

1/16 DIN Temperature/ Process Limit Controllers



CN7400



- ✓ Dual Display
- ✓ FM-Approved Limit
- ✓ Universal Inputs
- ✓ Illuminated Keys
- ✓ Remote Reset Capability

The CN7400 Series temperature/process FM-approved limit controllers set a new standard in 1/16 DIN limit controls. They have universal inputs (10 thermocouple and 4 RTD types, voltage, and current). Standard features include remote reset capability. Outputs include normally open (form "A") and normally closed (form "B") relays. Form "A" and form "B" relays can be set up for each setpoint output and logically linked to emulate a form "C" output.



CN7430 shown actual size.

Inputs

Input Types	Range
K Thermocouple	-200 to 2500°F (-129 to 1371°C)
J Thermocouple	-100 to 1600°F (-73 to 871°C)
T Thermocouple	-350 to 750°F (-212 to 398°C)
E Thermocouple	-100 to 1800°F (-73 to 982°C)
N Thermocouple	-100 to 2372°F (-73 to 1300°C)
R Thermocouple	0 to 3200°F (-17 to 1760°C)
S Thermocouple	0 to 3200°F (-17 to 1760°C)
B Thermocouple	75 to 3308°F (24 to 1820°C)
L (J DIN) Thermocouple	-100 to 1600°F (-73 to 871°C)
C Thermocouple	0 to 4208°F (-17 to 2320°C)
Pt100 RTD (0.00385)	-200 to 875°C (-328 to 1607°F)
Pt100 RTD (0.00392)	-200 to 875°C (-328 to 1607°F)
RTD, 120 Ω Nickel (0.00628)	-80 to 320°C (-112 to 608°F)
RTD, Pt1000 (0.00385)	-200 to 875°C (-328 to 1607°F)
0 to 20 mA*, 4 to 20 mA*	-1999 to 9999
0 to 10Vdc*, -10 to 10 Vdc*, -10 to 10 mVdc*	-1999 to 9999

Note: All thermocouple and RTD inputs can be set for 0.1° display. If temperature goes above 999.9° or below -199.9°, the display will return to whole-degree resolution.

* **Process Input Types:** The 0 to 20 mA_{dc}, 4 to 20 mA_{dc}, 0 to 10 V_{dc}, 2 to 10 V_{dc}, and -10 to 10 mV_{dc} inputs are fully scalable from a minimum of 100 counts span placed anywhere within the range of -1999 to 9999. Decimal point position is adjustable from the zero place (9999), tenths (999.9), hundredths (99.99) or thousandths (9.999).

Specifications

Selectable Input: 10 thermocouple, 4 RTD, DC voltage or DC current

Display: Two 4-digit, 7-segment, 7.62 mm H (0.3") LEDs

Accuracy: ±0.25% of span, ±1 least significant digit

Supply Voltage: 100 to 240 Vac, nominal, 10 to 15%, 50 to 400 Hz; single phase; 132 to 240 Vdc, nominal, 10 to 20%

Power Consumption: 5 VA max

Operating Temperature: -10 to 55°C (14 to 131°F)

Memory Backup: Non-volatile memory

Relay Control Output Ratings:

Resistive: SPST, 3 A @ 240 Vac

Inductive: 1.5 A @ 240 Vac

Weight: 227 g (8 oz)

Panel Cut-Out: 45 mm² (1.77 in²)

Bezel: 48 mm² (1.9 in²)

Maximum Panel Thickness: 6.35 mm (0.25")

Panel Depth: 133 mm (5.24")

To Order

Model No.	Description
CN7430	Single output, NO relay
CN7434	Dual output, NO relay, NC relay

Comes complete with operator's manual.

Ordering Examples: CN7430, single output controller with NO relay.

CN7434-PV1, dual output controller, NO relay/NC relay, 0 to 20 mA isolated retransmission output.

Option (Additional Cost)

Ordering Suffix	Description
-PV1	0 to 20 mA isolated retransmission output

Accessory (Field Installable)

Model Number	Description
CNQUENCHARC	Noise suppression RC snubber (2 leads), 110 to 230 Vac