

INSTALLATION MANUAL

R-MP

PRELIMINARY WARNINGS

The word **WARNING** preceded by the symbol  indicates conditions or actions that put the user's safety at risk. The word **ATTENTION** preceded by the symbol  indicates conditions or actions that could damage the instrument or connected equipment.

The warranty shall become null and void in the event of improper use or tampering with the module or devices supplied by the manufacturer as necessary for its correct operation, and if the instructions contained in this manual are not followed.

	WARNING: The full content of this manual must be read before any operation. The module must only be used by qualified electricians. Specific documentation is available using the QR-CODE shown on page 1.
	The module must be repaired and damaged parts replaced by the Manufacturer. The product is sensitive to electrostatic discharges. Take appropriate measures during any operation.
	Electrical and electronic waste disposal (applicable in the European Union and other countries with recycling). The symbol on the product or its packaging shows the product must be surrendered to a collection centre authorized to recycle electrical and electronic waste.



DOCUMENTATION



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CONTACT INFORMATION

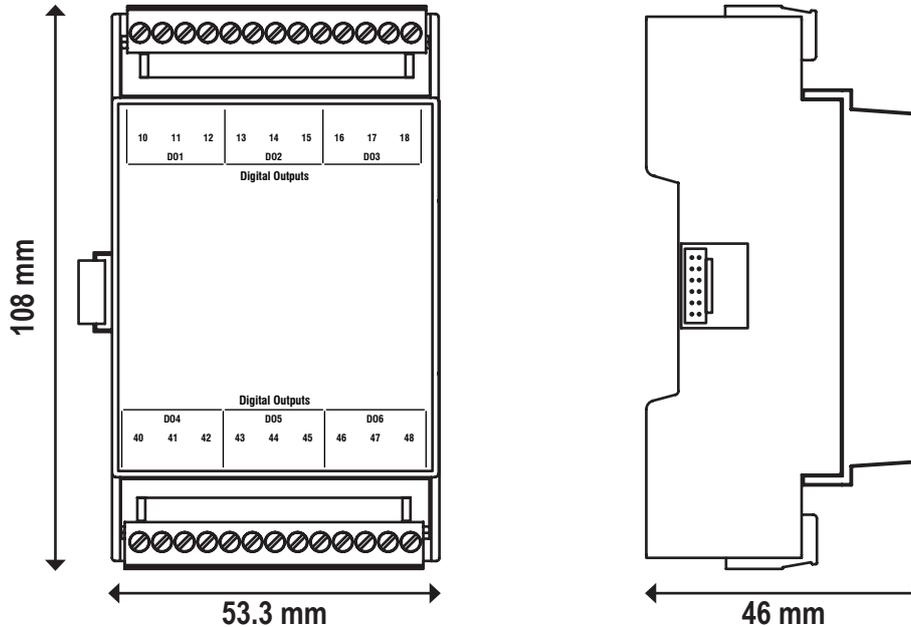
Technical support	supporto@seneca.it	Product information	commerciale@seneca.it
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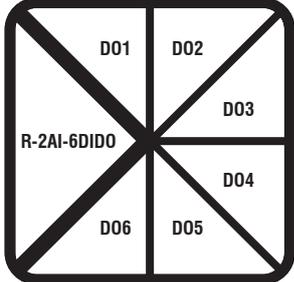
The content of this document corresponds to the described products and technologies.

Stated data may be modified or supplemented for technical and/or sales purposes.

MODULE LAYOUT

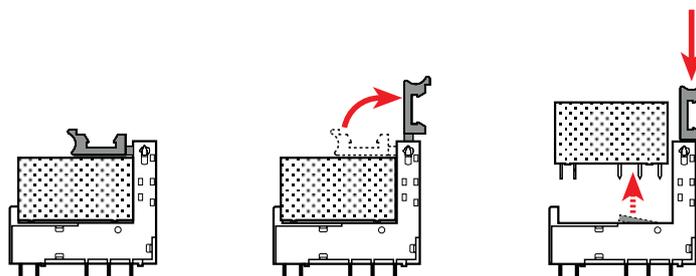


TECHNICAL SPECIFICATIONS

CERTIFICATIONS	  
INSULATION	 <p>— 1500 Vac — 3000 Vac</p>
ENVIRONMENTAL CONDITIONS	<p>Operating temperature: from -25°C to +60°C Humidity: 10% ÷ 90% non condensing. Storage temperature: from -30°C to +85°C Protection rating: IP20</p>
ASSEMBLY	35mm DIN rail IEC EN60715
CONNECTIONS	5 mm pitch terminal block, 2.5 mm ² max cable section
DIGITAL OUTPUTS	6 Removable relays (electromechanical or electronic) mounted on a base. Number of channels: 6; Max voltage/current: 250 V; 5 A

RELAY INSTALLATION

To replace a relay, lift the black tab.
 Once upright, press down lightly to trigger the ejection spring.
 After inserting the new relay, close the tab to lock in the component.
 Refer to diagram below for the correct procedure.



DEVICE OPERATION

Product R-MP is an accessory intended solely for connection to product R-2AI-6DIDO (motherboard).

It uses the digital outputs of the motherboard to drive the removable relays mounted on a base.

These relays can be electro-mechanical or electronic.

Relays can be mixed.

The following rules must be adhered to:

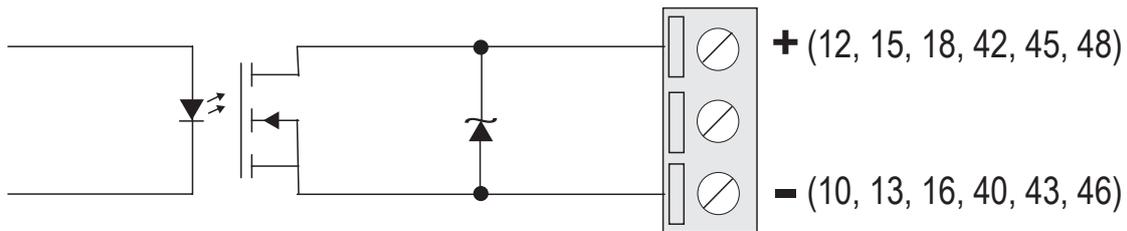
- Coil operating voltage: must be identical for all and compatible with the motherboard's I/O power supply.
- Operating voltage is determined by relay type, with a maximum of 5 A/250 Vac.
- Depending on the operating voltage, the maximum ambient operating temperature (T_{amb}) will be limited. Refer to diagrams on page 4 for further details.
- One or more of the 6 channels can be used as digital input(s) by removing the corresponding relay from its housing.
- R-MP is designed for use with mains voltage contacts up to 250 Vac relative to ground (CAT II).

ELECTRICAL CONNECTIONS

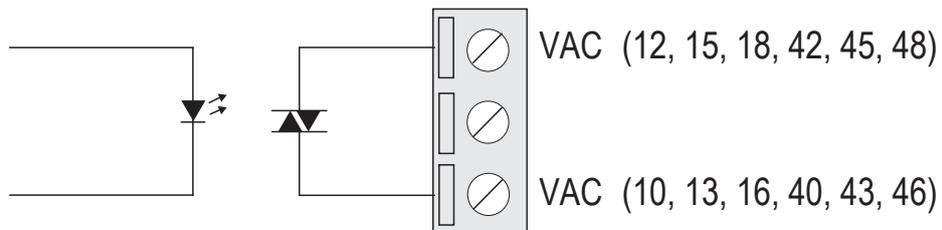
⚠ CAUTION

if some of the voltage contacts are used by SELV circuits (Safety Extra-Low Voltage), the adjoining relay on the same side (top or bottom) cannot be used at hazardous voltages.

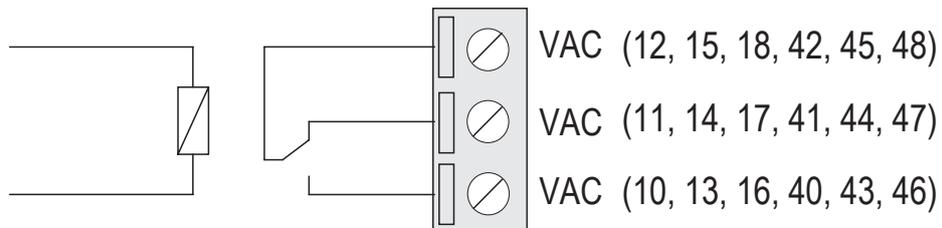
RELAY CONNECTION DIAGRAM WITH MOS-FET



RELAY CONNECTION DIAGRAM WITH TRIAC



ELECTROMECHANICAL RELAY CONNECTION DIAGRAM:



THERMAL DERATING

The diagrams below show the thermal derating when using electromechanical or electronic relays:

Diagram for FINDER electromechanical relay, Mod. no. 34.51.7.034.0010, 24V coils, 6A / 250 Vac contacts; and for ELCO electronic relay, Mod. type SSR01DH-824, 24V coil, 8A / 24 Vdc contact

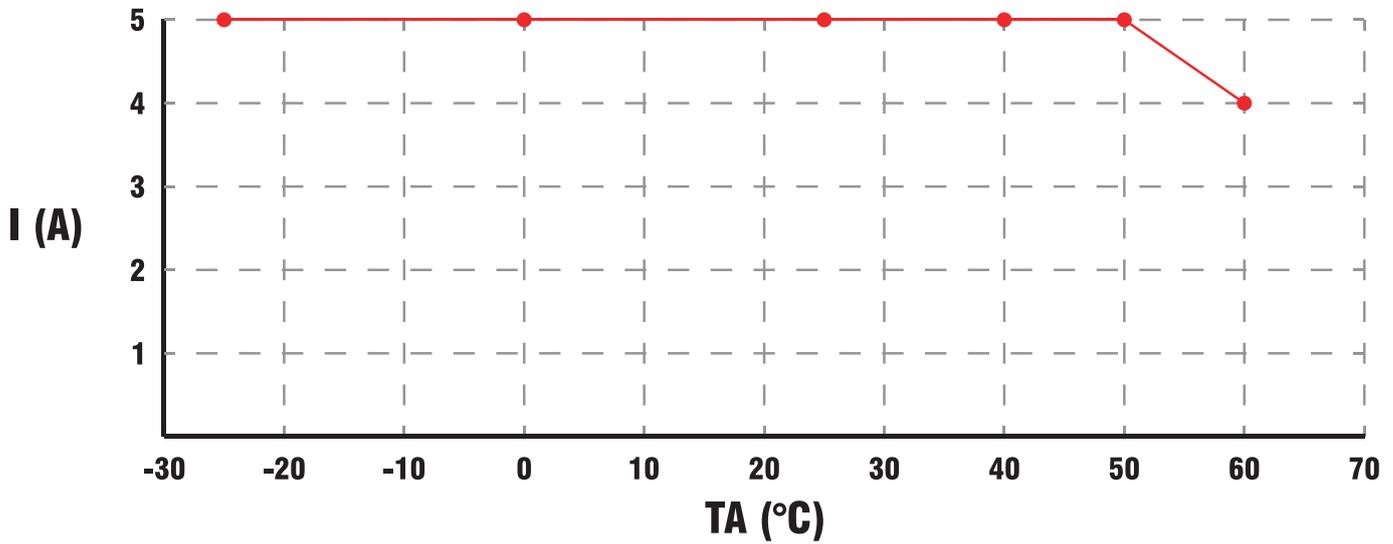
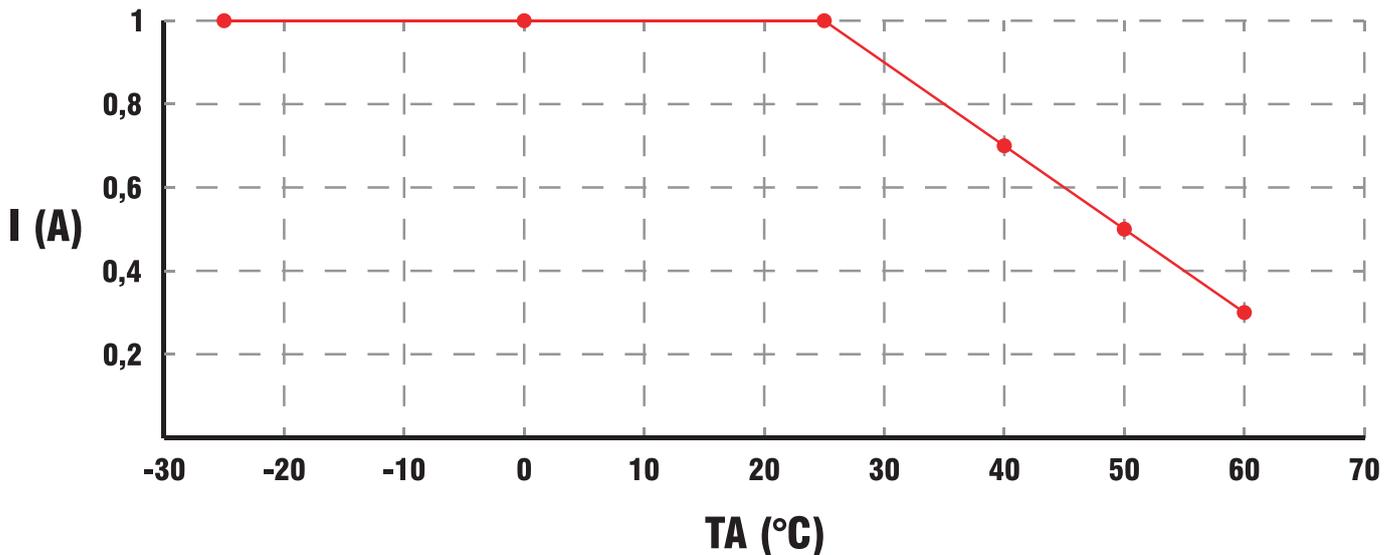


Diagram for ELCO electronic relay, Mod. no. SSR01A-2240, 24V coil, 2A / 250 Vac contacts:



⚠ CAUTION

Maximum flow rate refers to vertical installation.

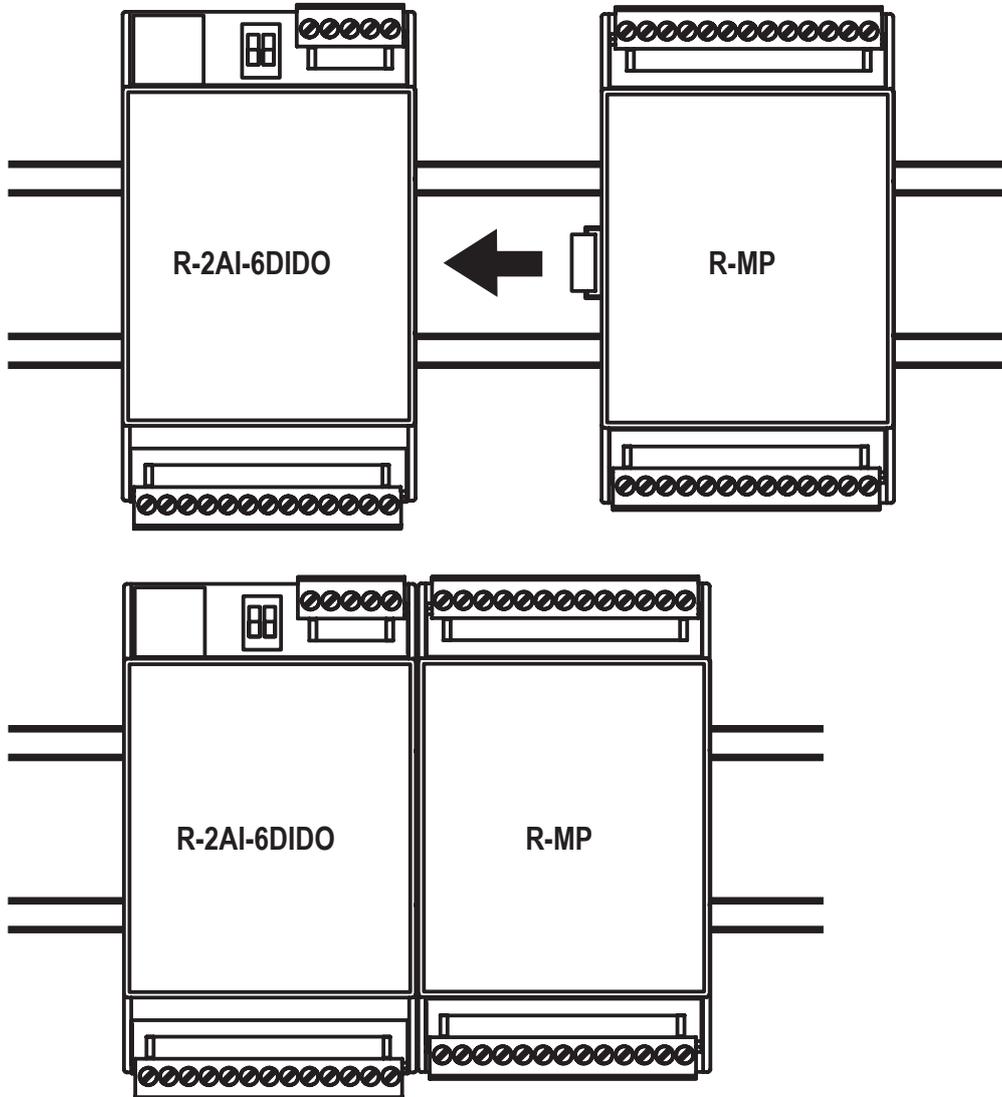
CONNECTION TO THE MAIN MODULE

Installation:

To connect the R-MP accessory module to the R-2AI-6DIDO main module, position it on the DIN rail as shown in the procedure below, then slide it along until it clicks into place with the side connector.

⚠ CAUTION

Connection of the R-MP accessory module must be carried out with the R-2AI-6DIDO main module switched off.



N.B.: For an ideal operation of the module, the use of a DIN rail clamp is recommended.

INSTALLATION ON DIN-IEC EN 60715 RAIL

Installation:

Position the device on the OMEGA rail resting the upper teeth from top to bottom.

Push the lower part towards the rail until the locking system engages.

Removal:

After switching off the module, with the help of a slotted screwdriver, unlock the locking system located on the underside of the instrument.

