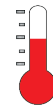# B-DE Series

*Temperature Controls*

## Single Set-Point, Precise Control

**Large (.56" high), easy to read LED display**

**Vapor tight , IP21, front panel prtection**

**±.25% full span, single digit accuracy**

**Single phase only.**

Adjustable temperature range from -40°F(-40°C) to 999°F(538°C)

cULus

| B-DE SERIES, DIGITAL CONTROLS | | | | | |
|---|---|---|---|---|---|
| MODEL NUMBER | VOLTS | MAX. AMPS | REPL. RELAY P/N | REPL. SENSOR P/N | SHIP WGT. Lbs./(kg) |
| B-DE301 | 120 | 30 | PRD-30-1 | RTD1000 | 16 |
| B-DE302 | 240 | 30 | PRD-30-2 | RTD1000 | (7.3) |

Control consists of gasketed plastic enclosure, thermostat, and 30 amp power relay

PROCESS TECHNOLOGY

ISO 9001:2015 WITH DESIGN CERTIFIED

## Features & Values

- Large (.56" high), easy to read LED display. Provides precise control for consistent plating and etch rates in most aqueous processes

- Fluoropolymer (FEP) covered 10-foot (3m), 1000-ohm platinum RTD sensor included standard with the control. Provides extended service in corrosive liquids and can be lengthened with ordinary copper wire

- NEMA 1, IP21, flame retardant and gasketed plastic enclosure with stainless steel hardware

- 30 amp switching capacities for 120 - 240 volts

- 20°F(-7°C) to 140°F(60°C) ambient temperature range

- ±.25% full span, single digit accuracy

- Single phase only

- Pre-wired outlets for plug-in heaters (16 amp max load)

## Specifications

| | |
|---|---|
| **Temperature Range** | Adjustable temperature range from -40°F(-40°C) to 999°F(538°C). |

### Options

- Scalable voltage and current inputs
- Three wire 100-ohm RTD sensors
- Special sensors required for temperatures above 500°F(260°C)
- 25-foot (7.6m) and 50-foot (15.2m) sensors
- P2, P3 or P8 thermal protection systems
- Integrated liquid level control components
- Front panel mounted digital timers
- Ground fault protection of equipment (GFPE) circuitry
- Combination controls available for three phase service and larger heater loads
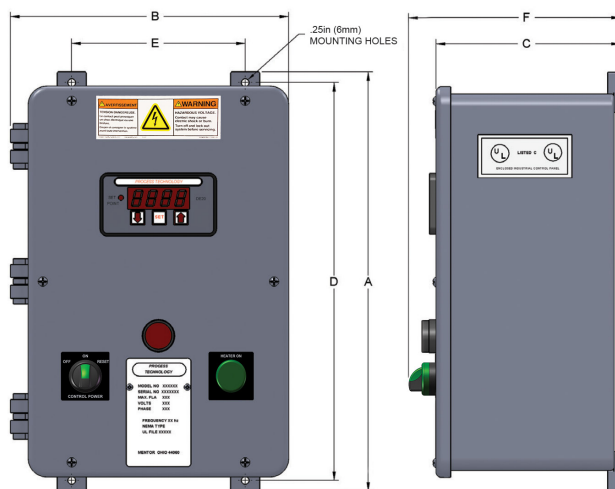- NEMA 4/4X enclosure (with internal heater for outdoor use

| | |
|---|---|
| **Saftey Features** | Pre-wired P1 terminal blocks<br>Non-volatile memory<br>Programmable high alarm shutdown<br>Sensor short and break protection<br>Security code restricted menu<br>Programmable high set point limit |
| **Certifications** | cULus |

## Dimensions



| Dimensions | 30 Amps |
|---|---|
| A -Overall height w/mounting | 14.375" (365mm) |
| B - Overall width | 9.63" (245mm) |
| C - Enclosure Depth | 6.25" (159mm) |
| D - Enclosure Height | 13.625" (346mm) |
| E - Mounting hole centers | 6" (152mm) |
| F - Overall Depth | 7.25" (184mm) |

*Box dimensions may vary with options

## Model Number Breakdown

| B- | DE | 30 | 0 | E | -L |
|---|---|---|---|---|---|
| Control Type | Series | Amperes | Voltage | Control Options | Standard Options |
| B- | DE | 30 | 1 - 120 | E = Easyplug | -R = RTD 100 |
| | | | 2 - 240 | -VC = 100 ohm, volt, current board | -L = No sensor |
| | | | 8 - 208 | | -H = high temperature sensor |
| | | | 9 - 220 | | -25 = 25 foot RTD sensor |
| | | | 0 - 200 | | -50 = 50 foot RTD sensor |
| | | | | | -F = FEP sleeved sensor |
| | | | | | -P2 = thermal protector 2 circuitry |
| | | | | | -P3 = thermal protector 3 circuitry |
| | | | | | -P8 = thermal protector 8 circuitry |
| | | | | | -*LC** = conductive liquid level |
| | | | | | -*ESP** = capacitive liquid level |
| | | | | | -D = digital timer |
| | | | | | -G = ground fault protection |
| | | | | | -N = NEMA 4X |
| | | | | | -NH = NEMA 4X with heater |

**PROCESS TECHNOLOGY**

DS10232018