



TEMPERATURE CONTROLS



DQ SERIES, DIGITAL COMBINATION CONTROLS						
MODEL NUMBER	VOLTS	MAX. AMPS	REPL. RELAY P/N	REPL. TRANS.	REPL. SENSOR P/N	SHIP WGT. Lbs./kg)
C-DQ202	240	20	AHD-20-1	HDD50 2/1	RTD1000	16
C-DQ204	480	20	AHD-20-1	HDD50 4/1	RTD1000	(7.3)
C-DQ302	240	30	AHD-30-1	HDD50 2/1	RTD1000	16
C-DQ304	480	30	AHD-30-1	HDD50 4/1	RTD1000	(7.3)
C-DQ502	240	50	AHD-50-1	HDD50 2/1	RTD1000	17
C-DQ504	480	50	AHD-50-1	HDD50 4/1	RTD1000	(7.7)
C-DQ752	240	75	AHD-75-1	HD100 2/1	RTD1000	23
C-DQ754	480	75	AHD-75-1	HD100 4/1	RTD1000	(10.4)
C-DQ902	240	90	AHD-90-1	HD100 2/1	RTD1000	25
C-DQ904	480	90	AHD-90-1	HD100 4/1	RTD1000	(11.3)
C-DQ1202	240	120	AHD-120-1	HD100 2/1	RTD1000	27
C-DQ1204	480	120	AHD-120-1	HD100 4/1	RTD1000	(12.2)
C-DQ1502	240	150	AHD-150-1	HDD150 2/1	RTD1000	33
C-DQ1504	480	150	AHD-150-1	HDD150 4/1	RTD1000	(15)

Combination control consists of gasketed plastic enclosure, thermostat, 3 pole contactor and transformer.

DQ Series, Combination Control Features and Benefits

IMPROVES PROCESS CONTROL:

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

TEMPERATURE SENSOR:

- ◆ 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.

CORROSION RESISTANT ENCLOSURE:

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

CAPACITIES:

- ◆ Large switching capacities from 20 to 150 amps for up to 600 volts.
- ◆ Adjustable temperature range from -40°F(-40°C) to 999°F(538°C).
- ◆ ±.25% full span, single digit accuracy.
- ◆ 20°F(-7°C) to 140°F(60°C) ambient temperature range.
- ◆ Single or three phase.
- ◆ Control transformer included.

CERTIFICATIONS: cULus

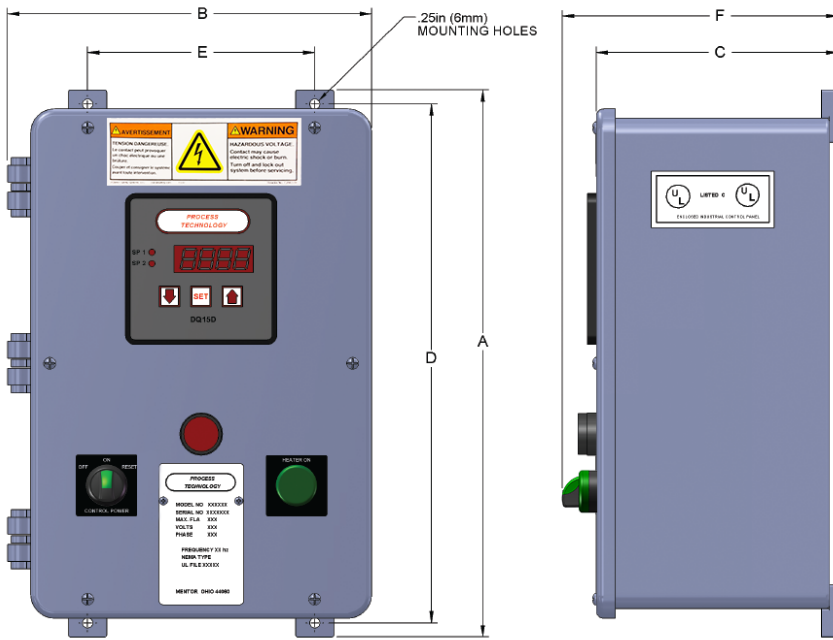
SAFETY FEATURES:

- ◆ Pre-wired P1 terminal blocks.
- ◆ Non-volatile memory.
- ◆ Programmable high alarm shutdown.
- ◆ Sensor short and break protection.
- ◆ Programmable high set point limit.
- ◆ Security code restricted menu.

OPTIONS AVAILABLE (consult factory):

- ◆ 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.
- ◆ Ground fault protection of equipment (GFPE) circuitry.
- ◆ NEMA 4/4X enclosure (with internal heater for outdoor use).

DIMENSIONS



Dimensions	20-50 Amps	75-90 Amps	120-150 Amps
A	14.375" (365mm)	16.04" (408mm)	18.04" (458mm)
B	9.63" (245mm)	14.04" (357mm)	16.04" (408mm)
C	6.25" (159mm)	9.28" (236mm)	9.28" (236mm)
D	13.625" (346mm)	15.27" (388mm)	17.27" (439mm)
E	6" (152mm)	10.56" (268mm)	12.56" (319mm)
F	7.25" (184mm)	10.28" (261mm)	10.28" (261mm)

*Box dimensions may vary with options.

DQ COMBINATION CONTROL ORDERING INFORMATION

Control Type	Series	Amperes	Voltage	Control Option	Standard Options
C - Combo	DQ	20 30 50 75 90 120 150	2 - 240 3 - 380 4 - 480 5 - 415 6 - 600 7 - 400 8 - 208 9 - 220 0 - 200	E = Easyplug -M = Milliamp output	-R = RTD 100 -H = High temp sensor -L = No sensor -__R = Rigid RTD (specify length) -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 -D = digital timer -G = ground fault protection -N = NEMA 4X -NH = NEMA 4X with heater

ORDERING EXAMPLE:

C-DQ302-P2

DQ combination control, 30 amps, 240 volt, P2 thermal protection.

