Accessory 23GA, 23GB Current Sensing Module Installation **ASCO**[®] Series 300 Transfer Switches with a Group G Controller

Overview

Current sensing modules can be installed on Series 300 transfer switches with a Group G controller. The current sensing module mounts directly on the controller.

Current transformers (CTs) and shorting terminal block may or may not be included. CTs are usually selected with appropriate ratio equal to or higher than the ampere rating of the transfer switch.

- Accessory 23GA is for single phase systems
- Accessory 23GB is for three phase systems

Refer to User's Guide 381333-400 for further information on this accessory.

Current Transformer ratio (from CT label) ____: 5A

NOTE The current sensing module is not needed when an ASCO 5210 Digital Power Meter is provided.



Figure 1. Current sensing module turned 90° to show the plug (and added socket for separate door controls).



Current Sensing Module

Hazardous voltage capable of causing shock, burns, or death is used in this transfer switch. Deenergize both normal and emergency power sources before installing the accessory.



Figure 2. Mounting location on Group G controller.

(continued on the next page)

381339-317 B



Figure 3. Detail of mounting location.



MPB2 socket for connection to Group G separate door controls, if used (see **NOTE**)

Current Sensing Module

Figure 4. Detail of installed current sensing module.



For single phase system use terminals A, C, and N.

Figure 5. Connections to current sensing module.

Installation

- 1. Deenergize the transfer switch. Then open the enclosure door and verify that all power is off.
- 2. Check the ratio on the label on the current transformers. It is usually _____: 5A. Write down the ratio number.
- 3. Refer to the wiring diagram and specific mounting instructions included with the CTs. Install the CTs (onto the load cables) and the shorting terminal block. Then route the wires to the bottom of the controller.
- Locate the Group G controller that is mounted on the inside of the door. Do <u>not</u> remove controller cover. Refer to Figures 1, 2, 3, 4, and 5.
- 5. Position the sensing module (with plug at top facing inward) onto the lower right area of the controller. Align the MPB plug and socket and push it straight inward. The four corners of the support base, and mounting screws should fit into holes in the controller. Gently tighten the two screws. Do <u>not</u> over tighten.

NOTE

If Group G separate door controls are used, plug one end of its ribbon cable into the MPB2 socket on the Current Sensing Module. Plug the other end of the ribbon cable into the MPB jack on the separate door controls.

6. Refer to the wiring diagram provided with the Series 300 transfer switch. It shows connections to the current transformers, shorting terminal block, and to the appropriate terminals on the sensing module. After all connections are made, remove the shorting screws from the shorting terminal block.

Be sure to install a shorting jumper between the current transformer terminals (or install the shorting screws in a shorting block) when the CT is disconnected from the sensing module!

- 7. After installation, close the enclosure door. Reenergize the transfer switch.
- 8. Refer to User's Guide 381333-400 to set this accessory. See *Main Menu*, *Settings*, *General*, *Other Parameters*. Set the *Current Sensing* to 2CT for single phase system or 3CT for 3 phase system. Set the *CT Ratio* for the ratio that is on the CT label.

Never leave an open secondary circuit of a current transformer. Dangerous voltage can cause shocks, burns, and/or death.