# Elimko

# E-58 SERIES

DIGITAL INDICATING CONTROLLERS



#### DESCRIPTION

E-58 Series controllers are designed using new generation microcontrollers for on/off and PID control. The unit has dimensions of 48x48 mm, conforming IEC/TR 60668.

E-58 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-58 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)	0-3600 seconds	
Derivative Time (Dt)	0-3600 seconds	
Bias	%0-100	
Control Form	On/Off, PID	
Control Outputs	NA Contact, SSR	

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

#### **■ TECHNICAL SPECIFICATIONS**

Accuracy Class	0.5		
Display Resolution	1/9999		
Display	2x4 Digit LED (7 mm)		
A/D Conversion	16 bit		
Reading Speed	2 readings/second		
Input Resistance	T/C, mV $\geq$ 1 M $\Omega$ mA, $\leq$ 51 $\Omega$		
Noise Suppression	120 dB 50 Hz		
Operating Temperature	-10 55°C		
Temperature Comp.	0 50°C		
Power Supply	220 V AC 24 V AC		
Power Consumption	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. 10⁵ writing		
Weight	200 gr		

## CE

- 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.

#### STANDARD WORKING LIMITS

Inputs	Туре	Min.	Max.
Cu-Const	Type-U*	-200 °C	600 °C
Cu-Const	Туре-Т	-200 °C	400 °C
Fe-Const	Type-L*	-200 °C	900 °C
Fe-Const	Туре-Ј	-200 °C	1100 °C
NiCr-Ni	Туре-К	-200 °C	1300 °C
Cr-Const	Туре-Е	-200 °C	800 °C
Nicrosil-Nisil	Type-N	-200 °C	1300 °C

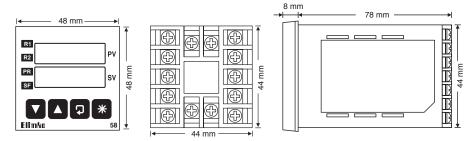
Inputs	Туре	Min.	Max.	
Pt%10Rh-Pt	Type-S	0 °C	1760 °C	
Pt%13Rh-Pt	Туре-R	0 °C	1760 °C	
Pt%18Rh-Pt	Туре-В	60 °C	1800 °C	
Pt 100	∝=0.385	-200 °C	840 °C	
mV	0-1000 mV	-1999 unit	9999 unit	
mA	0-20 mA	-1999 unit	9999 unit	

<sup>\*</sup> DIN 43710 standards, others conform to IEC 60584-1. E-58 Series instruments are general purpose and can be configured according to the application.

### ORDERING GUIDE

E-58 -W-X-Y-Z E-58 Series Controllers **Standard Features** • Programmable universal inputs Configurable by the customer **Relay Outputs** None ... 1 relay 1 x (NO-0)... 2 relay 2 x (NO-0). Pulse Voltage to drive SSR, 24 V DC / 20 mA .... Pulse Voltage to drive SSR, 24 V DC / 20 mA + 1 relay (NO-0) ...... **Analog Outputs** None .. Communication None .. **Power Supply** 220 V AC ± %10 ..... 24 V AC ± %10 .....

### DIMENSIONS



Panel cut-out =  $45 \times 45 \text{ mm}$ 





