LED Driver

LP1090-XX-YZ-E Series Switch-Mode LED Driver

Total Power 96 Watts Input Voltages 100-277VAC Number of Outputs One

Product Specifications

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SPECIAL FEATURES

• UL1310 / UL879 Class 2 recognized

• Various DC output available, max 96-Watts

• Meet IP65 standards (refer to detail)

• Suitable for damp or dry locations

• Suitable for wet location with adequate end plate and connectors

• Designed for outdoor or indoor applications

• Built-in wiring compartments for easy installation (selected models)

• Compact, lightweight w/ aluminum case

• Active PFC to conserve power consumption

• ELV (Trailing-Edge) dimmable - Optional

ELECTRICAL SPECIFICATIONS

Full range 100-277VAC / 1.5A~ 0.47A Input range

Frequency 47 to 63 Hz

PF & THD > 0.92 at full load, 115VAC; < 20% full load, 230VAC

1.5 max.

Inrush current 40.0 Amps maximum at 230VAC, cold start, 25° C

Input current 1.5Amps maximum at 90VAC

Efficiency 85% typical at 230VAC and maximum load EMI filtering 47CFR, Part 2, Part 15 and Cispr PUB, 22 Class A

96W

Current Adjust

Maximum power

Crest Factor

 $30 \sim 50\%$ range Load regulation $\pm 3\%$

0.4mA @ 110VAC, 0.75mA @ 230VAC Leakage Current

Hold up time Half cycle minimum at 120 VAC and 80% of rated

Protection Over-voltage, Over-current, Over-power and Short

circuit protection: Auto-recovery

ENVIRONMENTAL

Operating temperature: -30 to 70 ° C

(De-rating: 2% per ° C from 50°C) -40 to 85 ° C

Storage temperature: Humidity (Non-Condensing): 5% to 95%

Cooling: Convection

Vibration Frequency: 5 to 50 Hz MTBF: >100,000 Hours at full load and 25°C

ambient conditions (MIL-217F)

EMC: Compliant to 47CFR, Part 2, Part15 and

Cispr PUB, 22 Class B

SAFETY

CE

UL1310 / UL879 / UL8750 Class 2 certified UL

Certified

MODEL INFORMATION – SINGLE OUTPUT					
Model Numbers	Constant Voltage Mode Output		Constant Current Mode Output		Total output
	Adjust range (Vdc)	Current range (A)	Voltage range (Vdc)	Adjust range (A)	(Watts)
LP1090-48-YZ-E	$36 \sim 52, \pm 5\%$	1.0 ~ 2.00	24 ~ 48	$1.00 \sim 2.00, , \pm 5\%$	96 (non-UL)
LP1090-36-YZ-E	24 ~ 36, ± 5%	1.3 ~ 2.66	18 ~ 36	$1.50 \sim 2.66, \pm 5\%$	96
LP1090-24-YZ-E	18 ~ 24, ± 5%	1.5 ~ 4.00	12 ~ 24	$2.50 \sim 4.00, \pm 5\%$	96
LP1090-19-YZ-E	$12 \sim 19, \pm 5\%$	2.0 ~ 5.00	10 ~ 19	$3.00 \sim 5.00, \pm 5\%$	95

MECHANICAL DRAWING

Model Information - Single DC output LP1090-XX-YZ-E

XX – DC outputs

Y – AC input side plate options, refer to drawing for more details

Z – DC output side plate options, refer to drawing for more details

E – Aluminum enclosure length, 170, 240, 290mm, refer to drawing for more details Housing "240", "290" – The wiring compartment is accessed through side plate only.

Housing "249", "299" – The wiring compartment can be accessed from the top plate.

MECHANICAL DRAWING (AC INPUT VS. DC OUTPUT)

LP1090-XX-YZ-E

PF 1/2"

Y – AC input side plate options (Gland not included) GM-PF21-G GM-PF13-G TL-03-T PF 1/2" Z – DC output side plast options (Gland not included) GM-PF21-G GM-PF13-G TL-02-T TL-02-T

PF 1/4"

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Note: End plates and liquid tight glands for wet location application can be ordered separately.

