SfAR-S-8TO

Modbus I/O Module

MODEL	DESCRIPTION
SfAR-S-6TO	Modbus I/O module with 8 triac outputs

APPLICATION AND USE

SfAR-S-8TO can be used as a digital output and as an analog PWM output module. It gives users the possibility to control, for example, PWM-controlled valves. The module has 8 triac outputs (TO). All outputs 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 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

- 8 opto-isolated triac outputs
- 500 mA at 24 V AC, 500 mA at 230 V AC
- 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
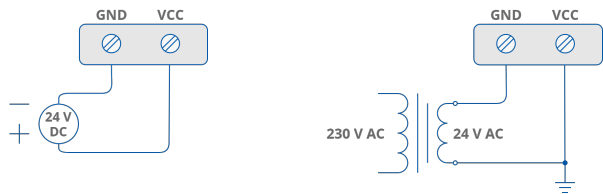
TECHNICAL SPECIFICATION

DESCRIPTION		SfAR-S-8TO
Power supply	Voltage	10-38 V DC; 10-28 V AC
Triac output	Number of outputs	8
	Switching voltage	20 to 250 V AC
	Continuous load per channel	0.5 A (1.5 A peak 30 s)
	Output current	500 mA at 24 V AC, 500 mA at 230 V AC
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

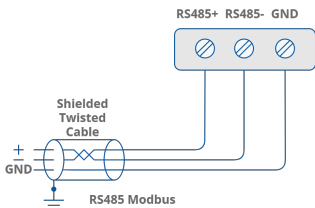The performances stated in this sheet can be modified without any prior notice.

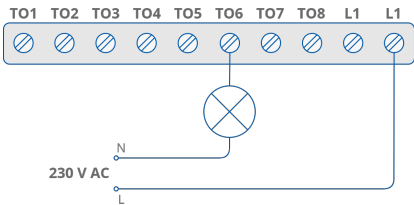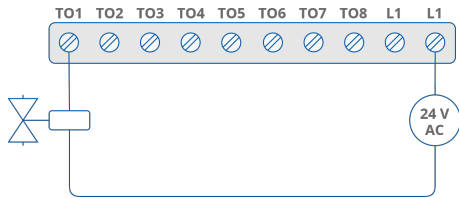| DESCRIPTION		SfAR-S-8TO
Temperature	Storage	-40°C to +85°C (-40°F to +185°F)
	Operating	-10°C to +50°C (14°F to 122°F)
Humidity	Relative	5 to 95% RH (without condensation)
Screw connectors	Type	2-pin (power supply), 3-pin (RS485), 10-pin (I/O)
	Maximum cable size	2.5 mm² (18...12 AWG)
Housing	Material	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

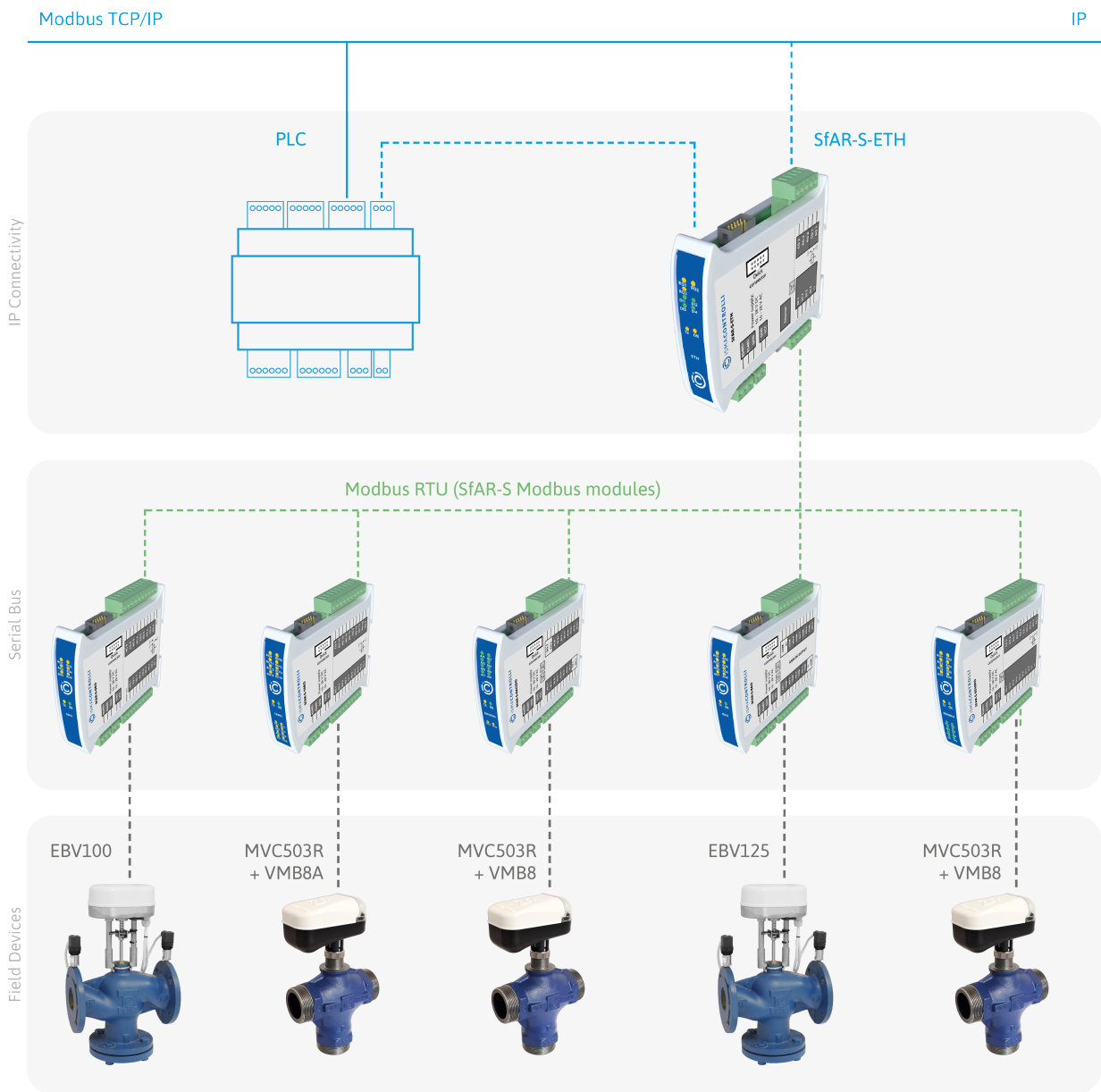## WIRING DIAGRAMS

Power Supply

Communication

Analog Output

DEDICATED SOFTWARE

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

APPLICATION EXAMPLE

Modbus TCP/IP — IP

IP Connectivity

PLC — SfAR-S-ETH

Serial Bus

Modbus RTU (SfAR-S Modbus modules)

Field Devices

| EBV100 | MVC503R + VMB8A | MVC503R + VMB8 | EBV125 | MVC503R + VMB8 |

DIMENSIONS [mm]

101 110.9 22.7 119.1