

## Timing Control Device



# OC440

OC440 devices are 48 x 48 mm in size. They are easy-to-use devices designed for applications where temperature and timing processes should be carried out together.

They can control on / off and PID and are completely modular and each module can be configured individually.

Thanks to the universal feeding source, it can be used with all kinds of feeding sources. RS485 MODBUS RTU communication module offers the possibility of remote monitoring and control.

### Device Features

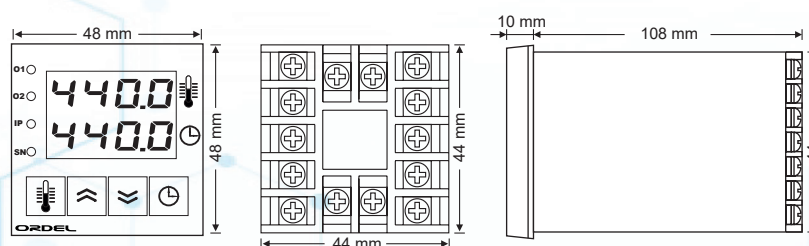
- 2 pcs 4 Digit Display
- 4 pcs LED Indicator
- 1 pcs Sensor Input (B,E,J,K,L,N,R,S,T,U,RT)
- 1 pcs Analog Output (0/4-20mA,0/2-10V)
- 1 pcs RS485 Communication Unit
- 2 pcs Relay or Logic Output (24VDC)
- 100-240V AC/DC Universal or 24V AC/DC Supply
- Isolation Between Input/Output Modules

- PID Heating/Cooling
- Auto-Tuning (Automatic setting of PID parameters)
- Sensor Error Detection
- Signal Input for Start-Stop
- Ramp Functions
- 2 pcs Working Modes
- Retransmission (For Process and Set Value)
- 17 Different Relay Functions
- ON/OFF, PID Control
- 3 pcs Step Recognize
- Linear and Time Proportioning Control Output
- Bumpless Transfer Ability
- 100ms Sampling and Control Cycle
- Standard MODBUS RTU Communication Protocol
- Configuration Via Computer

### Input Types

Sensor Type	Standard	Min.	Max.
Type-T ( Cu-Const )	IEC60584	-200 °C	300 °C
Type-U ( Cu-Const )	IEC60584	-200 °C	600 °C
Type-J ( Fe-Const )	IEC60584	-200 °C	800 °C
Type-L ( Fe-Const )	IEC60584	-200 °C	900 °C
Type-K ( NiCr-Ni )	IEC60584	-200 °C	1200 °C
Type-E ( Cr-Const )	IEC60584	-200 °C	1200 °C
Type-N ( Nicrosil-Nisil )	IEC60584	0 °C	1200 °C
Type-S ( Pt%10Rh-Pt )	IEC60584	0 °C	1500 °C
Type-R ( Pt%13Rh-Pt )	IEC60584	0 °C	1600 °C
Type-B ( Pt%18Rh-Pt )	IEC60584	0 °C	1800 °C
Pt-100	DIN 43760	-200 °C	850 °C

### Device Dimensions

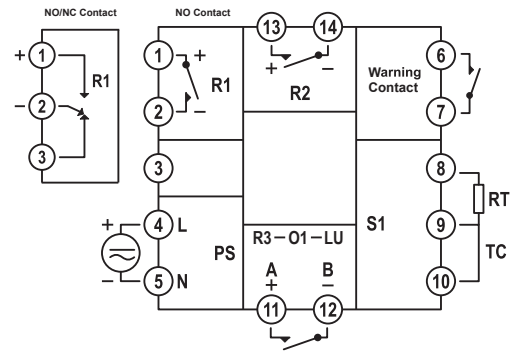


Panel Cutting Dimensions = 45 ± 0,5 mm x 45 ± 0,5 mm

## Technical Specifications

<b>Power Supply ( PS )</b>	100-240 Vac/dc +10%-15% Universal 24 Vac/dc +10%-20% Universal
<b>Power Consumption</b>	3W, 5VA
<b>Universal Sensor Input ( S1 )</b>	Thermocouple = B, E, J, K, L, N, R, S, T, U Resistance Thermometer = Pt-100
<b>Analog Input Impedance</b>	Thermocouple, mV = 10MΩ Current = 10Ω
<b>Analog Output ( O1 )</b>	Current = 0/4-20mA 20-4/0mA ( RL≥500Ω ) Voltage = 0/2-10V ( RL≥1MΩ )
<b>Relay Output ( R1,R2,R3 )</b>	Contact ( R1,R2 ) = 250VAC 10A Contact ( R3 ) = 250VAC 5A Logic Output = 24Vdc 20mA
<b>Contact Lifetime</b>	No Load = 10.000.000 Switching 250V,10A Resistive Load = 1.000.000 Switching
<b>Memory</b>	100 Years, 100.000 Renewals
<b>Accuracy</b>	+/- 0,2%
<b>Sampling Time</b>	100 ms
<b>Environment Temperature</b>	Working = -10...+55°C Storage = -20...+65°C
<b>Protection Class</b>	Front Panel = IP54 Trunk = IP20
<b>Dimensions</b>	Width = 48 mm Height = 48 mm Depth = 108 mm
<b>Panel Cutting Dimensions</b>	45 +/- 0,5 mm x 45 +/- 0,5 mm
<b>Weight</b>	154 gr

## Modular Structure and Connection Diagram



## Product Code

OC440 - / 0 / 0

<b>Power Supply :</b>	PS
0 = 100-240Vac (Universal) 1 = 24Vac/dc	
<b>Communication Module :</b>	LU
0 = N/A 3 = RS485 (MODBUS) Communication Module	
<b>Analog Output Module :</b>	O1
0 = N/A 1 = 0/4-20mA Current Output 2 = 0/2-10Vdc Voltage Output	
<b>R1 Output Module :</b>	R1
0 = N/A 1 = NO Contact 2 = 24V Logic Output ( to drive SSR ) 3 = NO/NC Contact	
<b>R2,R3 Output Modules :</b>	R2-R3
0 = N/A 1 = NO Contact 2 = 24V Logic Output ( to drive SSR )	

Note : In this model, Communication module, Analog output module and R3 output module cannot be used at the same time.  
Only one of these modules can be selected.