

## M300

## Digital output module



### Summary

The M300 digital output module is a microprocessor-controlled, communicative 8 binary outputs module. The module uses a RS485 bus for communication, and can be easily integrated in a variety of supervision and control systems.

### Applications

- HVAC and industrial control systems – binary signal acquisition

### Functions

The M300 module has eight independent open collector outputs which are capable of switching voltage up to 50 VDC, max. current 0,5 A.

The module communicates by means of a RS485 data bus. The communication protocol ensures smooth and easy integration in a number of control and data acquisition systems.

Removable connectors are used for incoming and outgoing data line so that mounting is fast and easy. As some communication cables include more pairs in one cable, free cores may be used for powering the module.

The communication circuits are protected against overvoltage. If the module is terminating the communication bus, i.e. it is the last in line, a terminating 120  $\Omega$  resistor may be switched on by short-circuiting of the BUS END jumpers. Two LEDs located inside of the housing enable fast diagnostics – power up and communication. Eight LEDs at the outputs indicate the status of each of the outputs separately.

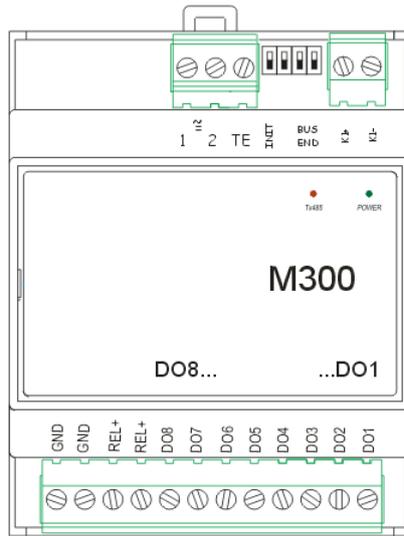
See *domat - Technical application notes* for connection examples.

All the settings are backed up in a EEPROM chip. The module is equipped with a watchdog circuit and the communication part is galvanically separated.

## Technical data

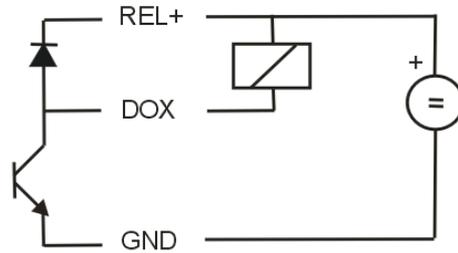
Supply voltage	10 V ÷ 35 V DC, 14 V ÷ 24 V AC
Consumption	1000 mW
Working temperature of the module	0 ÷ 70°C
Communication	RS485, 1200 ... 19200 bit/s
Max. bus length	1200m
Max. number of modules on the bus	256
Number of binary outputs	8 open collector outputs
Nominal output load	0,5A at 50 VDC
Dimensions	see below

## Terminals



Marking	Description
DO1 to DO8	open collector outputs
REL+	terminal to connect + potential when switching inductive load
GND	common transistor ground
1, 2	power, any polarity
K1+, K1-	communication bus

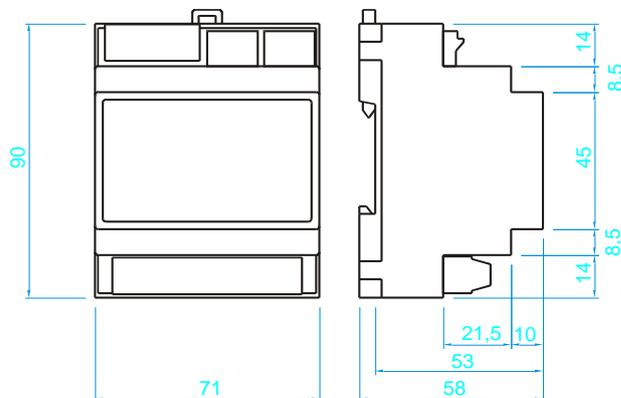
## Connection



Recommended connection of the relays. The usual voltage used is 24 V DC.

The internal diodes protect the output transistors from transient voltage peaks.

## Dimensions



7/2013 Subject to technical changes.