

XM-52M-VA500 relay - Voltage monitoring, Datasheet

2 C/O, 16 A



Description

The XM-52M-VA500 has a “WINDOW” function, which means that the upper level (Umax) and lower level (Umin) are set independently in % from rated monitored range.

A memory function can be set, when this function is set in case the relay get into a faulty state it keeps output in this state until it is reset by the reset button. The dipswitch no.3 can be used to choose if relays should switch individually for each level or in parallel in case any level of voltage is overrun. Dipswitch no.4 serves to set hysteresis which applies when going from normal state to a faulty one.

The relay has a protection against polarity reversing for DC voltage or incorrectly chosen AC-DC voltage (this fault is indicated by flashing of both LEDs (LED <U a LED >U).

Application

Voltage monitoring relay, suitable for 1-phase protection against under and overvoltage with an measuring range of 10-500 V. Suitable for various applications.

Features

- Universal AC/DC monitoring relay
- Monitoring voltage with 2 independent levels (overvoltage / undervoltage)
- Voltage monitoring 10...500 V
- Adjustable delay for short peaks
- Function of second relay adjustable (independent/parallel)
- Adjustable time delay 0 - 10 s
- 2 C/O contact 16 A / AC1
- 35 mm rail mounting
- Output status by LED indicator
- Supply voltage 230 VAC
- Modular housing, 3 modules

Benefits

- Rated current 16 A / AC1
- Long term availability
- 52 mm wide
- No maintenance

Industry compliancy

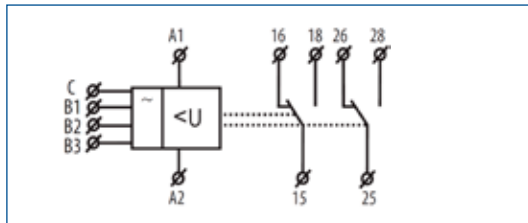
All our relays and accessories are designed according to regulations:

- EN 60255-6
- EN 61010-1
- CE

XM-52M-VA500

Technical specifications

Connection diagram



Time range

Time delay Umin	Adjustabel 0 - 10 s
Time delay Umax	Adjustabel 0 - 10 s
Time setting	Potentiometer
Setting accuracy	5%
Repeat accuracy	<1%

Measuring range

Ranges	10 - 50 VAC 50 Hz	32 - 160 VAC 50 Hz	100 - 500 VAC 50 Hz
Terminals	C-B1	C-B2	C-B3
Input resistance	110 kΩ	360 kΩ	1.1 MΩ
Max. permanent overload	100 V	300 V	600 V
Peak overload < 1 ms	250 V	700 V	1000 V

Tolerance of limet values	5%
Hysteresis (from fault to normal)	Selectable 5% / 10%

Output

Number of contacts	2x change-over / SPDT (AgNi/Silver Alloy)
Rated current	16 A / AC1
Breaking capacity	4000 VA / AC1, 384 W / DC
Inrush current	30 A / < 3 s
Switching voltage	250 V AC1 / 24 VDC
Min. breaking capacity DC	500 mW
Output indication	Yellow LED
Mechanical life	30 x 10 ⁶ operations
Electrical life (AC1)	7 x 10 ⁴ operations

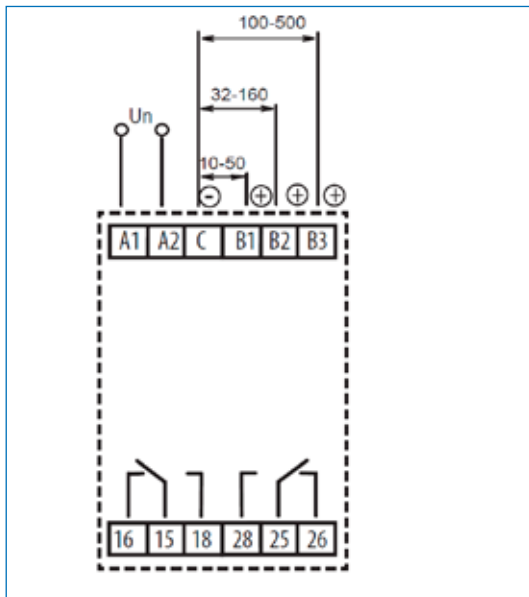
XM-52M-VA500

Technical specifications

Supply

Supply terminals	A1, A2
Supply voltage	230 VAC
Burden	Max. 4.5 VA
Supply voltage tolerance	0.85...1.1 Un

Connection



Environmental conditions

Operating temperature	-20 °C... +55 °C
Storage temperature	-30 °C... +70 °C
Depedence on temperature	< 0.1% °C
Electrical strength	4 kV (supply - output)
Operating position	Any
Mounting	35 mm rail EN 60715
Protection degree	IP40 front panel, IP20 terminals
Overvoltage category	III
Pollution degree	2
Max. cable size mm ²	Solid wire maximum 1 x 2.5 or 2 x 1.5 mm ² With sleeve maximum 1 x 1.5 mm ²

Mechanical data

Dimensions (d x w x h)	90 x 52 x 65 mm
Weight	239 g
Standard	EN 60255-6, EN 61010-1



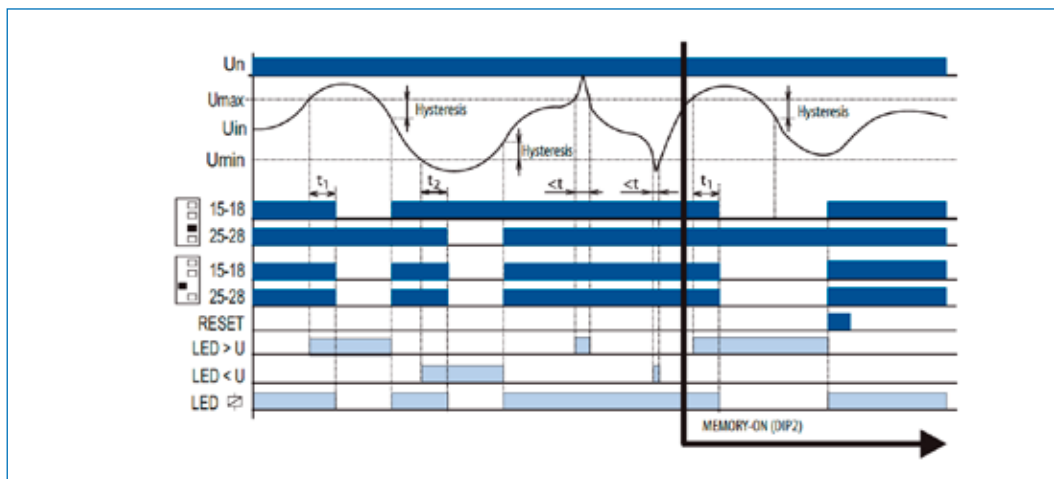
XM-52M-VA500

Technical specifications

Design

1. Supply terminals
2. Measuring terminal
3. Output contacts
4. AC of DC voltage measuring
5. Memory function
6. Output indication (red LED)
7. Hysteresis from faulty to OK normal state
8. Supply indication (green LED)
9. Overvoltage indication LED
10. Output indication
11. Undervoltage indication LED
12. Time delay for U_{max} T1
13. Adjusting upper level U_{max}
14. Time delay for U_{min} T2
15. Adjusting upper level U_{min}

Function



XM-52M-VA500

Technical specifications

Art. no.	Type	Function	Contacts	Voltage range
326001027	XM-17M-IA25U	AC 1-phase current monitoring	1 C/O	230 VAC 50/60 Hz
326002003	XM-17M-M400L	AC 3-phase voltage monitoring	1 C/O	3x 400 VAC 50 Hz
326002004	XM-17M-M400LN	AC 3-phase + N voltage monitoring	1 C/O	3x 400 VAC / 230 VAC 50 Hz
326002000	XM-17M-VA230	AC 1-phase voltage monitoring	1 C/O	48-276 VAC 50 Hz
326002002	XM-17M-2XVA230	AC 1-phase voltage monitoring	2x 1 C/O	48-276 VAC 50 Hz
326002011	XM-17M-VA400LN	AC 3-phase + N voltage monitoring	1 C/O	3x 400 VAC / 230 VAC 50 Hz
326002001	XM-17M-VD24	DC 1-phase voltage monitoring	1 C/O	6-30 VDC
326002006	XM-52M-M400L	AC 3-phase complete monitoring	2 C/O	230 VAC / 400 VAC 50/60 Hz
326002007	XM-52M-M400LN	AC 3-phase + N voltage monitoring	2 C/O	230 VAC / 400 VAC 50/60 Hz
326002005	XM-52M-VA500	AC/DC 1-phase voltage monitoring	2 C/O	10-500 VAC/DC 50 Hz





www.morssmitt.com



Mors Smitt France SAS

Tour Rosny 2, Avenue du Général de Gaulle,
F - 93118 Rosny-sous-Bois Cedex, FRANCE
T +33 (0)1 4812 1440, F +33 (0)1 4855 9001
E sales@msrelais.com

Mors Smitt Asia Ltd.

807, Billion Trade Centre, 31 Hung To Road
Kwun Tong, Kowloon, HONG KONG SAR
T +852 2343 5555, F +852 2343 6555
E info@morssmitt.hk

Mors Smitt B.V.

Vrieslantlaan 6, 3526 AA Utrecht,
NETHERLANDS
T +31 (0)30 288 1311, F +31 (0)30 289 8816
E sales.msbv@wabtec.com

Mors Smitt Technologies Inc.

1010 Johnson Drive,
Buffalo Grove, IL 60089-6918, USA
T +1 847 777 6497, F +1 847 520 2222
E salesmst@wabtec.com

Mors Smitt UK Ltd.

Doulton Road, Cradley Heath
West Midlands, B64 5QB, UK
T +44 (0)1384 567 755, F +44 (0)1384 567 710
E sales.msuk@wabtec.com