

Digital Display Indicator TC65



- ◆ Low cost
- ◆ Good EMI protection
- ◆ LCD or LED display available
- ◆ Analog retransmission output

TC65 process indicators produced by COMECO are devices for indication of the value of various physical values. They combine analog measurement and digital indication. This series of indicators are used for indication and monitoring of physical values such as temperature, pressure, flow, level etc. The TC65 indicators may be directly connected to most of the common temperature sensors. To indicate other physical values they are connected to standard analog output transmitters. The TC56 series includes devices with different digital display sizes:

13mm - variant "B"; 25mm - variant "D"; 45mm - variant "E"

These sizes provide visible readings at long distances in dark places. Due to their low cost allows the TC56 indicators are widely used in industry.



Technical specifications

TI

Inputs	2 or 3 - wire
Pt46 (GOST)	-50 to +199.9(600) °C ⁽¹⁾
Pt50 (w=1.385 or w=1.391)	-50 to +199.9(600) °C ⁽¹⁾
Pt100 (w=1.385 or w=1.391)	-50 to +199.9(600) °C ⁽¹⁾
Pt500 (w=1.385)	-50 to +199.9(600) °C ⁽¹⁾
Pt1000 (w=1.385)	-50 to +199.9(600) °C ⁽¹⁾
Cu100 (w=1.426 or w=1.428)	-50 to +199.9(200) °C ⁽¹⁾
Cu50 (w=1.426 or w=1.428)	-50 to +199.9(200) °C ⁽¹⁾
Cu53 (GOST)	-50 to +199.9(200) °C ⁽¹⁾
Other thermoresistive ⁽²⁾	min. -99 to max. +600 °C ⁽¹⁾
Thermocouple "J"	0 to +700 °C
Thermocouple "K"	0 to +700(1200) °C ⁽¹⁾
Linear voltage ^(3,4)	0 to 1(2, 5 or 10) V ⇒
	-199.9(1999) to +199.9(1999) ⁽¹⁾
Linear current ^(3,4)	0 to 5 or 0(4) to 20 mA ⇒
	-199.9(1999) to +199.9(1999) ⁽¹⁾
Custom linear voltage ^(3,4)	max. 10 V ⇒ 4000 points ⁽¹⁾
Custom linear current ^(3,4)	max.50 mA ⇒ 4000 points ⁽¹⁾
Analog outputs ⁽⁶⁾	
Output type	Retransmission
Current output	0(4) to 20 mA DC
Voltage output	0 to 1(2, 5 or 10) V DC
Operating conditions	
Operating temperature	-10 to 65 °C
Operating humidity	0 to 85 %RH

Accuracy

Measurement error	0.4 % from span
Temperature drift	0.007 % from span for 1 °C
Cold junction compensation	Automatic hardware ± 1 °C

Power supply

Supply voltage	220(110) VAC ± 10%
Low voltage supply (optional)	12 to 24 VAC/DC
Consumption	Max. 4 VA

Digital display

For variant "B"	3.5 digit LCD/LED-13/14mm plus LED for power supply
For variant "D"	3 digit LED - 25mm
For variant "E"	3 digit LED - 45mm

Design and materials

Case material	Plastic
Mounting	In panel cut-out
Wiring	Screw terminals
Dimensions:	
Variant "B and D"	96 x 48 (front) x 120 mm
Variant "E"	144 x 72 (front) x 105 mm
Weight:	
Variant "B and D"	Max. 400 g
Variant "E"	Max. 600 g
Protection front/terminals	IP-54 / IP-20

Ordering code



TC65* - G1.G2.G3.G6'6".G11

Code	Feature or option	Code values
*	Indicator variant	B - with digit height 13 mm, D - 25 mm, E - 45 mm
G1	Power Supply type	A - 220 VAC, B - 110 VAC, D - low voltage-DC ⁽⁵⁾ , E - low voltage-AC ⁽⁵⁾
G2	Display type	A - LCD ⁽⁶⁾ , B - LED normal, C - LED bright
G3	Resolution	B - 1, C - 0.1
G6'	Input signal type	B - thermoresistance, C - thermocouple, D - linear
G6"	Sensor type	Thermoresistor
		Thermocouple
		Linear
A - Pt46, B,C - Pt50, D,E - Pt100, F - Pt500, G - Pt1000, H,I - Cu50, J - Cu53, K,L - Cu100, Z - other		
J - "J", K - "K"		
A - 0.5 mA, B - 0..20 mA, C - 4..20 mA, H - 0..1V, I - 0..2 V, J - 0..5 V, K - 0..10 V, Z - other		
G11	Analog retransmission output ⁽⁶⁾	X - none, E - 0±20mA, F - 4±20mA, G - 0±1V, H - 0±2V, I - 0±5V, K - 0±10V, Z - other

⁽¹⁾ For variants "D" and "E": from -9.9(99) to +99.9(999) – 1100 points

⁽²⁾ Custom - specify range within the limits stated

⁽³⁾ Lower and upper display limits are specified by customer

⁽⁴⁾ Provides voltage for external transmitter power supply - 12(24)VDC/30mA

⁽⁵⁾ Exact value specified by customer

⁽⁶⁾ Only for variant "B"

For detailed instructions on ordering coding see chapter "ORDERING CODES"!