## **ZeroDT P120-20**

Uilizing the latest advancements in semiconductor technology and manufacturing, the ZeroDT P120-20 is a DIN rail mounted 120 Volt AC surge protector that provides effective protection against electrical transient surges that are generated by external lightning discharges, switching events and other over voltages. No other technology is quicker to respond than its Silicon Avalanche Suppression Diodes (SASD).

Technology advancements allow the ZeroDT P120-20 can handle 8/20 µs surge currents of ≥20 kA to ensure long-term system reliability and enhance equipment survivability. It does this by safely shunting high amounts of transient energy while maintaining its low clamping voltage

## **ELECTRICAL RATINGS**

Nominal Operating Voltage: Un = 120 VAC

Maximum Continuous Operating Voltage: Uc = 150 Vac

Nominal Surge Current  $(8x20\mu s)$ :  $I_n = 10 \text{ kA}$ , Maximum Surge Current $(8x20\mu s)$   $I_{max} = 20 \text{ kA}$ 

VPR (Voltage Protection Rating) (6 kV/3 kA/8x20 $\mu$ s):  $U_p$  =  $\leq$ 500 V

Certifications:

UL 1449 5th Edition Listed (VZCA2.E549004) – Type 2CA

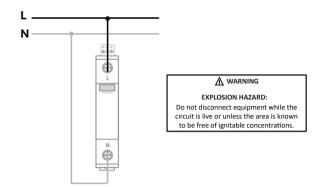
UL 121201 Listed (VZCH2.E549005) -

Class I, Division 2, Groups A, B, C and D Hazardous Locations

Operating Temperature: -40°C to +70°C

For more detailed specifications and other information on the ZeroDT P120-20 as well as our other products see the data sheet and other documents on our website: (www.zerodowntime.net)





Parallel Connection

## INSTALLATION INSTRUCTIONS

- The ZeroDT P120-20 unit is to be installed in accordance with the applicable requirements of the National Electric Code and the local authorities having jurisdiction.
- 2. Wiring: The SPD shall be installed in parallel with the load or electrical system wiring using #6 AWG stranded (#4 AWG solid) wire. The torque to be applied to the terminal screws is 3.3 lb-ti (4.5 Nm). Interconnecting wire should be no longer than 20" (500mm) in total length with a maximum bend radius of 4" (100mm). Strip the wire insulation 5/16" (10mm). Do not loop or twist the interconnecting wire.
- 3. Remote Status Indication: Electrically isolated Mounting: The SPD is intended for installation on the load side of the service equipment overcurrent device. Position the SPD as close to the equipment being protected as possible in order to minimize the conductor length. The SPD should be atached to a securel y mounted 35mm DIN rail. The SPD shall be mounted by positioning the terminal block end on the top edge of the DIN rail and pressing downward until a 'click' is heard.
- **4.** Form C dry contacts (NO/NC/COM) are provided. Contacts change state upon loss of transient/surge suppression functionality.
- 5. Visual Status Indication: Verify proper operation via the visual indicator on the module, RED unit needs replaced.

This equipment is suitable for use in Class I, Division 2, Groups. A, B, C, or D; as well as in non-hazardous locations.