

V TEMPERATURE SIGNALER

Industrial Use Signalers

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DEVICE FOR TEMPERATURE CONTROL AND ADJUSTMENT

ПКРТ-0103

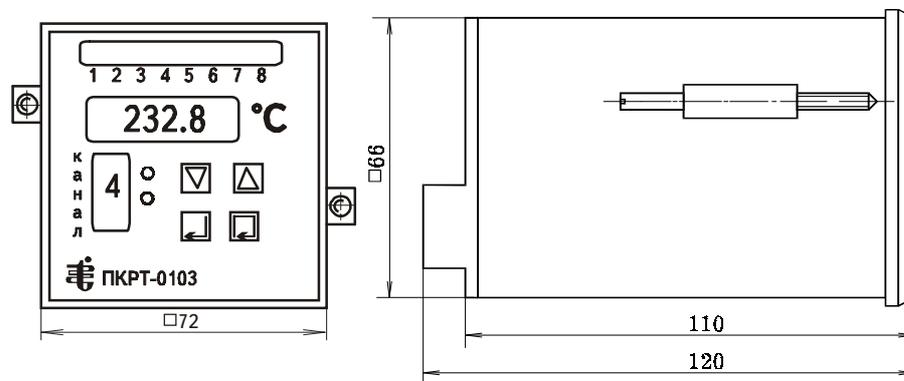
Designed for automatic and continuous signaling that a set level of temperature/ other physical value was achieved (independent level setting for each channel), and indication of the current value of measurements in the controlled channels. The device can operate in two, three position modes or PID control.. The outputs are vacant relay contacts, optosymistors or optotransistors (open collectors). 8 entry channels available.

The devices works in a set with primary thermocouples: thermocouples of resistance with nominal static characteristic of transduction (NSC) 50 M, 100M, 50Π, 100Π, or thermoelectrical couple with NSC K, L or primary thermocouples transducing other values with input signal 4 - 20 mA, 0 - 20 mA, 0 - 5 mA, 0 - 1 V, 0 - 5 V, 0 - 10 V etc.

The device can link with PC through RS232 or RS485 interface. The connection is provided with three wire line galvanically divided from input and powering circuits. The device may also generate measurement data archives and show them on PC screen later. The devices can be easily connected in a computer network.

Mounting – on board.

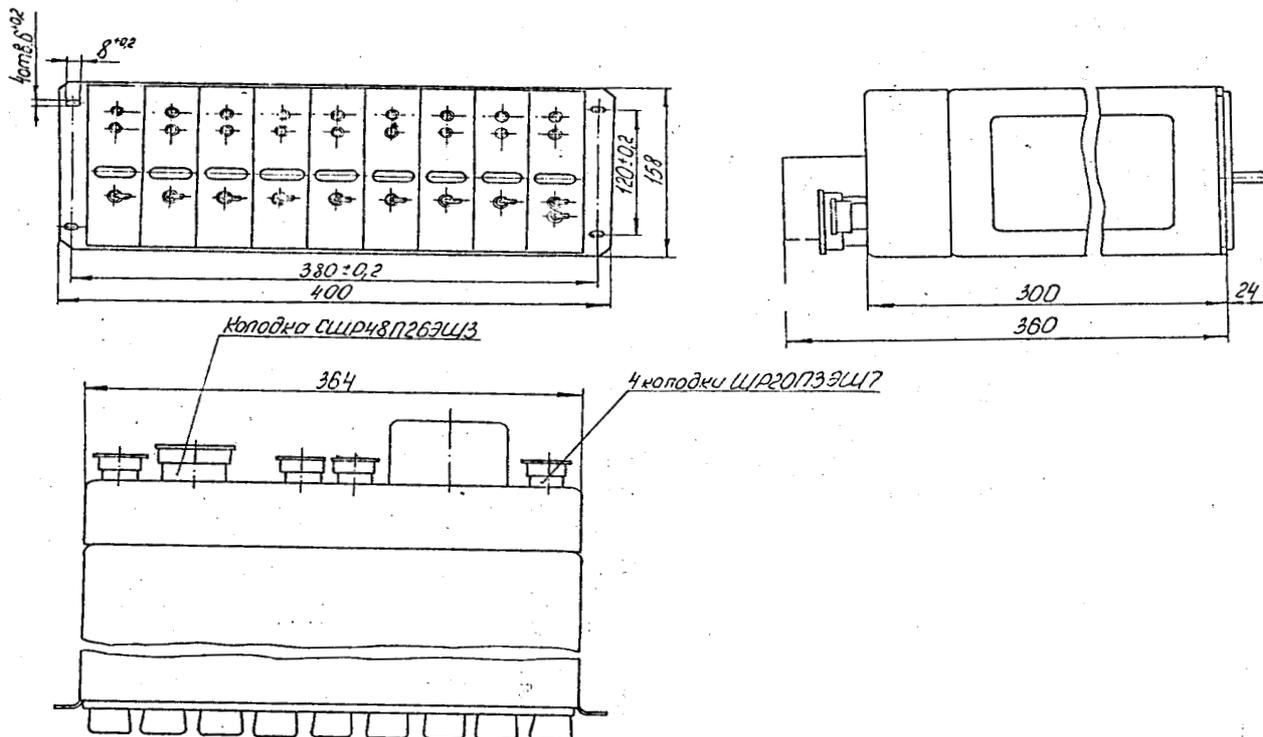
Range of measured temperature, °C	from minus 50 to 1800 (depending on the type of thermocouple used)
Resolution, °C	0,1 (1 – for thermoelectrical couples)
Number of decimal orders of indication	4
Threshold of main acceptable composite measurement, %	0,1.. - 0,5
Length of indication of the measured value of single channel, s	1
Number of points of archiving measured values for each channel, not less than	2000
Period of archiving, min	from 1 to 180
Powering voltage	220 ⁺²² ₋₃₃ V, 50 ± 1 Hz
Power of consumption, not more than, Wt	3



TEMPERATURE SIGNALING DEVICE
CT-136M (TY 25-7558.003-87)

Designed to control and signal about the temperature of bearings of pump unit and oil inside the pump at eight points. Works together with thermocouples of resistance.

Range of controlled temperatures, °C	from 30 to 180
Notation of NSC (ДСТУ 2858-94)	50П (Pt' 100), 100П (Pt' 100), 50М (Cu' 50)
Acceptable main error %, not more than	±1
Time of triggering, s, not more than	1
Quantity of discrete points of signaling, not more than	8
Difference of temperature between signaling points, °C not less than	4
Power supply: voltage, V frequency, Hz	220 50±1
Output signal – a contact output of signal relay with switching capacity voltage, up to	20 В·А 220 V; 50 Hz
Incoming electrical circuits – sparkproof, level of explosion protection «ІВ»	
Weight, not more than, kg	25,0



TEMPERATURE SIGNALING DEVICE
CTC-0189M (TY 25.7363.073-90)

Designed for automatic signaling of temperature in eight channels and showing temperature values beyond acceptable range.

Range of controlled temperatures, respectively
for NSC, °C:

50M, 100M, Cu 50, Cu 100	from minus 50 to 200
50П, 100П, Pt 50, Pt 100	from minus 60 to 600
K	from 0 to 1200
L	from 0 to 800
S, R	from 0 to 1500

Working mode of signaling device:

Individual values of temperature settings for regular
and emergency signaling for each channel,
sensor type, hysteresis

Interface RS-485

Commutation capacity of relay's output contacts
(«Warning», «Emergency», «Disconnected») 0,1 A, 220 V

Signaling about exceeding a set temperature

Discreteness of temperature setting, °C 0,1

Range of hysteresis factor control, °C from 0 to 200

Power supply for signaling device, V from 90 to 250

Weight, kg, not more than 0,5

Size, mm 96x96x110



TEMPERATURE SIGNALING DEVICE
CTC-1 (TY 25-04(5Ц0.299.020)-84)

Designed for continuous single position signaling about exceeding or lowered temperature relative to a set level at control points by switching contacts of output relay signalers connected into external electrical circuit.

CTC-1 works with thermocouple of resistance with Nominal Static Characteristic of transduction 50П.

Range, °C from minus 30 to 500

Technical Specifications:

Time of signaler triggering with instantaneous supply of nominal input signal, not more than, s 0,65

Lag of signaler output signal, not more than, s 0,65

Consumed power, not more than, V·A 30

Power supply AC mains voltage (220 ± 11) V or (127 ± 6) V frequency (50^{+1}_{-2}) / (400^{+8}_{-16})

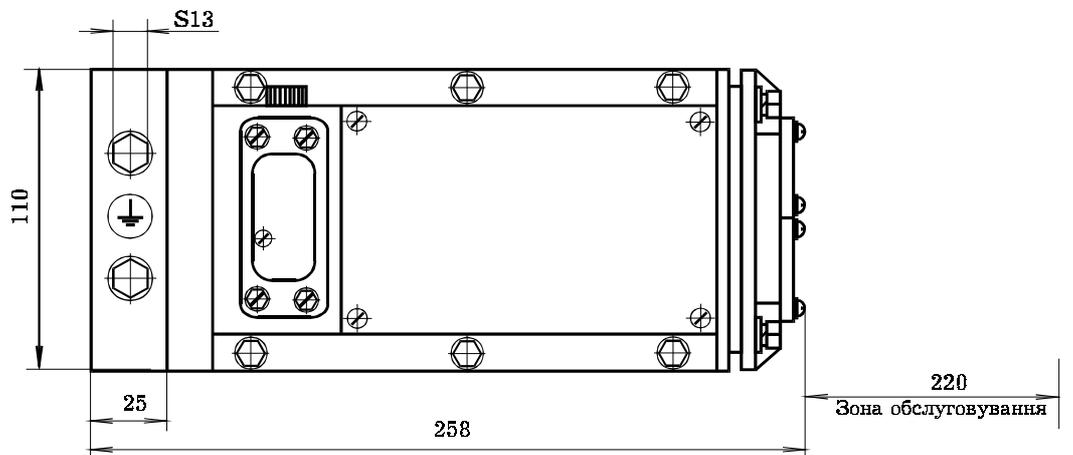
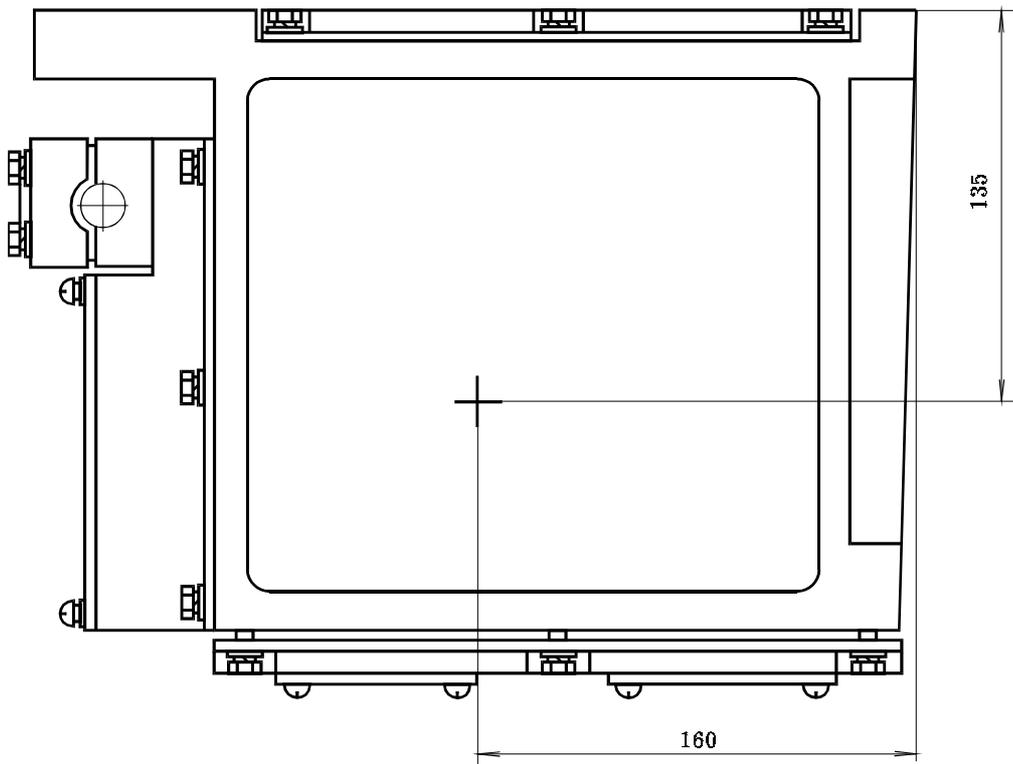
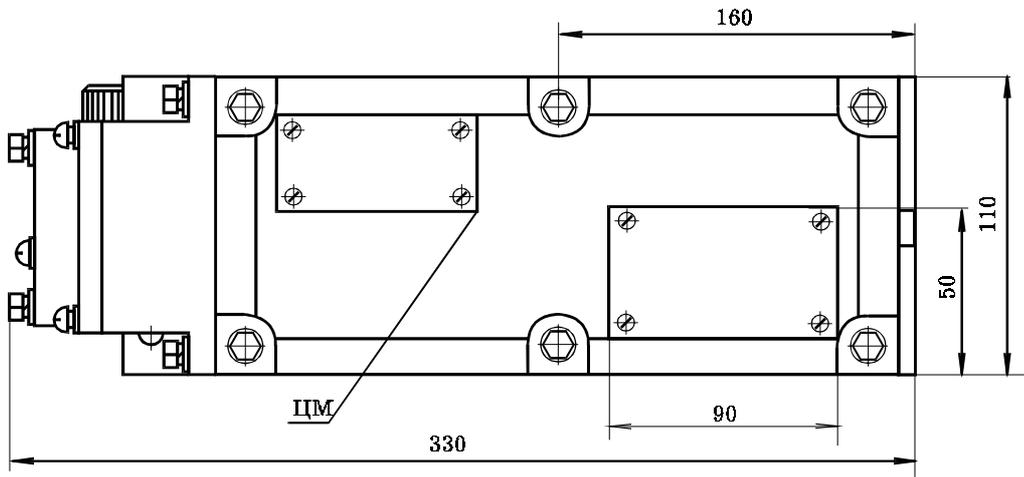
Life cycle, years 15

Packaging water proof

Size, mm 330x258x110

Weight, not more than, kg 9,0

Three wire circuit of thermocouple connection



SET OF SIGNALING DEVICE FOR AVERAGE TEMPERATURE VALUES
CT-042 (TY 25-02-1886-75)

Designed for measurement and signaling (current and emergency) of average temperature values at one point.

The set works with four thermoelectrical couples with letter notation of nominal static characteristic of transduction K.

The set includes:

- signaling device CT-642;
- miliammeter (0 - 5 mA) M1618 with the range 0 - 1100 °C - 2 pcs;
- connection box KC-212.

Temperature signaling range, °C	from 200 to 1100
Temperature measurement range, °C	from 0 to 1100
Life cycle, years, at least	10
MTBF, hours, at least	35000
Main signaling error, not more than, %	±1,5 (of high end of signaling)
Main measurement error, not more than, %	±3 (of high end of signaling)
Supply voltage (from batteries), V	24±2,4
Consumed power, not more than, B·A	10
Probability of error free operation in 5000 hours, not less than	0,9
Weight, not more than, kg	13
Packaging	water proof
Size, mm:	
CT-642	358x160x120
KC-212	168x148x62
M1618	126x120x120