PROGRAMMABLE AO

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**

Extension

Excitation • Comparators • Data output • Power supply 24 VAC, 110 VAC, 8...32 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 μ-controller and precise analogue output that secure high accuracy, stability and easy operation of the instrument.

Standard functions

Programmable AO

Setting	manual/automatic
	by keys on the front panel you may move within the required AO range
	projection on the display may be set for both limit 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. 14 bit, analogue output corresponds with displayed data, output type and range are selectable in Configuration menu-
Non-linearity:	0,2 % of range
Tempco:	100 ppm/°C
Rate:	response to change of value < 100 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:	50 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 < 10 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) - the relay function is adjustable in Configuration menu *upon request the output may be fitted with SSR (250 VAC, 1 A)*

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 Hz
	8...32 VDC/max. 300 mA, (24 VDC/max. 150 mA), isolated

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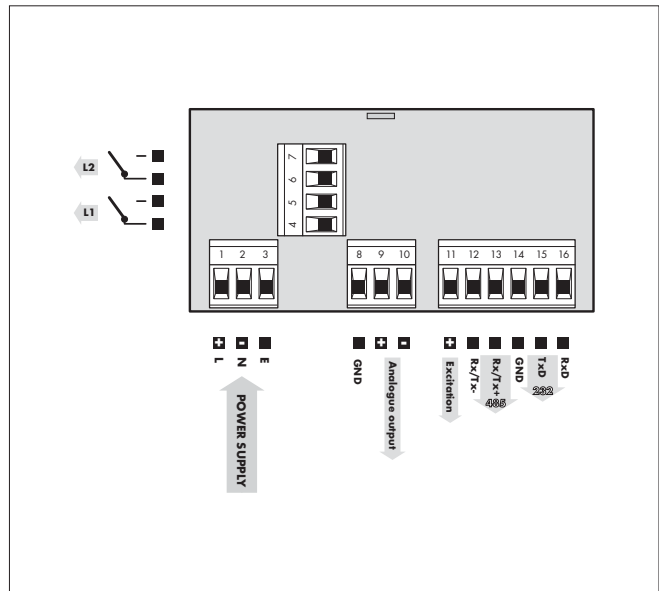
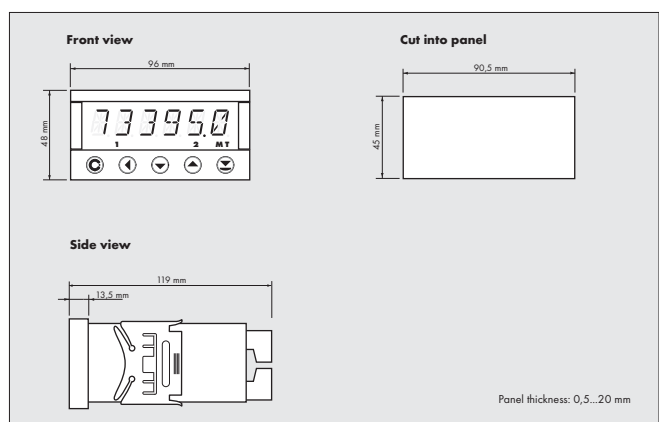|	
Material:	Noryl GFN2 SE1, incombustible UL 94 V-I
Dimensions:	96 x 48 x 120 mm
Panel cut-out:	90,5 x 45 mm

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
	III. - instrument power supply, relay output (300 V)
	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

Front view — 96 mm — 48 mm

73395.0

Cut into panel — 90,5 mm — 45 mm

Side view — 119 mm — 13,5 mm

Panel thickness: 0,5...20 mm

Order code

OM 601AV - xxxxx

Power supply
0: 24 VAC/50 Hz
1: 230 VAC/50 Hz
3: 110 VAC/50 Hz
4: 8...32 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