

# SPIKE BLOCK

## SURGE PROTECTION DEVICE

### Product Description

The Spike Block ALP(2F)-100 Series of hardwired AC Surge Protection Devices (SPD) are fast responding, high current handling devices designed to protect sensitive electronic equipment and systems from damaging transient surge events. The SPDs are Listed to ANSI/UL 1449 4th Edition as Type 1 & 2 suppressor. A proprietary circuit design offers superior voltage protection levels at high surge currents to meet the most demanding protection requirements. Diagnostics include easy to see status LEDs and dry relay contacts for remote annunciation.

### Dimensions

| Case Size           |                     |                    | Hole Positions      |                     |                      |                    |
|---------------------|---------------------|--------------------|---------------------|---------------------|----------------------|--------------------|
| A                   | B                   | C                  | D                   | E                   | F                    | G                  |
| 162 mm<br>(6.4 in.) | 122 mm<br>(4.8 in.) | 89 mm<br>(3.5 in.) | 173 mm<br>(6.8 in.) | 148 mm<br>(5.8 in.) | 60.3 mm<br>(2.4 in.) | 89 mm<br>(3.5 in.) |



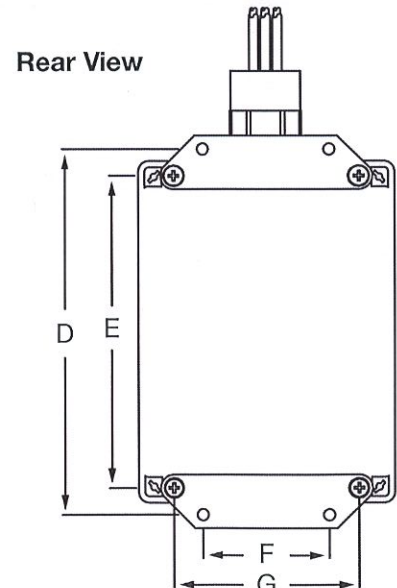
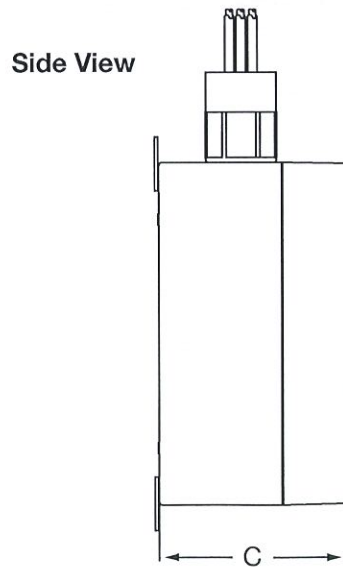
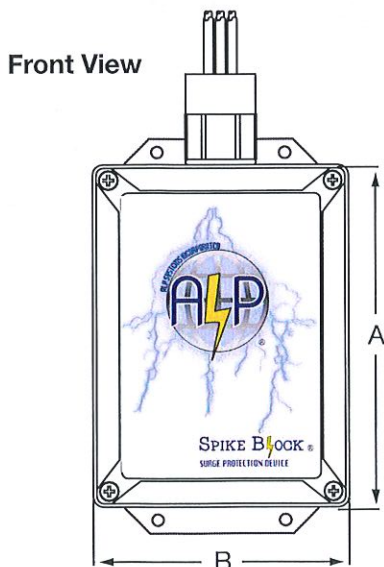
### FEATURES

- UL 1449 4th Edition Type 1 & 2
- Thermally Protected MOV technology
- 100 kA Surge Current Rating
- 200 kAIC Fault Current Rating
- 10 Year Warranty

### APPLICATIONS

For Critical Electronic Equipment located in:

- Petro-Chemical, Oil & Gas
- Industrial Automation
- Data Centers
- Communication Sites



# Surge Protection Device

## ALP(2F)-100-xxxx

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SURGE PROTECTION DEVICE

### Specifications

| Model                                      | ALP(2F)-100  |
|--|--|
| UL 1449 Location Type                      | Type 1 and Type 2  |
| Connection Type                            | Parallel Connected   |
| Agency Listings                            | UL 1449 4th Edition, UL 1283                                     |
| Protection Modes                           | Line to Neutral, Line to Ground, Line to Line, Neutral to Ground |
| Operating Frequency Range                  | 47 - 63 Hertz  |
| Maximum Continuous Operating Voltage Range | 115%   |
| Maximum Surge Current Rating               | 100 kA per phase   |
| Short Circuit Current Rating (SCCR)        | 200 kAIC   |
| UL 1449 Nominal Discharge Current (In)     | 20 kA  |
| 50 ohm EMI/RFI Attenuation                 | 63 dB max from 10kHz to 100MHz                                   |
| Response Time                              | < 1 nanosecond   |
| Status Indication                          | Status LEDs, Relay alarm contacts                                |
| Enclosure Protection Level                 | Polycarbonate NEMA 4X  |
| Dimensions (H x W x D)                     | 6.4" x 4.8" x 3.5"   |
| Weight (Maximum)                           | 5 lbs  |
| Wire Connections                           | Stranded #10 AWG   |
| Wire Lead Length                           | 36 inch  |
| Operating Temperature                      | -40 to +65 °C  |
| Operating Humidity                         | Up to 95% non condensing   |
| Altitude                                   | Up to 18,000 feet  |

❖NOTE Alternate enclosure options available

### Model Selection

| Model Number    | Service Voltage       | MCOV    | Voltage Protection Rating (VPR) |        |        |        |
|-----------------|-----------------------|---------|---------------------------------|--------|--------|--------|
|                 |                       |         | L-N                             | L-G    | N-G    | L-L    |
| ALPx2F-100-120S | 120 V Single Phase    | 180 Vac | 900 V                           | 800 V  | 700 V  | N/A    |
| ALPx2F-100-120T | 120/240 V Split Phase | 180 Vac | 900 V                           | 800 V  | 700 V  | 1500 V |
| ALPx2F-100-120W | 120/208 V 3 Phase Wye | 180 Vac | 900 V                           | 800 V  | 700 V  | 1500 V |
| ALPx2F-100-127W | 127/220 V 3 Phase Wye | 180 Vac | 900 V                           | 800 V  | 700 V  | 1500 V |
| ALPx2F-100-240S | 240 V Single Phase    | 320 Vac | 1500 V                          | 1200 V | 1200 V | N/A    |
| ALPx2F-100-220W | 220/380 V 3 Phase Wye | 320 Vac | 1500 V                          | 1200 V | 1200 V | 2500 V |
| ALP-100-240D    | 240 V 3 Phase Delta   | 320 Vac | N/A                             | 800 V  | N/A    | 1200 V |
| ALPx2F-100-240W | 240/415 V 3 Phase Wye | 320 Vac | 1500 V                          | 1200 V | 1200 V | 2500 V |
| ALPx2F-100-480W | 277/480 V 3 Phase Wye | 320 Vac | 1500 V                          | 1200 V | 1200 V | 2500 V |
| ALP-100-480D    | 480 V 3 Phase Delta   | 550 Vac | N/A                             | 1200 V | N/A    | 2500 V |
| ALPx2F-100-600W | 347/600 V 3 Phase Wye | 420 Vac | 1500 V                          | 1500 V | 1500 V | 2500 V |
| ALP-100-600D    | 600 V 3 Phase Delta   | 690 Vac | N/A                             | 1500 V | N/A    | 2500 V |

\*\* Delta configurations do not come with a filter, so the '2F' is dropped from the part number. \*\*



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