COMECO CONTROL & MEASUREMENT

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BS EN ISO 9001 Reg.No FM 40344

Programmable Process Indicator TC67

- **Low cost**
- **Two alarm relay outputs**
- **4-digit display**
- **Automatic software line and "cold junction" correction**
- **Self-testing and self-calibration**

TC67 is a cheap programmable process indicator, based on COMECO's RT284 model. The device is widely applicable for indicating various physical variables within the input range with resolution of **up to 3000 points**. The **four-digit display** is very convenient in cases where **temperatures above 1000 degrees** have to be monitored as well as in any case where higher resolution is needed. TC67 is also equipped with a **built-in circuit for self-testing and self-calibration**, **manual measurement offset** setting, and **automatic software compensation of line resistance or cold junction temperature**. The indicator has **two alarm relay outputs** with separate set-point, direction, and hysteresis adjustment, providing a flexible alarm control.

Technical specifications

Inputs	
Pt50 (w=1.385); 3-wire	-100.0 to +200.0(600) °C
Pt100 (w=1.385); 3-wire	-100.0 to +200.0(600) °C
Pt500 (w=1.385); 3-wire	-100.0 to +200.0(600) °C
Pt1000 (w=1.385); 3-wire	-100.0 to +200.0(600) °C
Cu100; 3-wire	-50.0 to +200.0 °C
Cu50; 3-wire	-50.0 to +200.0 °C
Other thermoresistive (1)	min. -100 to max. +800 °C
Thermocouple "J"	0 to +1000 °C
Thermocouple "K"	0 to +1300 °C
Thermocouple "L-GOST"	0 to +800 °C
Thermocouple "S"	0 to +1700 °C
Thermocouple "R"	0 to +1700 °C
Thermocouple "B"	0 to +1800 °C
Thermocouple "C"	0 to +2300 °C
Other thermocouple (1)	min. 0 to max. +2000 °C
Linear voltage (2)	0 to 10 V (0 to 3000)
Linear current (2)	0(4) to 20 mA (0 to 3000)
Custom linear voltage (1,2)	max. 40 V (0 to max.3000)
Custom linear current (1,2)	max. 80 mA (0 to max. 3000)
Input type selection	fixed as specified in the order

Outputs	
Relay electromechanical	2x5A/250V, NO/NC contact
Solid state relay (option)	SSR - 1A/250 VAC
Transistor gate (option)	Open collector - 40mA/40V
Output for ext. SSR (option)	12/24 V, 50 mA
Control algorithm	ON/OFF
Set point	Within input range limits
Programmable parameters	According to control algorithm

Accuracy	
Measurement error	0.4 % from span
Temperature drift	0.005 % from span for 1 °C
Cold junction compensation	Automatic software
Line resistance compensation	Automatic software
Calibration	Automatic software

Power supply	
Supply voltage	230 or 110 VAC
Pulse mode (option)	90 to 250 VAC/DC
Low voltage supply (option)	12/24 VDC, 12 VAC or 12…24 VAC/DC
Consumption	Max. 3 VA

Indication and keyboard	
Digital display	4 LED indicators, 20 mm
Measurement offset	Through keyboard
LEDs	2 LEDs for relay outputs
Keyboard	3 membrane keys

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

Design and materials	
Case material	Plastic
Mounting	In panel cut-out
Wiring	Screw terminals
Dimensions	96 x 48 x 120 mm
Weight	Max. 400 g
Protection front/terminals	IP54 / IP20

(1) Custom - specify range within the limits stated
(2) Provides voltage for external transmitter power supply - 12/24VDC

Ordering code

➔ **TC67 - G1.G3.G5G5.G6'6" - #1**

Code	Feature or option		Code values
G1	Power supply type		**A** - 230 VAC, **C** - 90…250 VAC/DC (3), **D** - 12/24 VDC (4), **E** - 12 VAC, **P** - 12…24 VAC/ DC
G3	Resolution (5)		**B** - 1, **C** - 0.1
G5	Relay output type		**X** - none, **C** - relay NO/NC, **D** - SSR, **E** - open collector NPN, **J** - external SSR
G6'	Input signal type		**B** - thermoresistance, **C** - thermocouple, **D** - linear, **Z** - other on request
G6"	Sensor type	Thermoresistance (RTD) Thermocouple Linear	**B** - Pt50, **D** - Pt100, **F** - Pt500, **G** - Pt1000, **H** - Cu50, **K** - Cu100, **Z** - other **B** - "B", **C** - "C", **J** - "J", **K** - "K", **M** - "L-GOST", **R** - "R", **S** - "S", **Z** - other **B** - 0…20 mA DC, **C** - 4…20 mA DC, **K** - 0…10 VDC, **Z** - other
#1	Auxiliary supply output		**X** - none, **AU** - installed (12 or 24(3) VDC/30mA)

(3) Contact COMECO for availability!
(4) Exact value is specified in customer order
(5) Do not code for linear input types

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

COMECO reserves the right of changing specifications without prior notice!