

The economical Konbo 480 is a great choice when expensive, advanced features aren't necessary. The controller has widespread use in a variety of industrial applications.

The Low Cost, Easy-to-Use Controller

480

The Konbo 480 1/16 DIN temperature controller

The Konbo 480 is our most economical, general purpose controller. It offers a simple-to-operate dial indicator and features both on/off and time-proportional controls. The 480 is perfect for applications where more expensive advanced features aren't needed and for OEM applications which call for easy installation. Industrial control applications for the 480 include plastics and rubber molding, textile processing, food baking, hot stamping, and control of flow ordering machinery.

A number of features make this controller an excellent choice. The 480 offers automatic thermocouple cold junction compensation to provide accurate control regardless of ambient conditions. Open sensor protection prevents your system from overheating in the event of sensor failure. The controller operates at either 110 or 220V AC, and can be ordered in either Fahrenheit or Celsius configurations. The 480 accepts input from thermocouple (J or K) or RTD sensors.

And what else? There's more! A list of some of the key features and how they'll benefit you is shown on the following page.

480 SPECIFICATIONS

Input:
Thermocouple: J (IC) or K (CA)
RTD: Pt100 (DIN)

Cold Junction Compensation:
Automatic

Input Break Protection:
Output OFF on open sensor

Contact Output:
SPDT relay, 5A at 120V AC or 3A at 240V AC, resistive load

Service Life:
Mechanical: 10,000,000 operations min
Electrical: 100,000 operations min

Voltage Output:
SSR Drive Voltage 12V DC

Control Mode:
Jumper selectable at connector between ON-OFF and time proportioning or ON-OFF and PD control

ON-OFF Differential:
0.5% FS, symmetrical around setpoint

Proportional Band:
2.5% FS, symmetrical around setpoint

Proportional Cycle:
Approx. 20 sec (relay output) or
2 sec (SSR drive output)

Setting Mode:
Analog via single-turn, wire-wound, precision potentiometer

Setting Accuracy:
Within ±2% of FS

Setting Scale length:
Approx. 90mm

Output Indicator:
Red LED

Power Supply Voltage:
110/220V AC, 50/60Hz, user-selectable at connector

Supply Voltage Variation:
90–110% of rated voltage

Power consumption:
Less than 2V A

Ambient Operating Temperature:
0°C-+50°C

Ambient Operating Humidity:
45–85% RH

Insulation:
20MΩ Min(500V DC)

Dielectric Strength:
1,500V AC, 50/60Hz for 1 min

Vibration:
10–55Hz, amplitude 0.5mm

Net Weight:
Approx. 200g including panel mount bracket

Mounting:
Panel mount. Requires 11-pin socket

MODEL CONFIGURATION

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INPUT & RANGE			
Set Ranges	Code Number For Range		
	J	K	Pt100
-100 to +100°C	01		16
0 to 100°C	02		18
0 to 400°C	04	09	20
0 to 1000°C		11	
0 to 1200°C		12	
0 to 200°F	05		22
0 to 600°F	06	13	24
0 to 800°F	07		
0 to 1000°F	08	14	
600 to 1600°F		15	

CONTROL OUTPUT	
Relay	1
SSR Drive voltage	2

CONTROL MODE	
ON-OFF/P	4
ON-OFF/PD	5

J: Iron Constantan, **K:** Chromel Alumel, **Pt100:** α=0.00385 Ω/Ω/°C.
11-pin socket required.

ACCESSORIES:	Part #
11-Pin Socket	
Screw-down type (terminals on back)	PG-11
Screw-down type (UL) (terminals on back)	TP311SB
Screw-down type (UL) (terminals on front)	TP311S

KONBO 480 BENEFITS:

Inputs—J, K, or RTD

Outputs—relay or DC voltage pulse

Choice of °F or °C temperature scale

Cold junction compensation—ensures accuracy over a wide range of ambient temperatures

Open sensor protection—prevents overheating in the event of sensor failure

On/Off and time proportioning control—allows you to choose the mode of control operation

Solid-state electronics—provides reliable and accurate performance

Plug-in or panel-mounted installation—choose the method of installation