60 Hz Input 696V DC Output			
Code Rated AC Input Amps	DC Amps	DC kW	Frame
125	129	90	6
156	160	111	
186	191	133	
248	255	177	
302	311	216	7
361	371	258	
430	442	307	
505	519	361	
617	617	429	
302	311	216	8
361	371	258	
430	442	307	
505	519	361	
545	560	390	
617	635	442	
710	730	508	
740	761	529	
800	823	573	9
960	987	687	
1K0	1075	748	
1K1	1167	812	
1K3	1404	977	
1K4	1460	1016	10
1K6	1702	1184	
2K0	2131	1483	11
2K6	2816	1959	
3K4	3501	2436	12
4K0	4186	2912	13
5K4	5555	3865	14
6K7	6925	4818	15

G3

PowerFlex 755TM ND Bus Supply Ratings
600V AC, 60 Hz Input
870V DC Output

Code Rated AC Input Amps	Amps	kW	Frame
077	79	69	6
099	102	89	
125	129	112	
144	148	129	
192	197	171	7
242	249	217	
295	303	263	
355	365	317	
395	406	353	
242	249	217	8
295	303	263	
355	365	317	
395	406	353	
435	447	389	
545	560	487	9
595	596	518	
690	710	617	
760	782	680	
825	848	737	
980	1008	877	10
1K1	1075	935	
1K2	1255	1091	
1K5	1471	1279	11
2K0	2001	1740	
2K4	2489	2164	12
2K9	3080	2678	13
3K9	4088	3555	14
4K9	5096	4432	15

G4

PowerFlex 755TM ND Bus Supply Ratings
690V AC, 50 Hz Input
1000V DC Output

Code Rated AC Input Amps	Amps	kW	Frame
082	84	84	6
098	101	101	
119	122	122	
142	146	146	
171	176	176	7
215	221	221	
265	272	272	
330	339	339	
370	380	380	
215	221	221	8
265	272	272	
330	339	339	
370	380	380	
415	426	426	
505	518	518	9
565	580	580	
650	667	667	
735	754	754	
820	842	842	
920	944	944	10
1K0	1057	1057	
1K1	1180	1180	
1K4	1456	1456	11
1K8	1914	1914	
2K3	2379	2379	12
2K7	2849	2849	13
3K6	3781	3781	14
4K5	4714	4714	15

Catalog number positions 8...10 identify the product normal duty rating.

1...3 4 5 6 7 8...10 11 12 13 14 15 16 17 18
 20G E D 3 F 2K3 M N D N N N N N -C0-C11-P15...

H1...H4

H1

PowerFlex 755T ND CBI Ratings 400V, 50 Hz Input			
Code	Amps	kW	Frame
302	302	160	8
367	367	200	
460	460	250	
540	540	315	
585	585	315	
650	650	355	
750	750	400	
770	770	400	
920	920	500	
1K0	1040	560	9
1K1	1112	630	
1K2	1175	710	
1K4	1463	800	
1K6	1590	850	10
1K7	1715	1000	
2K1	2156	1250	
2K8	2849	1650	
3K5	3542	2000	
4K2	4235	2200	13
5K6	5621	2920	14
7K0	7007	3640	15

H2

PowerFlex 755T ND CBI Ratings 480V, 60 Hz Input			
Code	Amps	Hp	Frame
302	302	250	8
361	361	300	
430	430	350	
505	505	400	
545	545	450	
617	617	500	
710	710	600	
740	740	650	
800	800	700	
960	960	800	9
1K0	1045	900	
1K1	1135	1000	
1K3	1365	1100	
1K4	1420	1250	10
1K6	1655	1500	
2K0	2072	1800	
2K6	2738	2400	
3K4	3404	3000	
4K0	4070	3600	13
5K4	5402	4800	14
6K7	6734	6000	15

H3

PowerFlex 755T ND CBI Ratings 600V, 60 Hz Input			
Code	Amps	Hp	Frame
242	242	250	8
295	295	300	
355	355	350	
395	395	400	
435	435	450	
545	545	550	
595	580	600	9
690	690	700	
760	760	800	
825	825	900	
980	980	1000	
1K1	1045	1100	10
1K2	1220	1250	
1K5	1430	1500	
2K0	1946	2000	

H4

PowerFlex 755T ND CBI Ratings 690V, 50 Hz Input			
Code	Amps	kW	Frame
215	215	200	8
265	265	250	
330	330	315	
370	370	355	
415	415	400	
505	505	500	
565	565	560	9
650	650	630	
735	735	710	
820	820	800	
920	920	900	
1K0	1030	1000	10
1K1	1150	1100	
1K4	1419	1400	
1K8	1865	1800	

H3

PowerFlex 755T ND CBI Ratings 600V, 60 Hz Input			
Code	Amps	Hp	Frame
2K4	2420	2500	12
2K9	2998	3100	13
3K9	3979	4100	14
4K9	4960	5100	15

H4

PowerFlex 755T ND CBI Ratings 690V, 50 Hz Input			
Code	Amps	kW	Frame
2K3	2318	2300	12
2K7	2778	2750	13
3K6	3687	3650	14
4K5	4596	4550	15

Catalog number positions 11...13 identify additional product configuration.

1...3 4 5 6 7 8...10 11 12 13 14 15 16 17 18

20G E G 3 D 740 L N A N N N N N -CO-P15...

I J K

I

Filtering and CM Cap Configuration						
Code	EMC Filtering ⁽¹⁾	PE-A ⁽²⁾	PE-B	DR ⁽³⁾	Reflective Wave Filtering	Frames
J ⁽⁴⁾	Yes	Installed	Removed	—	No	8...15
K ⁽⁴⁾	Yes	Installed	Removed	—	Yes	8...15
L ⁽⁵⁾	No	Installed	Removed	Installed	No	5...15, and 6L
M ⁽⁵⁾	No	Installed	Removed	—	Yes	8...15
P ⁽⁶⁾	Yes	Installed	Removed	—	No	7

- (1) EMC C2 rating, conducted only (IP20), is provided by 'P' filtering option for frame 7; C2 solutions kits are also available for frames 5, 6, 6L, and 8...10. See [Accessory Kits on page 62](#).
- (2) Configuration does not apply to product type 20G with input types D and E. PE-A jumpers are removed when bus conditioner for marine applications (-P51) is selected.
- (3) The DR jumper only applies to frame 5, 6, 6L, and 7 drives.
- (4) Does not provide a C2 solution (C3 compliant), but does include some filtering.
- (5) C3 compliant without additional filtering.
- (6) Filtering with C2 compliance.

J

Dynamic Braking ⁽¹⁾			
Code	Internal Resistor	Internal Transistor	Frames
N	No	No	5...15, and 6L

(1) Not available on Frames 8...15, specify Code 'N'.

K

Door-mounted HIM (Frames 7...15)		
Code	Operator Interface and Control	Frames
A	No HIM with TotalFORCE Control	5...15, and 6L
D	Enhanced LCD, Full Numeric, IP66, NEMA Type 4X/12 with TotalFORCE Control	7...15

Catalog number positions 14...18 are not used.

1...3 4 5 6 7 8...10 11 12 13 14 15 16 17 18
 20G E G 3 D 740 L N A N N N N N -C0-P15...

Power and control options are listed in the unnumbered field to right of position 18.

1...3 4 5 6 7 8...10 11 12 13 14 15 16 17 18
 20G E G 3 D 740 L N A N N N N N N -C0-P15...

20G Control Options Selection

Code	Option	Frames	Input Type
C0	Torque Accuracy Module	5...12, and 6L	D, E, F, G, 6, 7
		13...15	D, E
C11	Single Pod (with Control Bay) ⁽¹⁾	8...15	D, E
C12	Dual Pod (with Control Bay) ⁽¹⁾	8...15	D, E

(1) When code 'D' is selected in position 13, code C11 includes one door-mounted HIM and code C12 includes two door-mounted HIMs.

20J Control Options Selection

Code	Option	Frames	Input Type
C1	Control Transformer (Internal 240V) ⁽¹⁾	8...15	F

(1) This option only applies to 755TM regenerative and low harmonic bus supplies. If this option is not selected, a 240V AC, single-phase, neutral grounded external power source must be supplied by the customer.

20G Power Options Selection

Code	Option	Frames	Input Type
P15	Top Cable Exit with wiring bay	8...15	D, E, F, G
P16	Top Cable Entry with wiring bay	10...15	F, G
P17	Top Cable Entry no wiring bay	8...9	F, G
P46	System DC Bus (4700 Amp)	8...10	D, E, F, G
P50	DC Bus Conditioner	8...15	D, E, F, G
P51	DC Bus Conditioner - Marine Applications	5...12, and 6L	D, E, F, G, 6, 7
P60	Back-to-back configuration	13...15	D, E, F, G

20J Power Options Selection

Code	Option	Frames	Input Type
P16	Top Cable Entry with wiring bay	10...15	F
P17	Top Cable Entry no wiring bay	8...9	F
P46	System DC Bus (4700 Amp)	8...10	F
P50	DC Bus Conditioner	8...15	F
P51	DC Bus Conditioner - Marine Applications	8...12	F

Product Selection—400V AC PowerFlex 755TL and 755TR Drives

400V AC, Three-phase Drives—IP21/IP54, UL Types 1/12

Light Duty			Normal Duty					Heavy Duty					Base Cat. No.	Frame Size	
kW	Cont.	1 min	kW	Cont.	1 min	3 s	Hp	kW	Cont.	1 min	3 s	Hp			
11	22	24	7.5	15.4	17	23	10	5.5	11.5	17	21	7.5	20GExxC015xNxxxxxx-Cx-Px	5	
15	30	33	11	22	24	33	15	7.5	15.4	23	28	10	20GExxC022xNxxxxxx-Cx-Px		
18.5	37	41	15	30	33	45	20	11	22	33	40	15	20GExxC030xNxxxxxx-Cx-Px		
22	43	47	18.5	37	41	56	25	15	30	45	54	20	20GExxC037xNxxxxxx-Cx-Px		
30	60	66	22	43	47	65	30	19	37	56	67	25	20GExxC043xNxxxxxx-Cx-Px		
37	72	79	30	60	66	90	40	22	43	65	77	30	20GExxC060xNxxxxxx-Cx-Px		
45	85	94	37	72	79	108	50	30	60	90	108	40	20GExxC072xNxxxxxx-Cx-Px		
55	104	114	45	85	94	128	60	37	72	108	130	50	20GExxC085xNxxxxxx-Cx-Px		
55	104	114	55	104	114	156	75	45	85	128	153	60	20GExxC104xNxxxxxx-Cx-Px	6	
90	170	187	75	140	154	210	100	55	104	156	187	75	20GExxC140xNxxxxxx-Cx-Px		
110	205	226	90	170	194	264	125	75	140	210	252	100	20GExxC176xNxxxxxx-Cx-Px		
132	260	286	110	205	226	308	150	90	170	255	306	125	20GExxC205xNxxxxxx-Cx-Px		
160	302	332	132	260	286	390	200	110	205	308	369	150	20GExxC260xNxxxxxx-Cx-Px		
200	367	404	160	302	332	453	250	132	260	390	468	200	20GExxC302xNxxxxxx-Cx-Px		
250	460	506	200	367	404	551	300	160	302	453	544	250	20GExxC367xNxxxxxx-Cx-Px		
315	540	594	250	460	506	690	350	200	367	551	661	300	20GExxC460xNxxxxxx-Cx-Px		7
315	585	644	315	540	594	810	400	250	460	690	828	350	20GExxC540xNxxxxxx-Cx-Px		
315	617	679	315	585	644	878	500	250	500	750	900	400	20GExxC585xNxxxxxx-Cx-Px		
200	367	404	160	302	332	453	200	132	260	390	468	200	20GExxC302xNxxxxxx-Cx-Px	8	
250	460	506	200	367	404	551	250	160	302	453	544	250	20GExxC367xNxxxxxx-Cx-Px		
315	540	594	250	460	506	690	300	200	367	551	661	300	20GExxC460xNxxxxxx-Cx-Px		
315	585	644	315	540	594	810	350	250	460	690	828	350	20GExxC540xNxxxxxx-Cx-Px		
355	650	715	315	585	644	878	350	250	472	708	850	350	20GExxC585xNxxxxxx-Cx-Px		
400	750	825	355	650	715	975	400	315	540	810	972	400	20GExxC650xNxxxxxx-Cx-Px		
450	796	876	400	750	825	1125	450	315	585	878	1053	450	20GExxC750xNxxxxxx-Cx-Px		
450	832	915	400	770	847	1155	500	355	650	975	1170	500	20GExxC770xNxxxxxx-Cx-Px		
560	1040	1144	500	920	1012	1380	600	400	770	1155	1386	600	20GExxC920xNxxxxxx-Cx-Px	9	
630	1090	1199	560	1040	1144	1560	700	500	920	1380	1656	700	20GExxC1K0xNxxxxxx-Cx-Px		
710	1182	1300	630	1112	1223	1668	750	500	1040	1560	1872	750	20GExxC1K1xNxxxxxx-Cx-Px		
800	1465	1612	710	1175	1293	1763	800	560	1090	1635	1962	800	20GExxC1K2xNxxxxxx-Cx-Px		
850	1581	1739	800	1465	1612	2198	900	630	1175	1763	2115	900	20GExxC1K4xNxxxxxx-Cx-Px		
1000	1715	1887	850	1590	1749	2385	1000	710	1465	2198	2637	1000	20GExxC1K6xNxxxxxx-Cx-Px		
1250	2150	2365	1000	1715	1887	2573	1100	800	1480	2220	2664	1100	20GExxC1K7xNxxxxxx-Cx-Px		10
1400	2330	2563	1250	2156	2372	3234	1500	1000	1715	2573	3087	1500	20GExxC2K1xNxxxxxx-Cx-Px		
1800	3078	3386	1650	2849	3134	4274	2000	1400	2330	3495	4194	2000	20GExxC2K8xNxxxxxx-Cx-Px	11	
2200	3846	4231	2000	3542	3896	5313	2400	1650	3032	4548	5458	2400	20GExxC3K5xNxxxxxx-Cx-Px	12	
2475	4576	5034	2200	4235	4659	6353	3600	1953	3575	5363	6435	2800	20GExxC4K2xNxxxxxx-Cx-Px	13	
3285	6074	6681	2920	5621	6183	8432	4800	2592	4745	7118	8541	3700	20GExxC5K6xNxxxxxx-Cx-Px	14	
4095	7571	8328	3640	7007	7708	10511	6000	3231	5915	8873	10647	4600	20GExxC7K0xNxxxxxx-Cx-Px	15	

400V AC, Three-phase Drives—IP00, UL Open Type

Light Duty			Normal Duty					Heavy Duty					Base Cat. No.	Frame Size
kW	Cont.	1 min	kW	Cont.	1 min	3 s	Hp	kW	Cont.	1 min	3 s	Hp		
200	361	397	200	361	397	542	250	132	264	396	475	200	20G46NC360LNxxxxxx-Cx-Px	6L

Product Selection—480V AC PowerFlex 755TL and 755TR Drives

480V AC, Three-phase Drives—IP21/IP54, UL Types 1/12

Light Duty				Normal Duty					Heavy Duty					Base Cat. No.	Frame Size
kW	Cont.	1 min	Hp	kW	Cont.	1 min	3 s	Hp	kW	Cont.	1 min	3 s	Hp		
11	22	24	15	7.5	14	15	21	10	5.5	11	17	20	7.5	20GExxD014xNxNNNNN-Cx-Px	5
15	27	30	20	11	22	24	33	15	7.5	14	21	25	10	20GExxD022xNxNNNNN-Cx-Px	
19	34	37	25	15	27	30	41	20	11	22	33	40	15	20GExxD027xNxNNNNN-Cx-Px	
22	40	44	30	19	34	37	51	25	15	27	41	49	20	20GExxD034xNxNNNNN-Cx-Px	
30	52	57	40	22	40	44	60	30	19	34	51	61	25	20GExxD040xNxNNNNN-Cx-Px	
37	65	72	50	30	52	57	78	40	22	40	60	72	30	20GExxD052xNxNNNNN-Cx-Px	
45	77	85	60	37	65	72	98	50	30	52	78	94	40	20GExxD065xNxNNNNN-Cx-Px	
55	96	106	75	45	77	85	116	60	37	65	98	117	50	20GExxD077xNxNNNNN-Cx-Px	
55	96	106	75	55	96	106	144	75	45	77	116	139	60	20GExxD096xNxNNNNN-Cx-Px	
90	156	172	125	75	125	138	188	100	55	96	144	173	75	20GExxD125xNxNNNNN-Cx-Px	6
110	186	205	150	90	156	172	234	125	75	125	188	225	100	20GExxD156xNxNNNNN-Cx-Px	
132	248	273	200	110	186	205	279	150	90	156	234	281	125	20GExxD186xNxNNNNN-Cx-Px	
160	302	332	250	132	248	273	372	200	110	186	279	335	150	20GExxD248xNxNNNNN-Cx-Px	
200	361	397	300	160	302	332	453	250	132	248	372	446	200	20GExxD302xNxNNNNN-Cx-Px	7
250	430	473	350	200	361	397	542	300	160	302	453	544	250	20GExxD361xNxNNNNN-Cx-Px	
315	485	534	400	250	430	473	645	350	200	361	542	650	300	20GExxD430xNxNNNNN-Cx-Px	
315	545	600	450	315	505	556	758	400	250	430	645	774	350	20GExxD505xNxNNNNN-Cx-Px	8
315	617	679	500	315	600	660	900	500	250	500	750	900	400	20GExxD617xNxNNNNN-Cx-Px	
200	361	397	300	186	302	332	453	250	149	248	372	446	200	20GExxD302xNxNNNNN-Cx-Px	
250	430	473	350	224	361	397	542	300	186	302	453	544	250	20GExxD361xNxNNNNN-Cx-Px	9
315	485	534	400	261	430	473	645	350	224	361	542	650	300	20GExxD430xNxNNNNN-Cx-Px	
315	545	600	450	298	505	556	758	400	261	430	645	774	350	20GExxD505xNxNNNNN-Cx-Px	
355	617	679	500	336	545	600	818	450	261	454	681	817	350	20GExxD545xNxNNNNN-Cx-Px	
400	710	781	600	373	617	679	926	500	298	485	728	873	400	20GExxD617xNxNNNNN-Cx-Px	10
450	765	842	650	447	710	781	1065	600	336	545	818	981	450	20GExxD710xNxNNNNN-Cx-Px	
450	800	880	700	485	740	814	1110	650	373	617	926	1111	500	20GExxD740xNxNNNNN-Cx-Px	
560	960	1056	800	522	800	880	1200	700	447	740	1110	1332	600	20GExxD800xNxNNNNN-Cx-Px	11
630	1045	1150	900	597	960	1056	1440	800	522	800	1200	1440	700	20GExxD960xNxNNNNN-Cx-Px	
710	1135	1249	1000	671	1045	1150	1568	900	559	960	1440	1728	750	20GExxD1K0xNxNNNNN-Cx-Px	
800	1365	1502	1100	746	1135	1249	1703	1000	597	1045	1568	1881	800	20GExxD1K1xNxNNNNN-Cx-Px	
850	1520	1672	1250	820	1365	1502	2048	1100	671	1135	1703	2043	900	20GExxD1K3xNxNNNNN-Cx-Px	12
1000	1655	1821	1500	932	1420	1562	2130	1250	746	1365	2048	2457	1000	20GExxD1K4xNxNNNNN-Cx-Px	
1250	2070	2277	1800	1119	1655	1821	2483	1500	820	1420	2130	2556	1100	20GExxD1K6xNxNNNNN-Cx-Px	
1400	2240	2464	2000	1342	2072	2279	3108	1800	1119	1655	2483	2979	1500	20GExxD2K0xNxNNNNN-Cx-Px	13
1800	2960	3256	2600	1790	2738	3012	4107	2400	1491	2240	3360	4032	2000	20GExxD2K6xNxNNNNN-Cx-Px	
2200	3696	4066	3300	2237	3404	3744	5106	3000	1790	2980	4470	5364	2400	20GExxD3K4xNxNNNNN-Cx-Px	14
2475	4400	4840	3900	2200	4070	4477	6105	3600	1953	3394	5091	6109	2800	20GExxD4K0xNxNNNNN-Cx-Px	
3285	5840	6424	5200	2920	5402	5942	8103	4800	2592	4504	6756	8107	3700	20GExxD5K4xNxNNNNN-Cx-Px	15
4095	7280	8008	6400	3640	6734	7407	10101	6000	3231	5615	8423	10107	4600	20GExxD6K7xNxNNNNN-Cx-Px	

480V AC, Three-phase Drives—IP00, UL Open Type

Light Duty				Normal Duty					Heavy Duty					Base Cat. No.	Frame Size
kW	Cont.	1 min	Hp	kW	Cont.	1 min	3 s	Hp	kW	Cont.	1 min	3 s	Hp		
200	361	397	300	200	361	397	542	300	160	264	396	475	200	20G46ND360LANNNNN-Cx-Px	6L

Product Selection—600V AC PowerFlex 755TL and 755TR Drives

600V AC, Three-phase Drives—IP21/IP54, UL Types 1/12

Light Duty				Normal Duty					Heavy Duty					Base Cat. No.	Frame Size
kW	Cont.	1 min	Hp	kW	Cont.	1 min	3 s	Hp	kW	Cont.	1 min	3 s	Hp		
15	17	19	15	11	11	12	17	10	8	9	14	16	8	20GExxE011xNxNNNNN-Cx-Px	5
19	22	24	20	15	17	19	26	15	10	11	17	20	10	20GExxE017xNxNNNNN-Cx-Px	
22	27	30	25	19	22	24	33	20	15	17	26	31	15	20GExxE022xNxNNNNN-Cx-Px	
30	32	35	30	22	27	30	41	25	20	22	33	40	20	20GExxE027xNxNNNNN-Cx-Px	
37	41	45	40	30	32	35	48	30	24	27	41	49	25	20GExxE032xNxNNNNN-Cx-Px	
45	52	57	50	37	41	45	62	40	29	32	48	58	30	20GExxE041xNxNNNNN-Cx-Px	
55	62	68	60	45	52	57	78	50	37	41	62	74	40	20GExxE052xNxNNNNN-Cx-Px	
75	77	85	75	55	62	68	93	60	45	52	78	94	50	20GExxE062xNxNNNNN-Cx-Px	
90	99	109	100	75	77	85	116	75	55	62	93	112	60	20GExxE077xNxNNNNN-Cx-Px	6
110	125	138	125	90	99	109	149	100	75	77	116	139	75	20GExxE099xNxNNNNN-Cx-Px	
132	144	158	150	110	125	138	188	125	90	99	149	178	100	20GExxE125xNxNNNNN-Cx-Px	
160	192	211	200	132	144	158	216	150	110	125	188	225	125	20GExxE144xNxNNNNN-Cx-Px	
200	242	266	250	160	192	211	288	200	132	144	216	259	150	20GExxE192xNxNNNNN-Cx-Px	7
250	295	325	300	200	242	266	363	250	160	192	288	346	200	20GExxE242xNxNNNNN-Cx-Px	
315	355	391	350	250	295	325	443	300	200	242	363	436	250	20GExxE295xNxNNNNN-Cx-Px	
355	395	435	400	315	355	391	533	350	250	295	443	531	300	20GExxE355xNxNNNNN-Cx-Px	
400	435	479	450	355	395	435	593	400	315	355	533	639	350	20GExxE395xNxNNNNN-Cx-Px	8
224	295	325	300	186	242	266	363	250	149	192	288	346	200	20GExxE242xNxNNNNN-Cx-Px	
261	355	391	350	224	295	325	443	300	186	242	363	436	250	20GExxE295xNxNNNNN-Cx-Px	
298	395	435	400	261	355	391	533	350	224	295	443	531	300	20GExxE355xNxNNNNN-Cx-Px	
336	435	479	450	298	395	435	593	400	261	355	533	639	350	20GExxE395xNxNNNNN-Cx-Px	
373	510	561	500	336	435	479	653	450	298	395	593	711	400	20GExxE435xNxNNNNN-Cx-Px	
447	580	638	600	410	545	600	818	550	335	450	675	810	450	20GExxE545xNxNNNNN-Cx-Px	9
522	690	759	700	447	580	638	870	600	410	545	818	981	550	20GExxE595xNxNNNNN-Cx-Px	
597	760	836	800	485	690	759	1035	700	373	595	893	1071	600	20GExxE690xNxNNNNN-Cx-Px	
671	825	908	900	597	760	836	1140	800	522	690	1035	1242	700	20GExxE760xNxNNNNN-Cx-Px	
746	980	1078	1000	671	825	908	1238	900	597	760	1140	1368	800	20GExxE825xNxNNNNN-Cx-Px	
820	1102	1212	1100	746	980	1078	1470	1000	671	825	1238	1485	900	20GExxE980xNxNNNNN-Cx-Px	10
932	1220	1342	1250	820	1045	1150	1568	1100	746	980	1470	1764	1000	20GExxE1K1xNxNNNNN-Cx-Px	
1119	1430	1573	1500	932	1220	1342	1830	1250	820	1045	1568	1881	1100	20GExxE1K2xNxNNNNN-Cx-Px	
1193	1624	1786	1600	1119	1430	1573	2145	1500	932	1220	1830	2196	1250	20GExxE1K5xNxNNNNN-Cx-Px	
1566	2146	2361	2100	1491	1946	2141	2919	2000	1342	1700	2550	3060	1800	20GExxE2K0xNxNNNNN-Cx-Px	11
1939	2668	2935	2600	1864	2420	2662	3630	2500	1566	2070	3105	3726	2100	20GExxE2K4xNxNNNNN-Cx-Px	12
3080	3190	3509	3300	2750	2998	3298	4497	3100	2200	2475	3713	4455	2500	20GExxE2K9xNxNNNNN-Cx-Px	13
4088	4234	4657	4400	3650	3979	4377	5969	4100	2920	3285	4928	5913	3300	20GExxE3K9xNxNNNNN-Cx-Px	14
5096	5278	5806	5500	4550	4960	5456	7440	5100	3640	4095	6143	7371	4100	20GExxE4K9xNxNNNNN-Cx-Px	15

Product Selection—690V AC PowerFlex 755TL and 755TR Drives

690V AC, Three-phase Drives—IP21/IP54, UL Types 1/12

Light Duty				Normal Duty					Heavy Duty					Base Cat. No.	Frame Size
kW	Cont.	1 min	Hp	kW	Cont.	1 min	3 s	Hp	kW	Cont.	1 min	3 s	Hp		
15	20	22	15	11	15	17	23	10	8	12	18	22	8	20GExxF015xNxNNNNN-Cx-Px	5
19	23	25	20	15	20	22	30	15	11	15	23	27	10	20GExxF020xNxNNNNN-Cx-Px	
22	30	33	25	18.5	23	25	35	20	15	20	30	36	15	20GExxF023xNxNNNNN-Cx-Px	
30	34	37	30	22	30	33	45	25	19	23	35	41	20	20GExxF030xNxNNNNN-Cx-Px	
37	46	51	40	30	34	37	51	30	22	30	45	54	25	20GExxF034xNxNNNNN-Cx-Px	
45	50	55	50	37	46	51	69	40	30	34	51	61	30	20GExxF046xNxNNNNN-Cx-Px	
55	61	67	60	45	50	55	75	50	37	46	69	83	40	20GExxF050xNxNNNNN-Cx-Px	
75	82	90	75	55	61	67	92	60	45	50	75	90	50	20GExxF061xNxNNNNN-Cx-Px	
90	98	108	100	75	82	90	123	75	55	61	92	110	60	20GExxF082xNxNNNNN-Cx-Px	6
110	119	131	125	90	98	108	147	100	75	82	123	148	75	20GExxF098xNxNNNNN-Cx-Px	
132	142	156	150	110	119	131	179	125	90	98	147	176	100	20GExxF119xNxNNNNN-Cx-Px	
160	171	188	200	132	142	156	213	150	110	119	179	214	125	20GExxF142xNxNNNNN-Cx-Px	
200	215	237	250	160	171	188	257	200	132	142	213	256	150	20GExxF171xNxNNNNN-Cx-Px	7
250	265	292	300	200	215	237	323	250	160	171	257	308	200	20GExxF215xNxNNNNN-Cx-Px	
315	330	363	350	250	265	292	398	300	200	215	323	387	250	20GExxF265xNxNNNNN-Cx-Px	
355	370	407	400	315	330	363	495	350	250	265	398	477	300	20GExxF330xNxNNNNN-Cx-Px	
400	415	457	450	355	370	407	555	400	315	330	495	594	350	20GExxF370xNxNNNNN-Cx-Px	8
250	265	292	335	200	215	237	323	268	160	171	257	308	215	20GExxF215xNxNNNNN-Cx-Px	
315	330	363	422	250	265	292	398	335	200	215	323	387	268	20GExxF265xNxNNNNN-Cx-Px	
355	370	407	476	315	330	363	495	422	250	265	398	477	335	20GExxF330xNxNNNNN-Cx-Px	
400	415	457	536	355	370	407	555	476	315	330	495	594	422	20GExxF370xNxNNNNN-Cx-Px	9
450	460	506	603	400	415	457	623	536	355	370	555	666	476	20GExxF415xNxNNNNN-Cx-Px	
560	565	622	751	500	505	556	758	671	400	415	623	747	536	20GExxF505xNxNNNNN-Cx-Px	
630	650	715	845	560	565	622	848	751	500	505	758	909	671	20GExxF565xNxNNNNN-Cx-Px	
710	735	809	952	630	650	715	975	845	560	565	848	1017	751	20GExxF650xNxNNNNN-Cx-Px	10
800	820	902	1073	710	735	809	1103	952	630	650	975	1170	845	20GExxF735xNxNNNNN-Cx-Px	
900	920	1012	1207	800	820	902	1230	1073	710	735	1103	1323	952	20GExxF820xNxNNNNN-Cx-Px	
1000	1074	1181	1341	900	920	1012	1380	1207	800	820	1230	1476	1073	20GExxF920xNxNNNNN-Cx-Px	
1100	1150	1265	1475	1000	1030	1133	1545	1341	900	920	1380	1656	1207	20GExxF1K0xNxNNNNN-Cx-Px	11
1250	1344	1478	1676	1100	1150	1265	1725	1475	1000	1030	1545	1854	1341	20GExxF1K1xNxNNNNN-Cx-Px	
1500	1582	1740	2012	1400	1419	1561	2129	1877	1100	1162	1743	2092	1475	20GExxF1K4xNxNNNNN-Cx-Px	
2000	2091	2300	2682	1800	1865	2052	2798	2414	1500	1535	2303	2763	2012	20GExxF1K8xNxNNNNN-Cx-Px	
2500	2599	2859	3353	2300	2318	2550	3477	3084	2000	2020	3030	3636	2682	20GExxF2K3xNxNNNNN-Cx-Px	12
3080	3108	3419	3300	2750	2778	3056	4167	3100	2200	2283	3425	4109	2500	20GExxF2K7xNxNNNNN-Cx-Px	13
4088	4125	4538	4400	3650	3687	4056	5531	4100	2920	3030	4545	5454	3300	20GExxF3K6xNxNNNNN-Cx-Px	14
5096	5142	5656	5500	4550	4596	5056	6894	5100	3640	3777	5666	6799	4100	20GExxF4K5xNxNNNNN-Cx-Px	15

Product Selection—400V AC PowerFlex 755TM Common Bus Supplies

Wall Mounted (Frame 6) Bus Supplies: IP00, UL Open Type
 Cabinet (Frames 7...15) Bus Supplies: IP21/IP54, UL Types 1/12

Light Duty		Normal Duty		Heavy Duty		Base Cat. No.	Frame Size
kW	Amps DC	kW	Amps DC	kW	Amps DC		
106	182	87	150	65	112	20JExxC140xNxNNNNN	6
128	220	106	182	87	150	20JExxC176xNxNNNNN	
162	279	128	220	106	182	20JExxC205xNxNNNNN	
188	324	162	279	128	220	20JExxC260xNxNNNNN	
228	394	188	324	162	279	20JExxC302xNxNNNNN-Px	7
286	494	228	294	188	324	20JExxC367xNxNNNNN-Px	
336	579	286	494	228	294	20JExxC460xNxNNNNN-Px	
364	628	336	579	286	494	20JExxC540xNxNNNNN-Px	
384	662	373	644	311	527	20JExxC585xNxNNNNN-Px	
228	394	188	324	162	279	20JExxC302xNxNNNNN-Cx-Px	8
286	494	228	394	188	324	20JExxC367xNxNNNNN-Cx-Px	
336	579	286	494	228	394	20JExxC460xNxNNNNN-Cx-Px	
364	628	336	579	286	494	20JExxC540xNxNNNNN-Cx-Px	
387	667	364	628	286	494	20JExxC585xNxNNNNN-Cx-Px	
467	805	405	698	336	579	20JExxC650xNxNNNNN-Cx-Px	
479	826	467	805	364	628	20JExxC750xNxNNNNN-Cx-Px	
518	893	479	826	405	698	20JExxC770xNxNNNNN-Cx-Px	
647	1116	572	987	479	826	20JExxC920xNxNNNNN-Cx-Px	9
678	1170	647	1116	572	987	20JExxC1K0xNxNNNNN-Cx-Px	
735	1268	692	1193	647	1116	20JExxC1K1xNxNNNNN-Cx-Px	
911	1572	731	1261	678	1170	20JExxC1K2xNxNNNNN-Cx-Px	
983	1696	910	1570	731	1261	20JExxC1K4xNxNNNNN-Cx-Px	
1067	1840	984	1697	911	1572	20JExxC1K6xNxNNNNN-Cx-Px	10
1337	2307	1067	1840	921	1588	20JExxC1K7xNxNNNNN-Cx-Px	
1449	2500	1342	2314	1067	1840	20JExxC2K1xNxNNNNN-Cx-Px	
1915	3303	1772	3057	1449	2500	20JExxC2K8xNxNNNNN-Cx-Px	11
2393	4127	2204	3801	1886	3254	20JExxC3K5xNxNNNNN-Cx-Px	12
2847	4912	2634	4546	2226	3839	20JExxC4K2xNxNNNNN-Cx-Px	13
3779	6519	3496	6030	2954	5095	20JExxC5K6xNxNNNNN-Cx-Px	14
4711	8126	4358	7517	3684	6352	20JExxC7K0xNxNNNNN-Cx-Px	15

Product Selection—480V AC PowerFlex 755™ Common Bus Supplies

Wall Mounted (Frame 6) Bus Supplies: IP00, UL Open Type

Cabinet (Frames 7...15) Bus Supplies: IP21/IP54, UL Types 1/12

Light Duty		Normal Duty		Heavy Duty		Base Cat. No.	Frame Size
kW	Amps DC	kW	Amps DC	kW	Amps DC		
111	160	90	129	69	99	20JExxD125xNxNNNNN	6
133	191	111	160	90	129	20JExxD156xNxNNNNN	
177	255	133	191	111	160	20JExxD186xNxNNNNN	
216	311	177	255	133	191	20JExxD248xNxNNNNN	
258	371	216	311	177	255	20JExxD302xNxNNNNN-Px	7
307	442	258	371	216	311	20JExxD361xNxNNNNN-Px	
347	499	307	442	258	371	20JExxD430xNxNNNNN-Px	
390	560	361	519	307	442	20JExxD505xNxNNNNN-Px	
441	634	429	617	358	514	20JExxD617xNxNNNNN-Px	8
258	371	216	311	177	255	20JExxD302xNxNNNNN-Cx-Px	
307	442	258	371	216	311	20JExxD361xNxNNNNN-Cx-Px	
347	499	307	442	258	371	20JExxD430xNxNNNNN-Cx-Px	
390	560	361	519	307	442	20JExxD505xNxNNNNN-Cx-Px	
422	607	390	560	307	442	20JExxD545xNxNNNNN-Cx-Px	
508	730	442	635	347	499	20JExxD617xNxNNNNN-Cx-Px	
529	761	508	730	390	560	20JExxD710xNxNNNNN-Cx-Px	
573	823	529	761	442	635	20JExxD740xNxNNNNN-Cx-Px	9
687	987	573	823	529	761	20JExxD800xNxNNNNN-Cx-Px	
748	1075	687	987	573	823	20JExxD960xNxNNNNN-Cx-Px	
802	1153	748	1075	687	987	20JExxD1K0xNxNNNNN-Cx-Px	
977	1404	812	1167	748	1075	20JExxD1K1xNxNNNNN-Cx-Px	10
1087	1563	977	1404	812	1167	20JExxD1K3xNxNNNNN-Cx-Px	
1184	1702	1016	1460	977	1404	20JExxD1K4xNxNNNNN-Cx-Px	
1481	2129	1184	1702	1016	1460	20JExxD1K6xNxNNNNN-Cx-Px	
1603	2304	1483	2131	1184	1702	20JExxD2K0xNxNNNNN-Cx-Px	11
2118	3044	1959	2816	1603	2304	20JExxD2K6xNxNNNNN-Cx-Px	
2632	3784	2436	3501	2132	3065	20JExxD3K4xNxNNNNN-Cx-Px	12
3149	4527	2912	4186	2430	3493	20JExxD4K0xNxNNNNN-Cx-Px	13
4180	6008	3865	5555	3225	4636	20JExxD5K4xNxNNNNN-Cx-Px	14
5210	7489	4818	6925	4020	5779	20JExxD6K7xNxNNNNN-Cx-Px	15

Product Selection—600V AC PowerFlex 755TM Common Bus Supplies

Wall Mounted (Frame 6) Bus Supplies: IP00, UL Open Type
 Cabinet (Frames 7...15) Bus Supplies: IP21/IP54, UL Types 1/12

Light Duty		Normal Duty		Heavy Duty		Base Cat. No.	Frame Size
kW	Amps DC	kW	Amps DC	kW	Amps DC		
89	102	69	79	56	64	20JExxE077xNxNNNNN	6
112	129	89	102	69	79	20JExxE099xNxNNNNN	
129	148	112	129	89	102	20JExxE125xNxNNNNN	
171	197	129	148	112	129	20JExxE144xNxNNNNN	
217	249	171	197	129	148	20JExxE192xNxNNNNN-Px	7
263	303	217	249	171	197	20JExxE242xNxNNNNN-Px	
317	365	263	303	217	249	20JExxE295xNxNNNNN-Px	
353	406	317	365	263	303	20JExxE355xNxNNNNN-Px	
389	447	353	406	317	365	20JExxE395xNxNNNNN-Px	
263	303	217	249	171	197	20JExxE242xNxNNNNN-Cx-Px	8
317	365	263	303	217	249	20JExxE295xNxNNNNN-Cx-Px	
353	406	317	365	263	303	20JExxE355xNxNNNNN-Cx-Px	
389	447	353	406	317	365	20JExxE395xNxNNNNN-Cx-Px	
456	524	389	447	353	406	20JExxE435xNxNNNNN-Cx-Px	
518	596	487	560	403	463	20JExxE545xNxNNNNN-Cx-Px	
617	710	518	596	487	560	20JExxE595xNxNNNNN-Cx-Px	9
680	782	617	710	532	612	20JExxE690xNxNNNNN-Cx-Px	
737	848	680	782	617	710	20JExxE760xNxNNNNN-Cx-Px	
877	1008	737	848	680	782	20JExxE825xNxNNNNN-Cx-Px	
985	1133	877	1008	737	848	20JExxE980xNxNNNNN-Cx-Px	
1091	1255	935	1075	877	1008	20JExxE1K1xNxNNNNN-Cx-Px	10
1279	1471	1091	1255	935	1075	20JExxE1K2xNxNNNNN-Cx-Px	
1452	1670	1279	1471	1091	1255	20JExxE1K5xNxNNNNN-Cx-Px	
1919	2207	1740	2001	1520	1748	20JExxE2K0xNxNNNNN-Cx-Px	11
2386	2744	2164	2489	1851	2129	20JExxE2K4xNxNNNNN-Cx-Px	12
2851	3278	2678	3080	2215	2547	20JExxE2K9xNxNNNNN-Cx-Px	13
3784	4351	3555	4088	2939	3380	20JExxE3K9xNxNNNNN-Cx-Px	14
4717	5424	4432	5096	3664	4213	20JExxE4K9xNxNNNNN-Cx-Px	15

Product Selection—690V AC PowerFlex 755TM Common Bus Supplies

Wall Mounted (Frame 6) Bus Supplies: IP00, UL Open Type

Cabinet (Frames 7...15) Bus Supplies: IP21/IP54, UL Types 1/12

Light Duty		Normal Duty		Heavy Duty		Base Cat. No.	Frame Size
kW	Amps DC	kW	Amps DC	kW	Amps DC		
101	101	84	84	63	63	20JExxF082xNxNNNNN	6
122	122	101	101	84	84	20JExxF098xNxNNNNN	
146	146	122	122	101	101	20JExxF119xNxNNNNN	
176	176	146	146	122	122	20JExxF142xNxNNNNN	
221	221	176	176	146	146	20JExxF171xNxNNNNN-Px	7
272	272	221	221	176	176	20JExxF215xNxNNNNN-Px	
339	339	272	272	221	221	20JExxF265xNxNNNNN-Px	
380	380	339	339	272	272	20JExxF330xNxNNNNN-Px	
426	426	380	380	339	339	20JExxF370xNxNNNNN-Px	
272	272	221	221	176	176	20JExxF215xNxNNNNN-Cx-Px	8
339	339	272	272	221	221	20JExxF265xNxNNNNN-Cx-Px	
380	380	339	339	272	272	20JExxF330xNxNNNNN-Cx-Px	
426	426	380	380	339	339	20JExxF370xNxNNNNN-Cx-Px	
472	472	426	426	380	380	20JExxF415xNxNNNNN-Cx-Px	
580	580	518	518	426	426	20JExxF505xNxNNNNN-Cx-Px	9
580	580	580	580	518	518	20JExxF565xNxNNNNN-Cx-Px	
754	754	667	667	580	580	20JExxF650xNxNNNNN-Cx-Px	
842	842	754	754	667	667	20JExxF735xNxNNNNN-Cx-Px	
944	944	842	842	754	754	20JExxF820xNxNNNNN-Cx-Px	
1102	1102	944	944	842	842	20JExxF920xNxNNNNN-Cx-Px	10
1180	1180	1057	1057	944	944	20JExxF1K0xNxNNNNN-Cx-Px	
1380	1380	1180	1180	1057	1057	20JExxF1K1xNxNNNNN-Cx-Px	
1624	1624	1456	1456	1193	1193	20JExxF1K4xNxNNNNN-Cx-Px	11
2146	2146	1914	1914	1576	1576	20JExxF1K8xNxNNNNN-Cx-Px	
2668	2668	2379	2379	2073	2073	20JExxF2K3xNxNNNNN-Cx-Px	12
3190	3190	2849	2849	2343	2343	20JExxF2K7xNxNNNNN-Cx-Px	13
4234	4234	3781	3781	3110	3110	20JExxF3K6xNxNNNNN-Cx-Px	14
5278	5278	4714	4714	3877	3877	20JExxF4K5xNxNNNNN-Cx-Px	15

Product Selection—540V DC Nominal PowerFlex 755TM Common Bus Inverters

IP21/IP54, UL Types 1/12

Light Duty		Normal Duty		Heavy Duty		Base Cat. No.	Frame Size
kW	Amps AC	kW	Amps AC	kW	Amps AC		
200	367	160	302	132	260	20G1xxC302xNxNNNNN-Cx-Px	8
250	460	200	367	160	302	20G1xxC367xNxNNNNN-Cx-Px	
315	540	250	460	200	367	20G1xxC460xNxNNNNN-Cx-Px	
315	585	315	540	250	460	20G1xxC540xNxNNNNN-Cx-Px	
355	650	315	585	250	472	20G1xxC585xNxNNNNN-Cx-Px	
400	750	355	650	315	540	20G1xxC650xNxNNNNN-Cx-Px	
450	796	400	750	315	585	20G1xxC750xNxNNNNN-Cx-Px	
450	832	400	770	355	650	20G1xxC770xNxNNNNN-Cx-Px	
560	1040	500	920	400	770	20G1xxC920xNxNNNNN-Cx-Px	9
630	1090	560	1040	500	920	20G1xxC1K0xNxNNNNN-Cx-Px	
710	1182	630	1112	500	1040	20G1xxC1K1xNxNNNNN-Cx-Px	
800	1465	710	1175	560	1090	20G1xxC1K2xNxNNNNN-Cx-Px	
850	1581	800	1465	630	1175	20G1xxC1K4xNxNNNNN-Cx-Px	
1000	1715	850	1590	710	1465	20G1xxC1K6xNxNNNNN-Cx-Px	10
1250	2150	1000	1715	800	1480	20G1xxC1K7xNxNNNNN-Cx-Px	
1400	2330	1250	2156	1000	1715	20G1xxC2K1xNxNNNNN-Cx-Px	
1800	3078	1650	2849	1400	2330	20G1xxC2K8xNxNNNNN-Cx-Px	11
2200	3846	2000	3542	1650	3032	20G1xxC3K5xNxNNNNN-Cx-Px	12
2475	4576	2200	4235	1953	3575	20G1xxC4K2xNxNNNNN-Cx-Px	13
3285	6074	2920	5621	2592	4745	20G1xxC5K6xNxNNNNN-Cx-Px	14
4095	7571	3640	7007	3231	5915	20G1xxC7K0xNxNNNNN-Cx-Px	15

Product Selection—650V DC Nominal PowerFlex 755TM Common Bus Inverters

IP21/IP54, UL Types 1/12

Light Duty		Normal Duty		Heavy Duty		Base Cat. No.	Frame Size
Hp	Amps AC	Hp	Amps AC	Hp	Amps AC		
300	361	250	302	200	248	20G1xxD302xNxNNNNN-Cx-Px	8
350	430	300	361	250	302	20G1xxD361xNxNNNNN-Cx-Px	
400	485	350	430	300	361	20G1xxD430xNxNNNNN-Cx-Px	
450	545	400	505	350	430	20G1xxD505xNxNNNNN-Cx-Px	
500	617	450	545	350	454	20G1xxD545xNxNNNNN-Cx-Px	
600	710	500	617	400	485	20G1xxD617xNxNNNNN-Cx-Px	
650	765	600	710	450	545	20G1xxD710xNxNNNNN-Cx-Px	
700	800	650	740	500	617	20G1xxD740xNxNNNNN-Cx-Px	
800	960	700	800	600	740	20G1xxD800xNxNNNNN-Cx-Px	9
900	1045	800	960	700	800	20G1xxD960xNxNNNNN-Cx-Px	
1000	1135	900	1045	750	960	20G1xxD1K0xNxNNNNN-Cx-Px	
1100	1365	1000	1135	800	1045	20G1xxD1K1xNxNNNNN-Cx-Px	
1250	1520	1100	1365	900	1135	20G1xxD1K3xNxNNNNN-Cx-Px	

IP21/IP54, UL Types 1/12 (Continued)

Light Duty		Normal Duty		Heavy Duty		Base Cat. No.	Frame Size
Hp	Amps AC	Hp	Amps AC	Hp	Amps AC		
1500	1655	1250	1420	1000	1365	20G1xxD1K4xNxNNNNN-Cx-Px	10
1800	2070	1500	1655	1100	1420	20G1xxD1K6xNxNNNNN-Cx-Px	
2000	2240	1800	2072	1500	1655	20G1xxD2K0xNxNNNNN-Cx-Px	
2600	2960	2400	2738	2000	2240	20G1xxD2K6xNxNNNNN-Cx-Px	11
3300	3696	3000	3404	2400	2980	20G1xxD3K4xNxNNNNN-Cx-Px	12
3900	4400	3600	4070	2800	3394	20G1xxD4K0xNxNNNNN-Cx-Px	13
5200	5840	4800	5402	3700	4504	20G1xxD5K4xNxNNNNN-Cx-Px	14
6400	7280	6000	6734	4600	5615	20G1xxD6K7xNxNNNNN-Cx-Px	15

Product Selection—810V DC Nominal PowerFlex 755™ Common Bus Inverters

IP21/IP54, UL Types 1/12

Light Duty		Normal Duty		Heavy Duty		Base Cat. No.	Frame Size
Hp	Amps AC	Hp	Amps AC	Hp	Amps AC		
300	295	250	242	200	192	20G1xxE242xNxNNNNN-Cx-Px	8
350	355	300	295	250	242	20G1xxE295xNxNNNNN-Cx-Px	
400	395	350	355	300	295	20G1xxE355xNxNNNNN-Cx-Px	
450	435	400	395	350	355	20G1xxE395xNxNNNNN-Cx-Px	
500	510	450	435	400	395	20G1xxE435xNxNNNNN-Cx-Px	
600	580	550	545	450	450	20G1xxE545xNxNNNNN-Cx-Px	9
700	690	600	580	550	545	20G1xxE595xNxNNNNN-Cx-Px	
800	760	700	690	600	595	20G1xxE690xNxNNNNN-Cx-Px	
900	825	800	760	700	690	20G1xxE760xNxNNNNN-Cx-Px	
1000	980	900	825	800	760	20G1xxE825xNxNNNNN-Cx-Px	
1100	1102	1000	980	900	825	20G1xxE980xNxNNNNN-Cx-Px	10
1250	1220	1100	1045	1000	980	20G1xxE1K1xNxNNNNN-Cx-Px	
1500	1430	1250	1220	1100	1045	20G1xxE1K2xNxNNNNN-Cx-Px	
1600	1624	1500	1430	1250	1220	20G1xxE1K5xNxNNNNN-Cx-Px	11
2100	2146	2000	1946	1800	1700	20G1xxE2K0xNxNNNNN-Cx-Px	
2600	2668	2500	2420	2100	2070	20G1xxE2K4xNxNNNNN-Cx-Px	12
3300	3190	3100	2998	2500	2475	20G1xxE2K9xNxNNNNN-Cx-Px	13
4400	4234	4100	3979	3300	3285	20G1xxE3K9xNxNNNNN-Cx-Px	14
5500	5278	5100	4960	4100	4095	20G1xxE4K9xNxNNNNN-Cx-Px	15

Product Selection—932V DC Nominal PowerFlex 755™ Common Bus Inverters

IP21/IP54, UL Types 1/12

Light Duty		Normal Duty		Heavy Duty		Base Cat. No.	Frame Size
kW	Amps AC	kW	Amps AC	kW	Amps AC		
250	265	200	215	160	171	20G1xxF215xNxNNNNN-Cx-Px	8
315	330	250	265	200	215	20G1xxF265xNxNNNNN-Cx-Px	
355	370	315	330	250	265	20G1xxF330xNxNNNNN-Cx-Px	
400	415	355	370	315	330	20G1xxF370xNxNNNNN-Cx-Px	
450	460	400	415	355	370	20G1xxF415xNxNNNNN-Cx-Px	
560	565	500	505	400	415	20G1xxF505xNxNNNNN-Cx-Px	
630	650	560	565	500	505	20G1xxF565xNxNNNNN-Cx-Px	9
710	735	630	650	560	565	20G1xxF650xNxNNNNN-Cx-Px	
800	820	710	735	630	650	20G1xxF735xNxNNNNN-Cx-Px	
900	920	800	820	710	735	20G1xxF820xNxNNNNN-Cx-Px	
1000	1074	900	920	800	820	20G1xxF920xNxNNNNN-Cx-Px	10
1100	1150	1000	1030	900	920	20G1xxF1K0xNxNNNNN-Cx-Px	
1250	1344	1100	1150	1000	1030	20G1xxF1K1xNxNNNNN-Cx-Px	
1500	1582	1400	1419	1100	1162	20G1xxF1K4xNxNNNNN-Cx-Px	11
2000	2091	1800	1865	1500	1535	20G1xxF1K8xNxNNNNN-Cx-Px	
2500	2599	2300	2318	2000	2020	20G1xxF2K3xNxNNNNN-Cx-Px	12
3080	3108	2750	2778	2200	2283	20G1xxF2K7xNxNNNNN-Cx-Px	13
4088	4125	3650	3687	2920	3030	20G1xxF3K6xNxNNNNN-Cx-Px	14
5096	5142	4550	4596	3640	3777	20G1xxF4K5xNxNNNNN-Cx-Px	15

Certifications and Specifications

Product certifications	Rockwell Automation maintains current product certification information on its website at: rok.auto/certifications
CE	In conformity with the following European Directives: EMC Directive (2014/30/EU) Low Voltage Directive (2014/35/EU) RoHS Directive (2011/65/EU incorporating 2015/863) ATEX Directive (2014/34/EU) EC-Type-Examination Certificate Number TÜV 12 ATEX 7990 X EN 50495 Standards applied: EN 61800-3 EN 61800-5-1 Exposure to harmonics per Table 24 of IEC 61800-3 (second environment) results in drive shutdown in a safe condition.
China RoHS2	Compliant with China Restriction of Hazardous Substances Directive.
cULus	UL: Listed to UL61800-5-1 up to 600V AC
EMC	In conformity with EMC Directive (2014/30/EU). C3 Directive for Conducted and Radiated Emissions: All PowerFlex 755T drives, bus supplies, and common bus inverters C2 Directive for Conducted and Radiated Emissions: Frame 5 with 20-750-EMC2-F5 accessory kit installed Frame 6 with 20-750-EMC2-F6 accessory kit installed Frame 6L with 20-750-EMC2-F6L accessory kit installed Frame 7 with IP54, UL Type 12 enclosure and 'P' filtering option C2 Directive for Conducted Emissions: Frame 7 with IP20, UL Type 1 enclosure and 'P' filtering option Frame 8 with 20-750-MEMCC2-F8 and 20-750-MEMCC2-F8910 accessory kits installed Frame 9 with 20-750-MEMCC2-F9 and 20-750-MEMCC2-F8910 accessory kits installed Frame 10 with 20-750-MEMCC2-F10 and 20-750-MEMCC2-F8910 accessory kits installed
Functional safety	TÜV and Rheinland - Certification applies to 20-750-S, 20-750-S1, 20-750-S3 safety, and 20-750-S4 options when they are installed in the drive and are configured according to the appropriate safety manual. See Additional Resources on page 267 for list of publications. Standards applied: IEC 61508 PARTS 1...7 EN ISO 13849-1 EN 61800-3 IEC 62061 EN 61800-5-1 ISO 60204-1 IEC 61800-5-2 Machinery Directive (2006/42/EC)
IEEE-519	PowerFlex 755TL, 755TR, and 755TM products meet or exceed the requirements of IEEE-519. Achieving less than 5% Total Harmonic Distortion (THD) at the point of common coupling. PowerFlex 755TL, 755TR, and 755TM products comply to IEEE-519 as written. Individual current harmonics and Total Demand Distortion (TDD) are specified at 100% rating only. Compliance does not include the following frame 5 drive ratings: 400/480V, 22 kW/30 Hp and lower 600/690V, 30 Hp/30 kW and lower
KCC	Korean KC registration
Morocco	Arrêté ministériel n° 6404-15 du 1 er muharram 1437 (15 octobre 2015) NM EN 61800-5-1 Arrêté ministériel n° 6404-15 du 29 ramadan 1436 (16 juillet 2015) NM EN 61800-3
Network communication	ODVA Declaration of Conformity to the EtherNet/IP Specification
Packaging directive	In conformity with the Packaging Directive (94/62/EC and amendments 2004/12/EC and 2005/20/EC)
REACH	Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).
Regulatory compliance mark (RCM)	Australian Communications and Media Authority In conformity with the following: Radiocommunications Act: 1992 Radiocommunications Standard: 2008 Radiocommunications Labeling Notice: 2008 Standards applied: EN 61800-3:2012
SEMI F47	Certified compliant with the SEMI F47 standard.
UKCA	2016 No. 1101 Electrical Equipment (Safety) Regulations (LV) 2016 No. 1091 Electromagnetic Compatibility Regulations (EMC) 2012 No. 3032 Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations (RoHS)
Ecodesign Directive	Ecodesign Directive 2009/125/EC as implemented by Commission Regulation (EU) 2019/1781: PowerFlex 755T drives, bus supplies, and common bus inverters are exempt from the efficiency requirements of Commission Regulation (EU) 2019/1781 on the basis of Article 2(3c) and (3d).

Category	Specification																							
Environmental compliance	Rockwell Automation maintains current product environmental information on its website at: rok.auto/pec																							
Altitude Based on load Based on voltage	See Derating Guidelines starting on page 148 . Based on EN61800-5-1 (Electro-thermal Safety Standard for drives)																							
	Altitude Limit Above Sea Level ⁽¹⁾																							
	<table border="1"> <thead> <tr> <th>System and Ground Configuration</th> <th>Overvoltage Category ⁽²⁾</th> <th>400/480V AC</th> <th>600V AC</th> <th>690V AC</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Center Grounded (Y Neutral) w/Solid Ground</td> <td>Category II</td> <td>9000 m ⁽³⁾</td> <td>7500 m ⁽³⁾</td> <td>7500 m ⁽³⁾</td> </tr> <tr> <td>Category III</td> <td>4800 m</td> <td>4800 m</td> <td>4800 m</td> </tr> <tr> <td rowspan="2">Ungrounded, Impedance Grounded, or Corner Grounded</td> <td>Category II</td> <td>4800 m</td> <td>7500 m ⁽³⁾</td> <td>4800 m</td> </tr> <tr> <td>Category III</td> <td>2000 m</td> <td>4800 m</td> <td>2000 m</td> </tr> </tbody> </table>	System and Ground Configuration	Overvoltage Category ⁽²⁾	400/480V AC	600V AC	690V AC	Center Grounded (Y Neutral) w/Solid Ground	Category II	9000 m ⁽³⁾	7500 m ⁽³⁾	7500 m ⁽³⁾	Category III	4800 m	4800 m	4800 m	Ungrounded, Impedance Grounded, or Corner Grounded	Category II	4800 m	7500 m ⁽³⁾	4800 m	Category III	2000 m	4800 m	2000 m
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	<p>(1) Excluding failure from cosmic radiation. Cosmic radiation will increase rate of IGBT malfunction at altitudes greater than 3000 m above sea level. Concrete walls and ceilings or concrete walls and large bottles of water overhead are examples of ways to shield against cosmic radiation.</p> <p>(2) Overvoltage Categories: Category II (Isolation Transformer Level) - Typically two levels of isolation or protection from outdoor power lines. Category III (Most Common) Distribution Level Inside a Building - Typically one level of isolation or protection from outdoor power lines.</p> <p>(3) Product is limited to a maximum of 4800 m thermally. See the Ambient Temperature/Load Derating Guidelines starting on page 149.</p>																							
Corrosive atmosphere 755TL, 755TR, and 755TM, Series B • ASTM B845-97 Method K Accelerated Test (30-day Exposure) • Rockwell Automation proprietary accelerated corrosion test for specific industries with sources of gaseous sulfur compounds	Severity Level GX per ANSI/ISA 71.04-2013, Airborne contaminants-gases. Severity level GX is defined as up to 2100 angstroms of film growth per 30 days of copper or silver reactivity. Severity Level CX per IEC 60721-3-3: 2019, Chemically Active Substances. For the product to meet the corrosive atmosphere rating, these conditions must be met: • Keep the product or kit in its sealed XT packaging until installation. • Port plugs and covers must remain installed in unused ports after the XT packaging seal is broken.																							
Relative humidity 755TL, 755TR, and 755TM, Series A	5... 95% noncondensing in severity level G1 environments per ANSI/ISA 71.04-2013																							
Relative humidity 755TL, 755TR, and 755TM, Series B	5... 95% noncondensing																							
Environmental impact	EU Environmental Directive: Restriction of Hazardous Substances (RoHS) Directive (2011/65/EU) - CE mark is required for the EU Registration, Evaluation and Authorization of Chemicals (REACH) Regulation (1907/2006) Packaging Directive (94/62/EC as amended by 2004/12/EC and 2005/20/EC) China Restriction of Hazardous Substance (RoHS) Directive																							
Surrounding air temperature	<table border="0"> <tr> <td>IP00, UL Open Type:</td> <td>-20...+50 °C (-4...+122 °F)</td> <td>Frames 5 and 6, all ratings</td> </tr> <tr> <td>IP00, UL Open Type:</td> <td>0...50 °C (32...122 °F)</td> <td>Frame 6L, all ratings</td> </tr> </table>	IP00, UL Open Type:	-20...+50 °C (-4...+122 °F)	Frames 5 and 6, all ratings	IP00, UL Open Type:	0...50 °C (32...122 °F)	Frame 6L, all ratings																	
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IP54, UL Type 12:	-20...+40 °C (-4...+104 °F)	Frames 7...15, all ratings																						
Coolant temperature	IP00, UL Open Type: 0...50 °C (32...122 °F) Frame 6L, all ratings																							
Surrounding air or ambient temperature with derating	<table border="0"> <tr> <td>60 °C (140 °F):</td> <td>Frames 5 and 6, all ratings</td> <td rowspan="2">See Ambient Temperature Derating on page 149.</td> </tr> <tr> <td>50 °C (122 °F) or 55 °C (134 °F):</td> <td>Frames 7...15, all ratings</td> </tr> </table>	60 °C (140 °F):	Frames 5 and 6, all ratings	See Ambient Temperature Derating on page 149 .	50 °C (122 °F) or 55 °C (134 °F):	Frames 7...15, all ratings																		
60 °C (140 °F):	Frames 5 and 6, all ratings	See Ambient Temperature Derating on page 149 .																						
50 °C (122 °F) or 55 °C (134 °F):	Frames 7...15, all ratings																							
Storage temperature	-40...+70 °C (-40...+158 °F)																							
UV radiation	The HIM is not UV rated.																							
Shock Operating Packaged for shipment	<table border="0"> <tr> <td>Frames 5...15:</td> <td>Cabinet packaged products - 10 g peak for 11 ms duration (±1.0 ms), three shocks in each direction in each axis</td> </tr> <tr> <td>Frames 5...15:</td> <td>Meets ASTM International standards</td> </tr> </table>	Frames 5...15:	Cabinet packaged products - 10 g peak for 11 ms duration (±1.0 ms), three shocks in each direction in each axis	Frames 5...15:	Meets ASTM International standards																			
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Category	Specification								
Required volumetric airflow rate	Frame	755TL and 755TR Drives		755TM Bus Supplies		755TM CBIs			
		CFM (ft ³ /min)	CMS (m ³ /sec)	CFM (ft ³ /min)	CMS (m ³ /sec)	CFM (ft ³ /min)	CMS (m ³ /sec)		
	5	580	0.27	—	—	—	—		
	6	642	0.30	642	0.30	—	—		
	6L	810	0.38	—	—	—	—		
	7	1555	0.73	1090	0.51	—	—		
	8	2375	1.12	1675	0.79	975	0.46		
	9	3775	1.78	2375	1.12	1675	0.79		
	10	6500	3.07	4400	2.08	2375	1.12		
	11	7900	3.73	5100	2.41	3075	1.45		
	12	10,000	4.72	6500	3.07	3775	1.78		
	13	13,004	6.14	8802	4.15	5044	2.38		
	14	15,804	7.46	10,202	4.81	6850	3.23		
	15	20,004	9.44	13,002	6.14	8250	3.89		
	Entry and Exit Wire Bay								
Width		CFM (ft ³ /min)	CMS (m ³ /sec)						
400 mm (16 in.)		147	0.07						
800 mm (31 in.)		350	0.17						
Sound	Frame	755TL and 755TR Drives			755TM Bus Supplies		755TM CBIs		
		IP00 UL Open Type	IP20 ⁽¹⁾ UL Type 1 ⁽²⁾	IP21 UL Type 1	IP54 UL Type 12	IP21 UL Type 1	IP54 UL Type 12	IP21 UL Type 1	IP54 UL Type 12
	5	78	—	—	—	—	—	—	
	6	80	—	—	—	—	—	—	
	6L	87	—	—	—	—	—	—	
	7	—	—	77	77	—	—	—	
	8	—	—	79	78	77	76	76	75
	9	—	—	81	80	80	79	77	76
	10	—	—	84	83	84	83	79	78
	11	—	—	83	82	83	82	80	79
	12	—	—	84	83	84	83	81	80
	13	—	—	87	86	87	86	82	81
	14	—	—	86	85	86	85	83	82
	15	—	—	87	86	87	86	84	83
	(1) The optional conduit box is required to meet the IP20 enclosure rating. (2) The optional conduit box and debris hood is required to meet the UL Type 1 enclosure rating.								
Surrounding environment	Pollution Degree 1 and 2: All enclosures acceptable. Pollution Degree 3 and 4: Enclosure that meets or exceeds IP54, UL Type 12 required. (See page 44 for descriptions of each pollution degree rating.)								

Category	Specification	Motor Voltage				
		400V	480V	600V	690V	
	AC line input overvoltage trip ⁽¹⁾	542V AC	542V AC	780V AC	780V AC	
	AC line input undervoltage trip ⁽¹⁾	348V AC	418V AC	522V AC	600V AC	
	Bus overvoltage trip	815V DC	815V DC	1172V DC	1172V DC	
	Bus undervoltage shutoff	453V DC	543V DC	678V DC	781V DC	
	Nominal bus voltage (full load), 6-pulse front end	540V DC	650V DC	810V DC	932V DC	
	Nominal bus voltage (full load), AFE front end	580V DC	696V DC	870V DC	1000V DC	
	<small>(1) AC line overvoltage and AC line undervoltage trip levels represent the minimum and maximum AC input line voltage needed to prevent product undervoltage/overvoltage fault condition.</small>					
Protection	Drive overcurrent trip		Light Duty	Normal Duty	Heavy Duty	
		Software overcurrent trip	177% of LD drive rating	177% of ND drive rating	219% of HD drive rating	
		Instantaneous current limit	110% of LD drive rating	150% of ND drive rating	180% of HD drive rating	
		Calculations are based on the 400V current rating for 400/480V power structures and the 600V current rating for 600/690V power structures. Bus supply overcurrent is based on the rating of an equivalent 755T inverter/converter rating.				
	Line transients	Up to 2000V line-to-line and 4000V line-to-ground per IEC 61800-3				
	Control logic noise immunity	Meets EMC standards.				
	Power ride-thru	15 milliseconds at full load. No load ride-thru up to 10 minutes.				
	Logic control ride-thru	0.5 seconds minimum, 2 seconds typical (40 milliseconds without logic power)				
	Ground fault trip	Phase-to-ground on drive output				
	Short circuit trip	Phase-to-phase on drive output				

Category	Specification																																																																																										
Electrical	AC input voltage tolerance	See page 33 for full power and operating range.																																																																																									
	Frequency tolerance	47...63 Hz																																																																																									
	Three phase input	Three-phase input provides full rating for all drives. Single-phase operation is not permitted.																																																																																									
	DC input voltage tolerance	±10% of Nominal Bus Voltage. See the Protection category in this table on page 28 .																																																																																									
	Displacement power factor	0.98 across entire speed range. Can be as good as unity (1.0). This is regulated by algorithms in the active front end converter. The kVAR for power factor compensation setting is adjustable. When the kVAR command is set to zero, the converter regulates reactive current to maintain unity power factor. When a nonzero value is entered, it requests the amount of kVAR to command. Negative values are a lagging power factor and positive values are a leading power factor. When the converter is not delivering current, 67% of the full current rating of the converter is available to produce kVAR. As real current increases, while motoring or regenerating, the reactive current limit is automatically reduced.																																																																																									
	Efficiency Bus supplies and common bus inverters: Regenerative drives:	97% at rated amps, all frames 97% at rated amps, frames 5, 6, 7...15 95.4% at rated amps, frame 6L																																																																																									
	Maximum short circuit current rating	Suitable for use on a circuit capable of delivering not more than 100 kA rms symmetrical amperes, up to 600V maximum and 65 kA rms symmetrical amperes at 690V maximum.																																																																																									
	Actual short circuit current rating	May be further limited by AIC rating of customer supplied branch circuit fuse/circuit breaker.																																																																																									
	Drive to motor power ratio	Minimum: Recommended not less than 1:2 ratio Maximum: Recommended not greater than 2:1 ratio																																																																																									
	Current draw	Control pod (20-750-MCPODn): 5.5A at 24V																																																																																									
	Digital input	Nominal: DC 24V DC AC 120V AC Maximum: 30V DC 132V AC High State: 20...24V DC 100...132V AC Low State: 0...5V DC 0...30V AC																																																																																									
	Power supplies	240V AC ±10% Frame 5...6: 24V DC -5% / +1% Frame 7...15: 24V DC ±5%																																																																																									
	24V DC power requirements	<table border="1"> <thead> <tr> <th rowspan="3">Product</th> <th colspan="12">Max Power (Watts)</th> </tr> <tr> <th colspan="12">Frame</th> </tr> <tr> <th>5</th> <th>6</th> <th>6L</th> <th>7</th> <th>8</th> <th>9</th> <th>10</th> <th>11</th> <th>12</th> <th>13</th> <th>14</th> <th>15</th> </tr> </thead> <tbody> <tr> <td>755TL and 755TR drives</td> <td>240</td> <td>240</td> <td>240</td> <td>240</td> <td>213</td> <td>276</td> <td>339</td> <td>402</td> <td>465</td> <td>528</td> <td>654</td> <td>780</td> </tr> <tr> <td>755TM bus supplies</td> <td>-</td> <td>240</td> <td>-</td> <td>209</td> <td>182</td> <td>213</td> <td>245</td> <td>276</td> <td>308</td> <td>339</td> <td>402</td> <td>465</td> </tr> <tr> <td>755TM bus supplies with one 755TM common bus inverter</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>157</td> <td>188</td> <td>220</td> <td>251</td> <td>283</td> <td>314</td> <td>377</td> <td>440</td> </tr> <tr> <td>755TM bus supplies with two 755TM common bus inverters</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>313</td> <td>376</td> <td>439</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table>	Product	Max Power (Watts)												Frame												5	6	6L	7	8	9	10	11	12	13	14	15	755TL and 755TR drives	240	240	240	240	213	276	339	402	465	528	654	780	755TM bus supplies	-	240	-	209	182	213	245	276	308	339	402	465	755TM bus supplies with one 755TM common bus inverter	-	-	-	-	157	188	220	251	283	314	377	440	755TM bus supplies with two 755TM common bus inverters	-	-	-	-	313	376	439	-	-	-	-	-
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Method	Sine coded PWM with carrier frequency.																																																																																										
Carrier frequency	Motor Side Inverter on Frames 5, 6, and 6L: 2 (Default), 4, 8, 12 kHz Motor Side Inverter on Frames 7 and 15: 1.33 (Default), 2, 4 kHz Line Side Converter All Frames: 4 kHz (Fixed)																																																																																										
Output voltage range	0 to rated motor voltage																																																																																										
Output frequency range	0...325 Hz @ 1.33 and 2 kHz carrier 0...590 Hz @ 4 kHz carrier 90 Hz max for power modules with reflected wave filters (20-750-MI3-xnnxnnn)																																																																																										

Category	Specification													
Control	Frequency accuracy Digital input Analog input	Within ±0.01% of set output frequency Within ±0.4% of set output frequency												
	Frequency control	Speed regulation with slip compensation (V/Hz and Sensorless Vector modes), 0.5% of base speed across 40:1 speed range, 40:1 operating range												
	Open-Loop ⁽¹⁾ (0 dB crossing) Velocity Loop Bandwidth	<table border="1"> <thead> <tr> <th>Load Ratio</th> <th>Bandwidth (Hz)</th> </tr> </thead> <tbody> <tr> <td>1:0 (unloaded)</td> <td>73</td> </tr> <tr> <td>5:1</td> <td>32</td> </tr> <tr> <td>10:1</td> <td>28</td> </tr> <tr> <td>20:1</td> <td>20</td> </tr> <tr> <td>50:1</td> <td>16</td> </tr> </tbody> </table>	Load Ratio	Bandwidth (Hz)	1:0 (unloaded)	73	5:1	32	10:1	28	20:1	20	50:1	16
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20:1	27													
50:1	21													
Closed-Loop ⁽¹⁾ (-3 dB crossing) Position Loop Bandwidth	<table border="1"> <thead> <tr> <th>Load Ratio</th> <th>Bandwidth (Hz)</th> </tr> </thead> <tbody> <tr> <td>1:0 (unloaded)</td> <td>54</td> </tr> <tr> <td>5:1</td> <td>34</td> </tr> <tr> <td>10:1</td> <td>28</td> </tr> <tr> <td>20:1</td> <td>23</td> </tr> <tr> <td>50:1</td> <td>20</td> </tr> </tbody> </table>	Load Ratio	Bandwidth (Hz)	1:0 (unloaded)	54	5:1	34	10:1	28	20:1	23	50:1	20	
Load Ratio	Bandwidth (Hz)													
1:0 (unloaded)	54													
5:1	34													
10:1	28													
20:1	23													
50:1	20													
Velocity Tracking Error for 1 Hz Oscillating Command	<table border="1"> <thead> <tr> <th>Load Ratio</th> <th>Tracking Error (dB)</th> </tr> </thead> <tbody> <tr> <td>1:0 (unloaded)</td> <td>-57</td> </tr> <tr> <td>5:1</td> <td>-42</td> </tr> <tr> <td>10:1</td> <td>-41</td> </tr> <tr> <td>20:1</td> <td>-36</td> </tr> <tr> <td>50:1</td> <td>-33</td> </tr> </tbody> </table>	Load Ratio	Tracking Error (dB)	1:0 (unloaded)	-57	5:1	-42	10:1	-41	20:1	-36	50:1	-33	
Load Ratio	Tracking Error (dB)													
1:0 (unloaded)	-57													
5:1	-42													
10:1	-41													
20:1	-36													
50:1	-33													
Position Tracking Error for 1 Hz Oscillating Command	<table border="1"> <thead> <tr> <th>Load Ratio</th> <th>Tracking Error (dB)</th> </tr> </thead> <tbody> <tr> <td>1:0 (unloaded)</td> <td>-45</td> </tr> <tr> <td>5:1</td> <td>-35</td> </tr> <tr> <td>10:1</td> <td>-32</td> </tr> <tr> <td>20:1</td> <td>-29</td> </tr> <tr> <td>50:1</td> <td>-27</td> </tr> </tbody> </table>	Load Ratio	Tracking Error (dB)	1:0 (unloaded)	-45	5:1	-35	10:1	-32	20:1	-29	50:1	-27	
Load Ratio	Tracking Error (dB)													
1:0 (unloaded)	-45													
5:1	-35													
10:1	-32													
20:1	-29													
50:1	-27													
Velocity Disturbance Rejection for 1 Hz Oscillating Command	<table border="1"> <thead> <tr> <th>Load Ratio</th> <th>Disturbance Rejection (dB)</th> </tr> </thead> <tbody> <tr> <td>1:0 (unloaded)</td> <td>-61</td> </tr> <tr> <td>5:1</td> <td>-63</td> </tr> <tr> <td>10:1</td> <td>-66</td> </tr> <tr> <td>20:1</td> <td>-67</td> </tr> <tr> <td>50:1</td> <td>-71</td> </tr> </tbody> </table>	Load Ratio	Disturbance Rejection (dB)	1:0 (unloaded)	-61	5:1	-63	10:1	-66	20:1	-67	50:1	-71	
Load Ratio	Disturbance Rejection (dB)													
1:0 (unloaded)	-61													
5:1	-63													
10:1	-66													
20:1	-67													
50:1	-71													
Position Disturbance Rejection for 1 Hz Oscillating Command	<table border="1"> <thead> <tr> <th>Load Ratio</th> <th>Disturbance Rejection (dB)</th> </tr> </thead> <tbody> <tr> <td>1:0 (unloaded)</td> <td>49</td> </tr> <tr> <td>5:1</td> <td>50</td> </tr> <tr> <td>10:1</td> <td>48</td> </tr> <tr> <td>20:1</td> <td>47</td> </tr> <tr> <td>50:1</td> <td>42</td> </tr> </tbody> </table>	Load Ratio	Disturbance Rejection (dB)	1:0 (unloaded)	49	5:1	50	10:1	48	20:1	47	50:1	42	
Load Ratio	Disturbance Rejection (dB)													
1:0 (unloaded)	49													
5:1	50													
10:1	48													
20:1	47													
50:1	42													

Category	Specification	
Control	Torque accuracy with encoder feedback (with optional torque accuracy module, see option CO in 206 Control Options Selection on page 13)	±2% motor rated torque
	Selectable motor control	<ul style="list-style-type: none"> Flux vector (with and without encoder feedback) for induction motors, surface permanent magnet (SPM) motors, and Interior permanent magnet (IPM) motors. Sensorless vector for induction motors, permanent magnet motors (both IPM and SPM), and synchronous reluctance motors. Volts per hertz for induction motors, permanent magnet motors (both IPM and SPM), and synchronous reluctance motors. Economizer for induction motors.
	Stop modes	Multiple programmable stop modes including - Coast, Ramp, Current Limit, Fast Brake, and Decel to Hold.
	Accel/decel	Two independently programmable accel and decel times. Each time may be programmed from 0.1...3600 seconds in 0.1 second increments (0 to motor nameplate speed).
	S Curve time	Adjustable from 0 to 100% of ramp time (normal duty rating)
	Intermittent overload (All PowerFlex 755T products)	Light Duty: 110% Overload capability for up to 1 minute out of 10 minutes Normal Duty: 110% Overload capability for up to 1 minute out of 10 minutes Heavy Duty: 150% Overload capability for up to 3 seconds out of 60 seconds 150% Overload capability for up to 1 minute out of 10 minutes 180% Overload capability for up to 3 seconds out of 60 seconds
	Current limit capability	Proactive current limit programmable from 20 to 160% of rated output current. Independently programmable proportional and integral gain.
	Electronic motor overload protection	Class 10 motor overload protection according to NEC article 430 and motor over-temperature protection according to NEC article 430.126 (A)(2). UL61800-5-1 File E59272.

(1) Open and closed loop bandwidth do not refer to control without and with encoder feedback. It refers to closed loop (-3 dB) and open loop (0 dB crossing) control loop characterization. See the following [Explanation of Bandwidth](#) section for details.

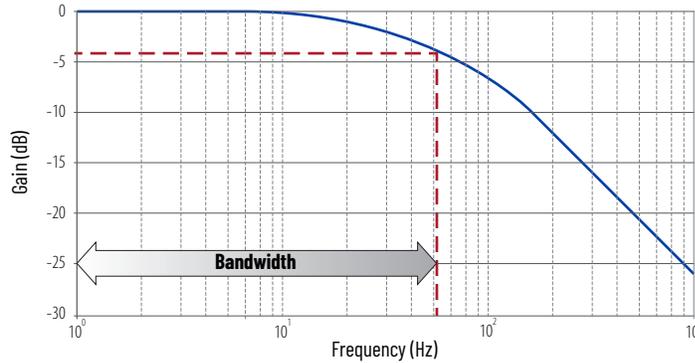
Explanation of Bandwidth

Bandwidth is a term that is used to indicate performance.

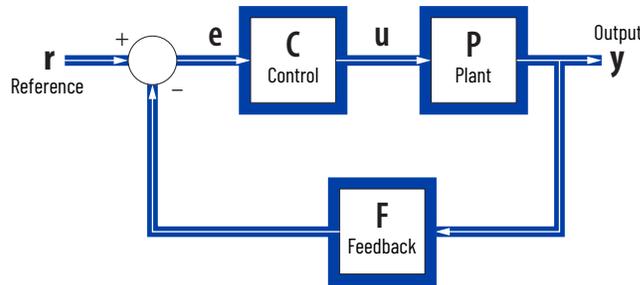
Closed Loop

Closed loop bandwidth is defined as the usable range of frequencies where the gain through a system is above -3 dB.

System Gain Versus Frequency

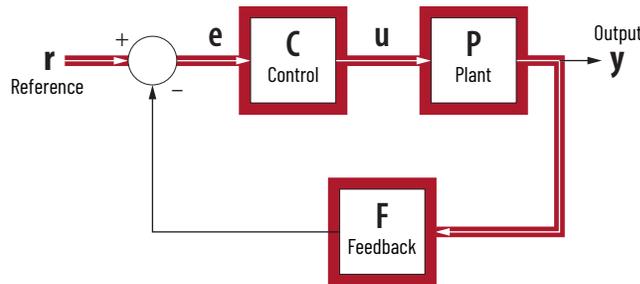


Closed loop bandwidth is a characterization of the entire classical system. Closed loop bandwidth reflects the propagation delays that are related to Control, Plant (motor and load), and Feedback (encoder and encoder input).



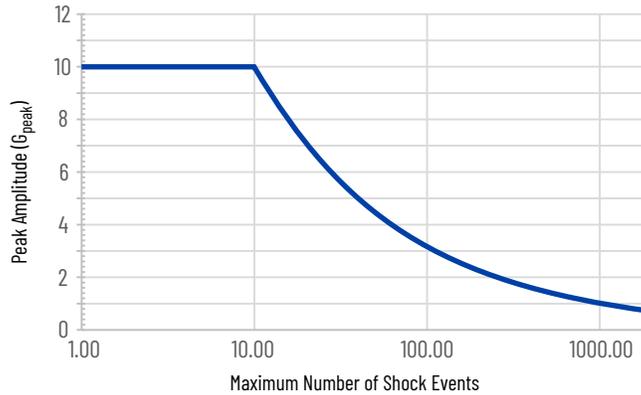
Open Loop Bandwidth

Open loop bandwidth is a characterization of the part of the system. It reflects propagation delays related to Control and Plant. This characterization excludes Feedback. Some control experts refer to this as '0 dB crossing' bandwidth.



Shock Events

PowerFlex 750-Series products can withstand a finite number of shock events. The maximum allowable number of shock events increases as the peak amplitude decreases. Below 0.7 G peak, the maximum total shock events should not exceed 2000 cycles.



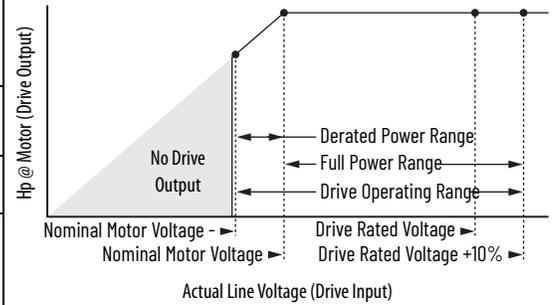
Design Considerations

This section provides information for design considerations.

Input Voltage Tolerance

Drive Rating	Nominal Line Voltage	Nominal Motor Voltage	Drive Full Power Range	Drive Operating Range
380...480	380	380	380...528	342...528
	400	400	400...528	
	480	460	460...528	
600...690	600	575	575...759	517...759
	690	660	660...759	

Drive Full Power Range =	Nominal Motor Voltage to Drive Rated Voltage + 10%. Rated current is available across the entire Drive Full Power Range
Drive Operating Range =	Lowest Nominal Motor Voltage - 10% to Drive Rated Voltage + 10%. Drive Output is linearly derated when Actual Line Voltage is less than the Nominal Motor Voltage

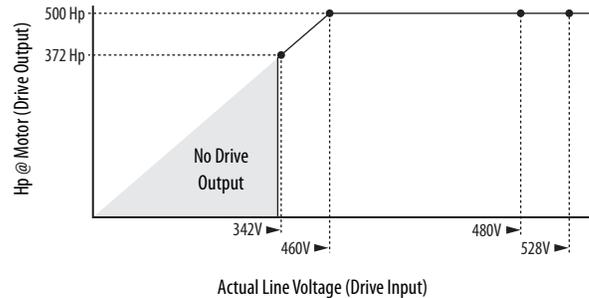


EXAMPLE

Calculate the maximum power of a 500 Hp, 460V motor connected to a 480V-rated drive supplied with 342V Actual Line Voltage input.

- Actual Line Voltage / Nominal Motor Voltage: $342V / 460V = 74.3\%$
- $74.3\% \times 500 \text{ Hp} = 372 \text{ Hp}$
- $74.3\% \times 60 \text{ Hz} = 44.6 \text{ Hz}$

At 342V Actual Line Voltage, the maximum power the 500 Hp, 460V motor can produce is 372 Hp at 44.6 Hz.



IMPORTANT

For maximum protection of the drive and its internal components, Rockwell Automation prefers the use of fast acting semiconductor fuses to other methods of circuit protection. This reduces risk of drive damage from power quality events, and improves machine and process utilization, thus maximizing productivity. See [Fuses and Circuit Breakers on page 69](#).

Control Transformer

Bus supplies include 240V fusing and control transformer when selected. See control option code C1 on page 13. These components are sized for loads representative of the number of common bus inverters for the frame rating.

Approximate Watts Loss

The following table lists watts loss data for drives, bus supplies, and common bus inverters products running at full load, full speed, and default carrier frequency in light duty mode.

Watts Loss for 400V 755T Devices

Catalog Number	Frame	Light Duty kW Output	Light Duty Cont. Output Amps	Total Watts Loss		Catalog Number	Frame	Light Duty kW Output	Light Duty Cont. DC Output Amps	Total Watts Loss
				755TL/ TR Drives	755TM Common Bus Inverters					755TM Bus Supplies
20G...C015	5	11	22	752	—	—	—	—	—	—
20G...C022	5	15	30	892	—	—	—	—	—	—
20G...C030	5	18.5	37	1,031	—	—	—	—	—	—
20G...C037	5	22	43	1,161	—	—	—	—	—	—
20G...C043	5	30	60	1,588	—	—	—	—	—	—
20G...C060	5	37	72	1,737	—	—	—	—	—	—
20G...C072	5	45	85	2,084	—	—	—	—	—	—
20G...C085	5	55	104	2,656	—	—	—	—	—	—
20G...C104	5	55	104	2,656	—	—	—	—	—	—
20G...C140	6	90	170	3,650	—	20J...C140	6	106	182	2,648
20G...C176	6	110	205	4,543	—	20J...C176	6	128	220	3,285
20G...C205	6	132	260	5,127	—	20J...C205	6	162	279	3,422
20G...C260	6	160	302	6,146	—	20J...C260	6	188	324	4,066
20G...C360	6L	200	361	10,500 ⁽¹⁾	—	—	—	—	—	—
20G...C302	7	200	367	6,707	—	20J...C302	7	228	394	4,086
20G...C367	7	250	460	8,699	—	20J...C367	7	286	494	5,358
20G...C460	7	315	540	10,634	—	20J...C460	7	336	579	6,608
20G...C540	7	315	585	11,812	—	20J...C540	7	364	628	7,375
20G...C585	7	315	617	12,689	—	20J...C585	7	384	662	7,948
20G...C302	8	200	367	11,340	4,811	20J...C302	8	228	394	6,594
20G...C367	8	250	460	14,803	6,162	20J...C367	8	286	494	8,740
20G...C460	8	315	540	18,267	7,508	20J...C460	8	336	579	10,894
20G...C540	8	315	585	20,414	8,340	20J...C540	8	364	628	12,231
20G...C585	8	355	650	18,146	7,707	20J...C585	8	387	667	10,615
20G...C650	8	400	750	23,110	9,692	20J...C650	8	467	805	13,673
20G...C750	8	450	796	23,990	10,048	20J...C750	8	479	826	14,209
20G...C770	8	450	832	26,835	11,200	20J...C770	8	518	893	15,947
20G...C920	9	560	1040	31,740	13,993	20J...C920	9	647	1116	17,991
20G...C1K0	9	630	1090	33,828	14,884	20J...C1K0	9	678	1170	19,211
20G...C1K1	9	710	1182	31,010	13,958	20J...C1K1	9	735	1268	17,367
20G...C1K2	9	800	1465	41,344	18,527	20J...C1K2	9	911	1572	23,298
20G...C1K4	9	850	1581	46,064	20,615	20J...C1K4	9	983	1696	26,007
20G...C1K6	10	1000	1715	45,311	20,435	20J...C1K6	10	1067	1840	25,316
20G...C1K7	10	1250	2150	60,912	27,393	20J...C1K7	10	1337	2307	34,207
20G...C2K1	10	1400	2330	68,143	30,622	20J...C2K1	10	1449	2500	38,328

Watts Loss for 400V 755T Devices (Continued)

Catalog Number	Frame	Light Duty kW Output	Light Duty Cont. Output Amps	Total Watts Loss	
				755TL/ TR Drives	755TM Common Bus Inverters
20G...C2K8	11	1800	3078	86,593	40,450
20G...C3K5	12	2200	3846	111,599	51,249
20G...C4K2	13	2475	4576	136,286	61,244
20G...C5K6	14	3285	6074	173,186	80,900
20G...C7K0	15	4095	7571	223,198	102,498

(1) For the liquid cooled frame 6L drive at 400V, 8,650 watts loss into liquid and 1,850 watts loss into air.

Catalog Number	Frame	Light Duty kW Output	Light Duty Cont. DC Output Amps	Total Watts Loss
				755TM Bus Supplies
20J...C2K8	11	1915	3303	47,198
20J...C3K5	12	2393	4127	61,667
20J...C4K2	13	2848	4912	76,656
20J...C5K6	14	3779	6519	94,396
20J...C7K0	15	4711	8126	123,334

Watts Loss for 480V 755T Devices

Catalog Number	Frame	Light Duty Hp Output	Light Duty Cont. Output Amps	Total Watts Loss	
				755TL/ TR Drives	755TM Common Bus Inverters
20G...D014	5	15	22	796	—
20G...D022	5	20	27	892	—
20G...D027	5	25	34	1,042	—
20G...D034	5	30	40	1,185	—
20G...D040	5	40	52	1,510	—
20G...D052	5	50	65	1,656	—
20G...D065	5	60	77	1,980	—
20G...D077	5	75	96	2,562	—
20G...D096	5	75	96	2,562	—
20G...D125	6	125	156	3,539	—
20G...D156	6	150	186	4,327	—
20G...D186	6	200	248	4,975	—
20G...D248	6	250	302	6,279	—
20G...D360	6L	300	361	11,000 ⁽¹⁾	—
20G...D302	7	300	361	6,854	—
20G...D361	7	350	430	8,320	—
20G...D430	7	400	485	9,597	—
20G...D505	7	450	545	11,100	—
20G...D617	7	500	617	13,054	—
20G...D302	8	300	361	11,568	4840
20G...D361	8	350	430	14,170	5825
20G...D430	8	400	485	16,493	6701
20G...D505	8	450	545	19,280	7748
20G...D545	8	500	617	17,322	7383
20G...D617	8	600	710	21,861	9189
20G...D710	8	650	765	23,149	9709
20G...D740	8	700	800	25,852	10,799

Catalog Number	Frame	Light Duty kW Output	Light Duty Cont. DC Output Amps	Total Watts Loss
				755TM Bus Supplies
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
20J...D125	6	111	160	2,583
20J...D156	6	133	191	3,148
20J...D186	6	177	255	3,285
20J...D248	6	216	311	4,089
—	—	—	—	—
20J...D302	7	258	371	4,154
20J...D361	7	307	442	5,072
20J...D430	7	347	499	5,879
20J...D505	7	390	560	6,837
20J...D617	7	441	635	8,091
20J...D302	8	258	371	6786
20J...D361	8	307	442	8425
20J...D430	8	347	499	9893
20J...D505	8	390	560	11,658
20J...D545	8	422	607	10,086
20J...D617	8	508	730	12,882
20J...D710	8	529	761	13,668
20J...D740	8	573	823	15,319

Watts Loss for 480V 755T Devices (Continued)

Catalog Number	Frame	Light Duty Hp Output	Light Duty Cont. Output Amps	Total Watts Loss	
				755TL/ TR Drives	755TM Common Bus Inverters
20G...D800	9	800	960	29,208	12,903
20G...D960	9	900	1045	32,645	14,365
20G...D1K0	9	1000	1135	29,520	13,387
20G...D1K1	9	1100	1365	38,046	17,180
20G...D1K3	9	1250	1520	44,113	19,881
20G...D1K4	10	1500	1655	44,394	20,019
20G...D1K6	10	1800	2070	59,059	26,537
20G...D2K0	10	2000	2240	65,776	29,525
20G...D2K6	11	2600	2960	83,398	38,960
20G...D3K4	12	3300	3696	106,950	48,975
20G...D4K0	13	3900	4400	131,552	59,050
20G...D5K4	14	5200	5840	166,796	77,920
20G...D6K7	15	6400	7280	213,900	97,950

Catalog Number	Frame	Light Duty kW Output	Light Duty Cont. DC Output Amps	Total Watts Loss
				755TM Bus Supplies
20J...D800	9	687	987	16,498
20J...D960	9	748	1075	18,507
20J...D1K0	9	802	1153	16,394
20J...D1K1	9	977	1404	21,250
20J...D1K3	9	1087	1563	24,707
20J...D1K4	10	1184	1702	24,751
20J...D1K6	10	1481	2129	33,109
20J...D2K0	10	1603	2304	36,937
20J...D2K6	11	2118	3044	45,334
20J...D3K4	12	2632	3784	59,082
20J...D4K0	13	3149	4527	73,874
20J...D5K4	14	4180	6008	90,668
20J...D6K7	15	5210	7489	118,164

(1) For the liquid cooled frame 6L drive at 480V, 9,100 watts loss into liquid and 1,900 watts loss into air.

Watts Loss for 600V 755T Devices

Catalog Number	Frame	Light Duty Hp Output	Light Duty Cont. Output Amps	Total Watts Loss	
				755TL/ TR Drives	755TM Common Bus Inverters
20G...E011	5	15	17	825	—
20G...E017	5	20	22	934	—
20G...E022	5	25	27	1,051	—
20G...E027	5	30	32	1,177	—
20G...E032	5	40	41	1,427	—
20G...E041	5	50	52	1,772	—
20G...E052	5	60	62	2,124	—
20G...E062	5	75	77	2,719	—
20G...E077	6	100	99	2,836	—
20G...E099	6	125	125	3,516	—
20G...E125	6	150	144	4,048	—
20G...E144	6	200	192	5,526	—
20G...E192	7	250	242	5,954	—
20G...E242	7	300	295	7,319	—
20G...E295	7	350	355	9,039	—
20G...E355	7	400	395	10,288	—
20G...E395	7	450	435	11,619	—
20G...E242	8	300	295	13,483	5312
20G...E295	8	350	355	16,499	6344
20G...E355	8	400	395	18,702	7090

Catalog Number	Frame	Light Duty kW Output	Light Duty Cont. DC Output Amps	Total Watts Loss
				755TM Bus Supplies
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
20J...E077	6	89	102	1,899
20J...E099	6	112	129	2,308
20J...E125	6	129	148	2,632
20J...E144	6	171	197	3,545
20J...E192	7	217	249	3,475
20J...E242	7	263	303	4,282
20J...E295	7	317	365	5,307
20J...E355	7	353	406	6,056
20J...E395	7	389	447	6,858
20J...E242	8	263	303	8212
20J...E295	8	317	365	10,212
20J...E355	8	353	406	11,681

Watts Loss for 600V 755T Devices (Continued)

Catalog Number	Frame	Light Duty Hp Output	Light Duty Cont. Output Amps	Total Watts Loss	
				755TL/ TR Drives	755TM Common Bus Inverters
20G...E395	8	450	435	21,059	7883
20G...E435	8	500	510	22,039	8483
20G...E545	8	600	580	25,885	9827
20G...E595	9	700	690	28,996	11,969
20G...E690	9	800	760	33,206	13,256
20G...E760	9	900	825	35,657	14,516
20G...E825	9	1000	980	38,230	15,908
20G...E980	9	1100	1102	44,018	18,202
20G...E1K1	10	1250	1220	48,145	19,811
20G...E1K2	10	1500	1430	57,543	23,430
20G...E1K5	10	1600	1624	66,994	27,059
20G...E2K0	11	2100	2146	84,849	35,627
20G...E2K4	12	2600	2668	108,608	44,685
20G...E2K9	13	3300	3190	133,988	54,118
20G...E3K9	14	4400	4234	169,698	71,254
20G...E4K9	15	5500	5278	217,216	89,370

Catalog Number	Frame	Light Duty kW Output	Light Duty Cont. DC Output Amps	Total Watts Loss	
				755TM Bus Supplies	
20J...E395	8	389	447	13,258	
20J...E435	8	456	524	13,667	
20J...E545	8	518	596	16,200	
20J...E595	9	617	710	17,130	
20J...E690	9	680	782	20,073	
20J...E760	9	737	848	21,285	
20J...E825	9	877	1008	22,523	
20J...E980	9	985	1133	26,068	
20J...E1K1	10	1091	1255	28,541	
20J...E1K2	10	1279	1471	34,395	
20J...E1K5	10	1452	1670	40,298	
20J...E2K0	11	1919	2207	49,697	
20J...E2K4	12	2386	2744	64,508	
20J...E2K9	13	2851	3278	80,596	
20J...E3K9	14	3784	4351	99,394	
20J...E4K9	15	4717	5424	129,016	

Watts Loss for 690V 755T Devices

Catalog Number	Frame	Light Duty kW Output	Light Duty Cont. Output Amps	Total Watts Loss	
				755TL/ TR Drives	755TM Common Bus Inverters
20G...F015	5	15	20	937	—
20G...F020	5	18.5	23	1,005	—
20G...F023	5	22	30	1,173	—
20G...F030	5	30	34	1,276	—
20G...F034	5	37	46	1,615	—
20G...F046	5	45	50	1,738	—
20G...F050	5	55	61	2,103	—
20G...F061	5	75	82	2,905	—
20G...F082	6	90	98	3,043	—
20G...F098	6	110	119	3,641	—
20G...F119	6	132	142	4,343	—
20G...F142	6	160	171	5,299	—
20G...F171	7	200	215	5,740	—
20G...F215	7	250	265	7,035	—
20G...F265	7	315	330	8,918	—
20G...F330	7	355	370	10,190	—
20G...F370	7	400	415	11,723	—
20G...F215	8	250	265	12,875	5057

Catalog Number	Frame	Light Duty kW Output	Light Duty Cont. DC Output Amps	Total Watts Loss	
				755TM Bus Supplies	
—	—	—	—	—	
—	—	—	—	—	
—	—	—	—	—	
—	—	—	—	—	
—	—	—	—	—	
—	—	—	—	—	
—	—	—	—	—	
—	—	—	—	—	
—	—	—	—	—	
F082	6	101	101	2,045	
F098	6	122	122	2,411	
F119	6	146	146	2,847	
F142	6	176	176	3,451	
F171	7	221	221	3,424	
F215	7	272	272	4,199	
F265	7	339	339	5,340	
F330	7	380	380	6,116	
F370	7	426	426	7,058	
20J...F215	8	272	272	7851	

Watts Loss for 690V 755T Devices (Continued)

Catalog Number	Frame	Light Duty kW Output	Light Duty Cont. Output Amps	Total Watts Loss	
				755TL/ TR Drives	755TM Common Bus Inverters
20G...F265	8	315	330	16,200	6171
20G...F330	8	355	370	18,459	6917
20G...F370	8	400	415	21,194	7814
20G...F415	8	450	460	20,668	7971
20G...F505	8	560	565	26,512	9990
20G...F565	9	630	650	24,768	10,319
20G...F650	9	710	735	33,893	13,383
20G...F735	9	800	820	37,242	15,075
20G...F820	9	900	920	37,736	15,605
20G...F920	9	1000	1074	45,212	18,529
20G...F1K0	10	1100	1150	48,104	19,660
20G...F1K1	10	1250	1344	56,985	23,033
20G...F1K4	10	1500	1582	68,911	27,546
20G...F1K8	11	2000	2091	87,377	36,268
20G...F2K3	12	2500	2599	111,745	45,474
20G...F2K7	13	3080	3108	137,822	55,092
20G...F3K6	14	4088	4125	174,754	72,536
20G...F4K5	15	5096	5142	223,490	90,948

Catalog Number	Frame	Light Duty kW Output	Light Duty Cont. DC Output Amps	Total Watts Loss	
				755TM Bus Supplies	
20J...F265	8	339	339	10,079	
20J...F330	8	380	380	11,602	
20J...F370	8	426	426	13,455	
20J...F415	8	472	472	12,788	
20J...F505	8	580	580	16,657	
20J...F565	9	580	580	14,519	
20J...F650	9	754	754	20,625	
20J...F735	9	842	842	22,308	
20J...F820	9	944	944	22,308	
20J...F920	9	1102	1102	26,922	
20J...F1K0	10	1180	1180	28,629	
20J...F1K1	10	1380	1380	34,201	
20J...F1K4	10	1624	1624	41,708	
20J...F1K8	11	2146	2146	51,558	
20J...F2K3	12	2668	2668	66,824	
20J...F2K7	13	3190	3190	83,416	
20J...F3K6	14	4234	4234	103,116	
20H...F4K5	15	5278	5278	133,648	

Liquid Cooling Loop Requirements

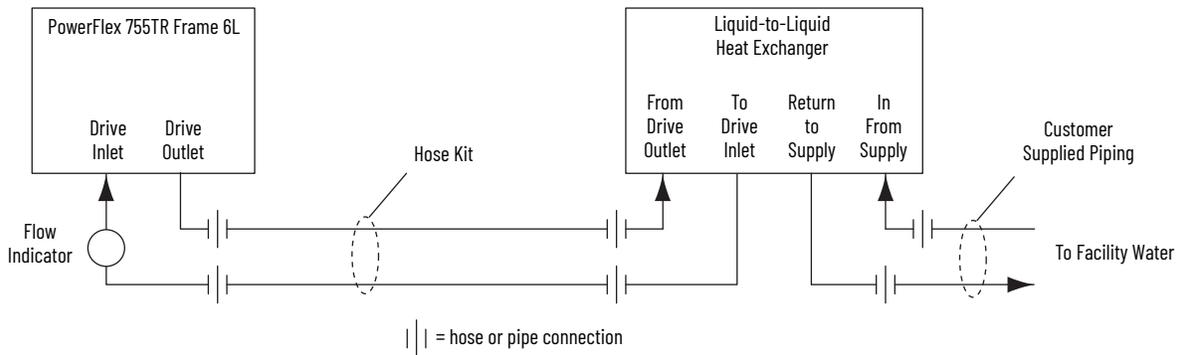
Proper liquid cooling is critical to Frame 6L drive operation and reliability. This section provides an overview of the types of drive cooling loops, drive coolant requirements, and cooling loop connections for the PowerFlex 755TR Liquid-Cooled drive power structure. For instructions on installing the PowerFlex 755TR frame 6L liquid cooled drive, see the PowerFlex Drives with TotalFORCE Control Installation Instructions, publication [750-IN100](#).

Liquid-to-Liquid Heat Exchanger Cooling Loop

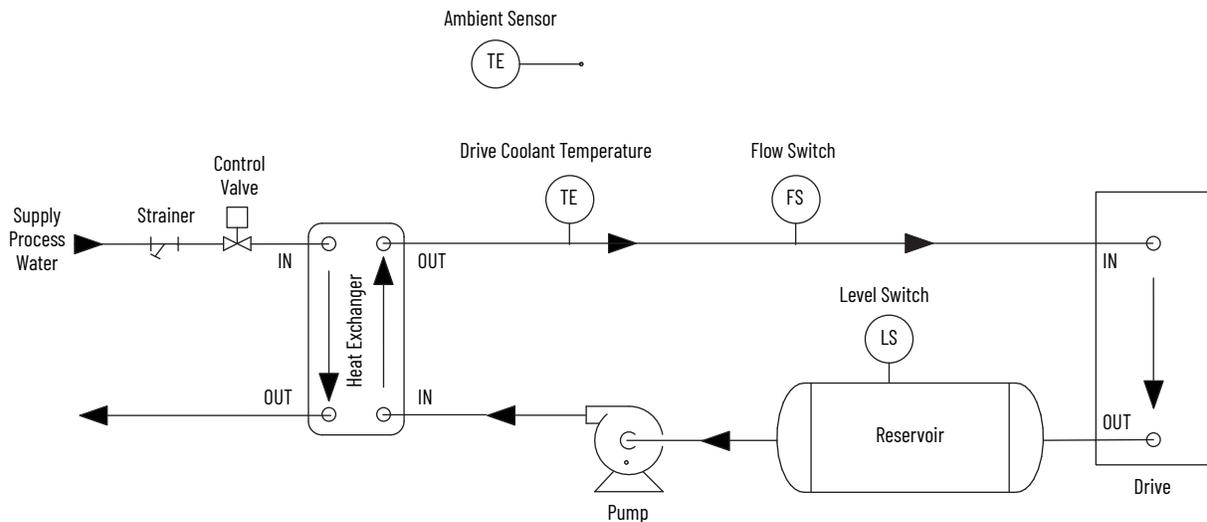
The liquid-to-liquid heat exchanger uses a heat transfer plate to transfer heat from one liquid to another. This method requires a stable water supply from the user.

Drive and Liquid-to-Liquid Heat Exchanger Plumbing Arrangement

This figure shows a cooling loop diagram for a typical liquid-to-liquid heat exchanger.



Liquid-to-Liquid Heat Exchanger Plumbing Diagram



The is a list of the main components of the liquid-to-liquid heat exchanger cooling loop.

Part Name	Description
Strainer	Filters particles from the supply water.
Control valve	Controls the supply loop water flow.
Heat exchanger plate	Transfers heat from the drive loop to the supply loop.
Ambient sensor	Senses the ambient temperature used for the dew point control.
Drive coolant temperature sensor	Senses the drive coolant temperature used for the dew point control.
Drive coolant flow switch	Measures the drive coolant flow rate.
Level switch	Senses the level of coolant in the reservoir.
Reservoir	Stores drive coolant.
Pump and motor	Circulates drive coolant.

Cable Considerations

Power Cable Types Acceptable for 400...690 Volt Installations

A variety of cable types are acceptable for drive installations. For an in-depth discussion of cable types, including a table of maximum motor cable lengths, refer to the PowerFlex 750-Series Products with TotalFORCE Control Installation Instructions, publication [750-IN100](#) or Wiring and Grounding Guidelines for Pulse Width Modulated (PWM) AC Drives, publication [DRIVES-IN001](#).

Selection Considerations

Type	Cable Type(s)	Description	Min. Insulation Rating	
Input Power ^{(1) (2)}	Standard	-	600V, 75 °C (167 °F) ⁽³⁾	
Motor	Standard	-	400...600V systems: 600V, 75 °C (167 °F) 690V systems: 2000V, 90 °C (194 °F)	
Signal ^{(1) (4) (5)}	Standard Analog I/O	-	0.750 mm ² (18 AWG), twisted pair, 100% shield w/drain.	
	Remote Pot	-	0.750 mm ² (18 AWG), 3 conductor, shielded.	
	Encoder/ Pulse I/O <30 m (100 ft)	Combined	0.196 mm ² (24 AWG) individually shielded pairs.	
	Encoder/ Pulse I/O 30...152 m (100...500 ft)	Signal	0.196 mm ² (24 AWG) individually shielded pairs.	300V, 75...90 °C (167...194 °F)
		Power	0.750 mm ² (18 AWG) in.dividually shielded pairs	
		Combined	0.330 mm ² (22 AWG), power is 0.500 mm ² (20AWG) individually shielded pairs.	
	Encoder/ Pulse I/O 152...259 m (500...850 ft.)	Signal	0.196 mm ² (24 AWG) individually shielded pairs.	
Power		0.750 mm ² (18 AWG) individually shielded pairs.		
Combined		0.750 mm ² (18 AWG) individually shielded pairs.		
Control Power	Un-shielded	-	Per US NEC or applicable national or local code.	
Digital I/O Safety Inputs Homing Inputs ^{(1) (4) (5)}	Un-shielded	-	Per US NEC or applicable national or local code.	
	Shielded	Multi-conductor shielded cable	0.750 mm ² (18 AWG), 3 conductor, shielded.	

(1) Signal wires should be separated from power wires by at least 0.3 meters (1 foot).

(2) The use of shielded wire for AC input power may not be necessary but is always recommended.

(3) The minimum insulation rating for input power wire must be at least equal to the nominal system voltage rating.

(4) If the wires are short and contained within a cabinet which has no sensitive circuits, the use of shielded wire may not be necessary, but is always recommended.

(5) I/O terminals labeled '(-)' or 'Common' are not referenced to earth ground and are designed to greatly reduce common mode interference. Grounding these terminals can cause signal noise. For CE installations, 115V I/O must use shielded cable or have a cable length less than 30 m (98 ft).

Power Wiring

The following section describes the cabling requirements for three-phase power and motor connections.

Follow applicable local codes to determine power and motor cable conductor size and quantity.

For detailed installation instructions, including cable entry and exit and customer connections options, refer to the PowerFlex 750-Series Products with TotalFORCE Control Installation Instructions, publication [750-IN100](#).

Input Power Cables

- Frame 5, 6, and 6L drives provide for input power cable connections at the bottom of the chassis.
- Frame 7 drives and bus supplies provide for power cable entry through either the top or the bottom of the cabinet.
- Frame 8...12 drives and bus supplies provide for power cable entry through the bottom of the input bay.
- Frame 8 and 9 drives and bus supplies that are equipped with the P17 power option provide for power cable entry through the top conduit plate of the input bay.
- Optional entry wiring bays are available to accommodate power cable top entry for frame 10...12 drives and bus supplies.
- Frame 13...15 drives and bus supplies include entry wiring bays.

Motor Cables

- Frame 5, 6, and 6L drives provide for motor cable connections at the bottom of the chassis.
- Frame 7 drives provide for motor cable exit through the bottom of the cabinet.
- Frame 8...12 drives and common bus inverters provide for motor cable exit through the bottom of the power bay (inverter).
- Optional exit wiring bays are available to accommodate motor cable top exit for all drives and common bus inverters, frames 8...12.
- Frame 13...15 in-line drive configurations and common bus converters include exit wiring bays.
- Frame 13...15 back-to-back drive configurations include a voltage balance bay.

Motor Considerations

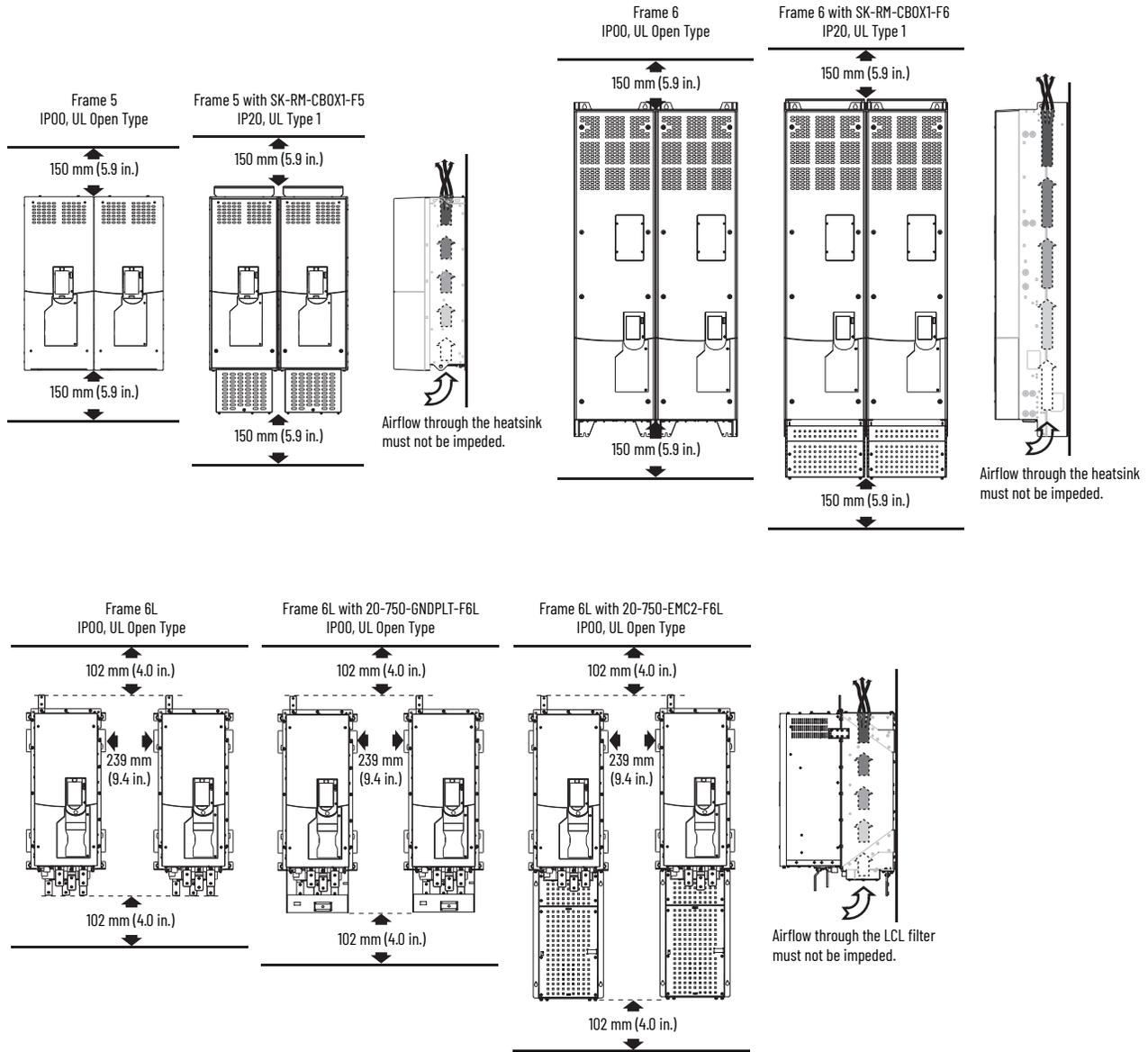
Due to the operational characteristics of AC variable frequency drives, motors with inverter grade insulation systems designed to meet or exceed NEMA MG1 Part 31.40.4.2 standards for resistance to spikes of 1600 volts are recommended.

Guidelines must be followed when using non-inverter grade motors to avoid premature motor failures. Refer to Wiring and Grounding Guidelines for Pulse Width Modulated (PWM) AC Drives, publication [DRIVES-IN001](#) for recommendations.

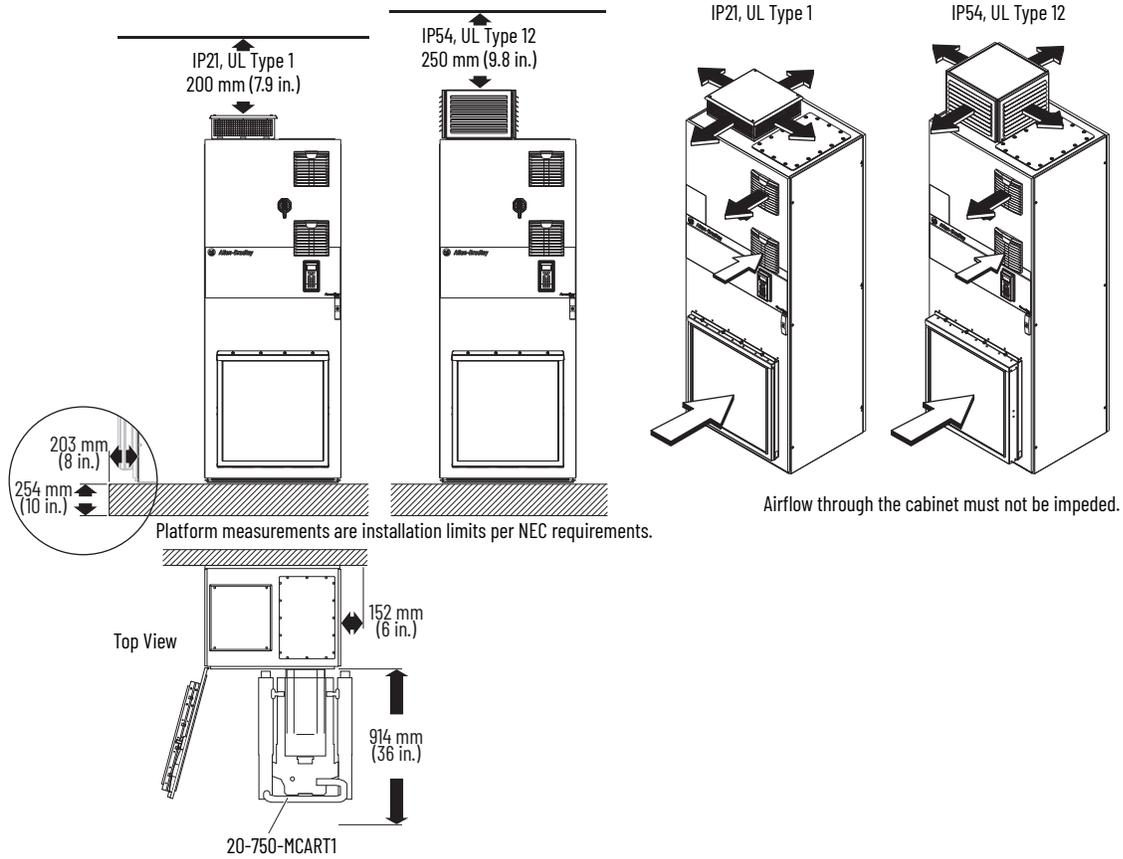
Minimum Mounting Clearances

Specified vertical clearance requirements are intended to be from the PowerFlex 755T product to the closest object that can restrict airflow through the cabinet. The product must be mounted in a vertical orientation as shown and must make full contact with the mounting surface. In addition, inlet air temperature must not exceed the product specification.

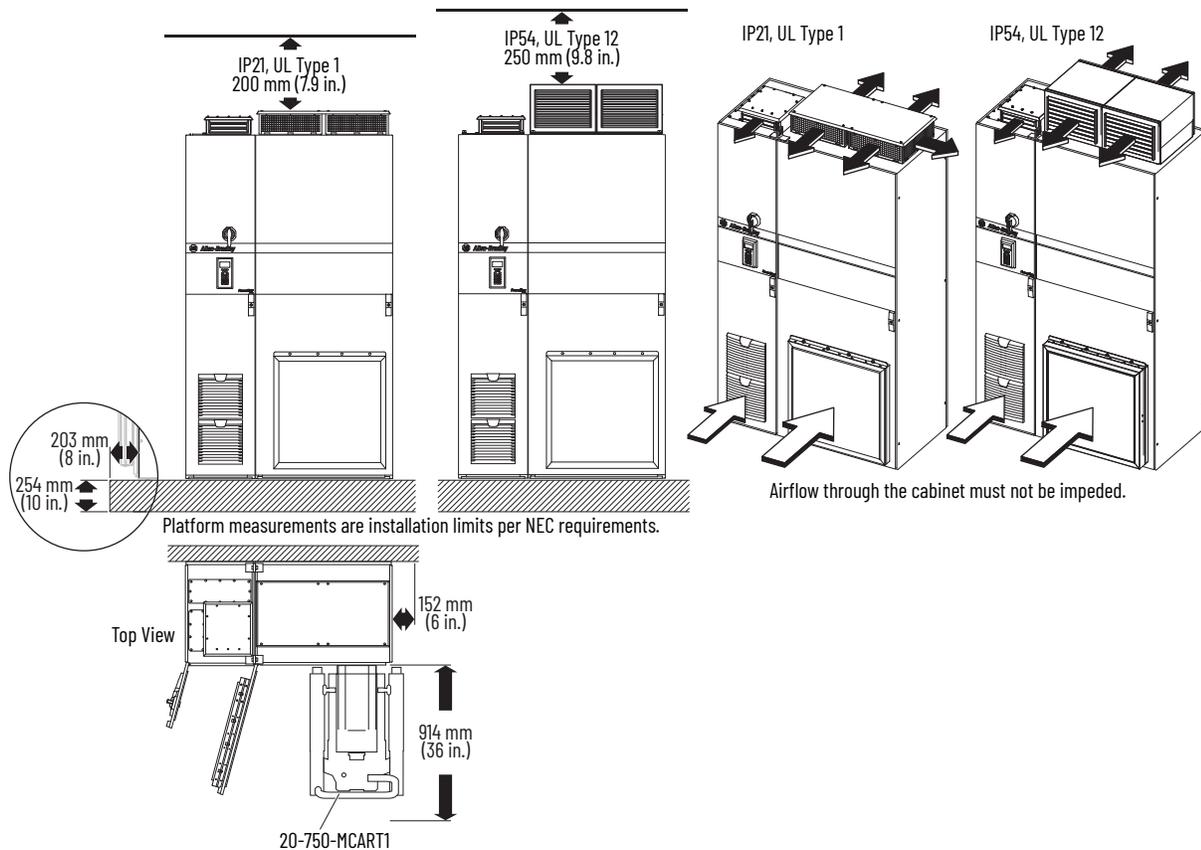
Wall Mount Frames 5, 6, and 6L



Floor Mount Frame 7



Floor Mount Frames 8...15



Enclosure Options

IMPORTANT IP21, UL Type 1 PowerFlex 750-Series drives must be installed in a clean, dry location. Contaminants such as oils, corrosive vapors and abrasive debris must be kept out of the enclosure. These enclosures are intended for indoor use primarily to provide a degree of protection against contact with enclosed equipment. These enclosures offer no protection against airborne contaminants. Refer to the following tables for an explanation of enclosure options and the environmental specifications found on [page 26](#). See Industry Installation Guidelines for Pulse Width Modulated (PWM) AC Drives, publication [DRIVES-AT003](#) for additional information.

Pollution Degree Ratings According to EN 61800-5-1

Pollution Degree	Description
1	No pollution or only dry, non-conductive pollution occurs. The pollution has no influence.
2	Normally, only non-conductive pollution occurs. Occasionally, however, a temporary conductivity caused by condensation is to be expected, when the drive is out of operation.
3	Conductive pollution or dry non-conductive pollution occurs, which becomes conductive due to condensation, which is to be expected.
4	The pollution generates persistent conductivity caused, for example by conductive dust or rain or snow.

Product Enclosure Ratings

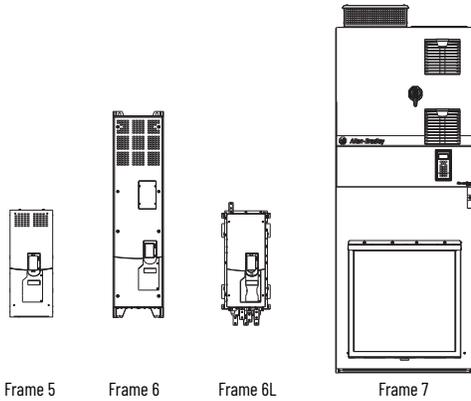
Frames	Enclosure Type (Cat. No. Position 6)	Enclosure Type	Pollution Degree
5, 6, and 6L	N	IP00, UL Open Type	1, 2
7		IP20, UL Type 1	1, 2
7...15	3	IP21, UL Type 1	1, 2
	4	IP54, UL Type 12	1, 2, 3, 4

Approximate Weights

Some products are divided for shipment. The weight of each section and the total weight are listed in the tables in this section.

Frame 5, 6, 6L, and 7 Drives and Bus Supplies

Frame 5, 6, 6L, and 7 drives and bus supplies ship as complete units.

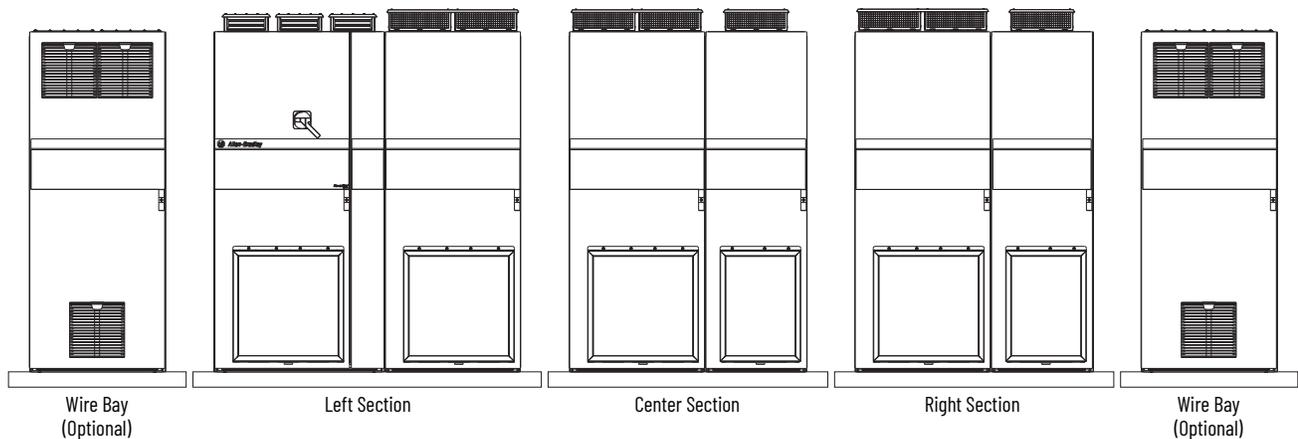


Approximate Maximum Weights - Frames 5, 6, 6L, and 7 Drives and Bus Supplies

Device	Frame Size	Approximate Maximum Weight [kg (lb)]	Approximate Maximum Weight with Packaging [kg (lb)]
755TL drives	5	73 (160)	85 (187)
	6	145 (320)	158 (349)
	7	567 (1250)	596 (1315)
755TR drives	5	73 (160)	85 (187)
	6	145 (320)	158 (349)
	6L	171 (377)	196 (431)
	7	567 (1250)	596 (1315)
755TM bus supplies	6	145 (320)	158 (349)
	7	454 (1000)	533 (1175)

Shipment Sections

This diagram illustrates how products are divided for shipment.



Approximate Maximum Drive and Bus Supply Weights – Frames 8...12

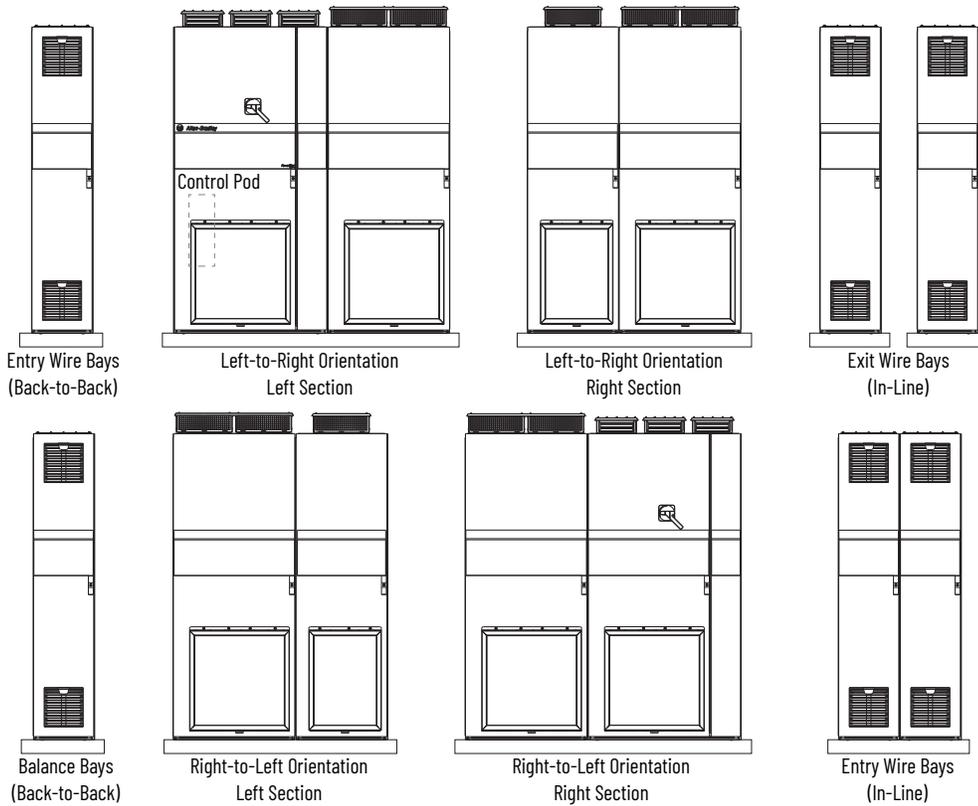
Device	Frame Size	Approximate Maximum Unit Weight [kg (lb)]				Approximate Maximum Weight with Packaging [kg (lb)]			
		Input and Power Bay	with Entry Wire Bay	with Exit Wire Bay	with Entry and Exit Wire Bay	Input and Power Bay	with Entry Wire Bay	with Exit Wire Bay	with Entry and Exit Wire Bay
755TL Drives	8	Total: 900 (1984)	Total: 987 (2176)	Total: 1770 (3902)	Total: 993 (2186)	Total: 1817 (4006)	Total: 1113 (2454)	Total: 1928 (4261)	
	9	Total: 1693 (3710)	Total: 1770 (3902)	Total: 3010 (6636)	Total: 3097 (6829)	Total: 1817 (4006)	Total: 1928 (4261)	Total: 3249 (7163)	
	10	Left section: 1553 (3423) Right section: 1370 (3021) Total: 2923 (6444)	Left section: 1553 (3423) Right section: 1457 (3213) Total: 3010 (6636)	Left section: 1640 (3616) Right section: 1457 (3213) Total: 3097 (6829)	Left section: 1640 (3616) Right section: 2018 (4449) Exit wire bay: 242 (533) Total: 4944 (10775)	Left section: 1683 (3710) Right section: 1467 (3234) Total: 3150 (6944)	Left section: 1782 (3929) Right section: 1467 (3234) Total: 3249 (7163)	Left section: 1683 (3710) Right section: 1601 (3530) Total: 3298 (7271)	Left section: 1687 (3741) Right section: 1601 (3530) Total: 3298 (7271)
755TR Drives	8	Total: 900 (1984)	Total: 987 (2176)	Total: 1770 (3902)	Total: 993 (2186)	Total: 1817 (4006)	Total: 1113 (2454)	Total: 1928 (4261)	
	9	Total: 1693 (3710)	Total: 1770 (3902)	Total: 3010 (6636)	Total: 3097 (6829)	Total: 1817 (4006)	Total: 1928 (4261)	Total: 3249 (7163)	
	10	Left section: 1650 (3593) Right section: 1370 (3021) Total: 3000 (6614)	Left section: 1553 (3423) Right section: 1457 (3213) Total: 3010 (6636)	Left section: 1640 (3616) Right section: 2018 (4449) Exit wire bay: 242 (533) Total: 4944 (10775)	Left section: 1642 (3620) Right section: 1419 (3128) Center section: 1485 (3274) Right section: 1485 (3274) Exit wire bay: 242 (533) Total: 4912 (10688)	Left section: 1683 (3710) Right section: 1467 (3234) Total: 3150 (6944)	Left section: 1782 (3929) Right section: 1467 (3234) Total: 3249 (7163)	Left section: 1683 (3710) Right section: 1601 (3530) Total: 3298 (7271)	Left section: 1786 (3937) Right section: 2166 (4775) Exit wire bay: 309 (681) Total: 4261 (9393)
755TM Bus Supplies	8	Total: 709 (1563)	Total: 987 (2176)	Total: 1770 (3902)	Total: 993 (2186)	Total: 1817 (4006)	Total: 1113 (2454)	Total: 1928 (4261)	
	9	Total: 1180 (2601)	Total: 1277 (2815)	Total: 2264 (4991)	Total: 2284 (4991)	Total: 1817 (4006)	Total: 1928 (4261)	Total: 3249 (7163)	
	10	Left section: 1642 (3621) Center section: 1419 (3128) Right section: 1363 (3004) Total: 4424 (9753)	Left section: 1642 (3621) Center section: 1419 (3128) Right section: 1363 (3004) Exit wire bay: 242 (533) Total: 4666 (10286)	Left section: 1642 (3621) Center section: 1419 (3128) Right section: 1363 (3004) Exit wire bay: 242 (533) Total: 4666 (10286)	Left section: 1642 (3621) Center section: 1419 (3128) Right section: 1363 (3004) Exit wire bay: 242 (533) Total: 4666 (10286)	Left section: 1683 (3710) Center section: 1541 (3397) Right section: 1541 (3397) Total: 4812 (10688)	Left section: 1782 (3929) Center section: 1541 (3397) Right section: 1541 (3397) Total: 4812 (10688)	Left section: 1683 (3710) Center section: 1541 (3397) Right section: 1541 (3397) Total: 4812 (10688)	Left section: 1786 (3937) Center section: 1541 (3397) Right section: 1485 (3274) Exit wire bay: 309 (681) Total: 5121 (11289)

Approximate Maximum Common Bus Inverter Weights

Device	Frame Size	Approximate Maximum Unit Weight [kg (lb)]				Approximate Maximum Weight with Packaging, kg (lb)			
		Power Bay	with Control Bay	with Exit Wire Bay	with Control and Exit Wire Bay	Power Bay	with Control Bay	with Exit Wire Bay	with Control and Exit Wire Bay
755TM Common Bus Inverter	8	374 (825)	455 (1004)	477 (1052)	588 (1291)	433 (955)	520 (1146)	544 (1199)	679 (1497)
	9	611 (1348)	682 (1527)	714 (1575)	796 (1754)	674 (1486)	761 (1678)	803 (1770)	891 (1964)
	10	873 (1924)	954 (2103)	954 (2103)	1057 (2331)	940 (2072)	1045 (2304)	1047 (2308)	1156 (2549)
	11	1284 (2830)	1365 (3009)	1503 (3331)	1584 (3492)	1377 (3036)	1464 (3228)	1637 (3609)	1738 (3832)
	12	1580 (3483)	1661 (3662)	1799 (3966)	1880 (4145)	1677 (3697)	1789 (3944)	1951 (4301)	2040 (4497)

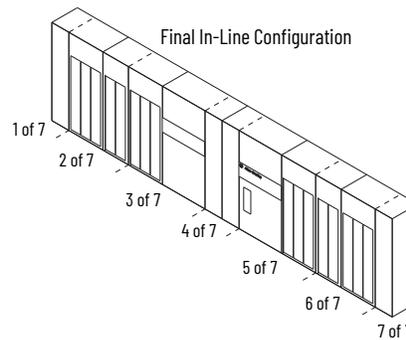
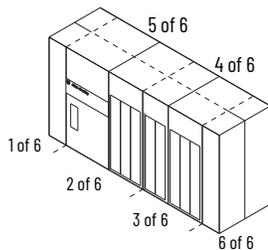
Shipment Sections Frame 13 Drives

This diagram illustrates how products are divided for shipment.



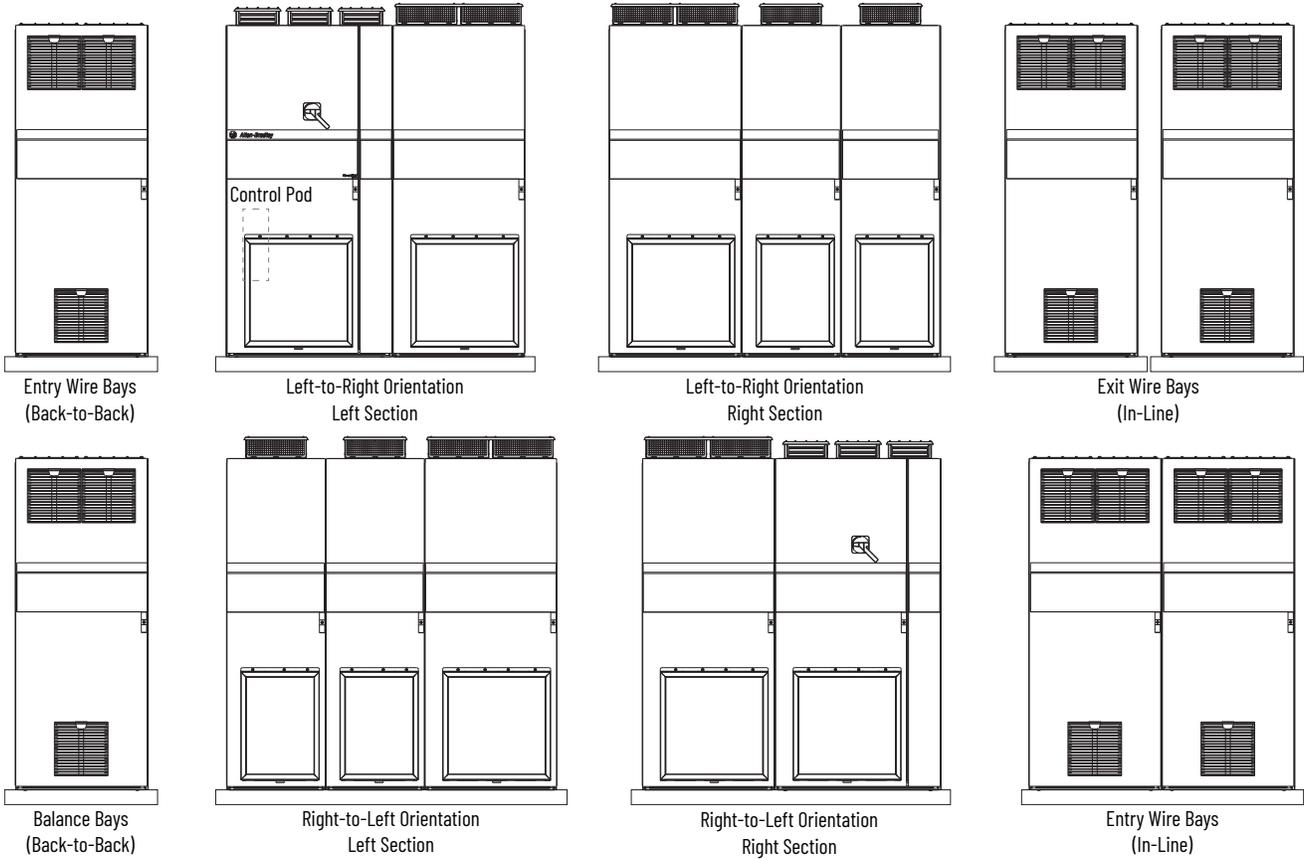
Approximate Maximum Weights - Frame 13 Drives

Device	Frame Size	Approximate Maximum Weight [kg (lb)]							
		Back-to-Back Configuration				In-Line Configuration			
		Description	Weight	with Packaging	Section No.	Description	Weight	with Packaging	Section No.
755TR drives	13	Left-to-right orientation				Left-to-right orientation			
		Left section:	1553 (3423)	1683 (3710)	2 of 6	Left section:	1553 (3423)	1683 (3710)	5 of 7
		Right section:	1370 (3021)	1467 (3234)	3 of 6	Right section:	1370 (3021)	1467 (3234)	6 of 7
		Right-to-left orientation				Right-to-left orientation			
		Left section:	1370 (3021)	1467 (3234)	4 of 6	Left section:	1370 (3021)	1467 (3234)	2 of 7
		Right section:	1553(3423)	1683 (3710)	5 of 6	Right section:	1553 (3423)	1683 (3710)	3 of 7
		Wire bays				Wire bays			
		Fiber routing and entry wire bays:	291 (642)	365 (805)	1 of 6	Entry wire bays:	252 (556)	314 (692)	4 of 7
		DC voltage balance and exit wire bays:	291 (642)	365 (805)	6 of 6	Left exit wire bay:	126 (278)	185 (408)	1 of 7
		Total:	6428 (14,172)	7030 (15,498)		Right exit wire bay:	126 (278)	185 (408)	7 of 7
						Total:	6350 (14,000)	6984 (15,397)	



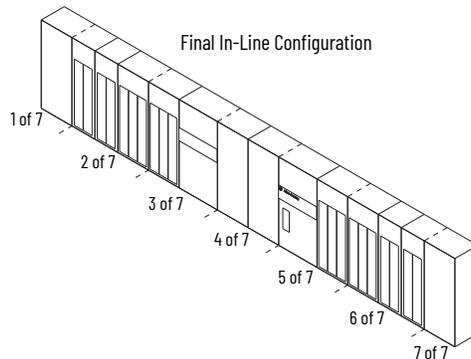
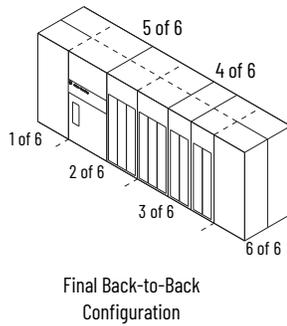
Shipment Sections Frame 14 Drives

This diagram illustrates how products are divided for shipment.



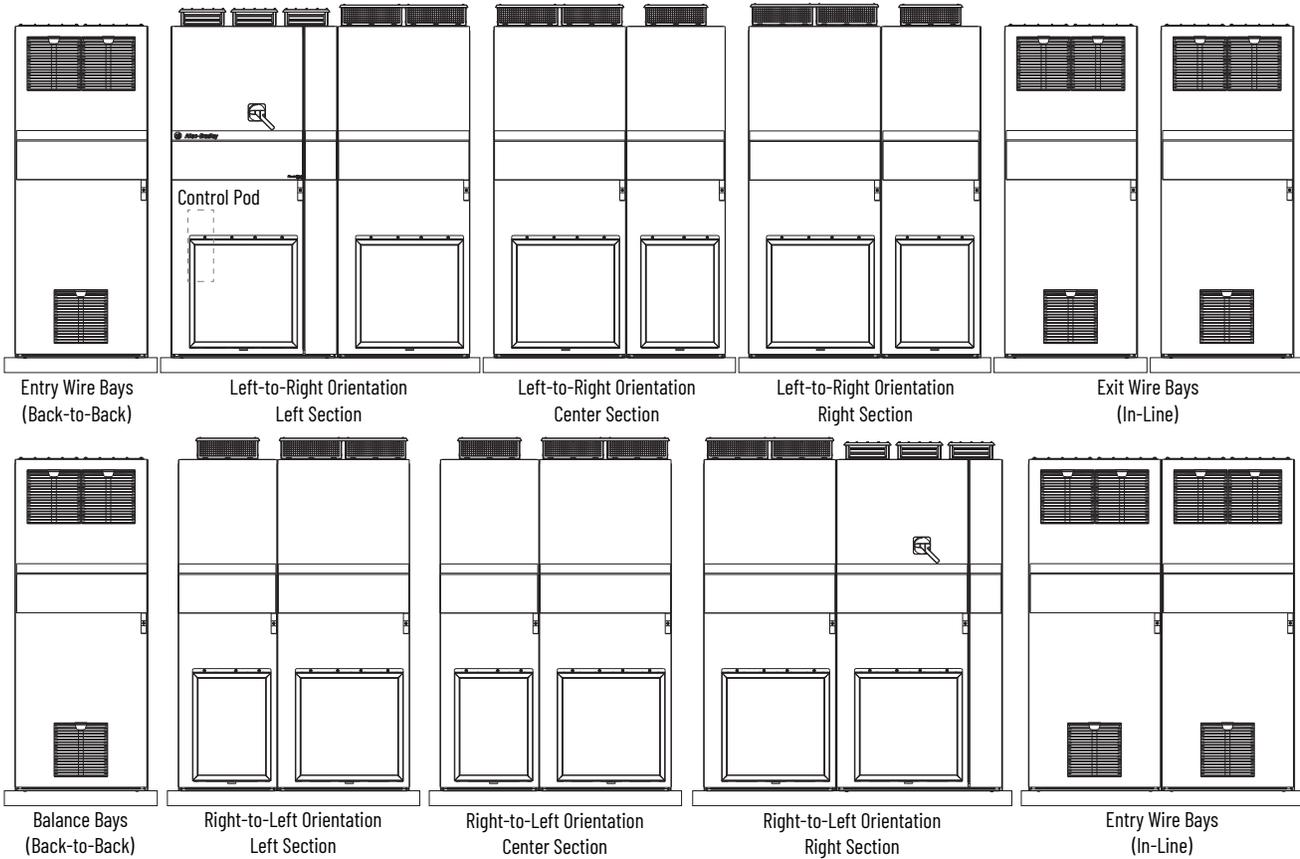
Approximate Maximum Weights - Frame 14 Drives

Device	Frame Size	Approximate Maximum Weight [kg (lb)]							
		Back-to-Back Configuration				In-Line Configuration			
		Description	Weight	with Packaging	Section No.	Description	Weight	with Packaging	Section No.
755TR drives	14	Left-to-right orientation	Left section: 1642 (3621) Right section: 2018 (4449)	1786 (3937) 2166 (4775)	2 of 6 3 of 6	Left-to-right orientation	Left section: 1642 (3621) Right section: 2018 (4449)	1786 (3937) 2166 (4775)	5 of 7 6 of 7
		Right-to-left orientation	Left section: 2018 (4449) Right section: 1642(3621)	2166 (4775) 1786 (3937)	4 of 6 5 of 6	Right-to-left orientation	Left section: 2018 (4449) Right section: 1642 (3621)	2166 (4775) 1786 (3937)	2 of 7 3 of 7
		Wire bays	Fiber routing and entry wire bays: 523 (1154) DC voltage balance and exit wire bays: 523 (1154) Total: 8366 (18,448)	597 (1316) 597 (1316)	1 of 6 6 of 6	Wire bays	Entry wire bays: 484 (1066) Left exit wire bay: 242 (533) Right exit wire bay: 242 (533) Total: 8288 (18,272)	600 (1323) 309 (681) 309 (681) 9122 (20,111)	4 of 7 1 of 7 7 of 7



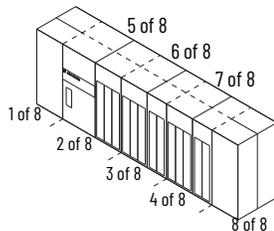
Shipment Sections Frame 15 Drives

This diagram illustrates how products are divided for shipment.

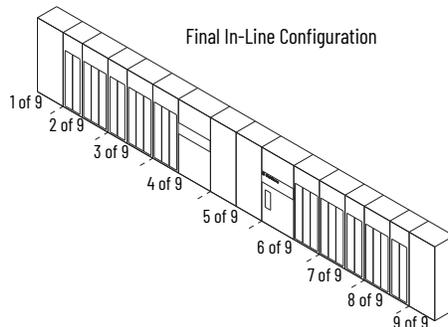


Approximate Maximum Weights - Frame 15 Drives

Device	Frame Size	Approximate Maximum Weight [kg (lb)]							
		Back-to-Back Configuration				In-Line Configuration			
		Description	Weight	with Packaging	Section No.	Description	Weight	with Packaging	Section No.
755TR drives	15	Left-to-right orientation				Left-to-right orientation			
			Left section: 1642 (3621)	1786 (3937)	2 of 8	Left section: 1642 (3621)	1786 (3937)	6 of 9	
			Center section: 1419 (3128)	1541 (3397)	3 of 8	Center section: 1419 (3128)	1541 (3397)	7 of 9	
			Right section: 1363 (3004)	1485 (3274)	4 of 8	Right section: 1363 (3004)	1485 (3274)	8 of 9	
	Right-to-left orientation				Right-to-left orientation				
	Left section: 1363 (3004)	1485 (3274)	5 of 8	Left section: 1363 (3004)	1485 (3274)	2 of 9			
	Center section: 1419 (3128)	1541 (3397)	6 of 8	Center section: 1419 (3128)	1541 (3397)	3 of 9			
	Right section: 1642 (3621)	1786 (3937)	7 of 8	Right section: 1642 (3621)	1786 (3937)	4 of 9			
	Wire bays				Wire bays				
	Fiber routing and entry wire bays: 523 (1154)	597 (1316)	1 of 8	Entry wire bays: 484 (1066)	600 (1323)	5 of 9			
	DC voltage balance and exit wire bays: 523 (1154)	597 (1316)	8 of 8	Left exit wire bay: 242 (533)	309 (681)	1 of 9			
	Total: 9894 (21,814)	10,818 (23,850)		Right exit wire bay: 242 (533)	309 (681)	9 of 9			
				Total: 9816 (21,638)	10,842 (23,902)				



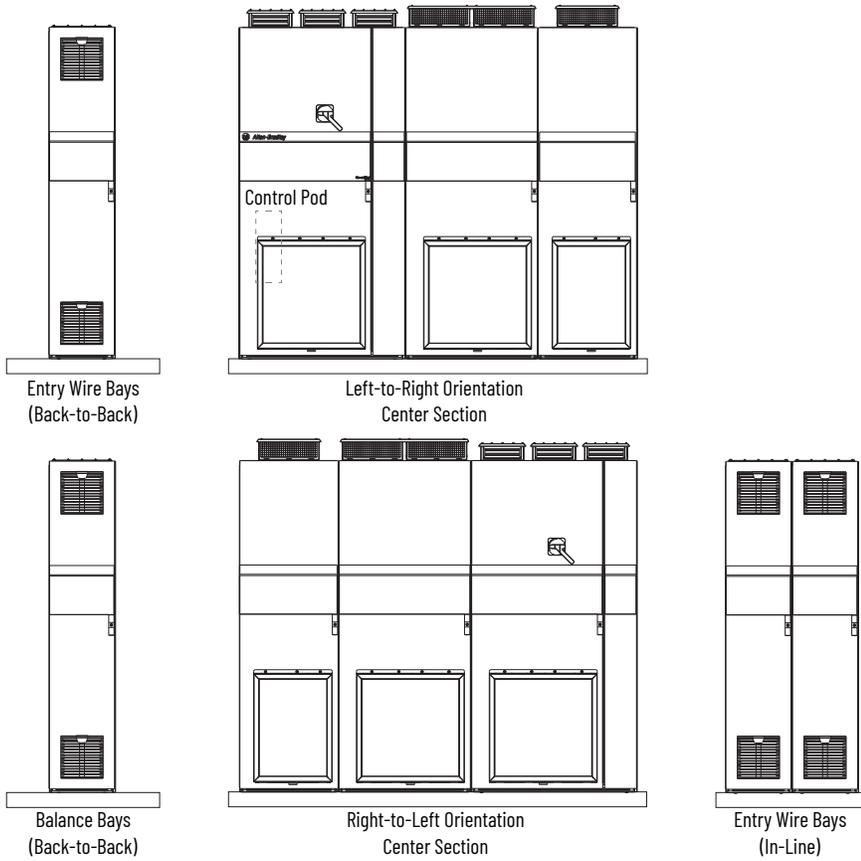
Final Back-to-Back Configuration



Final In-Line Configuration

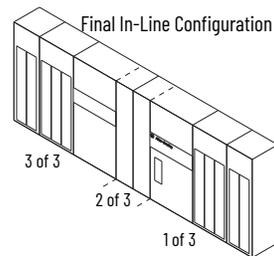
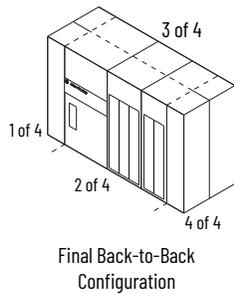
Shipment Sections Frame 13 Bus Supplies

This diagram illustrates how products are divided for shipment.



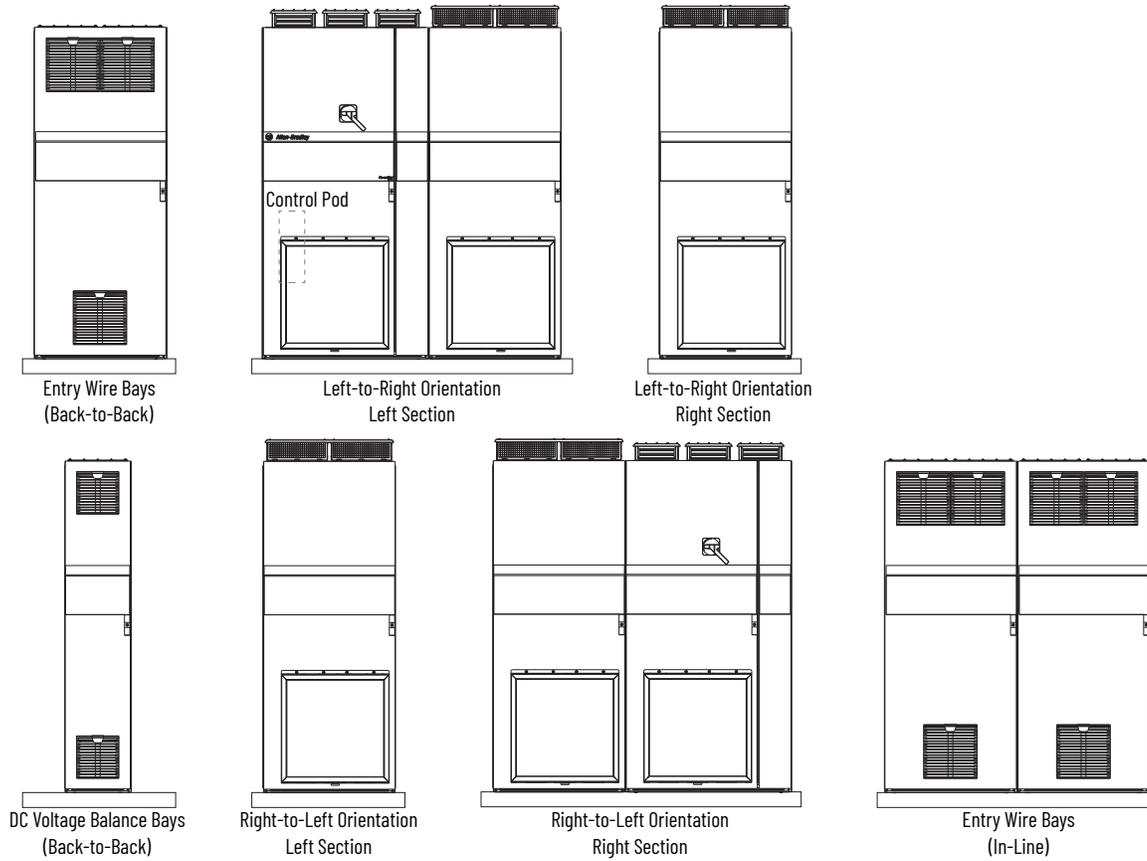
Approximate Maximum Weights - Frame 13 Bus Supplies

Device	Frame Size	Approximate Maximum Weight [kg (lb)]							
		Back-to-Back Configuration				In-Line Configuration			
		Description	Weight	with Packaging	Section No.	Description	Weight	with Packaging	Section No.
755TM bus supplies	13	Left-to-right orientation				Left-to-right orientation			
		Center section:	2106 (4643)	2264 (4991)	2 of 4	Center section:	2106 (4643)	2264 (4991)	1 of 3
		Right-to-left orientation				Right-to-left orientation			
		Center section:	2106 (4643)	2264 (4991)	3 of 4	Center section:	2106 (4643)	2264 (4991)	3 of 3
		Wire bays				Wire bays			
Fiber routing and entry wire bays:	252 (556)	365 (805)	1 of 4	Entry wire bays:	252 (556)	370 (816)	2 of 3		
DC voltage balance bays:	252 (556)	365 (805)	4 of 4	Total:	4464 (9842)	4898 (10,798)			
Total:	4716 (10,398)	5258 (11,592)							



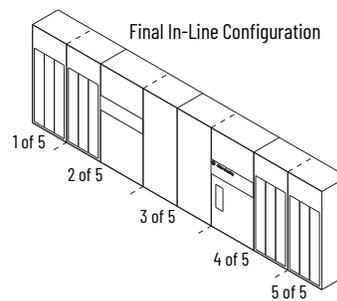
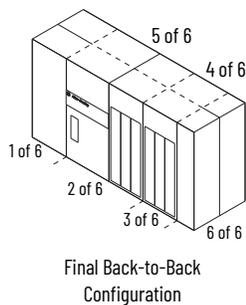
Shipment Sections Frame 14 Bus Supplies

This diagram illustrates how products are divided for shipment.



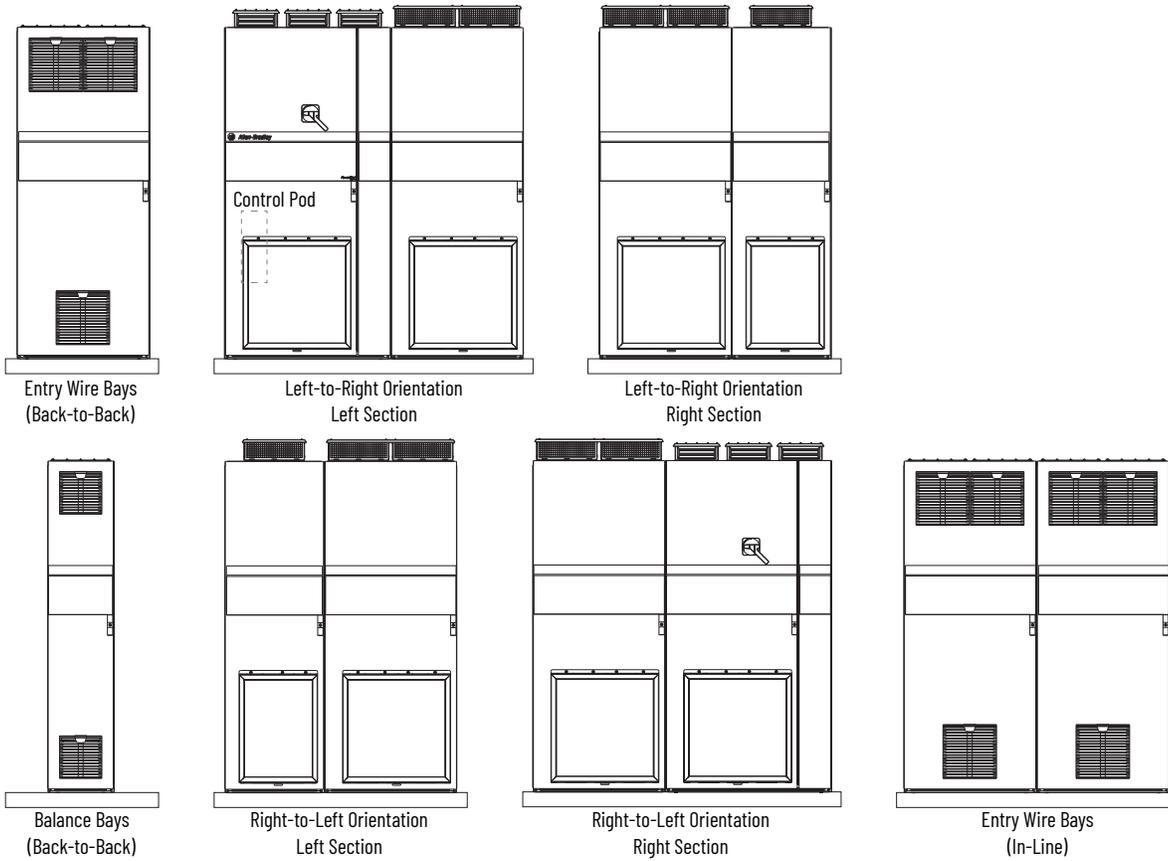
Approximate Maximum Weights - Frame 14 Bus Supplies

Device	Frame Size	Approximate Maximum Weight [kg (lb)]							
		Back-to-Back Configuration				In-Line Configuration			
		Description	Weight	with Packaging	Section No.	Description	Weight	with Packaging	Qty.
755TM bus supplies	14	Left-to-right orientation				Left-to-right orientation			
		Left section:	1642 (3621)	1772 (3907)	2 of 6	Left section:	1642 (3621)	1772 (3907)	4 of 5
		Right section:	889 (1959)	956 (2108)	3 of 6	Right section:	889 (1959)	956 (2108)	5 of 5
		Right-to-left orientation				Right-to-left orientation			
		Left section:	889 (1959)	956 (2108)	4 of 6	Left section:	889 (1959)	956 (2108)	1 of 5
		Right section:	1642 (3621)	1772 (3907)	5 of 6	Right section:	1642 (3621)	1772 (3907)	2 of 5
		Wire bays				Wire bays			
		Fiber routing and entry wire bays:	484 (1066)	597 (1316)	1 of 6	Entry wire bays:	484 (1066)	600 (1323)	3 of 5
		DC voltage balance bays:	252 (556)	365 (805)	6 of 6	Total:	5546 (12,226)	6056 (13,353)	
		Total:	5798 (12,782)	6418 (14,149)					



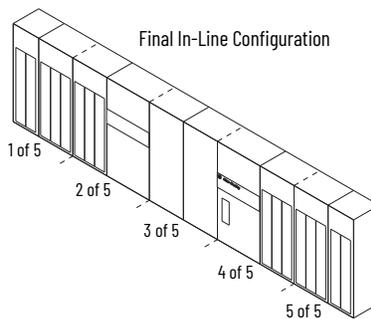
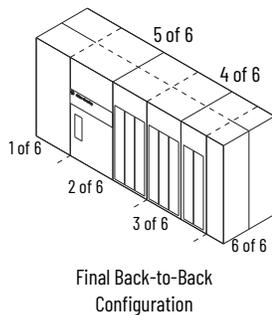
Shipment Sections Frame 15 Bus Supplies

This diagram illustrates how products are divided for shipment.



Approximate Maximum Weights - Frame 15 Bus Supplies

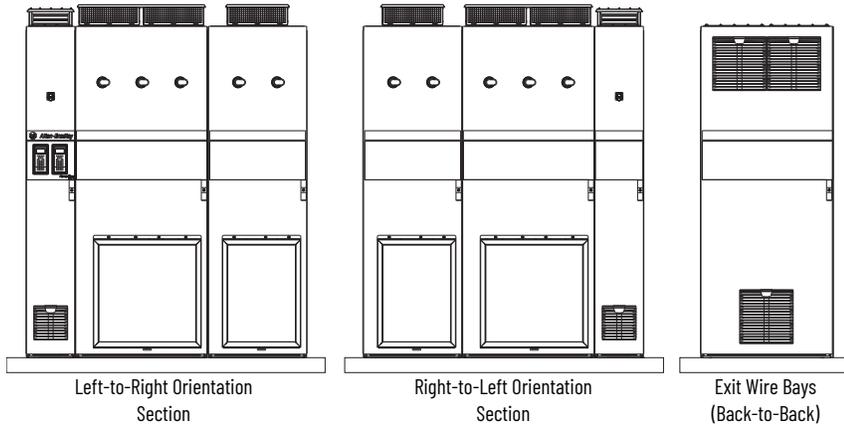
Device	Frame Size	Approximate Maximum Weight [kg (lb)]							
		Back-to-Back Configuration				In-Line Configuration			
		Description	Weight	with Packaging	Section No.	Description	Weight	with Packaging	Section No.
755TM bus supplies	15	Left-to-right orientation				Left-to-right orientation			
		Left section:	1642 (3621)	1772 (3907)	2 of 6	Left section:	1642 (3621)	1772 (3907)	4 of 5
		Right section:	1443 (3182)	1540 (3395)	3 of 6	Right section:	1443 (3182)	1540 (3395)	5 of 5
		Right-to-left orientation				Right-to-left orientation			
		Left section:	1443 (3182)	1540 (3395)	4 of 6	Left section:	1443 (3182)	1540 (3395)	1 of 5
		Right section:	1642 (3621)	1772 (3907)	5 of 6	Right section:	1642 (3621)	1772 (3907)	2 of 5
		Wire bays				Wire bays			
		Fiber routing and entry wire bays:	484 (1066)	597 (1316)	1 of 6	Entry wire bays:	484 (1066)	600 (1323)	3 of 5
		DC voltage balance bays:	252 (556)	385 (805)	6 of 6	Total:	6654 (14,672)	7224 (15,927)	
		Total:	6906 (15,228)	7586 (16,724)					



Shipment Sections Frame 8...15 Common Bus Inverters

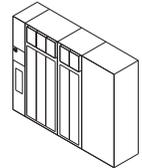
This diagram illustrates how products are divided for shipment. Frame 15 is shown.

Frame 8...12 common bus inverters ship as one in-line section.



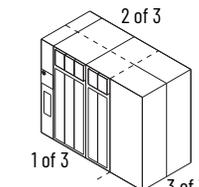
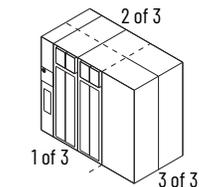
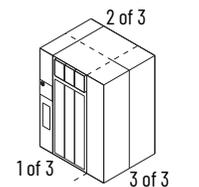
Approximate Maximum Unit Weights - Frame 8...12 Common Bus Inverters

Device	Frame Size	Approximate Maximum Weight [kg (lb)]				Approximate Maximum Weight with Packaging [kg (lb)]			
		Power Bay	with Control Bay	with Exit Wire Bay	with Control and Exit Wire Bay	Power Bay	with Control Bay	with Exit Wire Bay	with Control and Exit Wire Bay
755TM common bus inverters	8	374 (825)	455 (1004)	477 (1052)	588 (1231)	433 (955)	520 (1146)	544 (1199)	679 (1497)
	9	611 (1348)	692 (1527)	714 (1575)	796 (1754)	674 (1486)	761 (1678)	803 (1770)	891 (1964)
	10	873 (1924)	954 (2103)	954 (2103)	1057 (2331)	940 (2072)	1045 (2304)	1047 (2308)	1156 (2549)
	11	1284 (2830)	1365 (3009)	1503 (3313)	1584 (3492)	1377 (3036)	1464 (3228)	1637 (3609)	1738 (3832)
	12	1580 (3483)	1661 (3662)	1799 (3966)	1880 (4145)	1677 (3697)	1789 (3944)	1951 (4301)	2040 (4497)



Approximate Maximum Weights - Frame 13...15 Common Bus Inverters

Device	Frame Size	Approximate Maximum Weight [kg (lb)]				
		Back-to-Back Configuration				
		Description	Max Weight	with Packaging	Section No.	
755TM common bus inverters	13	Left-to-right orientation	Section: 954 (2103)	1045 (2304)	1 of 3	
		Right-to-left orientation				
		Wire bays	Section: 291 (642)	365 (805)	3 of 3	
			Fiber routing, DC voltage balance, and exit wire bays:	Total: 2189 (4848)	2455 (5412)	
	14	Left-to-right orientation	Section: 1365 (3009)	1464 (3228)	1 of 3	
		Right-to-left orientation				
		Wire bays	Section: 523 (1154)	597 (1316)	3 of 3	
			Fiber routing, DC voltage balance, and exit wire bays:	Total: 3253 (7172)	3525 (7771)	
	15	Left-to-right orientation	Section: 1542 (3400)	1789 (3944)	1 of 3	
Right-to-left orientation						
Wire bays		Section: 523 (1154)	597 (1316)	3 of 3		
		Fiber routing, DC voltage balance, and exit wire bays:	Total: 3607 (7954)	4175 (9204)		



Approximate Maximum Entry and Exit Wiring Bay Weights

Bay Width [mm (in.)]	Maximum Weight [kg (lb)]	Maximum Weight with Packaging [kg (lb)]
400 (15.7)	102 (225)	129 (285)
800 (31.5)	242 (535)	309 (682)

Approximate Maximum Module Weights

Module	Maximum Weight [kg (lb)]	Maximum Weight with Packaging [kg (lb)]
AC Precharge/Circuit Breaker (Frame 8)	41 (90)	71 (157)
AC Precharge/Circuit Breaker (Frame 9)	132 (291)	173 (381)
DC Precharge/Disconnect	41 (90)	44 (97)
Inverter/Converter Power Module (Frame 7)	113 (250)	164 (362)
Inverter/Converter Power Module (Frames 8...15)	142 (312)	192 (424)
LCL Filter Module (Frame 7)	175 (385)	226 (497)
1xLCL Filter Module	213 (470)	264 (582)
2xLCL Filter Module	322 (710)	373 (822)

Approximate Maximum IP54, UL Type 12 Roof Fan Assembly Weights

Bay Width [mm (in.)]	Maximum Weight [kg (lb)]	Maximum Weight with Packaging [kg (lb)]
400 (15.7)	25 (55)	30 (66)
600 (23.6)	25 (55)	32 (71)
800 (31.5)	50 (110)	57 (126)

Rating/Frame Cross-Reference

400/480V AC 755TL Drives

Catalog Number	Light Duty kW Output	Normal Duty kW Output	Heavy Duty kW Output	Catalog Number	Light Duty Hp Output	Normal Duty Hp Output	Heavy Duty Hp Output	Enclosure Code/Frame Size		
								N (IP00, UL Open Type)	3 (IP21, UL Type 1)	4 (IP54, UL Type 12)
400 Volt				480 Volt				5	-	-
20G...C015	11	7.5	5.5	20G...D014	15	10	7.5			
20G...C022	15	11	7.5	20G...D022	20	15	10			
20G...C030	18.5	15	11	20G...D027	25	20	15			
20G...C037	22	18.5	15	20G...D034	30	25	20			
20G...C043	30	22	18.5	20G...D040	40	30	25			
20G...C060	37	30	22	20G...D052	50	40	30			
20G...C072	45	37	30	20G...D065	60	50	40			
20G...C085	55	45	37	20G...D077	75	60	50			
20G...C104	55	55	45	20G...D096	75	75	60			
20G...C140	90	75	55	20G...D125	125	100	75			
20G...C176	110	90	75	20G...D156	150	125	100			
20G...C205	132	110	90	20G...D186	200	150	125			
20G...C260	160	132	110	20G...D248	250	200	150			
20G...C302	200	160	132	20G...D302	300	250	200			
20G...C367	250	200	160	20G...D361	350	300	250			
20G...C460	315	250	200	20G...D430	400	350	300			
20G...C540	315	315	250	20G...D505	450	400	350			
20G...C585	315	315	250	20G...D617	500	500	400			
20G...C302	200	160	132	20G...D302	300	250	200			
20G...C367	250	200	160	20G...D361	350	300	250			
20G...C460	315	250	200	20G...D430	400	350	300			
20G...C540	315	315	250	20G...D505	450	400	350			
20G...C585	355	315	250	20G...D545	500	450	350			
20G...C650	400	355	315	20G...D617	600	500	400			
20G...C750	450	400	315	20G...D710	650	600	450			
20G...C770	450	400	355	20G...D740	700	650	500			
20G...C920	560	500	400	20G...D800	800	700	600			
20G...C1K0	630	560	500	20G...D960	900	800	700			
20G...C1K1	710	630	500	20G...D1K0	1000	900	750			
20G...C1K2	800	710	560	20G...D1K1	1100	1000	800			
20G...C1K4	850	800	630	20G...D1K3	1250	1100	900			
20G...C1K6	1000	850	710	20G...D1K4	1500	1250	1000			
20G...C1K7	1250	1000	800	20G...D1K6	1800	1500	1100			
20G...C2K1	1400	1250	1000	20G...D2K0	2000	1800	1500			

600/690V AC 755TL Drives

Catalog Number	Light Duty Hp Output	Normal Duty Hp Output	Heavy Duty Hp Output	Catalog Number	Light Duty kW Output	Normal Duty kW Output	Heavy Duty kW Output	Enclosure Code/Frame Size		
								N (IP00, UL Open Type)	3 (IP21, UL Type 1)	4 (IP54, UL Type 12)
600 Volt				690 Volt				5	-	-
20G...E011	15	10	7.5	20G...F015	15	11	7.5			
20G...E017	20	15	10	20G...F020	18.5	15	11			
20G...E022	25	20	15	20G...F023	22	18.5	15			
20G...E027	30	25	20	20G...F030	30	22	18.5			
20G...E032	40	30	25	20G...F034	37	30	22			
20G...E041	50	40	30	20G...F046	45	37	30			
20G...E052	60	50	40	20G...F050	55	45	37			
20G...E062	75	60	50	20G...F061	75	55	45			
20G...E077	100	75	60	20G...F082	90	75	55			
								6		
20G...E099	125	100	75	20G...F098	110	90	75			
20G...E125	150	125	100	20G...F119	132	110	90			
20G...E144	200	150	125	20G...F142	160	132	110			
20G...E192	250	200	150	20G...F171	200	160	132			
								-	7	7
20G...E242	300	250	200	20G...F215	250	200	160			
20G...E295	350	300	250	20G...F265	315	250	200			
20G...E355	400	350	300	20G...F330	355	315	250			
20G...E395	450	400	350	20G...F370	400	355	315			
									8	8
20G...E242	300	250	200	20G...F215	250	200	160			
20G...E295	350	300	250	20G...F265	315	250	200			
20G...E355	400	350	300	20G...F330	355	315	250			
20G...E395	450	400	350	20G...F370	400	355	315			
								9	9	
20G...E435	500	450	400	20G...F415	450	400	355			
20G...E545	600	550	450	20G...F505	560	500	400			
20G...E595	700	600	550	20G...F565	630	560	500			
20G...E690	800	700	600	20G...F650	710	630	560			
								10	10	
20G...E760	900	800	700	20G...F735	800	710	630			
20G...E825	1000	900	800	20G...F820	900	800	710			
20G...E980	1100	1000	900	20G...F920	1000	900	800			
20G...E1K1	1250	1100	1000	20G...F1K0	1100	1000	900			
								10	10	
20G...E1K2	1500	1250	1100	20G...F1K1	1250	1100	1000			
20G...E1K5	1600	1500	1250	20G...F1K4	1500	1400	1100			

400/480V AC 755TR Drives

Catalog Number	Light Duty kW Output	Normal Duty kW Output	Heavy Duty kW Output	Catalog Number	Light Duty Hp Output	Normal Duty Hp Output	Heavy Duty Hp Output	Enclosure Code/Frame Size		
								N (IP00, UL Open Type)	3 (IP21, UL Type 1)	4 (IP54, UL Type 12)
400 Volt				480 Volt				5	-	-
20G...C015	11	7.5	5.5	20G...D014	15	10	7.5			
20G...C022	15	11	7.5	20G...D022	20	15	10			
20G...C030	18.5	15	11	20G...D027	25	20	15			
20G...C037	22	18.5	15	20G...D034	30	25	20			
20G...C043	30	22	18.5	20G...D040	40	30	25			
20G...C060	37	30	22	20G...D052	50	40	30			
20G...C072	45	37	30	20G...D065	60	50	40			
20G...C085	55	45	37	20G...D077	75	60	50			
20G...C104	75	55	45	20G...D096	75	75	60			
20G...C140	90	75	55	20G...D125	125	100	75	6		
20G...C176	110	90	75	20G...D156	150	125	100			
20G...C205	132	110	90	20G...D186	200	150	125			
20G...C260	160	132	110	20G...D248	250	200	150			
20G...C360	200	200	132	20G...D360	300	300	200			
20G...C302	200	160	132	20G...D302	300	250	200			
20G...C367	250	200	160	20G...D361	350	300	250	7	7	
20G...C460	315	250	200	20G...D430	400	350	300			
20G...C540	315	315	250	20G...D505	450	400	350			
20G...C585	315	315	250	20G...D617	500	500	400			
20G...C302	200	160	132	20G...D302	300	250	200			
20G...C367	250	200	160	20G...D361	350	300	250			
20G...C460	315	250	200	20G...D430	400	350	300			
20G...C540	315	315	250	20G...D505	450	400	350			
20G...C585	355	315	250	20G...D545	500	450	350			
20G...C650	400	355	315	20G...D617	600	500	400			
20G...C750	450	400	315	20G...D710	650	600	450	8	8	
20G...C770	450	400	355	20G...D740	700	650	500			
20G...C920	560	500	400	20G...D800	800	700	600			
20G...C1K0	630	560	500	20G...D960	900	800	700			
20G...C1K1	710	630	500	20G...D1K0	1000	900	750			
20G...C1K2	800	710	560	20G...D1K1	1100	1000	800			
20G...C1K4	850	800	630	20G...D1K3	1250	1100	900			
20G...C1K6	1000	850	710	20G...D1K4	1500	1250	1000			
20G...C1K7	1250	1000	800	20G...D1K6	1800	1500	1100			
20G...C2K1	1400	1250	1000	20G...D2K0	2000	1800	1500			
20G...C2K8	1800	1650	1400	20G...D2K6	2600	2400	2000	11	11	
20G...C3K5	2200	2000	1650	20G...D3K4	3300	3000	2400	12	12	
20G...C4K2	2475	2200	1953	20G...D4K0	3900	3600	2800	13	13	
20G...C5K6	3285	2920	2592	20G...D5K4	5200	4800	3700	14	14	
20G...C7K0	4095	3640	3231	20G...D6K7	6400	6000	4600	15	15	

600/690V AC 755TR Drives

Catalog Number	Light Duty Hp Output	Normal Duty Hp Output	Heavy Duty Hp Output	Catalog Number	Light Duty kW Output	Normal Duty kW Output	Heavy Duty kW Output	Enclosure Code/Frame Size		
								N (IP00, UL Open Type)	3 (IP21, UL Type 1)	4 (IP54, UL Type 12)
600 Volt				690 Volt						
20G...E011	15	10	7.5	20G...F015	15	11	7.5	5	-	-
20G...E017	20	15	10	20G...F020	18.5	15	11			
20G...E022	25	20	15	20G...F023	22	18.5	15			
20G...E027	30	25	20	20G...F030	30	22	18.5			
20G...E032	40	30	25	20G...F034	37	30	22			
20G...E041	50	40	30	20G...F046	45	37	30			
20G...E052	60	50	40	20G...F050	55	45	37			
20G...E062	75	60	50	20G...F061	75	55	45			
20G...E077	100	75	60	20G...F082	90	75	55			
20G...E099	125	100	75	20G...F098	110	90	75			
20G...E125	150	125	100	20G...F119	132	110	90			
20G...E144	200	150	125	20G...F142	160	132	110			
20G...E192	250	200	150	20G...F171	200	160	132			
20G...E242	300	250	200	20G...F215	250	200	160	7	7	
20G...E295	350	300	250	20G...F265	315	250	200			
20G...E355	400	350	300	20G...F330	355	315	250			
20G...E395	450	400	350	20G...F370	400	355	315			
20G...E242	300	250	200	20G...F215	250	200	160			
20G...E295	350	300	250	20G...F265	315	250	200			
20G...E355	400	350	300	20G...F330	355	315	250			
20G...E395	450	400	350	20G...F370	400	355	315			
20G...E435	500	450	400	20G...F415	450	400	355			
20G...E545	600	550	450	20G...F505	560	500	400			
20G...E595	700	600	550	20G...F565	630	560	500	-		
20G...E690	800	700	600	20G...F650	710	630	560			
20G...E760	900	800	700	20G...F735	800	710	630			
20G...E825	1000	900	800	20G...F820	900	800	710			
20G...E980	1100	1000	900	20G...F920	1000	900	800			
20G...E1K1	1250	1100	1000	20G...F1K0	1100	1000	900			
20G...E1K2	1500	1250	1100	20G...F1K1	1250	1100	1000			
20G...E1K5	1600	1500	1250	20G...F1K4	1500	1400	1100			
20G...E2K0	2100	2000	1800	20G...F1K8	2000	1800	1500			
20G...E2K4	2600	2500	2100	20G...F2K3	2500	2300	2000			
20G...E2K9	3300	3100	2500	20G...F2K7	3080	2750	2200			
20G...E3K9	4400	4100	3300	20G...F3K6	4088	3650	2920			
20G...E4K9	5500	5100	4100	20G...F4K5	5096	4550	3640			
								9	9	
								10	10	
								11	11	
								12	12	
								13	13	
								14	14	
								15	15	

400/480V AC 755TM Bus Supplies

Catalog Number	Light Duty kW Output	Normal Duty kW Output	Heavy Duty kW Output	Catalog Number	Light Duty kW Output	Normal Duty kW Output	Heavy Duty kW Output	Enclosure Code/Frame Size		
								N (IP00, UL Open Type)	3 (IP21, UL Type 1)	4 (IP54, UL Type 12)
400 Volt				480 Volt						
20J...C140	106	87	65	20J...D125	111	90	69	6	-	-
20J...C176	128	106	87	20J...D156	133	111	90			
20J...C205	162	128	106	20J...D186	177	133	111			
20J...C260	188	162	128	20J...D248	216	177	133			
20J...C302	228	188	162	20J...D302	258	216	177	7	7	
20J...C367	286	228	188	20J...D361	307	258	216			
20J...C460	336	286	228	20J...D430	347	307	258			
20J...C540	364	336	286	20J...D505	390	361	307			
20J...C585	384	373	311	20J...D617	438	426	355	8	8	
20J...C302	228	188	162	20J...D302	258	216	177			
20J...C367	286	228	188	20J...D361	307	258	216			
20J...C460	336	286	228	20J...D430	347	307	258			
20J...C540	364	336	286	20J...D505	390	361	307	9	9	
20J...C585	387	364	286	20J...D545	422	390	307			
20J...C650	467	405	336	20J...D617	508	442	347			
20J...C750	479	467	364	20J...D710	529	508	390			
20J...C770	518	479	405	20J...D740	573	529	442	10	10	
20J...C920	647	572	479	20J...D800	687	573	529			
20J...C1K0	678	647	572	20J...D960	748	687	573			
20J...C1K1	735	692	647	20J...D1K0	802	748	687			
20J...C1K2	911	731	678	20J...D1K1	977	812	748	11	11	
20J...C1K4	983	910	731	20J...D1K3	1087	977	812			
20J...C1K6	1067	984	911	20J...D1K4	1184	1016	977			
20J...C1K7	1337	1067	921	20J...D1K6	1481	1184	1016			
20J...C2K1	1449	1342	1067	20J...D2K0	1603	1483	1184	12	12	
20J...C2K8	1915	1772	1449	20J...D2K6	2118	1959	1603			
20J...C3K5	2393	2204	1886	20J...D3K4	2632	2436	2132			
20J...C4K2	2847	2634	2226	20J...D4K0	3149	2912	2430			
20J...C5K6	3779	3496	2954	20J...D5K4	4180	3865	3225	13	13	
20J...C7K0	4711	4358	3684	20J...D6K7	5210	4818	4020			
								14	14	
								15	15	

600/690V AC 755TM Bus Supplies

Catalog Number	Light Duty kW Output	Normal Duty kW Output	Heavy Duty kW Output	Catalog Number	Light Duty kW Output	Normal Duty kW Output	Heavy Duty kW Output	Enclosure Code/Frame Size		
								N (IP00, UL Open Type)	3 (IP21, UL Type 1)	4 (IP54, UL Type 12)
600 Volt				690 Volt						
20J...E077	89	69	56	20J...F082	101	84	63	6	-	-
20J...E099	112	89	69	20J...F098	122	101	84			
20J...E125	129	112	89	20J...F119	146	122	101			
20J...E144	171	129	112	20J...F142	176	146	122			
20J...E192	216	171	129	20J...F171	221	176	146	7	7	
20J...E242	263	217	171	20J...F215	272	221	176			
20J...E295	317	263	217	20J...F265	339	272	221			
20J...E355	353	317	263	20J...F330	380	339	272			
20J...E395	389	353	317	20J...F370	426	380	339			
20J...E242	263	217	171	20J...F215	272	221	176			
20J...E295	317	263	217	20J...F265	339	272	221			
20J...E355	353	317	263	20J...F330	380	339	272			
20J...E395	389	353	317	20J...F370	426	380	339			
20J...E435	456	389	353	20J...F415	472	426	380			
20J...E545	518	487	403	20J...F505	580	518	426	8	8	
20J...E595	617	518	487	20J...F565	580	580	518			
20J...E690	680	617	532	20J...F650	754	667	580			
20J...E760	737	680	617	20J...F735	842	754	667			
20J...E825	877	737	680	20J...F820	944	842	754			
20J...E980	985	877	737	20J...F920	1102	944	842	9	9	
20J...E1K1	1091	935	877	20J...F1K0	1180	1057	944			
20J...E1K2	1279	1091	935	20J...F1K1	1380	1180	1057			
20J...E1K5	1452	1279	1091	20J...F1K4	1624	1456	1193	10	10	
20J...E2K0	1919	1740	1520	20J...F1K8	2146	1914	1576			
20J...E2K4	2386	2164	1851	20J...F2K3	2668	2379	2073	11	11	
20J...E2K9	2851	2678	2215	20J...F2K7	3190	2849	2343	12	12	
20J...E3K9	3784	3555	2939	20J...F3K6	4234	3781	3110	13	13	
20J...E4K9	4717	4432	3664	20J...F4K5	5278	4714	3877	14	14	
								15	15	

400/480V AC 755TM Common Bus Inverters

Catalog Number	Light Duty kW Output	Normal Duty kW Output	Heavy Duty kW Output	Catalog Number	Light Duty Hp Output	Normal Duty Hp Output	Heavy Duty Hp Output	Enclosure Code/Frame Size	
								3 (IP21, UL Type 1)	4 (IP54, UL Type 12)
400 Volt				480 Volt					
20G...C302	200	160	132	20G...D302	300	250	200	8	8
20G...C367	250	200	160	20G...D361	350	300	250		
20G...C460	315	250	200	20G...D430	400	350	300		
20G...C540	315	315	250	20G...D505	450	400	350		
20G...C585	355	315	250	20G...D545	500	450	350		
20G...C650	400	355	315	20G...D617	600	500	400		
20G...C750	450	400	315	20G...D710	650	600	450		
20G...C770	450	400	355	20G...D740	700	650	500		
20G...C920	560	500	400	20G...D800	800	700	600	9	9
20G...C1K0	630	560	500	20G...D960	900	800	700		
20G...C1K1	710	630	500	20G...D1K0	1000	900	750		
20G...C1K2	800	710	560	20G...D1K1	1100	1000	800		
20G...C1K4	850	800	630	20G...D1K3	1250	1100	900		
20G...C1K6	1000	850	710	20G...D1K4	1500	1250	1000	10	10
20G...C1K7	1250	1000	800	20G...D1K6	1800	1500	1100		
20G...C2K1	1400	1250	1000	20G...D2K0	2000	1800	1500	11	11
20G...C2K8	1800	1650	1400	20G...D2K6	2600	2400	2000		
20G...C3K5	2200	2000	1650	20G...D3K4	3300	3000	2400	12	12
20G...C4K2	2475	2200	1953	20G...D4K0	3900	3600	2800	13	13
20G...C5K6	3285	2920	2592	20G...D5K4	5200	4800	3700	14	14
20G...C7K0	4095	3640	3231	20G...D6K7	6400	6000	4600	15	15

600/690V AC 755TM Common Bus Inverters

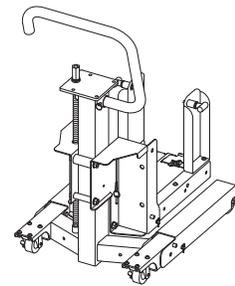
Catalog Number	Light Duty Hp Output	Normal Duty Hp Output	Heavy Duty Hp Output	Catalog Number	Light Duty kW Output	Normal Duty kW Output	Heavy Duty kW Output	Enclosure Code/Frame Size	
								3 (IP21, UL Type 1)	4 (IP54, UL Type 12)
600 Volt				690 Volt					
20G...E242	300	250	200	20G...F215	250	200	160	8	8
20G...E295	350	300	250	20G...F265	315	250	200		
20G...E355	400	350	300	20G...F330	355	315	250		
20G...E395	450	400	350	20G...F370	400	355	315		
20G...E435	500	450	400	20G...F415	450	400	355		
20G...E545	600	550	450	20G...F505	560	500	400		
20G...E595	700	600	550	20G...F565	630	560	500	9	9
20G...E690	800	700	600	20G...F650	710	630	560		
20G...E760	900	800	700	20G...F735	800	710	630		
20G...E825	1000	900	800	20G...F820	900	800	710		
20G...E980	1100	1000	900	20G...F920	1000	900	800		
20G...E1K1	1250	1100	1000	20G...F1K0	1100	1000	900	10	10
20G...E1K2	1500	1250	1100	20G...F1K1	1250	1100	1000		
20G...E1K5	1600	1500	1250	20G...F1K4	1500	1400	1100		
20G...E2K0	2100	2000	1800	20G...F1K8	2000	1800	1500	11	11
20G...E2K4	2600	2500	2100	20G...F2K3	2500	2300	2000	12	12
20G...E2K9	3300	3100	2500	20G...F2K7	3080	2750	2200	13	13
20G...E3K9	4400	4100	3300	20G...F3K6	4088	3650	2920	14	14
20G...E4K9	5500	5100	4100	20G...F4K5	5096	4550	3640	15	15

Options

This section lists options that are recommended to handle, transport, and store major product components.

Module Service Cart

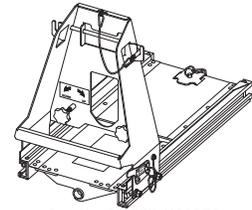
The PowerFlex 750-Series service cart is designed to handle and transport LCL filter modules and power modules. The service cart has an adjustable curb height of 0...254 mm (0...10 in.) and curb offset/reach of 0...203 mm (0...8.0 in.).



Cat. No. 20-750-MCART1

DC Precharge Module Service Lift

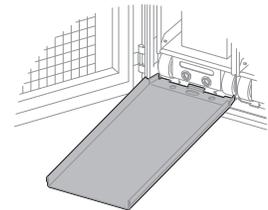
The PowerFlex 755T DC precharge module service lift allows you to remove and install DC precharge modules.



Cat. No. 20-750-MCART2

Power Module Service Ramp

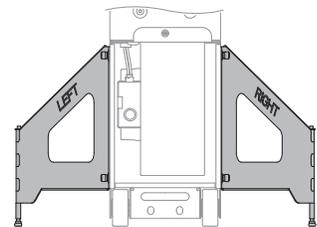
The PowerFlex 755T power module service ramp allows you to remove and install power modules, catalog numbers 20-750-MI1-*xnnxnn*, 20-750-MI2-*xnnxnn*, 20-750-MI3-*xnnxnn*, and 20-750-MI4-*xnnxnn* from the cabinet.



Cat. No. 20-750-MRAMP1

Power and Filter Module Storage Hardware

Power and LCL filter module storage hardware is designed to help stabilize modules during storage.



Cat. No. 20-750-MINV-ATIP

Accessory Kits

Cat. No.	Description		Frame Size
20-750-DCBS1-F6L	DC Input Bus Bar Kit	Provides connection to DC input terminals.	6L
20-750-MLBRKT-F8M	L Bus Bar Kit	Includes three L-brackets and mounting hardware.	8...15
20-750-RPD1-F8	Remote Control Pod Mounting Kit	Hardware, fiber-optic, and power supply cables to remotely mount the control POD up to 23 m (75 ft) from the drive.	7...15
20-750-MOSHDP-F7M	Seismic-qualified Installations Hardware Kits	Optional top bracket sets for installations that are at risk of a seismic event. Each kit includes parts for the largest possible enclosure lineup for the specified frame size. Therefore, in some cases, not all parts in the kit will be installed.	7
20-750-MOSHDP-F8M			8
20-750-MOSHDP-F9M			9
20-750-MOSHDP-F10M			10
20-750-MOSHDP-F11M			11
20-750-MOSHDP-F12M			12
20-750-EMC2-F5	EMC C2 Filter	Each kit provides a complete EMC C2 Filter solution for PowerFlex 755T Frames 5, 6, and 6L respectively. The solution is rated for EMC C2 radiated and conducted emissions compliance for installations up to a motor cable length of 150 m (492 ft). See PowerFlex 755T Frames 5, 6, and 6L EMC C2 Filter Kits Installation Instructions, publication 750-IN115 for physical dimensions and installation guidance.	5
20-750-EMC2-F6			6
20-750-EMC2-F6L			6L

Accessory Kits (Continued)

Cat. No.	Description		Frame Size
20-750-MEMCC2-F8910	EMC C2 Filter	These kits provide EMC C2 radiated emissions compliance for frame 8...10 drive ratings. For a full EMC C2 solution, the EMC C2 Filter kit, EMC Input Bus Bar Kit, EMC Output Bus Bar Kit, and EMC Wiring Bay is required. See PowerFlex 755TM IP00 Open Type Kits Technical Data, publication 750-TD101 and the PowerFlex 755TM Open Type Kits Installation Instructions, publication 750-IN101 for additional information.	8...10
20-750-MEMCC2-IPBB	EMC C2 Filter Input Bus Bars		8...10
20-750-MEMCC2-F8	EMC C2 Filter Output Bus Bars		8
20-750-MEMCC2-F9			9
20-750-MEMCC2-F10			10
20-750-MPBAY-800	800mm EMC Wiring Bay		
20-750-CMRN-F5	Marine Discharge Kit	The frame 5 kit provides a conduit box and debris hood with a pre-installed marine discharge board. This kit enables drive installation on a high-resistance ground or ungrounded distribution system in a marine application (for example, ship or marine vessel).	5
20-750-CMRN-F6	Marine Discharge Kit	The frame 6 and 6L kits are a marine discharge board assembly. These kits enable drive installation on a high-resistance ground or ungrounded distribution system in a marine application (for example, ship or marine vessel).	6
20-750-CMRN-F6L			6L
20-750-MEMCCLP-250	EMC Wiring Clamp Kit 250 (54...64 mm)	The electro magnet compatibility (EMC) gland plate and cable clamp kits are used for applications of PowerFlex 755T product installations that require EMC compliance according to IEC 61800-3. Properly installed EMC gland plate kits provide an IP54 rating.	8...12
20-750-MEMCCLP-205	EMC Wiring Clamp Kit 205 (42...52 mm)		8...12
20-750-MEMCCLP-175	EMC Wiring Clamp Kit 175 (34...44 mm)		8...12
20-750-MEMCCLP-135	EMC Wiring Clamp Kit 135 (26...36 mm)		8...12
20-750-MEMCCLP-125	EMC Wiring Clamp Kit 125 (22...27 mm)		8...12
20-750-MEMCPLT-400WB	Gland Plate	EMC gland plate 400 mm wide wiring bay.	8...10
20-750-MEMCPLT-800WB	Gland Plate	EMC gland plate 800 mm wide wiring bay.	11, 12
20-750-MEMCPLT-PBF8	Gland Plate	Frame 8 CBI, power bay EMC gland plate.	8
20-750-MEMCPLT-PB600	Gland Plate	PowerFlex 750 Kit, power bay CBI EMC gland plate, 600 mm wide.	9, 11, 12
20-750-MEMCPLT-PB800	Gland Plate	PowerFlex 750 Kit, power bay CBI EMC gland plate, 800 mm wide.	10, 12
20-750-MEMCPLT-IBF8	Gland Plate	PowerFlex 750 Kit, Frame 8 input bay, 400 mm wide EMC gland plate.	8
20-750-MEMCPLT-IBF9	Gland Plate	PowerFlex 750 Kit, Frame 9 input bay, 600 mm wide EMC gland plate.	9
20-750-MEMCPLT-IB1000	Gland Plate	PowerFlex 750 Kit, 1000 mm wide input bay, EMC gland plate.	10...12
20-750-MGROMMT-EMC	Grommet	PowerFlex 750 Kit, EMC gland plate, spare grommet (Qty 3)	8...12
SK-RM-GNDPLT-F5	Ground plate kit	Provides a shield termination point for power cables.	5
SK-RM-GNDPLT-F6			6
SK-RM-GNDPLT-F6L			6L
SK-RM-CBOX1-F5	Conduit box and debris hood kit	Conduit box changes enclosure rating to IP20. Conduit box and debris hood changes enclosure rating to UL Type 1.	5
SK-RM-CBOX1-F6			6

Human Interface Modules

PowerFlex 750-Series products with TotalFORCE control are compatible only with the enhanced PowerFlex 7-Class human interface modules listed here.



Description	Cat. No.
No HIM (Blank Plate)	20-HIM-A0
Enhanced, LCD, Full Numeric, Handheld/Local	20-HIM-A6
Enhanced, LCD, Full Numeric, IP66 NEMA Type 4X/12 (for indoor use only) ⁽¹⁾	20-HIM-C6S

(1) Includes a 1202-C30 interface cable (3 meters) for connection to drive.

Specifications - Human Interface Modules

	20-HIM-A6 ⁽¹⁾	20-HIM-C6S ⁽¹⁾
Drive Protocol: Data Rates:	Drive Peripheral Interface (DPI™) protocol 125 KBps or 500 KBps	
Consumption Drive (DPI):	140 mA at 12V DC supplied by the Host Drive	
Dimensions - H x W x D 20-HIM-A6: 20-HIM-C6S:	116 x 70 x 16 mm (4.57 x 2.75 x 0.63 in.) 180 x 93 x 25 mm (7.08 x 3.66 x 0.98 in.)	
Weight	91 g (3.2 oz.)	173 g (5.7 oz.)
Temperature Operating: Storage:	0...50 °C (32...122 °F) -40...+85 °C (-40...+185 °F)	
Relative Humidity	5...95% non-condensing	
Atmosphere	Important: The module must not be installed in an area where the ambient atmosphere contains volatile or corrosive gas, vapors or dust. If the module is not going to be installed for a period of time, it must be stored in an area where it will not be exposed to a corrosive atmosphere.	
UV Radiation	The HIM is not UV rated.	
Vibration Operating: Non-Operating:	2.5 G at 5...2000 Hz 5 G at 5...2000 Hz	
Shock Operating: Non-Operating:	30 G peak acceleration, 11 (±1) ms pulse width 50 G peak acceleration, 11 (±1) ms pulse width	
UL c-UL CE RCM FCC ID IC	UL508C CAN / CSA C22.2 No. 14 EN61800-3 EN61800-3 - -	

(1) This is a product of category C2 according to IEC 61800-3. In a domestic environment this product may cause radio interference in which case supplementary mitigation measures may be required.

Human Interface Module Kits

Description	Cat. No.
Bezel Kit for LCD HIMs, NEMA Type 1 ⁽¹⁾	20-HIM-B1
PowerFlex HIM Interface Cable, 1 m (39 in.) ⁽²⁾	20-HIM-H10
Comm Option Cable Kit (Male-Male) 0.33 m (1.1 ft) 1 m (3.3 ft) 3 m (9.8 ft) 9 m (29.5 ft)	1202-C03 1202-C10 1202-C30 1202-C90
Cable Kit (Male-Female) ⁽³⁾ 0.33 m (1.1 ft) 1 m (3.3 ft) 3 m (9.8 ft) 9 m (29.5 ft)	1202-H03 1202-H10 1202-H30 1202-H90
DPI Cable Kit with Connectors, Tools and 100 m (328 ft) Cable	1202-CBL-KIT-100M
DPI Cable Connector Kit	1202-TB-KIT-SET
DPI/SCANport™ One to Two Port Splitter Cable	1203-S03

(1) Includes a 1202-C30 interface cable (3 m) for connection to drive.

(2) Required only when HIM is used as handheld or remote.

(3) Required in addition to 20-HIM-H10 for distances up to a total maximum of 10 m (32.8 ft).

Communication Option Kits and Accessories

Description (see page 65 for specifications)	Cat. No.
TLink High-speed Drive-to-drive Communications Option Module (Used only with PowerFlex 755T drives, bus supplies, and common bus inverters.)	20-750-TLINK-XT
Coaxial ControlNet® Option Module	20-750-CNETC
DeviceNet® Option Module	20-750-DNET
Dual-port EtherNet/IP Option Module	20-750-ENETR
PROFIBUS DPV1 Option Module (Series B or later.)	20-750-PBUS
Single-port PROFINET I/O Option Module (Series B or later.)	20-750-PNET
Dual-port PROFINET I/O Option Module (Series B or later.)	20-750-PNET2P
Universal Serial Bus (USB) Converter includes 2 m USB, 20-HIM-H10 & 22-HIM-H10 Cables	1203-USB
ControlNet T-Tap Straight	1786-TPS

Environmental Specifications - Communication Modules

Temperature Operating:	-10...+50 °C (14...+122 °F)
Storage:	-40...+85 °C (-40...+185 °F)
Relative Humidity	5...95% non-condensing
Atmosphere	Important: The module must not be installed in an area where the ambient atmosphere contains volatile or corrosive gas, vapors, or dust. If the module is not going to be installed for a period of time, it must be stored in an area where it will not be exposed to a corrosive atmosphere.

Specifications - Communication Options and Accessories

	20-750-TLINK-XT	20-750-CNETC	20-750-DNET	20-750-PBUS	1203-USB
Network Protocol: Data Rate:	Internal RA Fiber-optic 100 Mbps	ControlNet 5 Mbps (fixed)	DeviceNet 125, 250, and 500 KBps	PROFIBUS 9600 bps...12 Mbps (autobauds)	Universal Serial Bus (USB) 115.2 KBps
Drive Protocol: Data Rates:	DPI 500 KBps	DPI 500 KBps	DPI 500 KBps	DPI 500 KBps	SCANport, DPI, or DSI 125, 125/500, 19.2 KBps
Consumption Drive (DPI): Network:	180 mA at 12V DC 55 mA at 24V DC Ext PS	250 mA at 14V DC None	50 mA at 14V DC 60 mA at 24V DC	250 mA at 14V DC None	130 mA at 12V DC 170 mA at +5V DC (DSI)

	20-750-TLINK-XT	20-750-CNETC	20-750-DNET	20-750-PBUS	1203-USB
Dimensions H x L x W:	87.1 x 130.0 x 15.0 mm (3.31 x 5.12 x 0.59 in.)	68.0 x 150.0 x 26.0 mm (2.70 x 5.90 x 1.00 in.)	68.0 x 150.0 x 26.0 mm (2.70 x 5.90 x 1.00 in.)	15.8 x 130.0 x 83.0 mm (0.62 x 5.12 x 3.27 in.)	103.5 x 73.4 x 23.6 mm (4.08 x 2.89 x 0.93 in.)
Weight	68 g (2.4 oz)	62 g (2.1 oz)	62 g (2.1 oz)	57 g (2 oz)	71 g (2.5 oz)
Compliance UL: c-UL: CE: RCM	UL 61800-5-1 CAN/CSA C22.2 No. 274-17 EN61800-3 EN61800-3	UL508C CAN/CSA C22.2 No. 14-05 EN61800-3 EN61800-3	UL508C CAN/CSA C22.2 No. 14 EN61800-3 EN61800-3	UL508C CAN/ CSA C22.2 No.14-M91 IEC50178 and IEC61800-3 EN61800-3	UL508C CAN/CSA C22.2 No. 14 EN50178 and EN61800-3 EN61800-3

Feedback Options

Description	Cat. No.
Incremental Encoder	20-750-ENC-1 ⁽¹⁾
Dual Incremental Encoder	20-750-DENC-1 ⁽¹⁾
Universal Feedback (includes Stegmann, Heidenhain, SSI, Biss, Incremental)	20-750-UFB-1

(1) Homing and registration functions are not supported when using this device with Integrated Motion. To use these functions, the Universal Feedback Board (20-750-UFB-1) must be used.

I/O Option Kits

Description ⁽¹⁾	Cat. No.
ATEX Option Module with 1 Thermosensor Input Connection (requires 11-Series I/O Module below)	20-750-ATEX
24V DC 11-Series I/O Module with 1 Analog In, 1 Analog Out, 3 Digital In and 2 Relay Outputs	20-750-1132C-2R
24V DC 11-Series I/O Module with 1 Analog In, 1 Analog Out, 3 Digital In, 1 Relay and 2 Transistor Outputs	20-750-1133C-1R2T
115V AC 11-Series I/O Module with 1 Analog In, 1 Analog Out, 3 Digital In and 2 Relay Outputs	20-750-1132D-2R
24V DC 22-Series I/O Module with 2 Analog In, 2 Analog Out, 6 Digital In and 2 Relay Outputs	20-750-2262C-2R
115V AC 22-Series I/O Module with 2 Analog In, 2 Analog Out, 6 Digital In and 2 Relay Outputs	20-750-2262D-2R
24V DC 22-Series I/O Module with 2 Analog In, 2 Analog Out, 6 Digital In, 3 Digital Out, 1 Relay and 2 Transistor Outputs	20-750-2263C-1R2T

(1) I/O option kits are not allowed in CIP motion mode.

Safety Options

Four safety options are available for PowerFlex 755T products:

- Safe Torque Off
- Safe Speed Monitor
- Integrated Safety - Safe Torque Off
- Integrated Safety Functions

Safe Torque Off is ideal for safety related applications requiring removal of rotational power to the motor without shutting down the drive. Safe Torque Off functionality offers the benefit of quick start-up after a demand on the safety system and helps reduce wear from repetitive start-up and provides safety ratings up to and including SIL CL3, PLe, and Category 3.

In applications where the speed needs to be controlled and monitored, the Safe-Speed Monitor option combines Safe Torque Off capability with integrated safety relay functionality and the Safe-Speed Control technology in one hardware option to provide safety ratings up to and including SIL CL3, PLe, and Category 4.

With the Safe Speed Monitor option you can safely monitor and control the speed of your application which allows operators to perform process or maintenance work without stopping the machine.

Note that PowerFlex 755T products can accommodate only one option.

Description	Cat. No.	Publication
Safe Torque Off ⁽¹⁾	20-750-S	PowerFlex 750-Series Safe Torque Off Option Module User Manual, publication 750-UM002
Safe Speed Monitor ⁽¹⁾⁽²⁾	20-750-S1	PowerFlex 750-Series Safe Speed Monitor Option Module Safety Reference Manual, publication 750-RM001
Integrated Safety - Safe Torque Off ⁽¹⁾	20-750-S3	PowerFlex 755 Integrated Safety - Safe Torque Off Option Module User Manual, publication 750-UM004
Integrated Safety Functions ⁽¹⁾	20-750-S4	PowerFlex 755/755T Integrated Safety Functions Option Module User Manual, publication 750-UM005

(1) Drive can accommodate only one option.

(2) Requires the dual incremental encoder or universal feedback option.

Specifications - PowerFlex 750-Series Safety Options

Attribute	Safe Torque Off, 20-750-S	Safe Speed Monitor, 20-750-S1
Standards	IEC/EN60204-1, ISO13489-1, IEC 61508, IEC 61800-5-2	IEC/EN60204-1, ISO12100, IEC 61508, IEC 61800-5-2
Safety Category	Cat. 3 and PL(e) per EN ISO 13849-1; SIL CL3 per IEC 61508 and EN 62061	Cat. 4 and PL(e) per EN ISO 13849-1; SIL CL3 per IEC 61508 and EN 62061
Power Supply (user I/O)	24V DC \pm 10%, 0.8...1.1 x rated voltage ⁽³⁾ PELV or SELV	
Power Consumption	4.4 W	36 W
Safety Enable (SE+, SE-)	24V DC, 22 mA, short-circuit protected	-
Safety Power (SP+, SP-)	24V DC, 35 mA, short-circuit protected	-
SLS Outputs (68, 78)	-	24V DC, 50 mA, short-circuit protected
SS Outputs (34, 44)	-	24V DC, 50 mA, short-circuit protected
Door Control Outputs (51, 52)	-	24V DC, short-circuit protected, 0.75 A bipolar (Power to Release/ Power to Lock) configuration. 20 mA, cascading (2Ch Source) configuration.
Pulse Outputs (S11, S21)	-	24V DC, 50 mA, short-circuit protected
Pulse Inputs (S12, S22, S32, S42, S52, S62, S72, S82, X32, X42)	-	5 mA per input, max
Input ON Voltage, Minimum	24V DC \pm 10%, 21.6...26.4V DC	15V
Input OFF Voltage, Maximum	5V	5V
Input OFF Current, Maximum	2.5 mA @ 5V DC	2 mA
Input-to-Output Response Time (SS_In, SLS_In, DM_In, ESM_In, LM_In)	-	20 ms
Overspeed Response Time	-	User-configurable

Specifications - PowerFlex 750-Series Safety Options (Continued)

Attribute	Safe Torque Off, 20-750-S	Safe Speed Monitor, 20-750-S1
Inputs (S34)	-	5 mA per input, max
Conductor Size ⁽¹⁾	0.3...0.8 mm ² (28...18 AWG)	0.25...2.5 mm ² (24...14 AWG)
Strip Length	10 mm (0.39 in.)	6 mm (0.25 in.)
Terminal Screw Torque	-	0.2...0.25 N•m (1.8...2.2 lb•in)
Certification ⁽²⁾		
c-UL-us	UL Listed, certified for US and Canada.	
CE	European Union 2004/108/EC EMC Directive, and EU 2006/42/EC Machinery Directive EN 61800-3; categories C2 and C3 EN 62061; EM Immunity EN ISO 13849-1 EN ISO 13849-2 EN 61800-5-1 EN 61800-5-2 EN 61508 Parts 1-7	
RCM	Australian Radiocommunications Act, compliant with: EN 61800-3; categories C2 and C3	
TÜV	TÜV Certified for Functional Safety: up to SIL CL3, according to EN 61800-5-2, EN 61508, and EN 62061; up to Performance Level PL(e) and Category 3, according to EN ISO 13849-1; when used as described.	TÜV Certified for Functional Safety: up to SIL CL3, according to EN 61800-5-2, EN 61508, and EN 62061; up to Performance Level PL(e) and Category 4, according to EN ISO 13849-1; when used as described.

(1) See the Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).

(2) When product is marked.

(3) Safety outputs need additional fuse for reverse voltage protection of the control circuit. Install a 6 A slow-blow or 10 A fast-acting fuse.

Specifications - Network Safety Options

Attribute	Network Safe Torque Off, 20-750-S3	Network Safe Speed Monitor, 20-750-S4
Standards	EN 60204-1, IEC 61508, EN 61800-3, EN 61800-5-1, EN 61800-5-2, EN 62061, EN ISO 13489	EN 60204-1, IEC 61508, EN 61800-3, EN 61800-5-1, EN 61800-5-2, EN 62061, EN ISO 13849-1
Safety category	Cat. 3 and PLe per ISO 13849-1; SIL CL3 per IEC 61508 and EN 62061	Cat. 4 and PLe per EN ISO 13849-1; SIL 3 per IEC 61508 and SIL CL3 per EN IEC 62061
Power supply (user I/O)	24V DC \pm 10%, 0.8...1.1 x rated voltage ⁽¹⁾ PELV or SELV	24V DC \pm 10%, 0.8...1.1 x rated voltage ⁽¹⁾ PELV or SELV
Input type	Current sinking	Current sinking
Voltage, on-state input	11...30V, 3.5 mA DC	11...30V DC
Voltage, off-state input, max	5V, 3.5 mA DC	-3...5V DC
Current, on-state input, min	3.3 mA	2 mA
Current, off-state, max	1.3 mA	1.5 mA
IEC 61131-2 (input type)	Type 3	Type 3
Conductor type	Multi-conductor shielded cable	Multi-conductor shielded cable
Conductor size ⁽²⁾	0.3...0.8 mm ² (28...18 AWG)	0.3...0.8 mm ² (28...18 AWG)
Strip length	10 mm (0.39 in.)	10 mm (0.39 in.)

(1) Safety outputs need additional fuse for reverse voltage protection of the control circuit. Install a 6 A slow-blow or 10 A fast-acting fuse.

(2) See the Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).

Fuses and Circuit Breakers

The tables on the following pages provide recommended AC line input fuse and circuit breaker information. Sizes that are listed are the recommended sizes that are based on 40 °C (104 °F) and the U.S. NEC. Other country, state, or local codes can require different ratings. In addition, floor mount drives and bus supplies (frames 7...15) include AC line and DC bus fuses (with blown fuse indicators) to provide short circuit protection. Panel mount drives and bus supplies (frames 5, 6, and 6L) require the use of external high-speed semiconductor fuses to provide short circuit protection.

Semiconductor Fuses

The recommended semiconductor fuses are listed here. Any alternate fuse should have a lower current rating, I^2t let through, and faster melting time. Consult the fuse time-current curves to ensure the selected fuse is equivalent or faster than the ones specified in the following tables.

- IEC – Frames 7...15 products use type gG or equivalent conforming to EN60269-1, Parts 1 and 2.
- UL – 400, 480, and 600V-class frame 5 and 6 products use high-speed semiconductor FWP series fuses.
- UL – 400 and 480V-class frame 6L products use high-speed semiconductor FWP series fuses.
- UL – 690V-class frame 5 and 6 products use high-speed semiconductor FWJ series fuses.

UL Listed Fuses

If available current ratings do not match the ratings that are listed in the tables provided, choose the next higher fuse rating.

- UL – Frames 7...15 products use Class T, RK1, J, or L type conforming to UL 248.

Circuit Breakers

The 'non-fuse' listings in the following tables include inverse time circuit breakers and instantaneous trip circuit breakers (motor circuit protectors). Both types of circuit breakers are acceptable for IEC installations.

IMPORTANT Rockwell Automation recommends the use of external fuses for branch circuit protection. External fusing helps protect the drive in the event of an internal short caused by an industrial accident while the drive is energized. Circuit breakers can be used in series with fuses as means for disconnection.

400 Volt AC and 540 Volt DC Input Protection Devices—Frames 5, 6, and 6L

400 Volt AC Input										540 Volt DC Input		
Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps		Continuous AC Input	AC Input Protection Devices			DC Output Protection Devices (4)	
					1 min	3 s		Amps	Minimum FWP Series Fuse (2)	High Speed Semiconductor Fuse		Continuous DC Output
								Bussmann Part No. (3)	Amps	Bussmann Part No. (5)		
7.5 kW	5	22	Light	20x...C015	24	—	21	FWP-40D	100	FWP-100B	100	FWP-100B
		15.4	Normal		17	23	14	FWP-40D	100	FWP-100B	100	FWP-100B
		11.5	Heavy		17	21	11	FWP-40D	100	FWP-100B	100	FWP-100B
11 kW	5	30	Light	20x...C022	33	—	28	FWP-50D	100	FWP-100B	100	FWP-100B
		22	Normal		24	33	21	FWP-50D	100	FWP-100B	100	FWP-100B
		15.4	Heavy		23	28	14	FWP-50D	100	FWP-100B	100	FWP-100B
15 kW	5	37	Light	20x...C030	41	—	35	FWP-70B	100	FWP-100B	100	FWP-100B
		30	Normal		33	45	28	FWP-70B	100	FWP-100B	100	FWP-100B
		22	Heavy		33	40	21	FWP-70B	100	FWP-100B	100	FWP-100B
18.5 kW	5	43	Light	20x...C037	47	—	40	FWP-80B	100	FWP-100B	100	FWP-100B
		37	Normal		41	56	35	FWP-80B	100	FWP-100B	100	FWP-100B
		30	Heavy		45	54	28	FWP-80B	100	FWP-100B	100	FWP-100B
22 kW	5	60	Light	20x...C043	66	—	56	FWP-100B	100	FWP-100B	100	FWP-100B
		43	Normal		47	65	40	FWP-100B	100	FWP-100B	100	FWP-100B
		37	Heavy		56	67	35	FWP-100B	100	FWP-100B	100	FWP-100B
30 kW	5	72	Light	20x...C060	79	—	67	FWP-125A	200	FWP-200A	175	FWP-175A
		60	Normal		66	90	56	FWP-125A	200	FWP-200A	175	FWP-175A
		43	Heavy		65	77	40	FWP-125A	200	FWP-200A	175	FWP-175A
37 kW	5	85	Light	20x...C072	94	—	79	FWP-150A	200	FWP-200A	175	FWP-175A
		72	Normal		79	108	67	FWP-150A	200	FWP-200A	175	FWP-175A
		60	Heavy		90	108	56	FWP-150A	200	FWP-200A	175	FWP-175A
45 kW	5	104	Light	20x...C085	114	—	97	FWP-175A	200	FWP-200A	175	FWP-175A
		85	Normal		94	128	79	FWP-175A	200	FWP-200A	175	FWP-175A
		72	Heavy		108	130	67	FWP-175A	200	FWP-200A	175	FWP-175A
55 kW	5	104	Light	20x...C104	114	—	97	FWP-175A	200	FWP-200A	175	FWP-175A
		104	Normal		114	156	97	FWP-175A	200	FWP-200A	175	FWP-175A
		85	Heavy		128	153	79	FWP-175A	200	FWP-200A	175	FWP-175A
75 kW	6	170	Light	20x...C140	187	—	159	FWP-300A	350	FWP-350A	350	FWP-350A
		140	Normal		154	210	131	FWP-300A	350	FWP-350A	350	FWP-350A
		104	Heavy		156	187	97	FWP-300A	350	FWP-350A	350	FWP-350A
90 kW	6	205	Light	20x...C176	226	—	192	FWP-350A	350	FWP-350A	350	FWP-350A
		170	Normal		187	255	159	FWP-350A	350	FWP-350A	350	FWP-350A
		140	Heavy		210	252	131	FWP-350A	350	FWP-350A	350	FWP-350A
110 kW	6	260	Light	20x...C205	286	—	243	FWP-450A	600	FWP-600A	500	FWP-500A
		205	Normal		226	308	192	FWP-450A	600	FWP-600A	500	FWP-500A
		170	Heavy		255	306	159	FWP-450A	600	FWP-600A	500	FWP-500A
132 kW	6	302	Light	20x...C260	332	—	282	FWP-600A	600	FWP-600A	500	FWP-500A
		260	Normal		286	390	243	FWP-600A	600	FWP-600A	500	FWP-500A
		205	Heavy		308	369	192	FWP-600A	600	FWP-600A	500	FWP-500A
200 kW	6L	361	Light	20x...C360	396	—	336	FWP-700A	700	FWP-700A	700	FWP-700A
		361	Normal		396	540	336	FWP-700A	700	FWP-700A	700	FWP-700A
		264	Heavy		396	475	246	FWP-700A	700	FWP-700A	700	FWP-700A

- (1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'C043' drive can be used in Normal Duty mode on a 30 kW motor, in Heavy Duty mode on a 22 kW motor or in Light Duty mode on a 37 kW motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 0:36 [Duty Rating Act].
- (2) Minimum recommended protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.
- (3) The Cooper Bussmann catalog numbers that are listed in the table are maximum specifications. Be sure that any alternate fuse has a lower current rating, I²t let through, and faster melting time. Consult the fuse time-current curves to select a fuse that is equivalent or faster than the fuse specified in the table.
- (4) DC output fusing is required for bus supplies and for drive configurations that use the DC output terminals.
- (5) The Cooper Bussmann part number listed, or an equivalent device, is recommended for use on the DC output.

480 Volt AC and 650 Volt DC Input Protection Devices—Frames 5, 6, and 6L

480 Volt AC Input										650 Volt DC Input		
Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps		Continuous AC Input	AC Input Protection Devices			DC Output Protection Devices (4)	
					1 min	3 s		Amps	Minimum FWP Series Fuse (2)	High Speed Semiconductor Fuse		Continuous DC Output
								Bussmann Part No. (3)	Amps	Bussmann Part No. (3)	Amps	Bussmann Part No. (5)
10 Hp	5	22	Light	20x...D014	24	—	20	FWP-40D	100	FWP-100B	100	FWP-100B
		14	Normal		15	21	13	FWP-40D	100	FWP-100B	100	FWP-100B
		11	Heavy		17	20	10	FWP-40D	100	FWP-100B	100	FWP-100B
15 Hp	5	27	Light	20x...D022	30	—	24	FWP-50D	100	FWP-100B	100	FWP-100B
		22	Normal		24	33	20	FWP-50D	100	FWP-100B	100	FWP-100B
		14	Heavy		21	25	13	FWP-50D	100	FWP-100B	100	FWP-100B
20 Hp	5	34	Light	20x...D027	37	—	30	FWP-60D	100	FWP-100B	100	FWP-100B
		27	Normal		30	41	24	FWP-60D	100	FWP-100B	100	FWP-100B
		22	Heavy		33	40	20	FWP-60D	100	FWP-100B	100	FWP-100B
25 Hp	5	40	Light	20x...D034	44	—	36	FWP-70B	100	FWP-100B	100	FWP-100B
		34	Normal		37	51	30	FWP-70B	100	FWP-100B	100	FWP-100B
		27	Heavy		41	49	24	FWP-70B	100	FWP-100B	100	FWP-100B
30 Hp	5	52	Light	20x...D040	57	—	47	FWP-90B	100	FWP-100B	100	FWP-100B
		40	Normal		44	60	36	FWP-90B	100	FWP-100B	100	FWP-100B
		34	Heavy		51	61	30	FWP-90B	100	FWP-100B	100	FWP-100B
40 Hp	5	65	Light	20x...D052	72	—	58	FWP-125A	200	FWP-200A	175	FWP-175A
		52	Normal		57	78	47	FWP-125A	200	FWP-200A	175	FWP-175A
		40	Heavy		60	72	36	FWP-125A	200	FWP-200A	175	FWP-175A
50 Hp	5	77	Light	20x...D065	85	—	69	FWP-150A	200	FWP-200A	175	FWP-175A
		65	Normal		72	98	58	FWP-150A	200	FWP-200A	175	FWP-175A
		52	Heavy		78	94	47	FWP-150A	200	FWP-200A	175	FWP-175A
60 Hp	5	96	Light	20x...D077	106	—	86	FWP-175A	200	FWP-200A	175	FWP-175A
		77	Normal		85	116	69	FWP-175A	200	FWP-200A	175	FWP-175A
		65	Heavy		98	117	58	FWP-175A	200	FWP-200A	175	FWP-175A
75 Hp	5	96	Light	20x...D096	106	—	86	FWP-175A	200	FWP-200A	175	FWP-175A
		96	Normal		106	144	86	FWP-175A	200	FWP-200A	175	FWP-175A
		77	Heavy		116	139	69	FWP-175A	200	FWP-200A	175	FWP-175A
100 Hp	6	156	Light	20x...D125	172	—	140	FWP-300A	350	FWP-350A	350	FWP-350A
		125	Normal		138	188	112	FWP-300A	350	FWP-350A	350	FWP-350A
		96	Heavy		144	173	86	FWP-300A	350	FWP-350A	350	FWP-350A
125 Hp	6	186	Light	20x...D156	205	—	167	FWP-350A	350	FWP-350A	350	FWP-350A
		156	Normal		172	234	140	FWP-350A	350	FWP-350A	350	FWP-350A
		125	Heavy		188	225	112	FWP-350A	350	FWP-350A	350	FWP-350A
150 Hp	6	248	Light	20x...D186	273	—	222	FWP-450A	600	FWP-600A	500	FWP-500A
		186	Normal		205	279	167	FWP-450A	600	FWP-600A	500	FWP-500A
		156	Heavy		234	281	140	FWP-450A	600	FWP-600A	500	FWP-500A
200 Hp	6	302	Light	20x...D248	332	—	271	FWP-600A	600	FWP-600A	500	FWP-500A
		248	Normal		273	372	222	FWP-600A	600	FWP-600A	500	FWP-500A
		186	Heavy		279	335	167	FWP-600A	600	FWP-600A	500	FWP-500A
300 Hp	6L	361	Light	20x...D360	396	—	322	FWP-700A	700	FWP-700A	700	FWP-700A
		361	Normal		396	540	322	FWP-700A	700	FWP-700A	700	FWP-700A
		264	Heavy		396	475	236	FWP-700A	700	FWP-700A	700	FWP-700A

- (1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'D040' drive can be used in Normal Duty mode on a 30 Hp motor, in Heavy Duty mode on a 25 Hp motor or in Light Duty mode on a 40 Hp motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 0:36 [Duty Rating Act].
- (2) Minimum recommended protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.
- (3) The Cooper Bussmann catalog numbers that are listed in the table are maximum specifications. Be sure that any alternate fuse has a lower current rating, I²t let through, and faster melting time. Consult the fuse time-current curves to select a fuse that is equivalent or faster than the fuse specified in the table.
- (4) DC output fusing is required for bus supplies and for drive configurations that use the DC output terminals.
- (5) The Cooper Bussmann part number listed, or an equivalent device, is recommended for use on the DC output.

600 Volt AC and 810 Volt DC Input Protection Devices—Frames 5...6

600 Volt AC Input											810 Volt DC Input	
Applied Rating ⁽¹⁾	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps		Continuous AC Input	AC Input Protection Devices			DC Output Protection Devices ⁽⁴⁾	
					1 min	3 s		Amps	Minimum FWP Series Fuse ⁽²⁾	High Speed Semiconductor Fuse		Continuous DC Output
								Bussmann Part No. ⁽³⁾	Amps	Bussmann Part No. ⁽³⁾	Amps	Bussmann Part No. ⁽⁵⁾
10 Hp	5	17	Light	20x...E011	19	—	15	FWP-30B	150	FWP-150A	125	FWJ-125A
		11	Normal		12	17	10	FWP-30B	150	FWP-150A	125	FWJ-125A
		9	Heavy		14	16	8	FWP-30B	150	FWP-150A	125	FWJ-125A
15 Hp	5	22	Light	20x...E017	24	—	20	FWP-40D	150	FWP-150A	125	FWJ-125A
		17	Normal		19	26	15	FWP-40D	150	FWP-150A	125	FWJ-125A
		11	Heavy		17	20	10	FWP-40D	150	FWP-150A	125	FWJ-125A
20 Hp	5	27	Light	20x...E022	30	—	24	FWP-50D	150	FWP-150A	125	FWJ-125A
		22	Normal		24	33	20	FWP-50D	150	FWP-150A	125	FWJ-125A
		17	Heavy		26	31	15	FWP-50D	150	FWP-150A	125	FWJ-125A
25 Hp	5	32	Light	20x...E027	35	—	29	FWP-60D	150	FWP-150A	125	FWJ-125A
		27	Normal		30	41	24	FWP-60D	150	FWP-150A	125	FWJ-125A
		22	Heavy		33	40	20	FWP-60D	150	FWP-150A	125	FWJ-125A
30 Hp	5	41	Light	20x...E032	45	—	37	FWP-70B	150	FWP-150A	125	FWJ-125A
		32	Normal		35	48	29	FWP-70B	150	FWP-150A	125	FWJ-125A
		27	Heavy		41	49	24	FWP-70B	150	FWP-150A	125	FWJ-125A
40 Hp	5	52	Light	20x...E041	57	—	47	FWP-90B	150	FWP-150A	125	FWJ-125A
		41	Normal		45	62	37	FWP-90B	150	FWP-150A	125	FWJ-125A
		32	Heavy		48	58	29	FWP-90B	150	FWP-150A	125	FWJ-125A
50 Hp	5	62	Light	20x...E052	68	—	56	FWP-125A	150	FWP-150A	125	FWJ-125A
		52	Normal		57	78	47	FWP-125A	150	FWP-150A	125	FWJ-125A
		41	Heavy		62	74	37	FWP-125A	150	FWP-150A	125	FWJ-125A
60 Hp	5	77	Light	20x...E062	85	—	69	FWP-150A	150	FWP-150A	125	FWJ-125A
		62	Normal		68	93	56	FWP-150A	150	FWP-150A	125	FWJ-125A
		52	Heavy		78	94	47	FWP-150A	150	FWP-150A	125	FWJ-125A
75 Hp	6	99	Light	20x...E077	109	—	89	FWP-175A	350	FWP-350A	300	FWJ-300A
		77	Normal		85	116	69	FWP-175A	350	FWP-350A	300	FWJ-300A
		62	Heavy		93	112	56	FWP-175A	350	FWP-350A	300	FWJ-300A
100 Hp	6	125	Light	20x...E099	138	—	112	FWP-225A	350	FWP-350A	300	FWJ-300A
		99	Normal		109	149	89	FWP-225A	350	FWP-350A	300	FWJ-300A
		77	Heavy		116	139	69	FWP-225A	350	FWP-350A	300	FWJ-300A
125 Hp	6	144	Light	20x...E125	158	—	129	FWP-250A	350	FWP-350A	300	FWJ-300A
		125	Normal		138	188	112	FWP-250A	350	FWP-350A	300	FWJ-300A
		99	Heavy		149	178	89	FWP-250A	350	FWP-350A	300	FWJ-300A
150 Hp	6	192	Light	20x...E144	211	—	172	FWP-350A	350	FWP-350A	300	FWJ-300A
		144	Normal		158	216	129	FWP-350A	350	FWP-350A	300	FWJ-300A
		125	Heavy		188	225	112	FWP-350A	350	FWP-350A	300	FWJ-300A

(1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'E041' drive can be used in Normal Duty mode on a 40 Hp motor, in Heavy Duty mode on a 30 Hp motor or in Light Duty mode on a 50 Hp motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 0:36 [Duty Rating Act].

(2) Minimum recommended protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.

(3) The Cooper Bussmann catalog numbers that are listed in the table are maximum specifications. Be sure that any alternate fuse has a lower current rating, I²t let through, and faster melting time. Consult the fuse time-current curves to select a fuse that is equivalent or faster than the fuse specified in the table.

(4) DC output fusing is required for bus supplies and for drive configurations that use the DC output terminals.

(5) The Cooper Bussmann part number listed, or an equivalent device, is recommended for use on the DC output.

690 Volt AC and 932 Volt DC Input Protection Devices—Frames 5...6

690 Volt AC Input										932 Volt DC Input			
Applied Rating ⁽¹⁾	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps		Continuous AC Input	AC Input Protection Devices			DC Output Protection Devices ⁽⁴⁾		
					1 min	3 s	Amps	Minimum FWJ Series Fuse ⁽²⁾		High Speed Semiconductor Fuse		Continuous DC Output	DC Output Protection Devices
								Bussmann Part No. ⁽³⁾	Amps	Bussmann Part No. ⁽³⁾	Amps	Bussmann Part No. ⁽⁵⁾	
11 kW	5	20	Light	20x...F015	22	—	18	FWJ-35A	125	FWJ-125A	125	FWJ-125A	
		15	Normal		17	23	13	FWJ-35A	125	FWJ-125A	125	FWJ-125A	
		12	Heavy		18	22	11	FWJ-35A	125	FWJ-125A	125	FWJ-125A	
15 kW	5	23	Light	20x...F020	25	—	21	FWJ-40A	125	FWJ-125A	125	FWJ-125A	
		20	Normal		22	30	18	FWJ-40A	125	FWJ-125A	125	FWJ-125A	
		15	Heavy		23	27	13	FWJ-40A	125	FWJ-125A	125	FWJ-125A	
18.5 kW	5	30	Light	20x...F023	33	—	27	FWJ-50A	125	FWJ-125A	125	FWJ-125A	
		23	Normal		25	35	21	FWJ-50A	125	FWJ-125A	125	FWJ-125A	
		20	Heavy		30	36	18	FWJ-50A	125	FWJ-125A	125	FWJ-125A	
22 kW	5	34	Light	20x...F030	37	—	30	FWJ-60A	125	FWJ-125A	125	FWJ-125A	
		30	Normal		33	45	27	FWJ-60A	125	FWJ-125A	125	FWJ-125A	
		23	Heavy		35	41	21	FWJ-60A	125	FWJ-125A	125	FWJ-125A	
30 kW	5	46	Light	20x...F034	51	—	41	FWJ-80A	125	FWJ-125A	125	FWJ-125A	
		34	Normal		37	51	30	FWJ-80A	125	FWJ-125A	125	FWJ-125A	
		30	Heavy		45	54	27	FWJ-80A	125	FWJ-125A	125	FWJ-125A	
37 kW	5	50	Light	20x...F046	55	—	45	FWJ-90A	125	FWJ-125A	125	FWJ-125A	
		46	Normal		51	69	41	FWJ-90A	125	FWJ-125A	125	FWJ-125A	
		34	Heavy		51	61	30	FWJ-90A	125	FWJ-125A	125	FWJ-125A	
45 kW	5	61	Light	20x...F050	67	—	55	FWJ-125A	125	FWJ-125A	125	FWJ-125A	
		50	Normal		55	75	45	FWJ-125A	125	FWJ-125A	125	FWJ-125A	
		46	Heavy		69	83	41	FWJ-125A	125	FWJ-125A	125	FWJ-125A	
55 kW	5	82	Light	20x...F061	90	—	73	FWJ-150A	125	FWJ-125A	125	FWJ-125A	
		61	Normal		67	92	55	FWJ-150A	125	FWJ-125A	125	FWJ-125A	
		50	Heavy		75	90	45	FWJ-150A	125	FWJ-125A	125	FWJ-125A	
75 kW	6	98	Light	20x...F082	108	—	88	FWJ-175A	300	FWJ-300A	300	FWJ-300A	
		82	Normal		90	123	73	FWJ-175A	300	FWJ-300A	300	FWJ-300A	
		61	Heavy		92	110	55	FWJ-175A	300	FWJ-300A	300	FWJ-300A	
90 kW	6	119	Light	20x...F098	131	—	106	FWJ-200A	300	FWJ-300A	300	FWJ-300A	
		98	Normal		108	147	88	FWJ-200A	300	FWJ-300A	300	FWJ-300A	
		82	Heavy		123	148	73	FWJ-200A	300	FWJ-300A	300	FWJ-300A	
110 kW	6	142	Light	20x...F119	156	—	127	FWJ-250A	300	FWJ-300A	300	FWJ-300A	
		119	Normal		131	179	106	FWJ-250A	300	FWJ-300A	300	FWJ-300A	
		98	Heavy		147	176	88	FWJ-250A	300	FWJ-300A	300	FWJ-300A	
132 kW	6	171	Light	20x...F142	188	—	153	FWJ-300A	300	FWJ-300A	300	FWJ-300A	
		142	Normal		156	213	127	FWJ-300A	300	FWJ-300A	300	FWJ-300A	
		119	Heavy		179	214	106	FWJ-300A	300	FWJ-300A	300	FWJ-300A	

(1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'F046' drive can be used in Normal Duty mode on a 37 kW motor, in Heavy Duty mode on a 30 kW motor or in Light Duty mode on a 45 kW motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 0:36 [Duty Rating Act].

(2) Minimum recommended protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.

(3) The Cooper Bussmann catalog numbers that are listed in the table are maximum specifications. Be sure that any alternate fuse has a lower current rating, I²t let through, and faster melting time. Consult the fuse time-current curves to select a fuse that is equivalent or faster than the fuse specified in the table.

(4) DC output fusing is required for bus supplies and for drive configurations that use the DC output terminals.

(5) The Cooper Bussmann part number listed, or an equivalent device, is recommended for use on the DC output.

400 Volt AC and 540 Volt DC Input Protection Devices - Frames 7...12

Applied Rating ⁽¹⁾	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps		Continuous AC Input Amps	AC Input Integral Semiconductor Fuse Size (170M Type) ⁽²⁾			AC Input Protection Devices				540 Volt DC Input				
					1 min	3 s		2xLCL Amps	1xLCL Amps	Qty.	0ty.	Dual Element Time Delay Fuse		Non-Time Delay Fuse		Circuit Breaker ⁽⁵⁾	Motor Circuit Protector ⁽⁶⁾	Input Quantities	DC Input Integral Semiconductor Fuse (kft) ⁽⁷⁾
												1/Phase Min ⁽³⁾	Max ⁽⁴⁾	1/Phase Min ⁽³⁾	Max ⁽⁴⁾				
160 kW	7	367	Light	20x...C302	404	-	343	-	900	-	1	500	650	500	1100	500	900	1400	2
		302	Normal		332	453	282	-	900	-	1	400	500	400	900	400	750	1400	2
		260	Heavy		390	468	243	-	900	-	1	350	450	350	800	350	650	1400	2
200 kW	7	460	Light	20x...C367	506	-	430	-	900	-	1	600	800	600	1350	600	1100	1400	2
		367	Normal		404	551	343	-	900	-	1	500	650	500	1100	500	900	1400	2
		302	Heavy		453	544	282	-	900	-	1	400	500	400	900	400	750	1400	2
250 kW	7	540	Light	20x...C460	594	-	505	-	900	-	1	700	900	700	1600	700	1350	1400	2
		460	Normal		506	680	430	-	900	-	1	600	800	600	1350	600	1100	1400	2
		367	Heavy		551	661	343	-	900	-	1	500	650	500	1100	500	900	1400	2
315 kW	7	585	Light	20x...C540	644	-	547	-	900	-	1	750	1000	750	1800	750	1400	1400	2
		540	Normal		594	810	505	-	900	-	1	700	900	700	1600	700	1350	1400	2
		460	Heavy		690	828	430	-	900	-	1	600	800	600	1350	600	1100	1400	2
315 kW	7	617	Light	20x...C585	679	-	577	-	900	-	1	800	1000	800	1900	800	1600	1400	2
		600	Normal		660	900	561	-	900	-	1	750	900	750	1800	750	1400	1400	2
		500	Heavy		750	900	467	-	900	-	1	650	800	650	1400	650	1200	1400	2
160 kW	8	367	Light	20x...C302	404	-	343	-	900	-	1	500	650	500	1100	500	900	1400	2
		302	Normal		332	453	282	-	900	-	1	400	500	400	900	400	750	1400	2
		260	Heavy		390	468	243	-	900	-	1	350	450	350	800	350	650	1400	2
200 kW	8	460	Light	20x...C367	506	-	430	-	900	-	1	600	800	600	1350	600	1100	1400	2
		367	Normal		404	551	343	-	900	-	1	500	650	500	1100	500	900	1400	2
		302	Heavy		453	544	282	-	900	-	1	400	500	400	900	400	750	1400	2
250 kW	8	540	Light	20x...C460	594	-	505	-	900	-	1	700	900	700	1600	700	1350	1400	2
		460	Normal		506	680	430	-	900	-	1	600	800	600	1350	600	1100	1400	2
		367	Heavy		551	661	343	-	900	-	1	500	650	500	1100	500	900	1400	2
315 kW	8	585	Light	20x...C540	644	-	547	-	900	-	1	750	1000	750	1800	750	1400	1400	2
		540	Normal		594	810	505	-	900	-	1	700	900	700	1600	700	1350	1400	2
		460	Heavy		690	828	430	-	900	-	1	600	800	600	1350	600	1100	1400	2
315 kW	8	650	Light	20x...C585	715	-	582	-	1250	-	1	900	1100	900	1900	900	1600	1400	2
		585	Normal		644	878	547	-	1250	-	1	750	1000	750	1800	750	1400	1400	2
		472	Heavy		708	850	430	-	1250	-	1	600	800	600	1400	600	1200	1400	2

See page 76 for notes.

400 Volt AC and 540 Volt DC Input Protection Devices - Frames 7...12 (Continued)

400 Volt AC Input												540 Volt DC Input						
Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps		Continuous AC Input Amps	AC Input Integral Semiconductor Fuse Size (170M Type) (2)			AC Input Protection Devices				DC Input Integral Semiconductor Fuse Kit (7)	Qty.		
					1 min	3 s		2xLCL Amps	1xLCL Amps	Qty.	Dual Element Time Delay Fuse	Non-Time Delay Fuse	Circuit Breaker (5)	Motor Circuit Protector (6)			Input Quantities Continuous DC Input	Amps
								1/Phase Min (3)	Max (4)	1/Phase Min (3)	Max (4)	Min	Max		Amps			
355 kW	8	750	Light	20x...C650	825	-	701	1000	1200	1000	2000	1000	1800	1000	864	1400	2	
		650	Normal		715	975	608	900	1100	900	1900	900	1600	1600	749	1400	2	
		540	Heavy		810	972	505	700	900	700	1600	700	1350	700	1350	622	1400	2
400 kW	8	796	Light	20x...C750	876	-	720	1000	1400	1000	2400	1000	1900	1000	917	1400	2	
		750	Normal		825	1125	701	1000	1200	1000	2000	1000	1800	1000	1800	864	1400	2
		585	Heavy		878	1053	547	750	1000	750	1800	750	1400	750	1400	674	1400	2
400 kW	8	832	Light	20x...C770	915	-	778	1100	1400	1100	2400	1100	2000	1000	959	1400	2	
		770	Normal		847	1155	720	1000	1350	1000	2400	1000	1900	1000	1900	887	1400	2
		650	Heavy		975	1170	600	900	1100	900	1900	900	1600	900	1600	749	1400	2
500 kW	9	1040	Light	20x...C920	1144	-	972	1800	1800	1350	3000	1350	2500	1350	1198	1400	4	
		920	Normal		1012	1380	860	1800	1600	1200	2500	1200	2400	1200	2400	1060	1400	4
		770	Heavy		1155	1386	720	1800	1350	1000	2400	1000	1900	1000	1900	887	1400	4
560 kW	9	1080	Light	20x...C1K0	1199	-	1019	1800	1900	1400	3000	1400	3000	1400	1256	1400	4	
		1040	Normal		1144	1560	972	1800	1800	1350	3000	1350	2500	1350	2500	1198	1400	4
		920	Heavy		1380	1656	860	1800	1600	1200	2500	1200	2400	1200	2400	1060	1400	4
630 kW	9	1182	Light	20x...C1K1	1300	-	1105	2000	2000	1500	3500	1500	3000	1500	1362	1400	4	
		1112	Normal		1223	1667	1039	2000	1900	1400	3500	1400	3000	1400	3000	1281	1400	4
		1040	Heavy		1560	1872	972	2000	1800	1350	3000	1350	2500	1350	2500	1198	1400	4
710 kW	9	1465	Light	20x...C1K2	1612	-	1370	2000	2500	1900	4000	1900	3500	1900	1688	1400	4	
		1175	Normal		1283	1763	1099	2000	2000	1500	3500	1500	3000	1500	3000	1354	1400	4
		1090	Heavy		1635	1962	1019	2000	1900	1400	3000	1400	3000	1400	3000	1256	1400	4
800 kW	9	1581	Light	20x...C1K4	1739	-	1478	2000	3000	2000	4500	2000	4000	2000	1821	1400	4	
		1463	Normal		1612	2198	1368	2000	2500	1900	4000	1900	3500	1900	3500	1688	1400	4
		1175	Heavy		1763	2115	1099	2000	2000	1500	3500	1500	3000	1500	3000	1354	1400	4
850 kW	10	1715	Light	20x...C1K6	1887	-	1603	2000	3000	2400	5000	2400	4500	2400	1976	1400	6	
		1590	Normal		1749	2385	1478	2000	3000	2000	4500	2000	4000	2000	4000	1852	1400	6
		1465	Heavy		2198	2637	1370	2000	2500	1900	4000	1900	3500	1900	3500	1688	1400	6
1000 kW	10	2150	Light	20x...C1K7	2365	-	2010	2000	3800	3000	6000	3000	5000	3000	2477	1400	6	
		1715	Normal		1887	2573	1803	2000	3000	2400	5000	2400	4500	2400	4500	1976	1400	6
		1480	Heavy		2220	2664	1384	2000	2500	1900	4500	1900	3800	1900	3800	1705	1400	6

See page 76 for notes.

400 Volt AC and 540 Volt DC Input Protection Devices - Frames 7...12 (Continued)

400 Volt AC Input										540 Volt DC Input			
Applied Rating ⁽¹⁾	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps		Continuous AC Input Amps	AC Input Protection Devices			DC Input Integral Semiconductor Fuse Size (170M Type) ⁽²⁾	DC Input Integral Semiconductor Fuse Kit ⁽⁷⁾	
					1 min	3 s		Dual Element Time Delay Fuse	Non-Time Delay Fuse	Circuit Breaker ⁽⁵⁾			Motor Circuit Protector ⁽⁶⁾
								1/Phase Min ⁽³⁾	Max ⁽⁴⁾	1/Phase Min ⁽³⁾	Max ⁽⁴⁾	Amps	Qty.
1650 kW	11	3078	Light	20x...C2X8	3386	4274	2878	4000	5000	4000	6000	3546	8
		2849	Normal				2664	3800	5000	3800	6000	3282	8
		2330	Heavy				2179	3000	4000	3000	6000	2684	8
2000 kW	12	3846	Light	20x...C3K5	4231	5313	3578	5000	6000	5000	6000	4431	10
		3542	Normal				3372	4500	6000	4500	6000	4081	10
		3032	Heavy				2835	3800	5000	3800	6000	3493	10

(1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a '2460' drive can be used in Normal Duty mode on a 250 kW motor, in Heavy Duty mode on a 200 kW motor or in Light Duty mode on a 315 kW motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter U:36 [Duty Rating Act].

(2) Refer to [Intermittent Overload on page 31](#) for an explanation of Duty Ratings.

(3) These AC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection. AC input protection devices for branch circuit protection based on US NEC are listed in the table. Each LCL filter has one fuse per phase.

(4) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.

(5) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(6) Circuit Breaker - inverse time breaker. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(7) Recommended Motor circuit protector - Instantaneous trip circuit breaker. The trip setting should be set to the input current of the drive and should be sized for the continuous current of the system.

(8) These DC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection.

480 Volt AC and 650 Volt DC Input Protection Devices - Frames 7...12

Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number (x = 6 or J)	Output Overload Amps		Continuous AC Input Amps		AC Input Integral Semiconductor Fuse Size (170H Type) (2)			AC Input Protection Devices						650 Volt DC Input					
												1 min		3 s		Amps		1xLCL Amps		Qty.		DC Input Integral Semiconductor Fuse Kit (7)	
												397		453		323		900		1		Amps	
Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number (x = 6 or J)	1 min	3 s	Amps	2xLCL Amps	1xLCL Amps	Qty.	0ty.	Dual Element Time Delay Fuse		Non-Time Delay Fuse		Circuit Breaker (5)		Motor Circuit Protector (6)					
												1/Phase Min (3)	Max (4)	1/Phase Min (3)	Max (4)	Min	Max						
250 Hp	7	361	Light	20x...D302	397	—	323	—	900	1	—	500	650	500	1000	500	900	500	1400	2			
		302	Normal		332	453	271	—	900	1	—	400	500	400	900	400	750	400	1400	2			
		248	Heavy		372	446	222	—	900	1	—	350	400	350	750	350	600	350	1400	2			
300 Hp	7	430	Light	20x...D361	473	—	385	—	900	1	—	600	750	600	1200	600	1000	600	1400	2			
		361	Normal		397	542	323	—	900	1	—	500	650	500	1000	500	900	500	1400	2			
		302	Heavy		453	544	271	—	900	1	—	400	500	400	900	400	750	400	1400	2			
350 Hp	7	485	Light	20x...D430	534	—	435	—	900	1	—	650	800	650	1500	650	1200	650	1400	2			
		430	Normal		473	645	385	—	900	1	—	600	750	600	1200	600	1000	600	1400	2			
		361	Heavy		542	650	323	—	900	1	—	500	650	500	1000	500	900	500	1400	2			
400 Hp	7	545	Light	20x...D505	600	—	488	—	900	1	—	700	900	700	1800	700	1350	700	1400	2			
		505	Normal		556	758	452	—	900	1	—	650	800	650	1500	650	1200	650	1400	2			
		430	Heavy		645	774	385	—	900	1	—	600	750	600	1200	600	1000	600	1400	2			
500 Hp	7	617	Light	20x...D617	679	—	553	—	900	1	—	800	1000	800	1800	800	1600	800	1400	2			
		600	Normal		660	900	538	—	900	1	—	750	900	750	1600	750	1400	750	1400	2			
		500	Heavy		750	900	448	—	900	1	—	650	800	650	1400	650	120	650	1400	2			
250 Hp	8	361	Light	20x...D302	397	—	323	—	900	1	—	500	650	500	1000	500	900	500	1400	2			
		302	Normal		332	453	271	—	900	1	—	400	500	400	900	400	750	400	1400	2			
		248	Heavy		372	446	222	—	900	1	—	350	400	350	750	350	600	350	1400	2			
300 Hp	8	430	Light	20x...D361	473	—	385	—	900	1	—	600	750	600	1200	600	1000	600	1400	2			
		361	Normal		397	542	323	—	900	1	—	500	650	500	1000	500	900	500	1400	2			
		302	Heavy		453	544	271	—	900	1	—	400	500	400	900	400	750	400	1400	2			
350 Hp	8	485	Light	20x...D430	534	—	435	—	900	1	—	650	800	650	1500	650	1200	650	1400	2			
		430	Normal		473	645	385	—	900	1	—	600	750	600	1200	600	1000	600	1400	2			
		361	Heavy		542	650	323	—	900	1	—	500	650	500	1000	500	900	500	1400	2			
400 Hp	8	545	Light	20x...D505	600	—	488	—	900	1	—	700	900	700	1800	700	1350	700	1400	2			
		505	Normal		556	758	452	—	900	1	—	650	800	650	1500	650	1200	650	1400	2			
		430	Heavy		645	774	385	—	900	1	—	600	750	600	1200	600	1000	600	1400	2			
450 Hp	8	617	Light	20x...D617	679	—	529	—	1250	1	—	800	1000	800	1800	800	1500	800	1400	2			
		545	Normal		600	818	488	—	1250	1	—	700	900	700	1600	700	1350	700	1400	2			
		454	Heavy		681	817	385	—	1250	1	—	600	800	600	1350	600	1100	600	1400	2			

See page 79 for notes.

480 Volt AC and 650 Volt DC Input Protection Devices – Frames 7...12 (Continued)

Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number (x = 6 or J)	Output Overload Amps		Continuous AC Input Amps	AC Input Integral Semiconductor Fuse Size (170M Type) (2)			AC Input Protection Devices				650 Volt DC Input			
					1 min	3 s		2xLCL Amps	1xLCL Qty.	Qty.	Dual Element Time Delay Fuse		Non-Time Delay Fuse		Circuit Breaker (5)	Motor Circuit Protector (6)	Input Quantities	DC Input Integral Semiconductor Fuse Kit (7)
											1/Phase Min (3)	Max (4)	1/Phase Min (3)	Max (4)				
500 Hp	8	710	Light	20x...D617	781	—	636	—	—	1250	1	900	2000	900	1800	800	1400	2
		617	Normal		679	926	553	—	—	1250	1	800	1800	800	1500	800	1400	2
		485	Heavy		728	873	435	—	—	1250	1	700	1400	700	1200	700	1400	2
600 Hp	8	765	Light	20x...D710	842	—	663	—	—	1000	1	1000	2400	1000	1900	1000	1400	2
		710	Normal		781	1065	636	—	—	1250	1	900	2000	900	1800	900	1400	2
		545	Heavy		818	981	488	—	—	1250	1	700	1600	700	1350	700	1400	2
650 Hp	8	800	Light	20x...D740	880	—	717	—	—	1000	1	1000	2400	1000	2000	1000	1400	2
		740	Normal		814	1110	663	—	—	1250	1	1000	2000	1000	1800	1000	1400	2
		617	Heavy		926	1111	553	—	—	1250	1	800	1800	800	1500	800	1400	2
700 Hp	9	980	Light	20x...D800	1056	—	860	1800	1	—	—	1200	3000	1200	2400	1200	1400	4
		800	Normal		880	1200	717	1800	1	—	1000	2400	1000	2000	1000	1400	4	
		740	Heavy		1110	1332	663	1800	1	—	1000	2000	1000	1800	1000	1400	4	
800 Hp	9	1045	Light	20x...D860	1150	—	936	1800	1	—	—	1350	3000	1350	2500	1350	1400	4
		960	Normal		1056	1440	860	1800	1	—	1200	3000	1200	2400	1200	1400	4	
		800	Heavy		1200	1440	717	1800	1	—	1000	2400	1000	2000	1000	1400	4	
900 Hp	9	1135	Light	20x...D1K0	1249	—	1004	2000	1	—	—	1500	3500	1500	3000	1500	1400	4
		1045	Normal		1150	1568	936	2000	1	—	1350	3000	1350	2500	1350	1400	4	
		960	Heavy		1440	1728	860	2000	1	—	1200	3000	1200	2400	1200	1400	4	
1000 Hp	9	1365	Light	20x...D1K1	1502	—	1223	2000	1	—	—	1800	4000	1800	3500	1800	1400	4
		1135	Normal		1249	1703	1017	2000	1	—	1500	3500	1500	3000	1500	1400	4	
		1045	Heavy		1568	1881	936	2000	1	—	1350	3000	1350	2500	1350	1400	4	
1100 Hp	9	1520	Light	20x...D1K3	1672	—	1362	2000	1	—	—	1900	4500	1900	3800	1900	1400	4
		1365	Normal		1502	2048	1223	2000	1	—	1800	4000	1800	3500	1800	1400	4	
		1135	Heavy		1703	2043	1017	2000	1	—	1500	3500	1500	3000	1500	1400	4	
1250 Hp	10	1655	Light	20x...D1K4	1821	—	1483	2000	1	1250	1	2400	5000	2400	4000	2400	1400	6
		1420	Normal		1562	2130	1272	2000	1	1800	4000	1800	3500	1800	1400	6		
		1365	Heavy		2048	2457	1223	2000	1	1800	4000	1800	3500	1800	1400	6		
1500 Hp	10	2070	Light	20x...D1K6	2277	—	1855	2000	1	1250	1	3000	6000	3000	5000	3000	1400	6
		1655	Normal		1821	2483	1483	2000	1	2400	5000	2400	4000	2400	1400	6		
		1420	Heavy		2130	2556	1272	2000	1	1800	4000	1800	3500	1800	1400	6		
1800 Hp	10	2240	Light	20x...D2K0	2464	—	2007	2000	1	1250	1	3000	6000	3000	5000	3000	1400	6
		2072	Normal		2279	3108	1857	2000	1	1250	3000	1250	3000	1250	1400	6		
		1655	Heavy		2483	2979	1483	2000	1	2400	5000	2400	4000	2400	1400	6		

See page 79 for notes.

480 Volt AC and 650 Volt DC Input Protection Devices - Frames 7...12 (Continued)

480 Volt AC Input										650 Volt DC Input					
Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number (x = G or J)	Output Overload Amps		Continuous AC Input Amps	AC Input Integral Semiconductor Fuse Size (170M Type) (2)		AC Input Protection Devices				DC Input Integral Semiconductor Fuse Kit (7)	
					1 min	3 s		2xLCL Qty.	1xLCL Qty.	Dual Element Time Delay Fuse	Non-Time Delay Fuse	Circuit Breaker (5)			Motor Circuit Protector (6)
								1/Phase Min (3)	Max (4)	1/Phase Min (3)	Max (4)	Min	Max	Amps	Qty.
2400 Hp	11	2960	Light			3256	2652	3800	5000	3800	6000	3800	6000	3268	8
		2738	Normal	20x...D2K6		3012	2453	3500	4500	3500	6000	3500	6000	3023	8
		2240	Heavy			3360	2007	3000	3800	3000	6000	3000	5000	2473	8
3000 Hp	12	3696	Light			4066	3297	5000	6000	5000	6000	5000	6000	4081	10
		3404	Normal	20x...D3K4		3744	3050	4500	6000	4500	6000	4500	6000	3768	10
		2980	Heavy			4470	2670	3800	5000	3800	6000	3800	6000	3290	10

(1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'D430' drive can be used in Normal Duty mode on a 350 Hp motor, in Heavy Duty mode on a 300 Hp motor or in Light Duty mode on a 400 Hp motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter D:36 [Duty Rating Act].

(2) Refer to [Intermittent Overload on page 31](#) for an explanation of Duty Ratings.

(3) These AC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection. AC input protection devices for branch circuit protection based on US NEC are listed in the table. Each LCL filter has one fuse per phase.

(4) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.

(5) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(6) Circuit Breaker - inverse time breaker. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.

(7) Recommended Motor circuit protector - Instantaneous trip circuit breaker. The trip setting should be set to the input current of the drive and should be sized for the continuous current of the system.

(8) These DC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection.

600 Volt AC and 810 Volt DC Input Protection Devices - Frames 7...12

Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number (x = 6 or J)	Output Overload Amps	Continuous AC Input Amps	AC Input Integral Semiconductor Fuse Size (170M Type) (2)				AC Input Protection Devices				810 Volt DC Input			
							2xLCL Amps		1xLCL Amps		Dual Element Time Delay Fuse		Non-Time Delay Fuse		Circuit Breaker (5)		Input Quantities	DC Input Integral Semiconductor Fuse Kit (7)
							1 min	3 s	Amps	Qty.	1xLCL Amps	Qty.	1/Phase Min (3)	Max (4)	1/Phase Min (3)	Max (4)	Min	Max
200 Hp	7	242	Light	20x...E192	286	217	700	1	350	400	350	750	350	600	249	100	2	
		192	Normal		211	172	700	1	250	350	250	600	250	500	197	100	2	
		144	Heavy		216	129	700	1	175	400	200	400	200	350	200	148	100	2
250 Hp	7	295	Light	20x...E242	325	264	700	1	400	500	400	900	400	750	303	100	2	
		242	Normal		266	217	700	1	350	400	350	750	350	600	249	100	2	
		192	Heavy		288	172	700	1	250	350	250	600	250	500	197	100	2	
300 Hp	7	355	Light	20x...E295	391	318	700	1	450	600	450	1000	450	900	365	100	2	
		295	Normal		325	264	700	1	400	500	400	900	400	750	303	100	2	
		242	Heavy		363	217	700	1	350	400	350	750	350	600	249	100	2	
350 Hp	7	395	Light	20x...E355	435	354	700	1	500	700	500	1100	500	1000	406	100	2	
		355	Normal		391	318	700	1	450	600	450	1000	450	900	365	100	2	
		295	Heavy		443	264	700	1	400	500	400	900	400	750	303	100	2	
400 Hp	7	435	Light	20x...E395	479	390	700	1	600	750	600	1350	600	1100	447	100	2	
		395	Normal		435	354	700	1	500	700	500	1100	500	1000	406	100	2	
		355	Heavy		533	318	700	1	450	600	450	1000	450	900	365	100	2	
250 Hp	8	295	Light	20x...E242	325	264	700	1	400	500	400	900	400	750	326	100	2	
		242	Normal		266	217	700	1	350	400	350	750	350	600	267	100	2	
		192	Heavy		288	172	700	1	250	350	250	600	250	500	212	100	2	
300 Hp	8	355	Light	20x...E295	391	318	700	1	450	600	450	1000	450	900	392	100	2	
		295	Normal		325	264	700	1	400	500	400	900	400	750	326	100	2	
		242	Heavy		363	217	700	1	350	400	350	750	350	600	267	100	2	
350 Hp	8	395	Light	20x...E355	435	354	700	1	500	700	500	1100	500	1000	436	100	2	
		355	Normal		391	318	700	1	450	600	450	1000	450	900	392	100	2	
		295	Heavy		443	264	700	1	400	500	400	900	400	750	326	100	2	
400 Hp	8	435	Light	20x...E395	479	390	700	1	600	750	600	1350	600	1100	480	100	2	
		395	Normal		435	354	700	1	500	700	500	1100	500	1000	436	100	2	
		355	Heavy		533	318	700	1	450	600	450	1000	450	900	392	100	2	
450 Hp	8	510	Light	20x...E435	561	457	900	1	650	900	650	1500	650	1200	563	100	2	
		435	Normal		479	390	900	1	600	750	600	1350	600	1100	480	100	2	
		395	Heavy		593	354	900	1	500	700	500	1100	500	1000	436	100	2	
450 Hp	8	510	Light	20x...E435	561	457	900	1	650	900	650	1500	650	1200	563	100	2	
		435	Normal		479	390	900	1	600	750	600	1350	600	1100	480	100	2	
		395	Heavy		593	354	900	1	500	700	500	1100	500	1000	436	100	2	

See page 82 for notes.

600 Volt AC and 810 Volt DC Input Protection Devices - Frames 7...12 (Continued)

Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps	Continuous AC Input	AC Input Integral Semiconductor Fuse Size (170M Type) (2)	Dual Element Time Delay Fuse	Non-Time Delay Fuse	Circuit Breaker (5)	Motor Circuit Protector (6)	810 Volt DC Input			
												Input Quantities	DC Input Integral Semiconductor Fuse Kit (7)		
														Continuous DC Input	Amps
550 Hp	8	580	Light	(x = 6 or J)	1 min	3 s	2xLCL Amps	1xLCL Qty.	1/Phase Min (3)	Max (4)	1/Phase Min (3)	Max (4)	Amps	Qty.	
		545	Normal	20x...E545	638	-	520	-	800	1	750	1000	1800	1100	2
		450	Heavy		600	818	488	-	900	1	700	900	1600	1350	1100
600 Hp	9	690	Light	20x...E595	675	810	403	-	900	1	600	800	1350	1100	2
		580	Normal		759	-	618	1250	1	900	1200	2000	1800	1100	4
		545	Heavy		638	870	520	1250	1	750	1000	1800	1400	1100	4
700 Hp	9	760	Light	20x...E690	818	981	488	1250	1	700	900	1600	1350	1100	4
		690	Normal		836	-	681	1250	1	1000	1350	2400	1900	1100	4
		595	Heavy		759	1035	618	1250	1	900	1200	2000	1800	1100	4
800 Hp	9	825	Light	20x...E760	893	1071	520	1250	1	750	1000	1800	1400	1100	4
		760	Normal		908	-	739	1250	1	1100	1400	2400	2000	1100	4
		680	Heavy		836	1140	681	1250	1	1000	1350	2400	1900	1100	4
900 Hp	9	825	Light	20x...E825	1035	1242	618	1250	1	900	1200	2000	1800	1100	4
		825	Normal		1078	-	878	1600	1	1350	1800	3000	2400	1100	4
		760	Heavy		908	1238	739	1600	1	1100	1400	2400	2000	1100	4
1000 Hp	9	1102	Light	20x...E980	1140	1368	681	1600	1	1000	1350	2400	1900	1100	4
		980	Normal		1212	-	987	1600	1	1400	1900	3500	2500	1100	4
		825	Heavy		1078	1470	878	1600	1	1350	1800	3000	2400	1100	4
1100 Hp	10	1220	Light	20x...E1K1	1238	1485	739	1600	1	1100	1400	2400	2000	1100	4
		1045	Normal		1342	-	1093	1600	1	1600	2000	3500	3000	1100	6
		980	Heavy		1150	1568	936	1600	1	1350	1800	3000	2500	1100	6
1250 Hp	10	1430	Light	20x...E1K2	1470	1764	878	1600	1	1350	1800	3000	2400	1100	6
		1220	Normal		1573	-	1281	1600	1	1800	2500	4500	3500	1100	6
		1045	Heavy		1342	1830	1093	1600	1	1600	2000	3500	3000	1100	6
1500 Hp	10	1624	Light	20x...E1K5	1568	1881	936	1600	1	1350	1800	3000	2500	1100	6
		1430	Normal		1786	-	1455	1600	1	2400	3000	5000	4000	1100	6
		1220	Heavy		1573	2145	1281	1600	1	1800	2500	4500	3500	1100	6
2000 Hp	11	2146	Light	20x...E2K0	1830	2196	1093	1600	1	1600	2000	3500	3000	1100	6
		1946	Normal		2361	-	1923	1600	2	3000	3800	6000	5000	1100	8
		1700	Heavy		2141	2919	1744	1600	2	2500	3500	6000	5000	1100	8
2500 Hp	12	2668	Light	20x...E2K4	2550	3060	1523	1600	2	2400	3000	5000	4500	1100	8
		2420	Normal		2935	-	2391	1600	2	3500	4500	6000	6000	1100	10
		2070	Heavy		2662	3630	2168	1600	2	3500	4000	6000	3500	1100	10
					3105	3726	1855	1600	2	3000	3000	5000	3000	1100	10

See page 82 for notes.

- (1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'E355' drive can be used in Normal Duty mode on a 350 Hp motor, in Heavy Duty mode on a 400 Hp motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 0:36 [Duty Rating Act]. Refer to [Intermittent Overload on page 31](#) for an explanation of Duty Ratings.
- (2) These AC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection. AC input protection devices for branch circuit protection based on US NEC are listed in the table. Each LCL filter has one fuse per phase.
- (3) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.
- (4) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.
- (5) Circuit Breaker - inverse time breaker. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.
- (6) Recommended Motor circuit protector - Instantaneous trip circuit breaker. The trip setting should be set to the input current of the drive and should be sized for the continuous current of the system.
- (7) These DC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection.

690 Volt AC and 932 Volt DC Input Protection Devices - Frames 7...12

Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number (x = G or J)	Output Overload Amps		Continuous AC Input		AC Input Integral Semiconductor Fuse Size (1700 Type) (2)			AC Input Protection Devices						932 Volt DC Input			
					1 min	3 s	Amps	2xLCL Amps	Qty.	1xLCL Amps	Qty.	1/Phase Min (3)	Max (4)	Dual Element Time Delay Fuse		Non-Time Delay Fuse		Circuit Breaker (5)		Motor Circuit Protector (6)	DC Input Integral Semiconductor Fuse Kit (7)
														Amps	Amps	1/Phase Min (3)	Max (4)	Min	Max		
160 kW	7	215	Light	20x...F71	237	—	192	—	700	1	300	400	300	650	300	500	300	1100	2		
		171	Normal		188	257	153	—	700	1	250	300	250	500	250	450	250	1100	2		
		142	Heavy		213	256	127	—	700	1	175	250	200	400	200	350	200	1100	2		
200 kW	7	265	Light	20x...F215	292	—	237	—	700	1	350	450	350	800	350	650	350	1100	2		
		215	Normal		237	323	192	—	700	1	300	400	300	650	300	500	300	1100	2		
		171	Heavy		257	308	153	—	700	1	250	300	250	500	250	450	250	1100	2		
250 kW	7	330	Light	20x...F265	363	—	295	—	700	1	450	600	450	900	450	800	450	1100	2		
		265	Normal		292	398	237	—	700	1	350	450	350	800	350	650	350	1100	2		
		215	Heavy		323	387	192	—	700	1	300	400	300	650	300	500	300	1100	2		
315 kW	7	370	Light	20x...F330	407	—	331	—	700	1	500	650	500	1100	500	900	500	1100	2		
		330	Normal		363	465	295	—	700	1	450	600	450	900	450	800	450	1100	2		
		265	Heavy		398	477	237	—	700	1	350	450	350	800	350	650	350	1100	2		
355 kW	7	415	Light	20x...F370	457	—	371	—	700	1	600	700	600	1200	600	1000	600	1100	2		
		370	Normal		407	555	331	—	700	1	500	650	500	1100	500	900	500	1100	2		
		330	Heavy		495	594	295	—	700	1	450	600	450	900	450	800	450	1100	2		
200 kW	8	265	Light	20x...F215	292	—	237	—	700	1	350	450	350	800	350	650	350	1100	2		
		215	Normal		237	323	192	—	700	1	300	400	300	650	300	500	300	1100	2		
		171	Heavy		257	308	153	—	700	1	250	300	250	500	250	450	250	1100	2		
250 kW	8	330	Light	20x...F265	363	—	295	—	700	1	450	600	450	900	450	800	450	1100	2		
		265	Normal		292	398	237	—	700	1	350	450	350	800	350	650	350	1100	2		
		215	Heavy		323	387	192	—	700	1	300	400	300	650	300	500	300	1100	2		
315 kW	8	370	Light	20x...F330	407	—	331	—	700	1	500	650	500	1100	500	900	500	1100	2		
		330	Normal		363	465	295	—	700	1	450	600	450	900	450	800	450	1100	2		
		265	Heavy		398	477	237	—	700	1	350	450	350	800	350	650	350	1100	2		
355 kW	8	415	Light	20x...F370	457	—	371	—	700	1	600	700	600	1200	600	1000	600	1100	2		
		370	Normal		407	555	331	—	700	1	500	650	500	1100	500	900	500	1100	2		
		330	Heavy		495	594	295	—	700	1	450	600	450	900	450	800	450	1100	2		
400 kW	8	460	Light	20x...F415	506	—	411	—	900	1	600	800	600	1350	600	1100	600	1100	2		
		415	Normal		457	623	371	—	900	1	600	700	600	1200	600	1000	600	1100	2		
		370	Heavy		555	666	331	—	900	1	500	650	500	1100	500	900	500	1100	2		

See page 85 for notes.

690 Volt AC and 932 Volt DC Input Protection Devices - Frames 7...12 (Continued)

Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps	Continuous AC Input Amps	AC Input Integral Semiconductor Fuse Size (170N Type) (2)				AC Input Protection Devices				932 Volt DC Input														
							2xLCL Amps		1xLCL Amps Qty.		Dual Element Time Delay Fuse		Non-Time Delay Fuse		Circuit Breaker (5)		Input Quantities	DC Input Integral Semiconductor Fuse Kit (7)											
							1min	3 s	Amps	Qty.	Amps	Qty.	1/Phase Min (3)	Max (4)	1/Phase Min (3)	Max (4)	Min	Max	Continuous DC Input Amps	DC Input Qty.									
500 kW	8	585	Light	20x...F505	622	505	-	900	1	750	1000	750	1600	750	1400	623	1100	2											
		505	Normal																556	758	452	800	650	1500	650	1200	556	1100	2
		415	Heavy																623	747	371	700	600	1200	600	1000	457	1100	2
560 kW	9	650	Light	20x...F565	715	581	-	900	1	900	1100	900	1900	900	1600	716	1100	4											
		585	Normal																622	848	505	1250	750	1600	750	1400	623	1100	4
		505	Heavy																758	909	452	1250	650	1500	650	1200	556	1100	4
630 kW	9	735	Light	20x...F650	809	657	-	1000	1	1000	1200	1000	2000	1000	1800	810	1100	4											
		650	Normal																715	975	581	1250	900	1900	900	1600	716	1100	4
		565	Heavy																848	1017	505	1250	750	1600	750	1400	623	1100	4
710 kW	9	820	Light	20x...F735	902	733	-	1100	1	1100	1400	1100	2400	1100	2000	904	1100	4											
		735	Normal																809	1103	657	1250	1000	2000	1000	1800	810	1100	4
		650	Heavy																975	1170	581	1250	900	1900	900	1600	716	1100	4
800 kW	9	920	Light	20x...F820	1012	823	-	1200	1	1200	1600	1200	2500	1200	2400	1014	1100	4											
		820	Normal																902	1230	733	1600	1100	2400	1100	2000	904	1100	4
		735	Heavy																1103	1323	657	1600	1000	2000	1000	1800	810	1100	4
900 kW	9	1074	Light	20x...F920	1181	960	-	1350	1	1350	1800	1350	3000	1350	2500	1183	1100	4											
		920	Normal																1012	1380	823	1600	1200	2500	1200	2400	1014	1100	4
		820	Heavy																1230	1476	733	1600	1100	2400	1100	2000	904	1100	4
1000 kW	10	1150	Light	20x...F1K0	1265	1028	-	1500	1	1500	2000	1500	3500	1500	3000	1267	1100	6											
		1030	Normal																1133	1545	921	1250	1350	3000	1350	2500	1135	1100	6
		920	Heavy																1380	1656	823	1250	1200	2500	1200	2400	1014	1100	6
1100 kW	10	1344	Light	20x...F1K1	1478	1202	-	1800	1	1800	2400	1800	4000	1800	3500	1481	1100	6											
		1150	Normal																1265	1725	1028	1250	1500	3500	1500	3000	1267	1100	6
		1030	Heavy																1545	1854	921	1250	1350	3500	1350	2500	1135	1100	6
1400 kW	10	1582	Light	20x...F1K4	1740	1365	-	2000	1	2000	3000	2000	4500	2000	4000	1743	1100	6											
		1419	Normal																1561	2129	1269	1250	1800	4000	1800	3500	1564	1100	6
		1162	Heavy																1743	2092	1039	1250	1500	3500	1500	3000	1280	1100	6
1800 kW	11	2091	Light	20x...F1K8	2300	1803	-	3000	2	3000	3500	3000	6000	3000	5000	2304	1100	8											
		1865	Normal																2052	2798	1668	1600	2400	5000	2400	4500	2055	1100	8
		1535	Heavy																2303	2763	1373	1600	2000	4500	2000	3800	1692	1100	8
2300 kW	12	2599	Light	20x...F2K3	2859	2242	-	3500	2	3500	4500	3500	6000	3500	6000	2864	1100	10											
		2318	Normal																2550	3477	2073	1600	3000	6000	3000	5000	2554	1100	10
		2020	Heavy																3030	3636	1807	1600	3000	6000	3000	5000	2226	1100	10

See page 85 for notes.

- (1) 'Applied Rating' refers to the motor that will be connected to the drive. For example, a 'F330' drive can be used in Normal Duty mode on a 315 kW motor, in Heavy Duty mode on a 250 kW motor or in Light Duty mode on a 355 kW motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 0:36 [Duty Rating Act]. Refer to [Intermittent Overload on page 31](#) for an explanation of Duty Ratings.
- (2) These AC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection. AC input protection devices for branch circuit protection based on US NEC are listed in the table. Each LCL filter has one fuse per phase.
- (3) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.
- (4) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.
- (5) Circuit Breaker - inverse time breaker. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.
- (6) Recommended Motor circuit protector - Instantaneous trip circuit breaker. The trip setting should be set to the input current of the drive and should be sized for the continuous current of the system.
- (7) These DC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection.

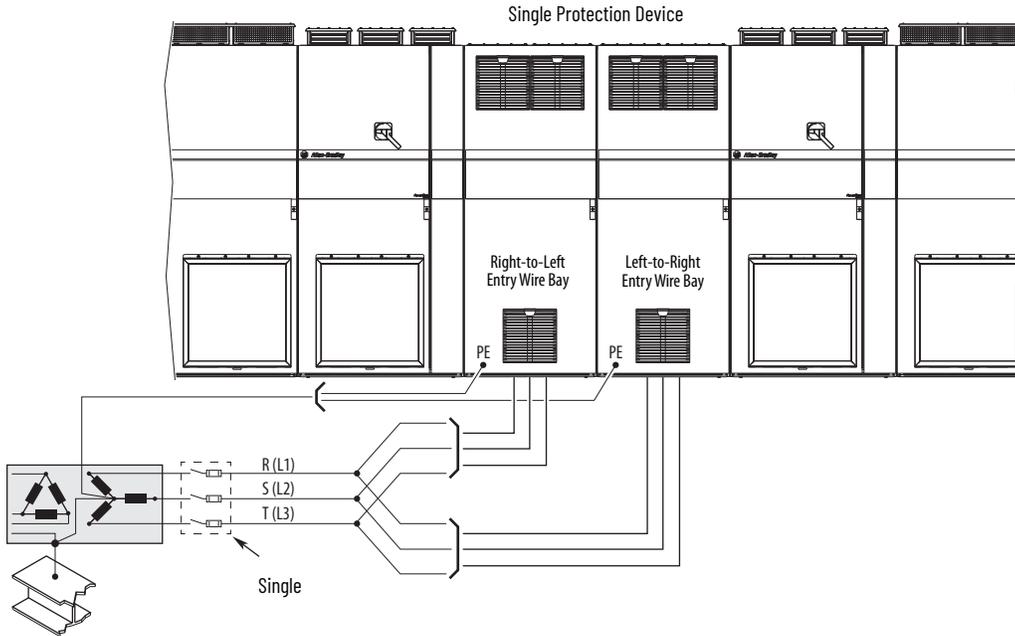
Dual Input Drives Fuse and Circuit Breakers

Frame 13...15 products require dual AC line inputs. Dependent on the output current rating, a single protection device can be used or dual protection devices are required.

The following Input Protection Device tables, the top table lists single protection device ratings and the bottom table lists dual protection device ratings.

Single Protection Device Scheme

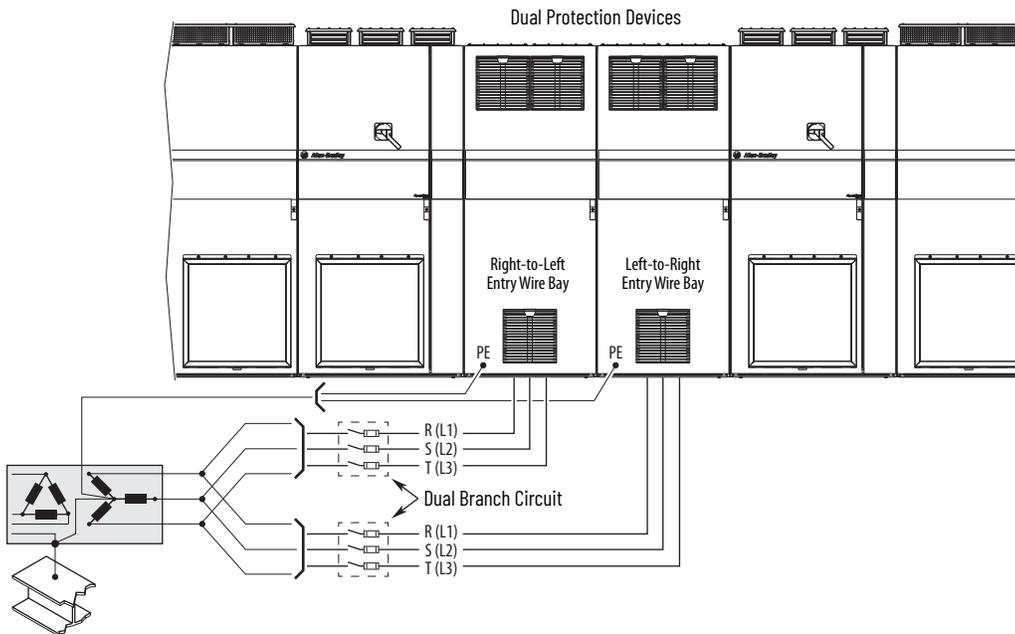
A single branch circuit protection device can be used with PowerFlex 755T products that are rated less than 5400 A.



Dual Protection Device Scheme

Use dual branch circuit protection devices in a dual-input configuration for PowerFlex 755T products that are rated over 5400 A.

Important: Do not wire dual branch circuit protection devices in parallel.



400 Volt AC and 540 Volt DC Input Protection Devices for Single Branch Circuit Device Configurations - Frames 13...15

400 Volt AC Input - Single Branch Circuit Device (See page 98)																		
Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps		Continuous AC Input Amps	AC Input Integral Semiconductor Fuse Size (170M Type) (2)		AC Input Protection Devices								
					1 min	3 s		2xLCL Amps	1xLCL Amps	Dual Element Time Delay Fuse - 1/Phase		Non-Time Delay Fuse - 1/Phase		Circuit Breaker (5)		Motor Circuit Protector (6)		
								Qty.	Qty.	Min (3)	Max (4)	Min (4)	Max (4)	Min	Max			
2200 kW	13	4576	Light		5034	-	4279	2000	2	1250	2	6000	6000	6000	6000	6000	6000	
		4235	Normal	20x...C4K2	4659	6353	3960	2000	2	1250	2	6000	6000	6000	6000	6000	6000	6000
		3575	Heavy		5363	6435	3300	2000	2	1250	2	5000	6000	6000	5000	6000	5000	6000
2920 kW	14	6074	Light		6681	-	5679	2000	4	-	-	-	-	-	-	-	-	
		5621	Normal	20x...C5K6	6183	8432	5256	2000	4	-	-	-	-	-	-	-	-	-
		4745	Heavy		7118	8541	4380	2000	4	6000	6000	6000	6000	6000	6000	6000	6000	6000
3640 kW	15	7571	Light		8328	-	7080	2000	4	1250	2	-	-	-	-	-	-	
		7007	Normal	20x...C7K0	7708	10,511	6552	2000	4	1250	2	-	-	-	-	-	-	-
		5915	Heavy		8873	10,647	5460	2000	4	1250	2	6000	6000	6000	6000	6000	6000	6000

Single Branch Circuit Device

400 Volt AC and 540 Volt DC Input Protection Devices for Dual Branch Circuit Device Configurations - Frames 13...15

400 Volt AC Input - Dual Branch Circuit Devices (See page 98)																		
Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps		Continuous AC Input Amps	AC Input Integral Semiconductor Fuse Size (170M Type) (2)		AC Input Protection Devices								
					1 min	3 s		2xLCL Amps	1xLCL Amps	Dual Element Time Delay Fuse - 1/Phase		Non-Time Delay Fuse - 1/Phase		Circuit Breaker (5)		Motor Circuit Protector (6)		
								Qty.	Qty.	Min (3)	Max (4)	Min (4)	Max (4)	Min	Max			
2200 kW	13	4576	Light		5034	-	4279	2000	2	1250	2	3000	4000	3000	3000	6000	3000	
		4235	Normal	20x...C4K2	4659	6353	3960	2000	2	1250	2	3000	3800	3000	3000	3000	5000	3000
		3575	Heavy		5363	6435	3300	2000	2	1250	2	2400	3000	2400	2400	2400	4500	2400
2920 kW	14	6074	Light		6681	-	5679	2000	4	-	-	3800	5000	3800	3800	6000	3800	
		5621	Normal	20x...C5K6	6183	8432	5256	2000	4	-	-	3800	5000	3800	3800	3800	6000	3800
		4745	Heavy		7118	8541	4380	2000	4	-	-	3000	4000	3000	3000	3000	6000	3000
3640 kW	15	7571	Light		8328	-	7080	2000	4	1250	2	5000	6000	5000	5000	6000	5000	
		7007	Normal	20x...C7K0	7708	10,511	6552	2000	4	1250	2	4500	6000	4500	4500	4500	6000	4500
		5915	Heavy		8873	10,647	5460	2000	4	1250	2	3800	5000	3800	3800	3800	6000	3800

Dual Branch Circuit Devices

- (1) Applied Rating refers to the motor that will be connected to the drive. For example, a 10460 drive can be used in Normal Duty mode on a 250 kW motor, in Heavy Duty mode on a 200 kW motor or in Light Duty mode on a 315 kW motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 0:36 [Duty Rating Act]. Refer to [Intermittent Overload on page 31](#) for an explanation of Duty Ratings.
- (2) These AC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection. AC input protection devices for branch circuit protection based on US NEC are listed in the table. Each LCL filter has one fuse per phase.
- (3) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.
- (4) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.
- (5) Circuit Breaker - inverse time breaker. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.
- (6) Recommended Motor circuit protector - instantaneous trip circuit breaker. The trip setting should be set to the input current of the drive and should be sized for the continuous current of the system.
- (7) These DC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection.

480 Volt AC and 650 Volt DC Input Protection Devices for Single Branch Circuit Device Configurations - Frames 13...15

480 Volt AC Input - Single Branch Circuit Device (See page 98)																	
Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps		Continuous AC Input Amps	AC Input Integral Semiconductor Fuse Size (170M Type) (2)		AC Input Protection Devices				650 Volt DC Input			
					1 min	3 s		2xLCL Amps	1xLCL Amps	Qty.	Qty.	Dual Element Time Delay Fuse - 1/Phase	Non-Time Delay Fuse - 1/Phase	Circuit Breaker (5)	Motor Circuit Protector (6)	Input Quantities	DC Input Integral Semiconductor Fuse Kft (7)
								Min (3)	Max (4)	Min (3)	Max (4)	Min	Max	Amps	Qty.		
3600 Hp	13	4400	Light	20x...D4K0	4840	—	3944	2000	2	1250	2	6000	6000	6000	6000	1400	12
		4070	Normal		4477	6105	3647	2000	2	1250	2	6000	6000	6000	6000	1400	12
		3394	Heavy		5091	6109	3042	2000	2	1250	2	4500	6000	4500	6000	1400	12
4800 Hp	14	5840	Light	20x...D5K4	6424	—	5234	2000	4	—	—	—	—	—	1400	16	
		5402	Normal		5942	8103	4840	2000	4	—	—	—	—	—	1400	16	
		4504	Heavy		6756	8107	4037	2000	4	6000	6000	6000	6000	6000	1400	16	
6000 Hp	15	7280	Light	20x...D6K7	8008	—	6525	2000	4	1250	2	—	—	—	1400	20	
		6734	Normal		7407	10,101	6033	2000	4	1250	2	—	—	—	1400	20	
		5615	Heavy		8423	10,107	5032	2000	4	1250	2	—	—	—	1400	20	

Single Branch Circuit Device

480 Volt AC and 650 Volt DC Input Protection Devices for Dual Branch Circuit Device Configurations - Frames 13...15

480 Volt AC Input - Dual Branch Circuit Device (See page 98)																	
Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps		Continuous AC Input Amps	AC Input Integral Semiconductor Fuse Size (170M Type) (2)		AC Input Protection Devices				650 Volt DC Input			
					1 min	3 s		2xLCL Amps	1xLCL Amps	Qty.	Qty.	Dual Element Time Delay Fuse - 1/Phase	Non-Time Delay Fuse - 1/Phase	Circuit Breaker (5)	Motor Circuit Protector (6)	Input Quantities	DC Input Integral Semiconductor Fuse Kft (7)
								Min (3)	Max (4)	Min (3)	Max (4)	Min	Max	Amps	Qty.		
3600 Hp	13	4400	Light	20x...D4K0	4840	—	3944	2000	2	1250	2	3000	4000	6000	3000	1400	12
		4070	Normal		4477	6105	3647	2000	2	1250	2	3000	3500	3000	3000	1400	12
		3394	Heavy		5091	6109	3042	2000	2	1250	2	2400	3000	2400	4000	1400	12
4800 Hp	14	5840	Light	20x...D5K4	6424	—	5234	2000	4	—	—	3800	5000	6000	3800	1400	16
		5402	Normal		5942	8103	4840	2000	4	—	—	3500	4500	3500	6000	1400	16
		4504	Heavy		6756	8107	4037	2000	4	—	—	3000	3800	3000	5000	1400	16
6000 Hp	15	7280	Light	20x...D6K7	8008	—	6525	2000	4	1250	2	5000	6000	6000	5000	1400	20
		6734	Normal		7407	10,101	6033	2000	4	1250	2	4500	6000	4500	6000	1400	20
		5615	Heavy		8423	10,107	5032	2000	4	1250	2	3800	5000	3800	6000	1400	20

Dual Branch Circuit Device

(1) Applied Rating refers to the motor that will be connected to the drive. For example, a 10460 drive can be used in Normal Duty mode on a 250 kW motor, in Heavy Duty mode on a 200 kW motor or in Light Duty mode on a 315 kW motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 0:36 [Duty Rating Act]. Refer to [Intermittent Overload on page 31](#) for an explanation of Duty Ratings.

(2) These AC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection. AC input protection devices for branch circuit protection based on US NEC are listed in the table. Each LCL filter has one fuse per phase.

(3) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.

(4) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor F.L.A. Ratings shown are maximum.

(5) Circuit Breaker - inverse time breaker. For US NEC, minimum size is 125% of motor F.L.A. Ratings shown are maximum.

(6) Recommended Motor circuit protector - instantaneous trip circuit breaker. The trip setting should be set to the input current of the drive and should be sized for the continuous current of the system.

(7) These DC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection.

600 Volt AC and 810 Volt DC Input Protection Devices for Single Branch Circuit Device Configurations - Frames 13...15

600 Volt AC Input - Single Branch Circuit Device (See page 98)																		
Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps		Continuous AC Input Amps	AC Input Integral Semiconductor Fuse Size (170M Type) (2)		AC Input Protection Devices				810 Volt DC Input				
					1 min	3 s		2xLCL Amps	1xLCL Amps	Qty.	Qty.	Dual Element Time Delay Fuse - 1/Phase	Non-Time Delay Fuse - 1/Phase	Circuit Breaker (5)		Continuous DC Input Amps	DC Input Integral Semiconductor Fuse Kft (7)	
								Min (3)	Max (4)	Min (3)	Max (4)	Min	Max	Amps	Qty.			
3100 Hp	13	3190	Light	20x...E2K9	3509	-	2880	2000	2	1250	2	4000	6000	4000	6000	2860	1100	12
		2998	Normal		3298	2000	2	1250	2	3800	5000	3800	6000	3800	6000	2684	1100	12
		2475	Heavy		3713	2000	2	1250	2	3500	4500	3500	6000	3500	6000	2217	1100	12
4100 Hp	14	4234	Light	20x...E3K9	4657	-	3796	2000	4	-	-	6000	6000	6000	6000	3796	1100	16
		3979	Normal		4377	2000	4	-	-	5000	6000	5000	6000	5000	6000	3562	1100	16
		3285	Heavy		4928	2000	4	-	-	4500	6000	4500	6000	4500	6000	2942	1100	16
5100 Hp	15	5278	Light	20x...E4K9	5806	-	4732	2000	4	1250	2	-	-	-	-	4732	1100	20
		4960	Normal		5456	2000	4	1250	2	-	-	-	-	-	-	4441	1100	20
		4095	Heavy		6143	2000	4	1250	2	6000	6000	6000	6000	6000	6000	3667	1100	20

Single Branch Circuit Device

600 Volt AC and 810 Volt DC Input Protection Devices for Dual Branch Circuit Device Configurations - Frames 13...15

600 Volt AC Input - Dual Branch Circuit Devices (See page 99)																		
Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps		Continuous AC Input Amps	AC Input Integral Semiconductor Fuse Size (170M Type) (2)		AC Input Protection Devices				810 Volt DC Input				
					1 min	3 s		2xLCL Amps	1xLCL Amps	Qty.	Qty.	Dual Element Time Delay Fuse - 1/Phase	Non-Time Delay Fuse - 1/Phase	Circuit Breaker (5)		Continuous DC Input Amps	DC Input Integral Semiconductor Fuse Kft (7)	
								Min (3)	Max (4)	Min (3)	Max (4)	Min	Max	Amps	Qty.			
3100 Hp	13	3190	Light	20x...E2K9	3509	-	2880	2000	2	2000	2	3000	5000	2000	4000	2860	1100	12
		2998	Normal		3298	2000	2	1900	2500	1900	4600	1900	3500	1900	3500	2684	1100	12
		2475	Heavy		3713	2000	2	1600	2000	1600	3500	1600	3000	1600	3000	2217	1100	12
4100 Hp	14	4234	Light	20x...E3K9	4657	-	3796	2000	4	3000	3800	6000	6000	3000	5000	3796	1100	16
		3979	Normal		4377	2000	4	2500	3500	2500	6000	2500	5000	2500	5000	3562	1100	16
		3285	Heavy		4928	2000	4	2400	3000	2400	5000	2400	4000	2400	4000	2942	1100	16
5100 Hp	15	5278	Light	20x...E4K9	5806	-	4732	2000	4	3500	4500	6000	6000	3500	6000	4732	1100	20
		4960	Normal		5456	2000	4	3500	4000	3500	6000	3500	6000	3500	6000	4441	1100	20
		4095	Heavy		6143	2000	4	3000	3500	3000	6000	3000	5000	3000	5000	3667	1100	20

Dual Branch Circuit Devices

(1) Applied Rating refers to the motor that will be connected to the drive. For example, a 10460 drive can be used in Normal Duty mode on a 250 kW motor, in Heavy Duty mode on a 200 kW motor or in Light Duty mode on a 315 kW motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 0:36 [Duty Rating Act]. Refer to [Intermittent Overload on page 31](#) for an explanation of Duty Ratings.

(2) These AC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection. AC input protection devices for branch circuit protection based on US NEC are listed in the table. Each LCL filter has one fuse per phase.

(3) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.

(4) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor F.L.A. Ratings shown are maximum.

(5) Circuit Breaker - inverse time breaker. For US NEC, minimum size is 125% of motor F.L.A. Ratings shown are maximum.

(6) Recommended Motor circuit protector - instantaneous trip circuit breaker. The trip setting should be set to the input current of the drive and should be sized for the continuous current of the system.

(7) These DC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection.

690 Volt AC and 932 Volt DC Input Protection Devices for Single Branch Circuit Devices - Frames 13...15

690 Volt AC Input - Single Branch Circuit Device (See page 86)

Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps		Continuous AC Input		AC Input Integral Semiconductor Fuse Size (170M Type) (2)		AC Input Protection Devices							
					1 min	3 s	Amps	2xLCL Amps	Qty.	1xLCL Amps	Qty.	Dual Element Time Delay Fuse - 1/Phase		Non-Time Delay Fuse - 1/Phase		Circuit Breaker (5)		Motor Circuit Protector (6)
												Min	Max (4)	Min (3)	Max (4)	Min	Max	
2750 kW	13	3108	Light	20x...F2K7	3419	-	2778	2000	2	1250	2	4000	5000	4000	6000	4000	6000	4000
		2778	Normal		3056	2000	2	1250	2	3500	5000	3500	6000	3500	6000	3500	6000	
		2283	Heavy		3425	2000	2	1250	2	3000	4000	3000	6000	3000	6000	3000	6000	
3650 kW	14	4125	Light	20x...F3K6	4538	-	3687	2000	4	-	-	6000	6000	6000	6000	6000	6000	6000
		3687	Normal		4056	2000	4	-	-	5000	6000	5000	6000	5000	6000	5000	6000	
		3030	Heavy		4545	2000	4	-	-	3800	5000	3800	6000	3800	6000	3800	6000	
4650 kW	15	5142	Light	20x...F4K5	5856	-	4596	2000	4	1250	2	-	-	-	-	-	-	-
		4596	Normal		5056	2000	4	1250	2	6000	6000	6000	6000	6000	6000	6000	6000	
		3777	Heavy		5666	2000	4	1250	2	5000	6000	5000	6000	5000	6000	5000	6000	

Single Branch Circuit Device

690 Volt AC and 932 Volt DC Input Protection Devices for Dual Branch Circuit Devices - Frames 13...15

690 Volt AC Input - Dual Branch Circuit Device (See page 86)

Applied Rating (1)	Frame	Cont. Output Amps	Duty	Catalog Number	Output Overload Amps		Continuous AC Input		AC Input Integral Semiconductor Fuse Size (170M Type) (2)		AC Input Protection Devices							
					1 min	3 s	Amps	2xLCL Amps	Qty.	1xLCL Amps	Qty.	Dual Element Time Delay Fuse - 1/Phase		Non-Time Delay Fuse - 1/Phase		Circuit Breaker (5)		Motor Circuit Protector (6)
												Min	Max (4)	Min (3)	Max (4)	Min	Max	
2750 kW	13	3108	Light	20x...F2K7	3419	-	2778	2000	2	1250	2	2000	3000	2000	4500	2000	4000	2000
		2778	Normal		3056	2000	2	1250	2	1800	2400	1800	4000	1800	3500	1800	3500	
		2283	Heavy		3425	2000	2	1250	2	1500	2000	1500	3500	1500	3000	1500	3000	
3650 kW	14	4125	Light	20x...F3K6	4538	-	3687	2000	4	-	-	3000	3500	3000	6000	3000	5000	3000
		3687	Normal		4056	2000	4	-	-	2400	3500	2400	5000	2400	4500	2400	4500	
		3030	Heavy		4545	2000	4	-	-	1900	2500	1900	4500	1900	3800	1900	3800	
4550 kW	15	5142	Light	20x...F4K5	5856	-	4596	2000	4	1250	2	3500	4500	3500	6000	3500	6000	3500
		4596	Normal		5056	2000	4	1250	2	3000	4000	3000	6000	3000	6000	3000	6000	
		3777	Heavy		5666	2000	4	1250	2	2500	3500	2500	6000	2500	5000	2500	5000	

Dual Branch Circuit Device

(1) Applied Rating refers to the motor that will be connected to the drive. For example, a 10460 drive can be used in Normal Duty mode on a 250 kW motor, in Heavy Duty mode on a 200 kW motor or in Light Duty mode on a 315 kW motor. The drive can be programmed for each mode. Wiring and fuses can be sized based on the programmed mode. For any given drive catalog number, Normal Duty mode provides higher continuous current but smaller overload current with respect to Heavy Duty mode. See parameter 0:36 [Duty Rating Act]. Refer to [Intermittent Overload on page 31](#) for an explanation of Duty Ratings.

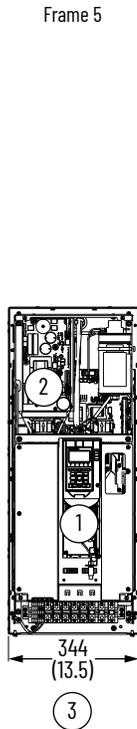
- (2) These AC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection. AC input protection devices for branch circuit protection based on US NEC are listed in the table. Each LCL filter has one fuse per phase.
- (3) Minimum protection device size is the lowest rated device that supplies maximum protection without nuisance tripping.
- (4) Maximum protection device size is the highest rated device that supplies drive protection. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.
- (5) Circuit Breaker - inverse time breaker. For US NEC, minimum size is 125% of motor FLA. Ratings shown are maximum.
- (6) Recommended Motor circuit protector - instantaneous trip circuit breaker. The trip setting should be set to the input current of the drive and should be sized for the continuous current of the system.
- (7) These DC line fuses (with blown fuse indicators) are included in the drive to provide drive short circuit protection.

Frame Size Explanation

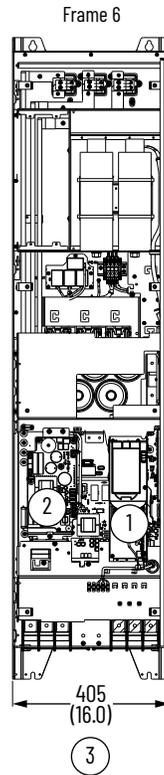
PowerFlex 750-Series products with TotalFORCE control are assigned frame size designators. These designations represent the various configurations of modules and hardware components that are packaged in a specific manner to obtain the full range of product offerings and power ratings. The products that are made possible through the combination of modular components and the assigned frame size designators are explained and illustrated in this section. All dimensions that are shown in the illustrations in this section are listed in millimeters and (inches).

PowerFlex 755TL and 755TR Drives

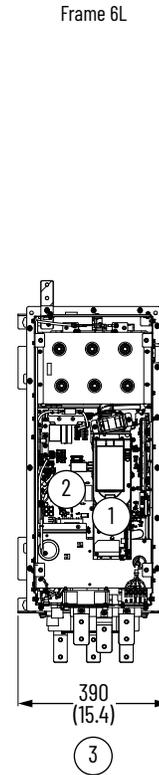
PowerFlex 755TL drive products are assigned frame sizes 5...12. PowerFlex 755TR drive products are assigned frame sizes 5...15, and 6L. The major drive components shown in these illustrations.



Frame 5 enclosures are 357 mm (14 in.) deep.
IP20, UL Open Type Enclosure Shown.

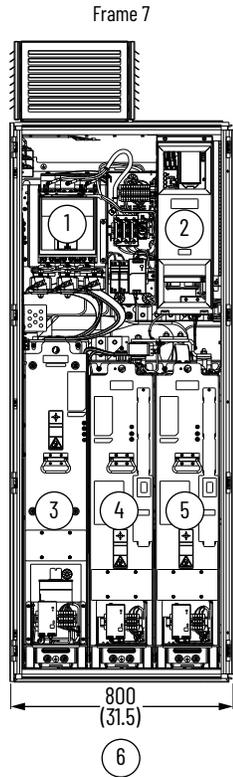


Frame 6 enclosures are 360.7 mm (14.2 in.) deep.
IP20, UL Open Type Enclosure Shown.



Frame 6L enclosures are 566 mm (22.3 in.) deep.
IP00, UL Open Type Enclosure Shown.

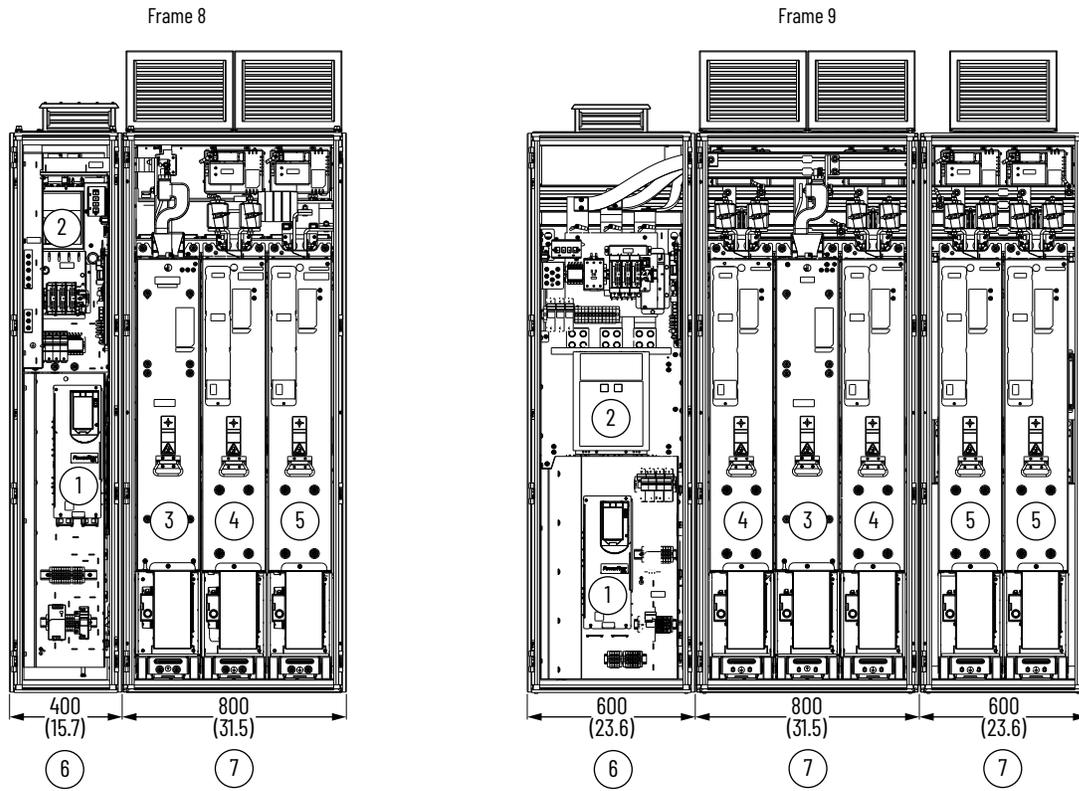
Item	Description
1	Control pod
2	AC precharge section
3	Chassis



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

Item	Description
1	AC precharge section
2	Control pod
3	LCL filter

Item	Description
4	Line side converter
5	Motor side inverter
6	Cabinet

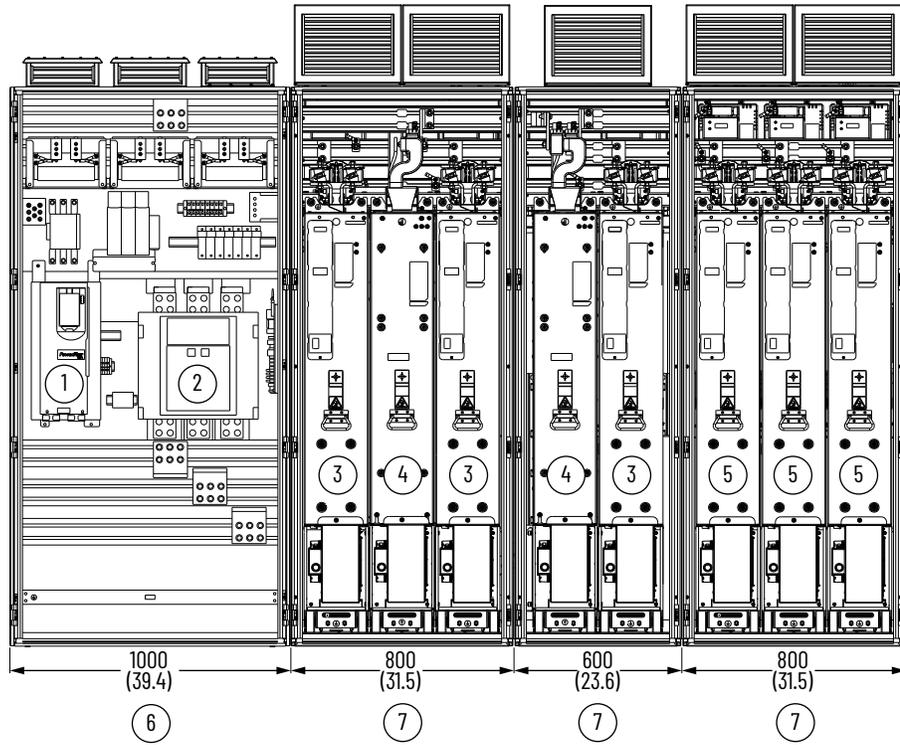


All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

Item	Description
1	Control pod
2	AC precharge module
3	LCL filter
4	Line side converter

Item	Description
5	Motor side inverter
6	Input bay
7	Power bay

Frame 10

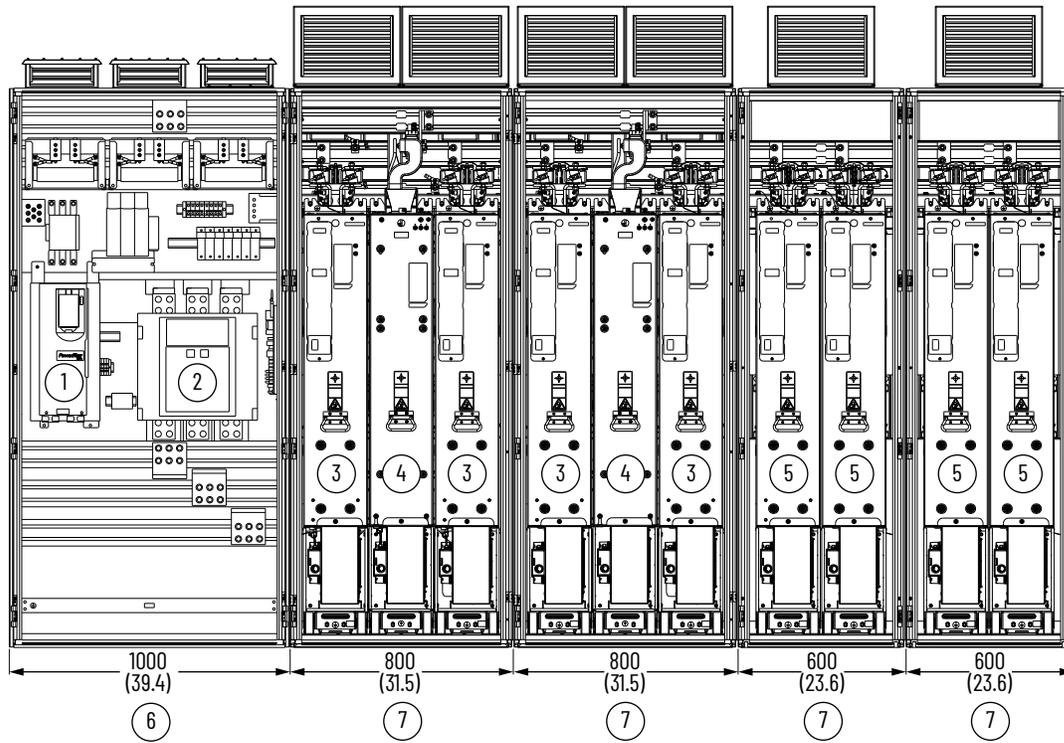


All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

Item	Description
1	Control pod
2	AC precharge section
3	Line side converter
4	LCL filter

Item	Description
5	Motor side inverter
6	Input bay
7	Power bay

Frame 11

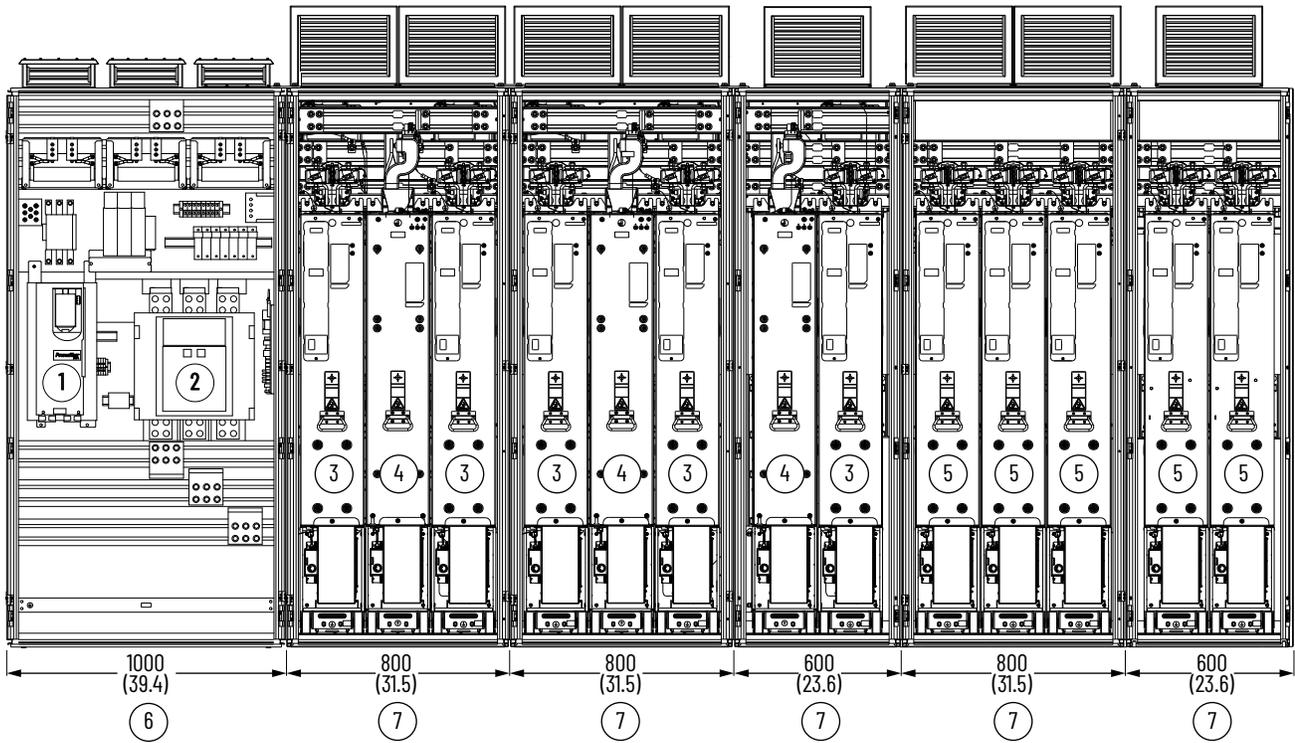


All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

Item	Description
1	Control pod
2	AC precharge section
3	Line side converter
4	LCL filter

Item	Description
5	Motor side inverter
6	Input bay
7	Power bay

Frame 12

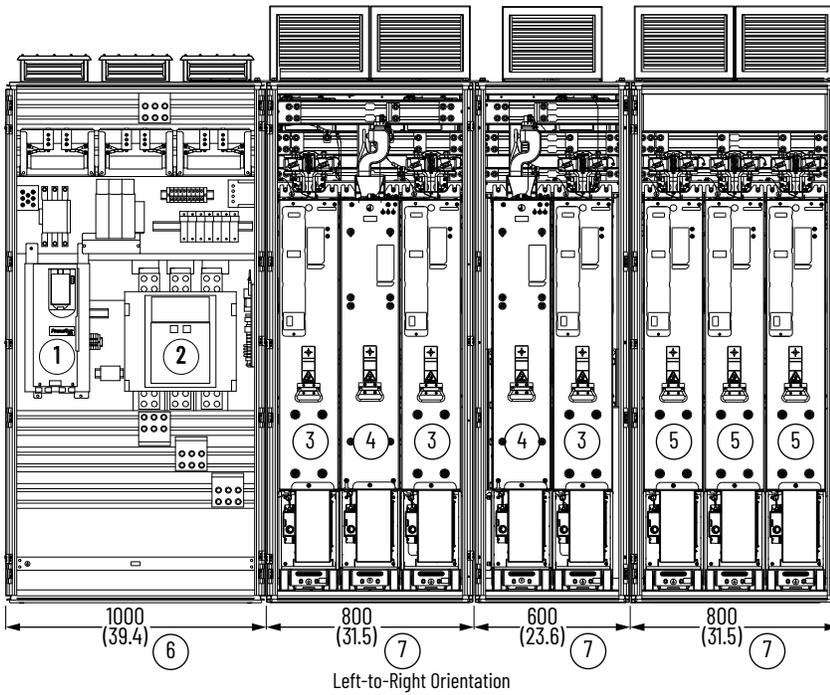


All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

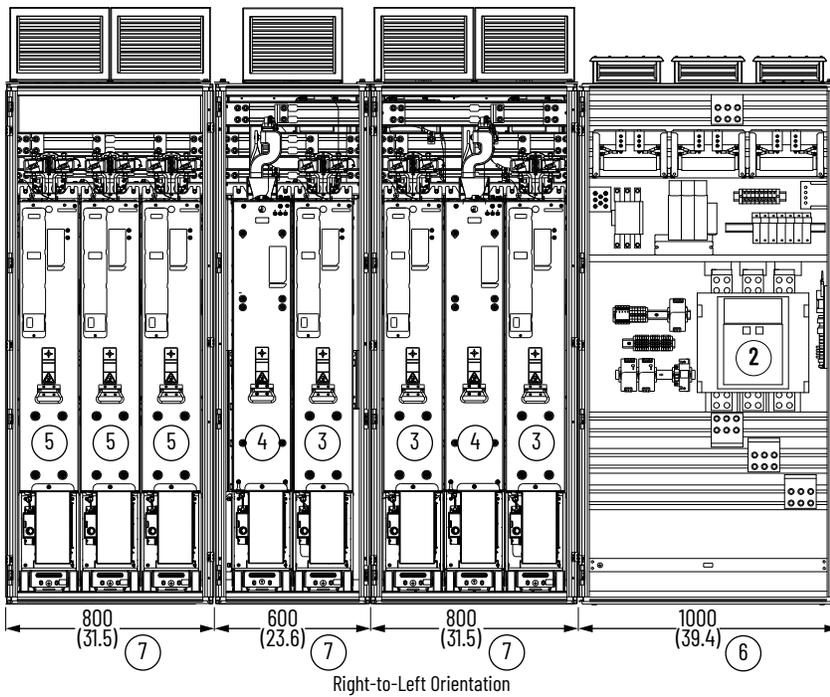
Item	Description
1	Control pod
2	AC precharge section
3	Line side converter
4	LCL filter

Item	Description
5	Motor side inverter
6	Input bay
7	Power bay

Frame 13

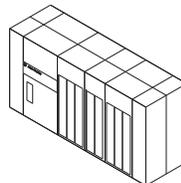


All cabinet enclosures are 600 mm (23.6 in.) deep.
IP54, UL Type 12 Enclosure Shown.

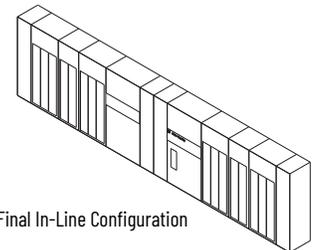


Entry and exit wire bays are omitted from this illustration.

Item	Description	Item	Description
1	Control pod	5	Motor side inverter
2	AC precharge section	6	Input bay
3	Line side converter	7	Power bay
4	LCL filter		

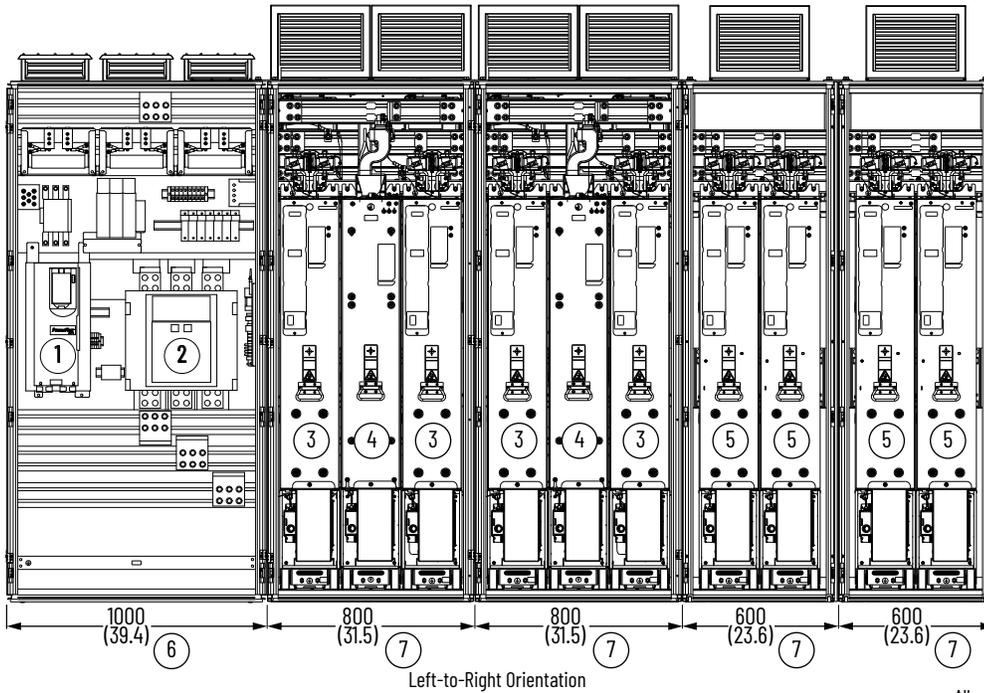


Final Back-to-Back Configuration



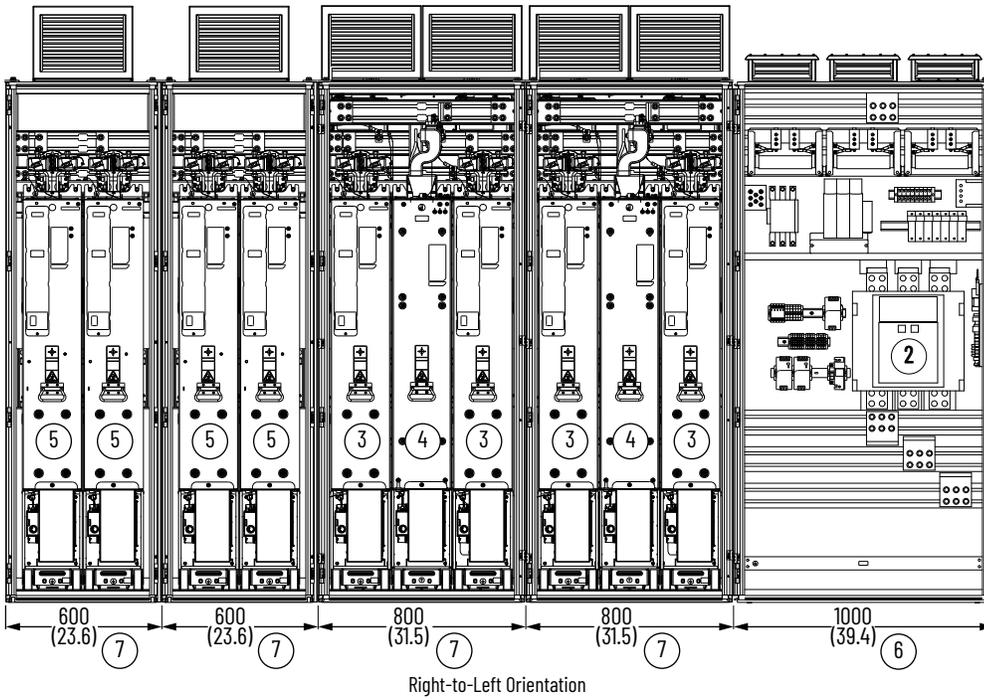
Final In-Line Configuration

Frame 14



Left-to-Right Orientation

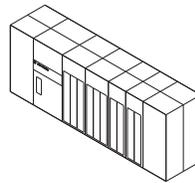
All cabinet enclosures are 600 mm (23.6 in.) deep.
IP54, UL Type 12 Enclosure Shown.



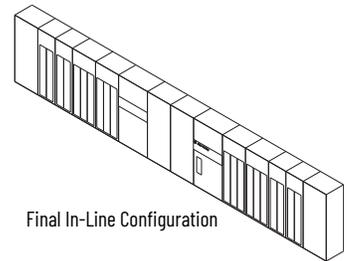
Right-to-Left Orientation

Entry and exit wire bays are omitted from this illustration.

Item	Description	Item	Description
1	Control pod	5	Motor side inverter
2	AC precharge section	6	Input bay
3	Line side converter	7	Power bay
4	LCL filter		

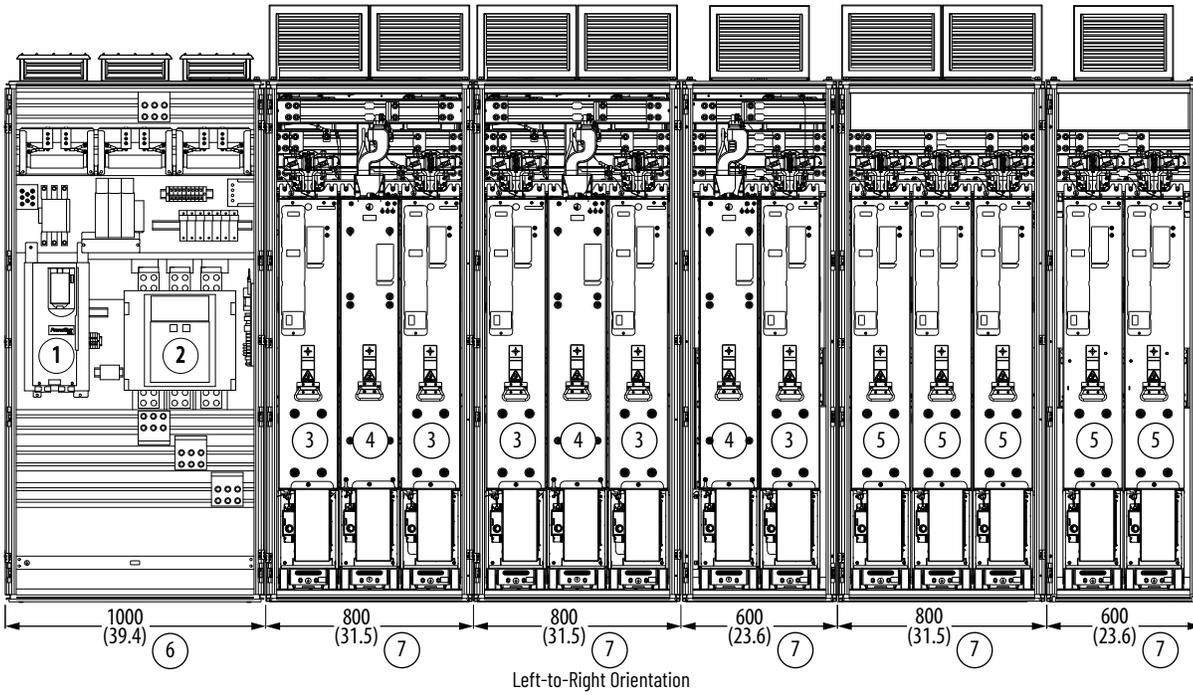


Final Back-to-Back Configuration

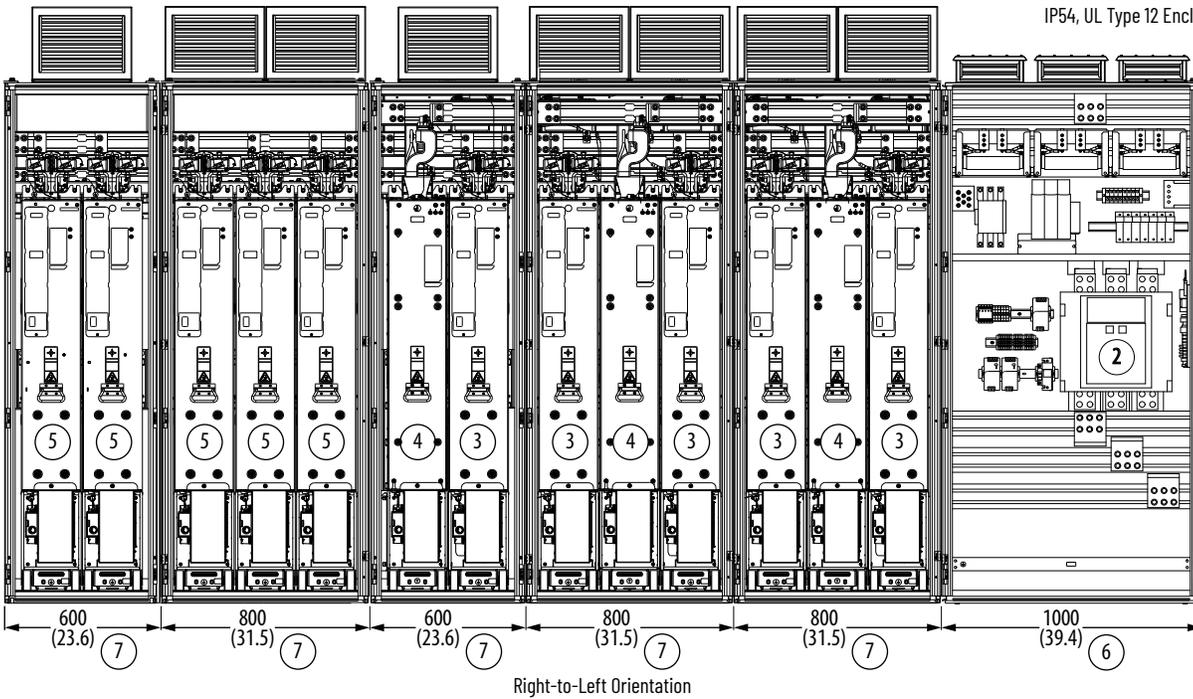


Final In-Line Configuration

Frame 15

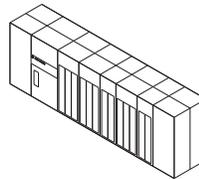


All cabinet enclosures are 600 mm (23.6 in.) deep.
IP54, UL Type 12 Enclosure Shown.

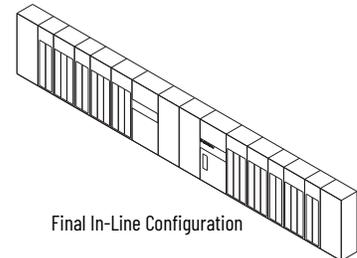


Entry and exit wire bays are omitted from this illustration.

Item	Description	Item	Description
1	Control pod	5	Motor side inverter
2	AC precharge section	6	Input bay
3	Line side converter	7	Power bay
4	LCL filter		



Final Back-to-Back Configuration

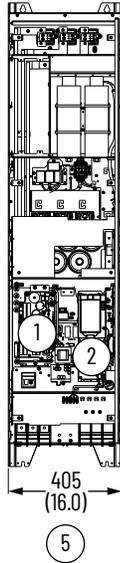


Final In-Line Configuration

PowerFlex 755TM Bus Supplies

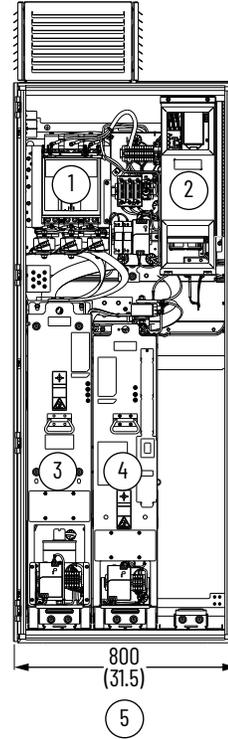
PowerFlex 755TM bus supply products are assigned frame sizes 6...15. The major components shown in these illustrations.

Frame 6



Frame 6 enclosures are 361 mm (14.2 in.) deep.
IP20, UL Open Type Enclosure Shown.

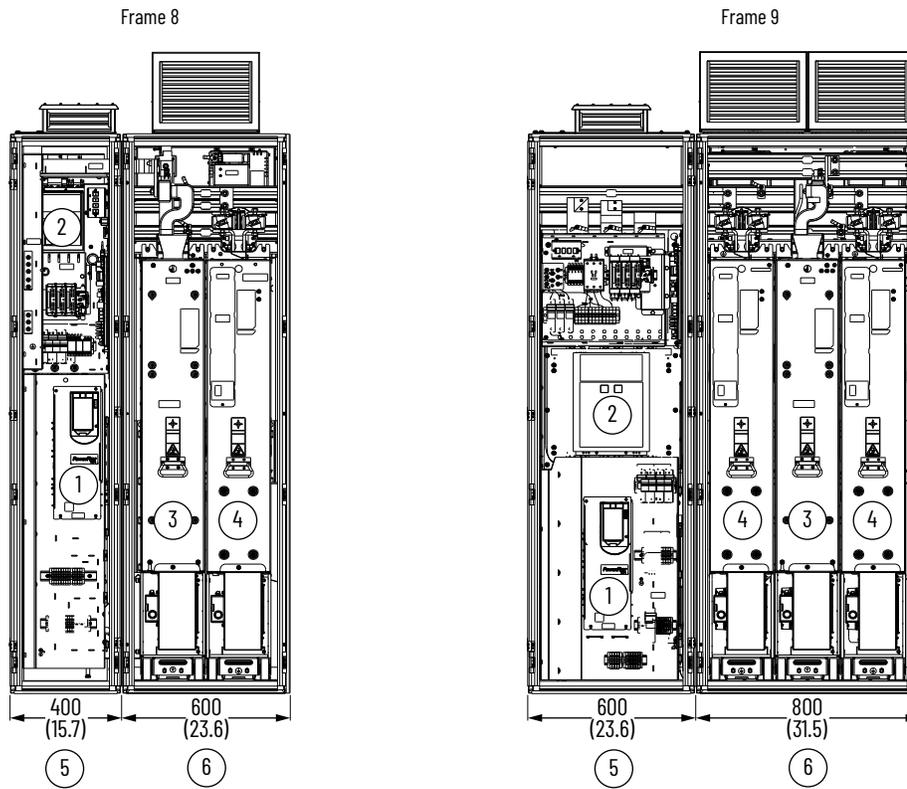
Frame 7



All cabinet enclosures are 600 mm (23.6 in.) deep.
Frame 7 IP54, UL Type 12 Enclosure Shown.

Item	Description
1	AC precharge section
2	Control pod
3	LCL filter

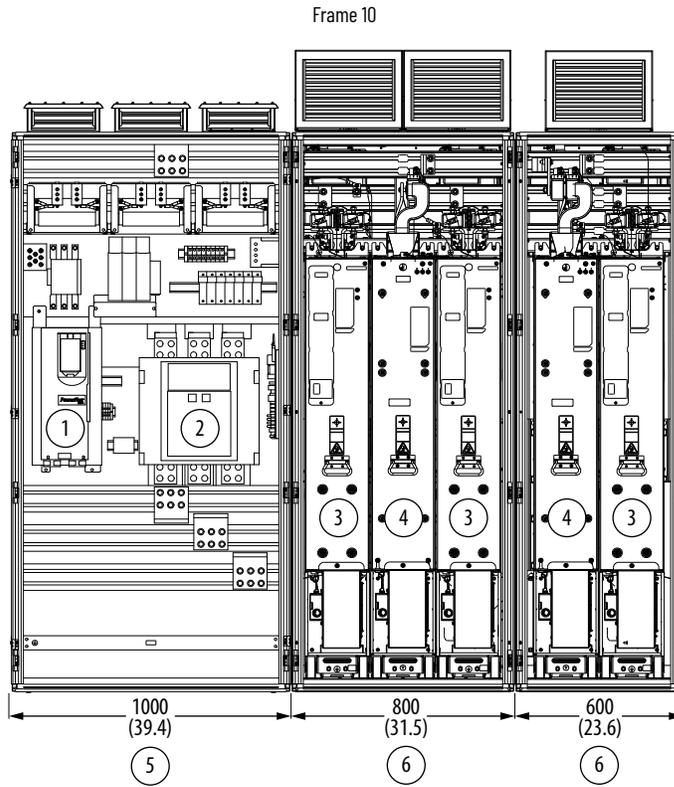
Item	Description
4	Line side converter
5	Chassis / Cabinet



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

Item	Description
1	Control pod
2	AC precharge section
3	LCL filter

Item	Description
4	Line side converter
5	Input bay
6	Power bay

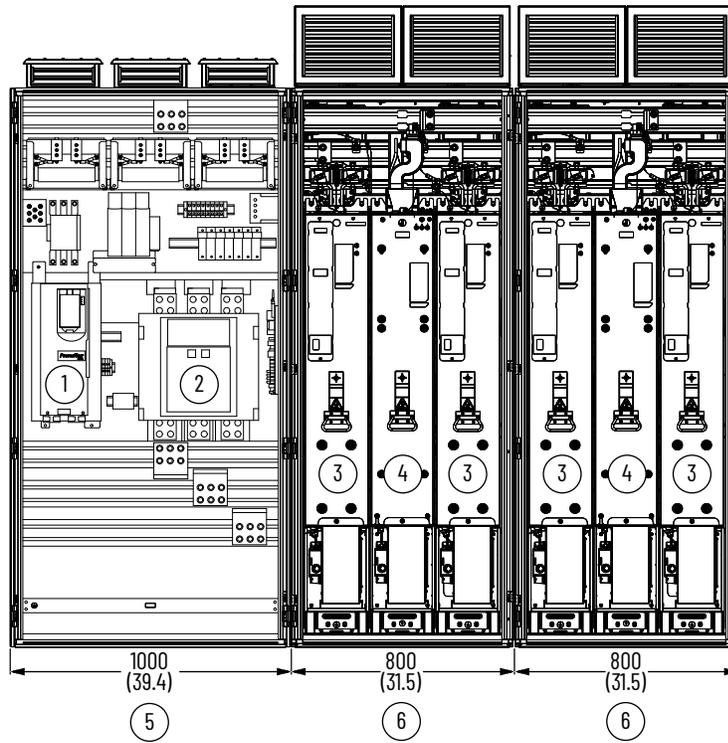


All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

Item	Description
1	Control pod
2	AC precharge section
3	Line side converter

Item	Description
4	LCL filter
5	Input bay
6	Power bay

Frame 11

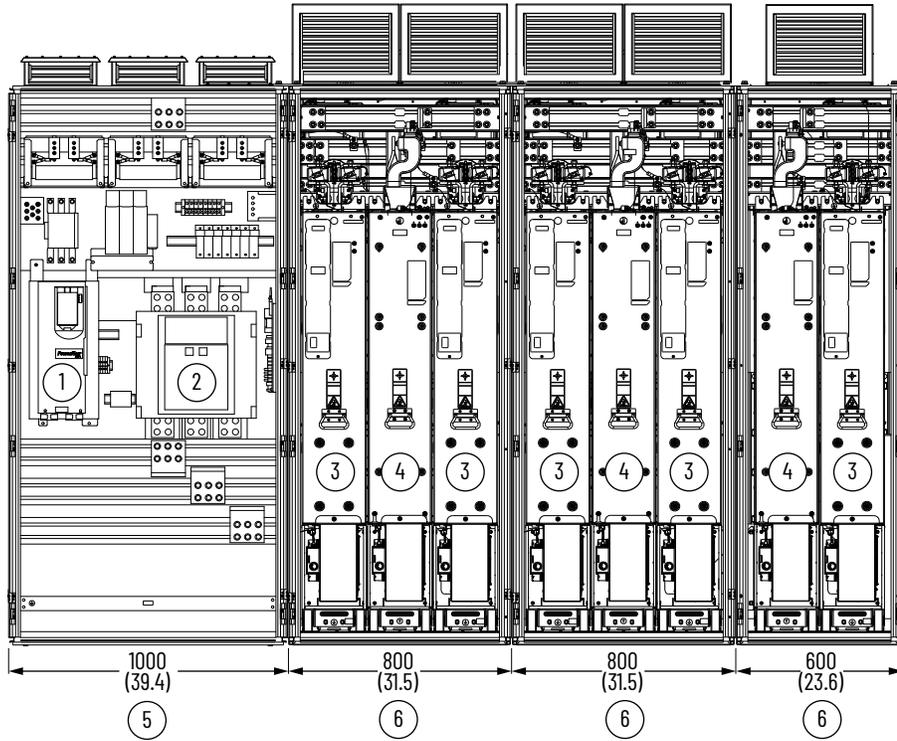


All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

Item	Description
1	Control pod
2	AC precharge section
3	Line side converter

Item	Description
4	LCL filter
5	Input bay
6	Power bay

Frame 12

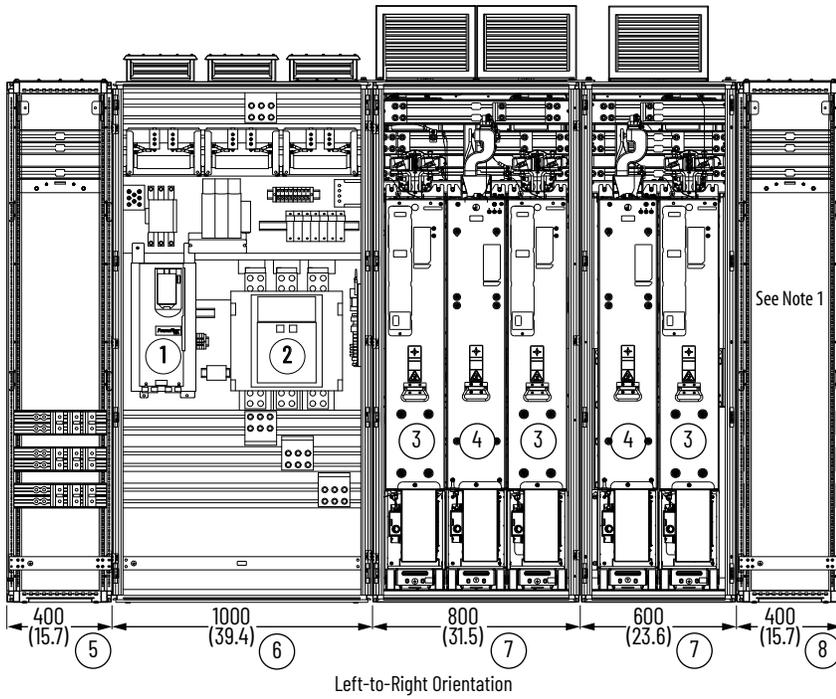


All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

Item	Description
1	Control pod
2	AC precharge section
3	Line side converter

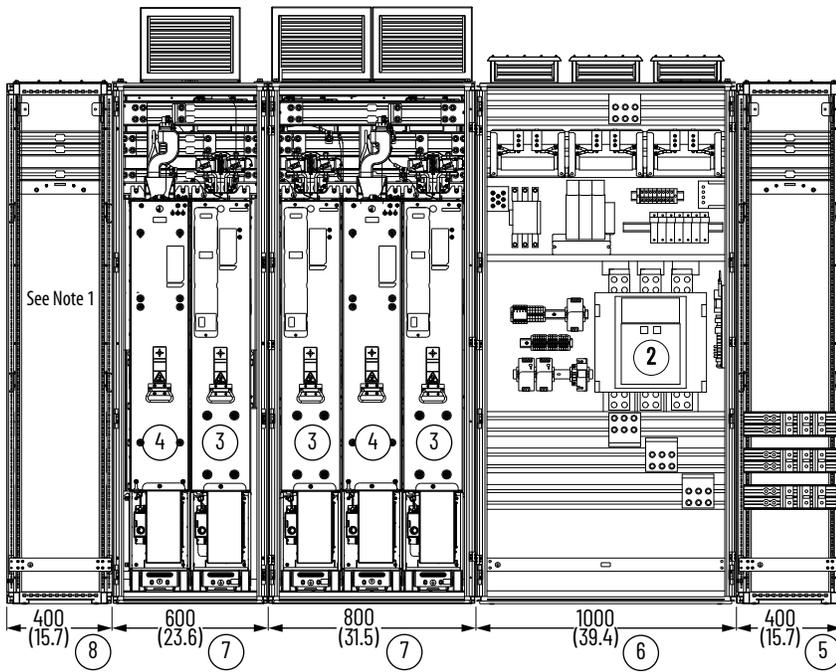
Item	Description
4	LCL filter
5	Input bay
6	Power bay

Frame 13



Left-to-Right Orientation

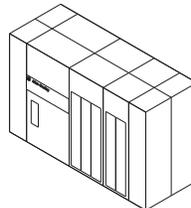
All cabinet enclosures are 600 mm (23.6 in.) deep.
IP54, UL Type 12 Enclosure Shown.



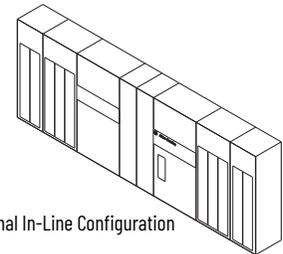
Right-to-Left Orientation

Note 1: 400 mm (15.7 in.) voltage balance bay only used with back-to-back configuration.

Item	Description	Item	Description
1	Control pod	5	Entry wire bay
2	AC precharge section	6	Input bay
3	Line side converter	7	Power bay
4	LCL filter	8	Voltage balance bay

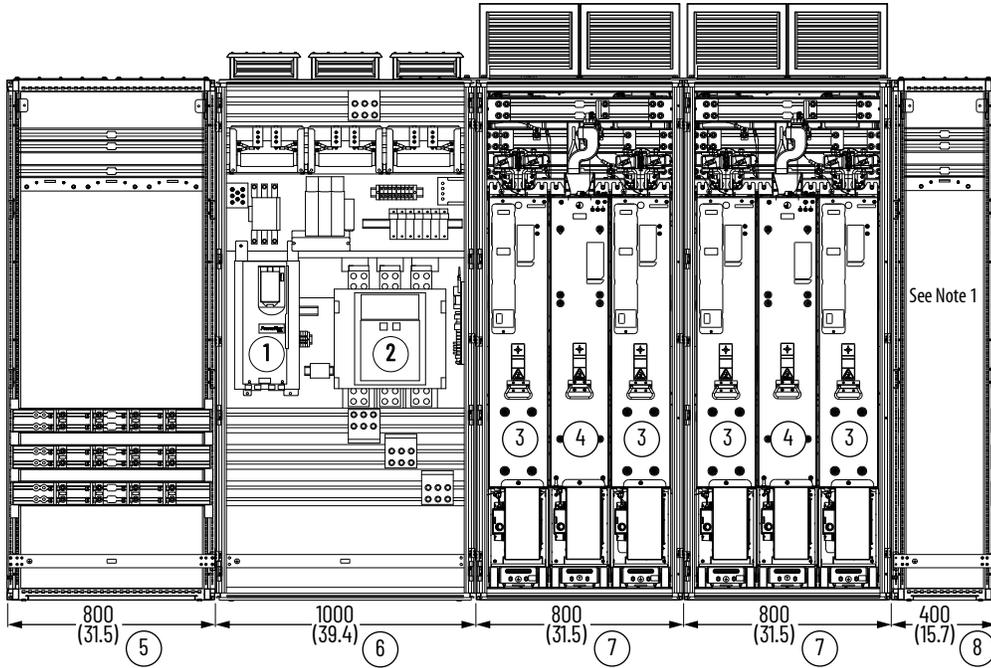


Final Back-to-Back Configuration



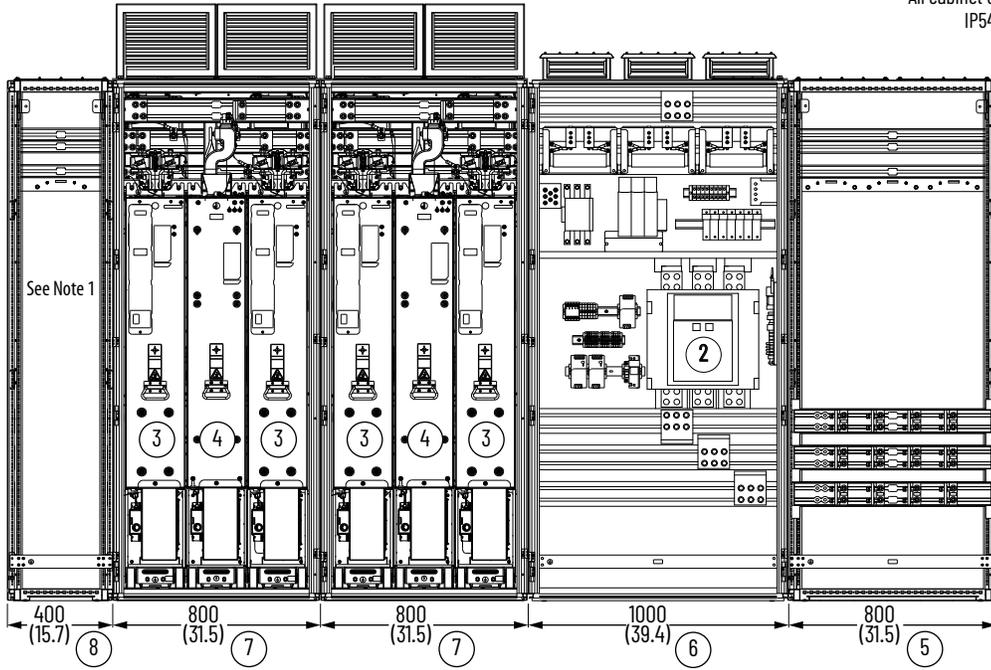
Final In-Line Configuration

Frame 14



Left-to-Right Orientation

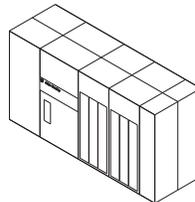
All cabinet enclosures are 600 mm (23.6 in.) deep.
IP54, UL Type 12 Enclosure Shown.



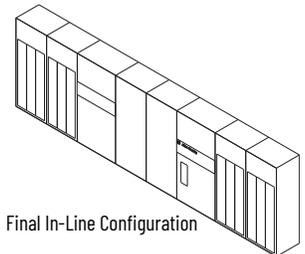
Right-to-Left Orientation

Note 1: 400 mm (15.7 in.) voltage balance bay only used with back-to-back configuration.

Item	Description	Item	Description
1	Control pod	5	Entry wire bay
2	AC precharge section	6	Input bay
3	LCL filter	7	Power bay
4	Line side converter	8	Voltage balance bay

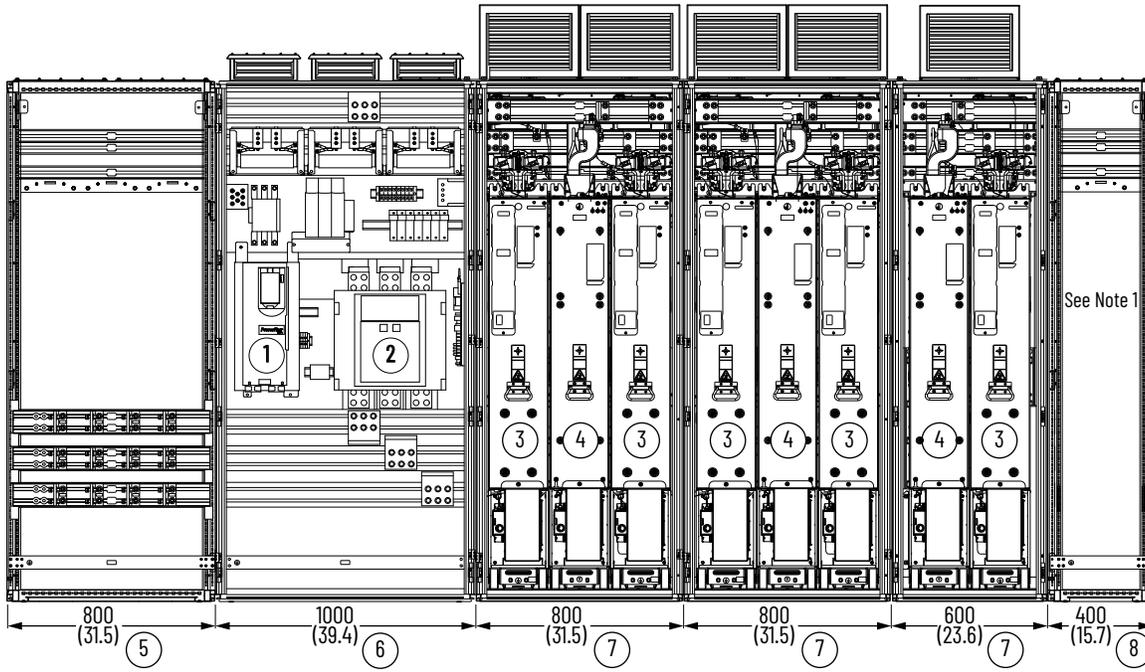


Final Back-to-Back Configuration



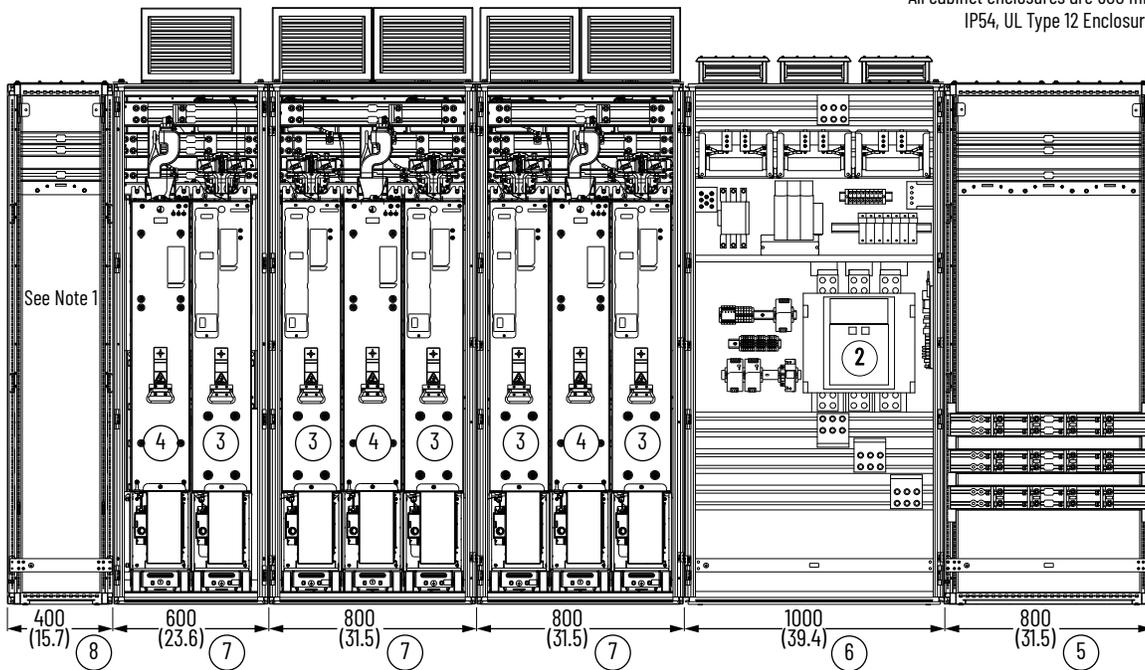
Final In-Line Configuration

Frame 15



Left-to-Right Orientation

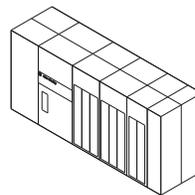
All cabinet enclosures are 600 mm (23.6 in.) deep.
IP54, UL Type 12 Enclosure Shown.



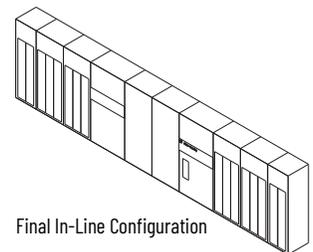
Right-to-Left Orientation

Note 1: 400 mm (15.7 in.) voltage balance bay only used with back-to-back configuration.

Item	Description	Item	Description
1	Control pod	5	Entry wire bay
2	AC precharge section	6	Input bay
3	Line side converter	7	Power bay
4	LCL filter	8	Voltage balance bay



Final Back-to-Back Configuration

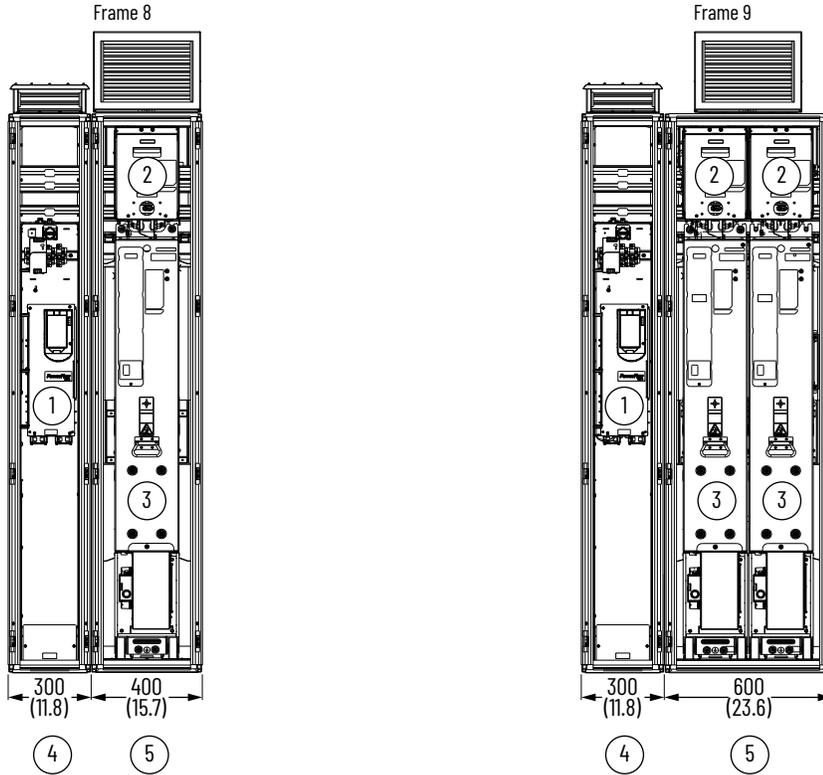


Final In-Line Configuration

PowerFlex 755TM Common Bus Inverters

The common bus inverter offerings provide power structures that are combined with a bus supply to provide power to multiple motor applications.

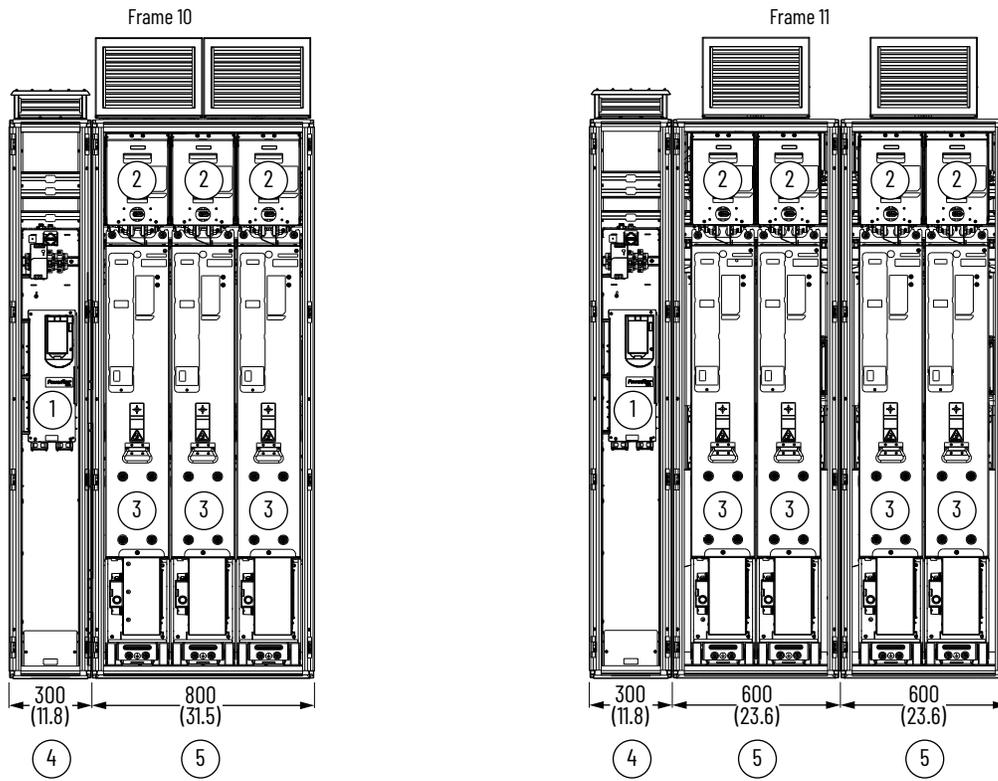
One control pod is required for each PowerFlex 755TM Common Bus Inverter in the system. Single pod control bays (catalog option C11) with single power bays are depicted on pages [108](#)..[113](#). A dual pod control bay (catalog option C12) with dual power bays is depicted on page [114](#).



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

Item	Description
1	Control pod
2	DC precharge module
3	Motor side inverter

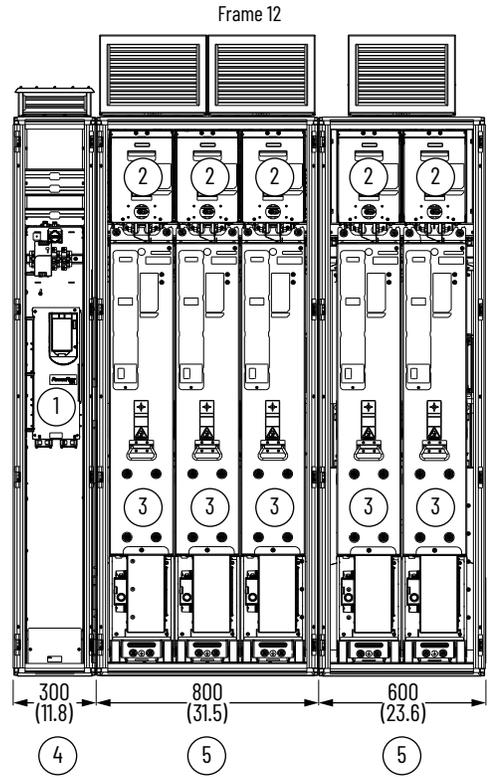
Item	Description
4	Control bay (Option C11)
5	Power bay



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

Item	Description
1	Control pod
2	DC precharge module
3	Motor side inverter

Item	Description
4	Control bay (Option C11)
5	Power bay

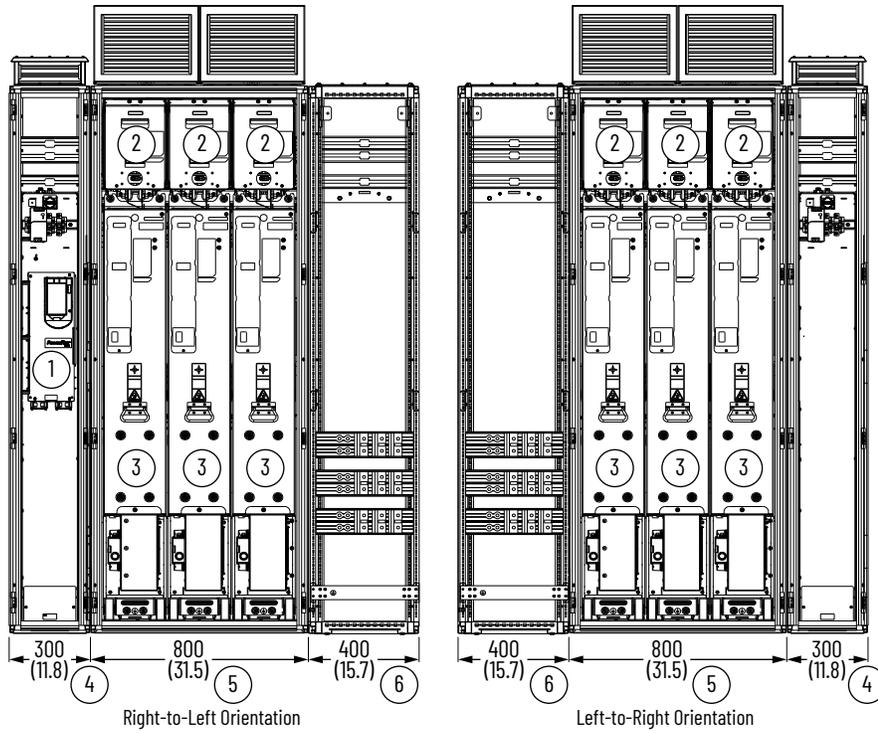


All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

Item	Description
1	Control pod
2	DC precharge module
3	Motor side inverter

Item	Description
4	Control bay (Option C11)
5	Power bay

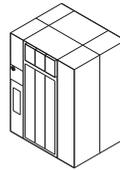
Frame 13



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

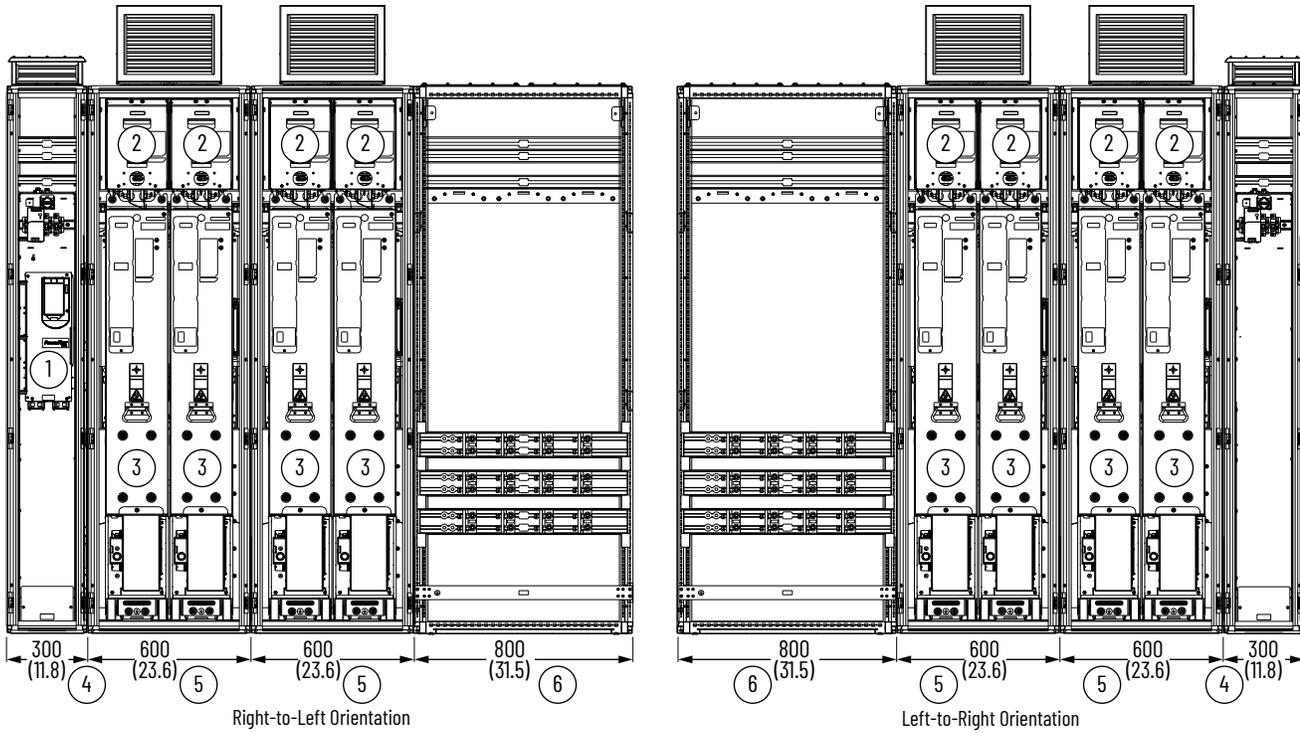
Item	Description
1	Control pod
2	DC precharge module
3	Motor side inverter

Item	Description
4	Control bay (Option C11)
5	Power bay
6	Voltage balance bay



Final Back-to-Back Configuration

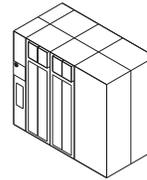
Frame 14



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

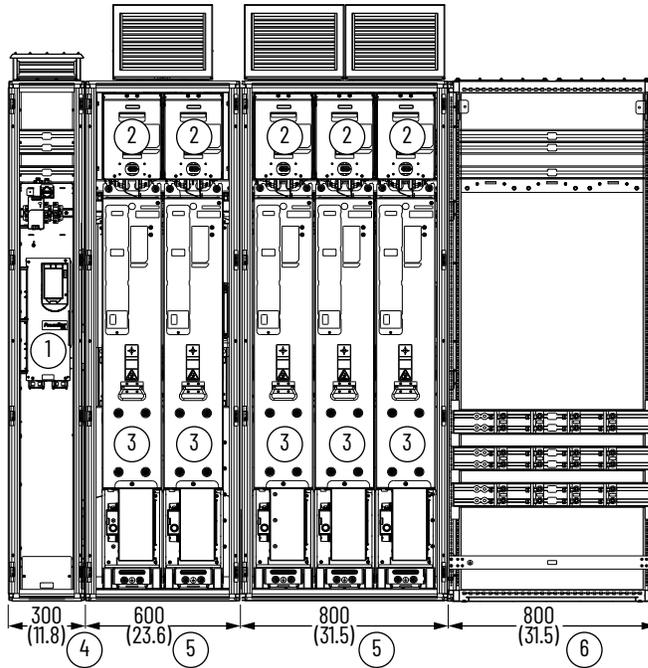
Item	Description
1	Control pod
2	DC precharge module
3	Motor side inverter

Item	Description
4	Control bay (Option C11)
5	Power bay
6	Voltage balance bay



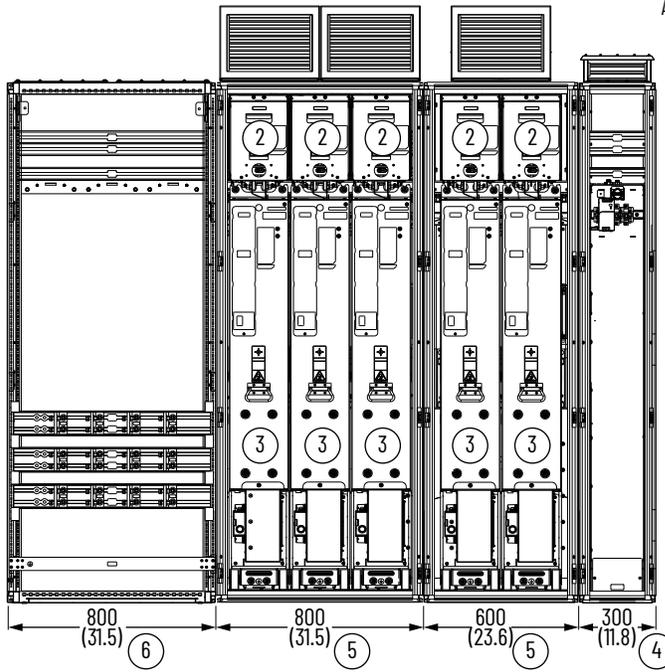
Final Back-to-Back Configuration

Frame 15



Left-to-Right Orientation

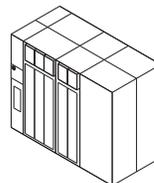
All cabinet enclosures are 600 mm (23.6 in.) deep.
IP54, UL Type 12 Enclosure Shown.



Right-to-Left Orientation

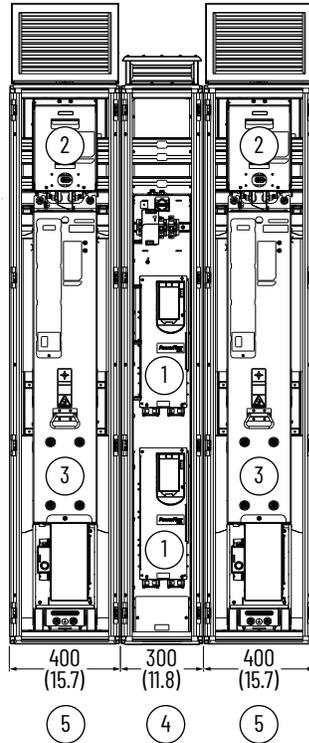
Item	Description
1	Control pod
2	DC precharge module
3	Motor side inverter

Item	Description
4	Control bay (Option C11)
5	Power bay
6	Voltage balance bay



Final Back-to-Back Configuration

Two Frame 8 Common Bus Inverters with Common Control Bay



All cabinet enclosures are 600 mm (23.6 in.) deep. IP54, UL Type 12 Enclosure Shown.

Item	Description
1	Control pod (Two pods shown)
2	DC precharge module
3	Motor side inverter

Item	Description
4	Control bay (Option C12)
5	Power bay

PowerFlex Products Approximate Dimensions

This section provides approximate product dimensions.

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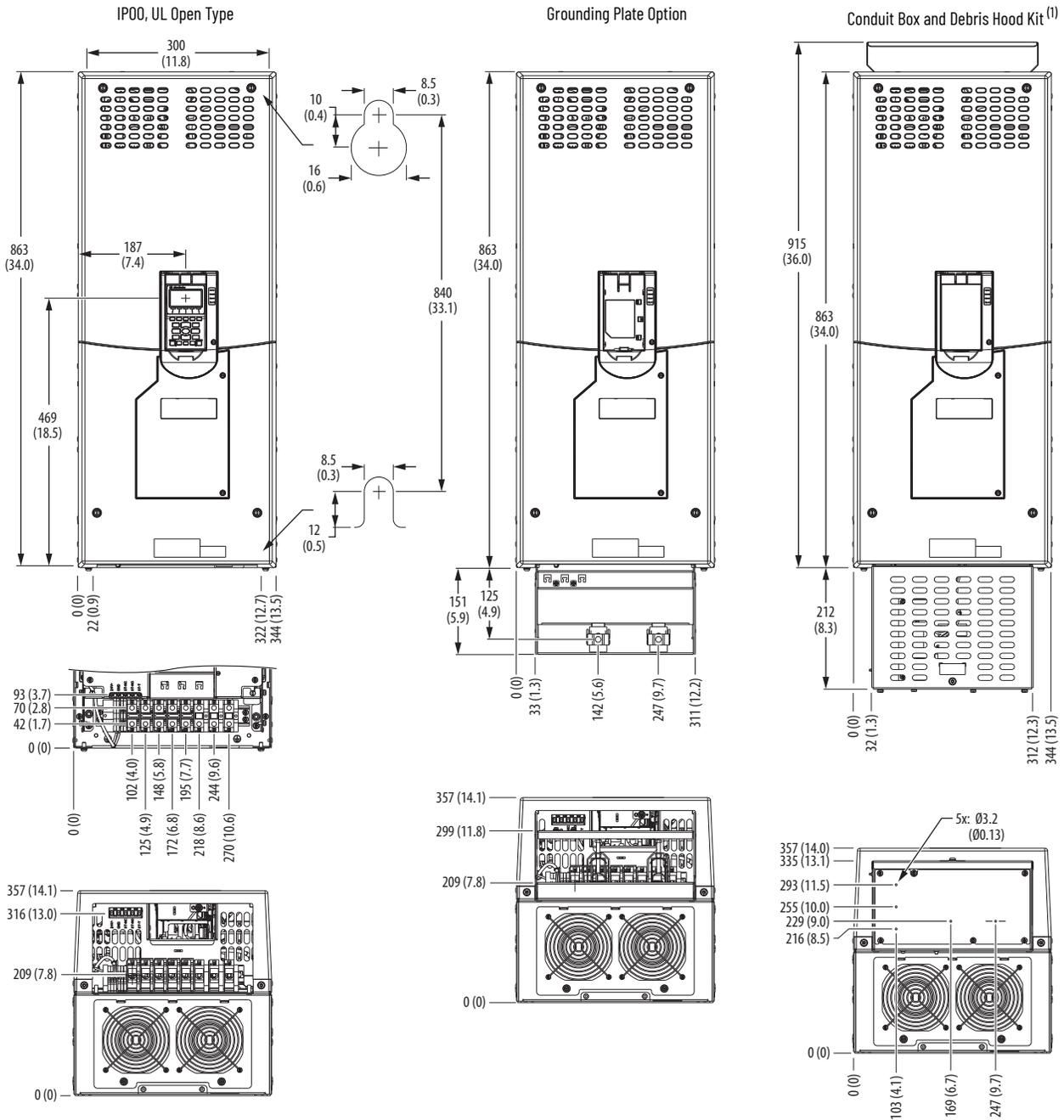
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PowerFlex 755TL and 755TR Drives

Frame 5 Drives Front and Bottom Views

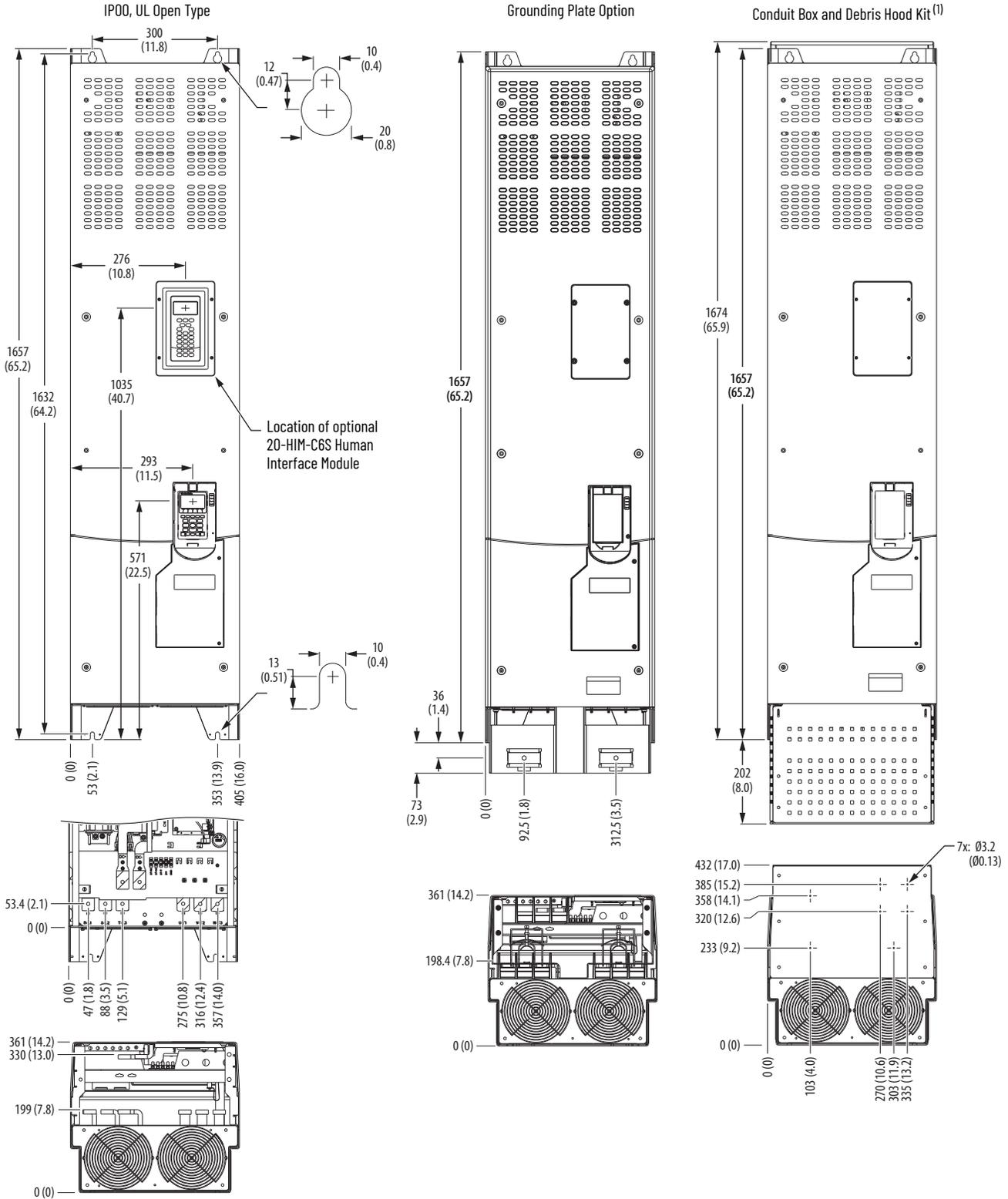
Approximate Dimensions [mm (in.)]



(1) The SK-RM-CBOX1-F5 kit contains a conduit box and debris hood. Install the conduit box to meet the IP20 enclosure rating. Install the conduit box and debris hood to meet the UL Type 1 enclosure rating.

Frame 6 Drives Top, Front, and Bottom Views

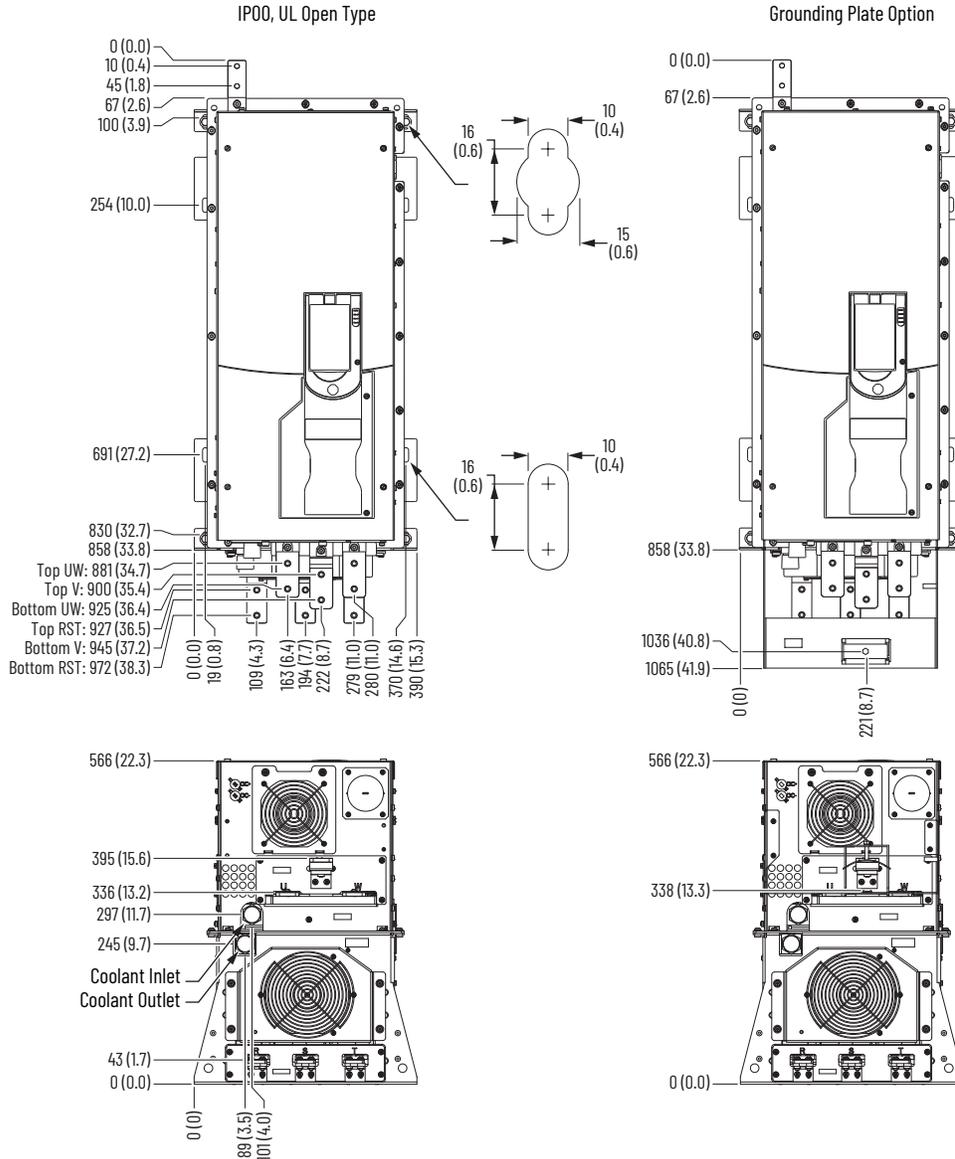
Approximate Dimensions [mm (in.)]



(1) The SK-RM-CBOX1-F6 kit contains a conduit box and debris hood. Install the conduit box to meet the IP20 enclosure rating. Install the conduit box and debris hood to meet the UL Type 1 enclosure rating.

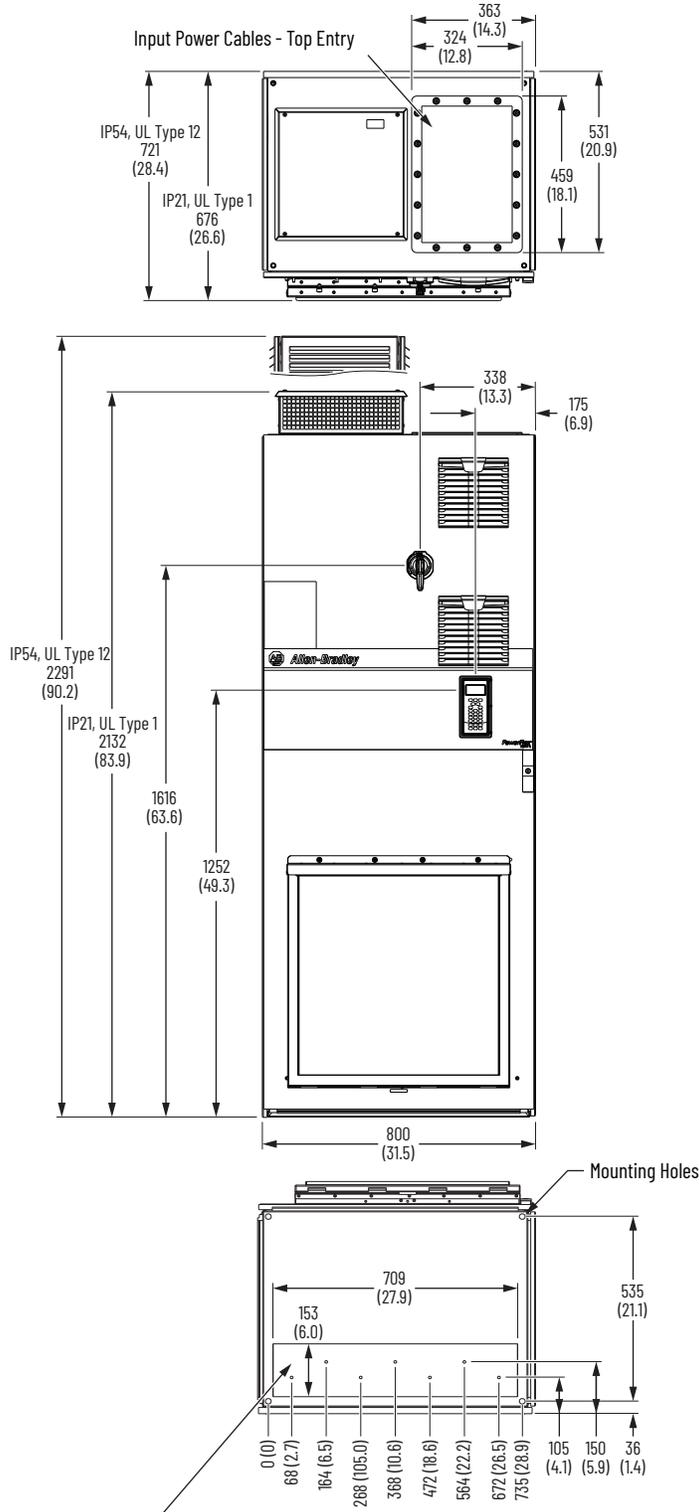
Frame 6L Drives Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]



Frame 7 Drives Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]

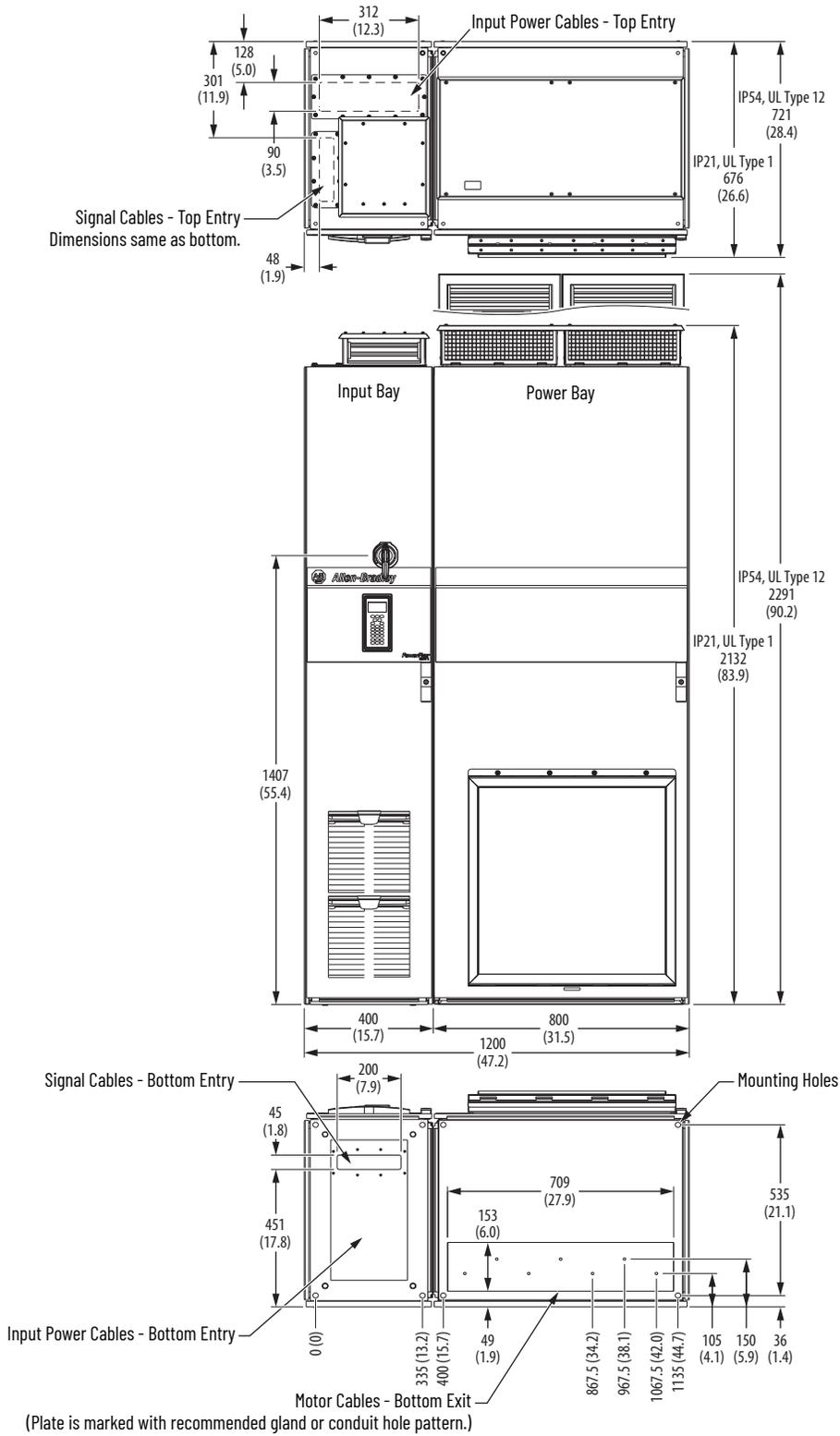


Input Power Cables and Motor Cables - Bottom Entry and Exit
 (Plate is marked with recommended gland or conduit hole pattern.)

Frame 8 Drives Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]

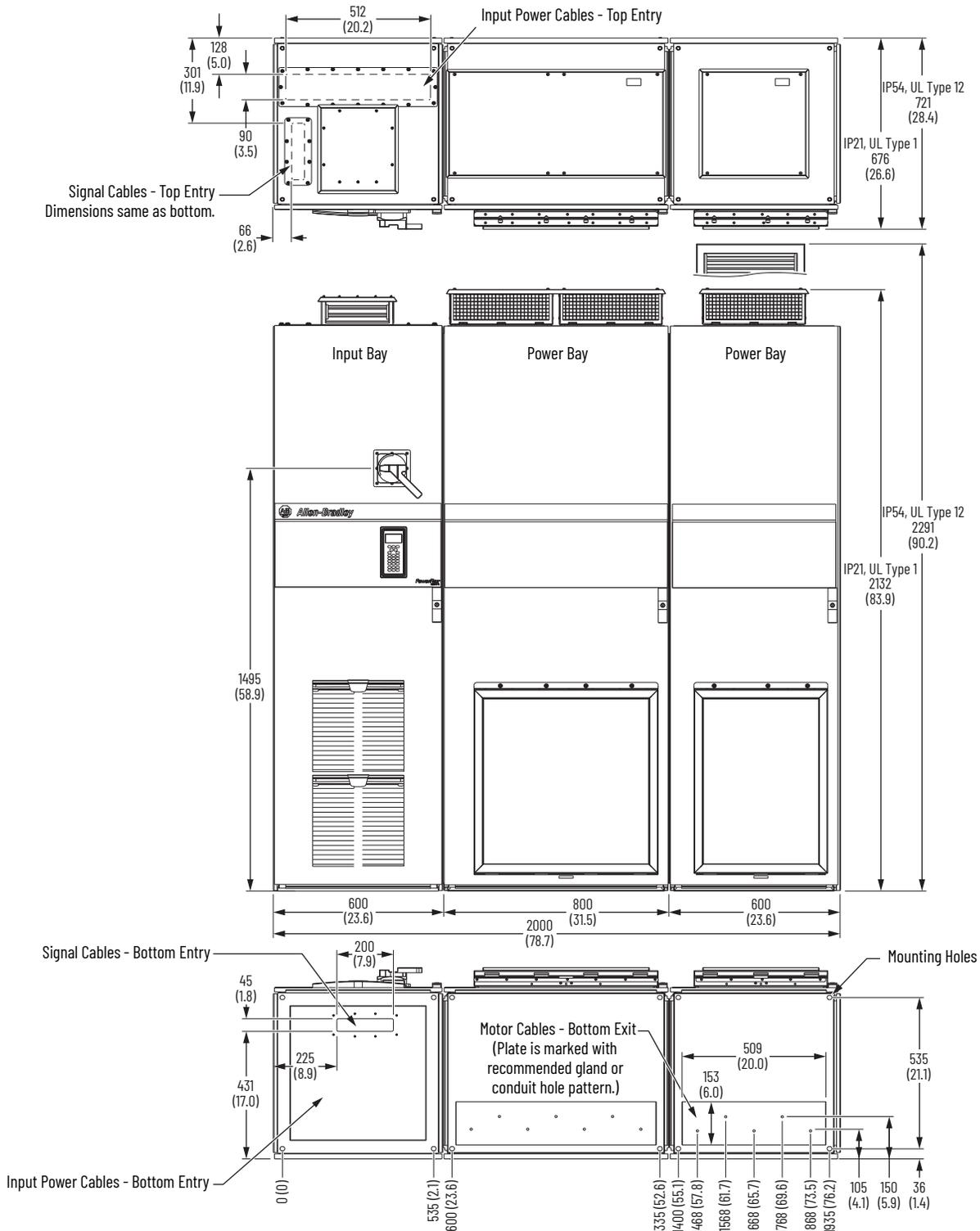
See [page 129](#) for optional exit wire bay dimensions.



Frame 9 Drives Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]

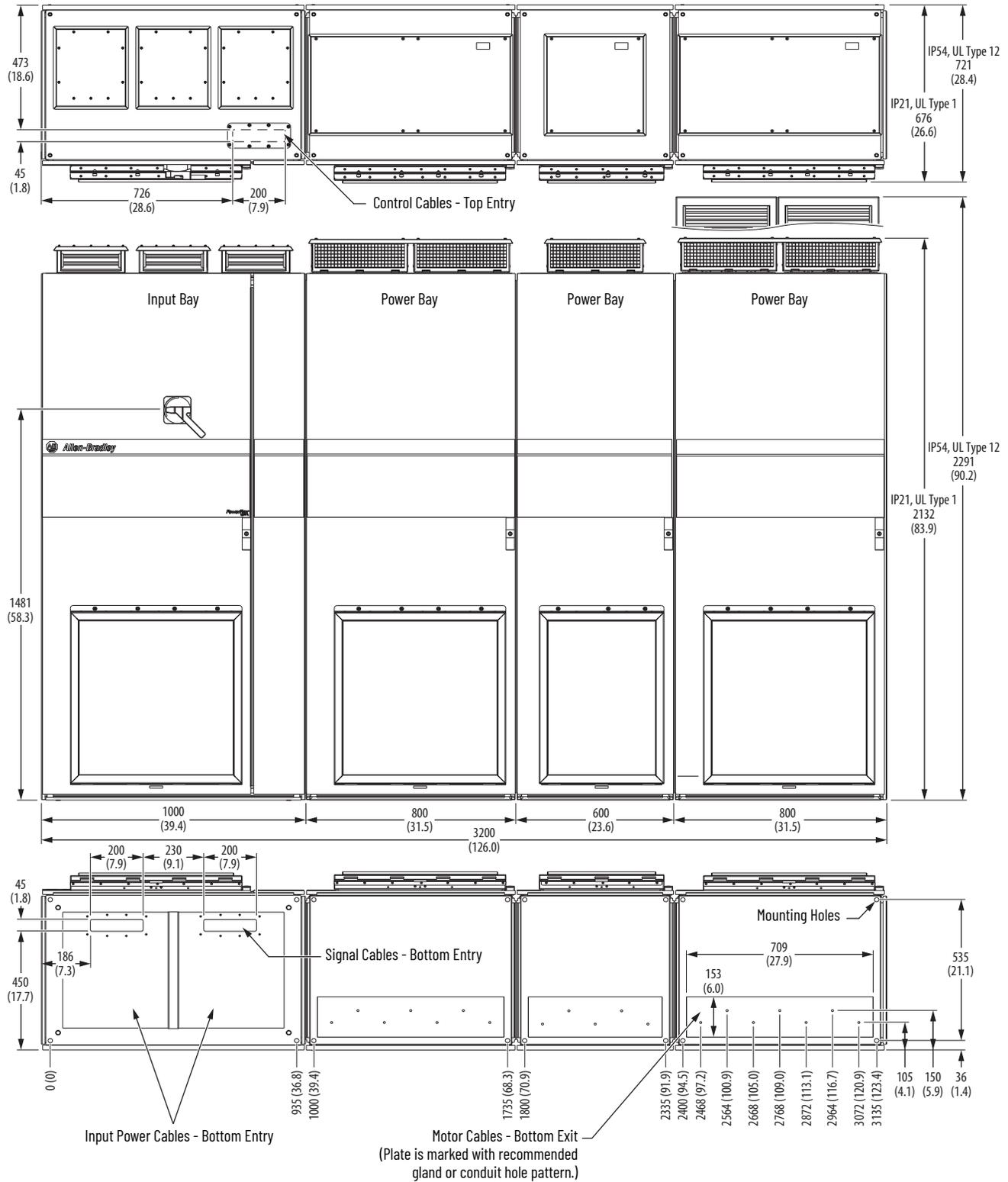
See [page 129](#) for optional exit wire bay dimensions.



Frame 10 Drives Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]

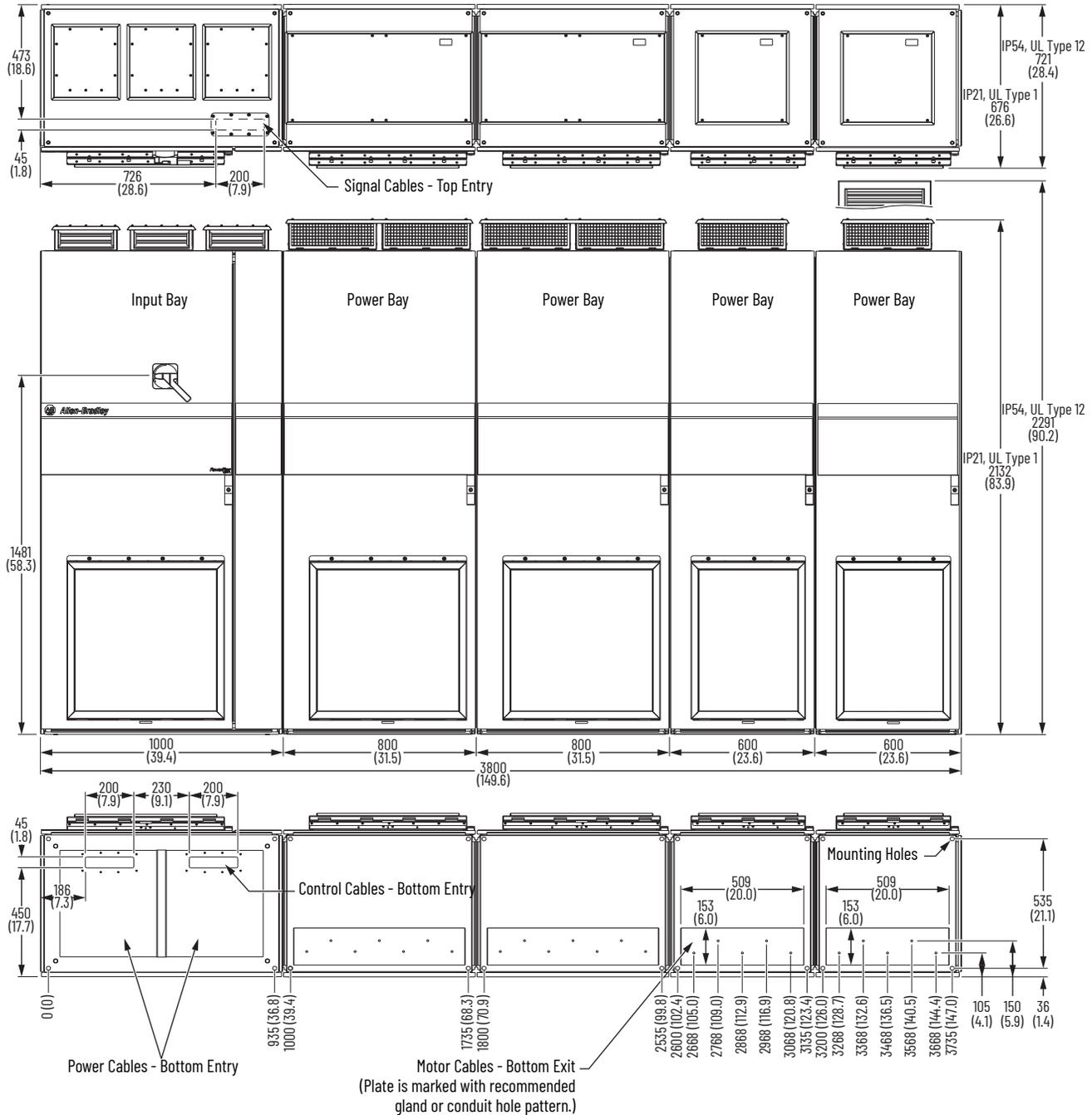
See [page 129](#) for optional entry and exit wire bay dimensions.



Frame 11 Drives Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]

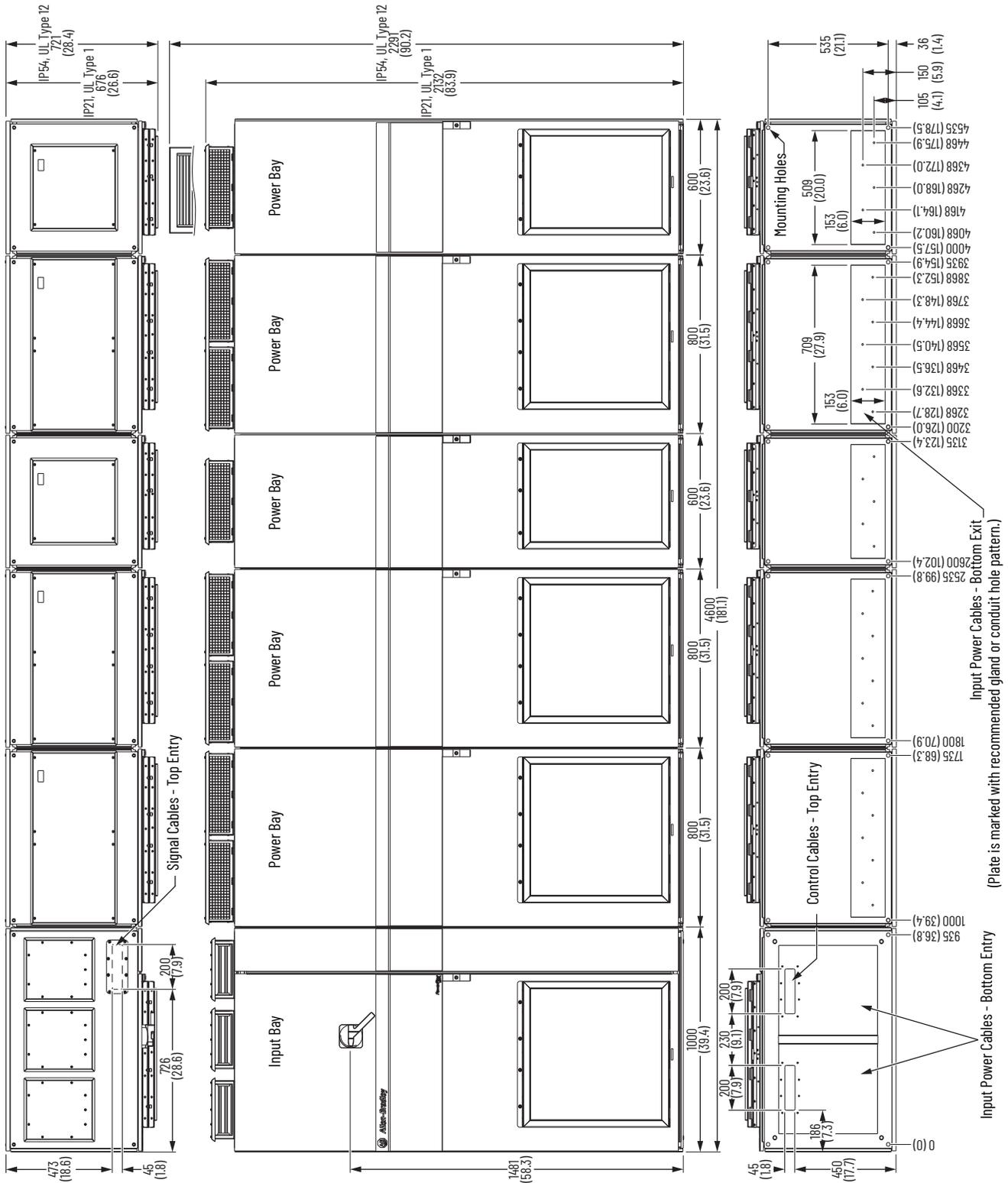
See [page 129](#) for optional exit wire bay dimensions.



Frame 12 Drives Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]

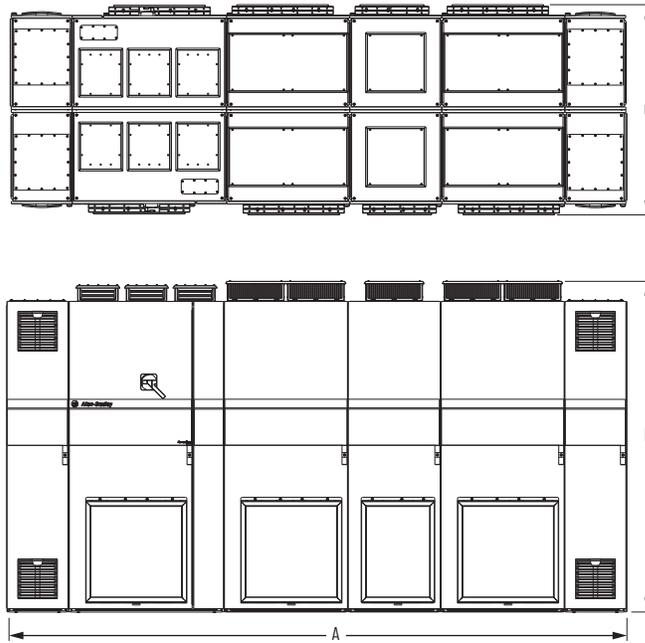
See [page 129](#) for optional entry and exit wire bay dimensions.



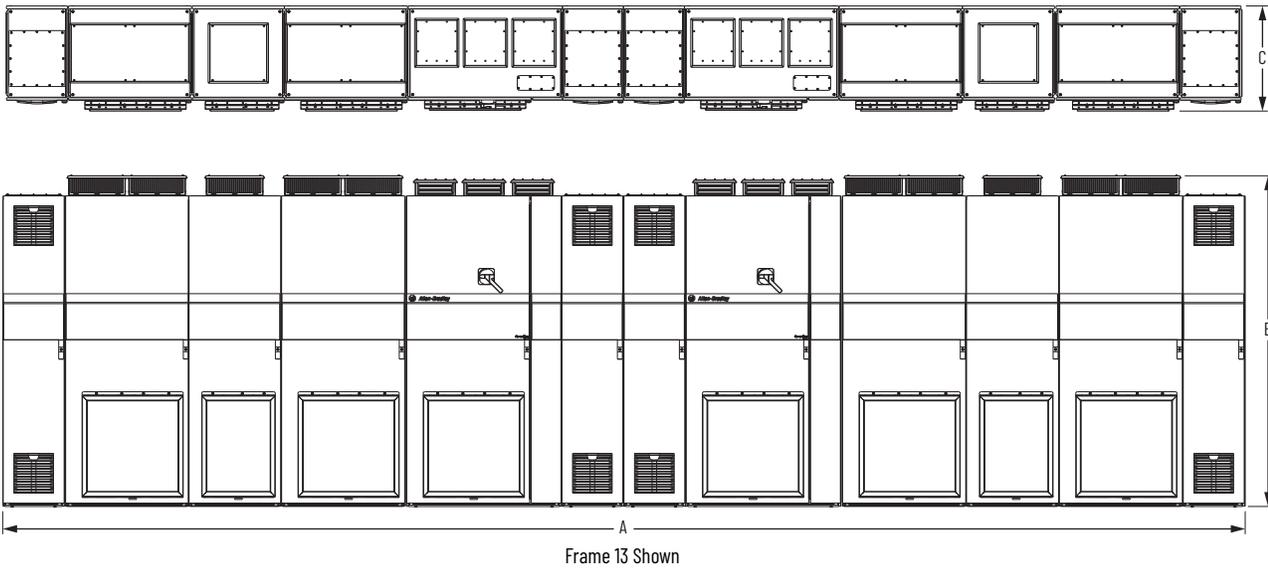
Frame 13...15 Drives Top and Front Views

Approximate Dimensions [mm (in.)]

Back-to-back Configuration



In-Line Configuration

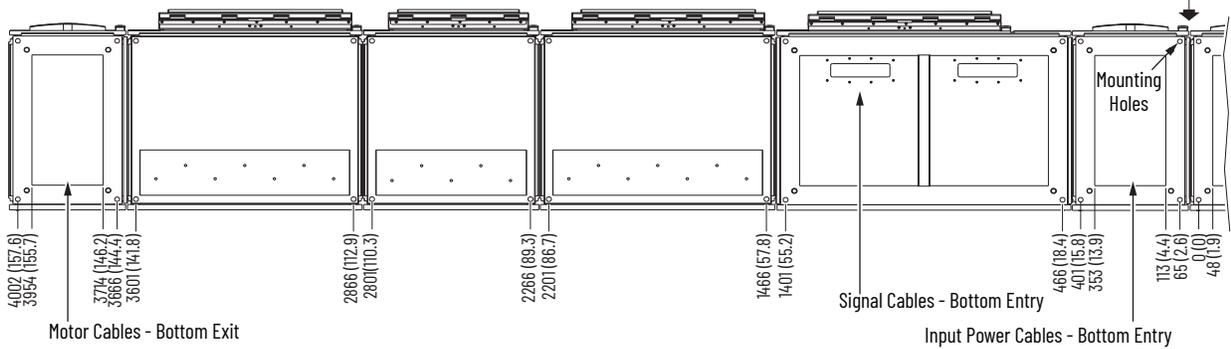
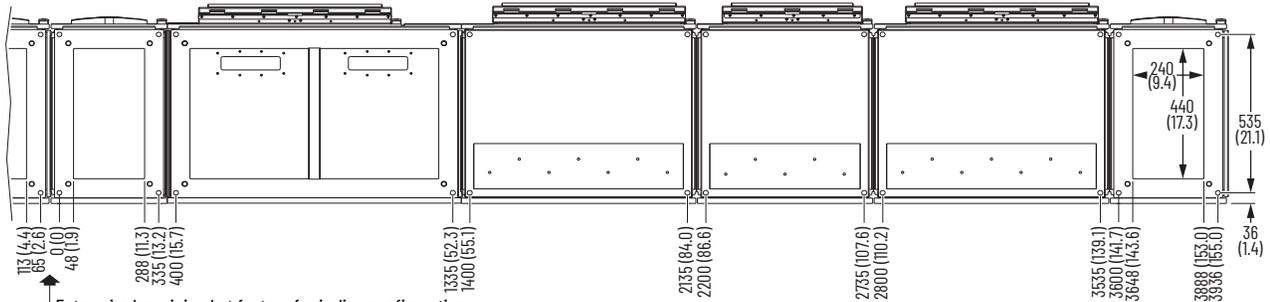


Frame	Back-to-Back Configuration						In-Line Configuration					
	IP21, UL Type 1			IP54, UL Type 12			IP21, UL Type 1			IP54, UL Type 12		
	A	B	C	A	B	C	A	B	C	A	B	C
13	4000 (157.4)	2132 (83.9)	1352 (53.2)	4000 (157.4)	2291 (90.2)	1442 (56.8)	8000 (314.8)	2132 (83.9)	676 (26.6)	8000 (314.8)	2291 (90.2)	721 (28.4)
14	5400 (212.6)	2132 (83.9)	1352 (53.2)	5400 (212.6)	2291 (90.2)	1442 (56.8)	10,800 (425.2)	2132 (83.9)	676 (26.6)	10,800 (425.2)	2291 (90.2)	721 (28.4)
15	6200 (244.1)	2132 (83.9)	1352 (53.2)	6200 (244.1)	2291 (90.2)	1442 (56.8)	12,400 (488.2)	2132 (83.9)	676 (26.6)	12,400 (488.2)	2291 (90.2)	721 (28.4)

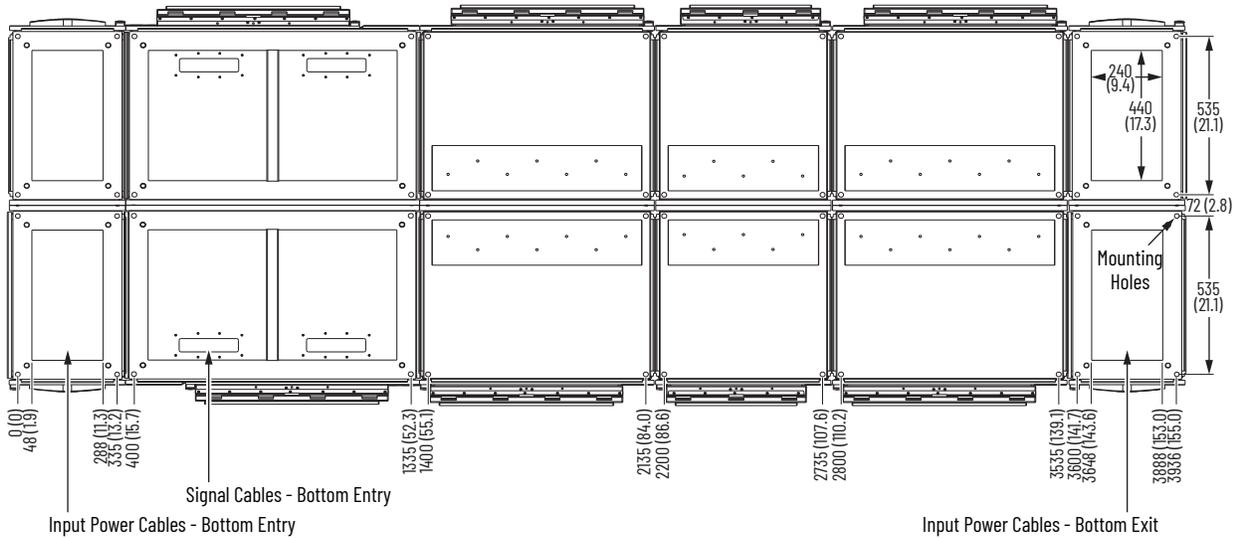
Frame 13 Drives Bottom Views

Approximate Dimensions [mm (in.)]

In-Line Configuration

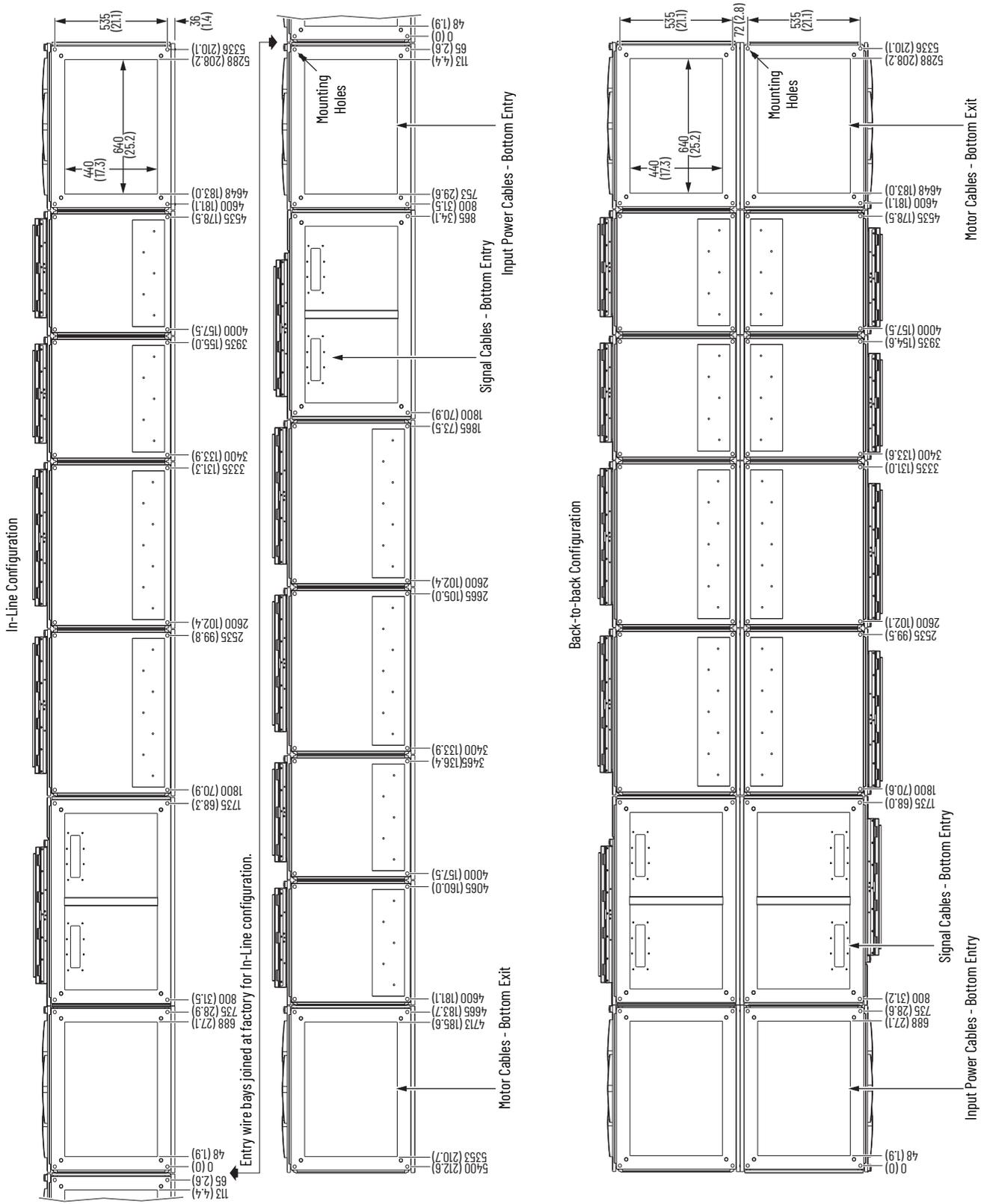


Back-to-back Configuration



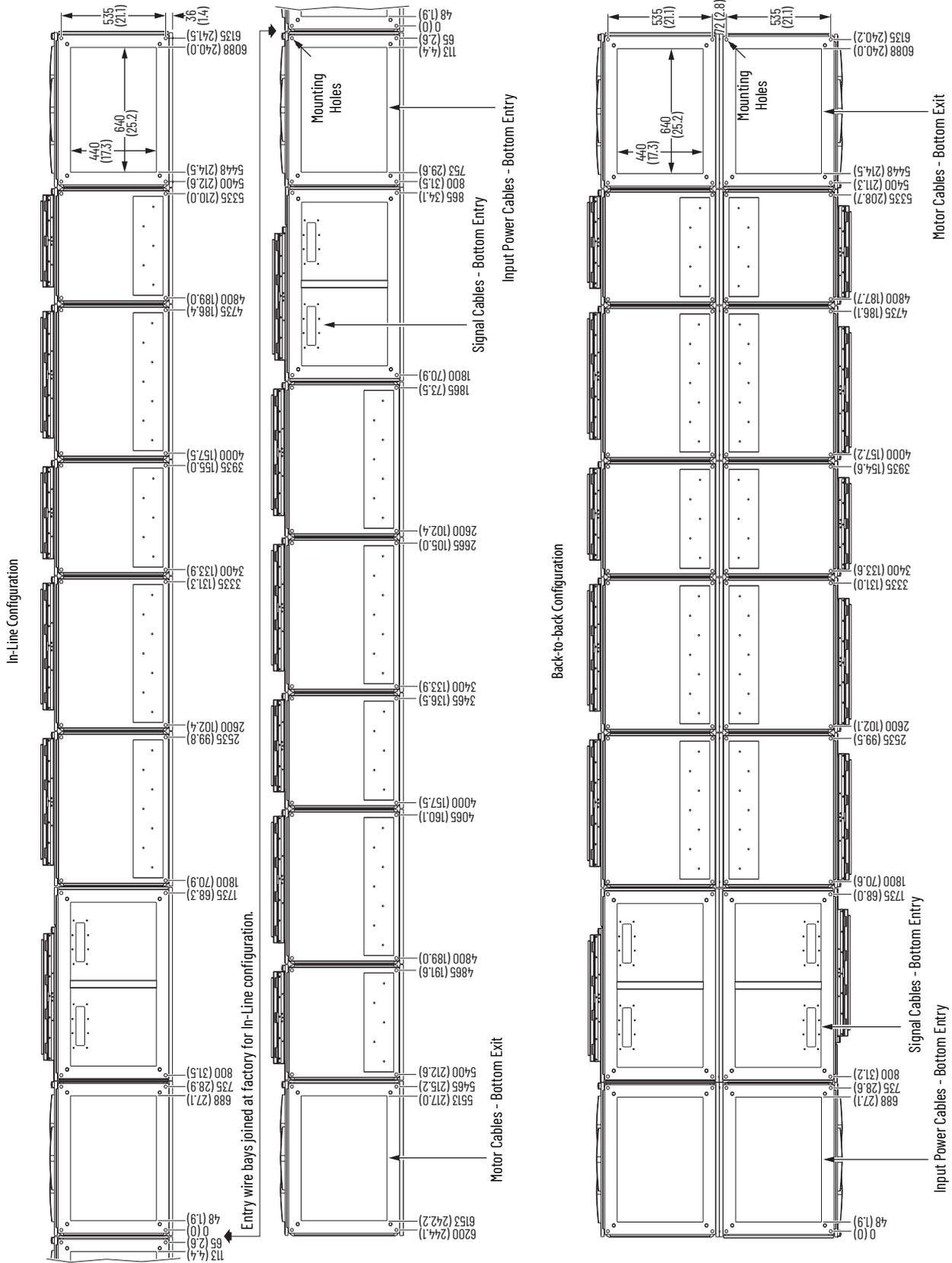
Frame 14 Drives Bottom Views

Approximate Dimensions [mm (in.)]

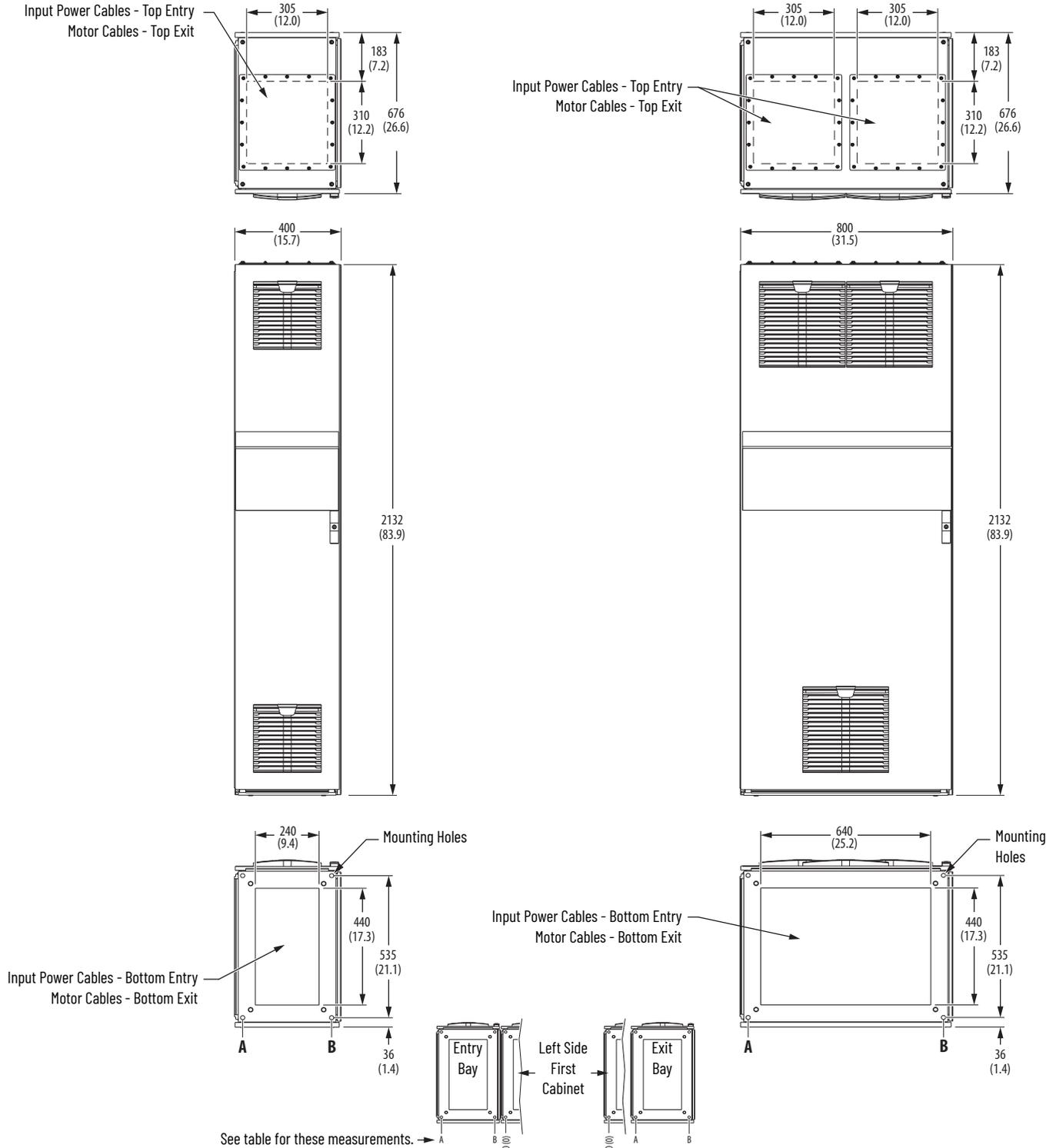


Frame 15 Drives Bottom Views

Approximate Dimensions [mm (in.)]



Drives Optional Entry and Exit Wire Bays Top, Front, and Bottom Views Approximate Dimensions [mm (in.)]

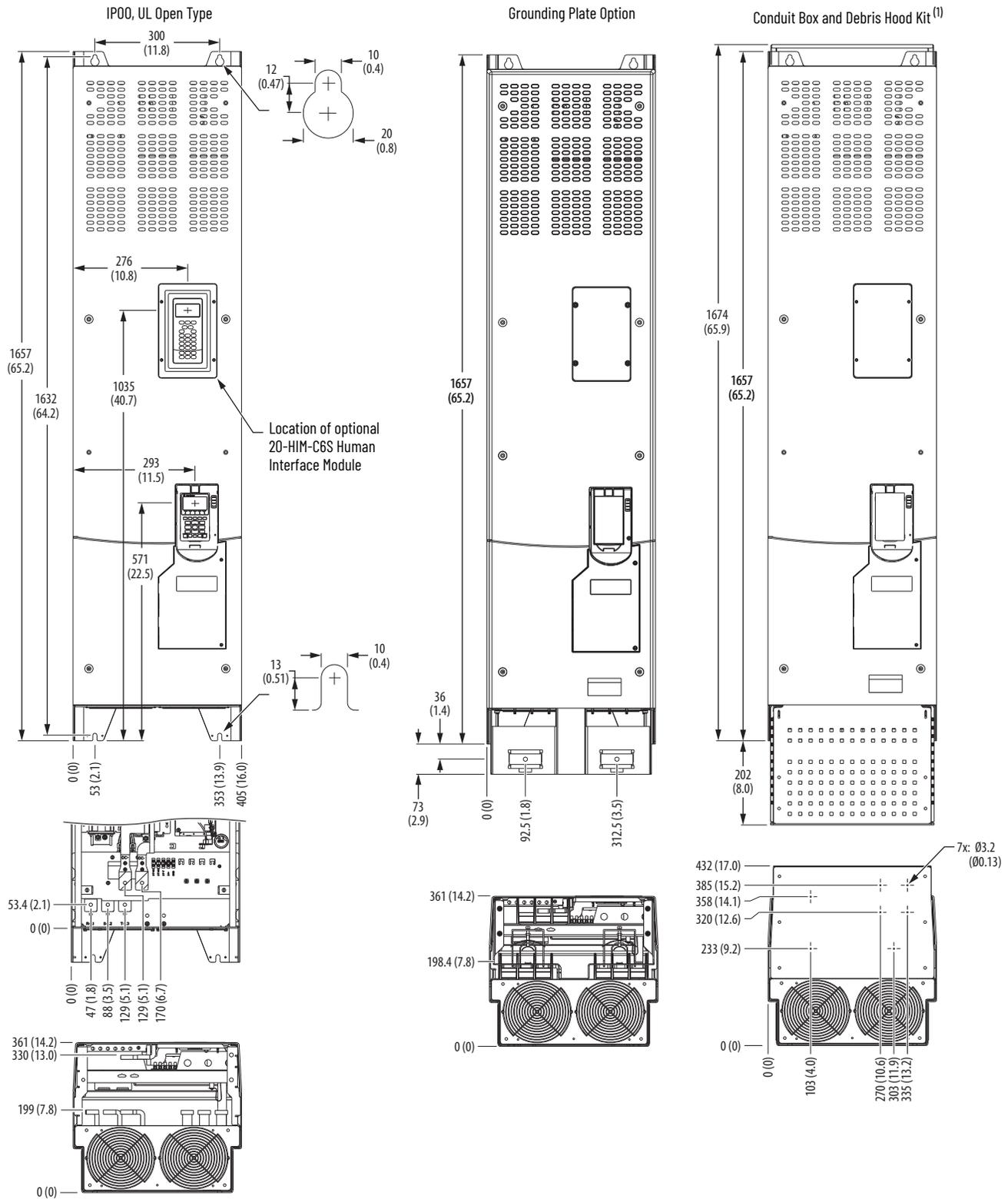


Frame	Entry Bay - 400 (15.7) Wide		Exit Bay - 400 (15.7) Wide		Entry Bay - 800 (31.5) Wide		Exit Bay - 800 (31.5) Wide	
	A	B	A	B	A	B	A	B
8	-	-	1200 (47.2)	1535 (60.4)	-	-	-	-
9	-	-	2000 (78.7)	2335 (91.9)	-	-	-	-
10	400 (15.7)	65 (2.6)	3200 (126.0)	3535 (139.2)	-	-	-	-
11	-	-	-	-	465 (18.3)	65 (2.6)	3800 (149.6)	4535 (178.5)
12	-	-	-	-	465 (18.3)	65 (2.6)	4600 (181.1)	5335 (210.0)

PowerFlex 755TM Bus Supplies

Frame 6 Bus Supplies Top, Front, Bottom, and Side Views

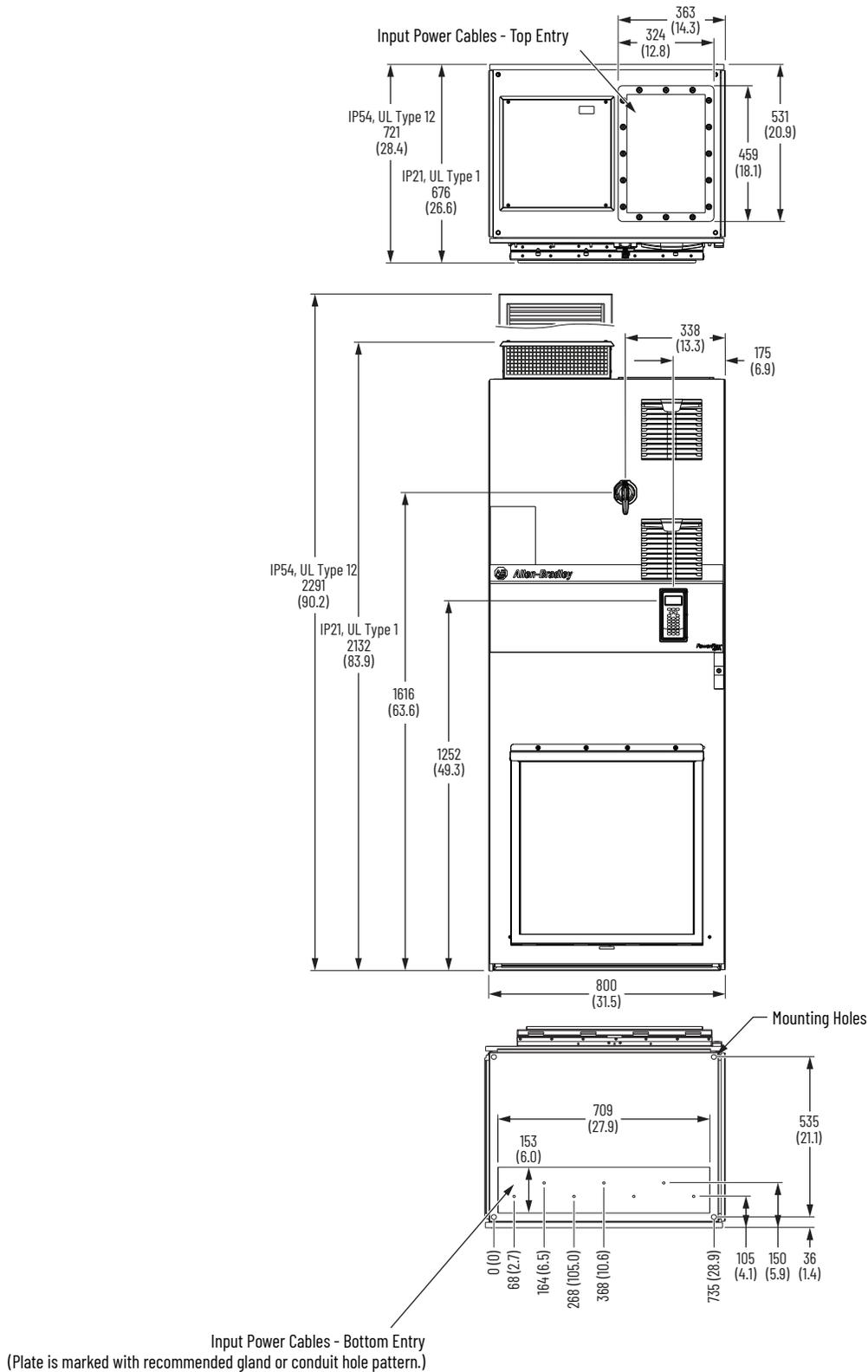
Approximate Dimensions [mm (in.)]



Frame 7 Bus Supplies Top, Front, Bottom, and Side Views

Approximate Dimensions [mm (in.)]

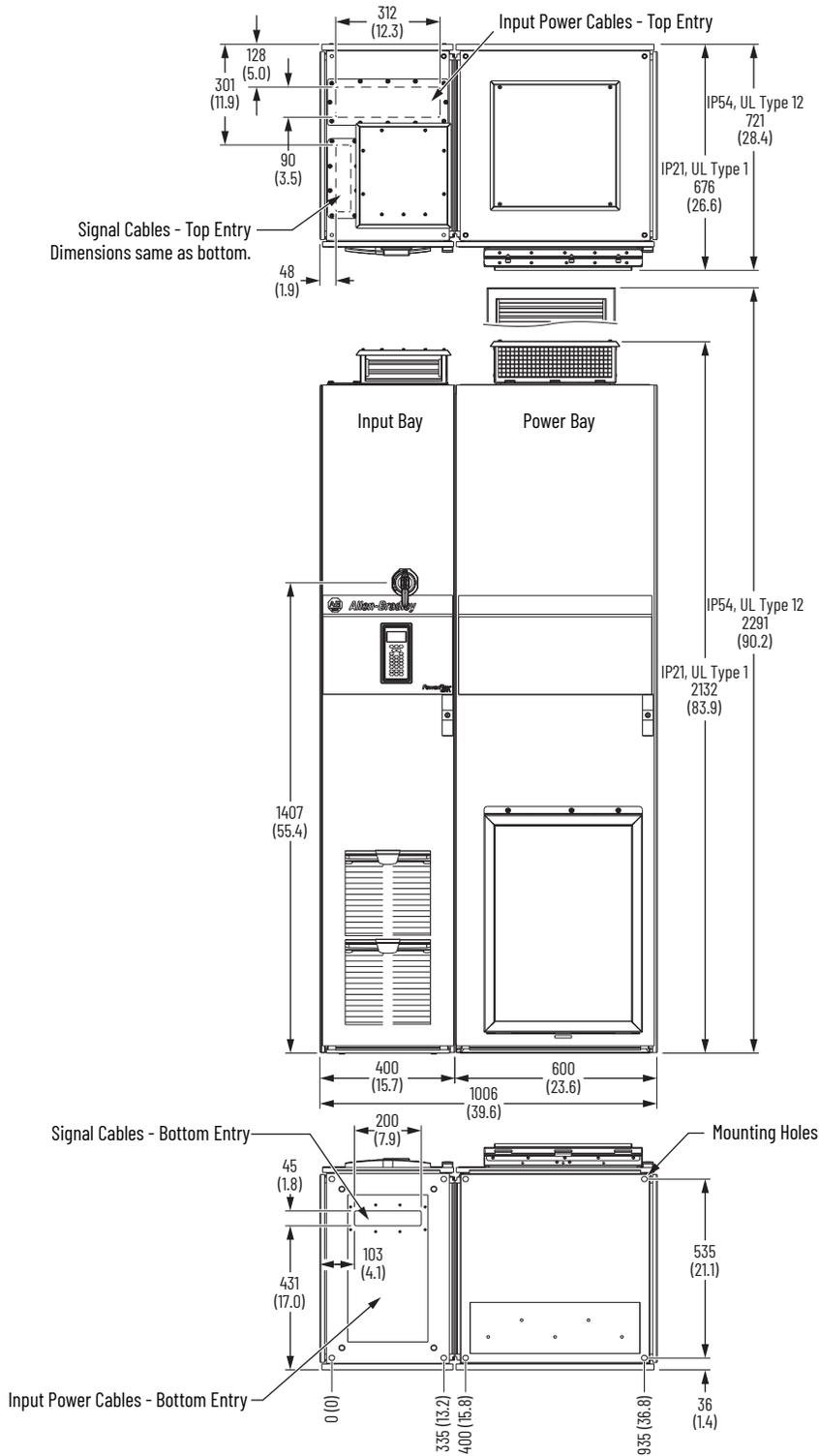
See [page 129](#) for optional entry wire bay dimensions.



Frame 8 Bus Supplies Top, Front, Bottom, and Side Views

Approximate Dimensions [mm (in.)]

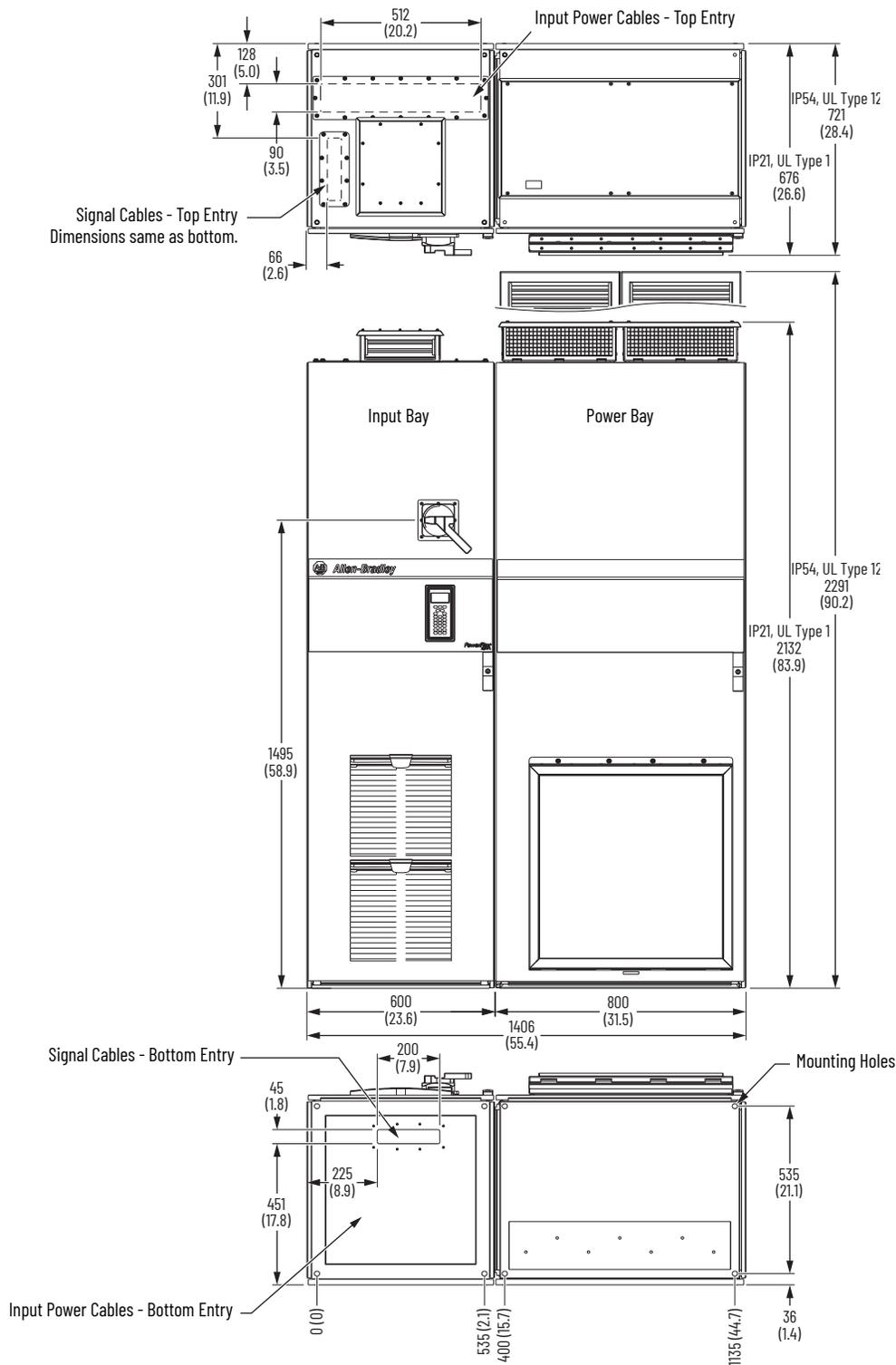
See [page 129](#) for optional entry wire bay dimensions.



Frame 9 Bus Supplies Top, Front, Bottom, and Side Views

Approximate Dimensions [mm (in.)]

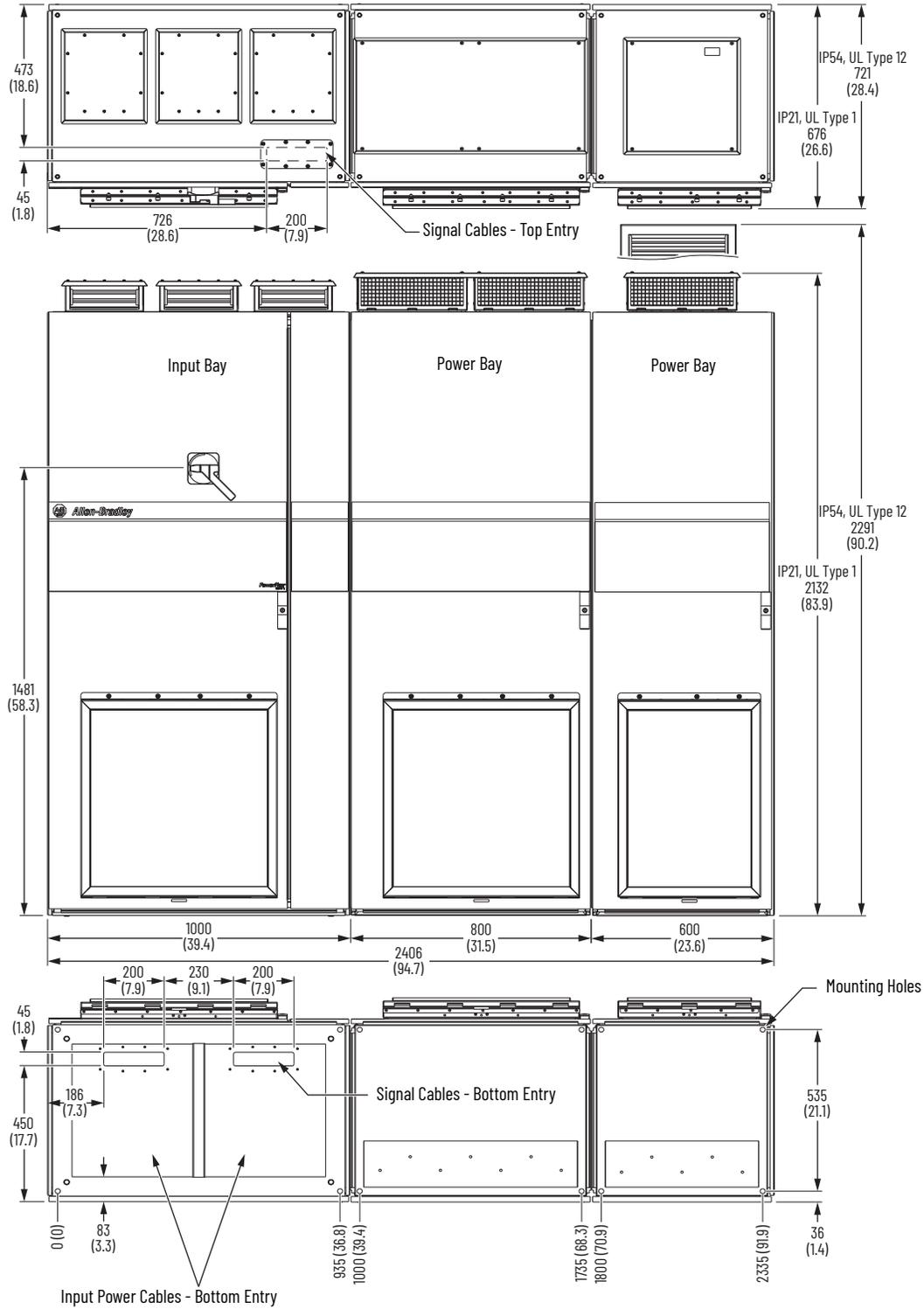
See [page 129](#) for optional entry wire bay dimensions.



Frame 10 Bus Supplies Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]

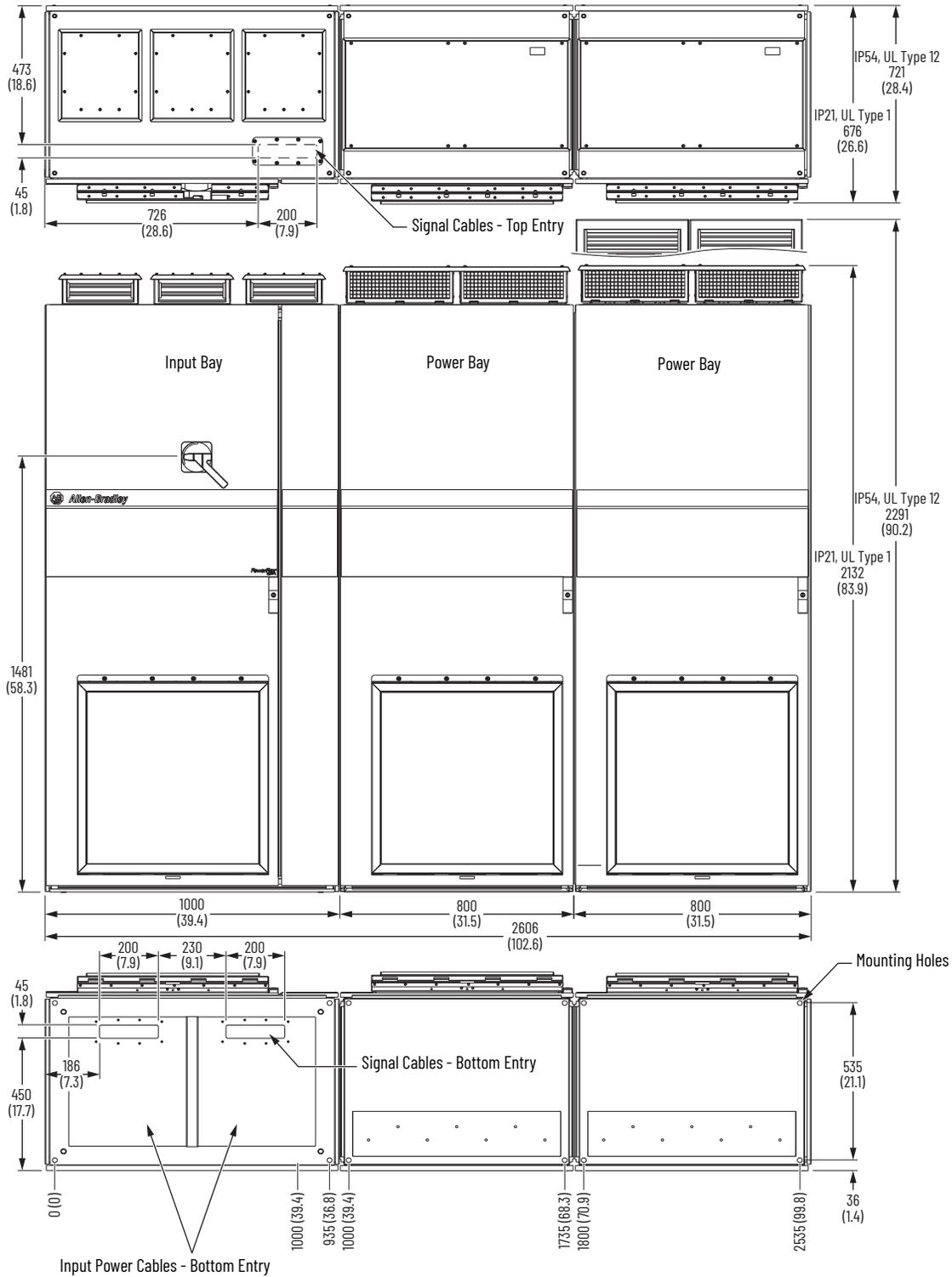
See [page 129](#) for optional entry wire bay dimensions.



Frame 11 Bus Supplies Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]

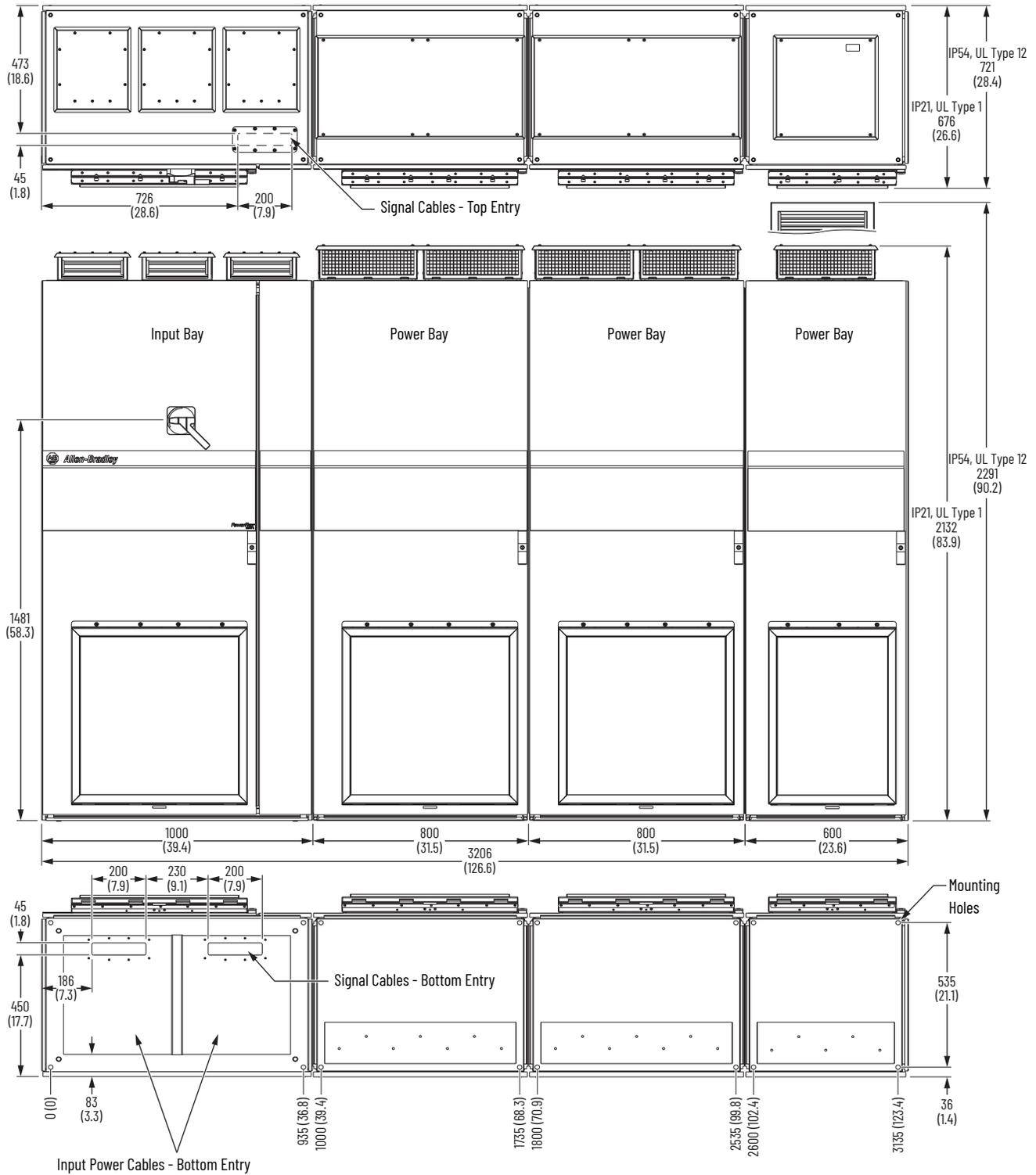
See [page 129](#) for optional entry wire bay dimensions.



Frame 12 Bus Supplies Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]

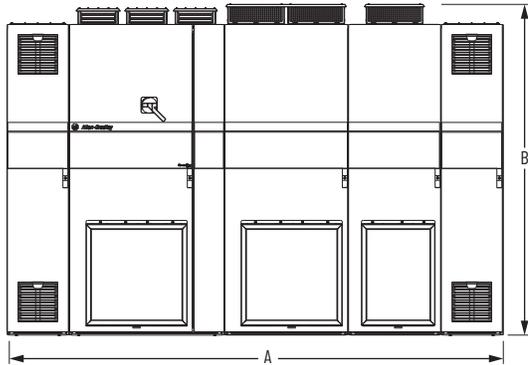
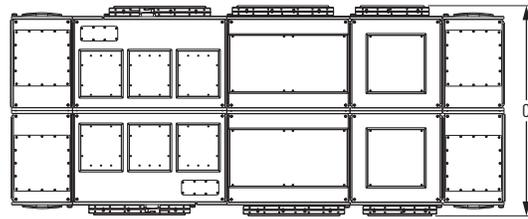
See [page 129](#) for optional entry wire bay dimensions.



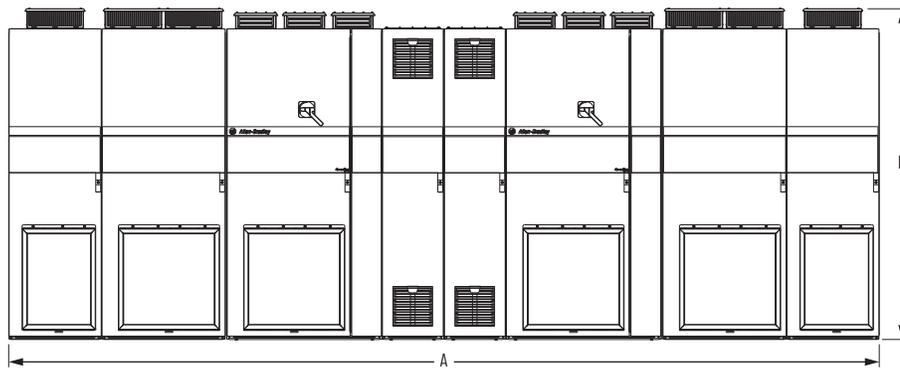
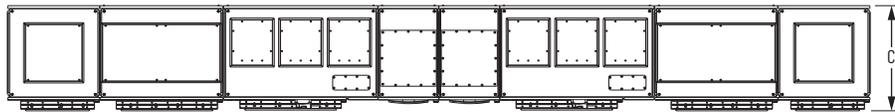
Frame 13...15 Bus Supplies Top and Front Views

Approximate Dimensions [mm (in.)]

Back-to-back Configuration



In-Line Configuration

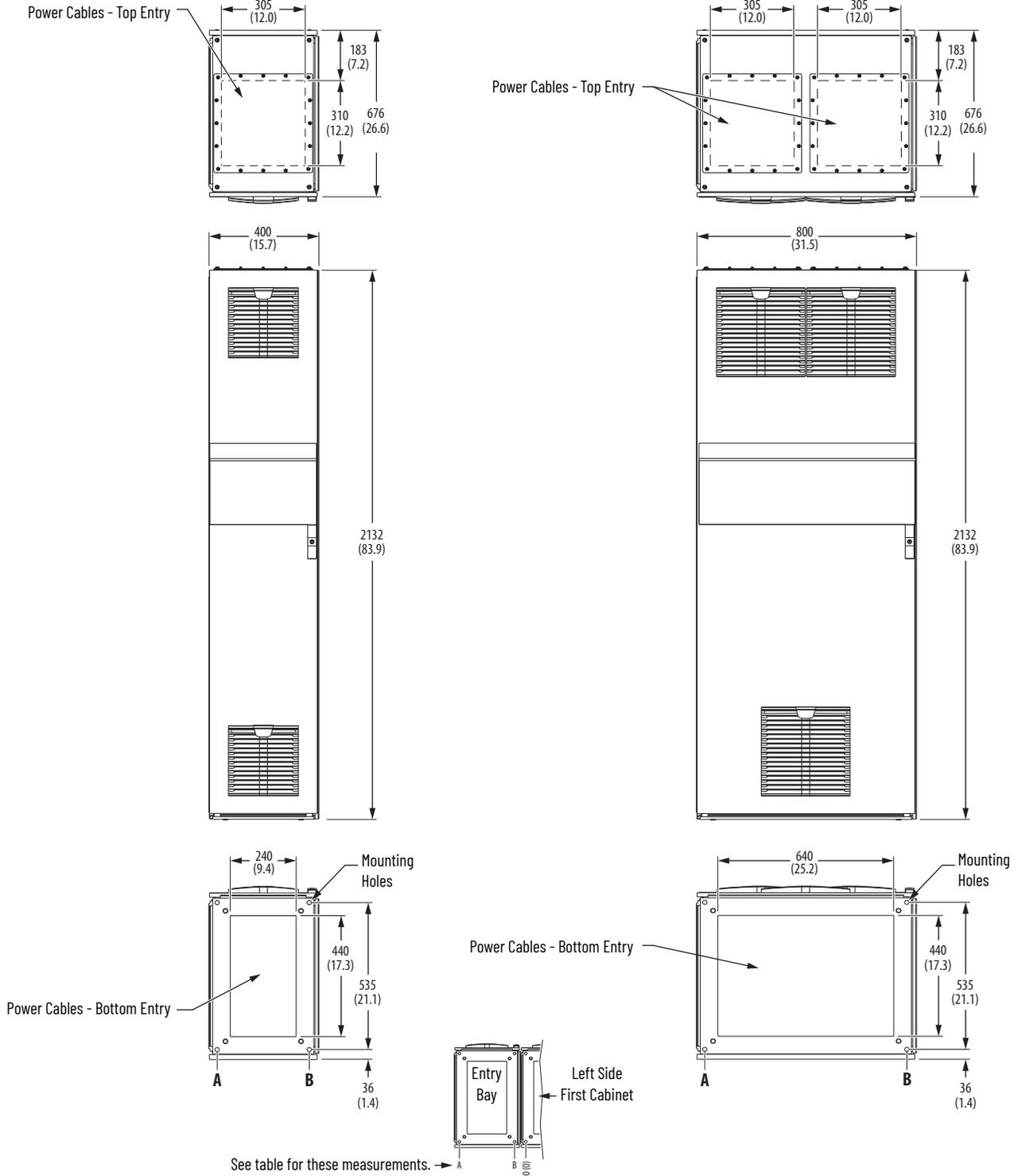


Frame 13 Shown

Frame	Back-to-Back Configuration						In-Line Configuration					
	IP21, UL Type 1			IP54, UL Type 12			IP21, UL Type 1			IP54, UL Type 12		
	A	B	C	A	B	C	A	B	C	A	B	C
13	3200 (125.9)	2132 (83.9)	1352 (53.2)	3200 (125.9)	2291 (90.2)	1442 (56.8)	5600 (220.4)	2132 (83.9)	676 (26.6)	5600 (220.4)	2291 (90.2)	721 (28.4)
14	3800 (149.6)	2132 (83.9)	1352 (53.2)	3800 (149.6)	2291 (90.2)	1442 (56.8)	6,800 (267.8)	2132 (83.9)	676 (26.6)	6,800 (267.8)	2291 (90.2)	721 (28.4)
15	4400 (173.2)	2132 (83.9)	1352 (53.2)	4400 (173.2)	2291 (90.2)	1442 (56.8)	8000 (315.0)	2132 (83.9)	676 (26.6)	8000 (315.0)	2291 (90.2)	721 (28.4)

Optional Entry Wire Bays Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]



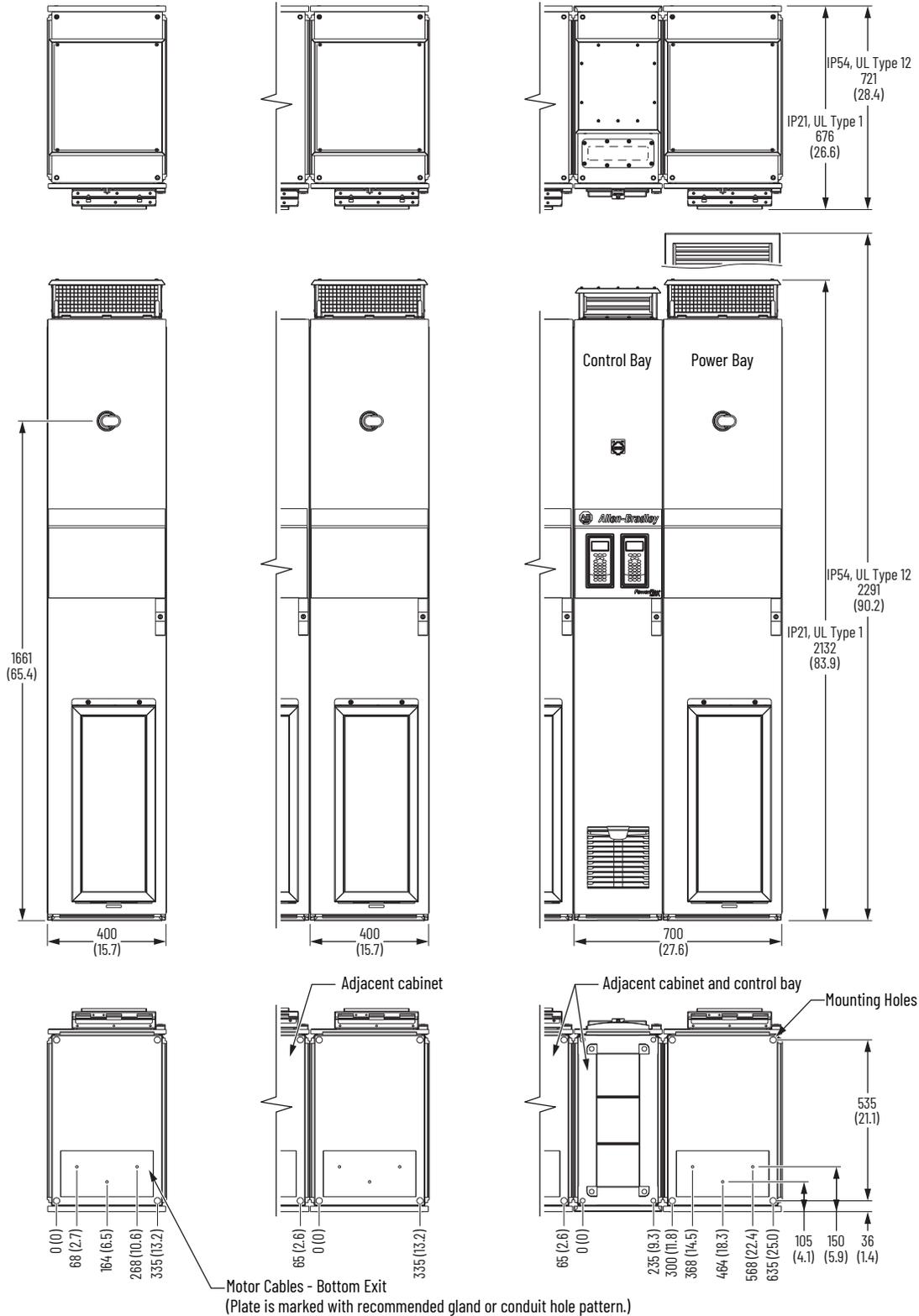
Frame	Entry Bay - 400 (15.7) Wide		Entry Bay - 800 (31) Wide	
	A	B	A	B
8	-	-	-	-
9	-	-	-	-
10	400 (15.7)	65 (2.6)	-	-
11	-	-	465 (18.3)	65 (2.6)
12	-	-	465 (18.3)	65 (2.6)

PowerFlex 755TM Common Bus Inverters

Frame 8 Common Bus Inverters Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]

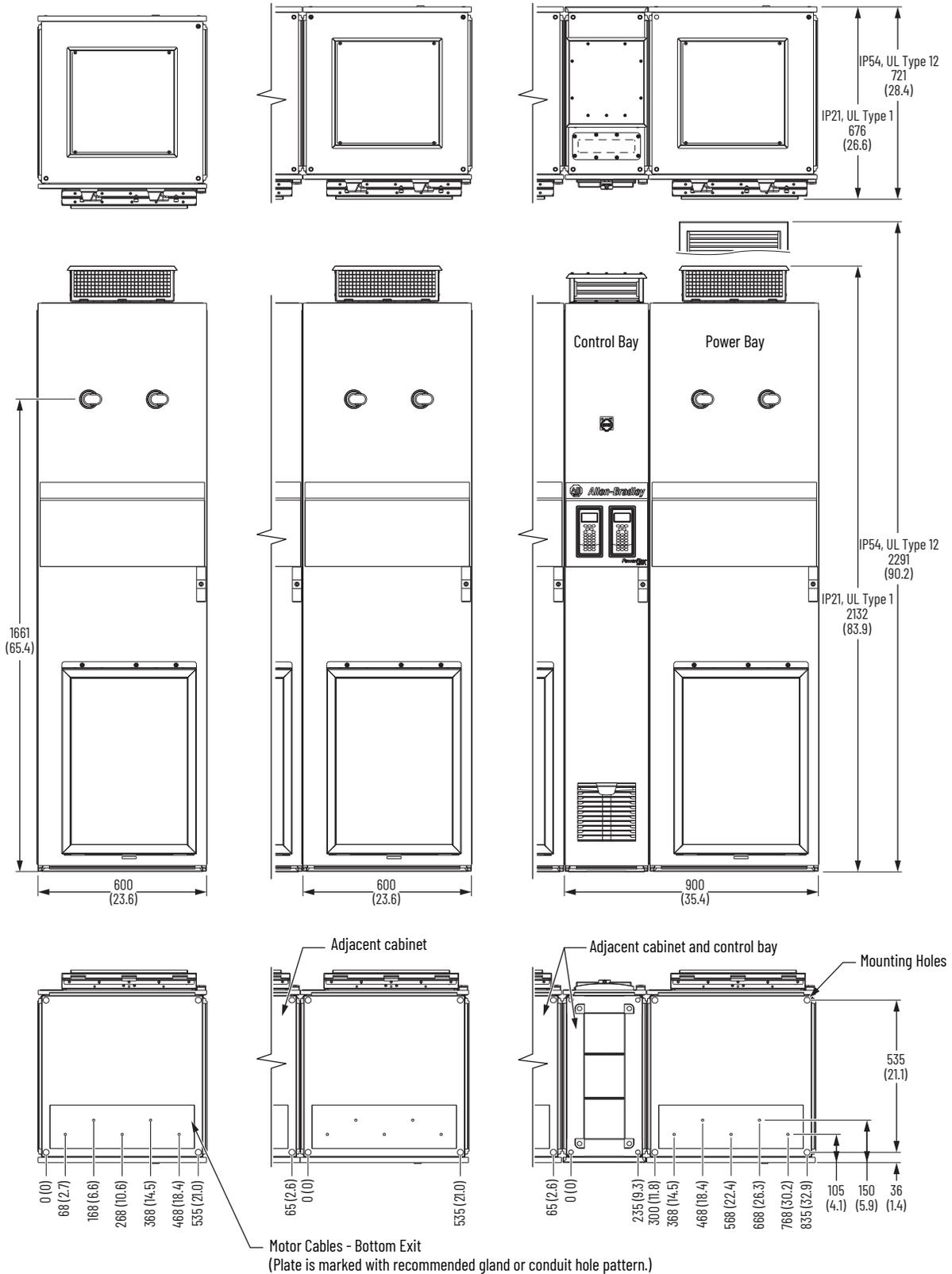
See [page 147](#) for optional exit wire bay dimensions.



Frame 9 Common Bus Inverters Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]

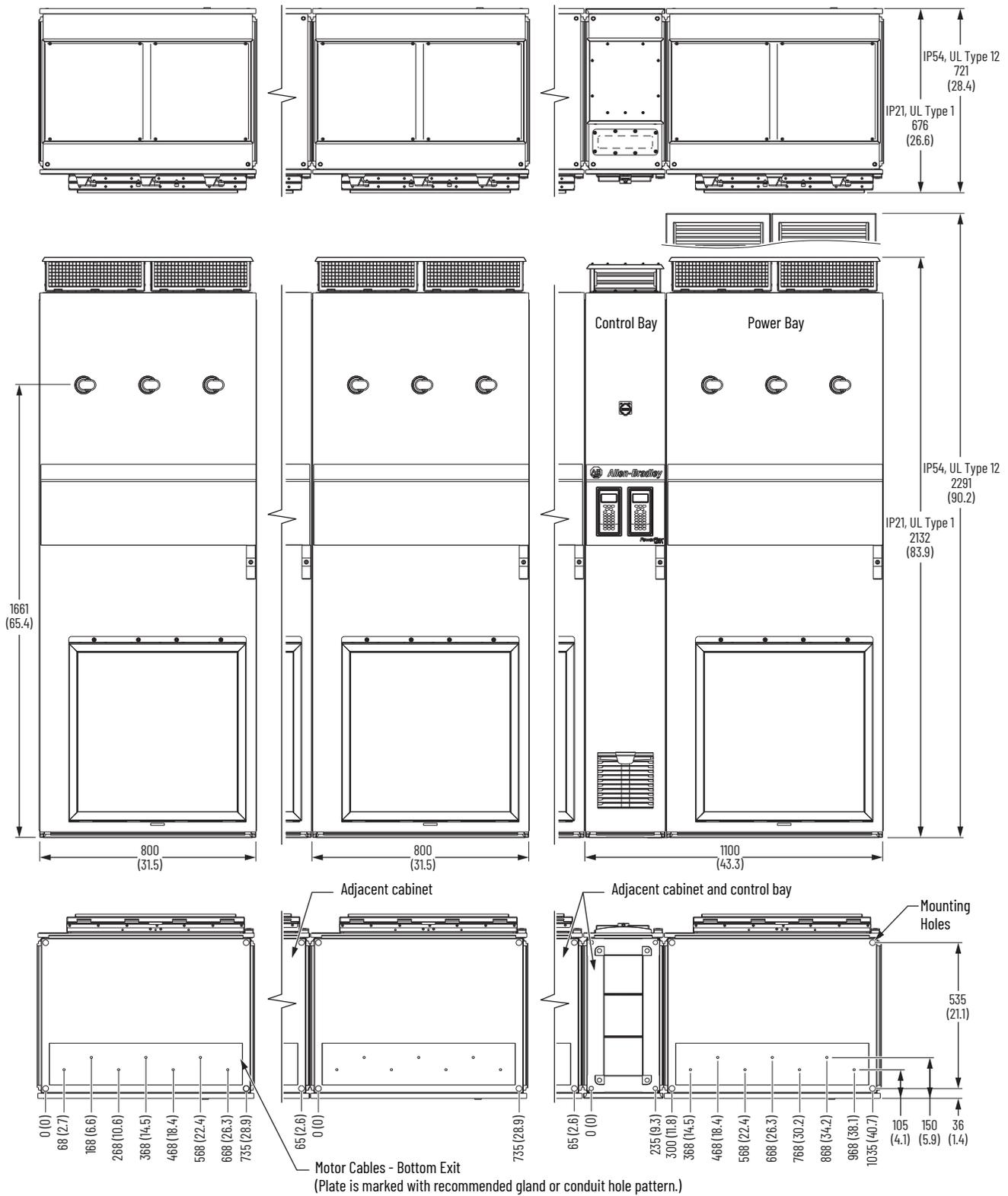
See [page 147](#) for optional exit wire bay dimensions.



Frame 10 Common Bus Inverters Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]

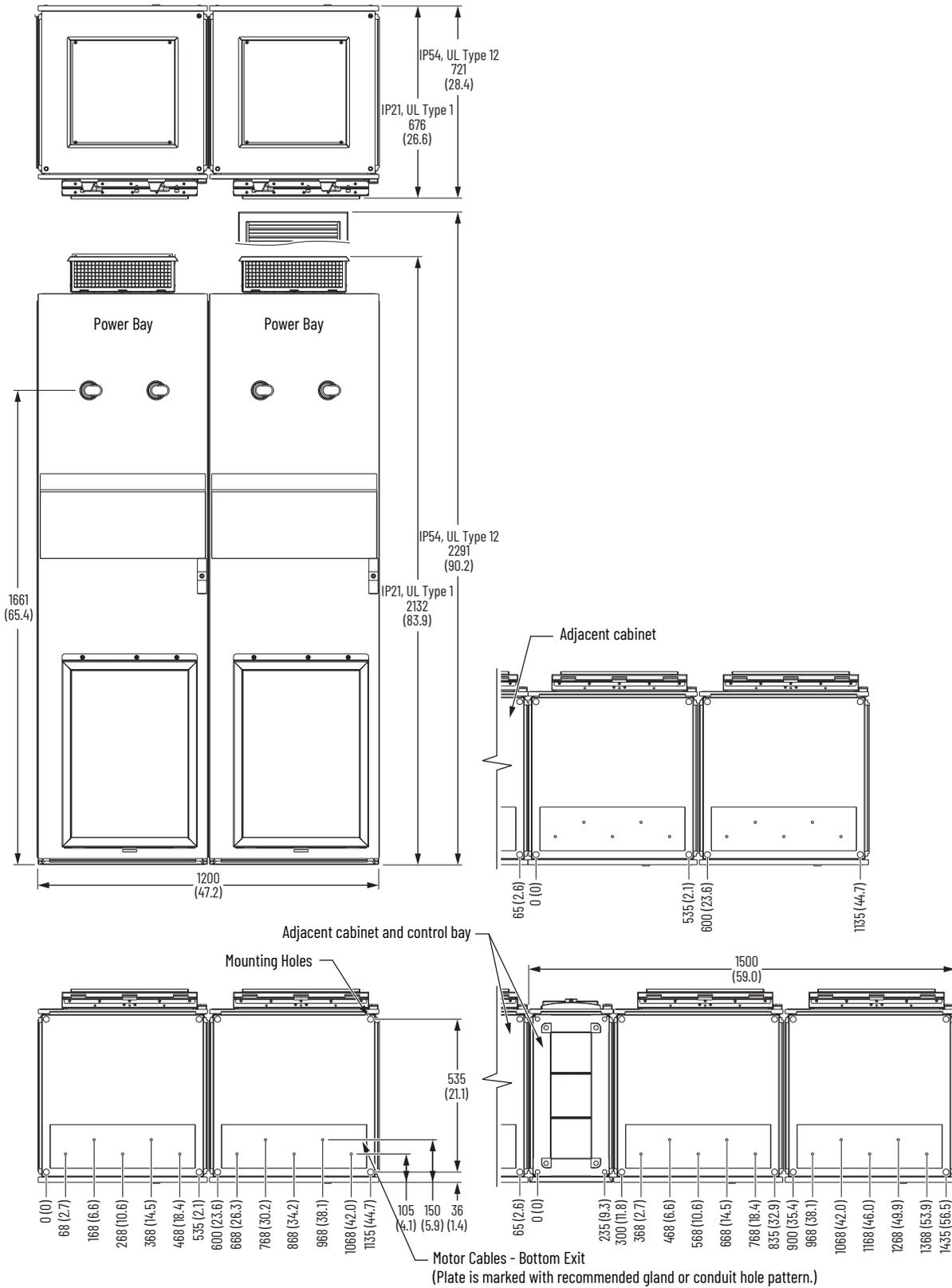
See [page 147](#) for optional exit wire bay dimensions.



Frame 11 Common Bus Inverters Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]

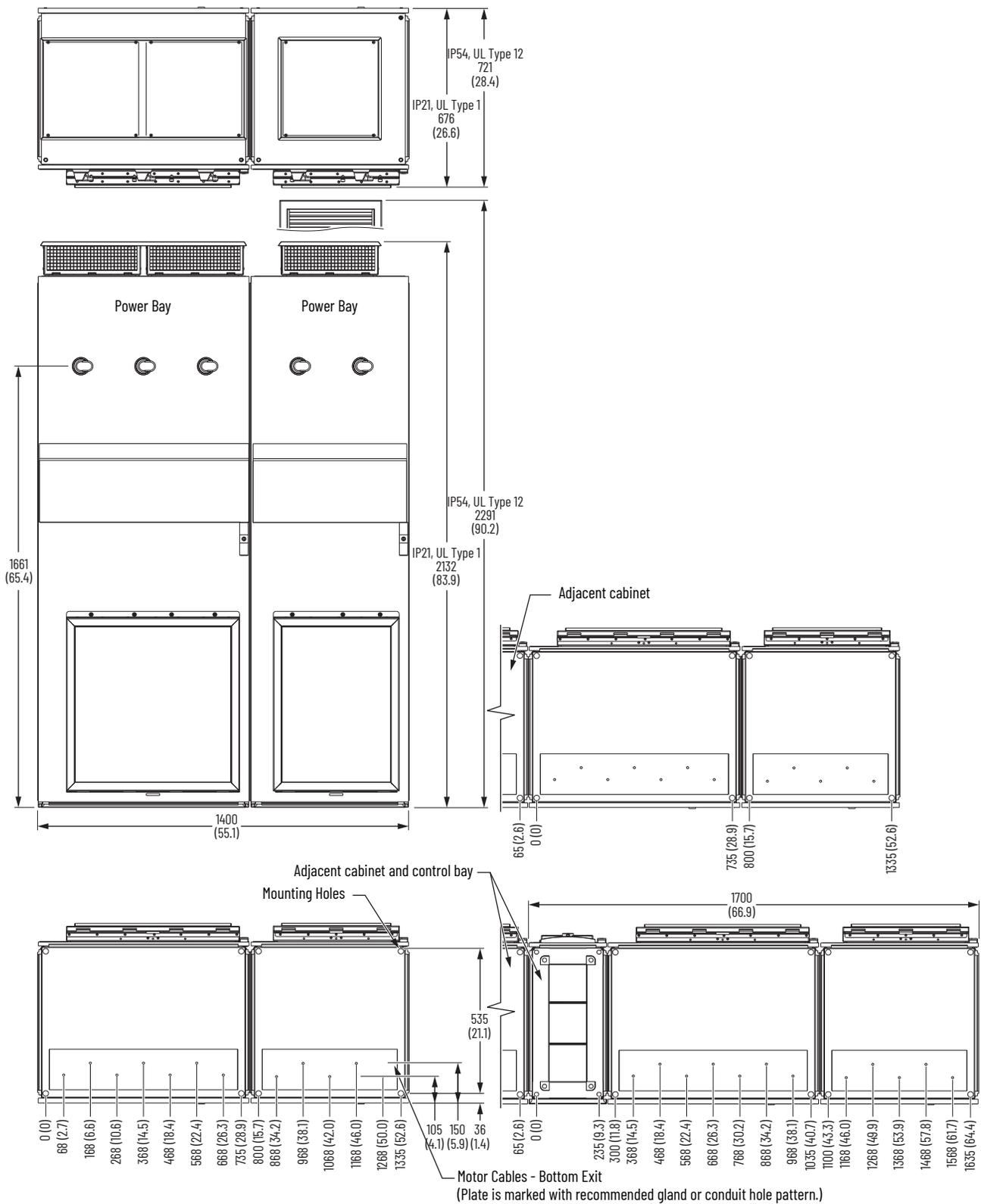
See [page 147](#) for optional exit wire bay dimensions.



Frame 12 Common Bus Inverters Top, Front, and Bottom Views

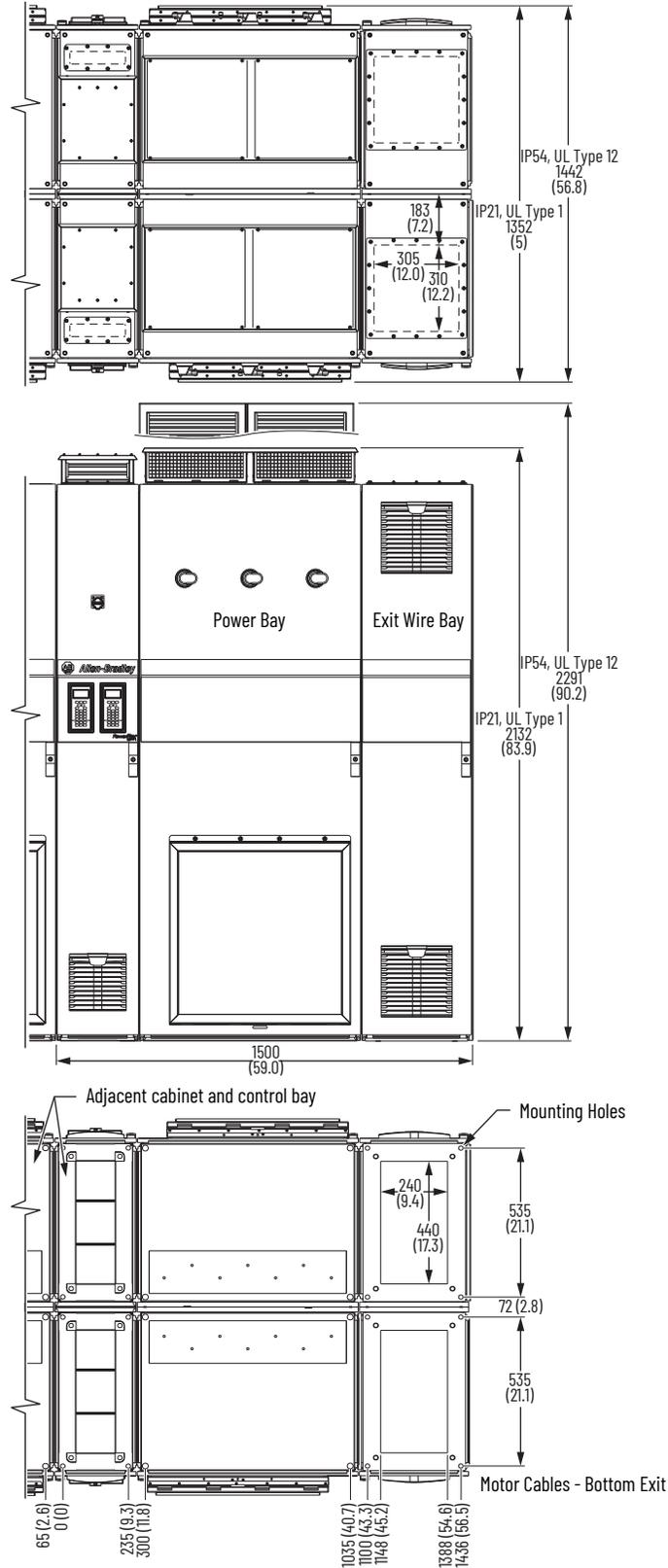
Approximate Dimensions [mm (in.)]

See [page 147](#) for optional exit wire bay dimensions.



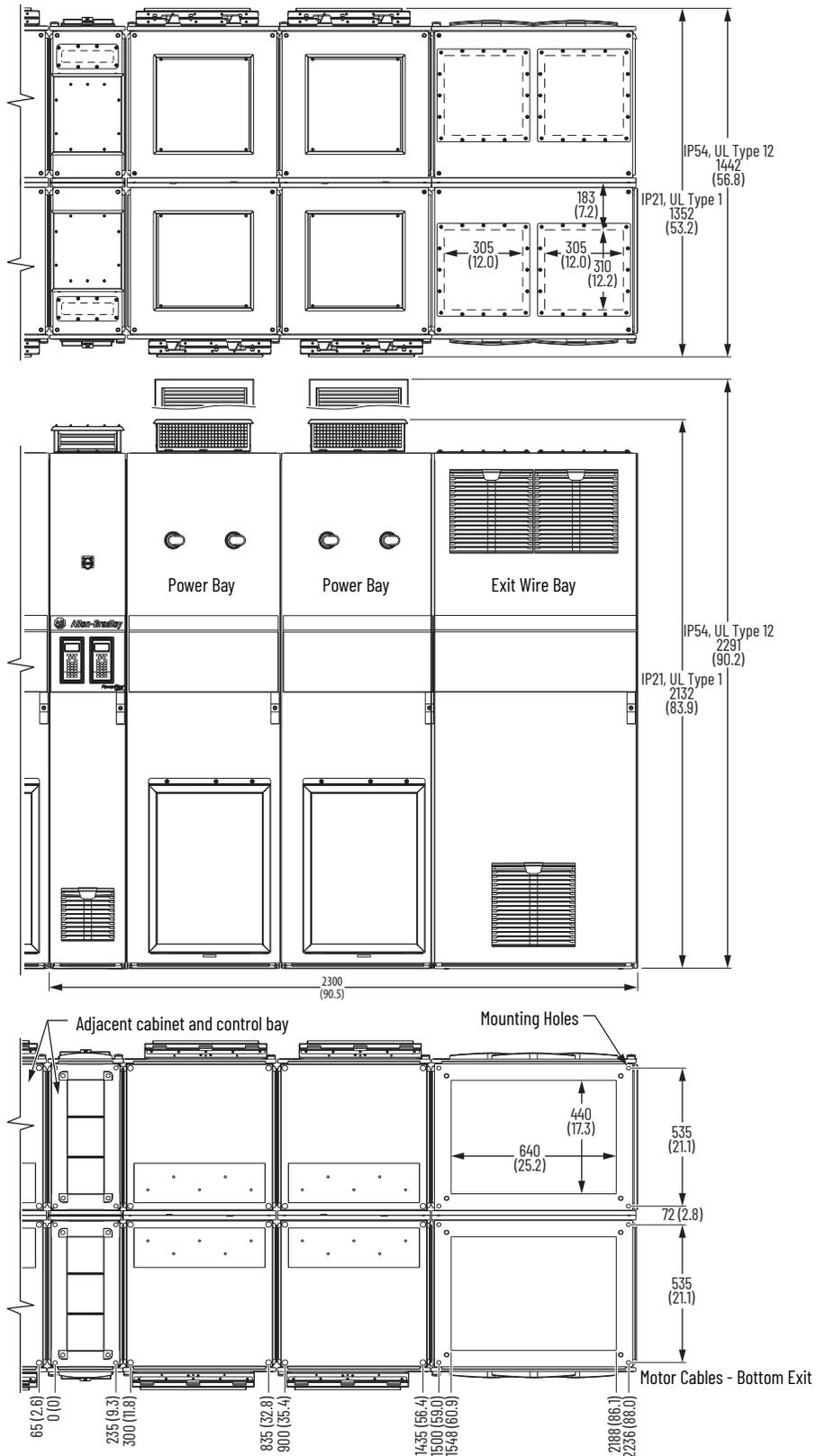
Frame 13 Common Bus Inverters Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]



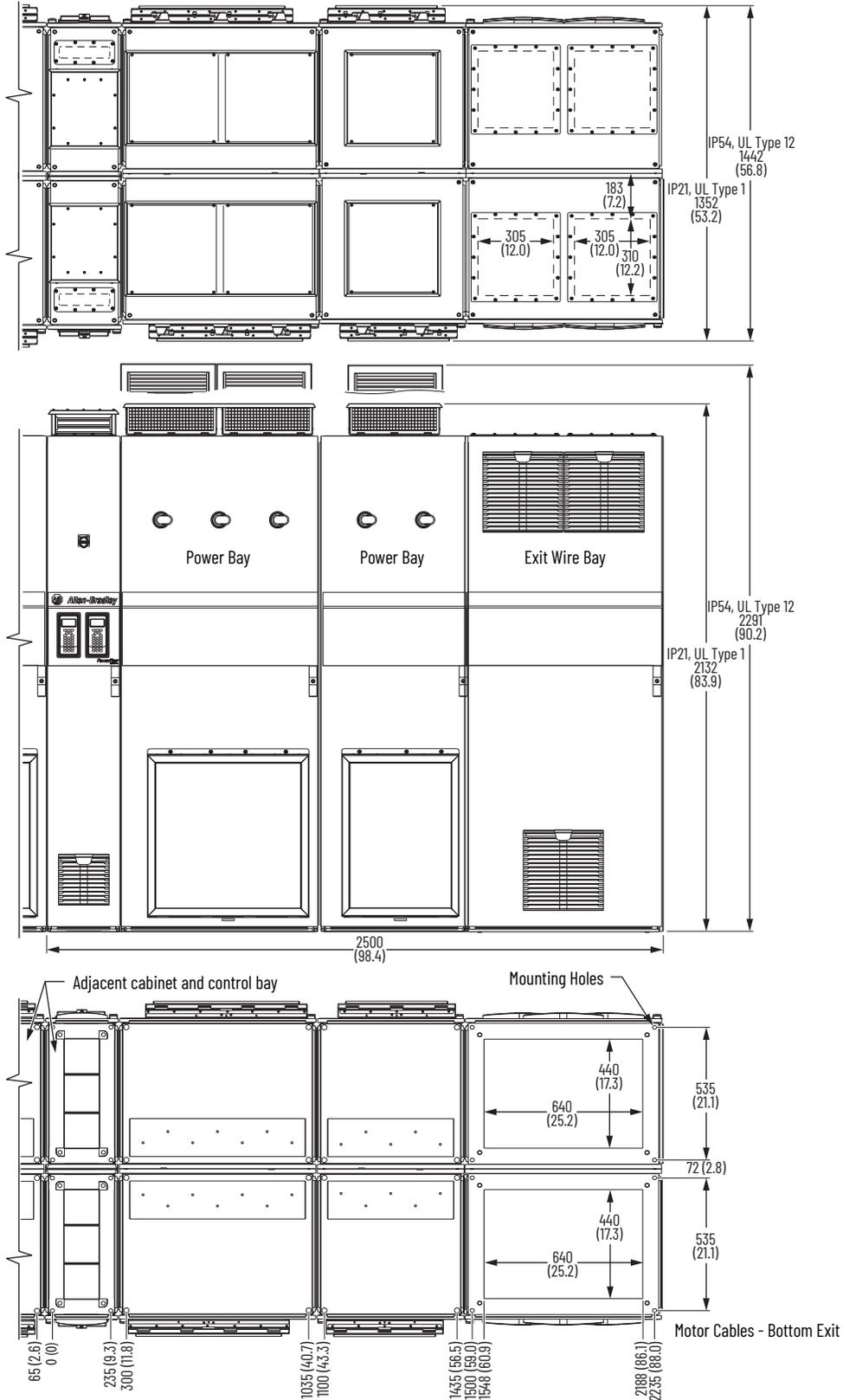
Frame 14 Common Bus Inverters Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]

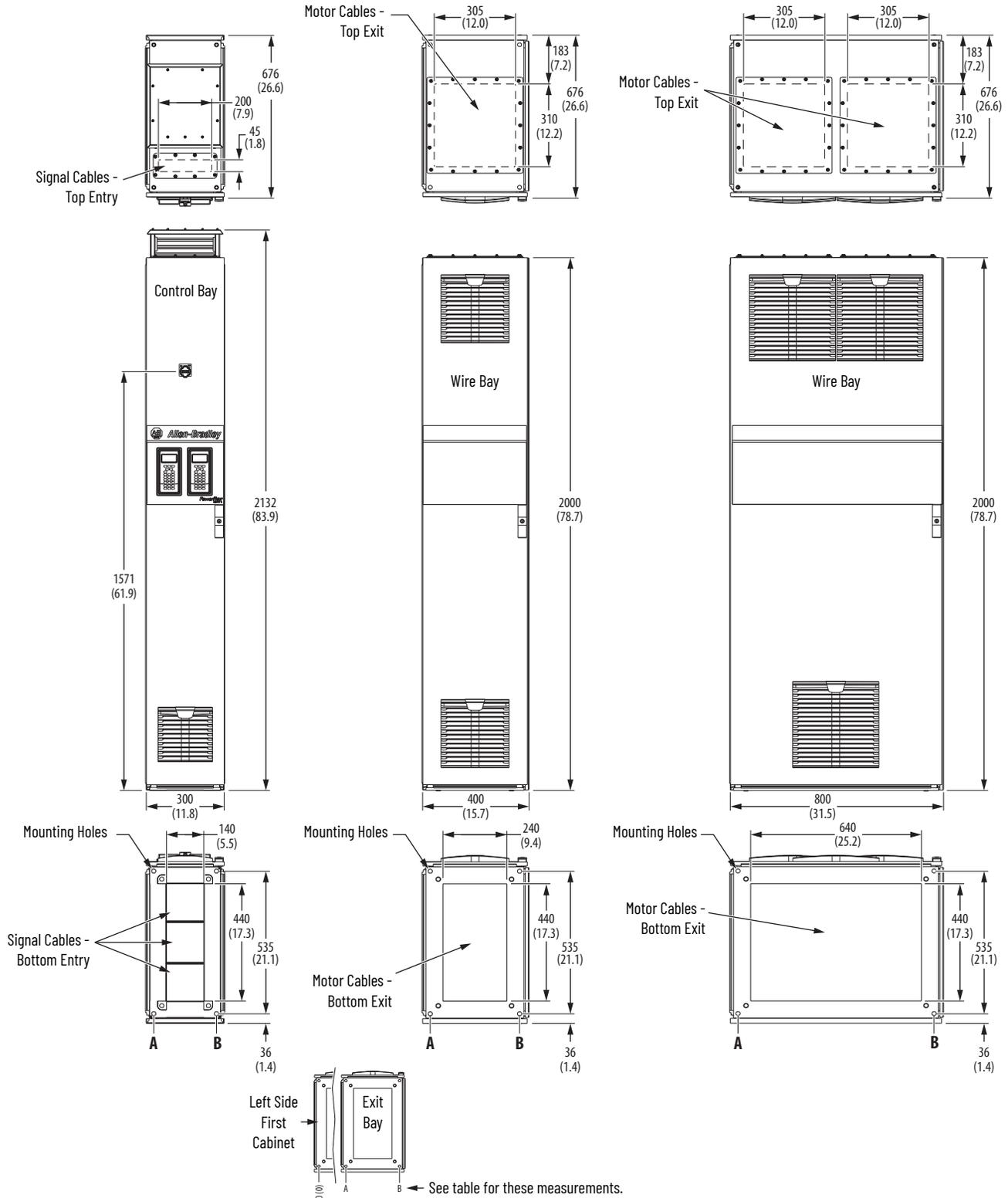


Frame 15 Common Bus Inverters Top, Front, and Bottom Views

Approximate Dimensions [mm (in.)]



Common Bus Inverter Control Bay and Optional Exit Wire Bays Top, Front, and Bottom Views Approximate Dimensions [mm (in.)]



← See table for these measurements.

Frame	Control Bay - 300 (11.8) Wide		Exit Bay - 400 (15.7) Wide		Exit Bay - 800 (31.5) Wide	
	A	B	A	B	A	B
8	300 (11.8)	65 (2.6)	400 (15.7)	735 (28.9)	-	-
9	300 (11.8)	65 (2.6)	600 (23.6)	935 (36.8)	-	-
10	300 (11.8)	65 (2.6)	800 (31.5)	1135 (44.7)	-	-
11	300 (11.8)	65 (2.6)	-	-	1200 (47.2)	1935 (76.1)
12	300 (11.8)	65 (2.6)	-	-	1400 (55.1)	2135 (84.0)

Derating Guidelines

The following sections describe conditional derating guidelines for voltage boost, ambient temperature, low speed, and temperature and altitude.

For switching frequencies greater than 4 kHz, low-speed operation, or operation at elevations greater than 2000 m (6562 ft) above sea level, the maximum ambient temperature supported is 40 °C (104 °F). For these conditions, see these sections:

Ambient Temperature Derating Section	Page
Bus Supply and Common Bus Inverter Ambient Temperature Derating	149
Drive Ambient Temperature Derating	150

Low Speed Derating with Reduced Carrier Frequency Section	Page
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Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15	155
Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—480V AC Frames 5, 6, and 6L	162
Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15	166
Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—600V AC Frames 5...6	172
Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—600V AC Frames 7...15	175
Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—690V AC Frames 5...6	181
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Low Speed/Load Derating for IP00, UL Open Type—400V AC Frames 5, 6, and 6L	190
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Low Speed/Load Derating for IP00, UL Open Type—480V AC Frames 5, 6, and 6L	200
Low Speed/Load Derating for IP00, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15	204
Low Speed/Load Derating for IP00, UL Open Type—600V AC Frames 5...6	210
Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12—600V AC Frames 7...15	213
Low Speed/Load Derating for IP00, UL Open Type—690V AC Frames 5...6	219
Low Speed/Load Derating for IP00, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15	222

Ambient Temperature and Altitude Derating Section	Page
Ambient Temperature and Altitude Derating for IP00, UL Open Type—400V AC Frames 5...6	228
Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15	232
Ambient Temperature and Altitude Derating for IP00, UL Open Type—480V AC Frames 5...6	238
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Ambient Temperature and Altitude Derating for IP00, UL Open Type—600V AC Frames 5...6	248
Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—600V AC Frames 7...15	251
Ambient Temperature and Altitude Derating for IP00, UL Open Type—690V AC Frames 5...6	257
Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15	260

Voltage Boost Derating

When voltage control parameters are used to set the DC bus voltage reference to a value that is greater than the default value, the DC bus output current is reduced. This voltage boost does not affect overload capabilities. Consult factory for derate information.

Ambient Temperature Derating

The derating curves in this section apply under these conditions:

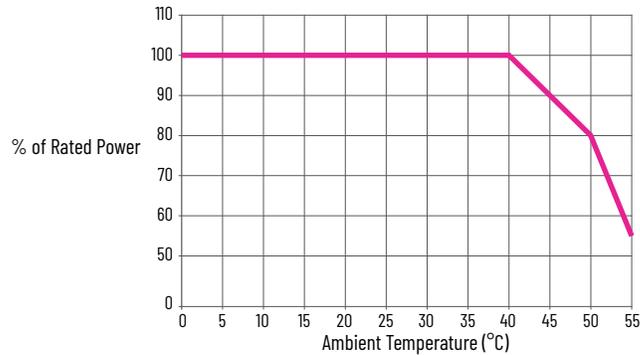
- The switching frequency is 2 kHz or 4 kHz.
- The operation is not low-speed. In this situation, "low-speed" is defined as continuously below 10 Hz output frequency.
- The elevation is not greater than 2000 m (6562 ft) above sea level.

Bus Supply and Common Bus Inverter Ambient Temperature Derating

PowerFlex 750T bus supplies and common bus inverters are designed to operate at -20...+40 °C (-4...+104 °F) ambient without derating. The following graphs show the derating curves at default carrier frequency. Operation of any bus supply or common bus inverter above the maximum temperature shown on its derating curve is not supported.

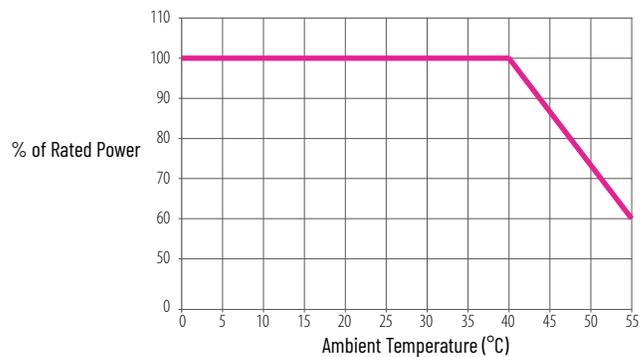
This derate curve applies to the following:

- Bus supplies with DC precharge, with the exception of frame 7
- Common bus inverters with DC precharge, with the exception of frame 7



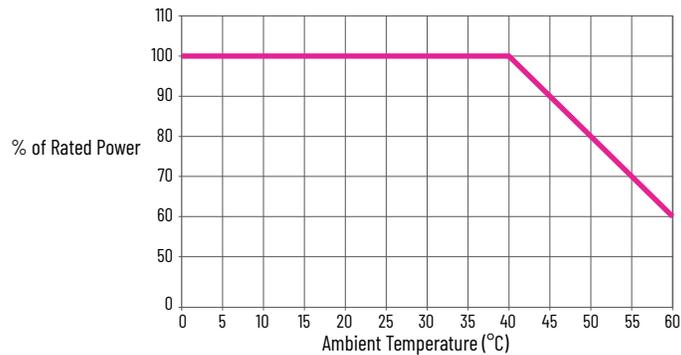
This derate curve applies to the following:

- Frame 7 bus supplies
- Frame 7 common bus inverters



This derate curve applies to the following:

- Bus supplies without DC precharge, with the exception of frame 7
- Common bus inverters without DC precharge, with the exception of frame 7



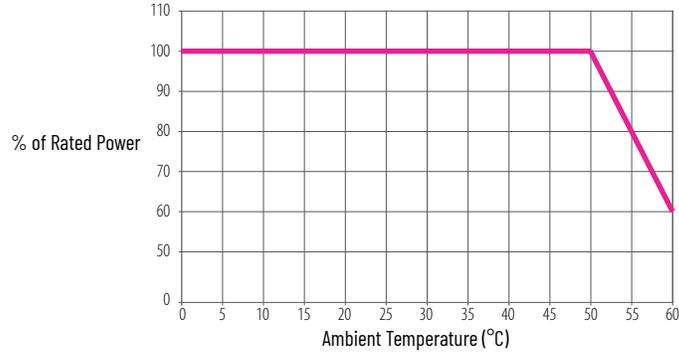
Drive Ambient Temperature Derating

- PowerFlex 750T drives are designed to operate at -20...+40 °C (-4...+104 °F) ambient without derating.
- PowerFlex 755TL frames 5 and 6 and PowerFlex 755TR frames 5 and 6 operate at 50 °C (122 °F) without derating in most conditions.
- PowerFlex 755TR frame 6L (liquid cooled) operates at 0...50 °C (32...122 °F) ambient without derating.

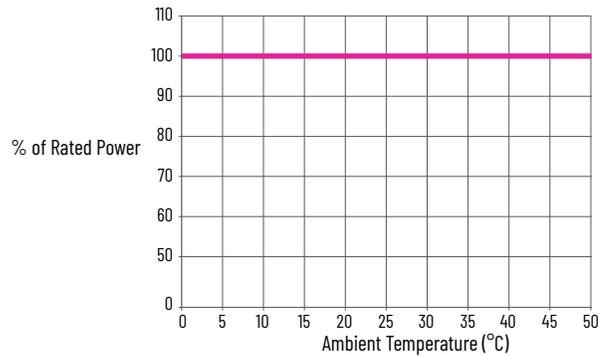
The following graphs show the derating curves at default carrier frequency. Operation of any drive above the maximum temperature shown on its derating curve is not supported.

This derate curve applies to the following drives:

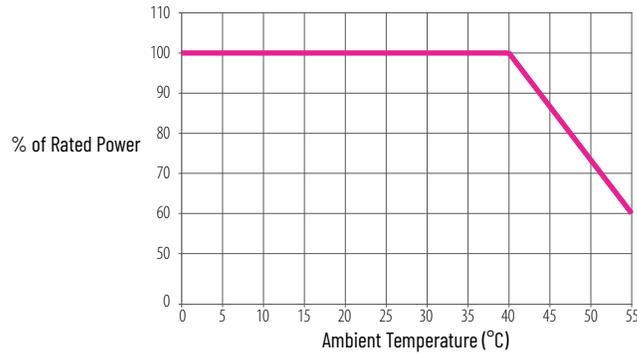
- PowerFlex 755TL frames 5 and 6
- PowerFlex 755TR frames 5 and 6



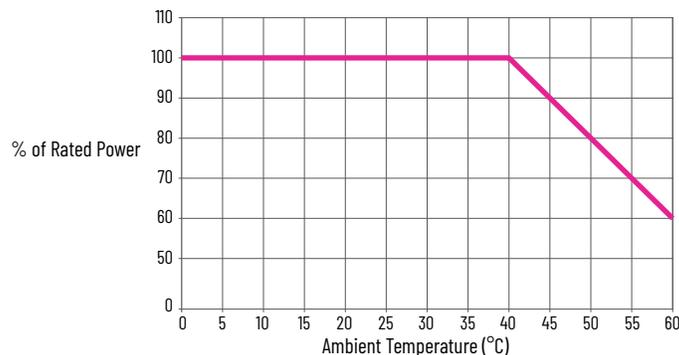
This derate curve applies to frame 6L drives.
(No derate and no operation above 50 °C)



This derate curve applies to frame 7 drives.



This derate curve applies to frame 8...15 drives.



Low Speed Derating with Reduced Carrier Frequency

The following graphs show the reduced carrier frequency deratings for motor side inverters. If a catalog number is not shown, that drive can be operated without derating as long as the limits specified on page 148 are followed.

Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—400V AC Frames 5, 6, and 6L

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type			
		LD		ND		HD		Output Freq.	PWM Frequency		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.666 kHz	1.33 kHz	
C015	5	11	22	7.5	15.4	11.5	5.5	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
C022	5	15	30	11	22	7.5	15.4	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
C030	5	18.5	37	15	30	11	22	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	

Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—400V AC Frames 5, 6, and 6L (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type			
		LD		ND		HD		Output Freq.	PWM Frequency		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.666 kHz	1.33 kHz	
C037	5	22	43	18.5	37	15	30	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								C043	5	30	
2	100	100									
4	100	100									
6	100	100									
8	100	100									
10	100	100									
15	100	100									
20	100	100									
30	100	100									
45	100	100									
60	100	100									
C060	5	37	72	30	60	22	43				0
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								C072	5	45	85
2	100	100									
4	100	100									
6	100	100									
8	100	100									
10	100	100									
15	100	100									
20	100	100									
30	100	100									
45	100	100									
60	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—400V AC Frames 5, 6, and 6L (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type			
		LD		ND		HD		Output Freq.	PWM Frequency		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.666 kHz	1.33 kHz	
C085	5	55	104	45	85	37	72	0	89	83	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								C104	5	55	
2	100	100									
4	100	100									
6	100	100									
8	100	100									
10	100	100									
15	100	100									
20	100	100									
30	100	100									
45	100	100									
60	100	100									
C140	6	90	170	75	140	55	104				0
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								C176	6	110	205
2	100	100									
4	100	100									
6	100	100									
8	100	100									
10	100	100									
15	100	100									
20	100	100									
30	100	100									
45	100	100									
60	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—400V AC Frames 5, 6, and 6L (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type			
		LD		ND		HD		Output Freq.	PWM Frequency		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.666 kHz	1.33 kHz	
C205	6	132	260	110	205	90	170	0	100	84	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								C260	6	160	
2	100	100									
4	100	100									
6	100	100									
8	100	100									
10	100	100									
15	100	100									
20	100	100									
30	100	100									
45	100	100									
60	100	100									
C360	6L	200	361	200	361	132	264				0
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
C302	7	200	367	160	302	132	260	0	100	100	100	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								60	100	100	100	
C367	7	250	460	200	367	160	302	0	100	100	100	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								60	100	100	100	
C460	7	315	540	250	460	200	367	0	100	100	94	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								60	100	100	100	
C540	7	315	585	315	540	250	460	0	97	94	86	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								60	100	100	100	

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
C585	7	315	617	315	600	250	500	0	92	89	82	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C302	8	200	367	160	302	132	260	0	100	100	97	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C367	8	250	460	200	367	160	302	0	88	85	77	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C460	8	315	540	250	460	200	367	0	75	72	66	
								2	100	100	97	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
C540	8	315	585	315	540	250	460	0	69	67	61	
								2	99	97	89	
								4	100	100	96	
								6	100	100	98	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								C585	8	355	650	
2	100	100	88									
4	100	100	95									
6	100	100	97									
8	100	100	99									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
C302	8	200	367	160	302	132	260					0
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								C367	8	250	460	200
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
C460	8	315	540	250	460	200	367	0	75	72	66	
								2	100	100	97	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								C540	8	315	585	
2	99	97	89									
4	100	100	96									
6	100	100	98									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
C585	8	355	650	315	585	250	472					0
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								C650	8	400	750	355
2	100	100	99									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
C750	8	450	796	400	750	315	585	0	76	73	66	
								2	100	100	97	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								C770	8	450	832	
2	100	97	89									
4	100	100	96									
6	100	100	97									
8	100	100	99									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
C920	9	560	1040	500	920	400	770					0
								2	100	100	96	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								C1K0	9	630	1090	560
2	100	100	92									
4	100	100	99									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
C1K1	9	710	1182	630	1112	500	1040	0	94	90	82	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								C1K2	9	800	1465	
2	100	100	96									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
C1K4	9	850	1581	800	1463	630	1175					0
								2	100	97	89	
								4	100	100	95	
								6	100	100	97	
								8	100	100	99	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								C1K6	10	1000	1715	850
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
C1K7	10	1250	2150	1000	1715	800	1480	0	76	73	66	
								2	100	100	97	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C2K1	10	1400	2330	1250	2156	1000	1715	0	70	68	61	
								2	100	97	89	
								4	100	100	95	
								6	100	100	97	
								8	100	100	99	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C4K2	13	2475	4576	2200	4235	1953	3575	0	70	68	61	
								2	100	97	89	
								4	100	100	95	
								6	100	100	97	
								8	100	100	99	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C2K8	11	1800	3078	1650	2849	1400	2330	0	70	68	61	
								2	100	97	89	
								4	100	100	96	
								6	100	100	97	
								8	100	100	99	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C5K6	14	3285	6074	2920	5621	2592	4745	0	70	67	61	
								2	99	97	89	
								4	100	100	95	
								6	100	100	97	
								8	100	100	98	
								10	100	100	99	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C3K5	12	2200	3846	2000	3542	1650	3032	0	70	67	61	
								2	99	97	89	
								4	100	100	95	
								6	100	100	97	
								8	100	100	98	
								10	100	100	99	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C7K0	15	4095	7571	3640	7007	3231	5915	0	70	67	61	
								2	99	97	89	
								4	100	100	95	
								6	100	100	97	
								8	100	100	98	
								10	100	100	99	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	

Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—480V AC Frames 5, 6, and 6L

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type			
		LD		ND		HD		Output Freq.	PWM Frequency		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.666 kHz	1.33 kHz	
D014	5	15	22	10	14	7.5	11	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								60	100	100	
D022	5	20	27	15	22	10	14	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								60	100	100	
D027	5	25	34	20	27	15	22	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								60	100	100	
D034	5	30	40	25	34	20	27	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								60	100	100	

Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—480V AC Frames 5, 6, and 6L (Continued)

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type			
		LD		ND		HD		Output Freq.	PWM Frequency		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.666 kHz	1.33 kHz	
D040	5	40	52	30	40	25	34	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								D052	5	50	
2	100	100									
4	100	100									
6	100	100									
8	100	100									
10	100	100									
15	100	100									
20	100	100									
30	100	100									
45	100	100									
60	100	100									
D065	5	60	77	50	65	40	52				0
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								D077	5	75	96
2	100	100									
4	100	100									
6	100	100									
8	100	100									
10	100	100									
15	100	100									
20	100	100									
30	100	100									
45	100	100									
60	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—480V AC Frames 5, 6, and 6L (Continued)

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type			
		LD		ND		HD		Output Freq.	PWM Frequency		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.666 kHz	1.33 kHz	
D096	5	75	96	75	96	60	77	0	95	88	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								D125	6	125	
2	100	100									
4	100	100									
6	100	100									
8	100	100									
10	100	100									
15	100	100									
20	100	100									
30	100	100									
45	100	100									
60	100	100									
D156	6	150	186	125	156	100	125				0
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								D186	6	200	248
2	100	100									
4	100	100									
6	100	100									
8	100	100									
10	100	100									
15	100	100									
20	100	100									
30	100	100									
45	100	100									
60	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—480V AC Frames 5, 6, and 6L (Continued)

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type			
		LD		ND		HD		Output Freq.	PWM Frequency		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.666 kHz	1.33 kHz	
D248	6	250	302	200	248	150	186	0	100	93	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								D360	6L	300	
2	100	100									
4	100	100									
6	100	100									
8	100	100									
10	100	100									
15	100	100									
20	100	100									
30	100	100									
45	100	100									
60	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				<div style="display: flex; justify-content: space-around; align-items: center;"> 0.444 kHz 0.666 kHz 1.33 kHz </div>
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
D302	7	300	361	250	302	200	248	0	100	100	100	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								D361	7	350	430	
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
D430	7	400	485	350	430	300	361					0
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								D505	7	450	545	400
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
D617	7	500	617	500	600	400	500	0	91	88	79	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								D302	8	300	361	
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
D361	8	350	430	300	361	250	302					0
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								D430	8	400	485	350
2	100	100	97									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
D505	8	450	545	400	505	350	430	0	69	67	61	
								2	99	97	89	
								4	100	100	96	
								6	100	100	98	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								D545	8	500	617	
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
D617	8	600	710	500	617	400	485					0
								2	100	100	99	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								D710	8	650	765	600
2	100	100	97									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
D740	8	700	800	650	740	500	617	0	70	68	61	
								2	100	97	89	
								4	100	100	96	
								6	100	100	97	
								8	100	100	99	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								D800	9	800	960	
2	100	100	96									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
D960	9	900	1045	800	960	700	800					0
								2	100	100	92	
								4	100	100	99	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								D1K0	9	1000	1135	900
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
D1K1	9	1100	1365	1000	1135	800	1045	0	75	73	66	
								2	100	100	96	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								D1K3	9	1250	1520	
2	100	97	89									
4	100	100	95									
6	100	100	97									
8	100	100	99									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
D1K4	10	1500	1655	1250	1420	1000	1365					0
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								D1K6	10	1800	2070	1500
2	100	100	97									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
D2K0 D4K0	10	2000	2240	1800	2072	1500	1655	0	70	68	61	
								2	100	97	89	
								4	100	100	95	
								6	100	100	97	
								8	100	100	99	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
D2K6 D5K4	11	2600	2960	2400	2738	2000	2240	0	70	68	61	
								2	100	97	89	
								4	100	100	96	
								6	100	100	97	
								8	100	100	99	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
D3K4 D6K7	12	3300	3696	3000	3404	2400	2980	0	70	67	61	
								2	99	97	89	
								4	100	100	95	
								6	100	100	97	
								8	100	100	98	
								10	100	100	99	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	

Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—600V AC Frames 5...6

Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type			
		LD		ND		HD		Output Freq.	PWM Frequency		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.666 kHz	1.33 kHz	
E011	5	15	17	10	11	7.5	9	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								60	100	100	
E017	5	20	22	15	17	10	11	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								60	100	100	
E022	5	25	27	20	22	15	17	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								60	100	100	
E027	5	30	32	25	27	20	22	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								60	100	100	

Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—600V AC Frames 5..6 (Continued)

Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type			
		LD		ND		HD		Output Freq.	PWM Frequency		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.666 kHz	1.33 kHz	
E032	5	40	41	30	32	25	27	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
E041	5	50	52	40	41	30	32	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
E052	5	60	62	50	52	40	41	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
E062	5	75	77	60	62	50	52	0	86	77	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	

Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—600V AC Frames 5..6 (Continued)

Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type			
		LD		ND		HD		Output Freq.	PWM Frequency		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.666 kHz	1.33 kHz	
E077	6	100	99	75	77	60	62	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								E099	6	125	
2	100	100									
4	100	100									
6	100	100									
8	100	100									
10	100	100									
15	100	100									
20	100	100									
30	100	100									
45	100	100									
60	100	100									
E125	6	150	144	125	125	100	99				0
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								E144	6	200	192
2	100	100									
4	100	100									
6	100	100									
8	100	100									
10	100	100									
15	100	100									
20	100	100									
30	100	100									
45	100	100									
60	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—600V AC Frames 7...15

Cat. No. 206...	Frame	600V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
E192	7	250	242	200	192	150	144	0	100	100	100	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								E242	7	300	295	
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
E295	7	350	355	300	295	250	242					0
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								E355	7	400	395	350
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—600V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
E395	7	450	435	400	395	350	355	0	80	76	65	
								2	100	100	95	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								E242	8	300	295	
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
E295	8	350	355	300	295	250	242					0
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								E355	8	400	395	350
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—600V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
E395	8	450	435	400	395	350	355	0	80	75	63	
								2	100	100	96	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								E435	8	500	510	
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
E545	8	600	580	550	545	450	450					0
								2	100	100	97	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								E595	9	700	690	600
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—600V AC Frames 7...15 (Continued)

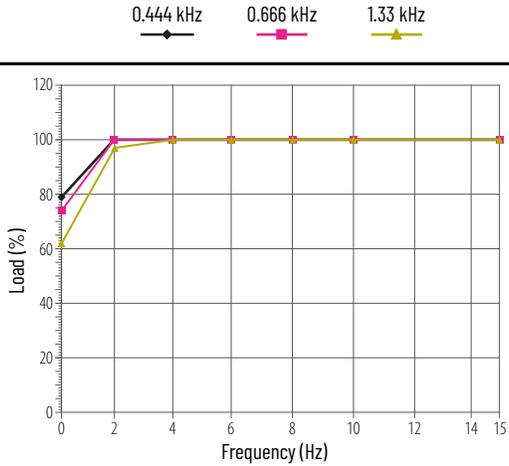
Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
E690	9	800	760	700	690	600	595	0	92	83	64	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								E760	9	900	825	
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
E825	9	1000	980	900	825	800	760					0
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								E980	9	1100	1102	1000
2	100	100	93									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—600V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
E1K1	10	1250	1220	1100	1045	1000	980	0	100	100	86	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
E1K2	10	1500	1430	1250	1220	1100	1045	0	94	88	73	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
E1K5 E2K9	10	1600	1624	1500	1430	1250	1220	0	80	75	62	
								2	100	100	97	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
	13	3300	3190	3100	2998	2500	2475	10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
E2K0 E3K9	11	2100	2146	2000	1946	1800	1700	0	79	74	62	
								2	100	100	97	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
	14	4400	4234	4100	3979	3300	3285	10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—600V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12			
		LD		ND		HD		Output Freq.	PWM Frequency		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz
E2K4 E4K9	12	2600	2668	2500	2420	2100	2070	0	79	74	62
								2	100	100	97
								4	100	100	100
								6	100	100	100
								8	100	100	100
								10	100	100	100
	15	5500	5278	5100	4960	4100	4095	15	100	100	100
								20	100	100	100
								30	100	100	100
								45	100	100	100
								60	100	100	100



Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—690V AC Frames 5...6

Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type			
		LD		ND		HD		Output Freq.	PWM Frequency		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	2 kHz	4 kHz	
F015	5	15	20	11	15	7.5	12	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
F020	5	18.5	23	15	20	11	15	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
F023	5	22	30	18.5	23	15	20	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
F030	5	30	34	22	30	18.5	23	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	

Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—690V AC Frames 5...6 (Continued)

Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type			
		LD		ND		HD		Output Freq.	PWM Frequency		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	2 kHz	4 kHz	
F034	5	37	46	30	34	22	30	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								F046	5	45	
2	100	100									
4	100	100									
6	100	100									
8	100	100									
10	100	100									
15	100	100									
20	100	100									
30	100	100									
45	100	100									
60	100	100									
F050	5	55	61	45	50	37	46				0
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								F061	5	75	82
2	100	100									
4	100	100									
6	100	100									
8	100	100									
10	100	100									
15	100	100									
20	100	100									
30	100	100									
45	100	100									
60	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type—690V AC Frames 5...6 (Continued)

Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP00, UL Open Type			
		LD		ND		HD		Output Freq.	PWM Frequency		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	2 kHz	4 kHz	
F082	6	90	98	75	82	55	61	0	100	100	
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								F098	6	110	
2	100	100									
4	100	100									
6	100	100									
8	100	100									
10	100	100									
15	100	100									
20	100	100									
30	100	100									
45	100	100									
60	100	100									
F119	6	132	142	110	119	90	98				0
								2	100	100	
								4	100	100	
								6	100	100	
								8	100	100	
								10	100	100	
								15	100	100	
								20	100	100	
								30	100	100	
								45	100	100	
								60	100	100	
								F142	6	160	171
2	100	100									
4	100	100									
6	100	100									
8	100	100									
10	100	100									
15	100	100									
20	100	100									
30	100	100									
45	100	100									
60	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15

Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
F171	7	200	215	160	171	132	142	0	100	100	100	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								60	100	100	100	
F215	7	250	265	200	215	160	171	0	100	100	86	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								60	100	100	100	
F265	7	315	330	250	265	200	215	0	92	86	72	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								60	100	100	100	
F330	7	355	370	315	330	250	265	0	83	77	64	
								2	100	100	95	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								60	100	100	100	

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
F370	7	400	415	355	370	315	330	0	75	70	58	
								2	100	100	86	
								4	100	100	95	
								6	100	100	98	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								F215	8	250	265	
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
F265	8	315	330	250	265	200	215					0
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								F330	8	355	370	315
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
F370	8	400	415	355	370	315	330	0	80	75	63	
								2	100	100	96	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								F415	8	450	460	
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
F505	8	560	565	500	505	400	415					0
								2	100	100	97	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								F565	9	630	650	560
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15 (Continued)

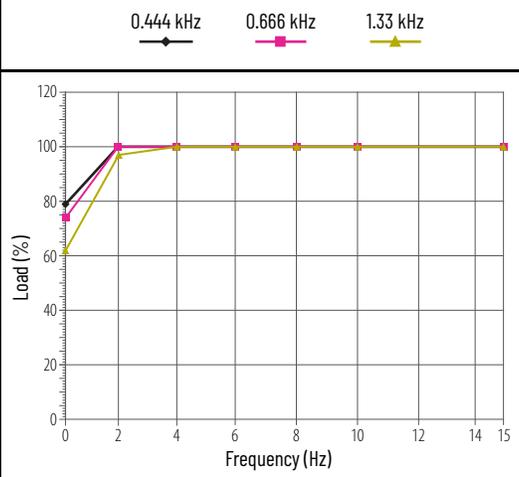
Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
F650	9	710	735	630	650	560	565	0	92	83	64	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								F735	9	800	820	
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
F820	9	900	920	800	820	710	735					0
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								F920	9	1000	1074	900
2	100	100	93									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz	
F1K0	10	1100	1150	1000	1030	900	920	0	100	100	86	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
F1K1	10	1250	1344	1100	1150	1000	1030	0	94	88	73	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
F1K4 F2K7	10	1500	1582	1400	1419	1100	1162	0	80	75	62	
								2	100	100	97	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
	13	3080	3108	2750	2778	2200	2283	10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
F1K8 F3K6	11	2000	2091	1800	1865	1500	1535	0	79	74	62	
								2	100	100	97	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
	14	4088	4125	3650	3687	2920	3030	10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	

Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed Derating with Reduced Carrier Frequency for IP20, UL Type 1 and IP54, UL Type 12			
		LD		ND		HD		Output Freq.	PWM Frequency		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	0.444 kHz	0.666 kHz	1.33 kHz
F2K3 F4K5	12	2500	2599	2300	2318	2000	2020	0	79	74	62
	15	5096	5142	4550	4596	3640	3777	2	100	100	97
								4	100	100	100
								6	100	100	100
								8	100	100	100
								10	100	100	100
								15	100	100	100
								20	100	100	100
								30	100	100	100
								45	100	100	100
								60	100	100	100



Low Speed/Load Derating

The following graphs show the carrier frequency deratings for motor side inverters. If a catalog number is not shown, that drive can be operated without derating as long as the limits specified on page 148 are followed.

Low Speed/Load Derating for IP00, UL Open Type—400V AC Frames 5, 6, and 6L

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed/Load Derating for IP00, UL Open Type					
		LD		ND		HD		Output Freq.	PWM Frequency				
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	2 kHz	4 kHz	8 kHz	12 kHz	
C015	5	11	22	7.5	15.4	11.5	5.5	0	100	100	100	100	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
C022	5	15	30	11	22	7.5	15.4	0	100	100	100	100	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
C030	5	18.5	37	15	30	11	22	0	100	100	100	100	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	

Low Speed/Load Derating for IP00, UL Open Type—400V AC Frames 5, 6, and 6L (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed/Load Derating for IP00, UL Open Type					
		LD		ND		HD		Output Freq.	PWM Frequency				
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	2 kHz	4 kHz	8 kHz	12 kHz	
C037	5	22	43	18.5	37	15	30	0	100	100	100	93	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
C043	5	30	60	22	43	18.5	37	0	100	100	84	66	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
C060	5	37	72	30	60	22	43	0	100	95	70	55	
								2	100	100	100	97	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
C072	5	45	85	37	72	30	60	0	96	80	59	47	
								2	100	100	100	82	
								4	100	100	100	92	
								6	100	100	100	95	
								8	100	100	100	98	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	

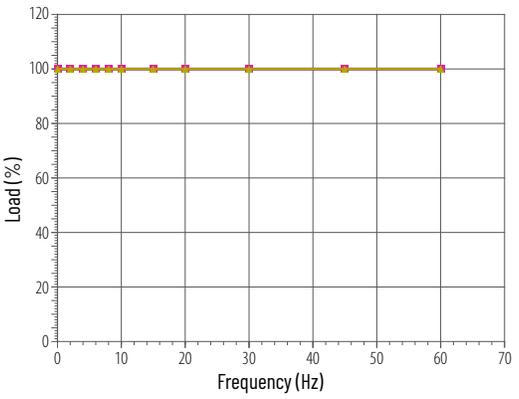
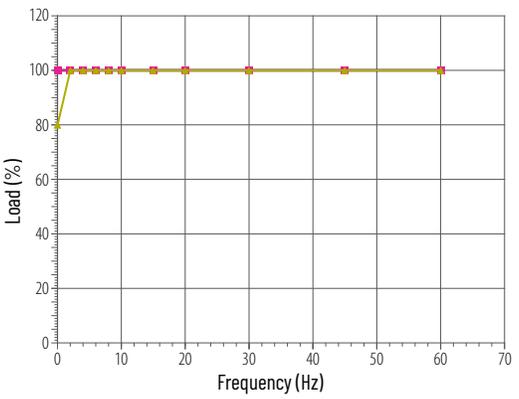
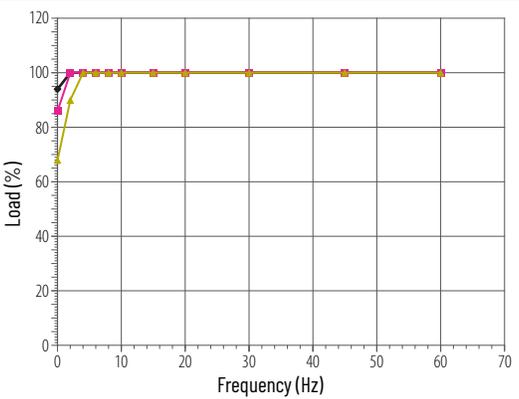
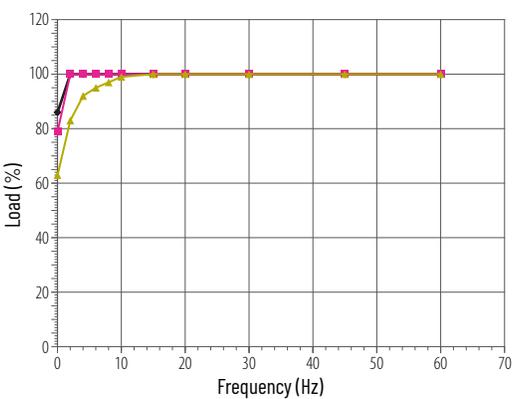
Low Speed/Load Derating for IP00, UL Open Type—400V AC Frames 5, 6, and 6L (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed/Load Derating for IP00, UL Open Type					
		LD		ND		HD		Output Freq.	PWM Frequency				
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	2 kHz	4 kHz	8 kHz	12 kHz	
C085	5	55	104	45	85	37	72	0	78	65	48	38	
								2	100	100	83	67	
								4	100	100	93	75	
								6	100	100	96	78	
								8	100	100	99	80	
								10	100	100	100	81	
								15	100	100	100	84	
								20	100	100	100	86	
								30	100	100	100	88	
								45	100	100	100	90	
								60	100	100	100	91	
C104	5	55	104	55	104	45	85	0	78	65	48	38	
								2	100	100	83	67	
								4	100	100	93	75	
								6	100	100	96	78	
								8	100	100	99	80	
								10	100	100	100	81	
								15	100	100	100	84	
								20	100	100	100	86	
								30	100	100	100	88	
								45	100	100	100	90	
								60	100	100	100	91	
C140	6	90	170	75	140	55	104	0	100	100	92	71	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
C176	6	110	205	90	170	75	140	0	100	100	77	59	
								2	100	100	100	96	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	

Low Speed/Load Derating for IP00, UL Open Type—400V AC Frames 5, 6, and 6L (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed/Load Derating for IP00, UL Open Type					
		LD		ND		HD		Output Freq.	PWM Frequency				
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	2 kHz	4 kHz	8 kHz	12 kHz	
C205	6	132	260	110	205	90	170	0	100	84	60	46	
								2	100	100	96	75	
								4	100	100	100	83	
								6	100	100	100	85	
								8	100	100	100	87	
								10	100	100	100	88	
								15	100	100	100	90	
								20	100	100	100	92	
								30	100	100	100	93	
								45	100	100	100	95	
								60	100	100	100	95	
C260	6L	160	302	132	260	110	205	0	89	72	52	40	
								2	100	100	83	65	
								4	100	100	91	71	
								6	100	100	93	73	
								8	100	100	95	75	
								10	100	100	96	76	
								15	100	100	99	78	
								20	100	100	100	79	
								30	100	100	100	80	
								45	100	100	100	82	
								60	100	100	100	82	
C360	6L	200	361	200	361	132	264	0	77	60	41	31	
								2	100	100	80	61	
								4	100	100	92	71	
								6	100	100	96	75	
								8	100	100	99	77	
								10	100	100	100	79	
								15	100	100	100	83	
								20	100	100	100	85	
								30	100	100	100	88	
								45	100	100	100	91	
								60	100	100	100	92	

Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				<div style="display: flex; justify-content: space-around; align-items: center;"> 1.33 kHz 2 kHz 4 kHz </div> 
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
C302	7	200	367	160	302	132	260	0	100	100	100	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C367	7	250	460	200	367	160	302	0	100	100	80	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C460	7	315	540	250	460	200	367	0	94	86	68	
								2	100	100	90	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C540	7	315	585	315	540	250	460	0	86	79	63	
								2	100	100	83	
								4	100	100	92	
								6	100	100	95	
								8	100	100	97	
								10	100	100	99	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	

Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
C585	7	315	617	315	600	250	500	0	82	75	60	
								2	100	97	79	
								4	100	100	87	
								6	100	100	90	
								8	100	100	92	
								10	100	100	94	
								15	100	100	97	
								20	100	100	99	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C302	8	200	367	160	302	132	260	0	97	88	68	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C367	8	250	460	200	367	160	302	0	77	70	55	
								2	100	100	84	
								4	100	100	92	
								6	100	100	94	
								8	100	100	96	
								10	100	100	97	
								15	100	100	99	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C460	8	315	540	250	460	200	367	0	66	60	46	
								2	97	89	72	
								4	100	96	78	
								6	100	99	80	
								8	100	100	82	
								10	100	100	83	
								15	100	100	85	
								20	100	100	86	
								30	100	100	87	
								45	100	100	89	
								60	100	100	89	

Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
C540	8	315	585	315	540	250	460	0	61	55	43	
								2	89	82	66	
								4	96	89	72	
								6	98	91	74	
								8	100	93	75	
								10	100	94	76	
								15	100	96	78	
								20	100	97	79	
								30	100	99	81	
								45	100	100	82	
								60	100	100	82	
C585	8	355	650	315	585	250	472	0	82	75	58	
								2	100	100	88	
								4	100	100	95	
								6	100	100	97	
								8	100	100	99	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C650	8	400	750	355	650	315	540	0	68	62	48	
								2	99	91	73	
								4	100	98	79	
								6	100	100	81	
								8	100	100	82	
								10	100	100	83	
								15	100	100	85	
								20	100	100	86	
								30	100	100	87	
								45	100	100	88	
								60	100	100	89	
C750	8	450	796	400	750	315	585	0	66	60	47	
								2	97	89	71	
								4	100	95	77	
								6	100	97	79	
								8	100	99	80	
								10	100	100	81	
								15	100	100	83	
								20	100	100	84	
								30	100	100	85	
								45	100	100	86	
								60	100	100	86	

Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
C770	8	450	832	400	770	355	650	0	61	56	43	
								2	89	82	66	
								4	96	88	71	
								6	97	90	73	
								8	99	92	74	
								10	100	93	75	
								15	100	94	76	
								20	100	96	77	
								30	100	97	79	
								45	100	98	80	
								60	100	98	80	
C920	9	560	1040	500	920	400	770	0	66	60	46	
								2	96	89	72	
								4	100	96	78	
								6	100	99	80	
								8	100	100	81	
								10	100	100	83	
								15	100	100	85	
								20	100	100	86	
								30	100	100	87	
								45	100	100	88	
								60	100	100	89	
C1K0	9	630	1090	560	1040	500	920	0	63	57	44	
								2	92	85	68	
								4	99	92	74	
								6	100	94	76	
								8	100	96	78	
								10	100	97	79	
								15	100	99	81	
								20	100	100	82	
								30	100	100	83	
								45	100	100	84	
								60	100	100	85	
C1K1	9	710	1182	630	1112	500	1040	0	82	75	58	
								2	100	100	88	
								4	100	100	95	
								6	100	100	97	
								8	100	100	99	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	

Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
C1K2	9	800	1465	710	1175	560	1090	0	66	60	47	
								2	96	89	71	
								4	100	95	77	
								6	100	97	79	
								8	100	99	80	
								10	100	100	81	
								15	100	100	83	
								20	100	100	84	
								30	100	100	85	
								45	100	100	86	
								60	100	100	86	
C1K4	9	850	1581	800	1463	630	1175	0	61	56	43	
								2	89	82	66	
								4	96	88	71	
								6	97	90	73	
								8	99	92	74	
								10	100	93	75	
								15	100	94	76	
								20	100	96	77	
								30	100	97	79	
								45	100	98	80	
								60	100	98	80	
C1K6	10	1000	1715	850	1590	710	1465	0	83	76	59	
								2	100	100	90	
								4	100	100	97	
								6	100	100	99	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
C1K7	10	1250	2150	1000	1715	800	1480	0	66	60	47	
								2	97	89	72	
								4	100	96	77	
								6	100	98	79	
								8	100	99	80	
								10	100	100	81	
								15	100	100	83	
								20	100	100	84	
								30	100	100	85	
								45	100	100	86	
								60	100	100	87	

Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	400V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
C2K1 C4K2	10 13	1400 2475	2330 4576	1250 2200	2156 4235	1000 1953	1715 3575	0	61	56	43	
								2	89	82	66	
								4	96	88	71	
								6	97	90	73	
								8	99	92	74	
								10	100	93	75	
								15	100	94	76	
								20	100	96	77	
								30	100	97	79	
								45	100	98	80	
								60	100	98	80	
C2K8 C5K6	11 14	1800 3285	3078 6074	1650 2920	2849 5621	1400 2592	2330 4745	0	61	56	43	
								2	89	82	66	
								4	96	88	71	
								6	97	90	73	
								8	99	92	74	
								10	100	93	75	
								15	100	94	76	
								20	100	96	78	
								30	100	97	79	
								45	100	98	80	
								60	100	98	80	
C3K5 C7K0	12 15	2200 4095	3846 7571	2000 3640	3542 7007	1650 3231	3032 5915	0	61	55	43	
								2	89	82	66	
								4	95	88	71	
								6	97	90	72	
								8	98	91	74	
								10	99	92	75	
								15	100	94	76	
								20	100	95	77	
								30	100	96	78	
								45	100	97	79	
								60	100	98	80	

Low Speed/Load Derating for IP00, UL Open Type—480V AC Frames 5, 6, and 6L

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed/Load Derating for IP00, UL Open Type					
		LD		ND		HD		Output Freq.	PWM Frequency				
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	2 kHz	4 kHz	8 kHz	12 kHz	
D014	5	15	22	10	14	7.5	11	0	100	100	100	100	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
D022	5	20	27	15	22	10	14	0	100	100	100	100	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
D027	5	25	34	20	27	15	22	0	100	100	100	100	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
D034	5	30	40	25	34	20	27	0	100	100	100	88	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	

Low Speed/Load Derating for IP00, UL Open Type—480V AC Frames 5, 6, and 6L (Continued)

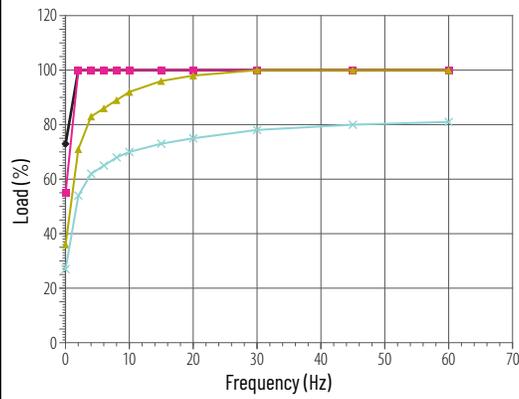
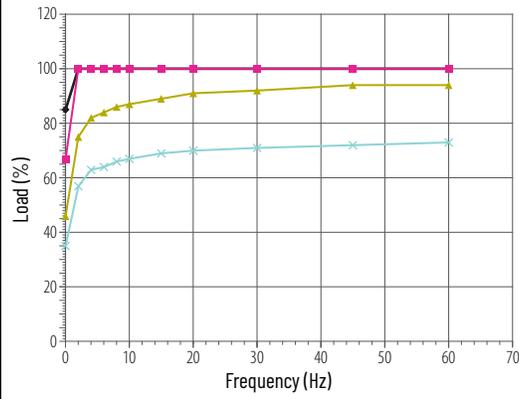
Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed/Load Derating for IP00, UL Open Type					
		LD		ND		HD		Output Freq.	PWM Frequency				
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	2 kHz	4 kHz	8 kHz	12 kHz	
D040	5	40	52	30	40	25	34	0	100	100	88	68	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
D052	5	50	65	40	52	30	40	0	100	98	70	54	
								2	100	100	100	96	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
D065	5	60	77	50	65	40	52	0	100	83	59	46	
								2	100	100	100	81	
								4	100	100	100	91	
								6	100	100	100	94	
								8	100	100	100	97	
								10	100	100	100	98	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
D077	5	75	96	60	77	50	65	0	82	66	47	36	
								2	100	100	82	65	
								4	100	100	92	73	
								6	100	100	95	75	
								8	100	100	98	77	
								10	100	100	100	79	
								15	100	100	100	82	
								20	100	100	100	84	
								30	100	100	100	86	
								45	100	100	100	87	
								60	100	100	100	88	

Low Speed/Load Derating for IP00, UL Open Type—480V AC Frames 5, 6, and 6L (Continued)

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed/Load Derating for IP00, UL Open Type					
		LD		ND		HD		Output Freq.	PWM Frequency				
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	2 kHz	4 kHz	8 kHz	12 kHz	
D096	5	75	96	75	96	60	77	0	82	66	47	36	
								2	100	100	82	65	
								4	100	100	92	73	
								6	100	100	95	75	
								8	100	100	98	77	
								10	100	100	100	79	
								15	100	100	100	82	
								20	100	100	100	84	
								30	100	100	100	86	
								45	100	100	100	87	
								60	100	100	100	88	
								D125	6	125	156	100	
2	100	100	100	100									
4	100	100	100	100									
6	100	100	100	100									
8	100	100	100	100									
10	100	100	100	100									
15	100	100	100	100									
20	100	100	100	100									
30	100	100	100	100									
45	100	100	100	100									
60	100	100	100	100									
D156	6	150	186	125	156	100	125						0
								2	100	100	100	93	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
								D186	6	200	248	150	186
2	100	100	91	70									
4	100	100	100	76									
6	100	100	100	79									
8	100	100	100	80									
10	100	100	100	81									
15	100	100	100	84									
20	100	100	100	85									
30	100	100	100	87									
45	100	100	100	88									
60	100	100	100	88									

Low Speed/Load Derating for IP00, UL Open Type—480V AC Frames 5, 6, and 6L (Continued)

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed/Load Derating for IP00, UL Open Type					
		LD		ND		HD		Output Freq.	PWM Frequency				
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	2 kHz	4 kHz	8 kHz	12 kHz	
D248	6	250	302	200	248	150	186	0	85	67	46	35	
								2	100	100	75	57	
								4	100	100	82	63	
								6	100	100	84	64	
								8	100	100	86	66	
								10	100	100	87	67	
								15	100	100	89	69	
								20	100	100	91	70	
								30	100	100	92	71	
								45	100	100	94	72	
								60	100	100	94	73	
								D360	6L	300	361	300	361
2	100	100	71	54									
4	100	100	83	62									
6	100	100	86	65									
8	100	100	89	68									
10	100	100	92	70									
15	100	100	96	73									
20	100	100	98	75									
30	100	100	100	78									
45	100	100	100	80									
60	100	100	100	81									



Low Speed/Load Derating for IP00, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				<div style="display: flex; justify-content: space-around; align-items: center;"> 1.33 kHz 2 kHz 4 kHz </div>
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
D302	7	300	361	250	302	200	248	0	100	100	94	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
D361	7	350	430	300	361	250	302	0	100	100	79	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
D430	7	400	485	350	430	300	361	0	100	91	70	
								2	100	100	93	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
D505	7	450	545	400	505	350	430	0	90	81	62	
								2	100	100	83	
								4	100	100	92	
								6	100	100	95	
								8	100	100	97	
								10	100	100	99	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	

Low Speed/Load Derating for IP00, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
D617	7	500	617	500	600	400	500	0	79	72	55	
								2	100	93	73	
								4	100	100	81	
								6	100	100	84	
								8	100	100	86	
								10	100	100	87	
								15	100	100	90	
								20	100	100	92	
								30	100	100	94	
								45	100	100	95	
								60	100	100	96	
								D302	8	300	361	
2	100	100	100									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
D361	8	350	430	300	361	250	302					0
								2	100	100	84	
								4	100	100	92	
								6	100	100	94	
								8	100	100	96	
								10	100	100	97	
								15	100	100	99	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								D430	8	400	485	350
2	97	89	72									
4	100	96	78									
6	100	99	80									
8	100	100	82									
10	100	100	83									
15	100	100	85									
20	100	100	86									
30	100	100	87									
45	100	100	89									
60	100	100	89									

Low Speed/Load Derating for IP00, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
D505	8	450	545	400	505	350	430	0	61	55	43	
								2	89	82	66	
								4	96	89	72	
								6	98	91	74	
								8	100	93	75	
								10	100	94	76	
								15	100	96	78	
								20	100	97	79	
								30	100	99	81	
								45	100	100	82	
								60	100	100	82	
D545	8	500	617	450	545	350	454	0	82	75	58	
								2	100	100	88	
								4	100	100	95	
								6	100	100	97	
								8	100	100	99	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
D617	8	600	710	500	617	400	485	0	68	62	48	
								2	99	91	73	
								4	100	98	79	
								6	100	100	81	
								8	100	100	82	
								10	100	100	83	
								15	100	100	85	
								20	100	100	86	
								30	100	100	87	
								45	100	100	88	
								60	100	100	89	
D710	8	650	765	600	710	450	545	0	66	60	47	
								2	97	89	71	
								4	100	95	77	
								6	100	97	79	
								8	100	99	80	
								10	100	100	81	
								15	100	100	83	
								20	100	100	84	
								30	100	100	85	
								45	100	100	86	
								60	100	100	86	

Low Speed/Load Derating for IP00, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
D740	8	700	800	650	740	500	617	0	61	56	43	
								2	89	82	66	
								4	96	88	71	
								6	97	90	73	
								8	99	92	74	
								10	100	93	75	
								15	100	94	76	
								20	100	96	77	
								30	100	97	79	
								45	100	98	80	
								60	100	98	80	
								D800	9	800	960	
2	96	89	72									
4	100	96	78									
6	100	99	80									
8	100	100	81									
10	100	100	83									
15	100	100	85									
20	100	100	86									
30	100	100	87									
45	100	100	88									
60	100	100	89									
D960	9	900	1045	800	960	700	800					0
								2	92	85	68	
								4	99	92	74	
								6	100	94	76	
								8	100	96	78	
								10	100	97	79	
								15	100	99	81	
								20	100	100	82	
								30	100	100	83	
								45	100	100	84	
								60	100	100	85	
								D1K0	9	1000	1135	900
2	100	100	88									
4	100	100	95									
6	100	100	97									
8	100	100	99									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									

Low Speed/Load Derating for IP00, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
D1K1	9	1100	1365	1000	1135	800	1045	0	66	60	47	
								2	96	89	71	
								4	100	95	77	
								6	100	97	79	
								8	100	99	80	
								10	100	100	81	
								15	100	100	83	
								20	100	100	84	
								30	100	100	85	
								45	100	100	86	
								60	100	100	86	
D1K3	9	1250	1520	1100	1365	900	1135	0	61	56	43	
								2	89	82	66	
								4	96	88	71	
								6	97	90	73	
								8	99	92	74	
								10	100	93	75	
								15	100	94	76	
								20	100	96	77	
								30	100	97	79	
								45	100	98	80	
								60	100	98	80	
D1K4	10	1500	1655	1250	1420	1000	1365	0	83	76	59	
								2	100	100	90	
								4	100	100	97	
								6	100	100	99	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
D1K6	10	1800	2070	1500	1655	1100	1420	0	66	60	47	
								2	97	89	72	
								4	100	96	77	
								6	100	98	79	
								8	100	99	80	
								10	100	100	81	
								15	100	100	83	
								20	100	100	84	
								30	100	100	85	
								45	100	100	86	
								60	100	100	87	

Low Speed/Load Derating for IP00, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	480V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
D2K0 D4K0	10 13	2000 3900	2240 4400	1800 3600	2072 4070	1500 2800	1655 3394	0	61	56	43	
								2	89	82	66	
								4	96	88	71	
								6	97	90	73	
								8	99	92	74	
								10	100	93	75	
								15	100	94	76	
								20	100	96	77	
								30	100	97	79	
								45	100	98	80	
60	100	98	80									
D2K6 D5K4	11 14	2600 5200	2960 5840	2400 4800	2738 5402	2000 3700	2240 4504	0	61	56	43	
								2	89	82	66	
								4	96	88	71	
								6	97	90	73	
								8	99	92	74	
								10	100	93	75	
								15	100	94	76	
								20	100	96	78	
								30	100	97	79	
								45	100	98	80	
60	100	98	80									
D3K4 D6K7	12 15	3300 6400	3696 7280	3000 6000	3404 6734	2400 4600	2980 5615	0	61	55	43	
								2	89	82	66	
								4	95	88	71	
								6	97	90	72	
								8	98	91	74	
								10	99	92	75	
								15	100	94	76	
								20	100	95	77	
								30	100	96	78	
								45	100	97	79	
60	100	98	80									

Low Speed/Load Derating for IP00, UL Open Type—600V AC Frames 5...6

Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed/Load Derating for IP00, UL Open Type					
		LD		ND		HD		Output Freq.	PWM Frequency				
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	2 kHz	4 kHz	8 kHz	12 kHz	
E011	5	15	17	10	11	7.5	9	0	100	100	100	100	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
E017	5	20	22	15	17	10	11	0	100	100	100	87	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
E022	5	25	27	20	22	15	17	0	100	100	91	67	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
E027	5	30	32	25	27	20	22	0	100	100	81	59	
								2	100	100	100	97	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	

Low Speed/Load Derating for IP00, UL Open Type—600V AC Frames 5...6 (Continued)

Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed/Load Derating for IP00, UL Open Type					
		LD		ND		HD		Output Freq.	PWM Frequency				
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	2 kHz	4 kHz	8 kHz	12 kHz	
E032	5	40	41	30	32	25	27	0	100	92	59	43	
								2	100	100	97	72	
								4	100	100	100	82	
								6	100	100	100	85	
								8	100	100	100	88	
								10	100	100	100	90	
								15	100	100	100	93	
								20	100	100	100	96	
								30	100	100	100	98	
								45	100	100	100	100	
								60	100	100	100	100	
E041	5	50	52	40	41	30	32	0	100	85	55	40	
								2	100	100	89	66	
								4	100	100	100	75	
								6	100	100	100	78	
								8	100	100	100	81	
								10	100	100	100	83	
								15	100	100	100	86	
								20	100	100	100	88	
								30	100	100	100	90	
								45	100	100	100	92	
								60	100	100	100	93	
E052	5	60	62	50	52	40	41	0	93	69	45	33	
								2	100	100	73	54	
								4	100	100	83	62	
								6	100	100	86	64	
								8	100	100	89	66	
								10	100	100	91	68	
								15	100	100	95	70	
								20	100	100	97	72	
								30	100	100	100	74	
								45	100	100	100	76	
								60	100	100	100	77	
E062	5	75	77	60	62	50	52	0	69	51	33	24	
								2	100	82	54	40	
								4	100	92	62	46	
								6	100	96	64	48	
								8	100	98	66	49	
								10	100	100	68	50	
								15	100	100	70	52	
								20	100	100	72	53	
								30	100	100	74	55	
								45	100	100	76	56	
								60	100	100	76	57	

Low Speed/Load Derating for IP00, UL Open Type—600V AC Frames 5...6 (Continued)

Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed/Load Derating for IP00, UL Open Type					
		LD		ND		HD		Output Freq.	PWM Frequency				
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	2 kHz	4 kHz	8 kHz	12 kHz	
E077	6	100	99	75	77	60	62	0	100	100	66	47	
								2	100	100	94	67	
								4	100	100	100	75	
								6	100	100	100	78	
								8	100	100	100	80	
								10	100	100	100	82	
								15	100	100	100	85	
								20	100	100	100	87	
								30	100	100	100	90	
								45	100	100	100	91	
								60	100	100	100	92	
E099	6	125	125	100	99	75	77	0	100	90	54	38	
								2	100	100	77	55	
								4	100	100	87	62	
								6	100	100	90	64	
								8	100	100	93	66	
								10	100	100	95	68	
								15	100	100	98	70	
								20	100	100	100	72	
								30	100	100	100	74	
								45	100	100	100	75	
								60	100	100	100	76	
E125	6	150	144	125	125	100	99	0	100	75	45	32	
								2	100	100	64	46	
								4	100	100	73	52	
								6	100	100	75	54	
								8	100	100	78	55	
								10	100	100	79	57	
								15	100	100	82	59	
								20	100	100	84	60	
								30	100	100	86	62	
								45	100	100	88	63	
								60	100	100	89	63	
E144	6	200	192	150	144	125	125	0	90	62	37	26	
								2	100	88	53	38	
								4	100	98	60	43	
								6	100	100	63	45	
								8	100	100	64	46	
								10	100	100	66	47	
								15	100	100	68	49	
								20	100	100	70	50	
								30	100	100	71	51	
								45	100	100	73	52	
								60	100	100	74	53	

Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12–600V AC Frames 7...15

Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
E192	7	250	242	200	192	150	144	0	100	100	76	
								2	100	100	100	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
E242	7	300	295	250	242	200	192	0	100	88	61	
								2	100	100	95	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
E295	7	350	355	300	295	250	242	0	82	71	49	
								2	100	100	76	
								4	100	100	85	
								6	100	100	88	
								8	100	100	90	
								10	100	100	92	
								15	100	100	95	
								20	100	100	97	
								30	100	100	99	
								45	100	100	100	
								60	100	100	100	
E355	7	400	395	350	355	300	295	0	73	63	44	
								2	100	94	68	
								4	100	100	76	
								6	100	100	78	
								8	100	100	80	
								10	100	100	82	
								15	100	100	84	
								20	100	100	86	
								30	100	100	88	
								45	100	100	90	
								60	100	100	91	

Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12–600V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
E395	7	450	435	400	395	350	355	0	65	56	39	
								2	95	84	60	
								4	100	93	67	
								6	100	96	70	
								8	100	98	71	
								10	100	100	73	
								15	100	100	75	
								20	100	100	77	
								30	100	100	79	
								45	100	100	80	
								60	100	100	81	
								E242	8	300	295	
2	100	100	93									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
E295	8	350	355	300	295	250	242					0
								2	100	100	74	
								4	100	100	84	
								6	100	100	88	
								8	100	100	90	
								10	100	100	92	
								15	100	100	95	
								20	100	100	98	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								E355	8	400	395	350
2	100	94	66									
4	100	100	75									
6	100	100	78									
8	100	100	80									
10	100	100	82									
15	100	100	85									
20	100	100	87									
30	100	100	89									
45	100	100	91									
60	100	100	92									

Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12–600V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
E395	8	450	435	400	395	350	355	0	63	54	36	
								2	96	84	59	
								4	100	94	67	
								6	100	97	69	
								8	100	100	71	
								10	100	100	73	
								15	100	100	76	
								20	100	100	78	
								30	100	100	80	
								45	100	100	81	
								60	100	100	82	
								E435	8	500	510	
2	100	100	73									
4	100	100	81									
6	100	100	84									
8	100	100	86									
10	100	100	88									
15	100	100	91									
20	100	100	92									
30	100	100	95									
45	100	100	96									
60	100	100	97									
E545	8	600	580	550	545	450	450					0
								2	97	84	59	
								4	100	93	66	
								6	100	96	68	
								8	100	98	70	
								10	100	100	71	
								15	100	100	74	
								20	100	100	75	
								30	100	100	77	
								45	100	100	78	
								60	100	100	79	
								E595	9	700	690	600
2	100	100	69									
4	100	100	79									
6	100	100	82									
8	100	100	84									
10	100	100	86									
15	100	100	90									
20	100	100	92									
30	100	100	95									
45	100	100	97									
60	100	100	98									

Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12–600V AC Frames 7...15 (Continued)

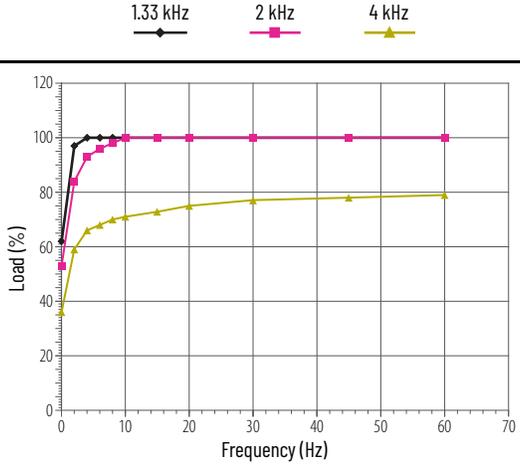
Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
E690	9	800	760	700	690	600	595	0	64	51	31	
								2	100	83	53	
								4	100	94	60	
								6	100	98	63	
								8	100	100	65	
								10	100	100	66	
								15	100	100	69	
								20	100	100	71	
								30	100	100	73	
								45	100	100	75	
								60	100	100	75	
								E760	9	900	825	
2	91	75	47									
4	100	84	54									
6	100	88	56									
8	100	90	58									
10	100	92	59									
15	100	96	62									
20	100	98	63									
30	100	100	65									
45	100	100	67									
60	100	100	68									
E825	9	1000	980	900	825	800	760					0
								2	100	94	66	
								4	100	100	74	
								6	100	100	76	
								8	100	100	78	
								10	100	100	80	
								15	100	100	82	
								20	100	100	84	
								30	100	100	86	
								45	100	100	88	
								60	100	100	88	
								E980	9	1100	1102	1000
2	93	81	57									
4	100	89	63									
6	100	92	65									
8	100	94	67									
10	100	96	68									
15	100	99	71									
20	100	100	72									
30	100	100	74									
45	100	100	75									
60	100	100	76									

Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12–600V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
E1K1	10	1250	1220	1100	1045	1000	980	0	86	73	49	
								2	100	100	82	
								4	100	100	91	
								6	100	100	94	
								8	100	100	97	
								10	100	100	99	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
E1K2	10	1500	1430	1250	1220	1100	1045	0	74	63	42	
								2	100	100	70	
								4	100	100	78	
								6	100	100	81	
								8	100	100	83	
								10	100	100	84	
								15	100	100	87	
								20	100	100	89	
								30	100	100	91	
								45	100	100	92	
								60	100	100	93	
E1K5 E2K9	10	1600	1624	1500	1430	1250	1220	0	62	53	36	
								2	97	85	59	
								4	100	94	66	
								6	100	96	68	
								8	100	99	70	
	13	3300	3190	3100	2998	2500	2475	10	100	100	72	
								15	100	100	74	
								20	100	100	75	
								30	100	100	77	
								45	100	100	78	
								60	100	100	79	
E2K0 E3K9	11	2100	2146	2000	1946	1800	1700	0	62	53	36	
								2	97	84	59	
								4	100	93	66	
								6	100	96	68	
								8	100	98	70	
	14	4400	4234	4100	3979	3300	3285	10	100	100	71	
								15	100	100	73	
								20	100	100	75	
								30	100	100	77	
								45	100	100	78	
								60	100	100	79	

Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12–600V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	600V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12			
		LD		ND		HD		Output Freq.	PWM Frequency		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz
E2K4 E4K9	12	2600	2668	2500	2420	2100	2070	0	62	53	36
								2	97	84	59
								4	100	93	66
								6	100	96	68
								8	100	98	70
								10	100	100	71
	15	5500	5278	5100	4960	4100	4095	15	100	100	73
								20	100	100	75
								30	100	100	77
								45	100	100	78
								60	100	100	79



Low Speed/Load Derating for IP00, UL Open Type—690V AC Frames 5...6

Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed/Load Derating for IP00, UL Open Type					
		LD		ND		HD		Output Freq.	PWM Frequency				
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	2 kHz	4 kHz	8 kHz	12 kHz	
F015	5	15	20	11	15	7.5	12	0	100	100	100	100	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
F020	5	18.5	23	15	20	11	15	0	100	100	100	79	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
F023	5	22	30	18.5	23	15	20	0	100	100	89	64	
								2	100	100	100	100	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	
F030	5	30	34	22	30	18.5	23	0	100	100	75	54	
								2	100	100	100	89	
								4	100	100	100	100	
								6	100	100	100	100	
								8	100	100	100	100	
								10	100	100	100	100	
								15	100	100	100	100	
								20	100	100	100	100	
								30	100	100	100	100	
								45	100	100	100	100	
								60	100	100	100	100	

Low Speed/Load Derating for IP00, UL Open Type—690V AC Frames 5...6 (Continued)

Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed/Load Derating for IP00, UL Open Type					
		LD		ND		HD		Output Freq.	PWM Frequency				
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	2 kHz	4 kHz	8 kHz	12 kHz	
F034	5	37	46	30	34	22	30	0	100	93	58	42	
								2	100	100	96	70	
								4	100	100	100	79	
								6	100	100	100	83	
								8	100	100	100	85	
								10	100	100	100	87	
								15	100	100	100	90	
								20	100	100	100	93	
								30	100	100	100	95	
								45	100	100	100	98	
								60	100	100	100	99	
F046	5	45	50	37	46	30	34	0	100	73	46	33	
								2	100	100	75	55	
								4	100	100	86	62	
								6	100	100	89	65	
								8	100	100	92	67	
								10	100	100	94	68	
								15	100	100	98	71	
								20	100	100	100	73	
								30	100	100	100	75	
								45	100	100	100	77	
								60	100	100	100	78	
F050	5	55	61	45	50	37	46	0	85	62	38	28	
								2	100	99	63	46	
								4	100	100	72	52	
								6	100	100	75	54	
								8	100	100	77	56	
								10	100	100	79	57	
								15	100	100	82	60	
								20	100	100	84	61	
								30	100	100	86	63	
								45	100	100	88	64	
								60	100	100	89	65	
F061	5	75	82	55	61	45	50	0	69	49	31	22	
								2	100	79	51	37	
								4	100	90	58	42	
								6	100	93	60	44	
								8	100	96	62	45	
								10	100	98	63	46	
								15	100	100	66	48	
								20	100	100	67	49	
								30	100	100	69	51	
								45	100	100	71	52	
								60	100	100	72	52	

Low Speed/Load Derating for IP00, UL Open Type—690V AC Frames 5...6 (Continued)

Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed/Load Derating for IP00, UL Open Type					
		LD		ND		HD		Output Freq.	PWM Frequency				
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	2 kHz	4 kHz	8 kHz	12 kHz	
F082	6	90	98	75	82	55	61	0	100	96	56	39	
								2	100	100	80	56	
								4	100	100	90	64	
								6	100	100	94	66	
								8	100	100	96	68	
								10	100	100	98	69	
								15	100	100	100	72	
								20	100	100	100	74	
								30	100	100	100	76	
								45	100	100	100	77	
								60	100	100	100	78	
								F098	6	110	119	90	
2	100	100	63	44									
4	100	100	71	50									
6	100	100	74	52									
8	100	100	76	54									
10	100	100	78	55									
15	100	100	81	57									
20	100	100	82	58									
30	100	100	85	60									
45	100	100	86	61									
60	100	100	87	62									
F119	6	132	142	110	119	90	98						0
								2	100	93	55	39	
								4	100	100	62	44	
								6	100	100	64	45	
								8	100	100	66	46	
								10	100	100	67	48	
								15	100	100	70	49	
								20	100	100	71	50	
								30	100	100	73	52	
								45	100	100	75	53	
								60	100	100	76	53	
								F142	6	160	171	132	142
2	100	69	41	29									
4	100	78	46	33									
6	100	81	48	34									
8	100	83	49	35									
10	100	85	50	36									
15	100	87	52	37									
20	100	89	53	38									
30	100	92	55	39									
45	100	93	56	39									
60	100	94	57	40									

Low Speed/Load Derating for IP00, UL Type 1 and IP54, UL Type 12–690V AC Frames 7...15

Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
F171	7	200	215	160	171	132	142	0	100	89	60	
								2	100	100	93	
								4	100	100	100	
								6	100	100	100	
								8	100	100	100	
								10	100	100	100	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
F215	7	250	265	200	215	160	171	0	86	73	49	
								2	100	100	76	
								4	100	100	85	
								6	100	100	88	
								8	100	100	90	
								10	100	100	92	
								15	100	100	95	
								20	100	100	97	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
F265	7	315	330	250	265	200	215	0	72	61	41	
								2	100	91	63	
								4	100	100	71	
								6	100	100	73	
								8	100	100	75	
								10	100	100	76	
								15	100	100	79	
								20	100	100	81	
								30	100	100	83	
								45	100	100	84	
								60	100	100	85	
F330	7	355	370	315	330	250	265	0	64	54	36	
								2	95	82	57	
								4	100	91	64	
								6	100	94	66	
								8	100	96	67	
								10	100	98	69	
								15	100	100	71	
								20	100	100	73	
								30	100	100	74	
								45	100	100	76	
								60	100	100	76	

Low Speed/Load Derating for IP00, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
F370	7	400	415	355	370	315	330	0	58	49	33	
								2	86	74	51	
								4	95	83	58	
								6	98	85	60	
								8	100	87	61	
								10	100	89	62	
								15	100	91	64	
								20	100	93	66	
								30	100	95	67	
								45	100	97	69	
								60	100	98	69	
								F215	8	250	265	
2	100	100	93									
4	100	100	100									
6	100	100	100									
8	100	100	100									
10	100	100	100									
15	100	100	100									
20	100	100	100									
30	100	100	100									
45	100	100	100									
60	100	100	100									
F265	8	315	330	250	265	200	215					0
								2	100	100	74	
								4	100	100	84	
								6	100	100	88	
								8	100	100	90	
								10	100	100	92	
								15	100	100	95	
								20	100	100	98	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
								F330	8	355	370	315
2	100	94	66									
4	100	100	75									
6	100	100	78									
8	100	100	80									
10	100	100	82									
15	100	100	85									
20	100	100	87									
30	100	100	89									
45	100	100	91									
60	100	100	92									

Low Speed/Load Derating for IP00, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
F370	8	400	415	355	370	315	330	0	63	54	36	
								2	96	84	59	
								4	100	94	67	
								6	100	97	69	
								8	100	100	71	
								10	100	100	73	
								15	100	100	76	
								20	100	100	78	
								30	100	100	80	
								45	100	100	81	
								60	100	100	82	
F415	8	450	460	400	415	355	370	0	76	65	44	
								2	100	100	73	
								4	100	100	81	
								6	100	100	84	
								8	100	100	86	
								10	100	100	88	
								15	100	100	91	
								20	100	100	92	
								30	100	100	95	
								45	100	100	96	
								60	100	100	97	
F505	8	560	565	500	505	400	415	0	62	53	36	
								2	97	84	59	
								4	100	93	66	
								6	100	96	68	
								8	100	98	70	
								10	100	100	71	
								15	100	100	74	
								20	100	100	75	
								30	100	100	77	
								45	100	100	78	
								60	100	100	79	
F565	9	630	650	560	565	500	505	0	83	67	41	
								2	100	100	69	
								4	100	100	79	
								6	100	100	82	
								8	100	100	84	
								10	100	100	86	
								15	100	100	90	
								20	100	100	92	
								30	100	100	95	
								45	100	100	97	
								60	100	100	98	

Low Speed/Load Derating for IP00, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15 (Continued)

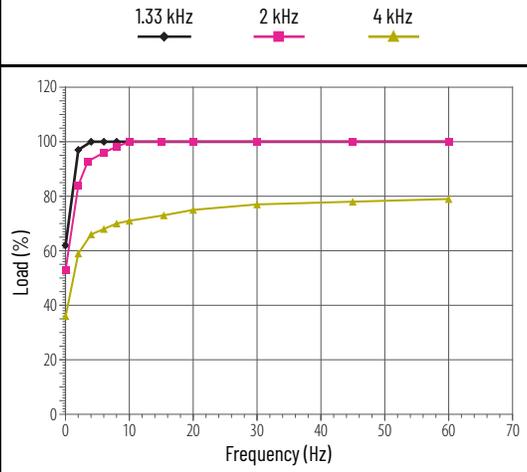
Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
F650	9	710	735	630	650	560	565	0	64	51	31	
								2	100	83	53	
								4	100	94	60	
								6	100	98	63	
								8	100	100	65	
								10	100	100	66	
								15	100	100	69	
								20	100	100	71	
								30	100	100	73	
								45	100	100	75	
								60	100	100	75	
								F735	9	800	820	
2	91	75	47									
4	100	84	54									
6	100	88	56									
8	100	90	58									
10	100	92	59									
15	100	96	62									
20	100	98	63									
30	100	100	65									
45	100	100	67									
60	100	100	68									
F820	9	900	920	800	820	710	735					0
								2	100	94	66	
								4	100	100	74	
								6	100	100	76	
								8	100	100	78	
								10	100	100	80	
								15	100	100	82	
								20	100	100	84	
								30	100	100	86	
								45	100	100	88	
								60	100	100	88	
								F920	9	1000	1074	900
2	93	81	57									
4	100	89	63									
6	100	92	65									
8	100	94	67									
10	100	96	68									
15	100	99	71									
20	100	100	72									
30	100	100	74									
45	100	100	75									
60	100	100	76									

Low Speed/Load Derating for IP00, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12				<div style="display: flex; justify-content: space-around; align-items: center;"> 1.33 kHz 2 kHz 4 kHz </div>
		LD		ND		HD		Output Freq.	PWM Frequency			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz	
F1K0	10	1100	1150	1000	1030	900	920	0	86	73	49	
								2	100	100	82	
								4	100	100	91	
								6	100	100	94	
								8	100	100	97	
								10	100	100	99	
								15	100	100	100	
								20	100	100	100	
								30	100	100	100	
								45	100	100	100	
								60	100	100	100	
F1K1	10	1250	1344	1100	1150	1000	1030	0	74	63	42	
								2	100	100	70	
								4	100	100	78	
								6	100	100	81	
								8	100	100	83	
								10	100	100	84	
								15	100	100	87	
								20	100	100	89	
								30	100	100	91	
								45	100	100	92	
								60	100	100	93	
F1K4 F2K7	10	1500	1582	1400	1419	1100	1162	0	62	53	36	
								2	97	85	59	
								4	100	94	66	
								6	100	96	68	
								8	100	99	70	
								10	100	100	72	
	13	3080	3108	2750	2778	2200	2283	15	100	100	74	
								20	100	100	75	
								30	100	100	77	
								45	100	100	78	
								60	100	100	79	
F1K8 F3K6	11	2000	2091	1800	1865	1500	1535	0	62	53	36	
								2	97	84	59	
								4	100	93	66	
								6	100	96	68	
								8	100	98	70	
								10	100	100	71	
	14	4088	4125	3650	3687	2920	3030	15	100	100	73	
								20	100	100	75	
								30	100	100	77	
								45	100	100	78	
								60	100	100	79	

Low Speed/Load Derating for IP00, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15 (Continued)

Cat. No. 20G...	Frame	690V AC Power Rating						Low Speed/Load Derating for IP20, UL Type 1 and IP54, UL Type 12			
		LD		ND		HD		Output Freq.	PWM Frequency		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	Hz	1.33 kHz	2 kHz	4 kHz
F2K3 F4K5	12	2500	2599	2300	2318	2000	2020	0	62	53	36
								2	97	84	59
								4	100	93	66
								6	100	96	68
								8	100	98	70
								10	100	100	71
	15	5096	5142	4550	4596	3640	3777	15	100	100	73
								20	100	100	75
								30	100	100	77
								45	100	100	78
								60	100	100	79



Ambient Temperature and Altitude Derating

The following graphs show the ambient temperature and altitude deratings for PowerFlex 755T products.

- Each carrier frequency curve is valid for both drives and common bus inverters.
- The lowest carrier frequency curve is valid for bus supplies.

If a catalog number is not shown, that drive can be operated without derating as long as the limits specified on page 148 are followed.

Ambient Temperature and Altitude Derating for IP00, UL Open Type—400V AC Frames 5...6

Catalog Number	Frame	400V AC Power Rating						Derating for IP00, UL Open Type							
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load				Altitude/Load			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	2 kHz	4 kHz	8 kHz	12 kHz	2 kHz	4 kHz	8 kHz	12 kHz
20G...C015	5	11	22	7.5	15.4	11.5	5.5								
20G...C022	5	15	30	11	22	7.5	15.4								
20G...C030	5	18.5	37	15	30	11	22								

Ambient Temperature and Altitude Derating for IP00, UL Open Type—400V AC Frames 5..6 (Continued)

Catalog Number	Frame	400V AC Power Rating						Derating for IP00, UL Open Type							
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load				Altitude/Load			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	2 kHz	4 kHz	8 kHz	12 kHz	2 kHz	4 kHz	8 kHz	12 kHz
20G...C037	5	22	43	18.5	37	15	30								
20G...C043	5	30	60	22	43	18.5	37								
20G...C060	5	37	72	30	60	22	43								
20G...C072	5	45	85	37	72	30	60								

Ambient Temperature and Altitude Derating for IP00, UL Open Type—400V AC Frames 5..6 (Continued)

Catalog Number	Frame	400V AC Power Rating						Derating for IP00, UL Open Type							
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load				Altitude/Load			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	2 kHz	4 kHz	8 kHz	12 kHz	2 kHz	4 kHz	8 kHz	12 kHz
20G...C085	5	55	104	45	85	37	72								
20G...C104	5	55	104	55	104	45	85								
20G...C140	6	90	170	75	140	55	104								

Ambient Temperature and Altitude Derating for IP00, UL Open Type—400V AC Frames 5..6 (Continued)

Catalog Number	Frame	400V AC Power Rating						Derating for IP00, UL Open Type							
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load				Altitude/Load			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	2 kHz	4 kHz	8 kHz	12 kHz	2 kHz	4 kHz	8 kHz	12 kHz
20G...C176	6	110	205	90	170	75	140								
20G...C205	6	132	260	110	205	90	170								
20G...C260	6	160	302	132	260	110	205								

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15

Catalog Number	Frame	400V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...C302	7	200	367	160	302	132	260						
20G...C367	7	250	460	200	367	160	302						
20G...C460	7	315	540	250	460	200	367						
20G...C540	7	315	585	315	540	250	460						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15 (Continued)

Catalog Number	Frame	400V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...C585	7	315	617	315	600	250	500						
20G...C302	8	200	367	160	302	132	260						
20G...C367	8	250	460	200	367	160	302						
20G...C460	8	315	540	250	460	200	367						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15 (Continued)

Catalog Number	Frame	400V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...C540	8	315	585	315	540	250	460						
20G...C585	8	355	650	315	585	250	472						
20G...C650	8	400	750	355	650	315	540						
20G...C750	8	450	796	400	750	315	585						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15 (Continued)

Catalog Number	Frame	400V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...C770	8	450	832	400	770	355	650						
20G...C920	9	560	1040	500	920	400	770						
20G...C1K0	9	630	1090	560	1040	500	920						
20G...C1K1	9	710	1182	630	1112	500	1040						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15 (Continued)

Catalog Number	Frame	400V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
206...C1K2	9	800	1465	710	1175	560	1090						
206...C1K4	9	850	1581	800	1463	630	1175						
206...C1K6	10	1000	1715	850	1590	710	1465						
206...C1K7	10	1250	2150	1000	1715	800	1480						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—400V AC Frames 7...15 (Continued)

Catalog Number	Frame	400V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...C2K1	10	1400	2330	1250	2156	1000	1715						
20G...C2K1	13	2475	4576	2200	4235	1953	3575						
20G...C2K8	11	1800	3078	1650	2849	1400	2330						
20G...C5K6	14	3285	6074	2920	5621	2592	4745						
20G...C3K5	12	2200	3846	2000	3542	1650	3032						
20G...C7K0	15	4095	7571	3640	7007	3231	5915						

Ambient Temperature and Altitude Derating for IP00, UL Open Type—480V AC Frames 5...6

Catalog Number	Frame	480V AC Power Rating						Derating for IP00, UL Open Type							
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load				Altitude/Load			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	2 kHz	4 kHz	8 kHz	12 kHz	2 kHz	4 kHz	8 kHz	12 kHz
20G...D014	5	15	22	7.5	14	5.5	11								
20G...D022	5	20	27	15	22	10	14								
20G...D027	5	25	34	20	27	15	22								
20G...D034	5	30	40	25	34	20	27								

Ambient Temperature and Altitude Derating for IP00, UL Open Type—480V AC Frames 5..6 (Continued)

Catalog Number	Frame	480V AC Power Rating						Derating for IP00, UL Open Type							
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load				Altitude/Load			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	2 kHz	4 kHz	8 kHz	12 kHz	2 kHz	4 kHz	8 kHz	12 kHz
20G...D040	5	40	52	30	40	25	34								
20G...D052	5	50	65	40	52	30	40								
20G...D065	5	60	77	50	65	40	52								
20G...D077	5	75	96	60	77	50	65								

Ambient Temperature and Altitude Derating for IP00, UL Open Type—480V AC Frames 5..6 (Continued)

Catalog Number	Frame	480V AC Power Rating						Derating for IP00, UL Open Type							
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load				Altitude/Load			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	2 kHz	4 kHz	8 kHz	12 kHz	2 kHz	4 kHz	8 kHz	12 kHz
20G...D096	5	75	96	75	96	60	77								
20G...D125	6	125	156	100	125	75	96								

Ambient Temperature and Altitude Derating for IP00, UL Open Type—480V AC Frames 5..6 (Continued)

Catalog Number	Frame	480V AC Power Rating						Derating for IP00, UL Open Type							
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load				Altitude/Load			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	2 kHz	4 kHz	8 kHz	12 kHz	2 kHz	4 kHz	8 kHz	12 kHz
20G...D156	6	150	186	125	156	100	125								
20G...D186	6	200	248	150	186	125	156								
20G...D248	6	250	302	200	248	150	186								

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15

Catalog Number	Frame	480V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...D302	7	300	361	250	302	200	248						
20G...D361	7	350	430	300	361	250	302						
20G...D430	7	400	485	350	430	300	361						
20G...D505	7	450	545	400	505	350	430						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15 (Continued)

Catalog Number	Frame	480V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...D617	7	500	617	500	600	400	500						
20G...D302	8	300	361	250	302	200	248						
20G...D361	8	350	430	300	361	250	302						
20G...D430	8	400	485	350	430	300	361						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15 (Continued)

Catalog Number	Frame	480V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...D505	8	450	545	400	505	350	430						
20G...D545	8	500	617	450	545	350	454						
20G...D617	8	600	710	500	617	400	485						
20G...D710	8	650	765	600	710	450	545						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15 (Continued)

Catalog Number	Frame	480V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...D740	8	700	800	650	740	500	617						
20G...D800	9	800	960	700	800	600	740						
20G...D960	9	900	1045	800	960	700	800						
20G...D1K0	9	1000	1121	900	1045	750	960						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15 (Continued)

Catalog Number	Frame	480V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...D1K1	9	1100	1365	1000	1135	800	1045						
20G...D1K3	9	1250	1520	1100	1365	900	1135						
20G...D1K4	10	1500	1655	1250	1420	1000	1365						
20G...D1K6	10	1800	2070	1500	1655	1100	1420						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—480V AC Frames 7...15 (Continued)

Catalog Number	Frame	480V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...D2K0 20G...D4K0	10 13	2000 3900	2240 4400	1800 3600	2072 4070	1500 2800	1655 3394						
20G...D2K6 20G...D5K4	11 14	2600 5200	2960 5840	2400 4800	2738 5402	2000 3700	2240 4504						
20G...D3K4 20G...D7K0	12 15	3300 6400	3696 7280	3000 600	3404 6734	2400 4600	2980 5615						

Ambient Temperature and Altitude Derating for IP00, UL Open Type—600V AC Frames 5...6

Catalog Number	Frame	600V AC Power Rating						Derating for IP00, UL Open Type							
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load				Altitude/Load			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	2 kHz	4 kHz	8 kHz	12 kHz	2 kHz	4 kHz	8 kHz	12 kHz
20G...E011	5	15	17	10	11	7.5	9								
20G...E017	5	20	22	15	17	10	11								
20G...E022	5	25	27	20	22	15	17								
20G...E027	5	30	32	25	27	20	22								

Ambient Temperature and Altitude Derating for IP00, UL Open Type—600V AC Frames 5..6 (Continued)

Catalog Number	Frame	600V AC Power Rating						Derating for IP00, UL Open Type							
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load				Altitude/Load			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	2 kHz	4 kHz	8 kHz	12 kHz	2 kHz	4 kHz	8 kHz	12 kHz
20G...E032	5	40	41	30	32	25	27								
20G...E041	5	50	52	40	41	30	32								
20G...E052	5	60	62	50	52	40	41								
20G...E062	5	75	77	60	62	50	52								

Ambient Temperature and Altitude Derating for IP00, UL Open Type—600V AC Frames 5..6 (Continued)

Catalog Number	Frame	600V AC Power Rating						Derating for IP00, UL Open Type							
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load				Altitude/Load			
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	2 kHz	4 kHz	8 kHz	12 kHz	2 kHz	4 kHz	8 kHz	12 kHz
20G...E077	6	100	99	75	77	60	62								
20G...E099	6	125	125	100	99	75	77								
20G...E125	6	150	144	125	125	100	99								
20G...E144	6	200	192	150	144	125	125								

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—600V AC Frames 7...15

Catalog Number	Frame	600V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
206...E192	7	250	242	200	192	150	144						
206...E242	7	300	295	250	242	200	192						
206...E295	7	350	355	300	295	250	242						
206...E355	7	400	395	350	355	300	295						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—600V AC Frames 7...15 (Continued)

Catalog Number	Frame	600V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...E395	7	450	435	400	395	350	355						
20G...E242	8	300	295	250	242	200	192						
20G...E295	8	350	355	300	295	250	242						
20G...E355	8	400	395	350	355	300	295						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—600V AC Frames 7...15 (Continued)

Catalog Number	Frame	600V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...E395	8	450	435	400	395	350	355						
20G...E435	8	500	510	450	435	400	395						
20G...E545	8	600	580	550	545	450	450						
20G...E595	9	700	690	600	580	550	545						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—600V AC Frames 7...15 (Continued)

Catalog Number	Frame	600V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...E690	9	800	760	700	690	600	595						
20G...E760	9	900	825	800	760	700	690						
20G...E825	9	1000	980	900	825	800	760						
20G...E980	9	1100	1102	1000	980	900	825						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—600V AC Frames 7...15 (Continued)

Catalog Number	Frame	600V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...E1K1	10	1250	1220	1100	1045	1000	980						
20G...E1K2	10	1500	1430	1250	1220	1100	1045						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12–600V AC Frames 7...15 (Continued)

Catalog Number	Frame	600V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		Hp	Cont. Amps	Hp	Cont. Amps	Hp	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...E1K5 20G...E2K9	10 13	1600 3300	1624 3190	1500 3100	1430 2998	1250 2500	1220 2475						
20G...E2K0 20G...E3K9	11 14	2100 4400	2146 4234	2000 4100	1946 3979	1800 3300	1700 3285						
20G...E2K4 20G...E4K9	12 15	2600 5500	2668 5278	2500 5100	2420 4960	2100 4100	2070 4095						

Ambient Temperature and Altitude Derating for IP00, UL Open Type—690V AC Frames 5...6

Catalog Number	Frame	690V AC Power Rating						Derating for IP00, UL Open Type							
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load				Altitude/Load			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	2 kHz	4 kHz	8 kHz	12 kHz	2 kHz	4 kHz	8 kHz	12 kHz
20G...F015	5	15	20	11	15	7.5	12								
20G...F020	5	18.5	23	15	20	11	15								
20G...F023	5	22	30	18.5	23	15	20								
20G...F030	5	30	34	22	30	18.5	23								

Ambient Temperature and Altitude Derating for IP00, UL Open Type—690V AC Frames 5..6 (Continued)

Catalog Number	Frame	690V AC Power Rating						Derating for IP00, UL Open Type							
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load				Altitude/Load			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	2 kHz	4 kHz	8 kHz	12 kHz	2 kHz	4 kHz	8 kHz	12 kHz
20G...F034	5	37	46	30	34	22	30								
20G...F046	5	45	50	37	46	30	34								
20G...F050	5	55	61	45	50	37	46								
20G...F061	5	75	82	55	61	45	50								

Ambient Temperature and Altitude Derating for IP00, UL Open Type—690V AC Frames 5..6 (Continued)

Catalog Number	Frame	690V AC Power Rating						Derating for IP00, UL Open Type							
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load				Altitude/Load			
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	2 kHz	4 kHz	8 kHz	12 kHz	2 kHz	4 kHz	8 kHz	12 kHz
20G...F082	6	90	98	75	82	55	61								
20G...F098	6	110	119	90	98	75	82								
20G...F119	6	132	142	110	119	90	98								
20G...F142	6	160	171	132	142	110	119								

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15

Catalog Number	Frame	690V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...F171	7	200	215	160	171	132	142						
20G...F215	7	250	265	200	215	160	171						
20G...F265	7	315	330	250	265	200	215						
20G...F330	7	355	370	315	330	250	265						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15 (Continued)

Catalog Number	Frame	690V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...F370	7	400	415	355	370	315	330						
20G...F215	8	250	265	200	215	160	171						
20G...F265	8	315	330	250	265	200	215						
20G...F330	8	355	370	315	330	250	265						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15 (Continued)

Catalog Number	Frame	690V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...F370	8	400	415	355	370	315	330						
20G...F415	8	450	460	400	415	355	370						
20G...F505	8	560	565	500	505	400	415						
20G...F565	9	630	650	560	565	500	505						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15 (Continued)

Catalog Number	Frame	690V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...F650	9	710	735	630	650	560	565						
20G...F735	9	800	820	710	735	630	650						
20G...F820	9	900	920	800	820	710	735						
20G...F920	9	1000	1074	900	920	800	820						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15 (Continued)

Catalog Number	Frame	690V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...F1K0	10	1100	1150	1000	1030	900	920						
20G...F1K1	10	1250	1344	1100	1150	1000	1030						

Ambient Temperature and Altitude Derating for IP21, UL Type 1 and IP54, UL Type 12—690V AC Frames 7...15 (Continued)

Catalog Number	Frame	690V AC Power Rating						Derating for IP21, UL Type 1 and IP54, UL Type 12					
		Light Duty		Normal Duty		Heavy Duty		Ambient Temperature/Load			Altitude/Load		
		kW	Cont. Amps	kW	Cont. Amps	kW	Cont. Amps	1.33 kHz	2 kHz	4 kHz	1.33 kHz	2 kHz	4 kHz
20G...FIK4 20G...F2K7	10 13	1500 3080	1582 3108	1400 2750	1419 2778	1100 2200	1162 2283						
20G...FIK8 20G...F1K8	11 14	2000 4088	2091 4125	1800 3650	1865 3687	1500 2920	1535 3030						
20G...F2K3 20G...F4K5	12 15	2500 5096	2599 5142	2300 4550	2318 4596	2000 3640	2020 3777						

Notes:

Additional Resources

These documents contain additional information concerning related products from Rockwell Automation. To view or download publications, go to rok.auto/literature.

Resource	Description
PowerFlex 750-Series Products with TotalFORCE Control Installation Instructions, publication 750-IN100	Provides the basic steps to install PowerFlex 755TL low harmonic drives, PowerFlex 755TR regenerative drives, and PowerFlex 755TM drive systems.
PowerFlex 755TM IP00 Open Type Kits Technical Data, publication 750-TD101	Provides detailed information on: <ul style="list-style-type: none"> • Kit selection • Kit ratings and specifications • Option specifications
PowerFlex 755TM IP00 Open Type Kits Installation Instructions, publication 750-IN101	Provides instructions to install IP00 Open Type kits in user-supplied enclosures.
PowerFlex 750-Series I/O, Feedback, and Power Option Modules Installation, publication 750-IN111	Provides instructions to install and wire 750-Series option modules.
PowerFlex 750-Series Products with TotalFORCE Control Reference Manual, publication 750-RM100	Provides detailed setup and programming instructions for common applications.
PowerFlex Drives with TotalFORCE Control Programming Manual (firmware revision 6.xxx or earlier), publication 750-PM100	Provides detailed information on: <ul style="list-style-type: none"> • I/O, control, and feedback options • Parameters and programming • Faults, alarms, and troubleshooting
PowerFlex TotalFORCE Firmware Documentation Set: <ul style="list-style-type: none"> • PowerFlex Drives with TotalFORCE Control Programming Manual (firmware revisions 10.xxx and later), publication 750-PM101 • PowerFlex Drives with TotalFORCE Control Parameters Reference Data, publication 750-RD101 • PowerFlex Drives with TotalFORCE Control Conditions Reference Data, publication 750-RD102 	Provides detailed information on: <ul style="list-style-type: none"> • Startup, control algorithms, and status indicators • Parameters and programming • Faults, alarms, events, and troubleshooting
Drives in Common Bus Configurations with PowerFlex 755TM Bus Supplies Application Techniques, publication DRIVES-AT005	Provides basic information to properly wire and ground the following products in common bus applications: <ul style="list-style-type: none"> • PowerFlex 755TM drive system for common bus solutions • PowerFlex 750-Series AC and DC input drives • Kinetix® 5700 servo drives
PowerFlex 755T Flux Vector Tuning, publication 750-AT006	Provides guidance on how to tune Flux Vector position and velocity loops, filters, and other features to achieve the level of performance that is required for a given application. This publication is intended for novice drives users and users with advanced skills.
PowerFlex Drives with TotalFORCE Control Built-in EtherNet/IP Adapter User Manual, publication 750COM-UM009	Provides information on how to install, configure, and troubleshoot applications for the PowerFlex drives with the built-in EtherNet/IP adapter.
PowerFlex 750-Series Products with TotalFORCE Control Hardware Service Manual, publication 750-TG100	Provides detailed information on: <ul style="list-style-type: none"> • Preventive maintenance • Component testing • Hardware replacement procedures
PowerFlex 750-Series Safe Speed Monitor Option Module Safety Reference Manual, publication 750-RM001	These publications provide detailed information on installation, set-up, and operation of the 750-Series safety option modules.
PowerFlex 750-Series Safe Torque Off Option Module User Manual, publication 750-UM002	
PowerFlex 750-Series ATEX Option Module User Manual, publication 750-UM003	
PowerFlex 755 Integrated Safety - Safe Torque Off Option Module User Manual, publication 750-UM004	
PowerFlex 755/755T Integrated Safety Functions Option Module User Manual, publication 750-UM005	
PowerFlex 20-HIM-A6 / -C6S HIM (Human Interface Module) User Manual, publication 20HIM-UM001	Provides detailed information on HIM components, operation, and features.
PowerFlex 755TM AC Precharge Modules Unpacking and Lifting Instructions, publication 750-IN102	These publications provide detailed information on: <ul style="list-style-type: none"> • Component weights • Precautions and recommendations • Hardware attachment points • Lifting the component out of the packaging
PowerFlex 755TM DC Precharge Modules Unpacking and Lifting Instructions, publication 750-IN103	
PowerFlex 755TM Power and Filter Modules Unpacking and Lifting Instructions, publication 750-IN104	
PowerFlex 750-Series Service Cart Instructions, publication 750-IN105	Provides detailed set-up and operating instructions for the module service cart and DC precharge module lift.
PowerFlex 755TM Power and Filter Module Storage Hardware Instructions, publication 750-IN106	Provides detailed installation and usage instructions for this hardware accessory.

Resource	Description
PowerFlex 755T Module Service Ramp Instructions, publication 750-IN108	Provides detailed usage instructions for the module service ramp.
Industry Installation Guidelines for Pulse Width Modulated (PWM) AC Drives, publication DRIVES-AT003	Provides basic information on enclosure systems, considerations to help protect against environmental contaminants, and power and grounding considerations for installing Pulse Width Modulated (PWM) AC drives.
Wiring and Grounding Guidelines for Pulse Width Modulated (PWM) AC Drives, publication DRIVES-IN001	Provides basic information to properly wire and ground PWM AC drives.
EtherNet/IP Network Devices User Manual, publication ENET-UM006	Describes how to configure and use EtherNet/IP devices to communicate on the EtherNet/IP network.
Ethernet Reference Manual, publication ENET-RM002	Describes basic Ethernet concepts, infrastructure components, and infrastructure features.
System Security Design Guidelines Reference Manual, publication SECURE-RM001	Provides guidance on how to conduct security assessments, implement Rockwell Automation products in a secure system, harden the control system, manage user access, and dispose of equipment.
Industrial Components Preventive Maintenance, Enclosures, and Contact Ratings Specifications, publication IC-TD002	Provides a quick reference tool for Allen-Bradley industrial automation controls and assemblies.
Safety Guidelines for the Application, Installation, and Maintenance of Solid-State Control, publication SGI-1.1	Designed to harmonize with NEMA Standards Publication No. ICS 1.1-1987 and provides general guidelines for the application, installation, and maintenance of solid-state control in the form of individual devices or packaged assemblies incorporating solid-state components.
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
PowerFlex AC Drive Performance Specifications per Ecodesign Regulation (EU) 2019/1781 and UK SI 2021 No. 745, publication PFLEX-TD003	Provides specifications per EU and UK Ecodesign, including efficiency class.
Product Certifications website, rok.auto/certifications	Provides declarations of conformity, certificates, and other certification details.

Rockwell Automation Support

Use these resources to access support information.

Technical Support Center	Find help with how-to videos, FAQs, chat, user forums, Knowledgebase, and product notification updates.	rok.auto/support
Local Technical Support Phone Numbers	Locate the telephone number for your country.	rok.auto/phonesupport
Technical Documentation Center	Quickly access and download technical specifications, installation instructions, and user manuals.	rok.auto/techdocs
Literature Library	Find installation instructions, manuals, brochures, and technical data publications.	rok.auto/literature
Product Compatibility and Download Center (PCDC)	Download firmware, associated files (such as AOP, EDS, and DTM), and access product release notes.	rok.auto/pcdc

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