



# Installation and Maintenance Manual

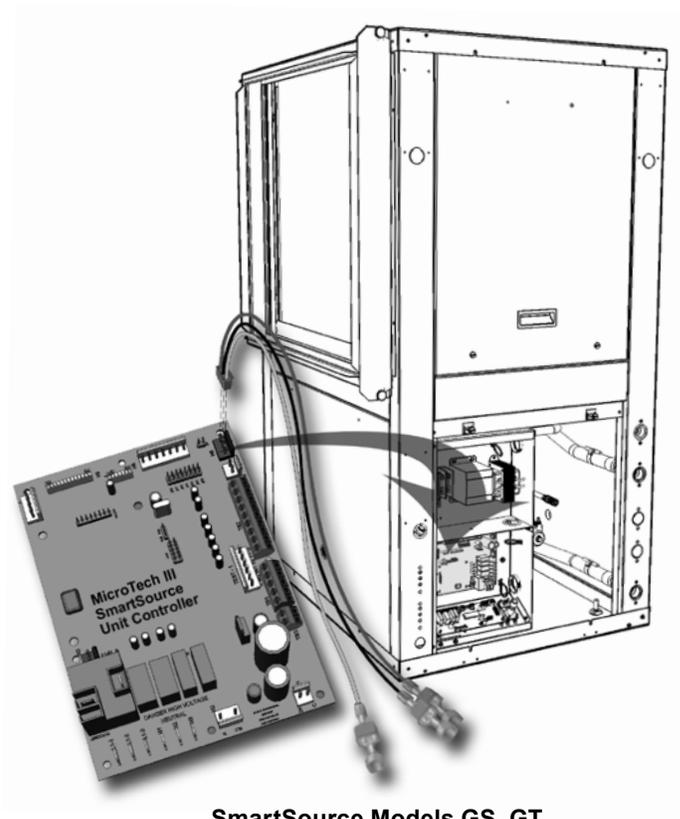
# IM 1186-2

Group: **WSHP**

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## SmartSource™ Water Source Heat Pumps Field Installation - Loop Pump Module Relay Kit



SmartSource Models GS, GT

## ⚠ WARNING

The installer must determine and follow all applicable codes and regulations. This equipment presents hazards of electricity, and sharp edges. Failure to read and follow these instructions can result in property damage, severe personal injury or death. This equipment must be installed by experienced, trained personnel only.

## ⚠ CAUTION

To prevent electrical shock, disconnect electric power to system at main fuse or circuit breaker box until installation is complete.

### What The Pump Relay Kit Does

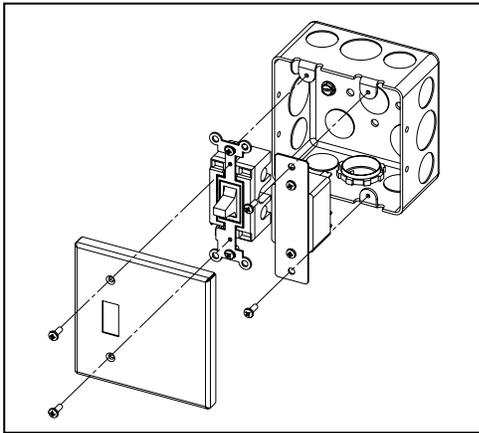
When there is a call for heating or cooling, the SmartSource WSHP unit turns on a 24VAC signal that serves as a Pump Request. The relay in the relay kit works as an electrically activated switch, turning on power to the pump when the Pump Request is activated.

The switch in the relay kit can be used as a manual override. In the AUTO position, the pump(s) will turn on and off in response to the pump request signal. In the ON position, the pump(s) will run continuously. This can be useful for checking the water loop temperature in the absence of a call for heating or cooling.

### Wiring Procedure

#### Models GS & GT

Figure 1: Junction box with switch & relay assembly



1. Remove switch and relay from junction box, and knock out knockouts as appropriate.
2. Feed field-supplied wires through knockouts with field-supplied conduit fittings for strain relief, consistent with local electrical codes.

3. Referring to Figure 2, Connect field-supplied wires to the Blue and Yellow wires on the provided wire harness end connectors:
4. Install the supplied wire harness 3-pin receptacle into the blue header terminal (H8) on the MicroTech III SmartSource control board, Figure 2.
5. Referring to Figure 2, Connect field-supplied wires to pigtails in kit, as follows:
  - a. Black, white, and green/yellow wires (line voltage, 18 AWG) connect to building service (power) wires L1, L2, and Ground, respectively.
  - b. Two orange wires (line voltage, 18 AWG) connect to pump (line voltage input).
  - c. Blue and yellow wires (24 VAC, 22 AWG) connect to WSHP unit, as shown in Figure 2.
6. Re-assemble switch and relay to junction box.

Figure 2: Wiring detail for SmartSource with MicroTech III unit controller

