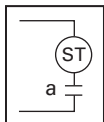


Shunt Trip

2

Shunt Trip



G-Frame Shunt Trip (LH Three-Pole Only)

Electrical Ratings				
Volts	Frequency	Amperes	Suffix Number	Catalog Number
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

F-Frame and HMCP (F) Shunt Trip

Voltage Rating (AC Frequency = 50/60 Hz)	Factory Mounted Connection Type and Location			Factory Installation Kit ①		
	18-Inch (457.2 mm) Pigtail Leads ②			Terminal Block	Pigtail Leads	Terminal Block
	Same Side	Rear ③	Opposite Side	Same Side		
	Suffix Number	Suffix Number	Suffix Number	Suffix Number	Catalog Number	Catalog Number
Left-Pole Mounting AC/DC Ratings						
12–24 Vac or Vdc	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 Vdc	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

Notes

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 four-pole circuit breakers.

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

Internal accessories are UL listed for factory installation under E7819.

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.

Shunt Trip**F-Frame and HMCP Shunt Trip Electrical Rating Data** ①②③

Catalog Number	Application Ratings		Supply Voltage (V)	Electrical Operating Ratings			I _{rms} at 0.25 (A)	I _{rms} at 0.33s (A)	VA	One Minute Dielectric Withstand Voltage (V)
	Voltage (V)	Frequency (Hz)		Minimum Operating Voltage (V)	I _p (A)					
SNT1LP03K or SNT1LT03K	12–24	50/60	9	6.3	6.1		4.3	40	1048	
			12		8.5		6	75		
			24		17		12	300		
	12–24	DC	12	9			8	100		
			24				16	400		
SNT1LP08K or SNT1LT08K	48–127	50/60	48	33.6	2.7		1.9	92	1254	
			60		3.4		2.4	140		
			110		6.2		4.4	480		
			120		6.8		4.8	570		
			127		7.2		5.1	640		
	48–60	DC	48	33.6			2.1	100		
			60				2.6	160		
SNT1LP12K or SNT1LT12K	208–380	50/60	208	146	1.2		0.25	180	1760	
			220		1.3		0.27	200		
			240		1.4		0.29	240		
			380		2.3		0.31	610		
	110–125	DC	110	77			0.5	55		
			120				0.55	66		
			125				0.57	71		
SNT1LP18K or SNT1LT18K	415–600	50/60	400	280	1.1		0.77	310	2200	
			415		1.1		0.8	330		
			440		1.2		0.85	380		
			480		1.3		0.93	450		
			525		1.4		1.02	530		
			550		1.5		1.06	590		
			600		1.6		1.16	700		
	220–250	DC	220	154			0.48	110		
			250				0.55	140		

Notes

- ① Average unlatching time: 6 milliseconds.
 ② Average circuit breaker contact total opening time: 18 milliseconds.
 ③ Endurance: 6000 electrical operations plus 4000 mechanical operations.

Accessories

2

Internal Accessories

Field Installation Kits											
Description	Factory Installation (HFDDC)	HFDDC ①	EGEDC, EGSDC, EGHDC	JGEDC, JGSDC, JGHDC	LGEDC, LGSDC, LGHDC	HJDDC	HKDDC	HLDDC	HMDLDC	NBDC	RGHDC
Right-Pole Mounting											
Auxiliary switch											
1A-1B	A06	A1X1PK	AUX1A1BPK	AUX1A1BPK	A1X2PK	A1X3PK	A1X4PK	A1X4PK	A1X4PK	4980D16G05	—
2A-2B	A13	A2X1RPK	AUX2A2BPK	AUX2A2BPK	A2X2PK	A2X3PK	A2X4PK	A2X4PK	A2X4PK	4980D16G06	A2X6RPK
Alarm switch											
1 make/1 break	B06	A1L1RPK	ALM1M1BEPK	ALM1M1BJPK	A1L2RPK	A1L3RPK	A1L4RPK	A1L4RPK	A1L4RPK	—	A1L6RPK
Auxiliary and alarm combo											
1A-1B, 1 make/1 break	C05	AAL1RPK	AUXALRMEPK	AUXALRMJPK	AAL2RPK	AAL3RPK	AA114RPK	AA114RPK	AA114RPK	—	—
Left-Pole Mounting											
Shunt trip											
12 Vdc	S02	SNT1LP03K	SNT012CPK	SNT012CPK	SNT2P04K	SNT3P04K	SNT4LP03K	SNT4LP03K	SNT4LP03K	2606D58G14	—
24 Vdc	S02	SNT1LP03K	SNT024CPK	SNT024CPK	SNT2P04K	SNT3P04K	SNT4LP03K	SNT4LP03K	SNT4LP03K	2606D58G13	SNT6P03K ②
48 Vdc	S06	SNT1LP08K	SNT4860CPK	SNT4860CPK	SNT2P06K	SNT3P06K	SNT4LP23K	SNT4LP23K	SNT4LP23K	2606D58G12	SNT6P23K ②
60 Vdc	S06	SNT1LP08K	SNT4860CPK	SNT4860CPK	SNT2P06K	SNT3P06K	SNT4LP23K	SNT4LP23K	SNT4LP23K	2606D58G11	SNT6P23K ②
125 Vdc	S10	SNT1LP12K	SNT120CPK	SNT120CPK	SNT2P11K	SNT3P11K	SNT4LP26K	SNT4LP26K	SNT4LP26K	2606D58G10	SNT6P23K ②
250 Vdc	S14	SNT1LP18K	—	—	SNT2P14K	SNT3P14K	SNT4LP14K	SNT4LP14K	SNT4LP14K	2606D58G09	SNT6P14K
120 Vac	S06	SNT1LP12K	SNT120CPK	SNT120CPK	SNT2P11K	SNT3P11K	SNT4LP11K	SNT4LP11K	SNT4LP11K	2060D58G05	SNT6P11K ②
Undervoltage release											
12 Vdc	U30	UVH1LP20K	UVR012DPK	UVR012DPK	UVH2LP20K	UVH3LP20K	UVH4LP20K	UVH4LP20K	UVH4LP20K	372D032G06	UVH6RP20K ②
24 Vdc	U34	UVH1LP21K	UVR024DPK	UVR024DPK	UVH2LP21K	UVH3LP21K	UVH4LP21K	UVH4LP21K	UVH4LP21K	372D032G07	UVH6RP21K ②
48 Vdc	U38	UVH1LP22K	UVR048DPK	UVR048DPK	UVH2LP22K	UVH3LP22K	UVH4LP22K	UVH4LP22K	UVH4LP22K	372D032G08	UVH6RP23K ②
125 Vdc	U42	UVH1LP26K	UVR125DPK	UVR125DPK	UVH2LP26K	UVH3LP26K	UVH4LP26K	UVH4LP26K	UVH4LP26K	372D032G09	UVH6RP26K ②
250 Vdc	U46	UVH1LP28K	UVR250DPK	UVR250DPK	UVH2LP28K	UVH3LP28K	UVH4LP28K	UVH4LP28K	UVH4LP28K	372D032G10	UVH6RP28K ②
120 Vac	U14	UVH1LP08K	UVR120APK	UVR120APK	UVH2LP08K	UVH3LP08K	UVH4LP08K	UVH4LP08K	UVH4LP08K	373D632G05	UVH6RP08K ②

Notes

- ① F-Frame circuit breakers are factory sealed. Underwriters Laboratories requires that internal accessories be installed at the factory. Internal accessories are UL listed for factory installation under E7819. 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.
- ② Right-pole mounted.

One accessory can be mounted per pole, per breaker. Factory installation of accessories is available. Contact Eaton for assistance with part number configuration.

Internal Accessories—Right Pole Mounting

	FD PV ^① Factory Modification Code	Field Kit Catalog Number	KD PV Factory Modification Code	Field Kit Catalog Number	LG PV Factory Modification Code	Field Kit Catalog Number	MDL PV Factory Modification Code	Field Kit Catalog Number
Auxiliary Switch								
1A-1B	A06	A1X1PK	A06	A1X3PK	A1	AUX1A1BPK	A06	A1X4PK
2A-2B	A13	A2X1RPK	A13	A2X3PK	A2	AUX2A2BPK	A13	A2X4PK
Alarm Switch								
1 make/1 break	B06	A1L1RPK	B06	A1L3RPK	B1	ALM1M1BJPK	B06	A1L4RPK
Auxiliary and Alarm Combo								
1A-1B, 1 make/1 break	C05	AAL1RPK	C05	AAL3RPK	B2	AUXALRMJPK	C05	AA114RPK

Internal Accessories—Left Pole Mounting

	FD PV ^① Factory Modification Code	Field Kit Catalog Number	KD PV Factory Modification Code	Field Kit Catalog Number	LG PV Factory Modification Code	Field Kit Catalog Number	MDL PV Factory Modification Code	Field Kit Catalog Number
Shunt Trip								
12 Vdc	S02	SNT1LP03K	S42	SNT3P04K	S4	SNT012CPK	S02	SNT4LP03K
24 Vdc	S02	SNT1LP03K	S42	SNT3P04K	S6	SNT024CPK	S02	SNT4LP03K
48 Vdc	S06	SNT1LP08K	S50	SNT3P06K	S7	SNT4860CPK	S86	SNT4LP23K
60 Vdc	S06	SNT1LP08K	S50	SNT3P06K	S7	SNT4860CPK	S86	SNT4LP23K
125 Vdc	S10	SNT1LP12K	S10	SNT3P11K	S2	SNT120CPK	S42	SNT4LP26K
250 Vdc	S14	SNT1LP18K	S14	SNT3P14K	—	—	S14	SNT4LP14K
120 Vac	S10	SNT1LP12K	S10	SNT3P11K	S2	SNT120CPK	S10	SNT4LP11K
Undervoltage Release								
12 Vdc	U30	UVH1LP20K	T02	UVH3LP20K	U1	UVR012DPK	T02	UVH4LP20K
24 Vdc	U34	UVH1LP21K	T02	UVH3LP21K	U2	UVR024DPK	T06	UVH4LP21K
48 Vdc	U38	UVH1LP22K	T10	UVH3LP22K	U4	UVR048DPK	T10	UVH4LP22K
60 Vdc	—	—	—	—	—	—	—	—
125 Vdc	U42	UVH1LP26K	T14	UVH3LP26K	U6	UVR125DPK	T14	UVH4LP26K
250 Vdc	U46	UVH1LP28K	T18	UVH3LP28K	U8	UVR250DPK	T18	UVH4LP28K
120 Vac	U14	UVH1LP08K	U18	UVH3LP08K	U5	UVR120APK	U18	UVH4LP08K

Notes

^① Underwriters Laboratories requires that internal accessories for the FD PV be installed at the factory. Internal accessories are UL listed for factory installation under E7819. 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.

One accessory can be mounted per pole, per breaker.

Dimensions

Approximate Dimensions in Inches (mm)

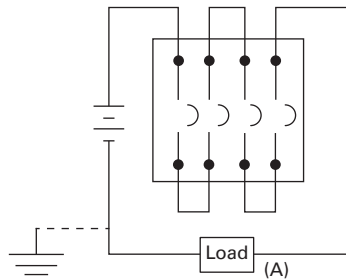
PVGard Solar Circuit Breakers—1000 Vdc Poles-in-Series

Frame	Number of Poles	Width	Height	Depth
FD PV	4	5.50 (139.7)	6.00 (152.4)	3.38 (86.0)
KD PV	4	7.22 (183.4)	10.13 (257.3)	4.09 (103.9)
LG PV	4	7.22 (183.4)	10.13 (257.3)	4.09 (103.9)
MDL PV	3	8.25 (209.6)	16.00 (406.4)	4.06 (103.1)

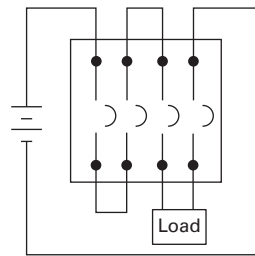
Wiring Diagrams

Series Connection Diagrams for DC Application ①②

FD PV, KD PV, LG PV—1000 Vdc Maximum—Four Poles-in-Series

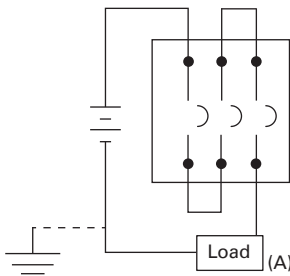


Suitable for use on ungrounded systems, or grounded systems that have one end of load (A) connected to grounded terminal, opposite poles in series connection.

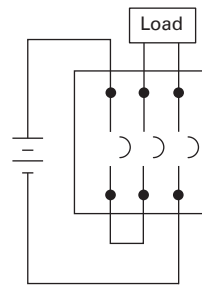


Suitable for use on ungrounded systems only.

MDL PV—1000 Vdc Maximum—Three Poles in Series



Suitable for use on ungrounded systems, or grounded systems that have one end of load (A) connected to grounded terminal, opposite poles in series connection.



Suitable for use on ungrounded systems only.

Notes

- ① Poles in series connection is customer supplied. Use rated cable per NEC.
- ② For grounded systems, all poles in series must be connected on non-grounded terminal, with load connected to grounded terminal.