

## INSTALL INSTRUCTIONS DTK-120/240HDFM

**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

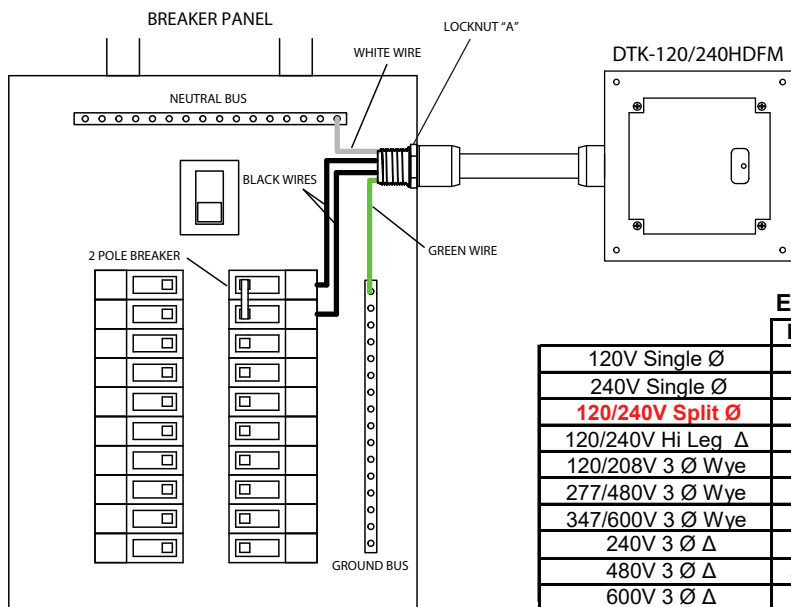
Type 1 SPD for hardwired installation on 120/240 VAC split phase electrical service.

### 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. Recommended circuit breaker size is 20 Amps. This SPD contains no serviceable parts.

1. Turn off the power at the circuit breaker or main breaker 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 edge of the electrical panel cover and as close as possible to the position of the 2-pole circuit breaker selected for the SPD connection. The SPD mounting hole cannot be farther than 7 inches away from the edge of the electrical panel as the included flexible conduit is a max of 7 inches. Conduit can be cut shorter to desired length.
4. After marking the desired position of the SPD, cut a hole in the surrounding surface (drywall, plywood, etc.) approximately 4.5" x 4.5" square. See Page 2 for exact enclosure and flush mount flange measurements.
5. If mounting in drywall, place SPD in the mounting hole first, level the unit and then mark the holes in each corner. Remove the SPD from the mounting hole and use appropriate drill bit to install the included anchors into the drywall.
6. Assemble the included flexible conduit and connector using the instructions on Page 2. Cut the flexible conduit to match the distance between the electrical panel knockout hole and the connector on the SPD enclosure when mounted in the cutout hole.
7. Remove a 1/2" knockout in the electrical panel or drill a 1/2" NPT hole in the electrical panel adjacent to the SPD mounting hole.
8. Feed all wires, conduit and 1/2" connector into the mounting hole, and then through the knockout hole in the panel, and finally tighten "Locknut A" on the conduit connector.
9. Position the SPD in the mounting hole and line up the flush mount plate with the installed anchors. Secure the unit using the (4) included mounting screws. If anchors were not used, use appropriate wood or construction screws and secure the unit using the (4) holes in the flush mount plate.
10. Connect the Ground wire (Green) to the Grounding bus of the panel.
11. Connect the Neutral wire (White) to the Neutral bus of the panel.
12. Connect the (2) Phase wires (Black) to the load side of the 2-pole circuit breaker.
13. Make sure the wire leads are as short as possible.
14. After all connections have been made and no hazards exist, replace panel cover and restore power.



**Expected System Voltages**

	L - L	HiL-G,N	L - G	L - N	N - G
120V Single Ø	NA	NA	120	120	0
240V Single Ø	NA	NA	240	240	0
<b>120/240V Split Ø</b>	<b>240</b>	<b>NA</b>	<b>120</b>	<b>120</b>	<b>0</b>
120/240V Hi Leg Δ	240	240	120	120	0
120/208V 3 Ø Wye	208	NA	120	120	0
277/480V 3 Ø Wye	480	NA	277	277	0
347/600V 3 Ø Wye	600	NA	347	347	0
240V 3 Ø Δ	240	NA	240 <sub>Max</sub>	NA	0
480V 3 Ø Δ	480	NA	480 <sub>Max</sub>	NA	0
600V 3 Ø Δ	600	NA	600 <sub>Max</sub>	NA	0

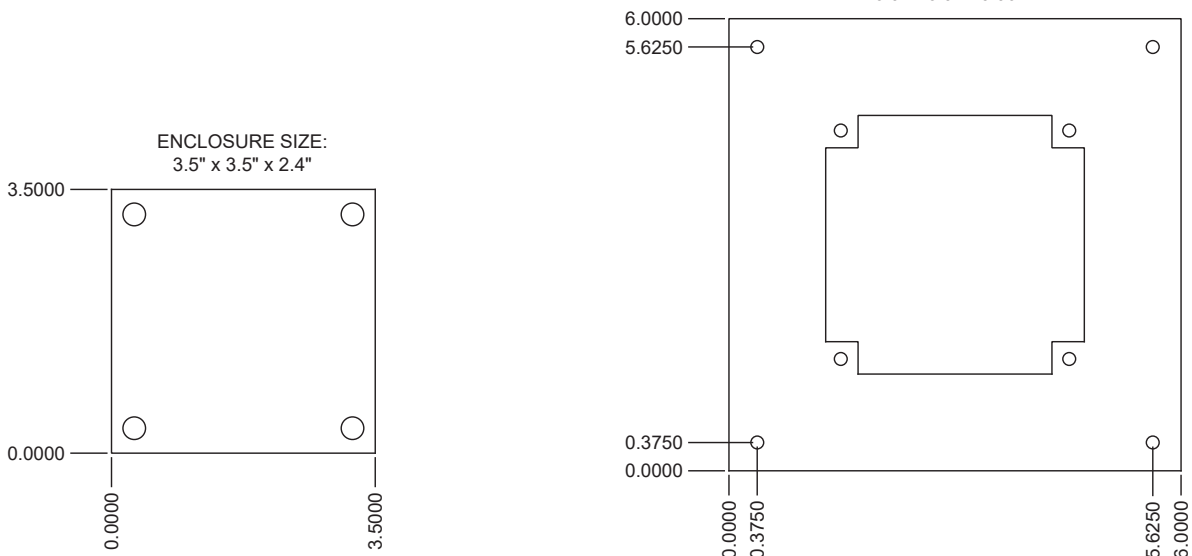
# INSTALLATION

## INSTALL INSTRUCTIONS

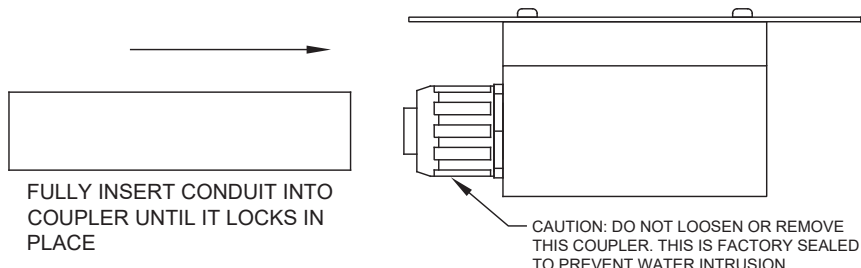
DTK-120/240HDFM

### Illustrations Page

FACEPLATE SIZE:  
6.0" x 6.0" x 0.062"



#### STEP 1



#### STEP 2

