

Data Sheet

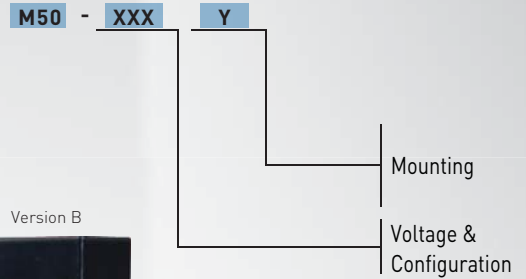
Type 2 Surge Protective Device *M50F Series*



Version A



Version B



Application

- Industrial
- Commercial
- Residential

Features

- I_{max} 50kA 8/20μs
- All single and three phase configurations from 120 to 600Vac
- Hybrid Technology for enhanced TOV protection with no leakage current and EMI/RFI Filtering
- Real-time diagnostics include an LED per phase and audible alarm
- Indoor/Outdoor IP66/NEMA6 rated enclosure (NEMA6 exceeds NEMA4 or 4X)
- Panel mount via M22 or 1/2" NPT
- Mounting is available on side, back or din rail
- Hardwired connection #12 AWG 36" leads
- 10-year free replacement warranty

UL

- Listed for standalone or integrated applications
- UL Type 2 SPD, cUL Type 2 SPD - Installed on line or load side of the main disconnect
- In 20kA (All models)
- SCCR 200kA (All models)
- VPR L-N is 700V for 120V, 120/240V, 120/208V (See page 2 for full table)
- VPR L-N is 1200V for 220V, 220/380V, 230/400V, 240/415V, 277/480V (See page 2 for full table)
- Meets requirements of UL96A Lightning Protection Master Label
- UL Type 1 SPD option available (M50 Series)
- File # VZCA.E326289 (www.ul.com)



CITEL

Data Sheet

Type 2 Surge Protective Device M50F Series

Technical Data

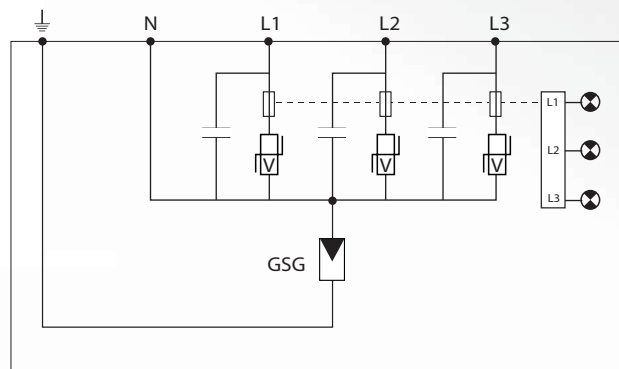
| Description | M50F-120Y-X | M50F-120T-X | M50F-120S-X | M50F-230S-X | M50F-240T-X | M50F-240D-X | M50F-277Y-X | M50F-347Y-X | M50F-480D-X | M50F-600D-X |
|--------------------------------------|------------------|---|---------------|---------------|-----------------|--------------|-------------|-------------|--------------|--------------|
| Product Part Number - A version | 750101 | 750102 | 750103 | 750303 | 750402 | 750404 | 750501 | 750601 | 750704 | 750804 |
| Product Part Number - B version | 750111 | 750112 | 750113 | 750313 | 750412 | 750414 | 750511 | 750611 | 750714 | 750814 |
| System voltage | 120-208 | 120-240 | 120 | 230 | 240-480 | 240 | 277-480 | 347-600 | 480 | 600 |
| System | 4W+G (Wye) | 3W+G (Split Ph) | 2W+G (single) | 2W+G (single) | 3W+G (Split Ph) | 3W+G (Delta) | 4W+G (Wye) | 4W+G (Wye) | 3W+G (Delta) | 3W+G (Delta) |
| Maximum Operating Voltage | L-G 140 | 140 | 140 | 270 | 280 | 280 | 320 | 400 | 550 | 690 |
| | L-N 140 | 140 | 140 | 270 | 280 | / | 320 | 400 | / | / |
| | N-G 120 | 120 | 120 | 230 | 240 | / | 280 | 350 | / | / |
| | L-L 240 | 280 | / | / | 480 | 280 | 560 | 690 | 560 | 690 |
| Operating Current | Ic | mA | | | | | | | | |
| Follow current | If | A | | | | | | | | |
| Short Circuit Current Rating | SCCR | kA | | | | | | | | |
| Maximum Leakage Current | Ipe | mA | | | | | | | | |
| Maximum Recommended fuse | Rating, Type | 200A, Class J | | | | | | | | |
| Frequency | F | Hz | | | | | | | | |
| Nominal discharge current | In (8-20) | kA | | | | | | | | |
| Maximum Discharge Current | L-G | 50 | | | | | | | | |
| | N-G | 100 | | | | | | | | |
| Impulse Discharge Current per phase | Iimp (10-350) | kA | | | | | | | | |
| Total Maximal Discharge Current | Itotal (8-20) | kA | | | | | | | | |
| Total Maximal Discharge Current | Itotal (10-350) | kA | | | | | | | | |
| Let through Voltage | Ures (V) at 20kA | 15 | 12 | 8 | 8 | 12 | 12 | 15 | 15 | 12 |
| | L-G | 1500 | 1500 | 1500 | 1900 | 1900 | 1500 | 1900 | 2500 | 1900 |
| | L-N | 900 | 900 | 900 | 1500 | 1500 | N/A | 1500 | 1800 | N/A |
| | N-G | 1500 | 1500 | 1500 | 1500 | 1500 | N/A | 1500 | 1800 | N/A |
| | L-L | 1500 | 1500 | N/A | N/A | 3100 | 1500 | 3300 | 3100 | 3800 |
| Voltage Protection Level | L-G | 1200 | 1200 | 1200 | 1500 | 1500 | 1200 | 1500 | 2000 | 1500 |
| | L-N | 700 | 700 | 700 | 1200 | 1200 | N/A | 1200 | 1400 | N/A |
| | N-G | 1200 | 1200 | 1200 | 1200 | 1200 | N/A | 1200 | 1800 | N/A |
| | L-L | 1200 | 1200 | N/A | N/A | 2500 | 1200 | 2500 | 2600 | 3000 |
| Shipping Dimensions | Inches | 8x3.75x4.25 | | | | | | | | |
| Shipping Weight | Ibs | 2.4 | | | | | | | | |
| Standard's Compliance or recognition | UL1449 ed4 | File: E326289 | | | | | | | | |
| | IEC 61643-11 ed2 | Type 2 | | | | | | | | |
| Visual disconnection indicator | | LED | | | | | | | | |
| Sound disconnection indicator | | Continuous Buzzer | | | | | | | | |
| Wiring type | | AWG 12 wires | | | | | | | | |
| Maximum altitude | ft | 6500 | | | | | | | | |
| Operating Temperature | °F | -40 +185 | | | | | | | | |
| Housing - Enclosure material | | Aluminum cast | | | | | | | | |
| Mounting type | | Side or back nipple (Version A or B) Threaded (M22) . NPT 1/2 adaptor available | | | | | | | | |
| Environmental rating | IP | IP66 | | | | | | | | |
| | Nema | NEMA 6 | | | | | | | | |
| Location Installation | | Indoor / outdoor | | | | | | | | |



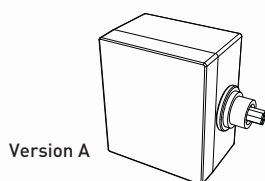
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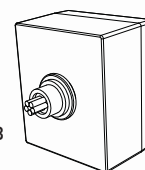
Electrical Diagram



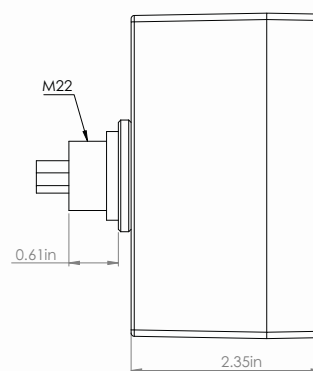
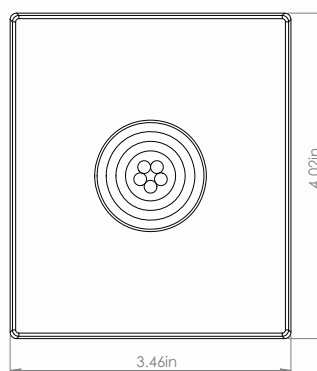
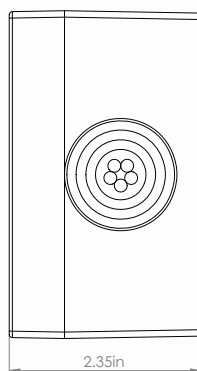
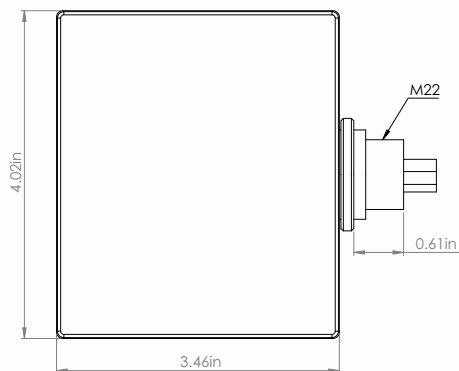
Dimensions



Version A



Version B



*NPT 1/2 adaptor available in both versions