

## OM 621BCD



### OM 621BCD MONITOR BCD AND ACTIVE TRANSFORMER TAPPING LEADS

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

#### Options

- Excitation • Comparators • Data output • Analog output
- Power supply: 9...50 V AC/DC

**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.

#### Standard functions

##### PROGRAMMABLE PROJECTION

**Calibration:** the type of BCD/transformer lead input may be set in „CM“

**Projection:** -99999...999999

##### OUTPUT

**Relays' functions:** For the tapping leads display device it is possible to set the regime of relay switching - BCD (10=10000)/BIN (10=01010)

#### 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.

#### 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 settings are stored in the EEPROM memory (they hold even after the instrument is switched off).

#### 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.

**Excitation** is suitable for feeding of sensors and transmitters. It is isolated, with continuously adjustable value in the range of 2...24 VDC.

**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.

**Technical data**

**INPUT**

**BCD display device**

**Serial BCD:** 4 data + 6 strobe; 8 data + 3 strobe; 12 data + 2 strobe; 4 data + 3 position + 1 strobe  
**Paralel BIN/BCD:** 20 data/24 data  
**Level:** 5...24 VDC, 10...60 VDC  
**Addressing:** up to 8 display devices

**Tapping leads display device**

**Input:** 5...24 VDC, 10...60 VDC, 90...130 VDC, 190...250 VDC  
**Number of tap. leads:** 24 + 1 signalling (on request 27)  
**Input resistance:** 5,5 kΩ/V  
**Output:** relay BIN/BCD, 5 relays(250 VAC/50 VDC, 3 A)

**PROJECTION**

**Display:** 999999, red or green 14-segment LED, digit height 14 mm  
**Brightness:** fixed

**INSTRUMENT ACCURACY**

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

**COMPARATOR**

**Type:** digital, setting in prog. mode, contact switch < 15 ms  
**Limits:** -99999...999999  
**Hysteresis:** 0...99999  
**Delay:** 0...99,9 s  
**Output:** 2x (3) Form A relays and 2x Form C relays (250 VAC/50 VDC, 3 A)

**DATA OUTPUT**

**Data format:** 7 bit + even parity + 1 stop bit (DIN Messbus)  
 8 bit + no parity + 1 stop bit (ASCII)  
**Rate:** 600...230 400 Baud  
**RS 232:** isolated  
**RS 485:** isolated, addressing (max. 31 instruments)

**ANALOG OUTPUT**

**Type:** isolated, programmable with resolution of max. 10 000 points, AO corresponds with the displayed data, type and range are selectable in programming mode  
**Non-linearity:** 0,2% of range  
**TC:** 100 ppm/°C  
**Rate:** response to change of value < 40 ms  
**Ranges:** 0...2/5/10 V, 0...5 mA, 0/4...20 mA (comp. < 500 Ω)

**EXCITATION**

**Adjustable:** 2...24 VDC/50 mA, isolated

**POWER SUPPLY**

9...50 V AC/DC, ±10 %, 13,5 VA  
 80...250 V AC/DC, ±10 %, 13,5 VA  
*Power supply is protected by a fuse inside the instrument*

**MECHANIC PROPERTIES**

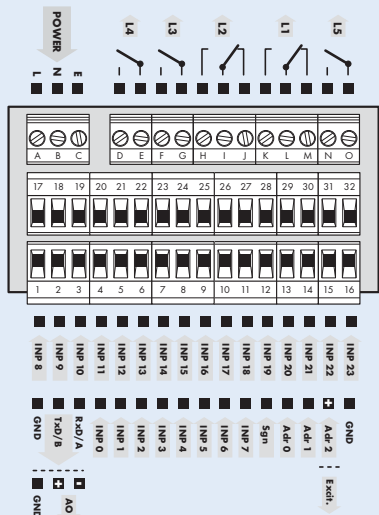
**Material:** Noryl GFN2 SE1, incombustible UL 94 V-1  
**Dimensions:** 96 x 48 x 154 mm  
**Panel cutout:** 90,5 x 45 mm

**OPERATING CONDITIONS**

**Connection:** connector terminal board, section < 2,5 mm<sup>2</sup>  
**Stabilization period:** within 15 minutes after switch-on  
**Working temperature:** 0°...60 °C  
**Storage temperature:** -10°...85 °C  
**Cover:** IP65 (front panel only)  
**El. safety:** EN 61010-1, A2  
**Insulation resistance:** for pollution degree II, measuring cat. III. power supply > 600 V (PI), 300 V (DI)  
 Input, output, Exc. > 300 V (PI), 250 V (DI)  
**EMC:** EN 61000-3-2+A12; EN 61000-4-2, 3, 4, 5, 8, 11; EN 550222, A1, A2

PI - Primary insulation, DI - Double insulation

**Connection**



**Order code**

**OM 621BCD**

<b>Power supply</b>	9...50 V AC/DC 80...250 V AC/DC	<b>0</b> <b>1</b>			
<b>Input</b>	5...25 VDC 10...60 VDC 90...130 VDC (110 VDC) 190...250 VDC (230 VDC)	<b>A</b> <b>B</b> <b>C</b> <b>D</b>			
<b>Comparators</b>	none 1 relay 2 relays 3 relays 4 relays 5 relays BCD/BIN (tapping leads display device)	<b>0</b> <b>1</b> <b>2</b> <b>3</b> <b>3</b> <b>5</b>			
<b>Output</b>	none Analog output RS 232 RS 485	<b>0</b> <b>1</b> <b>2</b> <b>3</b>			
<b>Excitation</b>	no yes		<b>0</b> <b>1</b>		
<b>Display color</b>	red green			<b>1</b> <b>2</b>	