The module MDH1230 (consisting of one MDH1210 and MDH1220) serves as local override / indication device (LO/ID) for the control of two double-stage drives.
Both channels provide two relay outputs each (changeover contact) for controlling power contactors, and three LEDs for indication of fault and operational feedback messages. The upper LED of each channel may be configured green, red or orange. For these two digital inputs there is a register available which provides three pieces of information for every DI. Namely, these are the current state of the DI, and whether a message has accrued newly ('new incident') or already was been acknowledged, provided the message is configured as a fault message. The selected LED color is not relevant for this function.

If the memory for fault messages of one of these digital inputs is activated, in the mentioned register the bit 'new incident' is set when a new fault message accrues (every digital input has its assigned bits in the register). When the fault message is acknowledged (via push button at the module or via MODBus command), in addition to the bit 'new incident', the corresponding bit 'fault acknowledged' will be set, provided the fault is still present. If the fault message is no longer active, the bits are just reset to zero. However, if the fault disappeared before acknowledged, the bit 'new incident' will still remain set until the fault message has been acknowledged. The LEDs 2, 3, 5 and 6, in contrast, will always be lit green, without memory for fault messages.
The control of the digital inputs will be done with 24 V DC switched by external dry contacts that are connected to the module via terminals. The reference potential is defined via the COM terminals in groups and can be both, 0 volts and +24 volts (DC). Using the settings in MODBus registers, you can select open circuit or closed-circuit principle for each input separately.

The status of the digital inputs and the current position of the switches ('Automatic' or 'Off / manually') will be transferred via MODBus to the MODBus master device (DDC/PLC) where they are available for further processing. However, the LEDs of the front module can also be configured so that they are controlled via MODBus commands. The digital inputs (terminals) can be used anyway, but in this case without signaling at the front module.
Activating the relays of the digital outputs usually is done via MODBus commands. Alternatively, however, in a configuration register the option can be defined that the relays will be controlled by signals which are connected via terminals to the corresponding digital inputs.

The conditional outputs (ground referenced, +24 V) also will be controlled via MODBus commands unless the option 'Controlling the conditional outputs depending on DI's status' is selected. For details on this feature, see the corresponding configuration register.
Regarding the system configuration (addressing, maximum number of modules connected to a MODBus Master interface, installation, connection to the bus etc.), please follow the instructions in the chapter Configuration.

Übersicht Klemmenbelegung:

MDH1210	Ansteuerung aller DI's mit +24VDC																
	+24V DC	GND	COM DI-Gruppen	DI Auto		DI Extern AUS		Störung (rt/grn)		Betrieb (grn)					Transistor-Ausg. 24V	GND für 24V-Ausg.
Kanal 1 Stufe 1			7, 8	1		6		5		3	71	72	73		41	45
Kanal 1 Stufe 2				2						4	74	75	76		42	
Kanal 2 Stufe 1			17, 18	11		16		15		13	81	82	83		43	46
Kanal 2 Stufe 2				12						14	84	85	86		44	
Spannungsversorgung	31	32														

Power supply: +24 V DC, connection via terminals

Relay data: Electromagnetic relay

Switching voltage max. 250 VAC / 30 VDC
Switching current (resistive) max. 5 A
Switching capacity max. 625 VA / 150 W

Rated load (resistive) 2.5 A / 250 VAC or 5 A / 30 VDC

With inductive loads, interference must be suppressed

subject to technical alternations

copyright, romutec - www.romutec.eu - Jochsbergerstr. 39 - D-91592 Buch am Wald - Tel +49-9867/9790-0

revision date:
6. 3. 2017