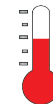# B-DQ Series

Temperature Controls

Dual Set-Point, Precise Control

- Easy to read (.56" high) dual setpoint LED display

- Provides precise control for consistent plating and etch rates in most aqueous processes

- ±.25% full span, single digit accuracy

- Single phase only

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

cULus

MODEL NUMBER	VOLTS	MAX. AMPS	REPL. RELAY P/N	REPL. SENSOR P/N	SHIP WGT. Lbs./(kg)
B-DQ301	120	30	PRD-30-1	RTD1000	16
B-DQ302	240	30	PRD-30-2	RTD1000	(7.3)

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

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ISO 9001:2015 WITH Design certified

Features & Values

- Easy to read .3" (7.6mm) dual LED displays. Two set points (heating and cooling). Provides precise control for consistent plating.

- 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 to 240 volts

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

- ±.25% full span, single digit accuracy

- Single phase only

Specifications

Temperature Range   Adjustable temperature range from -40°F(-40°C) to 999°F(538°C) (high temperature sensor required).

Options

- Scalable voltage and current inputs
- 4-20 mA outputs for process recording
- 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
- Pre-wired outlets for plug-in heaters (16 amp max load)
- Ground fault protection of equipment (GFPE) circuitry
- Combination controls available for three phase service and larger heater loads
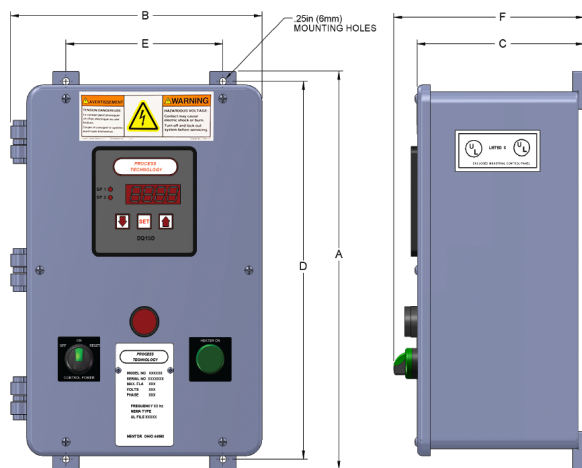- NEMA 4/4X enclosure (with internal heater for outdoor use

Safety Features
- Pre-wired P1 terminal blocks
- Non-volatile memory
- Programmable high or low temperature alarm output
- Sensor short and break protection
- Programmable high set point limit
- Security code restricted menu.

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)

Model Number Breakdown

B-	DQ	30	2	E	-H
Control Type	Series	Amperes	Voltage	Control Option	Standard Options
B -	DQ	30	1 - 120	E = Easyplug	-R = RTD 100
			2 - 240	-MA = Milliamp output	-H = High temp sensor
			8 - 208		-L = No sensor
			9 - 220		-__R = Rigid RTD (specify length)
			0 - 200		-25 = 25 foot RTD sensor
					-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
					-G = ground fault protection
					-D = digital timer
					-N = NEMA 4X
					-NH = NEMA 4X with heater

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