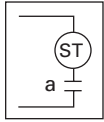


Shunt Trip

Shunt Trip



The Shunt Trip provides remote controlled tripping of the circuit breaker. The shunt trip consists of an intermittent rated solenoid with a tripping plunger and a cutoff switch assembled to a plug-in module. When required for ground fault protection applications, certain ac rated

shunt trips, as noted in the Electrical Rating Table, are suitable for operation at 55 percent of rated voltage.

Table 12-416. F-Frame Electrical Rating Data ①②③

50/60 Hz			dc		
Supply Voltage	Minimum Operating Voltage	VA	Supply Voltage	Minimum Operating Voltage	VA
12 24	6.75	75 300	12 24	9	100 400
48 60	36	92 140	48 60	36	100 160
110 120 127 208 220 240	156	480 570 640 180 200 240	110 120 125	77	55 66 71
380 415 440	300	610 130 330	127 220 250	—	72 110 140
480 525 550 600	300	380 450 530 590	— — — —	— — — —	— — — —

- ① Average unlatching time: 6 milliseconds.
 ② Average circuit breaker contact total opening time: 18 milliseconds.
 ③ Endurance: 6,000 electrical operations plus 4,000 mechanical operations.

Table 12-417. J-Frame Electrical Rating Data ④⑤⑥

50/60 Hz			dc		
Supply Voltage	Minimum Operating Voltage	VA	Supply Voltage	Minimum Operating Voltage	VA
12 24	9	31 173	12 24	8.4	50 247
48 60	36	686 1014	48 60	33.6	1094 1698
110 ⑦ 120 ⑦ 127 ⑦ 208 ⑦ 220 ⑦ 240 ⑦	60.5	66 84 102 354 396 432	110 120 125	77	112 138 150
380 400 415 440	285	180 200 240 610	110 120 125 127	154	40 58
480 525 550 600	360	34 42 — 60	— — — —	— — — —	— — — —

- ④ Average unlatching time: 6 milliseconds.
 ⑤ Average circuit breaker contact total opening time: 18 milliseconds.
 ⑥ Endurance: 6,000 electrical operations plus 2,000 mechanical operations.
 ⑦ Supply voltages suitable for use with Class 1 GFP devices. Marking label included with accessory kits.

Select shunt trip catalog number for the voltage within the indicated voltage range. Shunt trip coils are designed to be applied at specific ac or dc voltages within the voltage range shown. Electrical ratings are also shown on applicable circuit breaker accessory nameplates.

Table 12-418. K-Frame Electrical Rating Data ⑧⑨⑩

50/60 Hz			dc		
Supply Voltage	Minimum Operating Voltage	VA	Supply Voltage	Minimum Operating Voltage	VA
12 24	9	45 200	12 24	8.4	35 170
48 60		830 1280	48 60		710 1105
110 ⑪ 120 ⑪ 127 ⑪ 208 ⑪ 220 ⑪ 240 ⑪	60	100 120 140 420 470 550	110 120 125	77	110 130 140
380 400 415 440	285	95 108 120 136	220 250	154	41 54
480 525 550 600	360	40 50 50 70	— — — —	— — — —	— — — —

- ⑧ Approximate unlatching time: 6 milliseconds.
 ⑨ Approximate total circuit breaker contact opening time: 8 milliseconds.
 ⑩ Endurance: 5,000 electrical operations plus 1,000 mechanical operations.
 ⑪ Supply voltages suitable for use with Class 1 GFP devices. Marking label included with accessory kits.

Table 12-419. L- and M-Frame Electrical Rating Data ⑫⑬⑭

50/60 Hz			dc		
Supply Voltage	Minimum Operating Voltage	VA	Supply Voltage	Minimum Operating Voltage	VA
12 24	9	45 200	12 24	9	35 170
48 60	34	830 1280	48 60	34	710 1105
110 ⑮ 120 ⑮ 127 ⑮ 208 ⑮ 220 ⑮ 240 ⑮	60	100 120 140 420 470 550	110 120 125	77	110 130 140
380 400 415 440	266	95 108 120 136	220 250	154	41 54
480 525 550 600	336	40 50 50 70	— — — —	— — — —	— — — —

- ⑫ Approximate unlatching time: 6 milliseconds.
 ⑬ Approximate total circuit breaker contact opening time: 18 milliseconds.
 ⑭ Endurance: 5,000 electrical operations plus 1,000 mechanical operations.
 ⑮ Supply voltages suitable for use with Class 1 GFP devices. Marking label included with accessory kits.

Shunt Trip

Table 12-422. G-Frame Shunt Trip (LH 3-Pole only)

Electrical Ratings			Suffix Number	Adder U.S. \$	Catalog Number	Price U.S. \$
Volts	Frequency	Amperes				
120	50/60 Hz	1.1	S1		1373D62G01	
240	50/60 Hz	2.1	S2		1373D62G02	
12	dc	2.8	S3		1373D62G15	
24	dc	5.7	S4		1373D62G16	
24	60 Hz	—	S7		1373D62G20	

Note: G-Frame circuit breakers are factory sealed. Underwriters Laboratories requires that internal accessories be installed at the factory.

Note: Internal accessories are UL listed for factory installation under E7819.

Note: Where local codes and standards permit and UL listing is not required, internal accessories can be field installed. Accessory installation should be done before the circuit breaker is mounted and connected.

Table 12-423. F-Frame and HMCP (F) Shunt Trip

Voltage Rating (ac Frequency = 50/60 Hz)	Factory Mounted								Factory Installation Kit ①			
	Connection Type and Location											
	18-Inch (457.2 mm) Pigtail Leads ②								Terminal Block			
	Same Side		Rear ③		Opposite Side		Same Side		Pigtail Leads		Terminal Block	
Suffix Number	Adder U.S. \$	Suffix Number	Adder U.S. \$	Suffix Number	Adder U.S. \$	Suffix Number	Adder U.S. \$	Catalog Number	Price U.S. \$	Catalog Number	Price U.S. \$	

Left-Pole Mounting ac/dc Ratings

12 – 24 Vac or dc	S01		S02		S03		S04		SNT1LP03K		SNT1LT03K	
48 – 127 Vac or 48 – 60 Vdc ④	S05		S06		S07		S08		SNT1LP08K		SNT1LT08K	
208 – 380 Vac or 110 – 127 Vdc	S09		S10		S11		S12		SNT1LP12K		SNT1LT12K	
415 – 600 Vac or 220 – 250 Vdc	S13		S14		S15		S16		SNT1LP18K		SNT1LT18K	

Right- or Neutral-Pole Mounting ac/dc Ratings ⑤

12 – 24 Vac or dc	S17		S18		S19		S20		SNT1RP03K		SNT1RT03K ⑥	
48 – 127 Vac or 48 – 60 Vdc ④	S21		S22		S23		S24		SNT1RP08K		SNT1RT08K ⑥	
208 – 380 Vac or 110 – 127 Vdc	S25		S26		S27		S28		SNT1RP12K		SNT1RT12K ⑥	
415 – 600 Vac or 220 – 250 Vdc	S29		S30		S31		S32		SNT1RP18K		SNT1RT18K ⑥	

① Not listed with Underwriters Laboratories, for field installation.

② Pigtail wire size: 18 AWG (0.82 mm²).

③ Standard pigtail lead exit location.

④ 120 Vac marked suitable for ground fault protection devices.

⑤ Standard mounting location.

⑥ Not for use on 4-pole circuit breakers

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