# OM 601AV


- **Programmable AO**
  **0...5 mA/0/4...20 mA/0...2/5/10 V**
- **Size of DIN 96 x 48 mm**
- **Power supply 230 VAC**

## Options

Excitation • Comparators • Data output • Power supply 24 VAC, 110 VAC, 10...30 VDC

## Description

The OM 601AV model is a panel programmable analogue output (programmable output of current/voltage).
The instrument is based on an 8-bit controller and precise analogue output that secure high accuracy, stability and easy operation of the instrument.

## Standard functions

**Programmable AO**

| | |
|---|---|
| Setting | manual/automatic<br>by keys on the front panel you may move within the required AO range, projection on the display may be set for both limit AO values |
| Projection | -999...3999 |

## Operation

The instrument is set and controlled by five control keys located on the front panel. All programmable settings of the instrument are realised in two adjusting modes.

| | |
|---|---|
| Configuration menu | (hereinafter referred to as CM) is protected by an optional number code and contains complete instrument setting |
| User menu | may contain arbitrary programming settings defined in „CM" with another selective restriction (see, change) |

All programmable parameters are stored in the EEPROM memory (they hold even after the instrument is switched off). The measured units may be projected on the display.

## Options

**Excitation** is suitable for feeding of sensors and transmitters. It has galvanic isolation, with continuously adjustable value in the range of 2...24 VDC.
**Dual comparator** serves to monitor two limit values with relay output. The limits have adjustable hysteresis within the full range of the display as well as selectable delay of the switch-on in the range of 0...99,9 s. Reaching the preset limits is signalled by LED and simultaneously by the switch-on of the relevant relay.
**Data outputs** are for their rate and accuracy suitable for transmission of the measured data for further projection or directly into the control systems. We offer an isolated RS232 and RS485 with the ASCII protocol.

## Technical data

### ANALOGUE OUTPUTS

| | |
|---|---|
| Type: | isolated, programmable with resolution max. 10 000 points, analogue output corresponds with the displayed data, output type and range are selectable in CM |
| Non-linearity: | 0,2 % of range |
| Tempco: | 100 ppm/°C |
| Rate: | response to change of value < 40 ms |
| Voltage: | 0...2 V/5 V/10 V |
| Current: | 0...5 mA/0/4...20 mA (compensation of conduct up to 600 Ohm) |

### PROJECTION

| | |
|---|---|
| Display: | -999...3999, red or green 14-segment LED, digit height 14 mm |
| Decimal point: | adjustable - in Configuration menu |
| Brightness: | adjustable - in Configuration/User menu |

### INSTRUMENT ACCURACY

| | |
|---|---|
| Tempco: | 60 ppm/°C |
| Watch-dog: | reset after 1,2 s |
| Calibration: | at 25°C and 40 % r.h. |

### COMPARATOR

| | |
|---|---|
| Type: | digital, adjustable in programming mode, contact switch-on < 30 ms |
| Limit 1 and 2 | -999...3999 |
| Hysteresis: | 0...999 |
| Delay: | 0...99,9 s |
| Outputs: | 2 relays with switch-on (switch-off) contact (250 VAC/30 VDC, 3 A)<br>- the relay function is adjustable in Configuration menu<br>*upon request SSR (250 VAC, 1 A) or open collector may be fitted* |

### DATA OUTPUTS

| | |
|---|---|
| Data format: | rate 150...115 200 Baud, 8 bit + no parity + 1 stop bit |
| RS 232 | isolated |
| RS 485 | isolated, addressing (max. 31 instruments) |

### EXCITATION

| | |
|---|---|
| Adjustable: | 2....24 VDC/50 mA, with galvanic separation |

### POWER SUPPLY

24/110/230 VAC, 50/60 Hz, ±10 %, 5 VA
10...30 VDC/max. 300 mA, (24 VDC/max. 150 mA), isolated

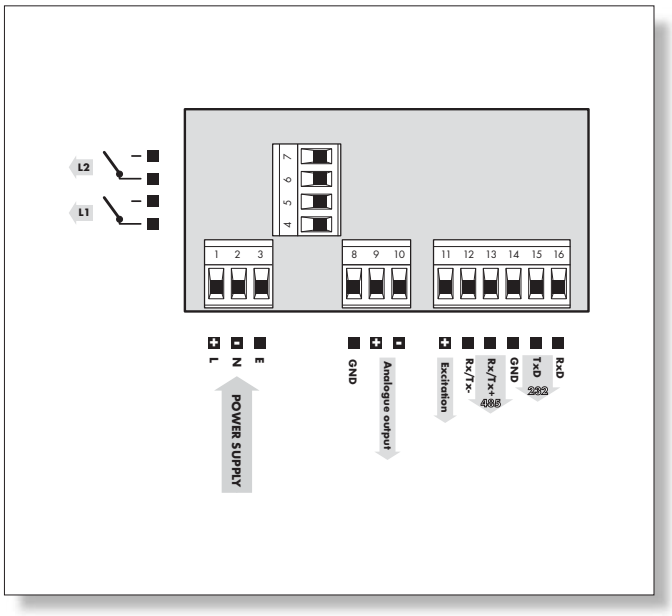
### MECHANIC PROPERTIES

| | |
|---|---|
| Material: | Noryl GFN2 SE1, incombustible UL 94 V-I |
| Dimensions: | 96 x 48 x 120 mm |
| Panel cut: | 90,5 x 45 mm |

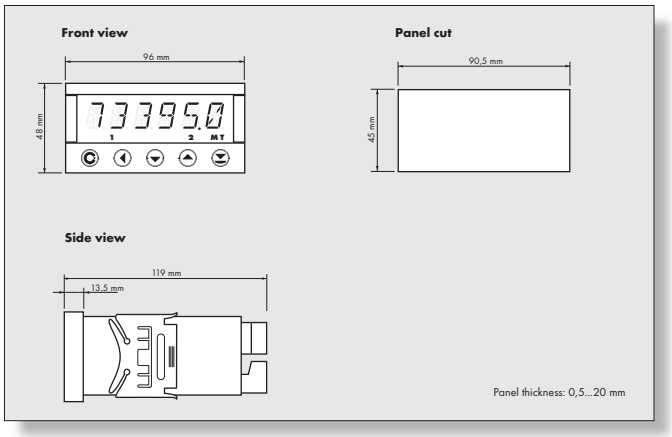
### OPERATING CONDITIONS

| | |
|---|---|
| Connection: | connector terminal board, conductor section up to 2,5 mm$^2$ |
| Stabilization period: | within 15 minutes after switch-on |
| Working temperature: | 0°...60°C |
| Storage temperature: | -10°...85°C |
| Covering: | IP65 (front panel only) |
| Construction: | safety class I |
| Electrical safety: | EN 61010-1, A2 |
| Overvoltage category: | for pollution degree II<br>III. - instrument power supply, relay output (300 V)<br>II. - input, output, excitation (300 V) |
| EMC: | EN 61000-3-2+A12; EN 61000-4-2, 3, 4, 5, 8, 11; EN 550222, A1, A2 |

## Connection




## Dimensions




## Order code

**OM 601AV - xxxxx**

***Power supply***
0: 24 VAC/50 Hz
1: 230 VAC/50 Hz
3: 110 VAC/50 Hz
4: 10...30 VDC, isolated

***Comparators***
0: no
1: yes

***Display color***
1: red
2: green

***Excitation***
0: no
1: yes

***Data output***
0: no
2: RS 232
3: RS 485

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