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MODEL CL-361 SINGLE – CHANNEL READ-OUT FOR VOLTAGE POWERED STRAIN GAUGE BASED TRANSDUCERS

- Single-channel signal conditioning/read-out instrument for strain gauge based transducers with 10 or 5 VDC excitation
- Complete, mains operated (230 V) desk-top instrument, or plug-in version (10 ÷ 30 V)
- Printer and PC ready via RS485 or RS 232 communication outputs (optional via converter RS/USB)
- Communication protocol MODBUS RTU - slave



Mod. CL-361 Desk-top Version



Mod. CL-361 Panel Version

Description:

Mod. CL-361 is a single channel digital signal conditioning/read-out instrument for inputs from strain gauge based transducers featuring 10 VDC or 5 VDC excitation voltage.

The instrument is available in two versions – as a mains operated (230 V) cabinet housed desk-top unit with built-in power supply, or as a rack-mount panel unit (24 V powered). The instrument readily accepts inputs from any kind of strain gauge based transducers with full bridge circuit configuration (e.g. force sensors, weighing cells, pressure sensors, etc.)

Mod. CL-361 desk-top version is available with either one RS232, or one RS485 communication interface (RS232 being standard). The rack-mount panel version is available with two RS's. Optionally available is a RS/USB converter for either version.

Technical data:

Number of input channels		1
Sensor resistance	Ω	120 ÷ 4300
Sensors excitation voltage	[V dc]	10 or 5
Resolution of A/C converter		min. 100000 graduations + sign
Non-linearity of A/C	[%]	<0,002
Measurement time	[s]	from 0,1
Insulation voltage for in series connections	[V]	> 150
Insulation voltage for analogue inputs	[V]	> 150
Insulation voltage for relays	[V]	> 150
Type of averaging		arithmetic mean from 1 ÷ 50 measurements
Additional functions		minimum and maximum, tare, comparison, correction of sensor non-linearity
Tare	[% of nominal]	0 ÷ 100
LED display		6 digits + 2 as number of function, 4 information LED's
Minimal indication		-199999
Maximal indication		999999
Hight of digits		13 mm (for measurement results) 8 mm (number of function)
Colour of digits		green
Communication outputs (optional)		1 or 2 independent (RS232 or RS485 or RS232 and RS485 or both RS485 and optional converter RS/USB)*

- protocol		MODBUS RTU - slave
- parameters of transmission		19200/9600/4800/1200 bps, 8 data bits, 1 or 2 stop bits, parity: none, odd or even
Types of comparison		upper alarm, lower alarm, alarm in interval, alarm beyond interval
Analogue current / voltage outputs (optional)		4 ÷ 20 mA or -10 V ÷ +10 V
Supply voltage	[V DC]	10 ÷ 30 (panel version)
Supply voltage	[V AC/50 Hz]	230 (Desk-top version)
Maximal current consumption under load of strain gauge sensors with 350 Ω resistance with 10 VDC excitation voltage:		
Device supply	1 sensor	3 sensors
10,0 VDC	390 mA	480 mA
12,0 VDC	330 mA	400 mA
24,0 VDC	190 mA	220 mA
30,0 VDC	165 mA	190 mA
Operating temperature range	[°C]	-20 ÷ + 50
Dimensions of Desk-top version CL361 (width/hight/depth)	[mm]	195 × 85 × 240
Dimensions of panel version CL 361 (width/hight/depth)	[mm]	96 × 48 × 190

* Number of accessible connections depends on instrument version.

Example of options for ordering:

CL-361-SxxxΩ-Rx-USBx-Wx-Hx

- CL-361- Sxxx – sensors resistance from 120 up to 4300Ω
- Rx – number and kind of connections: R1 – RS232; R2 – RS232 and RS485; R3 – both RS485; R4 – only RS485
- USBx – converter RS/USB; USB0 – without converter; USB1 – with converter RS232-USB; USB2 – with converter RS485-USB
- Wx – current output or voltage output: W0 – without outputs; W1 – current output, W2 – voltage output
- Hx – type of casing: H0 – panel version, H1 – Desk-top version with a built-in feeder 230 VAC

Example for ordering:

CL-361-S350Ω-R1-USB0-W0-H1

Sensors resistance – 350 Ω _____

communication output RS232 _____

without converter USB _____

neither current nor voltage output _____

Desk-top version with a built-in feeder 230 VAC _____