

DITEK Corporation ONE DITEK CENTER 1720 Starkey Road Largo, FL 33771

### **INSTALL INSTRUCTIONS**

### DTK-120/240CM+

**NOTICE:** This SPD should be installed by a licensed contractor in accordance with all applicable National and Local Electrical Codes and the following instructions.

#### **APPLICATION**

Type 1 SPD for hardwired installation on 120/240 VAC split phase electrical service or disconnect switch.

#### **INSTRUCTIONS**

Caution: Measure all voltages to verify applied voltage does not exceed the voltage rating of the unit. Improper installation voids the warranty.

**NOTE:** Suitable for use on a circuit capable of delivering not more than 100,000 rms symmetrical Amperes. Minimum circuit breaker size is 20 Amps. This SPD contains no serviceable parts.

**NOTE:** This SPD incorporates an LED indicator that must be on when correct voltage is applied. If the LED is out, surge protection is compromised and the unit should be replaced.

#### **HVAC DISCONNECT INSTALLATION:**

- 1. Turn off the power at the circuit breaker feeding the disconnect before beginning installation.
- 2. Remove a 3/4" knockout on the enclosure or drill a 3/4" NPT hole.
- 3. Feed all wires through the knockout hole and secure the SPD to the disconnect with the 3/4" locknut.
- 4. Connect the Ground wire (Green) to the Grounding bus inside the disconnect.
- 5. Connect the (2) Phase wires (Black) to the load side terminal lugs of the disconnect switch.
- 6. If the terminal lug is listed for 2 conductors, secure one SPD phase wire directly to each lug in parallel with the Phase wires feeding the equipment.
- 7. If the terminal lug is not listed for 2 conductors, a short "pigtail" wire must be added that is the same wire gauge size as the Phase wires feeding the equipment. Each SPD Phase wire (Black) is then terminated in parallel with the "pigtail" wire from the lug and the Phase wire feeding the equipment using an appropriate wire connector or tap. See drawing in example on next page.
- 8. Make sure the SPD wire leads are as short as possible.
- 9. After all connections have been made and no hazards exist, close disconnect cover and restore power.

#### **ELECTRICAL PANEL INSTALLATION:**

- 1. Turn off the power at the main circuit breaker or disconnect before beginning installation.
- 2. Remove front cover from the electrical panel.
- 3. Determine the ideal mounting position of the SPD by orienting the unit as close as possible to the position of the 2-pole circuit breaker selected for the SPD connection.
- 4. Remove a 3/4" knockout in the electrical panel or drill a 3/4" NPT hole in the electrical panel.
- 5. Feed all wires through the knockout hole and secure the SPD to the electrical panel with the 3/4" locknut.
- 6. Connect the Ground wire (Green) to the Grounding bus or Neutral bus of the panel.
- 7. Connect the (2) Phase wires (Black) to the load side of the 2-pole circuit breaker.
- 8. Make sure the SPD wire leads are as short as possible.
- 9. After all connections have been made and no hazards exist, replace panel cover and restore power.

#### 120VAC SINGLE PHASE CIRCUIT INSTALLATION:

- 1. Turn off the power at the circuit breaker or disconnect before beginning installation.
- 2. Remove a 3/4" knockout on the enclosure or drill a 3/4" NPT hole.
- 3. Feed all wires through the knockout hole and secure the SPD to the enclosure with the 3/4" locknut.
- 4. Connect the Ground wire (Green) to the Grounding conductor.
- 5. Connect both Phase wires (Black) in parallel with the Phase conductor of the 120VAC single phase circuit using an appropriate wire connector or tap.
- 6. Make sure the SPD wire leads are as short as possible.
- 7. After all connections have been made and no hazards exist, restore power.

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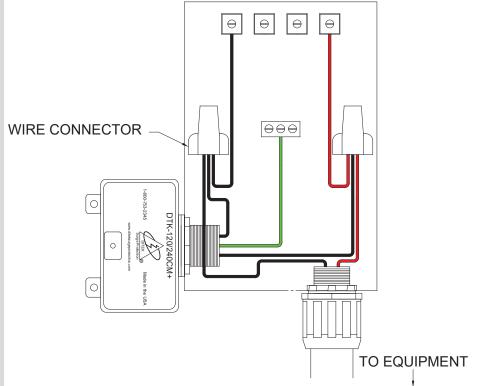
Part No. 191130 Rev.9



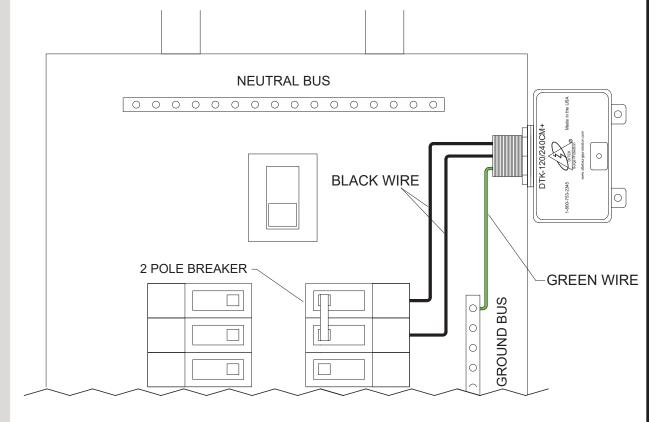
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## HVAC DISCONNECT INSTALLATION



### **ELECTRICAL PANEL INSTALLATION**



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