

# SurgeX

## Installation Instructions

### Powerframe 420

#### Mounting

The SurgeX Powerframe 420 is designed to be mounted on a flat, vertical surface. Secure the unit by fastening at the corners with appropriate screws. This product must not be flush mounted or set between wall studs as overheating can occur under such conditions. Use caution when removing knock-outs so that damage does not occur to internal components.

#### Connection

The SurgeX Powerframe provides four identical circuits, each rated at 120 Volts and 20 Amps, providing a total capacity of 80 Amps. This product shall be wired only by qualified Electricians using 12 AWG conductors as specified in Article 310 of the 2005 National Electric Code, as set forth in Table 310.13. Any type of conductor suitable for use in wet or dry locations such as (but not limited to) THHN, THHW, THW, THWN, or TW shall be considered acceptable if local Code permits. Each circuit must be protected by a 20 Amp circuit breaker.

A special terminal is provided for each circuit to carry an Isolated Ground (technical ground) through the unit. These terminals have no connection to the chassis ground or to the unit itself and their sole purpose is to provide a convenient way of joining isolated ground wires.

The four higher terminal blocks are for the Line connections, with the corresponding Load terminal block for that circuit directly below it.

#### Line Connection

Connect the electrical service from the load side of the circuit breaker to the upper terminal block as follows:

- Live (Black) wire to the terminal labeled **"LINE"**
- Neutral (White) wire to the terminal labeled **"NEUT"**
- Ground (Green) wire to the terminal labeled **"GRND"**
- Isolated Ground wire (if used) to the terminal labeled **"ISO GND"**

#### Load Connection

Connect the equipment circuit (load) to the lower terminal block as follows:

- Live (Black) wire to the terminal labeled **"LOAD"**
- Neutral (White) wire to the terminal labeled **"NEUT"**
- Ground (Green) wire to the terminal labeled **"GRND"**
- Isolated Ground wire (if used) to the terminal labeled **"ISO GND"**

#### Indicator Light

There are four green indicator lights on the front of the unit, one for each circuit. These green lights are Self-Test indicators that indicate power is applied to the unit and also that the internal surge protection circuitry on each circuit is fully functional.