

Programmable Process Indicator TC660



- ♦ From 20 to 32 mm digit height
- ♦ Universal programmable input
- ♦ Two programmable alarm relays
- ♦ Programmable digital filter
- ♦ Calibration and self-calibration
- ♦ Isolated current output
- ♦ RS485 serial interface option

TC660 is a multifunctional and cheap programmable process indicator for panel mounting, based on COMECO's RT384 model. It has a **universal input** for the most common thermoresistances, thermocouples, and linear signals. The input has a built-in automatic software compensation of line resistance and cold junction temperature as well as automatic software compensation of temperature drift. The operator can **calibrate the input** manually. TC660 is also equipped with a **programmable input filter** and a 4-digit display with programmable refresh rate. Available are various options for **access restriction**. The device has two programmable alarm relay outputs and an **isolated current output** as an option. TC660 can be also equipped with an isolated **RS485 option**. The device can be ordered with 20 mm or 32 mm LED display that provides excellent visibility in many applications.



Technical specifications

Input	(programmable)
Pt100 (w=1.385); 3-wire	-100 to 600 °C
Pt100 (w=1.391); 3-wire	-100 to 600 °C
Cu100 (w=1.426); 3-wire	-50 to 200 °C
Cu100 (w=1.428); 3-wire	-50 to 200 °C
Thermocouple "J"	0 to 1000 °C
Thermocouple "K"	0 to 1300 °C
Thermocouple "S"	0 to 1700 °C
Thermocouple "R"	0 to 1700 °C
Thermocouple "B"	100 to 1800 °C
Thermocouple "C"	0 to 2300 °C
Thermocouple "L - GOST"	0 to 600 °C
Linear voltage 0 to 50 mV ⁽¹⁾	-1999 to +9999
Linear current 0 to 20 mA	-1999 to +9999
Linear current 4 to 20 mA	-1999 to +9999 ⁽²⁾
Input type selection	programmable
Decimal point selection	programmable
Digital filter	programmable
Input calibration	programmable
Outputs	(up to 2 outputs)
Relay electromechanical	5A/250V with NO/NC contact
Solid state relay	SSR - 1A/250 VAC
Transistor gate	open collector - 40mA/40V
Output for external SSR	12(24)V/50mA
Operation modes	manual and automatic
Alarms	programmable
Current output (option)	4(0) to 20 mA, isolated
Serial interface (option)	RS485, isolated

Accuracy

Measurement error	0.3 % from span
Temperature drift	negligible
Self-calibration	automatic software
Cold junction compensation	automatic software
RTD line compensation	automatic software

Power supply

Supply voltage	230 VAC, 110 VAC, or 90...250 VAC/DC
Low-voltage power supply Consumption	12 VDC, 12 VAC, or 12...24 VAC/DC max. 3 VA

Indication and keyboard

Display digit height	20 mm ('D') or 32 mm ('E')
Operating LED	one for each relay
Keyboard	4 membrane keys

Operating conditions

Operating temperature	-10 to 65 °C
Operating humidity	0 to 85 %RH

Design and materials

	'D'	'E'
Mounting cut-out	93x45 mm	140x68 mm
Dimensions	96x48x120 mm	144x72x105 mm
Weight	max. 300 g	max. 400 g
Case material	plastic	
Mounting	in panel cut-out	
Wiring	screw terminals	
Protection, front/terminals	IP54 / IP20	

⁽¹⁾ Other voltage ranges can be obtained using two external resistors

⁽²⁾ Provides supply voltage for external two-wire transmitter 12/24VDC

Ordering code



TC660★ - G1.G5G5.G9.G11

Code	Feature or option	Code values
★	Variant (model)	D - 20 mm display height, E - 32 mm display height
G1	Power supply type	A - 230 VAC, B - 110 VAC, C - 90...250 VAC/DC, D - 12 VDC, E - 12 VAC, P - 12...24 VAC/DC
G5	Relay output type	X - none, C - relay NO/NC, D - SSR, E - open collector NPN, J - external SSR
G9	Interface ⁽³⁾	X - none, B - RS485
G11	Analog output ^(3,4)	X - none, E - 0...20 mA, F - 4...20 mA

⁽³⁾ May be not available for all low-voltage power supplies. Please, contact COMECO!

⁽⁴⁾ Instead of alarm relay G5_ _! If mounted, it can be programmed as control or retransmission type!

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