

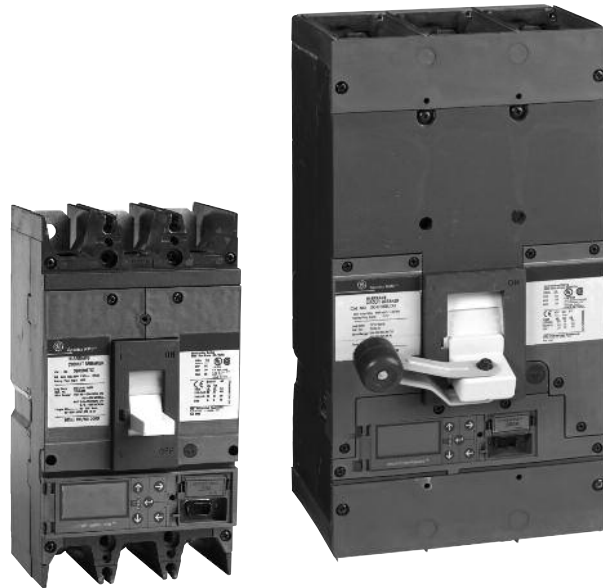
Features

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

Molded Case Circuit Breakers

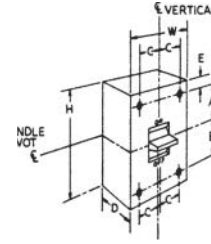
Industrial Circuit Breakers

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		2	480	—																		
		3	600	18																		
SEL	15-150	2	480	100	65	—																
		3	600			25																
		2	480	—																		
SEP		3	600	200	100	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																		
2			480	—																		
SFP	3		600	200	100	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																
		2	600	65	35	25																
SGH4 ²		125-400	3	600	65	35	25															
2	600		65	35	25																	
SGH6 ²	250-600	3	600	65	35	25																
SGL1 ⁵	60-150	3	600	100	65	65																
SGP1 ⁵		3	600	200	100	65																
SGL4	125-400	2	600	100	65	65																
		3	600	200	100	65																
		2	600	100	65	65																
SGP4		125-400	3	600	200	100	65															
2	600		100	65	65																	
SGL6	250-600	3	600	200	100	65																
2		600	100	65	65																	
SGP6		250-600	3	600	200	100	65															
2			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								
SKL8		3	600	100	65	42																
		2	600	200	100	65																
		3	600	200	100	65																
SKP8	600-1200	2	600	65	50	25																
3		600	100	65	42																	
SKH12		600-1200	2	600	200	100									65							
3			600	200	100	65																
SKL12	600-1200		2	600	200	100									65							
3		600	200	100	65																	
SKP12		800-1200	3	480	200	100									—							
SKS8	800-1200		3	480	200	100									—							
SKT8			3	480	200	100									—							
SKS12	800-1200	3	480	200	100	—																
SKT12		3	480	200	100	—																

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

Section 6

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		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		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		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		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		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		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		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		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		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.



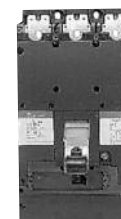
SE



SF



SG



SK



Molded Case Circuit Breakers

Section 6

Spectra™ RMS

SE150 Frame

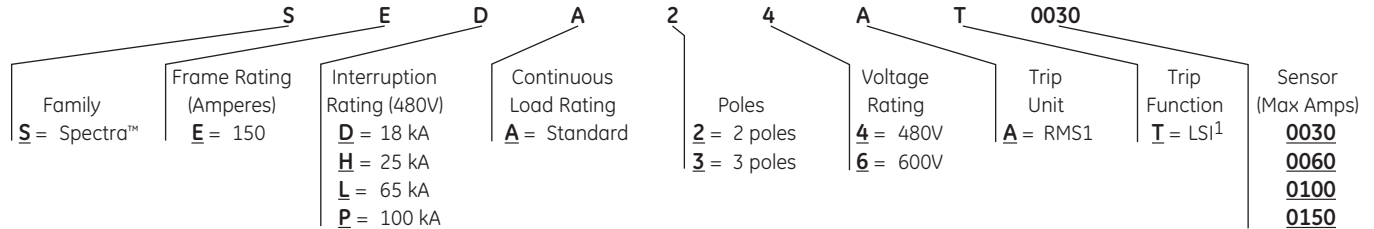
15-150A Circuit Breakers

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						
Adjustable Instantaneous Trip Range Amps		Product Number	Current Sensor	18kA	25kA	65kA	100kA	Product Number	Wire Range	
Ampere Rating	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	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							
70	206	863	SRPE100A70	100	SEDA24AT0100	SEHA24AT0100	SELA24AT0100	SEPA24AT0100		
80	236	999	SRPE100A80							
90	267	1138	SRPE100A90							
100	297	1280	SRPE100A100							
110	328	1426	SRPE150A110	150	SEDA24AT0150	SEHA24AT0150	SELA24AT0150	SEPA24AT0150		
125	374	1640	SRPE150A125							
150	450	1991	SRPE150A150							

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						
Adjustable Instantaneous Trip Range Amps		Product Number	Current Sensor	18kA	25kA	65kA	100kA	Product Number	Wire Range	
Ampere Rating	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							
70	206	863	SRPE100A70	100	SEDA36AT0100	SEHA36AT0100	SELA36AT0100	SEPA36AT0100		
80	236	999	SRPE100A80							
90	267	1138	SRPE100A90							
100	297	1280	SRPE100A100							
110	328	1426	SRPE150A110	150	SEDA36AT0150	SEHA36AT0150	SELA36AT0150	SEPA36AT0150		
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.

