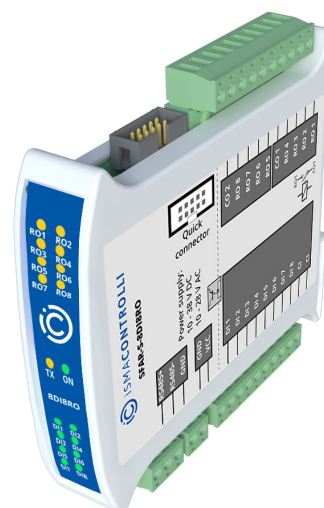


Modbus I/O Module

MODEL	DESCRIPTION
SfAR-S-8DI8RO	Modbus I/O module with 8 digital inputs and 8 relay outputs



APPLICATION AND USE

SfAR-S-8DI8RO is a controller's I/O extension, which, thanks to its unique features, fits a variety of applications. The module has 8 digital inputs (DI) and 8 relay outputs (RO). Digital inputs can work as fast pulse counters with up to 1000 counts per second, or timers measuring the ON state and offering a possibility to connect 2 encoders. Digital inputs support both PNP and NPN input types. Relay outputs are normally open (NO) type. All inputs are isolated from the logic with optoisolators. 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/Os, power supply, and RS485 communication. Configuration of the modules 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 external power supply.

FEATURES

- 8 opto-isolated digital inputs
- Every DI works as a 32-bit pulse counter or timer
- Support for encoder
- 8 relay outputs with 4 relays on a single common
- 3 A at 30 V DC or 3 A at 250 V AC for each common
- 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

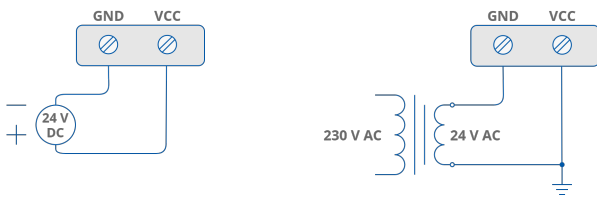
DESCRIPTION		SfAR-S-8DI8RO
Power supply	Voltage	10-38 V DC; 10-28 V AC
Digital input	Number of inputs	8
	Type	PNP or NPN transistor inputs Fast pulse counter up to 1 kHz Timer Encoder support
Relay output	Number of outputs	8
	Type	NO relay output
	Resistive load (AC1)	3 A at 230 V AC or 3 A at 30 V DC
	Inductive load (AC3)	75 VA at 230 V AC or 30 W at 30 V DC

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

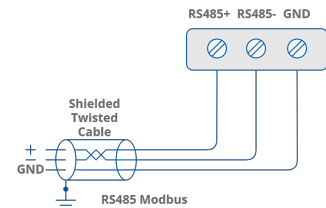
DESCRIPTION		SfAR-S-8DI8RO
TX	RS485 interface	Up to 128 devices
	Communication protocol	Modbus RTU/ASCII
	Ports	3-pin screw connector
	Baud rate	2400-115200 bps
USB	mini USB	Type B, for configuration
Ingress protection	IP rating	IP 40 for indoor installation
Temperature	Storage	-40°C to +85°C (-40°F to +185°F)
	Operating	-10°C to +50°C (14°F to 122°F)
Humidity	Relative	5 to 95% RH (without condensation)
	Type	2-pin (power supply), 3-pin (RS485), 10-pin (I/O)
Screw connectors	Maximum cable size	2.5 mm ² (18...12 AWG)
	Material	Self-extinguishing plastic (PC/ABS)
Housing	Cooling	Internal air circulation
	Mounting	DIN (DIN EN 50022 norm)
	Width	119.10 mm/4.69 in
Dimensions	Length	101.00 mm/3.98 in
	Height	22.70 mm/0.89 in

WIRING DIAGRAMS

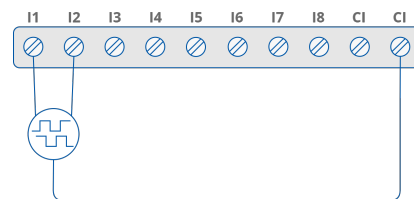
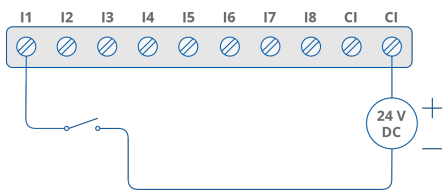
Power Supply



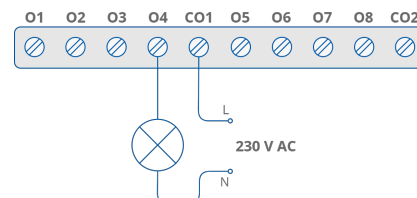
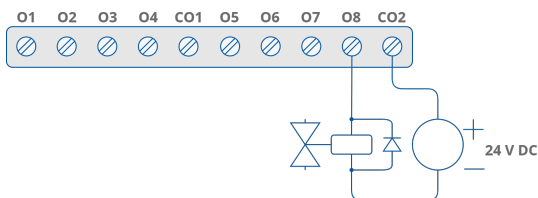
Communication



Digital Input



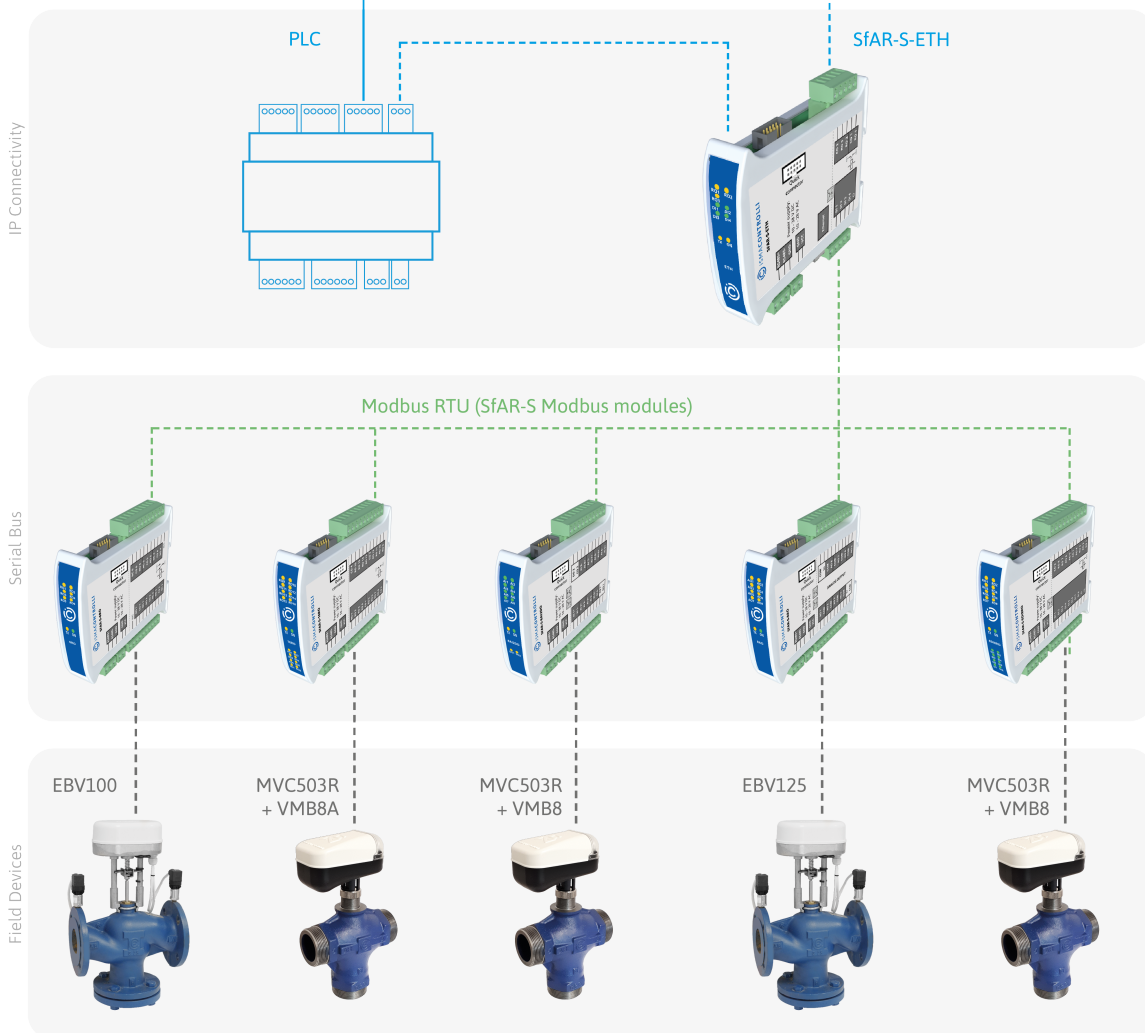
Relay Output



DEDICATED SOFTWARE



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



DIMENSIONS [mm]

