

# Deviation Display Controllers

## Miniature 1/16 DIN Size

CN800 Series



- ✓ J, K, T, R, S or RTD Input
- ✓ Easy-to-Use—No Programming Required
- ✓ Proportional or On/Off Control
- ✓ Socket Mount or Push-On Terminals

### Specifications

**Power:** 115/230 Vac, user-selectable; 50 to 60 Hz; preset to 115 Vac

**Power Consumption:** 3 VA

**Output 1:** SPDT mechanical relay, rated 5 A at 250 Vac, resistive load

**Output 2:** SPDT mechanical relay, rated 3 A at 250 Vac, resistive load

**Setpoint 1:** Front dial adjustment

**Setpoint 2:** Screwdriver adjustment within +10% of temperature range relative to setpoint 1

**Accuracy:** 2% FS, within 5 to 95% or range

**Accuracy Reference Conditions:** 22°C ±2°C (72°F ±3.6°F), after 30 minutes warm-up time

**Proportional Band:** 3% FS fixed

**Cycle Time:** 25 s, nominal, fixed

**On-Off Deadband:** 2% FS, fixed

**Input Types:** J, K, T, R, S thermocouples; 100 Ω Pt RTD, 2- or 3-wire

**Sensor Burnout:** Upscale, automatic

**Common Mode:** Negligible effect to 264 Vrms, 50/60 Hz

**Normal Mode:** Negligible effect to FS mV, 50/60 Hz

**Ambient Temperature Range:** 0 to 50°C (32 to 122°F)

**Dimensions:** 48 H x 48 W x 97 mm D (1.89 x 1.89 x 3.8")

**Panel Cutout:** 45 mm (1.772") square

**Weight:** 250 g (9 oz)



CN873K-500F shown actual size.

KTSS-18U-6 thermocouple probe, sold separately. Visit [omega.com/ktss\\_jtss\\_chb](http://omega.com/ktss_jtss_chb) for pricing and details.



OMEGACARE<sup>SM</sup> extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE<sup>SM</sup> covers parts, labor, and equivalent loaners.



### Input Types and Ranges

| Range Code | Input Type | Temp Range    | Dial Graduation |
|------------|------------|---------------|-----------------|
| J-200F     | J          | 0 to 200°F    | 4°              |
| J-300F     |            | 0 to 300°F    | 5°              |
| J-300C     |            | 0 to 300°C    | 5°              |
| J-500F     |            | 0 to 500°F    | 10°             |
| J-1200F    |            | 0 to 1200°F   | 20°             |
| K-500F     | K          | 0 to 500°F    | 10°             |
| K-1200F    |            | 0 to 1200°F   | 20°             |
| K-1200C    |            | 0 to 1200°C   | 20°             |
| T-NF       | T          | -100 to 200°F | 5°              |
| T-NC       |            | -100 to 200°C | 5°              |
| T-300C     |            | 0 to 300°C    | 5°              |
| R-1600C    | R          | 0 to 1600°C   | 20°             |
| S-1600C    | S          | 0 to 1600°C   | 20°             |
| RTD-NC     | RTD        | -100 to 200°C | 5°              |
| RTD-500C   |            | 0 to 500°C    | 10°             |

### To Order Visit [omega.com/cn800](http://omega.com/cn800) for Pricing and Details

| Model No. | Output 1 Type | Output 2 Type | Rear Connection |
|-----------|---------------|---------------|-----------------|
| CN872(*)  | Prop.         | —             | socket          |
| CN873(*)  | Prop.         | —             | push-on         |
| CN874(*)  | Prop.         | On/off        | socket          |
| CN882(*)  | On/off        | —             | socket          |
| CN883(*)  | On/off        | —             | push-on         |
| CN884(*)  | On/off        | On/off        | socket          |

### Accessory

| Model No. | Description          |
|-----------|----------------------|
| DPP-4     | 1/16 DIN panel punch |

Comes complete with operator's manual.

\* Specify range code from input types and ranges table

**Ordering Examples:** CN873T-NC, proportional controller, with single output, push-on connections, for Type T thermocouples, with an operating range of -100 to 200°C. OCW-3 OMEGACARE<sup>SM</sup> extends 2-year warranty to a total of 5 years.

CN882J-300F, on-off controller, with single output, socket connection for Type J thermocouples, with an operating range of 0 to 300°F.

