

### WAVECONTROL VMA Vac Voltage - monitoring module



## **WAVECONTROL VMA Vac** **Voltage - monitoring module**

<b>Type</b>	<b>Cat. No.</b>
Screw connection WAS2 VMA Vac	8581220000
Tension clamp connection WAZ2 VMA Vac	8581230000

Please read these instructions before using the product  
and retain for future information.

## 1. General instructions

**Warning!** Voltage-monitoring modules from the WAVECONTROL range should only be installed by qualified staff.

Be sure not to connect the unit to power supply before appropriate installation. Do not select ranges during operation, because live parts are exposed during this process.

Be sure to observe the national regulations for installation and selection of cables.



Appropriate safety measures against electrostatic discharge (ESD) should be taken during assembly and adjustment work on the WAVECONTROL VMA Vac

## 2. Application

The voltage-monitoring module WAVECONTROL VMA Vac is designed to measure AC voltages up to 450 Vac eff.

The output signal can be calibrated/switched via DIP switches (0...10V, 0...20mA, 4...20mA). It is **not** necessary to adjust the pre-settable measurement ranges.

The output signal is linear to the measurement voltage.

### 2.1 Note on EMC

Deviations may occur during HF interferences. These interferences can be reduced by installing the electrical equipment in a shielded housings, by using shielded conductors or conductor filters.

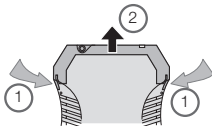
### 3. Configuration

#### 3.1 Equipment

A screwdriver with a width of 2.5 mm is required to adjust the unit and to connect the wires to the terminals.

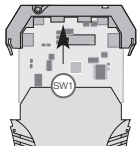
#### 3.2 Opening the unit

Disconnect the plugs. Disengage the top part of the housing by carefully pressing the latches on both sides (1). Pull out the top part of the housing and the electronics section until they lock (2).



#### 3.3 Settings

The input voltage and the output signals are selected in accordance with the following tables.



## Selecting the input

Wiring diagram		
Input	0V	Vac
0...30 Vac	1	2
0...70 Vac	1	3
0...130 Vac	1	4
0...250 Vac	1	5
0...450 Vac	1	6

## Selecting the output

Wiring diagram		
Output	GND 1	U / I
0...10 V	9	7
0...20 mA	9	8
4...20 mA	9	8

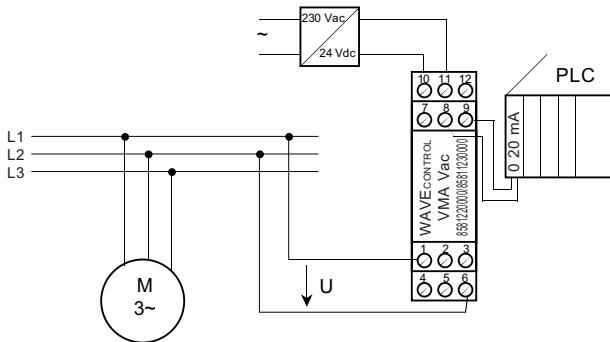
## Switching the current output

Output	SW1	SW2
0...20 mA	0	0
4...20 mA	1	1

1 = on

0 = off

### 3.4 Application



### 4. Mounting

The analogue signal isolators are mounted on standard TS 35 rails.

## 5. Electrical connection

### Terminal assignments

- 1 Input OV - reference potential
- 2 30 Vac
- 3 70 Vac
- 4 130 Vac
- 5 250 Vac
- 6 450 Vac
- 7 Voltage output 0...10 V
- 8 Current output 0/4...20mA
- 9 Output 0 V- reference potential GND 1
- 10 Power supply + 24 Vdc (cross-connected)
- 11 Power supply OV GND 2 (cross-connected)
- 12 not assigned

Wire cross-section max. 2.5 mm<sup>2</sup>

Multi-wire connection max. 1 mm<sup>2</sup>  
(two wires with same cross-section)



**Warning!** For applications with high isolation voltages, take measures to prevent accidental contact and make sure that there is sufficient distance or insulation between adjacent devices! Generally, ferrules with plastic collars are to be used.

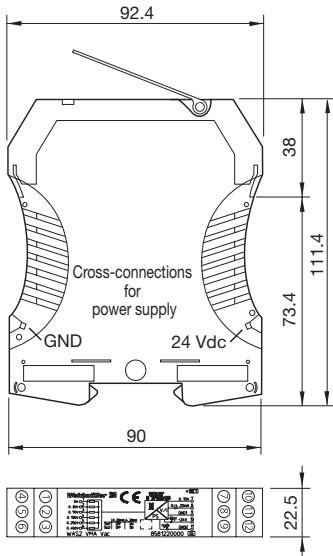
### 5.1 Power supply

approx. 1 W

18...30 Vdc

Voltage supply via cross-connections. Operating carrying capacity of cross-connection # 2 A (see Cat. No. position 7).

## 6. Dimensions in mm



## 7. Accessories (cross-connection)

<b>Designation</b>	<b>Cat. No.</b>
ZQV 2,5 N/2 yellow	1693800000
ZQV 2,5 N/2 red	1717900000
ZQV 2,5 N/2 blue	1717990000
ZQV 2,5 N/2 black	1718080000

## Connection markers

<b>Designation</b>	<b>Cat. No.</b>
WS 10/5 Multicard for plotter marking	1635010000
WS 10/5 Neutral	1060860000

## 8. Notes on CE marking

The WAS5/WAZ5 PRO Freq. analog signal isolators are marked CE in accordance with the EU directives 89/336/EEC "Electromagnetic Compatibility" and 73/23/EEC (low-voltage directive) detailing the Harmonized European Standards (EN).

The declarations of conformity are held, according the above mentioned EU directive, article 10, for the authorizing body by:

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