

# C-DSL Series

## PRODUCT DATA SHEET

### Temperature Controls

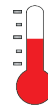
#### Dual Set-Point, Precise Control

Easy to read .3"(7.6mm)  
dual LED displays

Vapor tight , IP21, front  
panel prtction

±.25% full span, single  
digit accuracy

Single or Three phase



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



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C-DSL SERIES, DIGITAL COMBINATION CONTROLS						
CONTROL MODEL NUMBER	VOLTS	MAX. AMPS	REPL. RELAY P/N	REPL. TRANS. P/N	REPL. SENSOR P/N	SHIP WGT. Lbs./(kg)
C-DSL202	240	20	AHD-20-1	HDD50 2/1	RTD1000	16
C-DSL204	480	20	AHD-20-1	HDD50 4/1	RTD1000	(7.3)
C-DSL402	240	40	AHD-40-1	HDD50 2/1	RTD1000	17
C-DSL404	480	40	AHD-40-1	HDD50 4/1	RTD1000	(7.7)
C-DSL802	240	80	AHD-80-1	HD100 2/1	RTD1000	25
C-DSL804	480	80	AHD-80-1	HD100 4/1	RTD1000	(11.3)
C-DSL1252	240	125	AHD-125-1	HDD300 2/1	RTD1000	33
C-DSL1254	480	125	AHD-125-1	HDD300 4/1	RTD1000	(15)

Control consists of gasketed plastic enclosure, thermostat, contactor and transformer

**PROCESS  
TECHNOLOGY**

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 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
- 20°F(-7°C) to 140°F(60°C) ambient temperature range
- ±.25% full span, single digit accuracy
- Single or three phase
- Auto tune PID, PID or On/Off control with Auto/Manual operation (Solid state relay required - these features are non-UL)

## Specifications

**Temperature Range** Adjustable temperature range from -328°F(-200°C) to 4208°F(2320°C).

### Options

- Scalable voltage and current inputs
- 4-20 mA or 0-10VDC outputs for process recording
- 4-20 mA or 15VDC control outputs.
- RS485 communication protocol
- Three wire 100-ohm RTD sensors
- Type J, K, T, & R thermocouples
- 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 (some sizes)
- Ground fault protection of equipment (GFPE) circuitry.
- NEMA 4/4X enclosure (with internal heater for outdoor use)

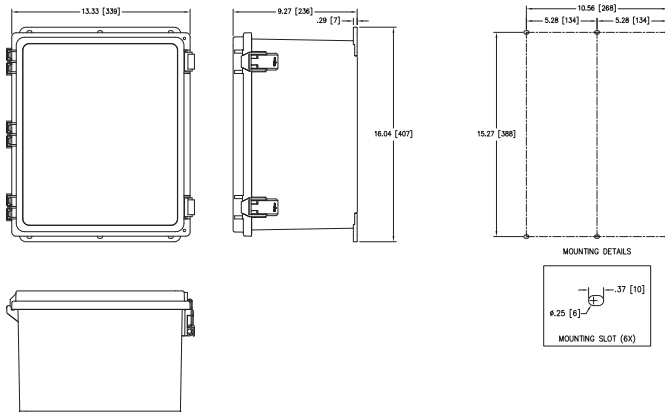
### Safety Features

- 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

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## Dimensions



Dimensions	20-40 Amps	80-125 Amps
<b>A - Overall height</b>	16.04" (408mm)	18.04" (458mm)
<b>B - Overall Width</b>	14.04" (357mm)	16.04" (408mm)
<b>C - Enclosure Depth</b>	9.28" (236mm)	9.28" (236mm)
<b>D - Enclosure Height</b>	15.27" (388mm)	17.27" (439mm)
<b>E - Mounting hole centers</b>	10.56" (268mm)	12.56" (319mm)
<b>F - Overall Depth</b>	10.28" (261mm)	10.28" (261mm)

\*Box dimensions may vary with options

## Model Number Breakdown

C	DSL	20	5	E	D
<b>Control Type</b>	<b>Series</b>	<b>Amperes</b>	<b>Voltage</b>	<b>Control Option</b>	<b>Standard Options</b>
C - Combo	DSL	20	2 - 240	E = Easyplug	-R = RTD100
		40	3 - 380	MAR = Milliamp output recording	-J = J Type TC
		80	4 - 480	RS = RS485 output	-K = K Type TC
		125	5 - 415	VC = 15VDC control output NC	-L = Less sensor
			6 - 600	VC-RS = 15VDC output/RS485 output	-H = High temp sensor
			7 - 400	VR = Voltage output recording	-25 = 25 foot sensor
			8 - 208		-50 = 50 foot sensor
			9 - 220		-F = FEP sleeved sensor
			0 - 200		-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

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