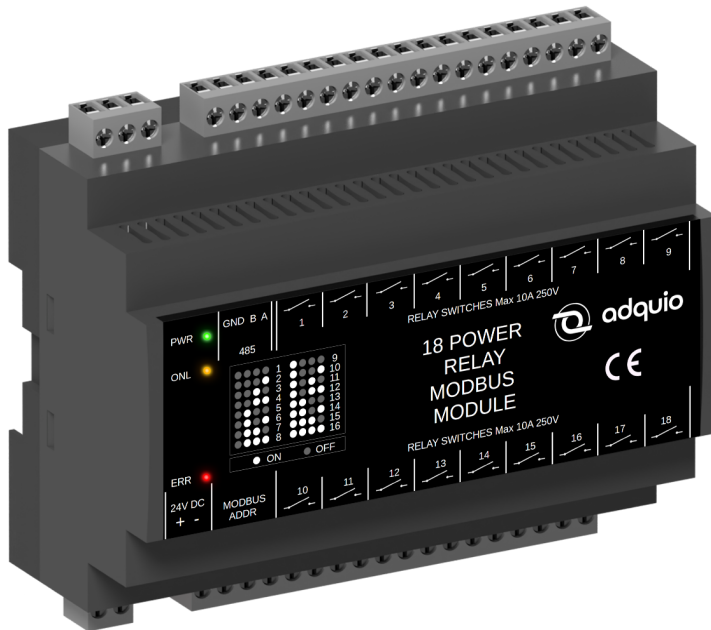


DATA SHEET

ADQUIO 18 RELAY MODBUS MODULE

18 relays module connectable by modbus



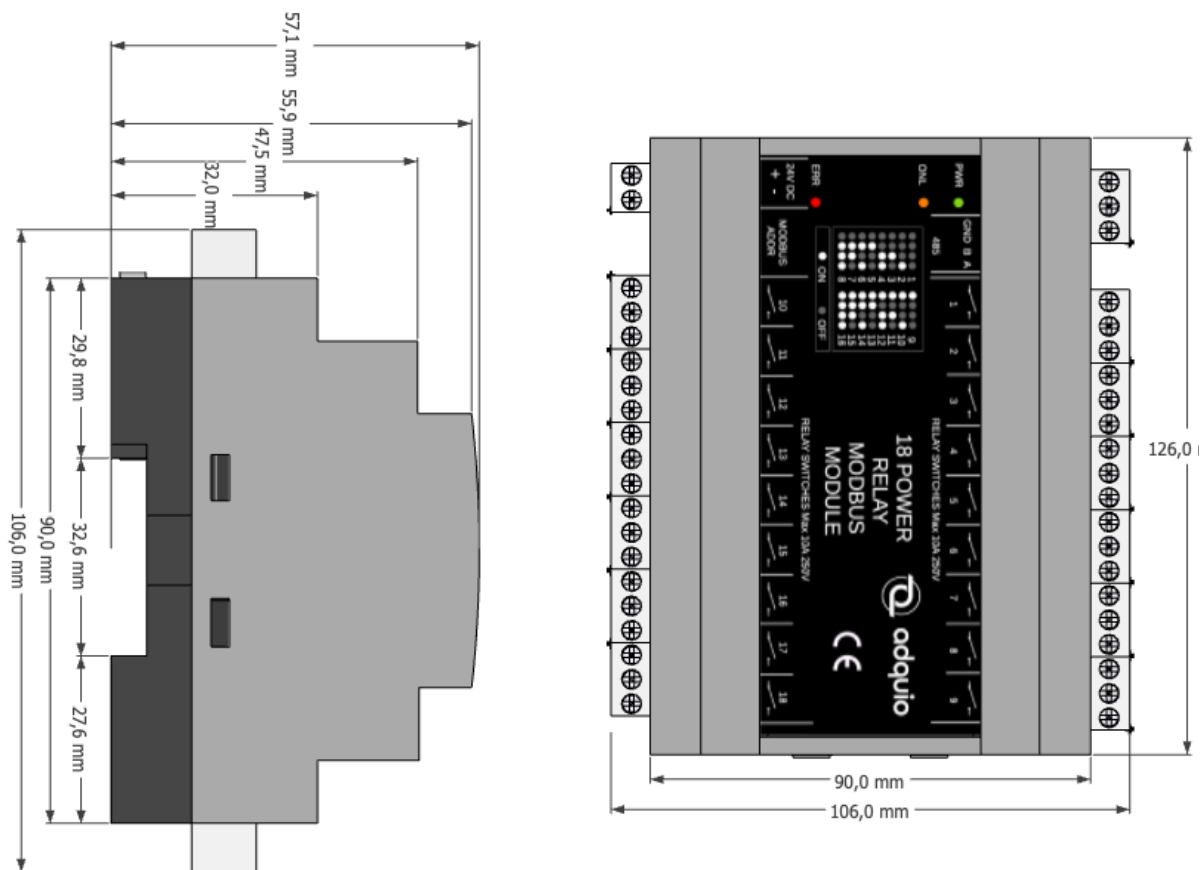
1 Ordering information

Reference	Description	Life cycle *
ADQ-EXP-MB-18R-10A	Adquio, module of 18 switching relays, supports up to 10A at 240V	Active



* For the planning and commissioning of new installations use modules in Active state only

2 Dimensions



3 Technical data

Parameter		Value
Process voltage		
	Connections	Removable terminal block 5.08 Pitch 2 contacts
	Nominal value	24 VDC
	Maximum supported	28 VDC
	Protection against voltage reversal	Yes

	Protection fuse nominal up to	3 A
Consumption		
	From a 24V power supply	370 mA
	Maximum consumption	370 mA
	Maximum consumption peak at start-up	12 mA


CAUTION!

Exceeding the maximum power supply voltage for process or supply voltages could cause irrecoverable damage to the system. The system could be destroyed.


CAUTION!

Improper connection cables cause overheating at the terminals. Acquio pro, they can be destroyed if the wrong cable type, cable size or cable temperature rating is used.

3.1 Technical data of the relay outputs

Parameter	Value
Number of outputs	18
Connections	Removable terminal block 5.08 Pitch 8 contacts
Maximum load	10A
Maximum switching voltage	250V
Number of operations before fault	50,000
Operation time	10 ms maximum
Contact resistance	10 mΩ maximum

4 System data

4.1 Environmental conditions

Parameter		Value
Temperature		
	Operation	0 ° C ... + 60 ° C (Horizontal mounting on DIN rail)
	Storage	-40 ° C ... + 70 ° C
	Transport	-40 ° C ... + 70 ° C
Humidity		Max. 95% non-condensing
Air pressure		
	Operation	> 800 hPa / <2000 m
	Storage	> 600 hPa / <3500 m
Insulation		IP20

4.2 Mechanical data

Parameter		Value
Mounting		Horizontal
Protection level		IP20
Housing material		ABS UL-94-HB Dark gray
Mounting alternatives		
Rail DIN EN 50022 DIN		35 mm, depth 7.5 mm or 15 mm
mounting screws		Screw with a diameter of 4 mm
tightening torque		Nm 1.2

4.4 Communications

Parameter		Value
Port 485		
No.		1
Protocol		Modbus RTU
speed		9600
node number		Configurable 1 to 16 by micro switches

4.5 Registers configuration table

Modbus positions						
Function	Address	Description	Read	Write	Type	Size
03/06	0	Relay 01 status	Yes	Yes	Holding Register	16 Bits
03/06	1	Relay 02 status	Yes	Yes	Holding Register	16 Bits
03 / 06	2	Relay 03 status	Yes	Yes	Holding Register	16 Bits
03/06	3	Relay 04 status	Yes	Yes	Holding Register	16 Bits
03/06	4	Relay 05 status	Yes	Yes	Holding Register	16 Bits
03/06	5	Relay 06 status	Yes	Yes	Holding Register	16 Bits
03/06	6	Relay 07 status	Yes	Yes	Holding Register	16 Bits
03/06	7	Relay 08 status	Yes	Yes	Holding Register	16 Bits
03/06	8	Relay 09 status	Yes	Yes	Holding Register	16 Bits
03/06	9	Relay 10 status	Yes	Yes	Holding Register	16 Bits
03/06	0	Relay 11 status	Yes	Yes	Holding Register	16 Bits
03/06	11	Relay 12 status	Yes	Yes	Holding Register	16 Bits
03/06	12	Relay 13 status	Yes	Yes	Holding Register	16 Bits
03/06	13	Relay 14 status	Yes	Yes	Holding Register	16 Bits
03/06	14	Relay 15 status	Yes	Yes	Holding Register	16 Bits
03/06	15	Relay 16 status	Yes	Yes	Holding Register	16 Bits
03/06	16	Relay 17 status	Yes	Yes	Holding Register	16 Bits

03/06	17	Relay 18 status	Yes	Yes	Holding Register	16 Bits
03/06	18	Relay 01 change *	Yes	Yes	Holding Register	16 Bits
03/06	19	Relay 02 change	Yes	Yes	Holding Register	16 Bits
03/06	20	Relay 03 change	Yes	Yes	Holding Register	16 Bits
03/06	21	Relay 04 change	Yes	Yes	Holding Register	16 Bits
03/06	22	Relay 05 change	Yes	Yes	Holding Register	16 Bits
03/06	23	Relay 06 change	Yes	Yes	Holding Register	16 Bits
03/06	24	Relay 07 change	Yes	Yes	Holding Register	16 Bits
03/06	25	Relay 08 change	Yes	Yes	Holding Register	16 Bits
03/06	26	Relay 09 change	Yes	Yes	Holding Register	16 Bits
03/06	27	Relay 10 change	Yes	Yes	Holding Register	16 Bits
03/06	28	Relay 11 change	Yes	Yes	Holding Register	16 Bits
03/06	29	Relay 12 change	Yes	Yes	Holding Register	16 Bits
03/06	30	Relay 13 change	Yes	Yes	Holding Register	16 Bits
03/06	31	Relay 14 change	Yes	Yes	Holding Register	16 Bits
03/06	32	Relay 15 change	Yes	Yes	Holding Register	16 Bits
03/06	33	Relay 16 change	Yes	Yes	Holding Register	16 Bits
03/06	34	Relay 17 change	Yes	Yes	Holding Register	16 Bits
03/06	35	Relay 18 change	Yes	Yes	Holding Register	16 Bits
03/06	36	Power Led	Yes	Yes	Holding Register	16 Bits



* The change registers pivot between 0 and 1 their state, its return to 0 automatically.

4.6 Certifications

Parameter	Value
Safety and Health	EN ISO 13849-1: 2015 EN ISO 13849-2: 2012 EN 62061: 2005 + A1: 2013 + A2: 2015 EN 60950-1: 2006 EN 62311: 2008
EMC	EN 61000-6-4 : 2007 + A1: 2011 EN 61000-6-2: 2005 ETSI EN 301 489-1 v2.2.0 ETSI EN 301 489-17 v3.2.0
RoHS	EN 50581: 2012

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