



DCEG-100W-P3



Available Models¹

- DCEG-40W-P3
- DCEG-60W-P3
- DCEG-75W-P3
- DCEG-100W-P3

Part Number Breakdown

Example: DCEG-100W-P3

Series	Power	Output Current	Feature
DCEG [DiodeDrive, Constant Current, Extruded Aluminum, IP67]	40W [40W]	P [Programmable]	3 [3-in-1 Dimming]
	60W [60W]		
	75W [75W]		
	100W [100W]		

Overview

The Programmable Constant Current Driver can be pre-programmed to a custom output level and minimum dimming percentage. Select an output level (see specifications) and a minimum dimming percentage between 10% and 75%. The driver also has 3-in-1 dimming capabilities, including 0-10V, 10V PWM, and a potentiometer. It has an input range of 100-277 VAC and an output voltage range of 27-54 VDC. Purchase with a handheld programmer to thoroughly customize the driver.

Features

- Custom Output Current up to 2800 mA
- 27-54 VDC output
- Dimming: 0-10V, 10V PWM, Potentiometer
- IP67 Waterproof construction
- Class 2 supply

Product Details

- Durable aluminum housing
- Input: 100-277 VAC
- Output: 27-54 VDC
- 3-in-1 dimmable

Certifications and Compliances

- UL Listed - UL 8750 (FKSZ)
- FCC and SELV compliant



Applications

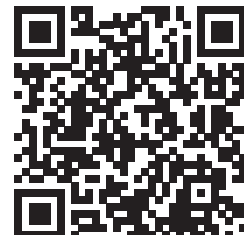
- Home Interiors
- Light Bars
- Sign Lighting
- Stage & Theaters
- Strip Lights
- Trade Shows
- Under-Cabinets

Optional Accessories

- Handheld programmer (CT-001)

Warranty

- 5-year warranty





DCEG Constant Current Drivers

Programmable Power Supply Specifications

Specifications

MODEL		DCEG-40W-P3	DCEG-60W-P3	DCEG-75W-P3	DCEG-100W-P3
OUTPUT					
Output Power		40W	60W	75W	100W
Default Output Current		950mA	1400mA	1700mA	2200mA
Output Current Range ($\pm 5\%$)		500-1050mA	700-1500mA	1000-2100mA	1300-2800 mA
Efficiency (TYP)	120 VAC	85%	86%	87%	88%
	230 VAC	87%	88%	88%	90%
Output Voltage Range		27-54 VDC			
No Load Output Voltage (max)		65 VDC			
Ripple Current		<5%			
Line Regulation		3%			
Load Regulation		3%			
Turn-on Delay Time		0.5S Max. @ 230VAC / 1.0S Max. @120VAC			
INPUT					
Input Voltage		100-277 VAC			
Input Frequency		50/60Hz			
Input Wattage (max)		45W	70W	100W	120W
Input Current (TYP)	@100-277 VAC full load	450mA	700mA	1000mA	1200mA
Power Factor (TYP) full load	120 VAC	0.97	0.97	0.97	0.97
	230 VAC	0.95	0.95	0.95	0.95
Standby Power Consumption		0.5W Max. @120VAC dimming shutdown			
Inrush Current		75A Max. @230VAC, 25° C cold start			
Total Harmonic Distortion		THD<15% @100-240VAC, full load			
DIMMING					
Dimming Control		0-10V, 10V PWM, and Potentiometer (100K Ω resistance)			
PROTECTIONS					
Output Overvoltage		Protection mode when driver exceeds the limit range, auto-recovery after fault condition is removed			
Short Circuit		Output short circuit causes input power to be reduced, auto-recovery after fault condition is removed			
Over Temperature		Drop current mode, auto-recovery after over-temperature condition is removed			
Open Circuit		When LED load has an open circuit, driver enters protection mode, power supply returns to regular operation after resolving the fault or restarting			





DCEG Constant Current Drivers

Programmable Power Supply Specifications

Specifications

ENVIRONMENTAL	
IP Rating	IP67
Environmental Rating	Suitable for Wet Locations, Waterproof
Ambient Operating Temperature	-40 to 50°C (-40 to 122°F)
Operating Humidity	10-90% relative humidity, non-condensing
Tcase (max)	90°C (194°F)
Storage Temperature	-40 to 75°C (-40 to 167°F)
Storage Humidity	10-90% relative humidity, non-condensing (sea level to 2000m)
Vibration	10 - 500Hz, 1.0G (depth of 3.5mm) for 1 hour (each X, Y, Z vertical axes)
SAFETY	
Standards	UL8750, Class 2 power supply
Insulation Resistance	≥10MΩ, I/P-O/P, 500VDC
Ground Resistance	≤0.1Ω, 25A/1min.
Leakage Current	≤0.75mA @277VAC
EMC	FCC part 15
MECHANICAL	
MTBF	≥ 200,000H@ 25°C, 230VAC, 80% load. [MIL-HDBK-217F]
Housing Material	Aluminum

Wire Specifications

	INPUT			OUTPUT			0/1-10V DIMMING		
	Function	Color	Gauge	Function	Color	Gauge	Function	Color	Gauge
DCEG SERIES	AC L	Black	18AWG	DC+	Red	18AWG	Dim+	Purple	22AWG
	AC N	White	18AWG	DC-	Black	18AWG	Dim-	Pink	22AWG
	Ground	Green	18AWG	/	/	/	/	/	/





DCEG Constant Current Drivers

Programmable Power Supply Specifications

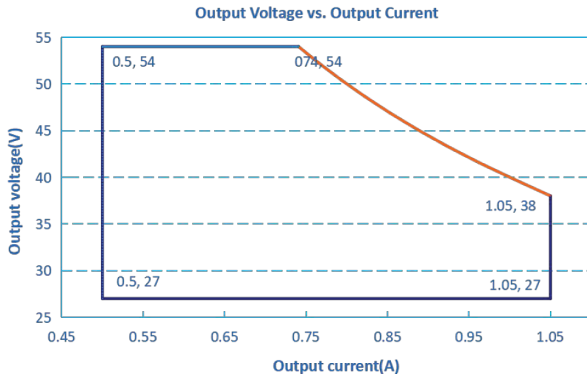
Dimming Specifications

DIMMING TYPE	PARAMETER	MIN.	TYP.	MAX.	REMARK
0-10V Positive Logic	Signal Level	0V	-	10V	Max voltage no more than 12 VDC
	Dimming Range	10%	-	100%	Percentage of output current programmed
	Shutdown Level	0.7V	0.8V	0.9V	-
	Turn On Level	0.9V	1.1V	1.35V	-
10-0V Negative Logic	Signal Level	10V	-	0V	Max voltage no more than 12 VDC
	Dimming Range	10%	-	100%	Percentage of output current
	Shutdown Level	-	-	-	-
	Turn On Level	0.9V	1.1V	1.35V	-
PWM	High Level	9.7V	-	10.3V	-
	Low Level	0V	-	0.3V	-
	Frequency	200Hz	1KHz	2KHz	-
	Duty Cycle	5%	-	100%	Positive Logic Dimming
		100%	-	5%	Negative Logic Dimming
Dimming Resistor	Resistance	10k Ω	-	100k Ω	-
	Dimming Range	10%	-	100%	Positive Logic Dimming

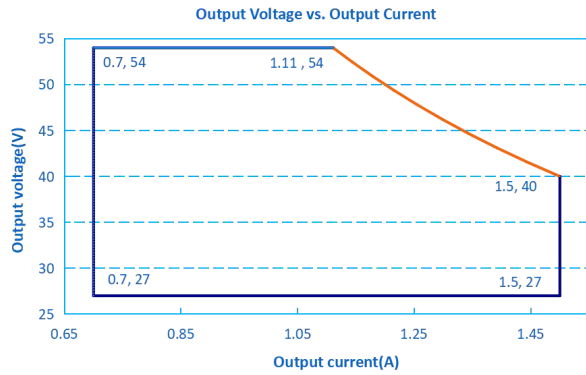


Working Curves

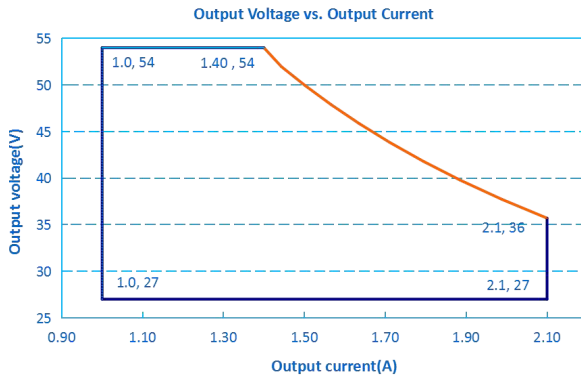
DCEG-40W-P3



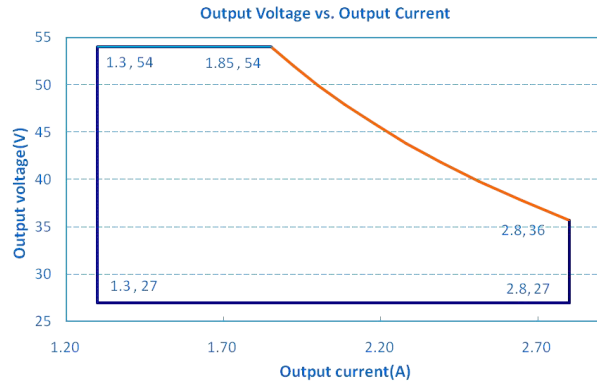
DCEG-60W-P3



DCEG-75W-P3

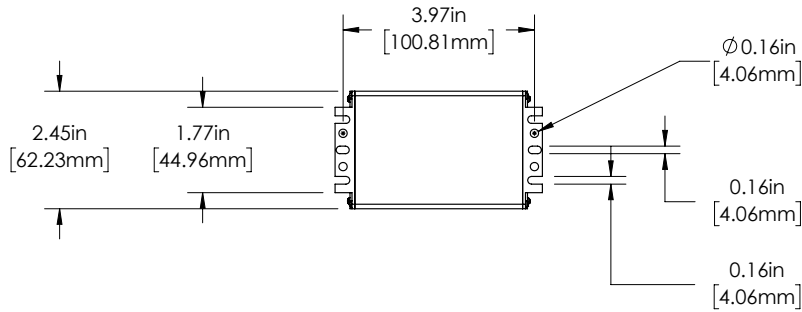
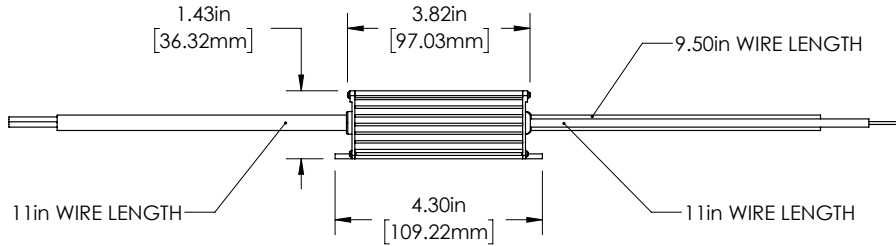


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Dimensional Drawings

DCEG-40/60W-P3



DCEG-75/100W-P3

