



E-72P SERIES

UNIVERSAL ADVANCED DIGITAL CONTROLLERS



DESCRIPTION

E-72P Series universal process controllers are industrial instruments with 72x72 mm IEC/TR 60668 dimensions designed using new generation microcontrollers with on/off, PID and other control modes, where inputs and outputs can be easily programmed by the user.

In E-72P Series controllers, the set value and measured value can be monitored from -1999 to 9999 on two 4-digit displays; general purpose inputs (T/C, R/T, mV, mA) can be programmed.

It is used in the measurement and control of temperature, pressure, level, speed, current, voltage, resistance and other physical units in all fields of industry; Plastics, Iron and Steel, Chemical, Metallurgy, Petro-Chemistry, Refineries, Food, Cement, Ceramics, Glass and other industries.

STANDARD WORKING LIMITS

Inputs	Tip	Min.	Max.
Cu-Const	Tip-U*	-200°C	600°C
Cu-Const	Tip-T	-200°C	400°C
Fe-Const	Tip-L*	-200°C	850°C
Fe-Const	Tip-J	-200°C	1100°C
NiCr-Ni	Tip-K	-200°C	1300°C
Cr-Const	Tip-E	-200°C	1000°C
Nikrosil-Nisil	Tip-N	-200°C	1200°C
Pt%10Rh-Pt	Tip-S	0°C	1760°C
Pt%13Rh-Pt	Tip-R	0°C	1760°C
Pt%18Rh-Pt	Tip-B	60°C	1800°C
Pt-100	$\alpha=0.385$	-200°C	840°C
mV	0-1000 mV	-1999 unit	9999 unit
mA	0-20 mA/ 4-20 mA	-1999 unit	9999 unit

* DIN 43710 standards, others conform to IEC 60584-1.
E-72P Series instruments are general purpose and can be configured according to the application.

TECHNICAL SPECIFICATIONS

Accuracy Class	0.5
Display Resolution	1/9999
Display	2x4 Digit LED (14 mm)
A/D Conversion	16 bit
D/A Conversion	12 bit
Reading Speed	2 readings/second
Input Resistance	T/C, mV $\geq 1 \text{ M}\Omega$ mA, $\leq 51 \Omega$
Noise Suppression	120 dB 50 Hz
Operating Temperature	-10 ... 55°C
T/C Temperature Comp	0 ... 50°C
Power Supply	85-265 V AC / 85-375 V DC 20-60 V AC / 20-85 V DC
Power Consumption	Max. 7 W
Relay Output	NA Contact 250 V AC 5 A
Input Signal	T/C, R/T, mA, mV
Sensors	Thermocouple Resistance thermometer Others= Standard and nonstandard transmitters and converters
Memory	EEPROM max. 10^5 writing
Protection Class	Front Panel IP66 (NEMA 4X) Rear Panel IP20
Weight	232 gr



- This controller complies with the European Low Voltage Directive 2006/95/EC, by the application of safety standard TS EN 61010-1. (Pollution degree 2).
- This controller complies with the EMC Directive 2004/108/EC, by the application of EMC standard TS EN 61326.

FEATURES

Set Adjustment	Between set point limits
Contact Forms	Alt (LO), Üst (HI), Lob, Hlb, Lod, Hld
Dead Band (Hysteresis)	0-999.9 (EU)*
Resolution	0.1 or 1
Proportional Band (Pb)	0.1-999.9 (EU)*

Integral Time (It)	0-3600 seconds (1 sec steps)
Derivative Time (Dt)	0-3600 seconds (1 sec steps)
Bias	% 0-100
Control Form	On / Off, PID
Control Outputs	0-20 mA, 4-20 mA, NA Contact, SSR

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

ORDERING GUIDE

E-72P Series Controllers

E- 72P - W - X - Y - Z

Standard Features

- Programmable universal inputs
- Auto - tune
- Configurable by the customer.
- Programmable universal outputs
- Transmitter power supply 24 V DC
- On - Off / PID Control Forms

Relay Outputs

None	0
1 relay (RL1)	1
2 relay (RL1, RL2)	2
1 SSR (SSR1)	3
1 SSR (SSR1) + 1 relay (RL2)	4
2 SSR (SSR1, SSR2)	5

Analog Outputs

None	0
1 x 0-20 / 4-20 mA (AO1)	1
2 x 0-20 / 4-20 mA (AO1, AO2) *	2
1 x 0-10 V DC (AO1)	3
1 x 0-20 / 4-20 mA (AO1) + 1 x 0-10 V DC (AO2)	4
2 x 0-10 V DC (AO1, AO2) *	5

Communication

None	0
RS485**	1

Power Supply

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

* Analog outputs are isolated from each other.

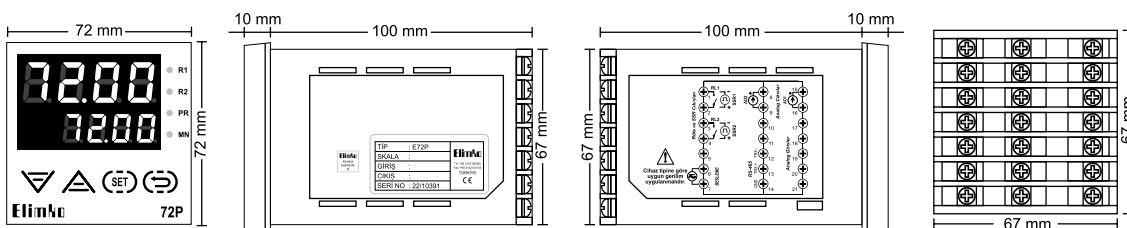
** When E-72P Series controllers are ordered with communication, the E-IB-11 USB-RS485 converter can be used for PC connection.

There are various control and monitoring software provided by Elimko

Example

- E - 72 - 0 - 0 - 0 - 0 Standard feature, 220 V AC power supply.
 E - 72 - 1 - 0 - 0 - 0 1 relay output, 220 V AC power supply.
 E - 72 - 2 - 1 - 0 - 1 2 relay outputs, 1 analog output, 24 V DC power supply.

DIMENSIONS



Panel cut - out = 68 x 68 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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