

# **Modbus I/O Module**

MODEL	DESCRIPTION
SfAR-S-6RO	Modbus I/O module with 6 relay outputs



#### **APPLICATION AND USE**

SfAR-S-6RO is designed to be applied wherever it is necessary to switch up to an 8 A load. The module has 6 relay outputs (RO). Relay outputs are double-throw contact types, offering both normally open (NO) and normally closed (NC) types at the same time. A built-in RS485 interface allows an easy connection over the Modbus RTU/ASCII protocol. A 32-bit ARM core processor provides fast processing and communication. The module is equipped with a set of LEDs used to indicate the status of I/O, power supply, and RS485 communication. Configuration of the module is carried out with our free software, the SfAR Configurator. A built-in mini USB allows for performing a primary configuration of the unit without an additional power supply. The module has been equipped with the Quick Connector system to simplify installation. Using a dedicated SfAR-S-LINK cable allows for connecting up to 10 modules, which provide both RS485 communication and an external power supply.

#### **FEATURES**

- 6 galvanic isolated relay outputs
- Separate contacts for NC and NO options
- Up to an 8 A load on each output
- Watchdog function
- Built-in LEDs for device status indication
- Modbus RTU/ASCII communication
- Baud rate: 2400-115200 bps

- Up to 128 modules on the bus
- Built-in mini USB type B port for configuration
- Space-saving housing
- DIN rail mounting
- DIP switch for configuration
- Quick Connector for grouping modules and providing power and communication

#### **TECHNICAL SPECIFICATION**

DESCRIPTION		SfAR-S-6RO
Power supply	Voltage	10-38 V DC; 10-28 V AC
Relay output -	Number of outputs	6
	Туре	Selectable NO/NC relay output
	Resistive load (AC1)	8 A at 230 V AC or 8 A at 30 V DC
	Inductive load (AC3)	360 VA at 230 V AC or 60 W at 30 V DC
TX	RS485 interface	Up to 128 devices
	Communication protocol	Modbus RTU/ASCII
	Ports	3-pin screw connector
	Baud rate	2400-115200 bps
USB	mini USB	Type B, for configuration
Ingress protection	IP rating	IP 40 for indoor installation

The performances stated in this sheet can be modified without any prior notice.

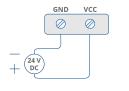
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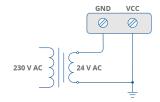


DESCRIPTION		SfAR-S-6RO
Temperature -	Storage	-40°C to +85°C (-40°F to +185°F)
	Operating	-10°C to +50°C (14°F to 122°F)
Humidity	Relative	5 to 95% RH (without condensation)
Screw connectors -	Туре	2-pin (power supply), 3-pin (RS485), 10-pin (I/O)
	Maximum cable size	2.5 mm2 (1812 AWG)
Housing	Material	Self-extinguishing plastic (PC/ABS)
	Cooling	Internal air circulation
	Mounting	DIN (DIN EN 50022 norm)
Dimensions	Width	119.10 mm/4.69 in
	Length	101.00 mm/3.98 in
	Height	22.70 mm/0.89 in

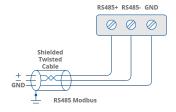
## **WIRING DIAGRAMS**

## **Power Supply**

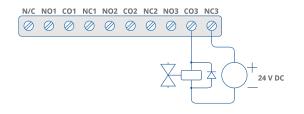


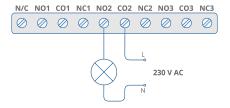


## Communication



# **Relay Output**

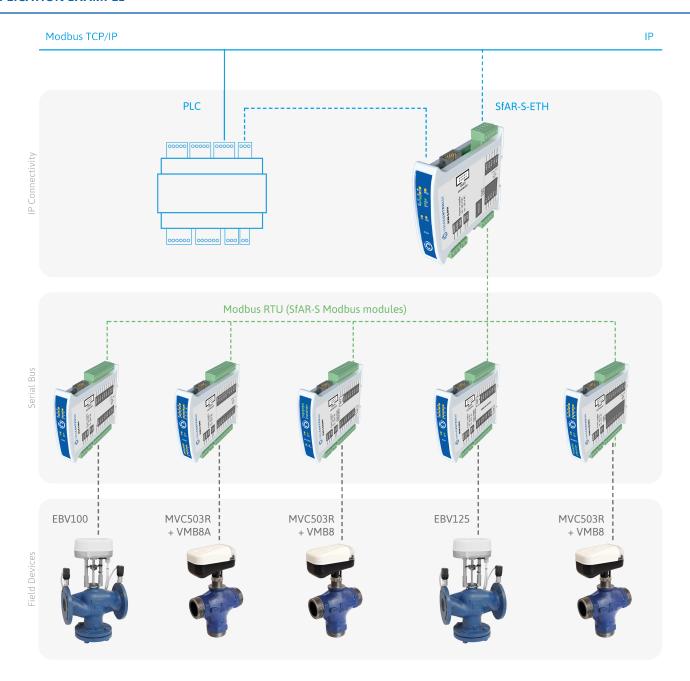




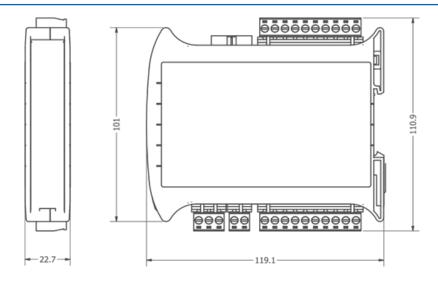
## **DEDICATED SOFTWARE**



SfAR Configurator - Windows-based freeware configuration tool made for Modbus I/O modules



## **DIMENSIONS** [mm]



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