

## Argus Technologies SM02 Replacement

## **Tools List:**

Ratchet Set
Wrench Set
Small Flat Screwdriver (1/8 x 4)
Black Electrical Tape
Small Wire Cutter/Stripper
Needle Nose Pliers
Ammeter with Clamp
Bridging cable (size appropriately with 3/8" or 1/4" mounting hardware)

Hex Socket and Driver (5/16)

Power System Manual

Power System Manual SM02 Manual

Note: All exposed metal on tools must be properly insulated. Recommend using rubber insulating tape wrapped in black electrical tape.

## **Procedure:**

- 1. For systems that have SM02 parameters and prompts (text) different from Argus factory defaults, the settings and prompts may easily be transferred using INSIGHT.
  - For systems that have custom parameters only, the settings may be programmed using the front panel keypad if INSIGHT is not available.
- 2. Review the power system schematic in the power system manual.
- 3. Remove all hand jewelry, i.e. watches, rings, etc.
- 4. If power system is equipped with an Low Voltage Disconnect Contactor, assemble bridging cable to bypass the contactor. The bridging cable should be sized to carry the maximum load of the system.
  - <u>WARNING</u>: This bridging cable will maintain power system integrity as when the SM02 is removed, the contactor will disengage.
- 5. Insulate all grounded metal work around the contactor while installing the bridging cable. (Canvass cloth is recommended)
- 6. Install bridging cable across LVD Contactor effectively bypassing the contactor. Cable must be <u>bolted</u> in place.

- 7. Identify and tag all wires terminating to the SM02 Supervisory Panel to ensure wires are reinstalled in the correct positions.
- 8. Remove fuses in SM02:
  - Panel mount: located inside, back right of the unit when looking from the rear.
  - Door Mount: located on the top left of the PCB board when looking from the rear.
- 9. Disconnect and insulate all leads on the SM02. If possible, disconnect all leads at the power source (live end) first.
  - \* Note: Use extreme care, some leads will be live.
- 10. Remove SM02 panel (Rack mount), or SM02 PCB (Door Mount)
- 11. Install replacement SM02 in position. Remove fuses in new SM02 and reconnect wires in reverse order from which they were removed.
- 12. Configure replacement SM02 'Setup Jumpers' as necessary to match original SM02.
- 13. Reinstall input fuses.
- 14. Send SM02 setup Parameter & Prompt file from Insight to SM02 or program all system parameters manually using SM02 keypad.
- 15. Check all SM02 functions (refer to manual for more detailed information).
- 16. Check and calibrate Voltage, Current and Temperature Inputs.
  - **CAUTION:** When "nulling" current input, ensure you are in the 'CURRENT NULL' menu. Setting the Discharge Voltage to 0V will disengage the contactor.
- 17. After all parameter and operation on the system has been verified, remove temporary bridging cable across the LVD Contactor and remove all insulation.