

OM 621BCD



OM 621BCD MONITOR BCD AND ACTIVE TRANSFORMER TAPPING LEADS

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).

Extension

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.

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

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

Extension

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

- voltage/current. The value of analog output corresponds with the displayed data and its type and range are selectable in CM.

Real time is an internal time control of data collection. It is suitable everywhere where it is necessary to register measured data in a given time segment. Up to 65 000 values may be stored in the instrument's memory. Data transmission into PC via serial interface RS232/485.485.

Standard functions

PROGRAMMABLE PROJECTION

Measuring modes: counter/frequency meter/dual counter/UP-DW counter/counter for IRC sensors

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

Projection: -99999...999999

OUTPUT

Functions relays: For the tapping leads display device it is possible to set the regime of relay switching BCD (10=10000)/BIN (10=01010)

Technical data

INPUT

BCD display device

BCD serial: 4 data + 6 strobe; 8 data + 3 strobe; 12 data + 2 strobe; 4 data + 3 position + 1 strobe

BIN/BCD paralel: 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, 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, 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, adjustable in programming mode, contact switch-on < 15 ms

Limit 1...4: -99999...999999

Hysteresis: 0...99999

Delay: 0...99,9 s

Output: 2 relays with switching and 2 relays with switch-on contact (250 VAC/50 VDC, 3 A)

DATA OUTPUTS

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 OUTPUTS

Type: isolated, programmable with resolution of max. 10 000 points, analog output corresponds with the displayed data, type and range are selectable in CM

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. < 600 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, conductor section < 2,5 mm²

Stabilization period: within 15 minutes after switch-on

Working temperature: 0 °...60 °C

Storage temperature: -10 °...85 °C

Protection: IP65 (front panel only)

Construction: safety class II

El. safety: EN 61010-1, A2

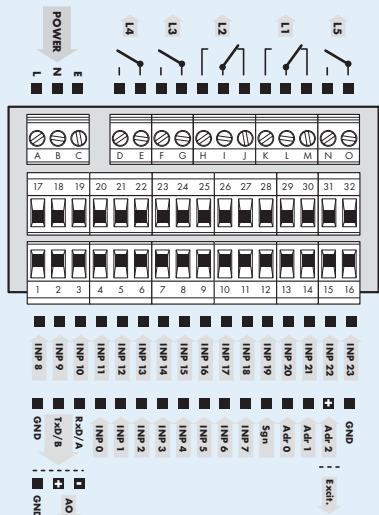
Overvoltage category: for pollution degree II

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

II. - input, output, excitation (270 V)

EMC: EN 61000-3-2+A12; EN 61000-4-2, 3, 4, 5, 8, 11; EN 550222, A1, A2

Connection



Order code

OM 621BCD

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