

ON/OFF - TEMPERATURE CONTROL UNIT

Eco LITE



TC (J,K,R,S,T Input Types) and RTD inputs selectable by parameter

Saving and Recovery of user parameters

Low Power Consumption, Energy saving and Environmentally Friendly with 2VA

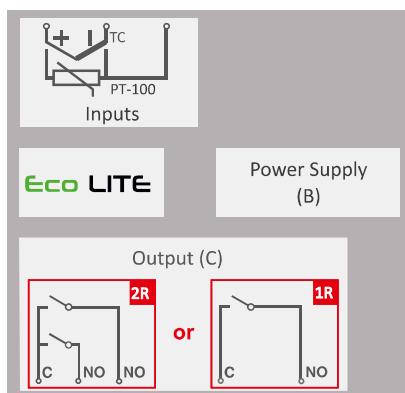
Return to Factory Settings

Standard Features

- 3 digits Process (PV) and 4 digits Set (SV) display
- Process input (TC, RTD)
- ON-OFF control form
- Selectable heating and cooling function
- Selectable temperature offset value
- Operation type selection with hysteresis
- Minimum pulling time adjustment for control outputs
- Password protection for programming mode

Technical Specifications

Specifications	Process Input	Thermocouple (TC): J, K, R, S and T (IEC584.1)(ITS90) Thermoresistance (RTD) : PT-100 (IEC751)(ITS90)
	Measurement Range	Please refer to process input type selection in process menu parameter section.
	Accuracy	± 0,25 of scale for thermocouple and thermoresistance
	Cold Junction Compensation	Automatically. ±0.1°C/1°C
	Line Compensation	Maximum 10 Ohm
	Sensor Break Protection	Upscale
	Sampling Cycle	0,1 second
	Input Filter	Programmable
	Control Form	ON/OFF
Output	Process Output	Relay (5A@250V ~ at Resistive Load)
	Alarm Outputs	Relay (5A@250V ~ at Resistive Load)
Environmental Conditions	Operation Temperature	0...50°C
	Humidity	0-90%RH (None condensing)
	Protection Class	IP65 in front, IP20 in rear
	Weight	150 gr.
	Dimension	48 x48 mm
	Depth	86,5 mm
	Panel Cut-Out	46 x46 mm



USAGE AREAS

All Applications Requiring Temperature Control

GLASS

PLASTIC

PETRO CHEMISTRY

TEXTILE

AUTOMOTIVE

MACHINE PRODUCTION INDUSTRY

PID - TEMPERATURE CONTROL UNIT

Eco PID



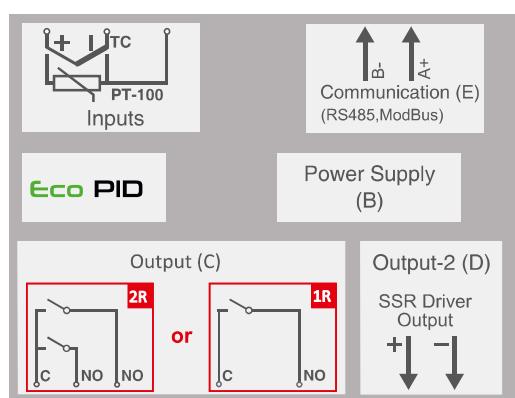
- High Resolution Sensitive PID control
- Saving and Recovery of user parameters
- TC (J,K,R,S,T Input Types) and RTD inputs selectable by parameter
- Return to Factory Settings
- Low Power Consumption, Energy saving and Environmentally Friendly with 2VA
- RS-485 Modbus (RTU) communication option

Standard Features

- 3 digits Process (PV) and 4 digits Set (SV) display
- Process input (TC, RTD)
- Programmable ON-OFF, P, PI, PD, PID control forms
- Adaptation of PID Coefficients to the system with Self-Tune operation (Step ResponseTuning)
- Selectable heating and cooling function
- Selectable temperature offset value
- Operation type selection with hysteresis
- Minimum pulling time adjustment for control outputs
- Password protection for programming mode

Technical Specifications

Specifications	Process Input	Thermocouple (TC): J, K, R, S and T (IEC584.1)(ITS90) Thermoresistance (RTD) : PT-100 (IEC751)(ITS90)
	Measurement Range	Please refer to process input type selection in process menu parameter section.
	Accuracy	± 0,25 of scale for thermocouple and thermoresistance
	Cold Junction Compensation	Automatically. ±0.1°C/1°C
	Line Compensation	Maximum 10 Ohm
	Sensor Break Protection	Upscale
	Sampling Cycle	0,1 second
	Input Filter	Programmable
Output	Control Form	ON/OFF, P, PI, PD or PID (Programmable)
	Process Output	Relay (5A@250V ~ at Resistive Load) Or SSR Driver Output (Maximum 10mA, Max. 12V---)
Environmental Conditions	Alarm Outputs	Relay (5A@250V ~ at Resistive Load)
	Operation Temperature	0...50°C
	Humidity	0-90%RH (None condensing)
	Protection Class	IP65 in front, IP20 in rear
	Weight	150 gr.
	Dimension	48 x48 mm
	Depth	86,5 mm
Panel Cut-Out	Panel Cut-Out	46 x46 mm



USAGE AREAS

All Applications Requiring Temperature Control

GLASS

PLASTIC

PETRO CHEMISTRY

TEXTILE

AUTOMOTIVE

MACHINE PRODUCTION INDUSTRY

PID - HOT RUNNER CONTROL UNIT

Eco HR



- High Resolution Sensitive PID control
- Saving and Recovery of user parameters
- TC (J,K,R,S,T Input Types) selectable by parameter
- Return to Factory Settings
- Low Power Consumption, Energy saving and Environmentally Friendly with 2VA
- RS-485 Modbus (RTU) communication option
- Digital or RS-485 input for activate the 2nd Set Value (Optional)
- Activate 2nd Set Value by front panel

Standard Features

3 digits Process (PV) and 4 digits Set (SV) display

Process input (TC)

Programmable ON-OFF,
P, PI, PD, PID control forms

Adaptation of PID Coefficients to the system
with Self-Tune operation (Step ResponseTuning)

Selectable heating and cooling function

Selectable temperature offset value

Operation type selection with hysteresis

Minimum pulling time adjustment
for control outputs

Password protection for programming mode

Technical Specifications

Process Input	(TC): J, K, R, S and T (IEC584.1)(ITS90)
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Measurement Range	Please refer to process input type selection in process menu parameter section.
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Accuracy	$\pm 0,25$ of scale for thermocouple
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Cold Junction Compensation	Automatically. $\pm 0.1^\circ\text{C}/1^\circ\text{C}$
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Line Compensation	Maximum 10 Ohm
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Sensor Break Protection	Upscale
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Sampling Cycle	0,1 second
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Input Filter	Programmable
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Control Form	ON/OFF, P, PI, PD or PID (Programmable)
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Process Output	Relay (5A@250V ~ at Resistive Load) Or SSR Driver Output (Maximum 10mA, Max. 12V=---)
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Alarm Outputs	Relay (5A@250V ~ at Resistive Load)
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Operation Temperature	0...50°C
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Humidity	0-90%RH (None condensing)
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Protection Class	Ip65 in front, Ip20 in rear
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Weight	150 gr.
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Dimension	48 x48 mm
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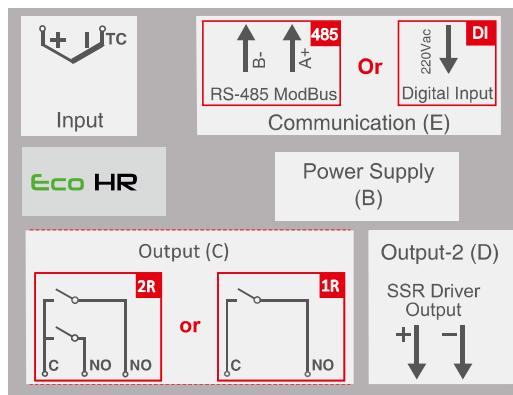
Depth	86,5 mm
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Panel Cut-Out	46 x46 mm
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Specifications

Output

Environmental Conditions



USAGE AREAS

All Applications Requiring Temperature Control

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www.emkoelektronik.com.tr

Order Information

Eco LITE
Eco PID
Eco HR

