OM 621BCD

2003 - 3 - en

- **6 digit programmable projection**
- **Input BCD/transformer tapping leads**
- **Comparators**
- **Size of DIN 96 x 48 mm**
- **Power supply 80...250 V AC/DC**

Options

Comparators • Excitation • Data output • Universal analog output

Description

The OM 621BCD model is a 6 digit panel monitor of serial or parallel BCD/BIN signal and monitor of active transformer tapping lead, allowing for projection of transitional status and servomotor running.
The instrument is based on an 8-bit processor that secures high accuracy, stability and easy operation of the instrument.

Standard functions

Programmable display projection

Setting	type of Input BCD/tapping lead may be set in „CM“
Projection	-99999...999999

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

Comparators are assigned to monitor one, two, three or four limit values with relay output. The user may select limits regime: LIMIT/DOSING/FROM-TO. 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. For the tapping leads display device it is possible to set the regime of relay switching BCD (10=10000)/BIN (10=01010).

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 DIN MessBus/ASCII protocol.

Analog outputs will find their place in applications where further evaluating or processing of measured data is required in external devices. We offer universal analog output with the option of selection of the type of output - voltage/current. The value of analog output corresponds with the displayed data and its type and range are selectable in CM.

Excitation is suitable for feeding of sensors and transmitters. It has a galvanic isolation, with continuously adjustable value in the range of 2...24 VDC.

Technical data

INPUT

Display device for BCD

Type :	BCD serial:	4 data + 6 strobe
		8 data + 3 strobe
		12 data + 2 strobe
		4 data + 3 positions + 1 strobe
	BIN/BCD parallel:	20 data/24 data
Level:	5...24 VDC, 10...60 VDC	
Addressing:	up to 8 instruments	

Tapping leads display devices

Voltage:	5...25 VDC 90...130 VDC (110 VDC) 190...250 VDC (230 VDC)
Number of tap.leads:	24 + 1 signalisation (upon request 27)
Input resistance:	5,5 kOhm/V
Output:	relay BIN/BCD, 5 relays with switch-on contact (250 VAC/50 VDC, 3 A)

PROJECTION

Display:	999999, intensive red or green LED, digit height 14 mm
Brightness:	fixed

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
Limits	-99999...999999
Hysteresis:	0...99999
Delay:	0...99,9 s
Outputs:	2 relays with switching & 2 relays with switch-on contact (250 VAC/50 VDC, 3 A) - *cannot be used for „Tapping leads display device“*

DATA OUTPUTS

Data format:	rate 600...115 200 Baud, 7 bit + even parity + 1 stop bit (DIN MessBus), 8 bit + no parity + 1 stop bit (ASCII)
RS 232	isolated, two-way communication
RS 485	isolated, addressing (max. 31 instruments)

ANALOG OUTPUTS

Type:	isolated, programmable with resolution max. 10 000 points, analog 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/20 mA/4...20 mA (compensation of conduct up to 600 Ohm)

EXCITATION

Adjustable:	2....24 VDC/50 mA, (occupies terminal/bracket 15 - Adr. 2)

POWER SUPPLY

80 ... 250 V (AC/DC), 13,5 VA
9 ... 50 V (AC/DC), 13,5 VA
- power supply is protected by a fuse inside the instrument

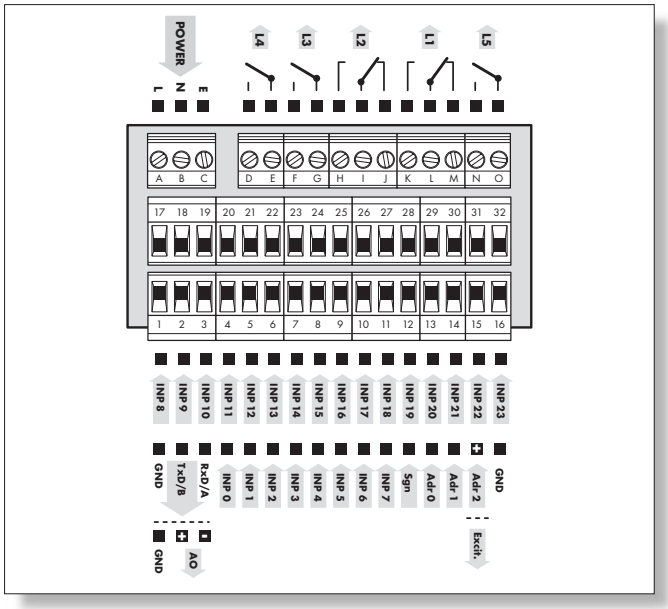
MECHANIC PROPERTIES

Material:	Noryl GFN2 SE1, incombustible UL 94 V-I
Dimensions:	96 x 48 x 154 mm
Panel cut:	90,5 x 45 mm

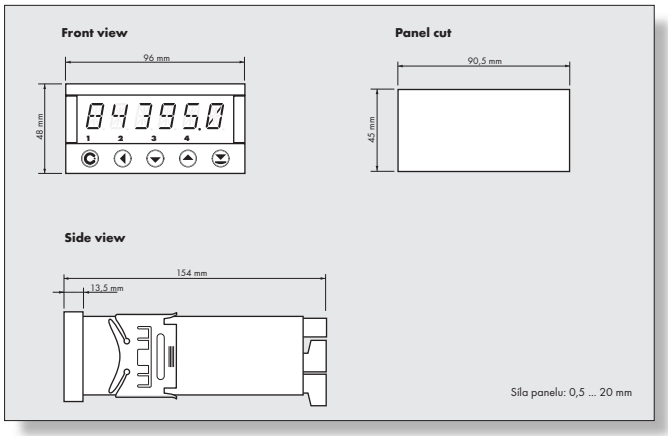
OPERATING CONDITIONS

Connection:	connector terminal board, conductor section up to 1,5/2,5 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 II
Overvoltage category:	EN 61010-1, A2, for pollution degree II III. - instrument power supply, relay outputs (300 V) II. - input, output (270 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 621BCD - xxxxxx

Power supply
0: 9...50 V AC/DC
1: 80...250 V AC/DC

Input
A: 5...25 VDC
B: 10...60 VDC
C: 90...130 VDC (110 VDC)
D: 190...250 VDC (230 VDC)

Comparators
0: no
1: 1 relay
2: 2 relays
3: 3 relays
4: 4 relays
5: 5 relays BCD/BIN

Display color
1: red
2: green

Excitation
0: no
1: yes

Output
0: no
1: Analogue
2: Data - RS 232
3: Data - RS 485

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