Maretron
Vessel Monitoring & Control Systems

Installation Instructions
SH-002 Smoke/Heat Detector

Instructions

Please follow these instructions to connect the SH-002 to the NMEA 2000® network via a Maretron SIM100 Switch Indicator Module. The wiring diagram appears in Figure 1 on the reverse side of this page. The diagram shows a connection to channel #1 of the SIM100, but connections to other channels are similar.

1. Connect the SH-002 power terminals (marked as + and -) to an 8.5-33VDC supply that is independent of the NMEA 2000® network power supply as shown in Figure 1. Powering the unit separately from the NMEA 2000® network allows the detector to work even when the NMEA 2000® network is powered off.

2. Connect the SH-002 two alarm contact terminals (marked NO and COM) to a free switch channel on the SIM100. The example in Figure 1 shows the SH-002 smoke/heat detector connected to the SIM100 switch channel 1, terminals (marked SW1A and SW1B).

3. Use a Maretron DSM150/DSM250 display (firmware 1.3.5 or higher), or a Maretron USB100 and PC running N2KAnalyzer software to configure the SIM100 switch channel mode (indicated as “Channel #*x* Mode”) to the “End of Line Resistor” setting. For this example, you would set “Channel #1 Mode” to “End of Line Resistor”.

4. Supply Power to the NMEA 2000® network and to the SH-002 and verify that the switch channel indicates an “off” (normal) state using a Maretron display, N2KAnalyzer, or other product capable of displaying switch indicator state.

5. Perform a smoke test and heat test on the SH-002 and verify that the switch channel indicates an “on” (alarm) state during each of the tests.

6. Remove power from the SH-002 and verify that the switch channel indicates an “error” state.

7. Reconnect power and verify that the switch channel indicates an “off” (normal) state.

8. Disconnect either of the two alarm wires from the SIM100 and verify that the switch channel indicates an “error” state.

9. Reconnect the alarm wires to the SIM100 and verify that the switch channel indicates an “off” (normal) state.

WARNING: The SH-002 is shipped with an 8KΩ end-of-line resistor installed between one of the alarm contacts terminals and one of the supervisory relay terminals. Also, the detector is shipped with a jumper wire installed between the supervisor relay and the alarm contacts. Do not remove either the resistor or the jumper wire, as they are required for proper operation.

The SH-002 is packaged with the original manufacturer’s *ESL 500N Series Smoke Detector Installation Sheet*. Retain this document and review it for testing and maintenance procedures to be performed on the smoke/heat detector.

(continued on reverse)

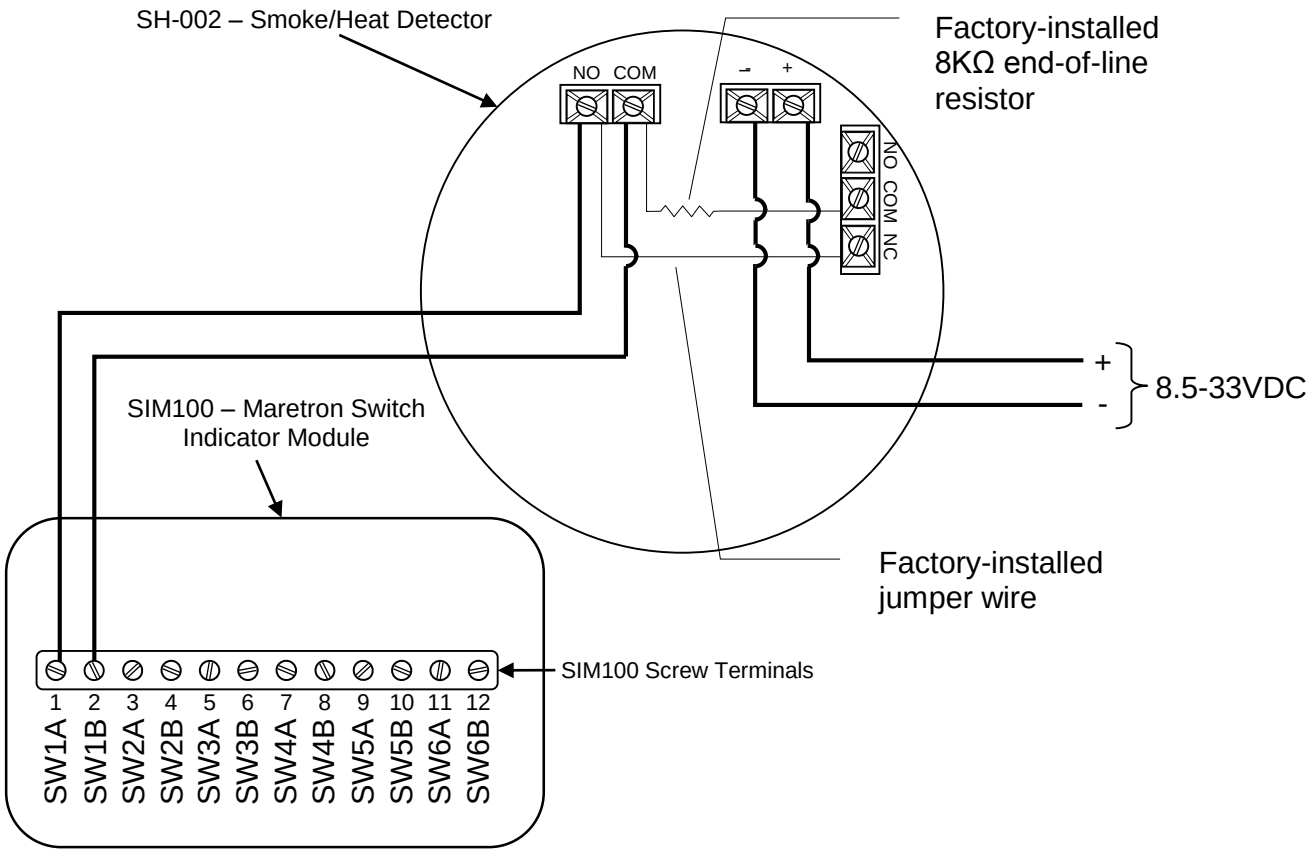

Figure 1 - Wiring Diagram

For installation support, please contact:

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