Installation Instructions
MS-1035, MS-1055-N, MS-1075, MS-1085-N Magnetic Switches

Instructions

Please follow these instructions to connect any of the MS-1035, MS-1055-N, MS-1075, or MS-1085-N to the NMEA 2000® network via a Maretron SIM100 Switch Indicator Module. The wiring diagram appears in Figure 1 on back of page.
*The diagram shows a connection to channel #1, but connections to other channels are similar.
*The Magnetic Switches offer a Normally Open (N.O.) contact configuration.

1. Connect the two alarm contact terminals of the sensor portion of the magnetic switch to a free switch channel. The example in Figure 1 shows the sensor portion of the magnetic switch connected to switch channel 1 with one wire connected to “SW1A”, and the second wire connected to “SW1B”.

2. Use a Maretron DSM Series display or the N2KAnalyzer PC software and appropriate gateway to properly configure the SIM100 and associated channel for use with the magnetic switches. The channel “Mode:” should be set to “No End of Line Resistor”. Set the “Label:” with an appropriate name for easy identification when setting up favorite screens described in the next step (e.g., Engine Room Hatch).

3. Supply Power to the NMEA 2000® network and verify that the switch channel indicates an “OFF” (alarm) state using Maretron N2KView software, N2KAnalyzer, the MConnect or other product capable of displaying switch indicator state while the Magnetic switch is in the open configuration.

4. Place the magnetic portion (the part with no connected wires) of the switch close to the sensor portion (the part with connected wires) of the switch and verify that the switch channel indicates an “ON” (normal) state during the test, indicating closure of switch.

5. To display the status of the Magnetic Switch on a DSM Series display, N2KView software or the MConnect, create an “Indicator Status” within a favorite screen. Since the Magnetic Switches are as Normally Open, set the ‘closed’ or “ON Color” to green. Set the ‘open’ or “OFF Color” to be yellow or red to indicate the open switch.

6. In order to create an Alert on a DSM Series display or within the N2KView software, create an Alert->Indicator->Status->On Alert. Whenever the Magnetic Switch is opened, the SIM100 indicates an open condition and the Alert is triggered. *Users can implement a delay in trigger response, indicating if monitored application (door, hatch, etc.) is in the open of closed state for an extended duration.

7. Test the connections between the Magnetic Switch and SIM100 using N2KAnalyzer PC software and an appropriate gateway connection (i.e., USB100 or IPG100).
    a. With the SIM100 selected within N2KAnalyzer software, open a transmitted PGN window and expand PGN 127501 to view the appropriate channel where the Magnetic Switch is connected. With sensor closed, the status should read “Yes, On, Enabled, Set, “1””.
    b. Next, open the monitored application, the status should read “No, Off, Disabled, Reset, “0””. After a few seconds close the hatch, the status should read “Yes, On, Enabled, Set, “1””.

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(Continued on reverse)

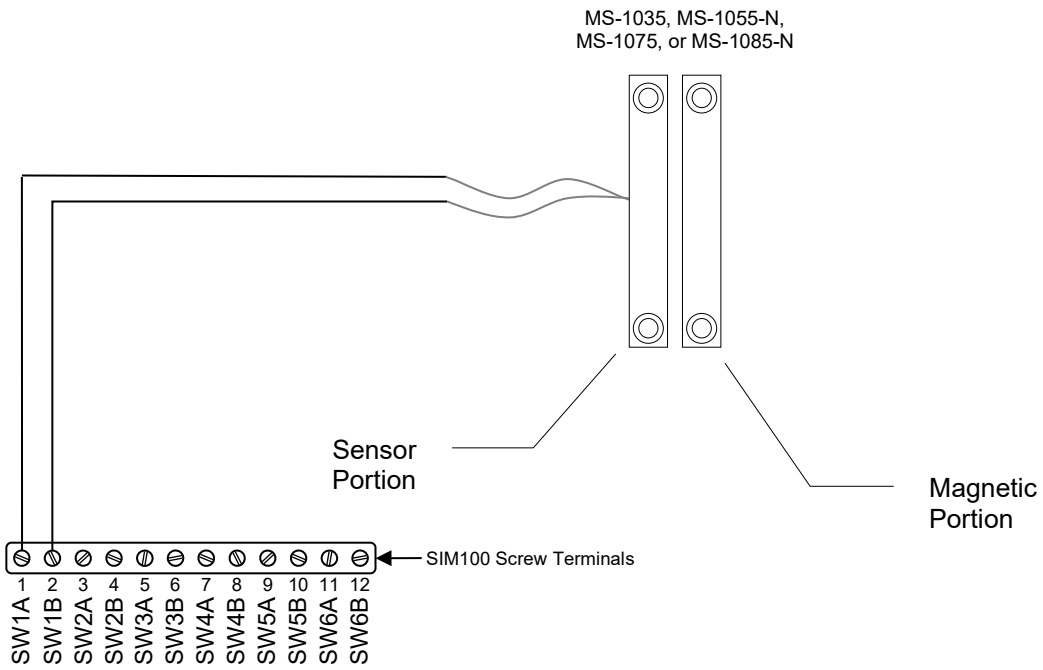

Figure 1 - Wiring Diagram

If you require technical support for Maretron products, you can reach us in any of the following ways:

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