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LED-40W Series– Fixed Output and Dimmable
Switch Mode LED Drivers
Constant Current & Constant Voltage with Isolation
Black Magic Thermal Advantage™ Plastic Housing

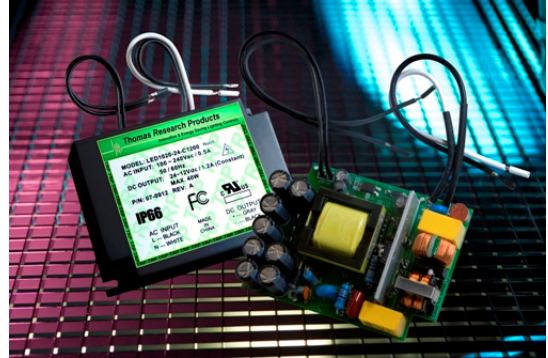
Total Power: 40 Watts
Input Voltage: 100-277 VAC
Outputs: Single from 3 VDC to 114 VDC
Indoor or Outdoor Applications
Active Power Factor Correction
UL8750 and Class 2 Compliant, as noted

Electrical Specifications

Input Voltage Range: 100-277 VAC Nom. (90-305 Min/Max)
Frequency: 50/60 Hz
Power Factor: >0.94 at full load 115VAC/230VAC 50/60 Hz
Inrush Current: <20.0 Amps maximum @ 230 VAC, cold start 25°C
Input Current: 0.40 Amps maximum
Maximum Power: 40W
Current Accuracy: ± 1% Over input line variation
Load Regulation: ± 3%
THD: ≤ 20% @ full load
Leakage Current: 400 uA Typical
Hold Up Time: Half Cycle
Protection: Output Over-Voltage, Output Over-Current, and Output Short Circuit Protection with Auto Recovery

Environmental Specifications

Operating Temperature: -30°C to +60°C
Maximum Case Temp. 90°C
Storage Temperature: -40°C to +85°C
Humidity: 5% to 95%
Cooling: Convection
Vibration Frequency: 5 to 55 Hz/2g, 30 minutes
MTBF: 482,000 Hours at full load and 40°C ambient conditions per MIL-217F Notice 2
EMC: FCC 47CFR Part 15 Class B compliant



Constant Current Versions - Product Specifications

Model Number	Output voltage range	Output constant current	Current accuracy	Output power	Max. efficiency
LED40W-114-C0350-XX	38-114 VDC	350 mA	± 3%	40W	87%
LED40W-100-C0400-XX	33-100 VDC	400 mA	± 3%	40W	87%
LED40W-89-C0450-XX	30-89 VDC	450 mA	± 3%	40W	87%
LED40W-54-C0700-XX	18-54 VDC	700 mA	± 3%	37.8W	86%
LED40W-48-C0830-XX	16-48 VDC	830 mA	± 3%	40W	86%
LED40W-36-C1100-XX	12-36 VDC	1100 mA	± 3%	40W	86%
LED40W-30-C1300-XX	10-30 VDC	1300 mA	± 3%	39.0W	86%
LED40W-24-C1400-XX	8-24VDC	1400 mA	± 3%	33.6W	86%
LED40W-24-C1670-XX	8-24 VDC	1670 mA	± 3%	40W	86%
LED40W-22-C1820-XX	7-22 VDC	1820 mA	± 3%	40W	86%
LED40W-18-C2220-XX	6-18 VDC	2200 mA	± 3%	40W	85%
LED40W-15-C2680-XX	5-15 VDC	2680 mA	± 3%	40W	85%
LED40W-13-C3080-XX	4-13 VDC	3080 mA	± 3%	40W	85%
LED40W-12-C3330-XX	4-12 VDC	3330 mA	± 3%	40W	84%
LED40W-10-C4000-XX	3-10 VDC	4000 mA	± 3%	40W	84%
LED40W-09-C4450-XX	3-9 VDC	4450 mA	± 3%	40W	83%

-XX indicates dimming options are available. See options at left. Blank = fixed current output

Constant Voltage Versions - Product Specifications

Model Number	Output constant voltage	Output current range	Voltage accuracy	Output power	Max. efficiency
LED40W-114	114 VDC	88-350 mA	± 5%	40W	87%
LED40W-100	100 VDC	100-400 mA	± 5%	40W	87%
LED40W-89	89 VDC	113-450 mA	± 5%	40W	87%
LED40W-54	54 VDC	175-700 mA	± 5%	40W	86%
LED40W-48	48 VDC	208-830 mA	± 5%	40W	86%
LED40W-36	36 VDC	275-1100 mA	± 5%	40W	86%
LED40W-30	30 VDC	325-1300 mA	± 5%	40W	86%
LED40W-24	24 VDC	418-1670 mA	± 5%	40W	86%
LED40W-22	22 VDC	455-1820 mA	± 5%	40W	86%
LED40W-18	18 VDC	550-2200 mA	± 5%	40W	85%
LED40W-15	15 VDC	670-2680 mA	± 5%	40W	85%
LED40W-13	13 VDC	770-3080 mA	± 5%	40W	85%
LED40W-12	12 VDC	833-3330 mA	± 5%	40W	84%
LED40W-10	10 VDC	1000-4000 mA	± 5%	40W	84%
LED40W-09	9 VDC	1112-4450 mA	± 5%	40W	83%

Class 2: US/Canada US Only

06-25-12



Ordering Options:

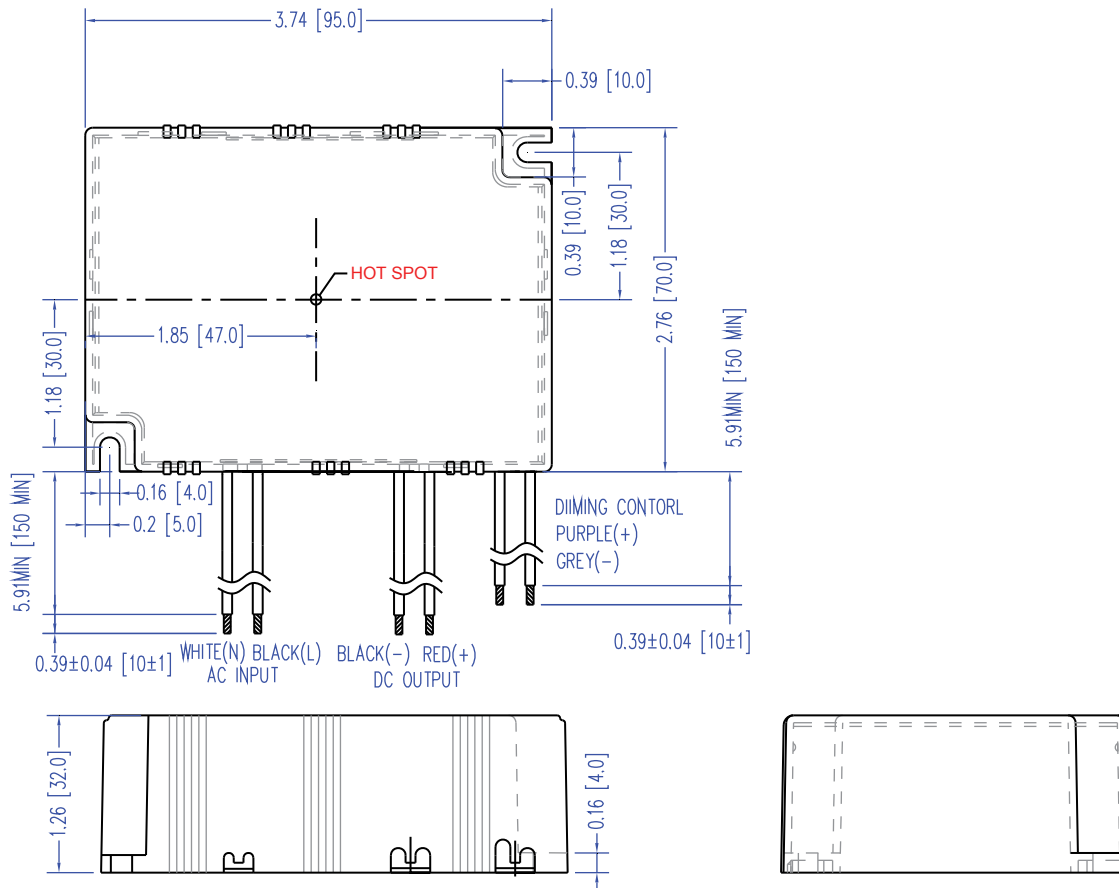
- D: 0-10V & Resistance dimmable version comes with an extra two wires +Purple/-Gray on the output side. -D 0-10V Dimming is compatible with most quality 0-10V wall dimmers and direct 0-10V analog signal. See page 3 for additional specifications.
- PD: PWM Dimmable version comes with an extra two wires +Purple/-Gray on the output side. PD PWM version is PWM Dimmable via a positive 10% to 100% Duty Cycle, 200Hz to 1KHz, 0-10V Pulse. See page 4 for additional specifications.



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Dimensions - Inches (mm)



UL Conditions of Acceptability

See website for additional information



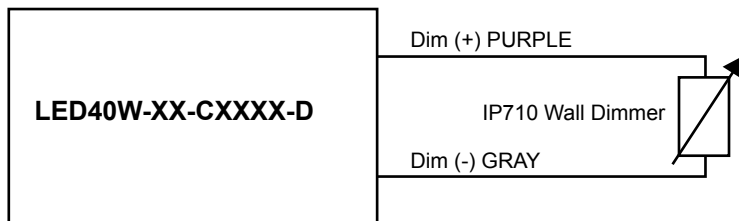
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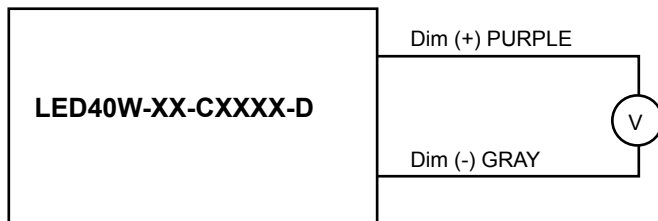
-D Option - 0-10VDC and Resistance Dimming

Parameters	Minimum	Typical	Maximum
Source Current out of 0-10V Purple Wire	0mA	—	2mA
Absolute Voltage Range on 0-10V (+) Purple Wire	-2.0V	—	+15V
Sink Current into 0-10V Purple Wire	0mA	—	1.2mA

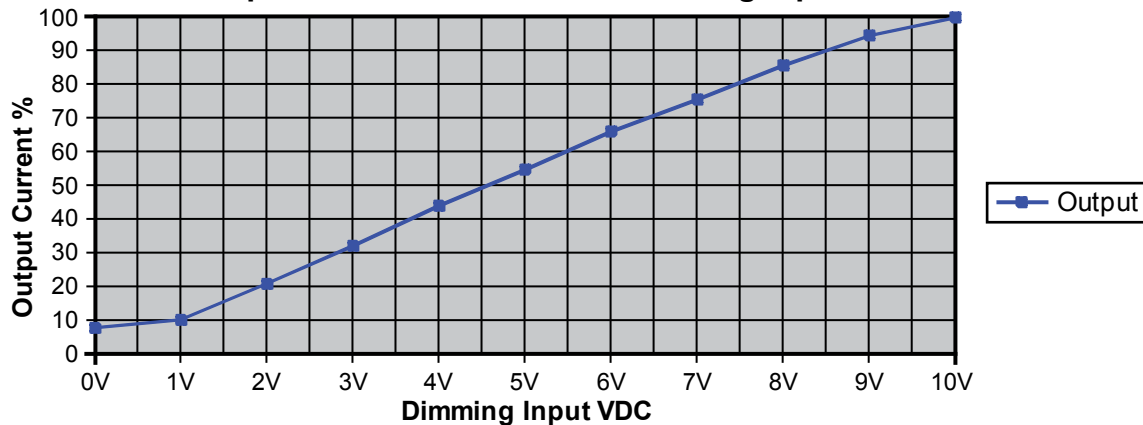
Resistance Dimming Typical Circuit



0-10V Analog Dimming Typical Circuit



Output Current vs. 0-10VDC Dimming Input



Notes:

1. 0-10V dimmable version comes with an extra two wires +Purple/-Gray on the output side.
2. Compatible with most 0-10V Wall Slide dimmers and direct 0-10V analog signal. Recommended dimmer is Leviton IP710 or equivalent
3. 0-10V dimmable version is not intended to dim below about 5% @ 0V or 10% @ 1.0V
4. 0-10V dimmable version output will be 100% with Purple/Gray open and minimum with Purple/Gray Shorted.



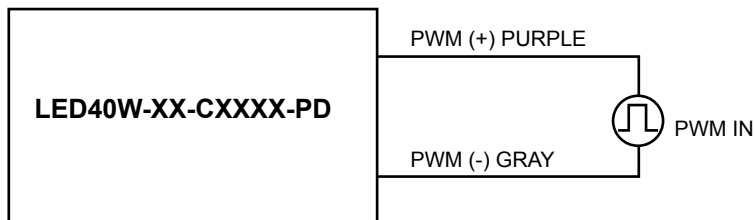
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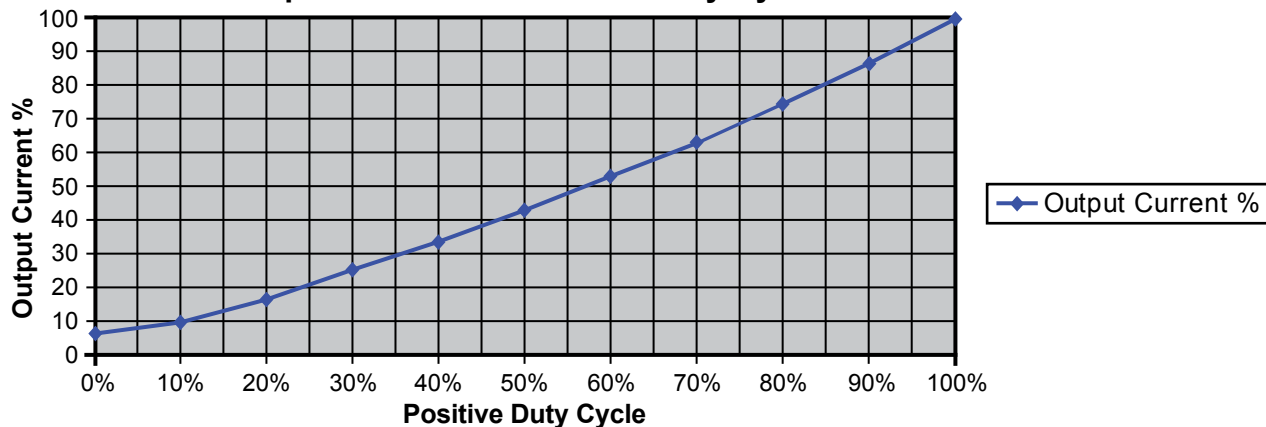
-PD Option - 0-10VDC and Resistance Dimming

Parameters	Minimum	Typical	Maximum
Absolute Maximum Voltage Range on PWM Input (Purple Wire)	-2.0V	10V	+28V
Input LOW Level Voltage Range (Purple Wire)	-2.0	0V	+7.5V
Input HIGH Level Voltage Range (Purple Wire)	+9.0	10V	28V
Sink Current into PWM Input (Purple Wire)	0mA	—	1.2mA
PWM Input Signal Frequency	200Hz	—	1000Hz
PWM Input Signal Positive Duty Cycle	0%	10-90%	100%

PWM Positive Dimming Typical Circuit



Output Current vs. Positive Duty Cycle



Notes:

1. PWM Dimmable version comes with an extra 2 wires +Purple/-Gray on the output side.
2. Below 10% Duty cycle proper dimming operation is not assured. Unit is not intended to turn off at <10% Duty Cycle.
3. PWM dimmable version output will be 100% with Purple/Gray open and minimum with Purple/Gray Shorted.