

Molded Case Circuit Breakers Industrial Circuit Breakers

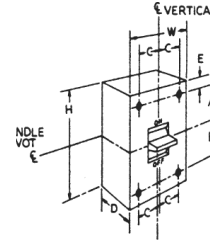
Section 6

Quick Reference Guide

15-1200A Circuit Breakers

Electronic Trip

Ratings do not apply to molded case switches. The interruption ratings and voltages shown in the table are maximum ratings. A circuit breaker of the type given in the left-hand column may be applied at the given circuit voltage in any electrical distribution system where the available fault current at the load terminals of the breaker does not exceed the value in the table. That circuit breaker type may also be applied at intermediate values of circuit voltage provided the available fault current at the load terminals of the breaker does not exceed the value in the table for the higher value of voltage.



SE 150

Spectra™ RMS Circuit Breakers UL/CSA Ratings

Solid-State with Interchangeable Trip Unit (Rating Plug)

Circuit Breaker Type	Ampere Rating	No. Poles	Maximum Vac	UL Listed Interrupting Rating—kA			Dimensions Inches (mm)							Approx. Ship Wt./Std. Pack
				240 Vac	480 Vac	600 Vac	H	W	D	A	B	C	E	
SE150 Current Limiting (UL File No. E-11592; CSA LR 40350)¹														
SED ^{2,3}	15-150	2	480	18	18	—	6.31 (160)	4.12 (105)	3.38 (86)	2.41 (61)	2.47 (63)	.69 (18)	.72 (18)	5.65 lb/1
		3	600			14								
SEH ²	15-150	2	480	65	25	—								
		3	600			18								
SEL	15-150	2	480	100	65	—								
		3	600			25								
SEP	15-150	2	480	200	100	—								
		3	600			25								
SF-250 Current Limiting (UL File No. E-11592; CSA LR 40350)¹														
SFH ²	70-250	2	480	65	35	—	10.12 (257)	4.12 (105)	3.81 (97)	3.87 (98)	3.87 (98)	.69 (18)	1.19 (30)	9.15 lb/1
		3	600			22								
SFL	70-250	2	480	100	65	—								
		3	600			25								
SFP	70-250	2	480	200	100	—								
		3	600			25								
SG600 Current Limiting (UL File No. E-11592; CSA LR 40350)^{1,4}														
SGH1 ^{2,5}	6-150	3	600	65	35	25	10.09 ⁶ (256)	5.50 (140)	3.81 (97)	4.45 (113)	3.30 (84)	.91 (23)	1.18 ⁶ (30)	15.85 lb/1
SGD ²	125-400	2	240	65	—	—								
		3	600	65	35	25								
SGH4 ²	125-400	2	600	65	35	25								
		3	600	65	35	25								
SGH6 ²	250-600	2	600	65	35	25								
		3	600	65	35	25								
SGL1 ⁵	60-150	3	600	100	65	65								
		3	600	200	100	65								
SGP1 ⁵	60-150	2	600	100	65	65								
		3	600	100	65	65								
SGL4	125-400	2	600	100	65	65								
		3	600	100	65	65								
SGP4	125-400	2	600	200	100	65								
		3	600	200	100	65								
SGL6	250-600	2	600	100	65	65								
		3	600	100	65	65								
SGP6	250-600	2	600	200	100	65								
		3	600	200	100	65								
SK1200 (UL File No. E-11592; CSA LR 40350)^{1,4}														
SKH8	300-800	2	600	65	50	25	15.50 ⁷ (394)	8.25 (210)	5.50 (140)	8.56 (217)	5.69 (145)	1.38 (35)	.62 ⁷ (16)	47.6 lb/1
		3	600	100	65	42								
SKL8	300-800	2	600	100	65	42								
		3	600	200	100	65								
SKP8	300-800	2	600	200	100	65								
		3	600	200	100	65								
SKH12	600-1200	2	600	65	50	25								
		3	600	65	50	25								
SKL12	600-1200	2	600	100	65	42								
		3	600	100	65	42								
SKP12	600-1200	2	600	200	100	65								
		3	600	200	100	65								
SKS8	800-1200	3	480	200	100	—								
		3	480	100	65	—								
SKT8	800-1200	3	480	100	65	—								
		3	480	200	100	—								
SKS12	800-1200	3	480	200	100	—								
		3	480	100	65	—								
SKT12	800-1200	3	480	200	100	—								
		3	480	100	65	—								

¹UL listed as HACR (heating, air conditioning and refrigeration).

²Not current-limiting circuit breaker.

³UL listed as HID (high intensity discharge).

⁴Includes microEntelliGuard™ Trip Units.

⁵microEntelliGuard™, MicroVersaTrip™ Plus and MicroVersaTrip™ PM Trip Units only.

⁶Add 1.76 inches (45 mm) to each end with lugs and lug cover installed.

⁷Add 4.00 inches (101 mm) to upper end for SKP (100 kAIC-480V) lug cover.



Molded Case Circuit Breakers

Industrial Circuit Breakers

Quick Reference Guide
 15-1200A Circuit Breakers
 Electronic Trip

Ratings do not apply to molded case switches

IEC/JIS Ratings

Solid-State with Interchangeable Trip Unit (Rating Plug)														
Circuit Breaker Type	Ampere Rating	No. Poles	IEC 947-2 Interruption Capacity – kA								Japanese Industry Standard Interruption Capacity kA			
			220-240 Vac		380-415 Vac		500 Vac		690 Vac		Vac			
			I _{cu}	I _{cs}	I _{cu}	I _{cs}	I _{cu}	I _{cs}	I _{cu}	I _{cs}	220-240	380-415	500	690
SE150 Current Limiting, 15-32A														
SED	15-32	2	18	9	10	5	—	—	—	—	18	10	—	—
		3					4	4	—	—			4	—
SEH	15-32	2	65	33	15	10	—	—	—	—	65	15	—	—
		3					6	6	—	—			6	—
SEL	15-32	2	100	50	20	15	—	—	—	—	100	20	—	—
		3					8	8	3	3			8	3
SEP	15-32	2	200	100	20	20	—	—	—	—	200	20	—	—
		3					10	10	5	5			10	5
SE150 Current Limiting, 40-160A														
SED	40-160	2	18	9	14	7	—	—	—	—	18	14	—	—
		3					14	7	—	—			14	—
SEH	40-160	2	65	33	35	17	—	—	—	—	65	25	—	—
		3					25	12	—	—			18	—
SEL	40-160	2	100	50	65	33	—	—	—	—	100	65	—	—
		3					40	20	5	5			25	5
SEP	40-160	2	200	100	100	50	—	—	—	—	200	100	—	—
		3					50	25	10	5			65	10
SF250 Current Limiting														
SFH	70-250	2	65	33	35	17	—	—	—	—	65	25	—	—
		3					25	12	—	—			18	—
SFL	70-250	2	100	50	65	33	—	—	—	—	100	65	—	—
		3					40	20	14	7			25	14
SFP	70-250	2	200	100	100	50	—	—	—	—	200	100	—	—
		3					65	33	18	9			65	18
SG600 Current Limiting														
SGH1 ¹	60-150	3	65	33	25	13	18	9	—	—	65	25	18	—
SGL1 ¹			100	50	65	33	35	18	14	7	100	65	35	22
SGP1 ¹			200	100	100	50	50	25	18	9	200	100	65	35
SGH4	125-400	2	65	33	25	13	—	—	—	—	65	25	—	—
		3					18	9	—	—			18	—
SGL4	125-400	2	100	50	65	33	—	—	—	—	100	65	—	—
		3					35	18	14	7			35	22
SGP4	125-400	2	200	100	100	50	—	—	—	—	200	100	—	—
		3					50	25	18	9			65	35
SGH6	250-600	2	65	33	25	13	—	—	—	—	65	25	—	—
		3					18	9	—	—			18	—
SGL6	250-600	2	100	50	65	33	—	—	—	—	100	65	—	—
		3					35	18	14	7			35	22
SGP6	250-600	2	200	100	100	50	—	—	—	—	200	100	—	—
		3					50	25	18	9			65	35
SK1200														
SKH8	300-800	2	65	16	50	13	25	13	—	—	65	50	25	—
		3												
SKL8	300-800	2	100	25	65	16	42	21	14	14	100	65	42	14
		3												
SKP8	300-800	2	140	35	85	25	50	25	18	18	140	85	50	18
		3												
SKH12	600-1250	2	65	16	50	13	25	13	—	—	65	50	25	—
		3												
SKL12	600-1250	2	100	25	65	21	42	16	14	14	100	65	42	14
		3												
SKP12	600-1250	2	140	35	70	25	50	25	18	18	140	85	50	18
		3												

¹ microEntelliGuard™, MicroVersaTrip™ Plus, and MicroVersaTrip™ PM Trip Units only.



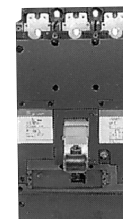
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SF



SG



SK



Molded Case Circuit Breakers

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Spectra™ RMS

SE150 Frame

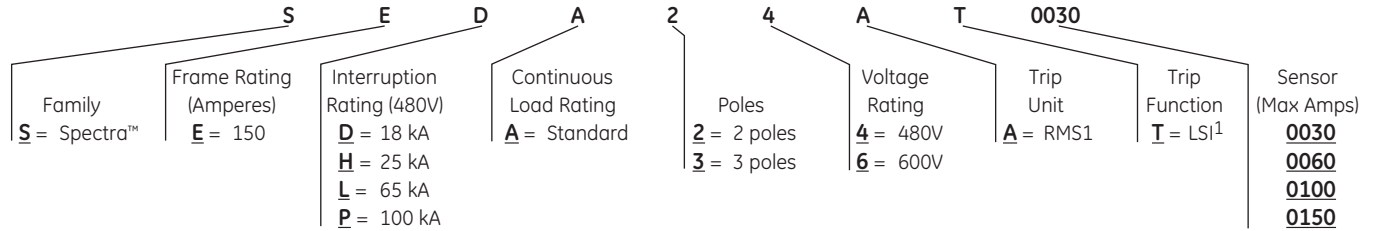
15-150A Circuit Breakers

Electronic Trip

Suitable for Reverse Feed

UL File E-11592, CSA LR 40350

Product Number Structure



¹Adjustable Instantaneous with Tracking Short Time (Long Time established via Interchangeable Rating Plugs).

Note: This information is provided for interpreting product numbers (it should not be used to build product numbers).

SED, SEH, SEL, SEP²; 2-Pole, 150A, 480 Vac Max., (IEC 947-2: 160A, 415 Vac Max.)

Rating Plug				Frame					Terminal Lugs for Front Connection (Cu/Al)	
				UL 489 IC @ 480 Vac						
Ampere Rating	Adjustable Instantaneous Trip Range Amps		Product Number	Current Sensor	18kA	25kA	65kA	100kA	Product Number	Wire Range
	Low	High			Product Number	Product Number	Product Number	Product Number		
15	43	182	SRPE30A15	30	SEDA24AT0030 ³	SEHA24AT0030 ³	SELA24AT0030 ³	SEPA24AT0030 ³	TCAL18	12-3/0 Cu 12-3/0 Al
20	58	254	SRPE30A20							
25	73	332	SRPE30A25							
30	87	415	SRPE30A30							
35	104	453	SRPE60A35							
40	118	501	SRPE60A40	60	SEDA24AT0060 ³	SEHA24AT0060 ³	SELA24AT0060 ³	SEPA24AT0060 ³		
45	134	583	SRPE60A45							
50	148	637	SRPE60A50							
60	178	777	SRPE60A60							
70	206	863	SRPE100A70							
80	236	999	SRPE100A80	100	SEDA24AT0100	SEHA24AT0100	SELA24AT0100	SEPA24AT0100		
90	267	1138	SRPE100A90							
100	297	1280	SRPE100A100							
110	328	1426	SRPE150A110							
125	374	1640	SRPE150A125							
150	450	1991	SRPE150A150	150	SEDA24AT0150	SEHA24AT0150	SELA24AT0150	SEPA24AT0150		

SED, SEH, SEL, SEP²; 3-Pole, UL/CSA: 150A, 600 Vac Max., (IEC 947-2: 160A, 690 Vac Max.)

Rating Plug				Frame					Terminal Lugs for Front Connection (Cu/Al)	
				UL 489 IC @ 480 Vac						
Ampere Rating	Adjustable Instantaneous Trip Range Amps		Product Number	Current Sensor	18kA	25kA	65kA	100kA	Product Number	Wire Range
	Low	High			Product Number	Product Number	Product Number	Product Number		
15	43	182	SRPE30A15	30	SEDA36AT0030 ³	SEHA36AT0030 ³	SELA36AT0030 ³	SEPA36AT0030 ³	TCAL18	12-3/0 Cu 12-3/0 Al
20	58	254	SRPE30A20							
25	73	332	SRPE30A25							
30	87	415	SRPE30A30							
35	104	453	SRPE60A35							
40	118	501	SRPE60A40	60	SEDA36AT0060 ³	SEHA36AT0060 ³	SELA36AT0060 ³	SEPA36AT0060 ³		
45	134	583	SRPE60A45							
50	148	637	SRPE60A50							
60	178	777	SRPE60A60							
70	206	863	SRPE100A70							
80	236	999	SRPE100A80	100	SEDA36AT0100	SEHA36AT0100	SELA36AT0100	SEPA36AT0100		
90	267	1138	SRPE100A90							
100	297	1280	SRPE100A100							
110	328	1426	SRPE150A110							
125	374	1640	SRPE150A125							
150	450	1991	SRPE150A150	150	SEDA36AT0150	SEHA36AT0150	SELA36AT0150	SEPA36AT0150		

²SEL, SEP UL current limiting.

³When used with 15-50A Rating Plug, UL listed for HID (high intensity discharge).

Note: All Spectra™ breakers UL listed as HACR type.

All Spectra™ breakers marked CE.



Molded Case Circuit Breakers

Molded Case Switches

100-1200A

Section 6

Molded Case Switches Spectra™ RMS

UL File E-57546, CSA LR 91464, Includes fixed, high-set Instantaneous trip suitable for reverse feed.

Frame Type	Ampere Rating	Switch ¹ Product Number	Terminal Lugs for Front Connection (Cu/Al)		Maximum Short Circuit Withstand Rating ² (kA rms symmetrical)		
			Product Number	Wire Range	240 Vac	480 Vac	600 Vac
SE150	100	SEDA36AN0100	TCAL18	Aluminum: #12-3/0	200	100	25
	150	SEDA36AN0150		Copper: #14-3/0			
SF250	250	SFDA36AN0250	TCAL29	Aluminum: #8-350 kcmil	200	100	25
				Copper: #8-350 kcmil			
SG600	400	SGDA36AN0400	3-pole lug kit TCLK365 ³	Aluminum: (2) 2/0-500 kcmil	200	100	65
	600	SGDA36AN0600		or (1) #8-600 kcmil			
SK1200	800	SKDA36AN0800	TCAL81	Aluminum: (3) 3/0-500 kcmil	100	65	42
	1000	SKDA36AN1000	TCAL125	Copper: (3) 3/0-500 kcmil			
	1200	SKDA36AN1200		Aluminum: (4) 250-500 kcmil			
				Copper: (4) 250-500 kcmil			

Molded Case Switches Nonautomatic Trip, Includes Cu/Al line and load lugs. For optional lugs, see page 6-103 and 6-104.

Type	Ampere Rating	Number of Poles	Voltage Rating	Product Number
TEB	100	1	120 Vac, 125 Vdc	TEB111Y100 ⁴
TEB	100	2	240 Vac, 250 Vdc	TEB122Y100 ⁴
TEB	100	3	240 Vac	TEB132Y100 ⁴
TEB	100	3	240Vac	TEB132YT100 ⁹
TED	100	1	277 Vac, 125 Vdc	TED113Y100 ⁴
TED	100	2	480 Vac, 250 Vdc	TED124Y100 ⁴
TED	100	3	480Vac, 250Vdc	TED134YT100 ⁹
TED	100	3	600Vac	TED136VT100 ⁹
TED	100	3	600Vac	TED136VT100A ¹⁰
TED	150	2	480 Vac, 250 Vdc	TED124Y150 ^{4,5}
TED	150	3	480Vac, 250Vdc	TED134YT150 ⁹
TED	150	3	600Vac	TED136VT150 ⁹
TFJ	225	2	600 Vac	TFJ226Y225 ^{4,6,11}
TFJ	225	3	600 Vac	TFJ236Y225 ^{6,11}
TJJ	400	2	600 Vac, 250 Vdc	TJJ426Y400 ⁷
TJJ	400	3	600 Vac	TJJ436Y400 ⁷

Type	Ampere Rating	Number of Poles	Voltage Rating	Product Number
TFK	225	2	600 Vac, 250 Vdc	TFK226Y225 ^{6,7,8,11}
TFK	225	3	600 Vac, 250 Vdc	TFK236Y225 ^{7,8,11}
TJK	400	2	600 Vac, 250 Vdc	TJK426Y400 ⁷
TJK	400	3	600 Vac, 250 Vdc	TJK436Y400 ⁷
TJK	600	2	600 Vac, 250 Vdc	TJK626Y600 ⁷
TJK	600	3	600 Vac, 250 Vdc	TJK636Y600 ⁷
TKM	800	2	600 Vac, 250 Vdc	TKMA826Y800 ^{7,11}
TKM	800	3	600 Vac, 250 Vdc	TKMA836Y800 ^{7,11}
TKM	1000	2	600 Vac, 250 Vdc	TKMA2Y1000 ^{7,11}
TKM	1000	3	600 Vac, 250 Vdc	TKMA3Y1000 ^{7,11}
TKM	1200	2	600 Vac, 250 Vdc	TKMA2Y1200 ^{7,11}
TKM	1200	3	600 Vac, 250 Vdc	TKMA3Y1200 ^{7,11}

¹No rating plug required.

²The maximum withstand rating is limited by the application to the value set forth in this table or the short circuit rating of the upstream fuse or circuit breaker, whichever is less. The upstream protective device must have an instantaneous trip function or element and its rated ampacity may not exceed the ampere rating of the switch.

³Order one kit for either line or load end; two kits required for both.

⁴Internal accessory requires factory installed dummy trip. Specify on order. Accessories not available for one-pole TEB, TED.

⁵Not UL listed.

⁶600 Volts max.

⁷Internal accessory requires factory installed dummy trip unit. See page 6-44 for additional details. Nonautomatic trip unit and dummy trip not UL listed for field installation.

⁸UL listed only when ordered as a complete switch.

⁹Includes factory installed dummy trip for accessory installation.

¹⁰Includes factory installed dummy trip and TCAL12A lugs.

¹¹Limited availability. Obsolete when inventory is depleted.

