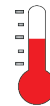# C-DE Series

Temperature Controls

Single Set-Point, Precise Control

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

Large switching capacities from 20 to 125 amps for up to 600 volts

±.25% full span, single digit accuracy

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

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

cULus

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C-DE SERIES, DIGITAL COMBINATION CONTROLS						
MODEL NUMBER	VOLTS	MAX. AMPS	REPL. RELAY P/N	REPL. TRANS.	REPL. SENSOR P/N	SHIP WGT. Lbs./(kg)
C-DE202	240	20	AHD-20-1	HDD50 2-4/1	RTD1000	16
C-DE204	480	20	AHD-20-1	HDD50 2-4/1	RTD1000	(7.3)
C-DE402	240	40	AHD-40-1	HDD50 2-4/1	RTD1000	17
C-DE404	480	40	AHD-40-1	HDD50 2-4/1	RTD1000	(7.7)
C-DE802	240	80	AHD-80-1	HDD100 2-4/1	RTD1000	25
C-DE804	480	80	AHD-80-1	HDD100 2-4/1	RTD1000	(11.3)
C-DE1252	240	125	AHD-125-1	HDD300 2-4/1	RTD1000	33
C-DE1254	480	125	AHD-125-1	HDD300 2-4/1	RTD1000	(15)

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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.

➢ Large switching capacities from 20 to 125 amps for up to 600 volts, single or three phase. Larger capacities available, consult factory.

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

➢ ±.25% full span, single digit accuracy

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

Specifications

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

Options

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

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
Certifications	cULus

Dimensions

.25in (6mm) MOUNTING HOLES
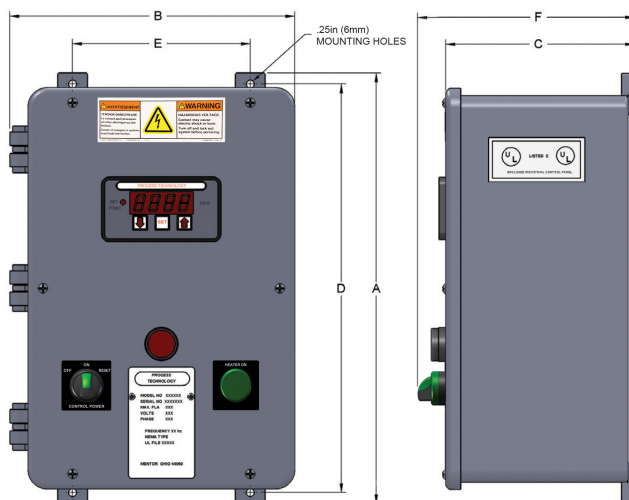
Dimensions	20-40 Amps	80 Amps	125 Amps
A	14.375" (365mm)	18" (457mm)	20.25" (514mm)
B	9.63" (245mm)	13.75" (349mm)	15.75" (400mm)
C	6.25" (159mm)	7.625" (194mm)	8.375" (213mm)
D	13.625" (346mm)	17" (432mm)	19.25" (489mm)
E	6" (152mm)	10" (254mm)	12" (305mm)
F	7.03" (175mm)	8.4" (213mm)	9.15" (232mm)

*Box dimensions may vary with options

Model Number Breakdown

C	DE	20	5	E	-L
Control Type	**Series**	**Amperes**	**Voltage**	**Control Options**	**Standard Options**
C - Combo	DE	20	2 - 240	E = Easyplug	-R = RTD 100
		40	3 - 380	-VC = 100 ohm, volt, current board	-L = No sensor
		80	4 - 480		-H = high temperature sensor
		125	5 - 415		-25 = 25 foot RTD sensor
			6 - 600		-50 = 50 foot RTD sensor
			7 - 400		-F = FEP sleeved sensor
			8 - 208		-P2 = thermal protector 2 circuitry
			9 - 220		-P3 = thermal protector 3 circuitry
			0 -200		-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

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