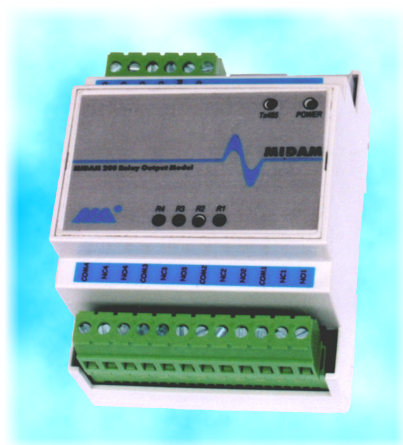




# MIDAM

## MIDAM 200 Relay Output Modul



**MIDAM 200** is an intelligent module with four relay outputs (four change-over contacts). The relays may switch 380 VAC or 150 VDC and maximum switched current is 10A. The status of the outputs may be controlled via the RS485 communication bus. The module has to be installed on a DIN strip.

The module communicates and is controlled solely via the RS485 data bus. Its communication protocol is identical with the ADAM 4000 module series produced by ADVANTECH company. The MIDAM 200 sensor operates in the same way as the ADAM 4060 module. This means that a standard actuator used with the ADAM modules can be used to provide control in various programmes.

The module wiring to the RS485 bus is provided by two RJ45 connectors. The connectors are in parallel connection. Thus it is possible to lead the bus from the module further to other modules in the network. Communication inputs are protected against overvoltage. In case that the converter has been installed as a terminal device on the bus, a terminating resistor and resistors defining idle condition on the bus may be installed. To attain this, remove the case cover and connect the resistors to the line by short-circuiting the contacts on the printed circuit board.

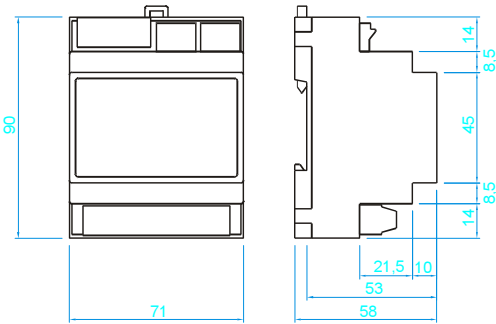
Some communication cables include more wire pairs in a cable. Therefore the converter has been designed to allow that the module power supply can be brought via the free conductors in the cable. This measure makes the module installation easier and reduces the cabling requirements.

All adjustments are saved in an EEPROM memory. The module is fitted with the WATCHDOG circuit which is guarding proper operation of the processor. There are four LEDs on the top panel of the module indicating status of each output and two LEDs indicating communication with the module and power supply connection.

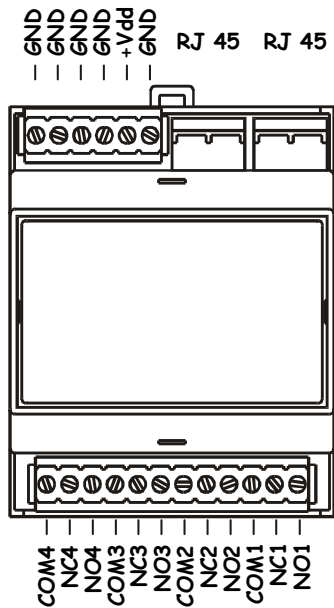
### Technical data

Supply voltage	10 V + 35 V DC non-regulated 14 V + 24 V AC
Power input	1 W
Permissible module inner temperature	0 + 70°C
Communication properties	data transmission via RS 485 data bus baud rates: 1200, 2400, 4800, 9600, 19200 Bd max. segment length: 1200 m, asynchronous transmission up to 256 modules per one serial port communication protocol identical with the ADAM 4000 modules
Outputs number	4
Output type	change-over contact relay
Rated loading	8A/250VAC, 8A/24VDC
Max. switched output	2000 VA, 192W
Max switched voltage	380 VAC or 150 VDC
Max. switched current	10 A
Pick-up time	max. 10 ms
Release time	max. 5 ms
Relay service life	- electrical 10 <sup>5</sup> cycles
	- mechanical 5*10 <sup>5</sup> cycles
Resistance in switched condition	max. 30 mΩ

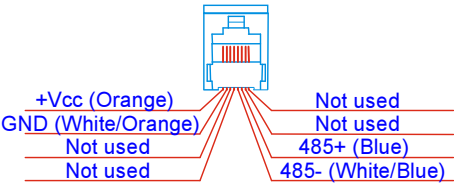
Module external dimensions



Terminals wiring



Recommended wiring of the RJ 45 connector



Designation	Description
NO1 to NO4	Open at a standstill
NC1 to NC4	Closed at a standstill
COM1 to COM4	Change-over switch common terminal
+Vdd	+ module power supply terminal
GND	- module power supply terminal
RJ 45	Connectors for wiring a data bus and possibly for wiring supply power to the module

As an optional feature available on customer's demand, another communication protocol may be implemented into the module or the module can be programmed as a control module.

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