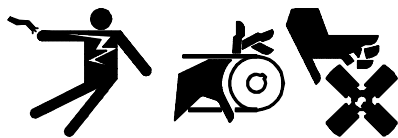

INSTALLATION INSTRUCTIONS

Customer Connection Kits PA-273915 & PA-273915-SD For 20-1600 kW Standby Generator Sets

The customer connection kit allows easy and convenient connection of controller accessories without accessing the controller terminal strip. A (single or ten-relay) dry contact kit must be used between the customer connection kit and any external connections. This is done to isolate the controller circuit board from any electrical interference. The controller accessories or customer-supplied warning devices (lights, horns, etc.) are then connected to the dry contact kit. The terminal strip in the customer connection kit simulates the one located in the microprocessor controller, except for terminals 1 and 1A which are used for the emergency stop kit.

If customer accessory supply voltage is to be 12 volts DC, make connections to battery positive at starter solenoid, and to battery negative at engine ground. Do not use terminals 42A and N of dry contact kit terminal strip to supply voltage to relay contacts. These must be separate leads direct from the battery. Leads should be sized according to appropriate electrical codes.

WARNING



Accidental starting.

Can cause severe injury or death.

Disconnect battery cables before working on generator set (negative lead first and reconnect it last).

Accidental starting can cause severe injury or death. Turn generator master switch to OFF position, disconnect power to battery charger, and remove battery cables (remove negative lead first and reconnect it last) to disable generator set before working on any equipment connected to generator. The generator set can be started by automatic transfer switch or remote start/stop switch unless these precautions are followed.

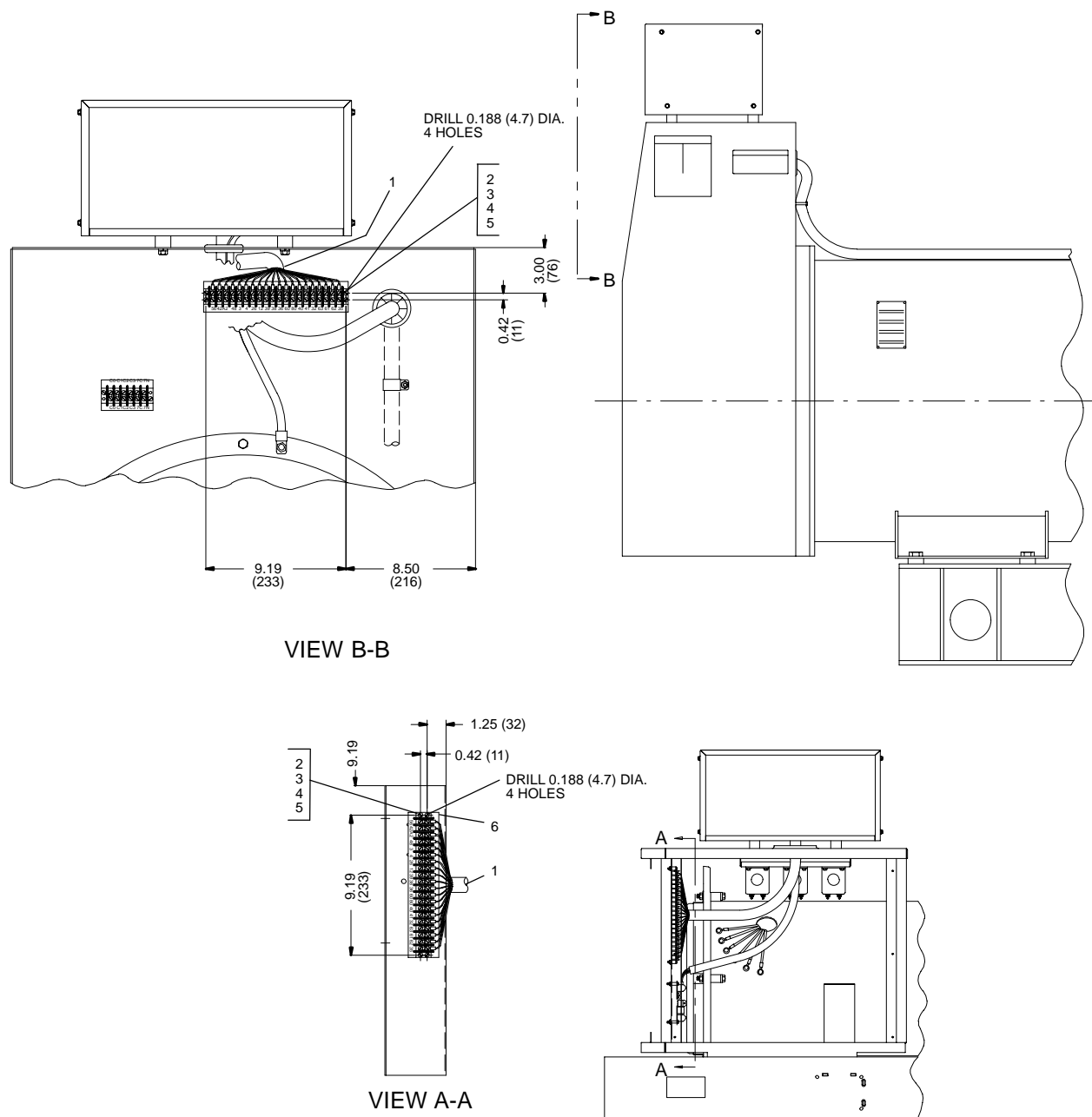
INSTALLATION

1. Move generator master switch to OFF position. Disconnect battery cables, negative lead first.
2. Remove junction box access panel.
3. Using the terminal marker strip (273770) as a template, drill four 0.188 inch (4.7 mm) diameter holes at the location appropriate to the application (see Figure 1).

NOTE

Observe all appropriate safety procedures for use of power tools when drilling holes. Remove all burrs and metal chips from the work area before continuing installation procedure.

4. Install the terminal marker strip (273770) and terminal block (273769) with four 8-32 x 0.75-in. screws (X-51-11), plain washers (X-25-48), and whiz nuts (X-6210-4). Place terminal marker strip between terminal block and junction box.
5. Connect the terminal block to the controller terminal block with wiring harness (273771) (see Figure 2).



NOTE: Dimensions in () are millimeter equivalents

CA-273000-E

1. Wiring Harness (273771)
2. Whiz Nut (X-6210-4)
3. Terminal Block (273769)

4. Screw (X-51-11)
5. Plain Washer (X-25-48)
6. Terminal Marker Strip (273770)

Figure 1. Customer Connection Kits

6. Install dry contact kit(s) according to kit instructions. Locate the dry contact kit(s) as close to the customer connection kit as possible to eliminate electrical interference. Using customer-supplied wiring, connect leads between customer connection kit and dry contact kit.

Use 18 gauge wire for connection between customer connection kit and dry contact kit.

NOTE

Customer-provided devices connected to the dry contact kit must be furnished with an electrical supply adequate to operate the device. Check the

electrical requirements of the customer-provided accessories prior to installation.

All wiring between customer connection kit and dry contact kit(s) must be in a separate conduit, from the load leads to the dry contact kit(s).

7. Connect customer-supplied accessories to dry contact kit(s), as necessary. Refer to dry contact kit instructions for further information.
8. Reinstall junction box access cover.
9. Reconnect battery cables, negative lead last.

Parts List		
Kits PA-273915 & PA-273915-SD		
Description	Qty.	Part No.
Washer, 0.188 x 0.438 x 0.049 in. plain	4	X-25-48
Screw, 8-32 x 0.75 in.	4	X-51-11
Nut, 8-32 whiz	4	X-6210-4
Block, terminal	1	273769
Strip, terminal marker	1	273770
Harness, wiring	1	273771