

Features

Spectra™ RMS Molded Case Circuit Breakers

SE150, SF250, SG600, and SK1200 circuit breaker frames have a digital, solid-state, rms sensing trip system with field installable, front-mounted rating plugs to establish or change the breaker ampere rating. Adjustable instantaneous with tracking short-time is standard on all frames including SE150. The trip system uses digital sampling to determine the rms value of sinusoidal and nonsinusoidal currents.

microEntelliGuard™ Trip Units

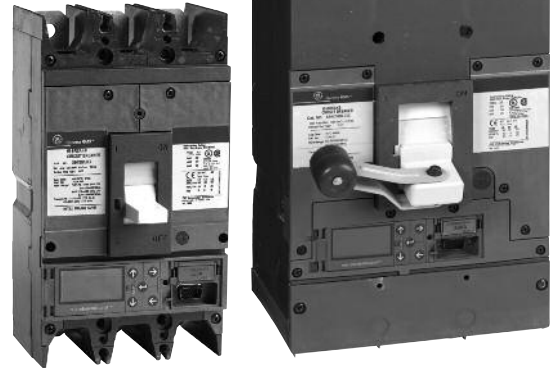
Spectra™ SG600 and SK1200 breakers are now available with *microEntelliGuard™* trip units - the newest and most advanced trip unit available in the Spectra™ line of molded case circuit breakers. Based on the EntelliGuard™ TU trip unit platform, the *microEntelliGuard™* trip unit has the same HMI interface and incorporates the advanced features and protective functions for improved system protection, coordination, selectivity, performance, and diagnostic capabilities. New features offered with the *microEntelliGuard™* trip unit include enhanced time-current curve shaping capability, ground fault alarm, direct Modbus communications, reduced energy let-through setting, zone selective interlock, neutral protection, waveform capture, and programmable output contacts. The *microEntelliGuard™* trip unit utilizes the same power management accessories offered for the Spectra™ MicroVersaTrip™ with the addition of a new advanced junction box and interconnect cables. The breakers have the same footprint and interrupt ratings as their SG/SK counterparts and are backwards compatible with existing equipment and installations. The *microEntelliGuard™* trip unit uses the same universal rating plugs and test kit offered for the EntelliGuard TU™ trip unit.

Spectra™ molded cases circuit breakers with *microEntelliGuard™* trip units can be part of an ArcWatch™ solution.

GE's ArcWatch™ system solution involves a combination of intelligent trip units and current limiting molded case circuit breakers to create a no compromise solution; safety and reliability together. Advances in zone selective interlocking (ZSI) and waveform recognition algorithms allow entire systems to be designed so that full selectivity and 100% instantaneous protection at calculated arcing current is possible. For most industrial systems, the GE ArcWatch™ solution will result in incident energy under 8 cal/cm² at 18".

Enabling ArcWatch™ means the proper coordination analysis techniques have been used to determine the necessary circuit breaker protection features and settings that allow full coordination in the given system. The circuit breaker must be set to match the results of the completed study.

For more information, check out www.geindustrial.com/ArcWatch (Publication DET-760) or contact your local sales representative.



Spectra™ SG600 and SK1200 Breakers
with *microEntelliGuard™* Trip Units

Molded Case Circuit Breakers

Industrial Circuit Breakers

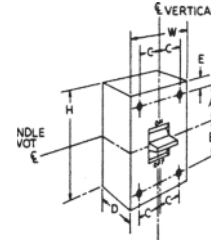
Section 6

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/cUL 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) 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		2	480	65	25	—																
		3	600			18																
SEL	15-150	2	480	100	65	—																
		3	600			25																
SEP		2	480	200	100	—																
		3	600			25																
SF-250 Current Limiting (UL File No. E-11592) 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		2	480	200	100	—																
		3	600			25																
SG600 Current Limiting (UL File No. E-11592) ^{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																				
2		600	65	35	25																	
3																						
SGH6 ²	250-600	2	600	65	35	25																
SGL1 ⁵	60-150	3	600	100	65	65																
		3	600	200	100	65																
SGP1 ⁵		125-400	2	600	100	65	65															
			3																			
2	600		200	100	65																	
3																						
SGL4	125-400	2	600	100	65	65																
3																						
2		600	200	100	65																	
3																						
SGL6	250-600	2	600	100	65	65																
3																						
2		600	200	100	65																	
3																						
SGP6		2	600	200	100	65																
SK1200 (UL File No. E-11592) ^{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																				
SKL8		2													600	100	65	42				
		3																				
SKP8	600-1200	2	600	200	100	65																
		3																				
SKH12		2													600	65	50	25				
		3																				
SKL12	600-1200	2	600	100	65	42																
		3																				
SKP12		2													600	200	100	65				
		3																				
SKS8	800-1200	3	480	200	100	—																
SKT8		3		100	65																	
SKS12	800-1200	3	480	200	100	—																
SKT12		3		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

Section 6

Spectra™ RMS

SE150 Frame

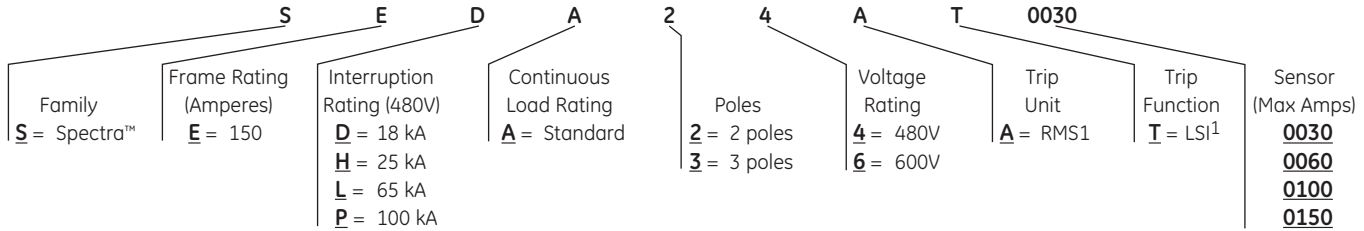
15-150A Circuit Breakers

Electronic Trip

Suitable for Reverse Feed

UL/cUL File E-11592

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						
Adjustable Instantaneous										
Ampere Rating	Trip Low	Range High	Amps Product Number	Current Sensor	18kA Product Number	25kA Product Number	65kA Product Number	100kA Product Number	Product Number	Wire Range
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	60	SEDA24AT0060 ³	SEHA24AT0060 ³	SELA24AT0060 ³	SEPA24AT0060 ³		
40	118	501	SRPE60A40							
45	134	583	SRPE60A45							
50	148	637	SRPE60A50							
60	178	777	SRPE60A60	100	SEDA24AT0100	SEHA24AT0100	SELA24AT0100	SEPA24AT0100		
70	206	863	SRPE100A70							
80	236	999	SRPE100A80							
90	267	1138	SRPE100A90							
100	297	1280	SRPE100A100	150	SEDA24AT0150	SEHA24AT0150	SELA24AT0150	SEPA24AT0150		
110	328	1426	SRPE150A110							
125	374	1640	SRPE150A125							
150	450	1991	SRPE150A150							

SED, SEH, SEL, SEP²; 3-Pole, UL/cUL: 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	60	SEDA36AT0060 ³	SEHA36AT0060 ³	SELA36AT0060 ³	SEPA36AT0060 ³		
40	118	501	SRPE60A40							
45	134	583	SRPE60A45							
50	148	637	SRPE60A50							
60	178	777	SRPE60A60	100	SEDA36AT0100	SEHA36AT0100	SELA36AT0100	SEPA36AT0100		
70	206	863	SRPE100A70							
80	236	999	SRPE100A80							
90	267	1138	SRPE100A90							
100	297	1280	SRPE100A100	150	SEDA36AT0150	SEHA36AT0150	SELA36AT0150	SEPA36AT0150		
110	328	1426	SRPE150A110							
125	374	1640	SRPE150A125							
150	450	1991	SRPE150A150							

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.