



I/O DIGITAL INTERFACE - 12 INPUT / 4 RELAYS OUTPUT RS485 MODBUS Slave

QA-12DI-4DO



I/O Digital Modbus Slave Interface, USB configurable, DIN rail mounting, 4-way galvanically isolated, universal power supply AC/DC, n°12 DIGITAL INPUT and n°4 OUTPUT RELAYS SPDT 5A.



<b>POWER SUPPLY</b>	10..40 Vdc, 20-28 Vac, 50-60 Hz
<b>OUTPUT</b>	n°4 relays output SPDT 5 A / 250 VAC, n°1 RS485 Modbus Slave
<b>ABSORPTION</b>	Maximum 2,5 VA
<b>PROTECTION INDEX</b>	IP 20
<b>WORKING TEMPERATURE</b>	-15...+65°C
<b>STORAGE TEMPERATURE</b>	-40°C... +85°C
<b>ISOLATION</b>	4 way: Digital inputs, Digital output, serial output RS485 and Power supply, are galvanically isolated at 1,5 kV. Output isolated relays 4 kV
<b>HUMIDITY</b>	10...90% not condensing
<b>ALTITUDE</b>	Up to 2000 m s.l.m.
<b>MOUNTING</b>	DIN rail mounting with removable terminals, RS485 bus and Supply connection ready on the base of module (connector not included, on request)
<b>CONNECTIONS</b>	Removable terminals 5,08 mm

<b>CE STANDARDS</b>	EN61000-6-4/2006 + A1 2011; EN64000-6-2/2005; EN61010-1/2010
<b>DIMENSIONS</b>	17,5 x 100 x 112 mm (terminals excluded)
<b>CONFIGURATION</b>	By free software FACILE QA-12DI-4DO to configure all of the conversion parameters like span, zero, alarm contact via USB port or via RS485. Dip-switch for setting modbus address and baudrate
<b>HOT SWAPPING</b>	The module QA-12 DI-4DO has HOT SWAPPING technology, this enables the module to be inserted and removed from the system without the need to restart the device Modbus Master connected to it

DIGITAL INPUTS:

DIGITAL INPUTS: n°12. TYPES: PNP with common negative, n°12 counter/totalizer inputs at 32 bit, max frequency 10kHz. Output 12 Vdc for detecting the presence of optomos contacts.

DIGITAL AND SERIAL OUTPUTS:

DIGITAL OUTPUTS: n°4 Relays SPDT 5A / 250 VAC; SERIAL OUTPUT: • RS485 Modbus Slave; • Bus connection on the base of module by adapter (option) or on terminals. Dip-switch for setting address and baudrate; • Configuration by RS485.

N°12 DIGITAL INPUTS:

All the inputs could be Totalizer or free contact

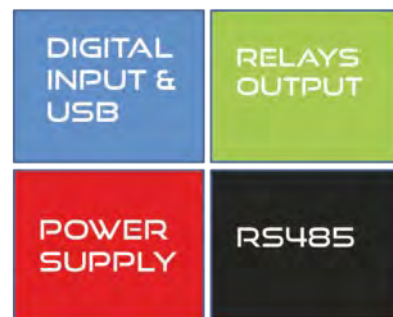
N°4 RELAYS OUTPUT:

SPDT RELAYS 5 A / 250 VAC

USB for configuration

MASTER MODBUS: PLC - HMI - PC

4-WAY GALVANIC ISOLATION



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**INSTRUCTION MANUAL**
**QA-12DI-4DO**
**DESCRIPTION:**

The QA-12DI-4DO is a slave module with n°12 optically isolated digital inputs and n°4 relays output. Thanks to the presence of the RS485 serial port can perform advanced functions such as I/O module with Modbus RTU protocol. The QA-12DI-4DO behaves as slave device providing an output at 12 V for the detection of Optomos contact. It also features n°4 digital output relays SPDT 5A - 230V.

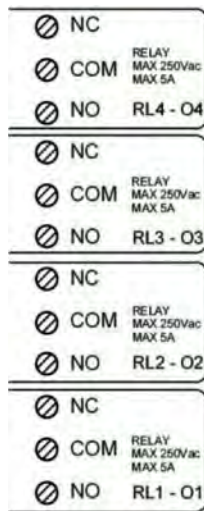
**ELECTRICAL CONNECTIONS:**

QA-12DI-4DO

INSTRUCTION MANUAL


**POWER SUPPLY:**

10...40 Vdc or 20...28 Vac - Connectors 16 and 17, or by T-BUS connector (optional tool) on the base of the module.


**DIGITAL OUTPUT:**

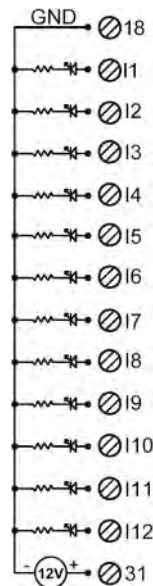
n°4 relays SPDT 5 A / 250 VAC.

**RL1 - O1: digital output n°1.**

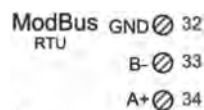
**RL2 - O2: digital output n°2.**

**RL3 - O3: digital output n°3.**

**RL4 - O4: digital output n°4.**


**DIGITAL INPUTS:**

the QA-12DI-4DO accepts the input pulses until 10 kHz, from mechanical contact, REED, 24 V, PNP.


**SERIAL OUTPUT RS485:**

available on connectors 32 (GND), 33 (B-), 34 (A+), or by T-BUS connector to be mounted on the module.


**T-BUS CONNECTION (OPTION), needs T-BUS connector:**

it may be affixed to the accessory T-BUS based on the module to bring both power and serial communication. The number of modules supported by the bus is a function of the power supply used (check the absorption of the modules).