

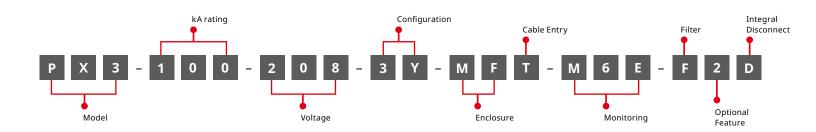
Panelboard Extension - PX3™ series — 100 Surge Protection

surge protective devices

DATASHEET



The PX3TM offers an externally mounted surge solution that can be physically attached to the top or bottom of any panelboard, providing a reduced profile surge solution. PX3TM suppression filter systems feature a powerful failure-free ISMTM (Integrated Suppression Module). The ISMTM contains individual thermally fused and protected MOVs, surge-rated copper busing, robust filtering and advanced remote communications capabilities.



| kA Rating | Volta | age | Con | figuration** | Enclo | osure |
|-----------|-------|----------|-----|-----------------------------------|-------|---------------------------------------|
| 050 | 208 | 120/208 | 1G | 1 Phase, Grounded | MFT | Metal, Flush Mount, Top Feed |
| 080 | 240 | 120/240 | 2G | 2 Phase, Grounded, Split Phase | MFB | Metal, Flush Mount, Bottom Feed |
| 100 | 380 | 220/380 | 3Y | 3 Phase, Grounded Wye | MST | Metal, Surface Mount, Top Feed |
| 125* | 480 | 277/480 | ЗН | 3 Phase, Grounded, High Leg Delta | MSB | Metal, Surface Mount, Bottom Feed |
| 150* | 600 | 347/600* | 3D | 3 Phase, Grounded Delta | SFT | Stainless, Flush Mount, Top Feed |
| 200* | | | | | SFB | Stainless, Flush Mount, Bottom Feed |
| | | | | | SST | Stainless, Surface Mount, Top Feed |
| | | | | | SSB | Stainless, Surface Mount, Bottom Feed |

^{*}Not available with Integral Disconnect option.



^{**} See table at page three for more voltage/configuration

| Monitoring | | Filter | Optional Features | | Disconnect Option | | (To Be | -Alone Options Ordered As ate Items) |
|------------|--|-------------|-------------------|----------------------------------|-------------------|------------------------|--------|--|
| M0 | No local monitoring (see remote MxX stand-alone option) | F Filter | 1 | Panel Mounted In-House | D | Integral Disconnect | DTS | DTS-2 Diagnostic Test Set |
| M1 | Smart switching tri-color/LED/ Phase, Audible Alarm & Dry Relay Contacts | N No Filter | 2 | Test Port | Blank | No Disconnect | MxX | Remote Monitor Extension M1X through M6EX |
| M2 | M1 + Surge Counter | | 4 | Full Flush Cover | | | HPI | HPI Cable |
| M3 | Advanced Monitoring, Character Display, Modbus RTU | | 5 | GE Version | | | | |
| M4E | M3 + Ethernet, Modbus TCP | | 6 | Square D Version | | | | |
| M5 | Advanced Monitoring, Graphics Display, Modbus RTU | | 7 | Siemens, Eaton- Cutler Hammer | | | | |
| M6E | M5 + Ethernet, Modbus TCP | | | | | | | |

Must choose one

Product Specifications

| Consul Constitution | |
|---------------------------------|--|
| General Specifications | |
| Maximum Surge Current Rating | 100kA Per Mode, 200kA Per Phase |
| Nominal Discharge Surge Current | I-n = 20kA |
| Safety Listings | UL Listed 1449 5th Edition for Type 1 and Type 2 SPD applications, cUL, and UL 1283 / Meets Requirements for UL 96A / Compliant to IEEE C62.41.1-2002, C62.41.2-2002 and C62.45-2002 / NFPA 70 [NEC], Article 285 / RoHS Compliant |
| Protection Method | Thermally protected MOVs, Capacitive Filter |
| Product Design | Individual thermally fused and protected MOVs, and All Copper, Tin-plated Bus |
| Dimensions | 9"H x 20"W x 5.75"D (without Integral Disconnect) 14"H x 20"W x 5.75"D (with Integral Disconnect) |
| Weight | 18 lbs. (without Integral Disconnect) 20 lbs (with Integral Disconnect) |
| Enclosure Type | NEMA 1 Standard |
| Installation Location | Indoor |
| Operating Environment | -25°C to +60°C 5% – 95% Non-Condensing Humidity |
| Fault Current (SCCR) | 200kAIC |
| Connection Method | Parallel |
| Protection Modes | All Modes (L-N, L-G, N-G, L-L) |
| Response Time | < 0.5 Nanoseconds |
| Operating Frequency | 47 – 63 Hz |
| Warranty | 15 Years |

Filtering Attenuation Frequencies (Per Mil-Std-220B January 2000)**

| 10 KHz | 100 KHz | 1 MHz | 10 MHz | Max at 142 KHz |
|---------|---------|---------|---------|----------------|
| 18.1 dB | 44 dB | 22.8 dB | 15.3 dB | 54.6 dB |

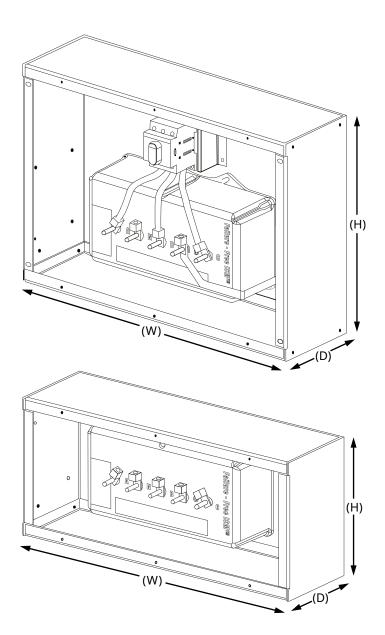
| Single/Repetitive Surge Curr | rent Canacities (Tested)** |
|------------------------------|----------------------------|

| Protection Mode | Single Pulse Surge Current Capacity/ Mode | Repetitive Surge Current Capacity/ Mode |
|-------------------|---|---|
| Line-to-Neutral | 100,000A | 7,000 Impulses |
| Line-to-Ground | 100,000A | 7,000 Impulses |
| Neutral-to-Ground | 100,000A | 7,000 Impulses |
| Line-to-Line | 200,000A | 14,000 Impulses |
| Per Phase | 200,000A | 14,000 Impulses |

** Data based on actual tests. Contact factory for test reports

Maximum Continuous Operating Voltage (MCOV)

| Voltage | L-N MCOV | Voltage | L-L MCOV |
|---------|----------|---------|----------|
| 120V | 150V | 240V | 300V |
| 277V | 320V | 480V | 552V |
| 347V | 420V | 600V | 690V |



Dimensional specifications

| | Inches | (mm) |
|---|--------|---------|
| Н | 14.00 | (355.6) |
| W | 20.00 | (508.0) |
| D | 5.75 | (146.0) |

| Without Disconnect | | |
|--------------------|---------------|--|
| Inches | (mm) | |
| 9.00 | (228.6) | |
| 20.00 | (508.0) | |
| 5.75 | (146.0) | |
| | 9.00 20.00 | Inches (mm) 9.00 (228.6) 20.00 (508.0) |

Voltage/configuration options

Not all voltage configurations are displayed, contact your local sales representative for additional configurations.

| | | 2-Phase, Grounded, Split- Phase | | | Grounded, |
|---------|-----------|--|----|----|-----------|
| | 1G | 2G | 3Y | 3H | 3D |
| Voltage | Configura | tion | | | |
| 120 | Х | | | | |
| 208 | Χ | | Χ | | Χ |
| 220 | Х | Χ | | | Х |
| 230 | Х | | | | Х |
| 240 | Χ | Χ | | Χ | Χ |
| 380 | | Χ | Χ | | Х |
| 415 | | Χ | Χ | | Х |
| 480 | | Χ | X | | Х |
| 600 | | X | Χ | | X |

PX3™/100 performance data

| System Voltage 120/240\ | | | 20/208V | ' | 277/480V | | | 347/600V* | | | | 480V Delta* | | |
|-------------------------------------|-----|-----|---------|------|----------|------|------|-----------|------|------|------|-------------|------|------|
| Protection Mode | L-N | L-G | N-G | L-L | L-N | L-G | N-G | L-L | L-N | L-G | N-G | L-L | L-G | L-L |
| MCOV | 150 | 150 | 150 | 300 | 320 | 320 | 320 | 552 | 420 | 420 | 420 | 690 | 552 | 552 |
| B3 Ring Wave 6kV, 500A | 490 | 570 | 640 | 500 | 450 | 540 | 570 | 530 | 490 | 520 | 600 | 550 | 1450 | 530 |
| B3/C1 Combo Wave 6kV, 3kA | 614 | 629 | 634 | 1011 | 1013 | 1031 | 950 | 1857 | 1197 | 1219 | 1175 | 2369 | 1542 | 1857 |
| C3 Combo Wave 20kV, 10kA | 980 | 980 | 1170 | 1600 | 1420 | 1540 | 1600 | 2600 | 1670 | 1670 | 1730 | 2980 | 2270 | 2600 |
| UL 1449 5th Edition VPR 6kV, 3kA | 700 | 700 | 700 | 1200 | 1200 | 1200 | 1000 | 2000 | 1200 | 1500 | 1200 | 2500 | 1800 | 2000 |

^{*}Not available with Integral Disconnect option.

All PX3TM systems voltage protection ratings (VPR) are peak values ($\pm 10\%$) measured from the 90° reference point and are in compliance with test and evaluation procedures outlined in ANSI/IEEE C62.41





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