

379-004 E3 IP Strobe MRM (Monitored Relay Module) Station

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General Information

The Model 379-004 E3 IP Strobe MRM (Monitored Relay Module) station operates in an Elemec3 system. The E3 controller's software configuration controls its operation.

The MRM includes eight relay output circuits. Each relay contains two type C contacts rated for 5 amps. Relay outputs typically switch power to signaling devices such as beacons or strobes but are applicable to any switching application that does not exceed the relay's current rating. Relay circuits are programmable to activate during:

system alarms
 pages
 trouble conditions

The E3 IP strobe MRM monitors relay output cabling for open circuit, short circuit, and ground fault conditions and automatically reports fault conditions to the E3 controller. Monitoring occurs while the relay output circuit is inactive. The relay circuit will not activate while a cable fault is present, preventing a possible dangerous condition.

The Model 379-004 E3 IP Strobe MRM station's housing is a NEMA 4X stainless steel enclosure measuring 13.00 W \times 14.30 H \times 6.23 D inches (330.2 \times 363.2 \times 158.2 mm). Internal components include:

- 24 V dc power supply
- No. 12579-005 Monitored Relay Module Assembly

The No. 12579-005 E3 IP Strobe MRM has three components (see Figure 1)

- No. 69639-xxx Ethernet CPU PCBA
- No. 69670-001 Strobe Monitored-Input PCBA
- No. 69672-001 Relay E3 Strobe Supervision PCBA.

The scope of this manual is mounting and wiring the IP strobe MRM station. Refer to Pub. 42004-559 for additional information on the No. 12579-005 E3 IP Strobe MRM (see the <u>Reference Documentation</u> section).

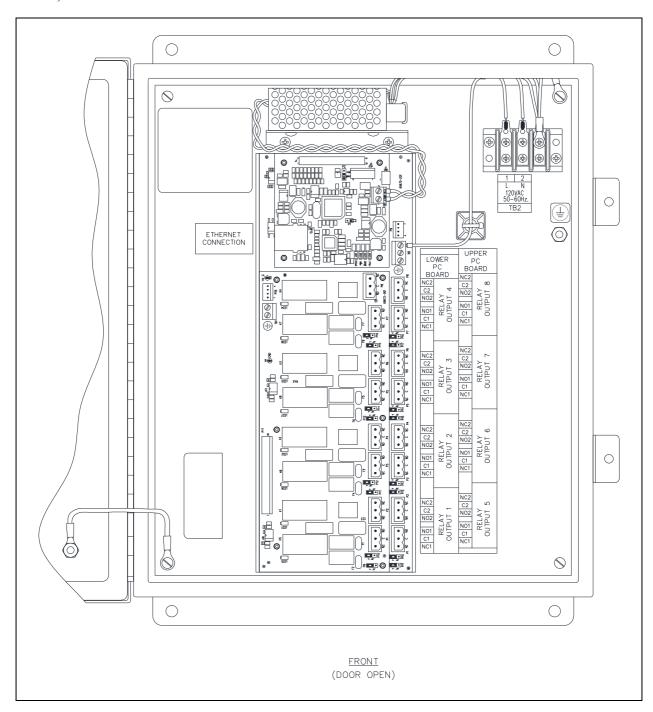


Figure 1. Model 379-004 E3 IP Strobe MRM Station (Interior View)

Installation

CAUTION — Do not install this equipment in hazardous areas. Disconnect power before installing or removing the MRM.

Mounting

Mount the Model 379-004 E3 IP Strobe MRM station vertically (see <u>Figure 2</u>). Select a mounting location that is flat, provides proper clearance, and is rigid and strong enough to support the enclosure.

- 1. Mount the enclosure using ½-20 (M6) hardware, appropriate for the mounting surface, through the four 0.31-inch (7.9 mm) diameter holes, on the mounting flanges (see Figure 2)
 - Determine the mounting hardware length by the thickness of the mounting surface or by the anchoring method the customer selects.
 - **NOTE:** Due to the various surface types the station mounts to, the customer must supply the mounting hardware.
 - The suggested height of the station is 48 inches (1219 mm) to the center of the bottom mounting holes of the enclosure.
 - GAI-Tronics supplies the Model 379-004 E3 IP Strobe MRM station enclosure with two 1-1/4-inch holes and one ³/₄-inch hole with sealing hole plugs (see <u>Figure 3</u>). Remove hole plugs and install (*customer supplied*) liquid tight conduit or cable glands when connecting field wiring.
 - Use entry hole **A** for ac input power wiring. Use entry holes **B** and **C** for signal/control and/or Ethernet connections (see Figure 3).
- 2. Remove the shipping tie-wrap securing the PCBA to the mounting Snaptrack.

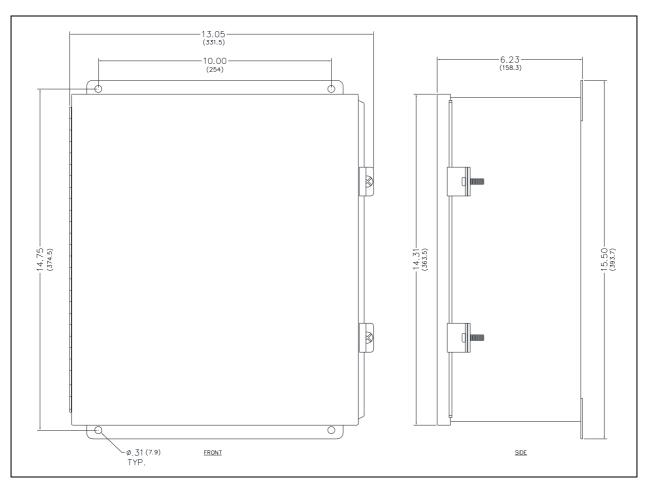


Figure 2. E3 IP Strobe MRM Enclosure

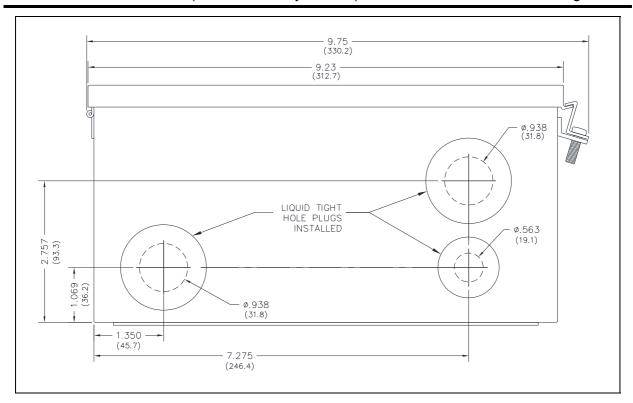


Figure 3. E3 IP Strobe MRM Cable Entries

Wiring

The IP strobe MRM station requires 120 V ac, 50/60 Hz power and an Ethernet connection to an *Elemec3* IP controller. Connect the eight relay outputs and input contact circuits as needed. Refer to Pub. 42004-559 for detailed information on I/O circuits, I/O circuit connections, and I/O configuration (see the Reference Documentation section).

Power

Connect 120 V ac power to terminal block TB2, at the top of the panel (see <u>Figure 1</u>). Use 14 AWG minimum power conductors and an all-pole main switch (circuit breaker).

The grounding stud, next to terminal block TB2 (see <u>Figure 1</u>) provides the earth ground termination. Minimum wire gauge is 14 AWG.

Function Terminal Block Wire Color

AC Line (hot) TB2-1 Black

Neutral TB2-2 White

Ground EARTH GROUND STUD Green

Table 1. AC Power Termination

Ethernet Connection

Plug a Category 5 or better Ethernet cable with RJ45 plug from the E3 network into the RJ45 jack, on the CPU PCBA (see <u>Figure 1</u>).

Replacement Parts

Table 2. Replacement Parts

Part Number	Description
69639- <i>xxx</i>	PCBA, Ethernet CPU
69670-001	PCBA, Strobe Monitored IN8—120VAC
69672-001	PCBA, Relay E3 Strobe Supervision
40404-011	Power Supply, 24 V dc, 25 W

Reference Documentation

For additional information, please refer to the standard publication listed below. GAI-Tronics' publications are on the GAI-Tronics website at https://www.hubbell.com/gai-tronics/en.

E3 IP Strobe MRM (Monitored Rel	lay Modules)	42004-559
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Specifications

Electrical

Power requirements	Ĺ
NOTE: Power requirements do NOT include power switched to external devices such as beacons or	

NOTE: Power requirements do **NOT** include power switched to external devices such as beacons or strobes.

Mechanical

Dimensions	$1.13.00 \text{ W} \times 14.30 \text{ H} \times 6.23 \text{ D} \text{ in } (330.2 \times 363.2 \times 158.2 \text{ mm})$
Weight	

Environmental

Humidity	95% non-condensing relative humidity
Temperature range	22 °F to 158 °F (-30 °C to 70 °C)
Environmental rating	NEMA 4X

Approvals

	CE Mark
UL	62368-1, 2nd Ed, 2014-12-01
CAN/CSA	C22.2 No. 62368-1-14, 2nd Ed, Issued: 2014-12-01
FCC	CFR47, Part 15 Class A Compliant

Warranty

Equipment. GAI-Tronics warrants for a period of one (1) year from the date of shipment, that any GAI-Tronics equipment supplied hereunder shall be free of defects in material and workmanship, shall comply with the then-current product specifications and product literature, and if applicable, shall be fit for the purpose specified in the agreed-upon quotation or proposal document. If (a) Seller's goods prove to be defective in workmanship and/or material under normal and proper usage, or unfit for the purpose specified and agreed upon, and (b) Buyer's claim is made within the warranty period set forth above, Buyer may return such goods to GAI-Tronics' nearest depot repair facility, freight prepaid, at which time they will be repaired or replaced, at Seller's option, without charge to Buyer. Repair or replacement shall be Buyer's sole and exclusive remedy. The warranty period on any repaired or replacement equipment shall be the greater of the ninety (90) day repair warranty or one (1) year from the date the original equipment was shipped. In no event shall GAI-Tronics warranty obligations with respect to equipment exceed 100% of the total cost of the equipment supplied hereunder. Buyer may also be entitled to the manufacturer's warranty on any third-party goods supplied by GAI-Tronics hereunder. The applicability of any such third-party warranty will be determined by GAI-Tronics.

<u>Services.</u> Any services GAI-Tronics provides hereunder, whether directly or through subcontractors, shall be performed in accordance with the standard of care with which such services are normally provided in the industry. If the services fail to meet the applicable industry standard, GAI-Tronics will re-perform such services at no cost to buyer to correct said deficiency to Company's satisfaction provided any and all issues are identified prior to the demobilization of the Contractor's personnel from the work site. Re-performance of services shall be Buyer's sole and exclusive remedy, and in no event shall GAI-Tronics warranty obligations with respect to services exceed 100% of the total cost of the services provided hereunder.

<u>Warranty Periods.</u> Every claim by Buyer alleging a defect in the goods and/or services provided hereunder shall be deemed waived unless such claim is made in writing within the applicable warranty periods as set forth above. Provided, however, that if the defect complained of is latent and not discoverable within the above warranty periods, every claim arising on account of such latent defect shall be deemed waived unless it is made in writing within a reasonable time after such latent defect is or should have been discovered by Buyer.

<u>Limitations / Exclusions.</u> The warranties herein shall not apply to, and GAI-Tronics shall not be responsible for, any damage to the goods or failure of the services supplied hereunder, to the extent caused by Buyer's neglect, failure to follow operational and maintenance procedures provided with the equipment, or the use of technicians not specifically authorized by GAI-Tronics to maintain or service the equipment. THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE IN LIEU OF AND EXCLUDE ALL OTHER WARRANTIES AND REMEDIES, WHETHER EXPRESS OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Return Policy

If the equipment requires service, contact your Regional Service Center for a return authorization number (RA#). Equipment should be shipped prepaid to GAI-Tronics with a return authorization number and a purchase order number. If the equipment is under warranty, repairs or a replacement will be made in accordance with the warranty policy set forth above. Please include a written explanation of all defects to assist our technicians in their troubleshooting efforts.

Call 800-492-1212 (inside the USA) or 610-777-1374 (outside the USA) for help identifying the Regional Service Center closest to you.