Interface options for measuring and monitoring relays of the XM420 series

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Measuring and monitoring relays of the XM420 series

XM420 series

Device features

- Flexible interface options for devices of the XM420 series
- Easy transfer or transmission of measured values to instrumentation and control engineering
- Due to a galvanically isolated interface measured values are not adversely affected.

Description

The standard measuring and monitoring relays of the XM420 series include two alarm relays with one changeover contact each. In addition the following options are available:

Option M
Analogue output, galvanically isolated, output signal selectable via the menu:

DC 0…400 µA	current output for Bender measuring instruments of the 96…series.
DC 0…10 V	standardized voltage signal
DC 0/4…20 mA	standardized current output

Option M1C
Analogue output 0/4…20 mA (not galvanically isolated), one changeover contact to be used as a freely configurable alarm message.

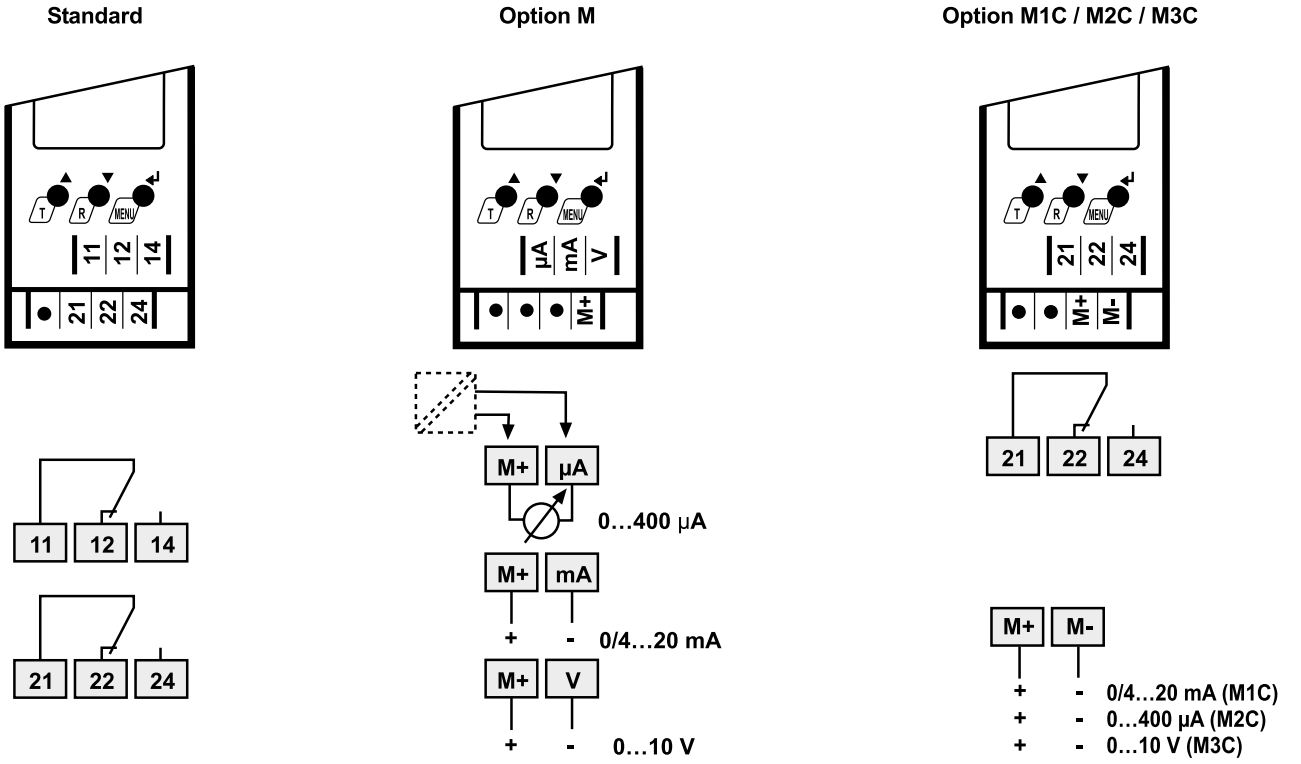
Option M2C
Analogue output 0…400 µA (not galvanically isolated), one changeover contact to be used as a freely configurable alarm message.

Option M3C
Analogue output 0…10 V (not galvanically isolated), one changeover contact to be used as a freely configurable alarm message.

Note:
The analogue output without galvanic separation is only suited for supply of measuring instruments or PLC inputs that are not galvanically connected to earth.

A galvanic connection of a measuring device output to earth may lead to fault messages on insulation monitoring devices IR42… and malfunctions of voltage relays VM…42….

Interface options



Ordering information Standard

Designation	Type	Art.-Nr.	
		Screw-type terminal	Push-wire terminal
INSULATION MONITORING DEVICE	IR420-D6-1	B91016415	B71016415
	IR420-D6-2	B91016407	B71016407
	IR425-D4-2	B91036402	B71036402
CURRENT RELAY 3ph	CMD420-D-1	B93060006	B73060006
	CMD420-D-2	B93060007	B73060007
	CMD421-D-1	B93060008	B73060008
	CMD421-D-2	B93060009	B73060009
CURRENT RELAY 1ph	CME420-D-1	B93060001	B73060001
	CME420-D-2	B93060002	B73060002
RESIDUAL CURRENT MONITOR	RCM420-D-1	B94014001	B74014001
	RCM420-D-2	B94014002	B74014002
	RCMA420-D-1	B94043001	B74043001
	RCMA420-D-2	B94043002	B74043002
	RCMA423-D-1	B94043023	B74043023
	RCMA423-D-2	B94043025	B74043025
VOLTAGE RELAY 3ph 3NAC	VMD420-D-1	B93010005	B73010005
	VMD420-D-2	B93010006	B73010006
	VMD421H-D-3	B93010007	B73010007
VOLTAGE RELAY 1ph AC/DC	VME420-D-1	B93010001	B73010001
	VME420-D-2	B93010002	B73010002
	VME421H-D-1	B93010003	B73010003
	VME421H-D-2	B93010004	B73010004

Options M, M1C, M2C and M3C on request.

Technical data

Switching elements

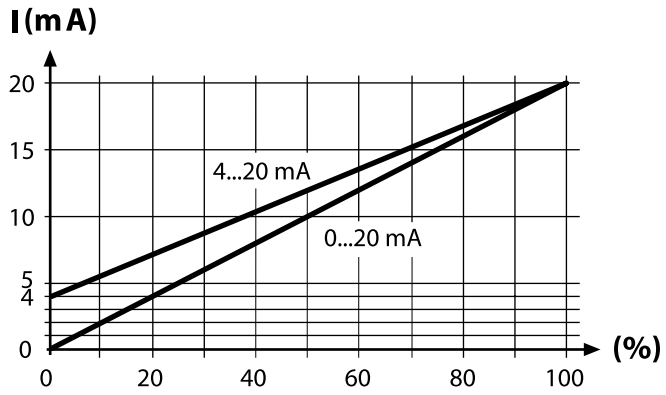
Number of changeover contacts, standard:	2 x 1 changeover contacts				
Electrical service life under rated operating conditions	10.000 switching operations				
Contact data acc. to IEC 60947-5-1					
Utilization category	AC-13	AC-14	DC-12	DC-12	DC-12
Rated operational voltage	230 V	230 V	24 V	110 V	220 V
Rated operational current	5 A	3 A	1 A	0,2 A	0.1 A
Minimum contact load	1 mA at AC / DC > 10 V				

General data

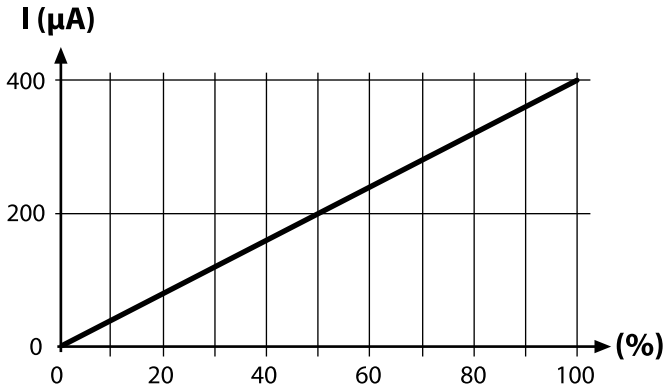
Max. no load voltage (terminals open)	DC 20 V
Max. short-circuit current	30 mA short-circuit proof
Voltage output	DC 0…10 V
Load min.	1 kΩ
Current output	DC 0/4…20 mA
Load max.	500 Ω
Current output	DC 0…400 µA
Load max.	12.5 kΩ

( )* factory setting

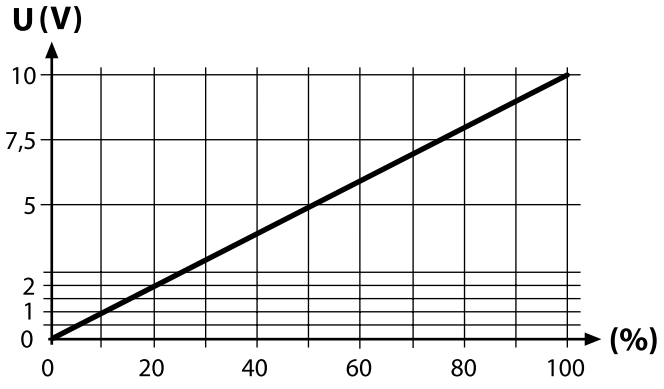
Current output 0/4…20 mA



Current output 0…400 µA



Voltage output 0…10 V



Note:
A free configurable value (I, U, $I_{\Delta n}$, Asy) or the response value of the respective device can be set as 100% value via the menu.

This does not apply to insulation monitoring devices.

The characteristic curves for the insulation resistance R_F can be found in the respective manual of the insulation monitoring device.

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