LED DMG OUTDOOR DRIVER

POLLO SERIES

ESL-DMG-50W-HV

Project: Catalog#: Date:

Notes:

Key Features & Benefits:

- Built-In Active PFC function
- High Efficiency
- Waterproof (IP67)
- Constant Current / 0-10V Dimming
- Clock Dimming(CLK) / CP Dimming
- Protection: OVP, SCP, OTP
- UL Type TL, Type HL

5 YEAR WARRANTY

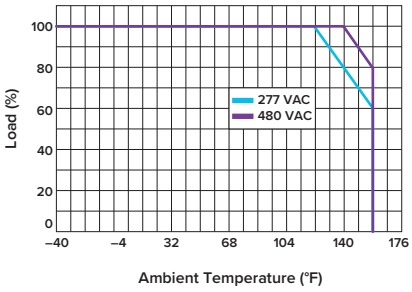
c UL us E350222

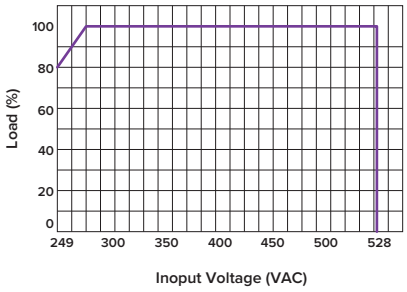
DIMMABLE 1-10V

ESL-DMG-50W-HV-OPMA-56-1350		
Input	Efficiency (277V) Note.1	83.0%
	Efficiency (480V) Note.1	85.0%
	Voltage Range (VAC) Note.2	277 - 528
	Rated Input Voltage (VAC) Note.2	277 - 480
	Frequency Range (Hz)	47 ~ 63
	Power Factor	>0.96 at 480 VAC, >0.90 at 277-480 VAC at full load
	THD	<15% with 80% - 100% load, at 277 - 480 VAC; <20% with 50% - 100% load, at 277 - 480 VAC
	AC Current (Typ.)	0.3A Max. at 277 VAC
	Inrush Current (Typ.)	65A at 480 VAC Input 77°F Cold Start (Time wide=500uS, measured at 50% Ipeak,Not applicable for the inrush current to noise filter for less than 0.2ms)
	Leakage Current (Max.)	0.75mA at 480Vac/50Hz
Output	Rated Output Voltage (V)	56-37
	Output Voltage Range (V) Note.1	56-22
	Rated Current (mA)	900-1350
	Output Current Range (mA)	90-1350
	Rated Power (W)	50W (max)
	Output Current Set Range	6.5%Io_max - 100%Io_max
	Constant Power Output Set Range	65%Io_max - 100%Io_max
	Ripple Current (PK / AV) / AV)	10% max. (peak-to-average value) at 100% Iout
	Current Tolerance Note.2	±5%
	Line Regulation	±1%
	Load Regulation	±3%
	Turn On Delay Time	2s(typ.), measured at 277 VAC input
Dimming Control	12 VDC Output Voltage (VDC)	10.8V Min. / 12V Typ. / 13.2V Max.
	12 VDC Output Current (VDC)	0mA~20mA max.
	1~10V / DMI+ Voltage	Absolute maximum voltage - 10V min ~ 20V max
	1~10V / DMI+ Short Current	280uA ~ 450uA (DIM(+)=0)
	DIMMING FUNCTION	1~10V/10%Io~100%Io ref. Dimming module diagram and dimming curve
Protection	Over Voltage (V)	Protection type: Voltage limiting.output will not excceed the upper limit voltage , recovers automatically after fault condition is removed.
	Short Circuit	Protection type: Hiccup mode. recovers automatically after short is removed.
	Over Temperature	Protection type: Decrease output current. When tc reaches 212°F+/-50°F, the output current decrease to approximate 50% of rated value until tc drops below 194°F.
Environment	Operating Temperature	-40~+158°F (Refer to "Derating Curve")
	Tcase	190.4°F Max
	Operating Humidity	20~95%RH, non-condensing
	Storage Temperature (Humidity)	-40~+185°F, 10-95%RH
	Temperature Coefficient	0.03% / °F (32 - 122°F)
	Vibration	10~500Hz, 5G 12min/cycle, period for 72 min. each along X, Y, Z axes
Safety & EMC	Safety Standard	UL1310 Class 2,UL8750,UL1012, CSA 250.13
	Withstand Voltage	I/P-O/P:3.75KVAC I/P-FG:1.875KV O/P-FG:1.5KV
	Isolation Resistance	I/P-O/P ,I/P-FG,O/P-FG:100M Ohms/500VDC/77°F/70%RH
	EMC Emission	Conducted Emission: FCC PART15 Class A, Radiated Emission: FCC PART15 Class A
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61000-4-5: Line to Neutral: ±6kV ; Line to GND: ±6kV ; Neutral to GND: ±6kV. IEEE / ANSI C62.41.2 Transient Surge Requirements, combi wave 2 ohm source impedance.
Others	MTBF	300,000 hours, measured at full load, 25°C ambient temperature MIL-HDBK-217F(25°C)
	Lifetime	>=100 KHrs lifetime (continous) at Tcase = 149°F / >=50 KHrs lifetime (continous) at Tcase = 167°F
	Dimension (LxWxH)	4.02" L x 3.15" W x 3.15"1.89"H
	Weight	1.57lbs

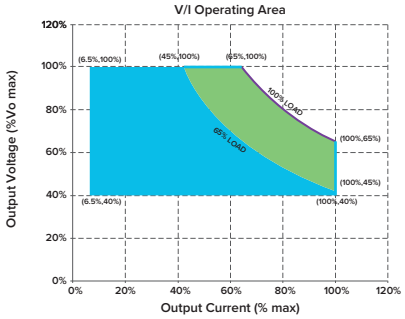
Note.1: Measured at full load and steady-state temperature in 77°F ambient(Efficiency will be about 2% lower if measured immediately after startup); Note.2: Derating may be needed under low input voltages Please Refer to 'Derating Curve' ; Note. : All parameters NOT specially mentioned are measured at 480 VAC input , rated load and 77°F of ambient temperature

Derating Curve:

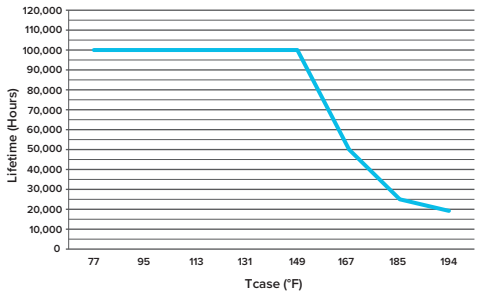




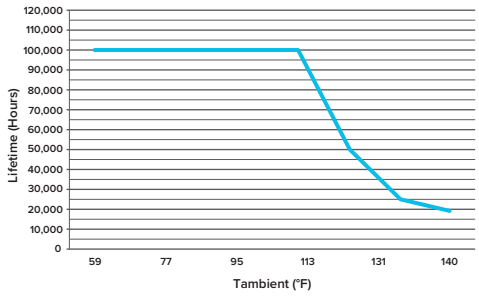
V/I Curve:



Life Time vs. Tcase (Ref.):



Life Time vs. Tambient (Ref.):



Dimensions: