

SURGE-TRAP® MODULAR

SURGE PROTECTIVE DEVICE

DIN-RAIL
MODULAR
SPD FOR
ANSI/UL 1449
TYPE 1 AND 2
APPLICATIONS



Surge-Trap® Modular Surge Protective Device (SPD) is a no-fuse, fail-safe surge suppressor featuring Mersen's patented TPMOV® technology inside. UL 1449 4th Edition approved, it is DIN-rail mountable featuring a fail-safe self-protected design, visual indicator, and a small footprint. A remote indicator option provides status to critical control circuitry. The Surge-Trap Modular SPD has a high short circuit rating and a thermally protected MOV, which eliminates the need for additional overcurrent protection devices.

FEATURES AND BENEFITS:

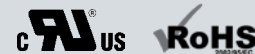
- Easy installation or retrofit
- DIN-rail mountable
- Fail-safe, self-protected design
- Remote indicator (optional)
- Visual indicator
- IP20 finger-safe design
- Small footprint
- No additional overcurrent protection devices required
- 2-year warranty

RATINGS:

- **Volts (U_n):** 120-690VAC
- **Nominal Discharge Current Rating (I_n):** 10-20kA
- **Surge Capacity:** 50kA
- **Short-Circuit Current Rating (SCCR):** 200kA

APPROVALS:

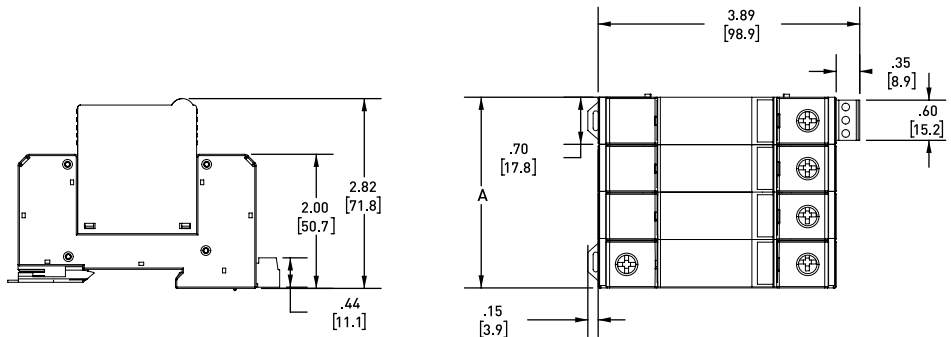
- ANSI/UL 1449 4th Edition, Type 1 Component Assembly SPD, File E210793
- ANSI/IEEE C62.41.1, C62.41.2, C62.45
- RoHS Compliant



GENERAL PRODUCT SPECIFICATIONS										
Mounting:	35mm DIN-Rail				Operating & Storage Temperature:	- 40°C to + 85°C				
Wire Range:	6-14AWG Solid / Stranded CU				Visual End of Life Indicator:	Visual Tab				
Terminal Torque:	14.75 lbs-in				Remote End of Life Indicator:	NO/NC Dry Contact				
Degree of Protection:	IP 20				Frequency:	50-60 Hz				
Flammability:	UL94 V0				Response Time:	< 25 ns				
1-POLE, SINGLE-PHASE, 2-WIRE										
CATALOG NUMBER	NOMINAL VOLTAGE (VAC)	MAXIMUM CONTINUOUS OPERATING VOLTAGE (MCOV, VAC)				VOLTAGE PROTECTION RATING (VPR, VAC)				I _n (kA)
		L-N	L-G	N-G	L-L	L-N	L-G	N-G	L-L	
ST1201PG(M)	120	180	180	-	-	500	500	-	-	20
ST2301PG(M)	240	270	270	-	-	800	800	-	-	20
ST2771PG(M)	277	320	320	-	-	900	900	-	-	20
2-POLE, SPLIT-PHASE, 3-WIRE										
CATALOG NUMBER	NOMINAL VOLTAGE (VAC)	MAXIMUM CONTINUOUS OPERATING VOLTAGE (MCOV, VAC)				VOLTAGE PROTECTION RATING (VPR, VAC)				I _n (kA)
		L-N	L-G	N-G	L-L	L-N	L-G	N-G	L-L	
ST208SPG(M)	120/208	180	180	-	360	500	500	-	900	20
ST240SPG(M)	120/240	180	180	-	360	500	500	-	900	20
ST480SPG(M)	240/480	270	270	-	540	800	800	-	1500	20
3-POLE, 3-PHASE DELTA, 3-WIRE										
CATALOG NUMBER	NOMINAL VOLTAGE (VAC)	MAXIMUM CONTINUOUS OPERATING VOLTAGE (MCOV, VAC)				VOLTAGE PROTECTION RATING (VPR, VAC)				I _n (kA)
		L-N	L-G	N-G	L-L	L-N	L-G	N-G	L-L	
ST2403PD(M)	240	-	-	-	270	-	-	-	1000	20
ST4803PD(M)	480	-	-	-	550	-	-	-	3000	20
3-POLE, 3-PHASE DELTA, 4-WIRE										
CATALOG NUMBER	NOMINAL VOLTAGE (VAC)	MAXIMUM CONTINUOUS OPERATING VOLTAGE (MCOV, VAC)				VOLTAGE PROTECTION RATING (VPR, VAC)				I _n (kA)
		L-N	L-G	N-G	L-L	L-N	L-G	N-G	L-L	
ST2403PDG(M)	240	270	270	-	540	800	800	-	1500	20
ST4803PDG(M)	480	550	550	-	1100	1500	1500	-	3000	20
3-POLE, 3-PHASE WYE, 4-WIRE										
CATALOG NUMBER	NOMINAL VOLTAGE (VAC)	MAXIMUM CONTINUOUS OPERATING VOLTAGE (MCOV, VAC)				VOLTAGE PROTECTION RATING (VPR, VAC)				I _n (kA)
		L-N	L-G	N-G	L-L	L-N	L-G	N-G	L-L	
ST2083PYG(M)	120/208	180	180	-	360	500	500	-	900	20
ST4803PYG(M)	277/480	320	320	-	640	900	900	-	1800	20
ST6003PYG(M)	347/600	420	420	-	840	1200	1200	-	2000	20
ST6903PYG(M)	400/690	510	510	-	1020	1500	1500	-	3000	20
4-POLE, 3-PHASE WYE, 5-WIRE, INCLUDING N-G MODE										
CATALOG NUMBER	NOMINAL VOLTAGE (VAC)	MAXIMUM CONTINUOUS OPERATING VOLTAGE (MCOV, VAC)				VOLTAGE PROTECTION RATING (VPR, VAC)				I _n (kA)
		L-N	L-G	N-G	L-L	L-N	L-G	N-G	L-L	
ST2083PY(M)	120/208	180	360	180	360	500	900	500	900	20
ST4803PY(M)	277/480	320	470	150	640	1000	1500	500	1800	20
ST6003PY(M)	347/600	420	690	270	840	1500	2500	800	2500	20
ST6903PY(M)	400/690	1020	510	510	1020	3000	1500	1500	3000	20

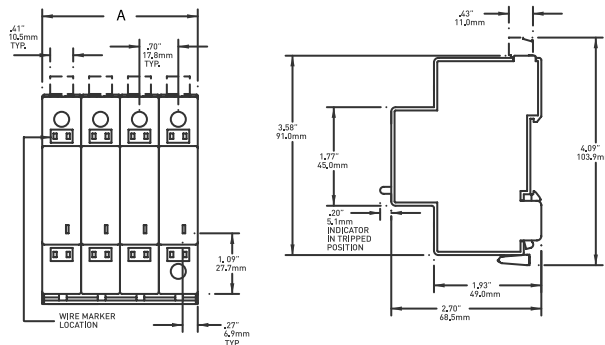
DIMENSIONS - STP SERIES

POLES	A	
	IN	MM
1 Pole	0.71	18.03
2 Pole	1.42	36.06
3 Pole	2.13	54.1
4 Pole	2.84	72.13



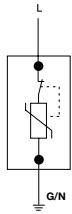
DIMENSIONS - ST SERIES

POLES	A	
	IN	MM
1 Pole	0.7	17.8
2 Pole	1.39	35.5
3 Pole	2.1	53.3
4 Pole	2.8	71

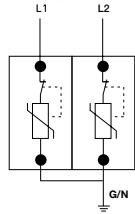


WIRING DIAGRAMS

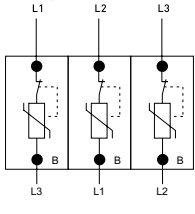
1-POLE, SINGLE-PHASE, 2-WIRE



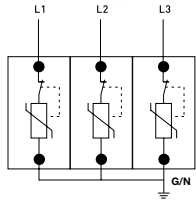
2-POLE, SPLIT-PHASE, 3-WIRE



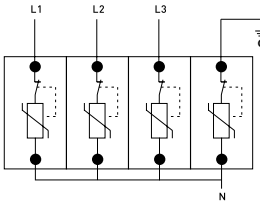
3-POLE, 3-PHASE DELTA, 3-WIRE



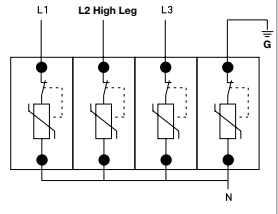
3-POLE, 3-PHASE DELTA, 3-PHASE WYE, 4-WIRE



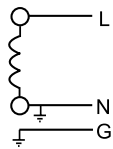
4-POLE, 3-PHASE WYE, 5-WIRE



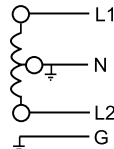
4-POLE, 3-PHASE DELTA HIGH-LEG, 5-WIRE



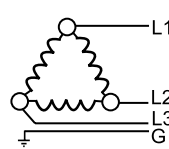
SINGLE PHASE
2 WIRE + GROUND



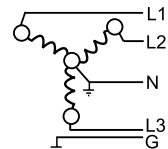
SPLIT PHASE
3 WIRE + GROUND



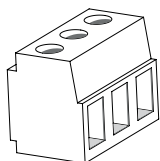
3 PHASE DELTA
3 WIRE + GROUND



3 PHASE WYE
4 WIRE + GROUND



REMOTE STATUS INDICATOR



Signal Wire Range

#16 to #30 AWG

Terminal Torque

2.2 lb-in

Cont. between Comm + NO

Product Offline, Not Protected

Cont. between Comm + NC

Product Online, Protected

STP SERIES: REMOTE INDICATION COMES STANDARD WITH ALL STP, SURGE-TRAP PLUGGABLE UNITS.

ST SERIES: FOR REMOTE INDICATION, ADD "M" TO THE END OF THE CATALOG NUMBER. FOR EXAMPLE, ST4803PYGM.