

Modbus I/O Module

MODEL	DESCRIPTION
SfAR-S-16DO	Modbus I/O module with 16 digital outputs



APPLICATION AND USE

SfAR-S-16DO gives users the possibility to send multiple signals to multiple devices, for example, to start/stop or alarm reset commands for pumps. The module has 16 digital outputs (DO). Digital outputs are PNP transistor outputs, sending voltage signals. 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 external power supply.

FEATURES

- 16 opto-isolated digital outputs
 - Every DO is protected against inductive load with a built-in diode
 - 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

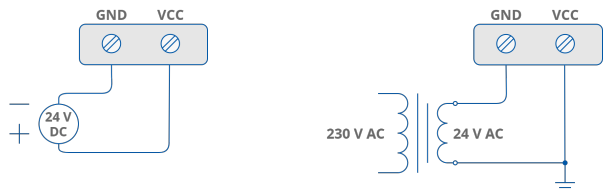
DESCRIPTION		SfAR-S-16DO
Power supply	Voltage	10-38 V DC; 10-28 V AC
Digital output	Number of outputs	8
	Type	PNP transistor output
	Maximum current load	500 mA
	Maximum voltage load	30 V DC
TX	RS485 interface	Up to 128 devices
	Communication protocol	Modbus RTU/ASCII
	Ports	3-pin screw connector
	Baud rate	2400-115200 bps
USB	mini USB	Type B, for configuration

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

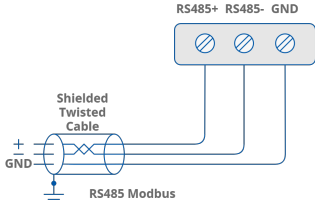
DESCRIPTION		SfAR-S-16DO
Ingress protection	IP rating	IP 40 for indoor installation
Temperature	Storage	-40°C to +85°C (-40°F to +185°F)
	Operating	-10°C to +50°C (14°F to 122°F)
Humidity	Relative	5 to 95% RH (without condensation)
Screw connectors	Type	2-pin (power supply), 3-pin (RS485), 10-pin (I/O)
	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



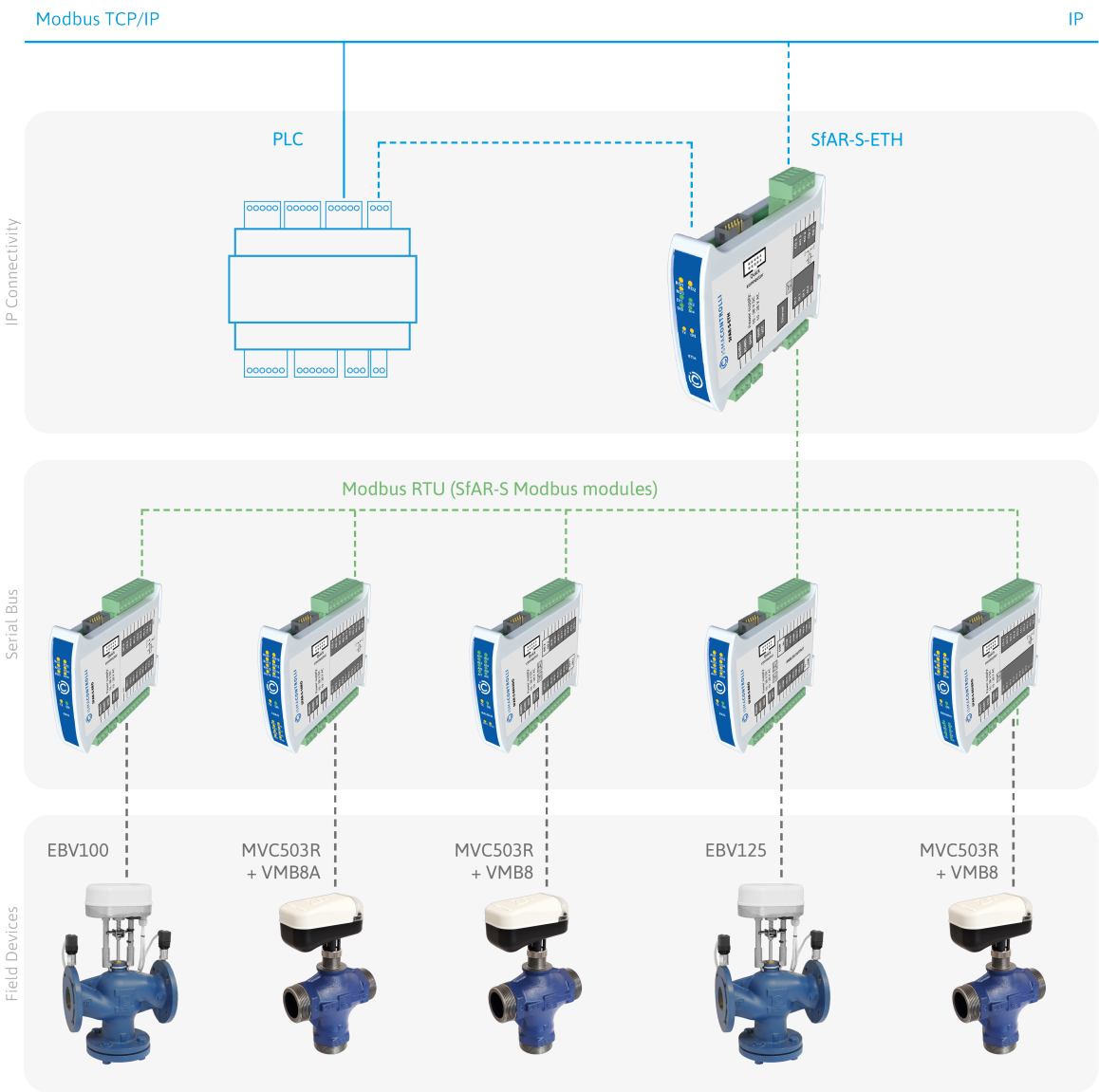
Digital Output



DEDICATED SOFTWARE



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



DIMENSIONS [mm]

