00002952 selected article: romod 8DO-R

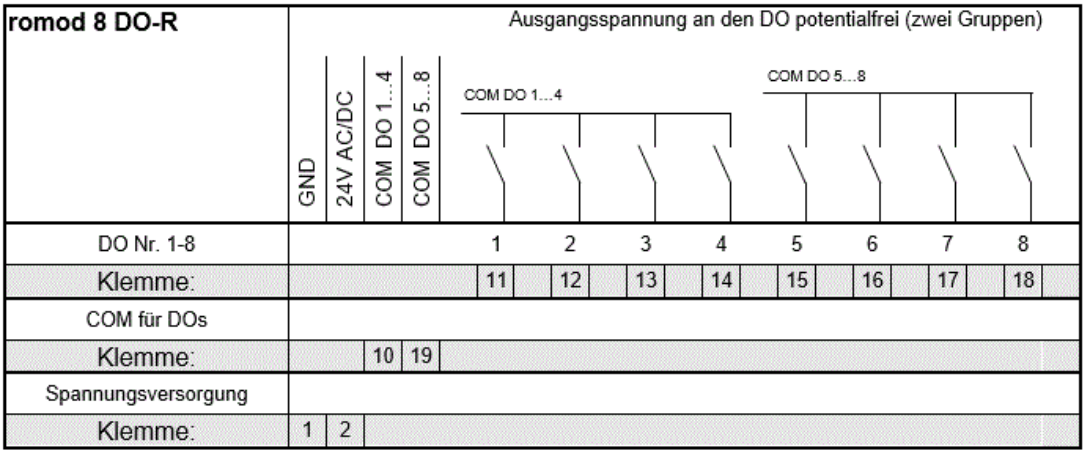
The digital output module romod 8 DO-R is a Local Override/Indication Device (LO/ID) which is used to control eight 1-stage motors, or other digital actuators. By means of the integrated switches, it provides the ability of manual override of the DOs which are usually controlled via Modbus commands.

The relay outputs provide the normally open contact of each relay.
The signal that will be switched by the relay contacts also has to be connected via terminals. The eight relay outputs are divivded into two groups of four outputs. The two groups are not linked internally, so both COM terminals must be wired.
Important: The signals to be switched must have the same phasing.

For each DO there is a LED present which signalizes the status of the digital outputs. Using the settings in the relevant Modbus register, for each of this LEDs the colour can be defined to either red, green or orange.
Furthermore, the LEDs can be controlled via Modbus commands, provided that this option previously has been defined in a configuration register. This setting can be made individually for each LED.

The current positions of the switches can be read out using two registers. Doing so, one register shows the switch position "Manually ON" and the other one the switch position "Automatic". There is a register that displays whether and which switch has been operated since the last time this register has been read. When reading this register, all bits are reset to zero. If the position of a switch has been altered several times, e.g. from AUTO to OFF and back to AUTO, a change will be displayed, anyway.

All digital outputs can be configured so that they will assume a defined state ('safe state') if the module has not received valid bus telegrams via the Modbus for a certain time.
Note: The time for triggering the 'safe state' should not be too short in order to avoid malfunctions as they can occur, e.g., when another device which is connected to the bus fails and will so cause time-outs.



Die beiden Einspeiseklemmen (10 + 19) für die DOs sind intern NICHT gebrückt!

Wichtig: **Die zu schaltenden Spannungen müssen die gleiche Phasenlage besitzen!**

Modbus-Anschluss	**Klemme**		
I-GND	3		
A (+)		4	
B (-)			5

Power supply: 24 V AC/DC, connection via terminals

Current consumption:
typically 85 mA (DC), 220 mA (AC), with all relays activated

Power dissipation
max. 2.1 W (DC), 5.2 W (AC), with all relays activated

Specifications DO's:
Relay outputs (NO contact), max. 250 VAC

Characteristics (Resistive Load):
Initial contact resistance 100mOhm (at 1A / 24 VDC)
Rated load 3 A at 250 VAC / 30 VDC
Max. switching voltage 277 VAC, 30 VDC
Max. switching capacity 830 VA (AC), 90 W (DC)
Endurance 100000 ops (Rated Load)
Inductive loads should be avoided or be suppressed at the source

Bus interface RS485

Supported baud rates
Autobauding, 9,600 Baud, 19,200 Baud, 38,400 Baud, 57,600 Baud

Bus cycle time individually depending on the baud rate and the number of data points that will be addressed

Configuration settings are stored in the internal EEPROM, max. number of write cycles up to 100,000 times (Memory uPC internally)

Protocol Modbus rtu (RS485), Serial Port Parameter Setting 8-N-1

Environmental conditions
Operating temperature 0...50°C
Transport and storage temperature 0...70°C
Relative humidity 10...90%, non-condensing

Protection class IP 20

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