Elimko

ISO-9001

GOST

E-49 SERIES
DIGITAL INDICATING CONTROLLERS

DESCRIPTION

E-49 Series controllers are designed using new generation micro-controllers for on/off and PID control. The unit has dimensions of 48x96 mm, conforming IEC 668.

E-49 Series have a 2x4 digits LED display range between –1999 and +9999, configurable universal inputs (T/C, R/T, mV, mA) with 16 bit resolution, low calibration drifts with environmental conditions.

E-49 Series controllers have easy programming facilities to provide on/off and PID forms and are used in every field of industry for measurement and control of temperature, pressure, level, current, voltage, resistance and other process parameters in industries such as iron & steel, cement, plastic, chemistry, metallurgy, petrochemical plants, refineries, ceramic, glass and others.

FEATURES

Set Adjustment	Between set point limits
Contact Forms	Low (LO), HIGH (HI) Lob, Hlb, Lod, Hld
Dead band (Hysterisis)	0-999.9 (EU)*
Resolution	0.1 or 1
Proportional Band (Pb)	0.1-999.9 (EU)*
Integral Time (It)	0-9999 (seconds)
Derivative Time (Dt)	0-2500 (seconds)
Bias	%0-100
Control Form	On/Off, PID
Control Outputs	0-20 mA, 4-20 mA, NO Contact, pulse

* (EU) °C for the thermocouples and resistance thermometer inpusts, for the linear inputs, same with the units which is controlled. Decimal point can be determined by parameter of dP.

TECHNICAL SPECIFICATION

Accuracy Class	0.5
Display Resolution	1 / 9999
Display	2x4 Digit LED (7mm)
A/D Conversion	16 Bit
S/A Conversion	12 Bit
Reading Speed	2 readings/second
Input Resistance	T/C, mV: ≥ 1MΩ mA : ≤ 51 Ω
Noise Suppression	120 dB 50 Hz
Operating Temperature	-10 ÷ 55 °C
Temperature Comp.	0-50 C
Operating Voltage	85-265 V AC, 85-375 V DC, 20-60 V AC, 20-85 V DC
Power Consumption	Max. 10 VA
Relay Output	SPST-NO 250 V AC 5 amp
Input Signal	T/C, R/T, mA, mV
Sensors	Thermocouple Resistance Thermometre Others= Standard and non-standart transmitters and converters
Memory	EEPROM max. 10^5 writing
Weight	220 gr

CE

- This controller complies with the European Low Voltage Directive 73/23/EEC, by the application safety standard TS 2418 EN 61010-1. (Pollution degree 2)
- This controller complies with the EMC Directive 89/336/EEC, by the application of EMC standart TS EN 61326.

STANDARD WORKING LIMITS

Inputs	Type	Min.	Max.
Cu-Const	Type -U*	-200 °C	600 °C
Cu-Const	Type -T	-200 °C	400 °C
Fe-Const	Type -L*	-200 °C	900 °C
Fe-Const	Type -J	-200 °C	1100 °C
Cr-Al	Type -K	-200 °C	1300 °C
NiCr-Ni	Type -K	-200 °C	1300 °C
Cr-Const	Type -E	-200 °C	800 °C
Nicrosil-Nisil	Type -N	-200 °C	1300 °C

Inputs	Type	Min.	Max.
Pt%10Rh-Pt	Type -S	0 °C	1760 °C
Pt%13Rh-Pt	Type -R	0 °C	1760 °C
Pt%18Rh-Pt	Type -B	60 °C	1800 °C
Pt-100	∝=0.385	-200 °C	840 °C
mV	0-1000mV	-1999 Unit	9999 unit
mA	0-20 mA	-1999 Unit	9999 unit

* DIN 43710 standards, others conform to IEC 584 E-49 Series instruments are general purpose and can be configured according to the application.

ORDERING GUIDE

E-49 Series Controllers — E-49 W X 0 Z

Standard Features

- Programmable universal inputs
- Programmable universal outputs
- Tranmitter power supply 24 V DC
- External set point
- Motorised value feedback input
- Heat - Cool
- Auto-tune

Configurable by the customer

Relay Outputs

2 Relays 2x(NO-O)	2
3 Relays 3x(NO-O)	3
4 Relays 4x(NO-O)	4
1 Relay, pulse voltage to drive SSR, 24 V DC / 20 mA	5
2 Relays, pulse voltage to drive SSR, 24 V DC / 20 mA	6
3 Relays, pulse voltage to drive SSR, 24 V DC / 20 mA	7

Analog Outputs

None	0
0-20mA/4-20 mA (isolated)	1

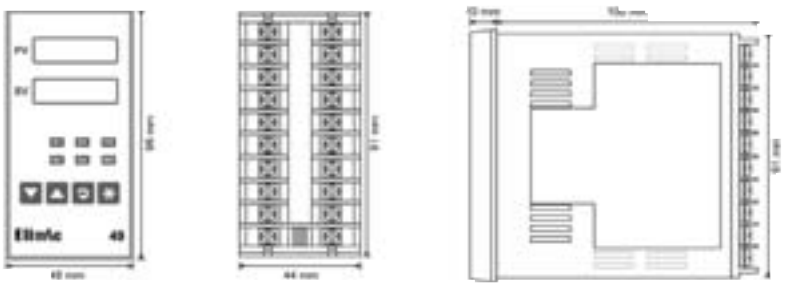
Communication

None	0

Power Supply

85-265 V AC / 85-375 V DC	0
20-60 V AC / 20-85 V DC	1

DIMENSIONS



Panel cut-out = 45 x 92 mm

* The company's policy is one of continuous product improvement. We reserve the right to modify the information contained herein without notice.

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