

JSPR – 160

HEAVY DUTY FOR SERVICE ENTRANCE APPLICATIONS

**Extra
Feature**



FEATURES AND BENEFITS

- Listed to UL 1449 3rd Edition for a Type 1 and Type 2 SPD application.
- **Compact design to allow the SPD to be recessed into the wall.**
- Fail-safe design with individually fused Metal Oxide Varistors (MOVs) eliminating single point failure, protecting against both overcurrent and overvoltage events.
- 200kAIC short circuit rating permits direct bus connection to most electrical services.
- Low let through voltage ensured by the lowest possible impedance path to ground and equal current sharing during surge events.
- 10-year standard warranty with optional 15-year extended warranty.

AVAILABLE CONFIGURATIONS

| Model Number | Voltage | Configuration |
|---------------|----------|-----------------------------------|
| JSPR160-1P120 | 120V | 1-Phase, 2-Wire + Ground |
| JSPR160-1P240 | 240V | 1-Phase, 2-Wire + Ground |
| JSPR160-1S240 | 120/240V | 2-Phase, 3-Wire + Ground |
| JSPR160-3Y208 | 120/208V | 3-Phase Wye, 4-Wire + Ground |
| JSPR160-3Y380 | 220/380V | 3-Phase Wye, 4-Wire + Ground |
| JSPR160-3Y415 | 240/415V | 3-Phase Wye, 4-Wire + Ground |
| JSPR160-3Y480 | 277/480V | 3-Phase Wye, 4-Wire + Ground |
| JSPR160-3Y600 | 347/600V | 3-Phase Wye, 4-Wire + Ground |
| JSPR160-3H240 | 120/240V | 3-Phase High-Leg, 4-Wire + Ground |
| JSPR160-3D240 | 240V | 3-Phase Delta, 3-Wire + Ground |
| JSPR160-3D380 | 380V | 3-Phase Delta, 3-Wire + Ground |
| JSPR160-3D480 | 480V | 3-Phase Delta, 3-Wire + Ground |
| JSPR160-3D600 | 600V | 3-Phase Delta, 3-Wire + Ground |

Units suitable for TT and IT grounded power systems available upon request. Consult factory for model number.

Warranty

10-years (Optional 15-years)

Available Options

Transient Filter Add suffix -F (Meets UL 1283*)
 Stainless Steel Enclosure Add suffix -S

*Not recommended when using telecommunication rectifiers.

Stand Alone Option (To be ordered as a Separate Item)

Flush-Mount Plate Kit JSPR-FMP-120/160

EMI/RFI Filter Attenuation

Max. Attenuation Frequency 41dB @ 106kHz

PRODUCT SPECIFICATIONS

Electrical

| | |
|--|--|
| Maximum Surge Current Rating | 160kA per phase, 80kA per mode |
| Nominal Discharge Current Rating (I-n) | 20kA |
| Operating Frequency | 47–63Hz |
| Connection Method | Pre-wired with 36 inches of #10 AWG conductor |
| Modes of Protection | All Modes (L-N, L-G, N-G, L-L) |
| Fault Rating (SCCR) | 200kAIC – no upstream over-current protection device (breaker or fuse) required |
| Response Time | Less than 1 nanosecond |
| Standard Monitoring | Status indicator lights (one per phase) Standard Dry (From C) Relay Contacts Audible Alarm with Silence Button |

Mechanical

| | |
|-----------------------|--|
| Weight | 30 lbs (13.6 kg) |
| Enclosure Type | Powder coated, impact-resistance steel, weather-proof NEMA 4 |
| Installation Location | Indoor / Outdoor |
| Mounting Method | Dual mounting flanges |
| Operating Environment | -40° to +158°F (-40° to +70°C) |
| Altitude | Up to 13,000 ft. (4000 m) |
| Product Design | Parallel design with individually fused MOVs |

Regulatory

| | |
|---------------------------|--------|
| UL 1449 3rd Edition Type | Type 1 |
| UL 1283 | Yes |
| IEEE C62.41.1, .2, C62.45 | Yes |
| Listed By | UL |

JSPR 160 PERFORMANCE DATA

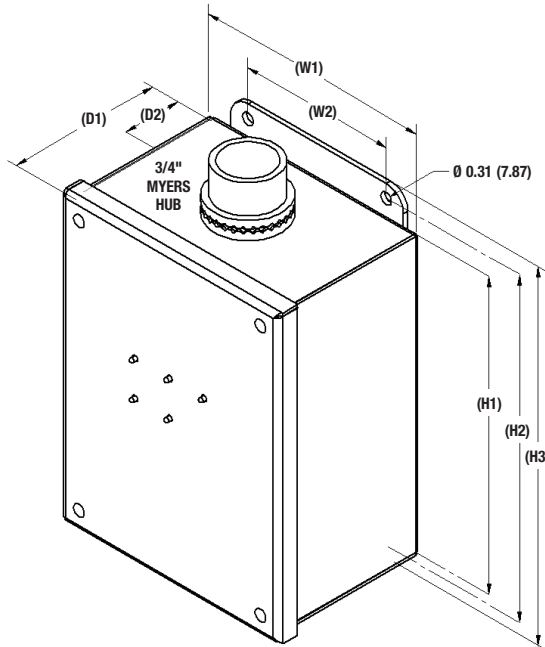
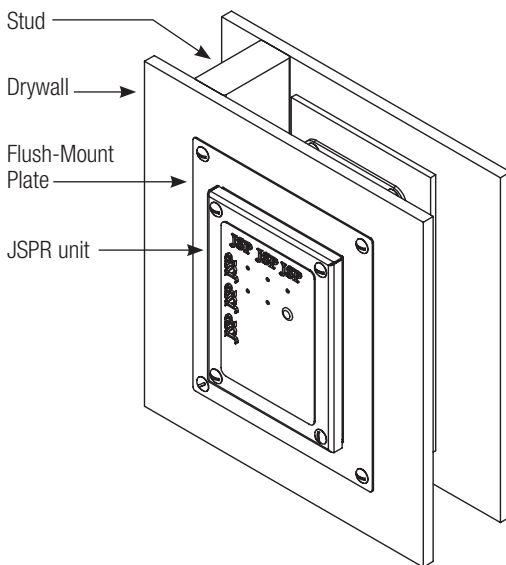
ANSI/IEEE C62.41.1-2002, C62.41.2-2002, & C62.45-2002 Measured Limiting Voltage

| Model Number | Voltage Configuration | Protection Mode | MCOV | B3 Ring Wave 6kV, 500A | B3/C1 Combo Wave 6kV, 3kA | C3 Combo Wave 20kV, 10kA | UL 1449 3rd Edition 6kV, 3kA VPR |
|---------------|-----------------------|-----------------|------|------------------------|---------------------------|--------------------------|----------------------------------|
| JSPR160-1P120 | 1P120 | L-N | 150V | 440V | 629V | 1413V | 700V |
| | | L-G | 150V | 496V | 640V | 1360V | 700V |
| | | N-G | 150V | 464V | 624V | 1360V | 700V |
| JSPR160-1P240 | 1P240 | L-N | 320V | 347V | 525V | 1069V | 1000V |
| | | L-G | 320V | 1145V | 565V | 1117V | 1000V |
| | | N-G | 320V | 1090V | 507V | 930V | 1000V |
| JSPR160-1S240 | 1S240 | L-N | 150V | 440V | 629V | 1413V | 700V |
| | | L-G | 150V | 496V | 640V | 1360V | 700V |
| | | L-L | 300V | 544V | 971V | 1707V | 1200V |
| JSPR160-3Y208 | 3Y208 | L-N | 150V | 440V | 629V | 1413V | 700V |
| | | L-G | 150V | 496V | 640V | 1360V | 700V |
| | | L-L | 300V | 544V | 971V | 1707V | 1200V |
| JSPR160-3Y380 | 3Y380 | N-G | 150V | 464V | 624V | 1360V | 700V |
| | | L-N | 320V | 347V | 525V | 1069V | 1000V |
| | | L-G | 320V | 1145V | 565V | 1117V | 1000V |
| JSPR160-3Y415 | 3Y415 | L-L | 640V | 491V | 860V | 1443V | 1800V |
| | | N-G | 320V | 1090V | 507V | 930V | 1000V |
| | | L-N | 320V | 347V | 525V | 1069V | 1000V |
| JSPR160-3Y480 | 3Y480 | L-G | 320V | 1145V | 565V | 1117V | 1000V |
| | | L-L | 640V | 491V | 860V | 1443V | 1800V |
| | | N-G | 320V | 1090V | 507V | 930V | 1000V |
| JSPR160-3Y600 | 3Y600 | L-N | 420V | 715V | 1250V | 1910V | 1500V |
| | | L-G | 420V | 829V | 1340V | 1960V | 1500V |
| | | L-L | 840V | 1130V | 2300V | 2910V | 2500V |
| JSPR160-3H240 | 3H240 | N-G | 420V | 670V | 1230V | 1880V | 1500V |
| | | L-N | 150V | 440V | 629V | 1413V | 700V |
| | | H-N | 320V | 347V | 525V | 1069V | 1000V |
| JSPR160-3D240 | 3D240 | L-G | 150V | 496V | 640V | 1360V | 700V |
| | | L-L | 320V | 1145V | 565V | 1117V | 1000V |
| | | H-L | 300V | 544V | 971V | 1707V | 1000V |
| JSPR160-3D380 | 3D380 | H-L | 470V | 980V | 1250V | 1640V | 1500V |
| | | N-G | 150V | 512V | 568V | 1090V | 800V |
| | | L-G | 320V | 759V | 982V | 1630V | 1000V |
| JSPR160-3D480 | 3D480 | L-L | 320V | 640V | 1070V | 1550V | 1000V |
| | | L-G | 550V | 1050V | 1500V | 2260V | 1800V |
| | | L-L | 550V | 860V | 1720V | 2340V | 1800V |
| JSPR160-3D600 | 3D600 | L-G | 750V | 1260V | 1960V | 2760V | 2500V |
| | | L-L | 750V | 1070V | 2260V | 2950V | 2500V |

All JSPR™ systems measured limited voltages are peak values (±10%) measured from the zero reference point and are in compliance with test and evaluation procedures outlined in NEMA LS1-1992 (2000), paragraphs 2.210 and 3.10.



THE JSPR DESIGN ALLOWS FOR IT TO BE RECESSED INTO THE WALL.



DIMENSIONS

| Dim | Inches (mm) |
|-----|---------------|
| H1 | 10.00 (254.0) |
| H2 | 10.75 (273.1) |
| H3 | 11.50 (292.1) |
| W1 | 8.00 (203.2) |
| W2 | 6.00 (152.4) |
| D1 | 4.20 (106.9) |
| D2 | 2.00 (50.8) |

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