

DPS240/12V Dimmable Power Supply

Custom LitePad®



Rosco's DPS240/12V Dimmable Power Supply is designed to complement larger Custom LitePad installations. The system comes with power supply and controller all pre-wired and ready to integrate with an array of LitePads. Four individually fused outlets, each capable of handling loads up to 60W, provide maximum integration flexibility.

The embedded programmable controller allows an expanded portfolio of color management and color-chasing options.



KEY FEATURES

- 4 separate 5A (60W) fused outlets with overload protection
- Universal AC input: 88 - 264VAC
- Built in active power factor correction (PFC)
- Dimming control via 0-10V external source, DMX or DALI protocols
- Vented enclosure with cooling via variable speed DC fan
- 3-year warranty

SPECIFICATIONS

DPS240/12V	
Item Code	Description
290 63524 0000	DPS240 Power Supply

OUTPUT

DC Voltage:	12V
Rated Current:	25A
Current Range:	0 ~ 25A
Rated Power:	300W
Ripple & Noise (Max.) Note.2:	150 mVp-p
Voltage Adj. Range:	10 ~ 13.2V
Voltage Tolerance Note.3:	±1.0%
Line Regulation:	±0.3%
Load Regulation:	±0.5%
Setup, Rise Time:	800ms, 50ms/230VAC 2500ms, 50ms/115VAC at full load
Hold Up Time (Typ.):	16ms/230VAC 16ms/115VAC at full load

INPUT

Voltage Range Note.5:	88 ~ 264VAC 124 ~ 370VDC
Frequency Range:	47 ~ 63Hz
Power Factor (Typ.):	PF>0.95/230VAC PF>0.98/115VAC at full load
Efficiency (Typ.):	86%
AC Current (Typ.):	115VAC 5A 230VAC 2.5A
Inrush Current (Typ.):	20A/115VAC 40A/230VAC
Leakage Current:	<1mA/240VAC

PROTECTION

Overload:	105 ~ 135% rated output power
Protection type:	Hiccup mode, recovers automatically after fault condition is removed
Over Voltage:	13.8 ~ 16.2V
Protection type:	Shut down o/p voltage, re-power on to recover
Over Temperature:	80°C ±5°C (70°C ±5°C 3.3V, 5V only) (TSW1 : detect on heatsink of power transistor)
Protection type:	Shut down o/p voltage, recovers automatically after temperature goes down

ENVIRONMENT

Working Temperature:	-20 ~ +65°C (Refer to "Derating Curve")
Working Humidity:	20 ~ 90% RH non-condensing
Storage Temp., Humidity:	-40 ~ +85°C, 10-95% RH
Temp. Coefficient:	±0.03%/°C (0 ~ 50°C)
Vibration:	10 ~ 500Hz, 2G 10min./1 cycle, 60min. each along X,Y, Z axes

SAFETY & EMC (Note. 4)

Safety Standards:	UL60950-1, TUV EN60950-1, CCC GB4943 (except for 3.3V, 36V) approved
Withstand Voltage:	I/P-O/P: 3KVAC I/P-FG: 2.0KVAC O/P-FG: 0.5KVAC
Isolation Resistance:	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500 VDC / 25°C / 70% RH
EMC Emission:	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2, -3
EMC Immunity:	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A

OTHERS

MTBF:	207K hrs min. MIL-HDBK-217F (25°C)
Dimension:	(L W H): 215 115 50mm
Packing:	1.1 Kg; 12pcs/14Kg/0.92 CUFT

DPS240/12V Dimmable Power Supply

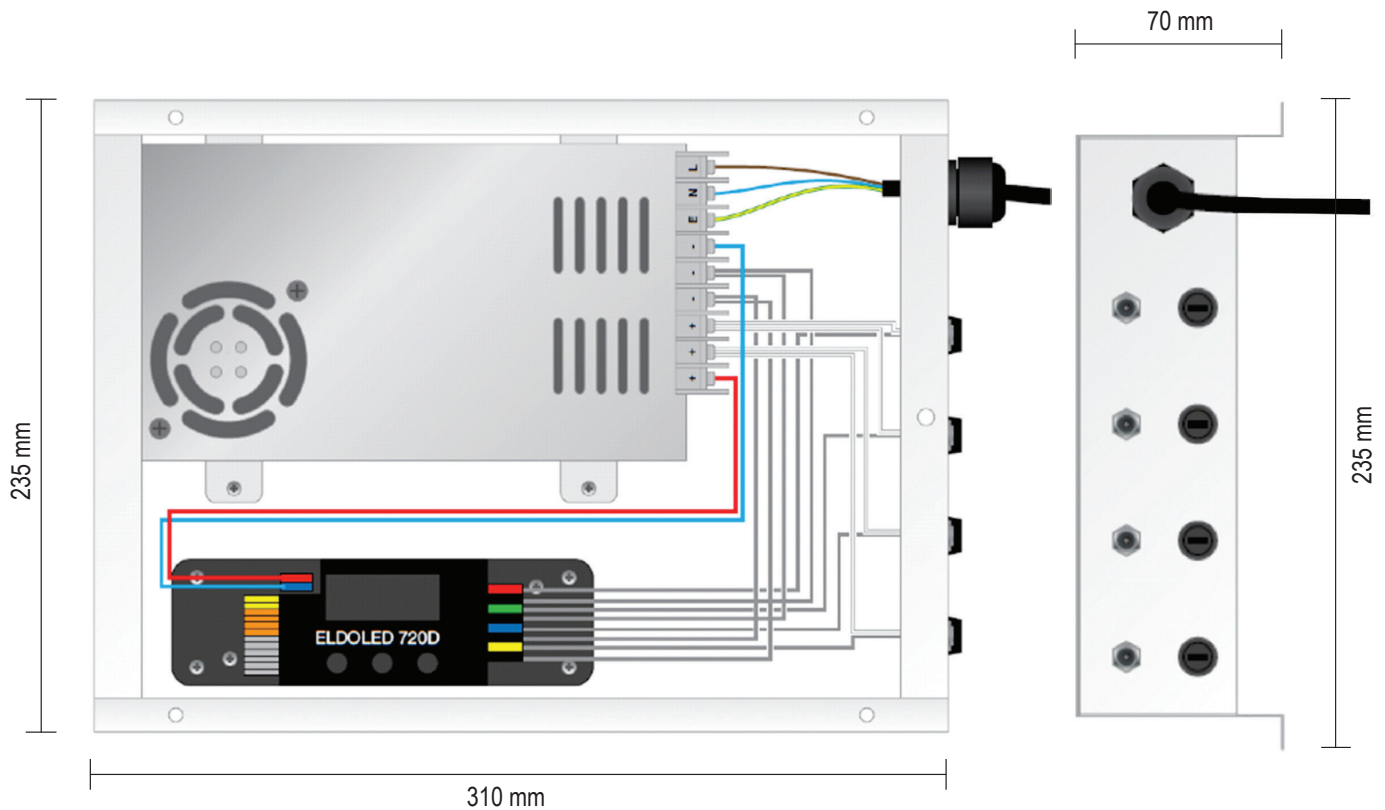
Custom LitePad®



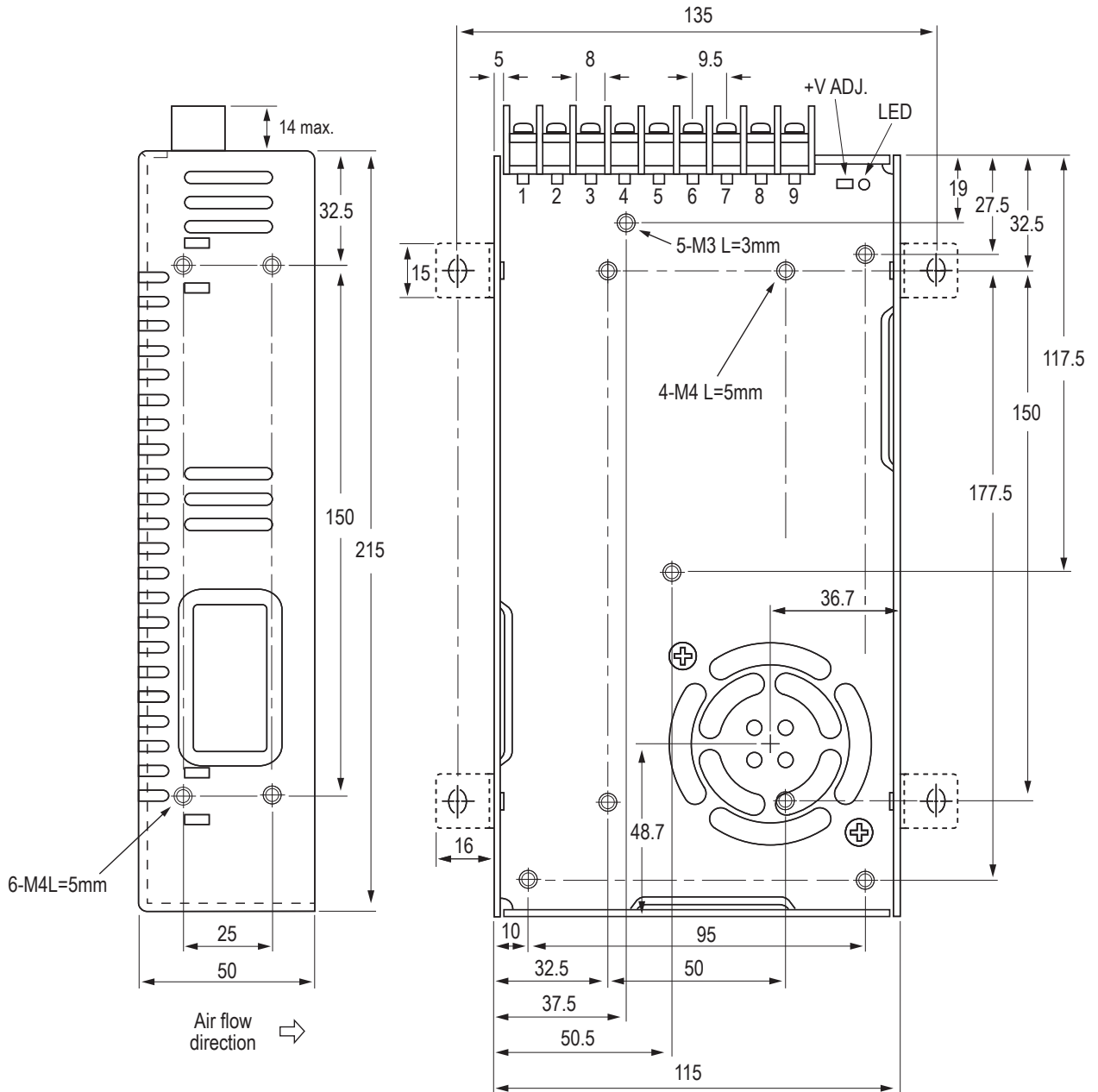
NOTE

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using 12" twisted pair-wire terminated with a 0.1 uf & parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. The power supply is considered a component which will be installed into final equipment. The final equipment must be reconfirmed to meet EMC directives. For guidance on how to perform the EMC tests, please refer to "EMI testing of component power supplies." (as available on <http://www.meanwell.com>)
5. Derating may be needed under low input voltages. Please check the derating curve for more details.

DIMENSIONS & CONTENTS



POWER SUPPLY MECHANICAL SPECIFICATIONS



Terminal Pin No. Assignment:

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	4~6	DC OUTPUT -V
1	AC/N	7~9	DC OUTPUT +V
3	FG \perp		

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LINEAR DRIVE 720D SPECIFICATIONS

Weight: 144 g, 5.0 oz

WIRING

Cross Section: 0.5 - 1.5 mm², AWG20 - 16

Strip Length: 9 mm / 0.35 in.

CONNECTORS LINEARDRIVE 720D

VDC: + and -

DMX in: +, - and shield

LedSync out: +, - and shield

DALI: + and - (x2)

Ext in: + and -

LED Outputs: + and - (x4)

CERTIFICATIONS

CE

IEC 61347, EN 55015, IEC 61003, EN 61547

UL: UL Recognized Component (file no. E333135)

LINEARdrive 100D is Class 2 output.

ENVIRONMENTAL RATINGS

Ta range: -20°C ~ 50°C / -4°F ~ 122°F

Tc max: 65°C / 149°F

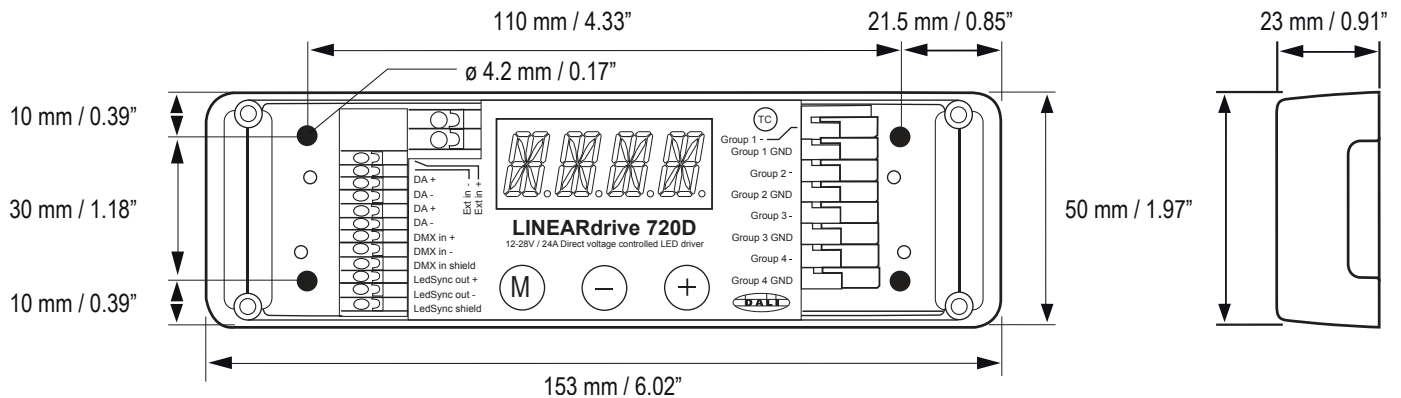
For use in dry locations

CONTROL COMPATIBILITY

DALI control gear (LINEARdrive 720D)

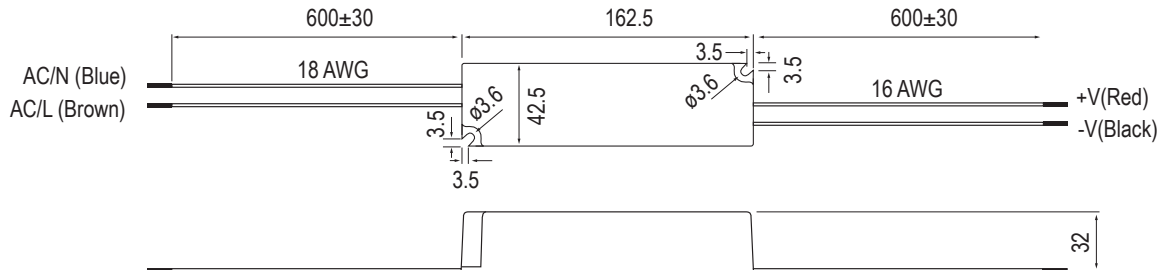
DMX512A and RDM explore & address (ANSI E1.20) control gear

Standard 0-10V switch controls

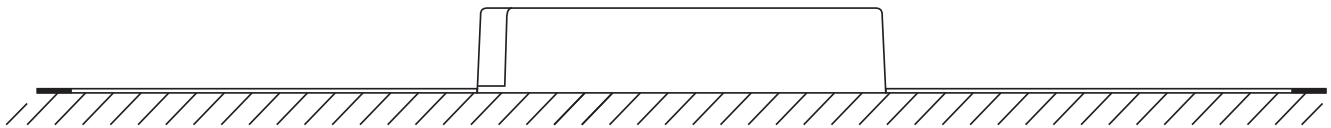


MECHANICAL SPECIFICATION

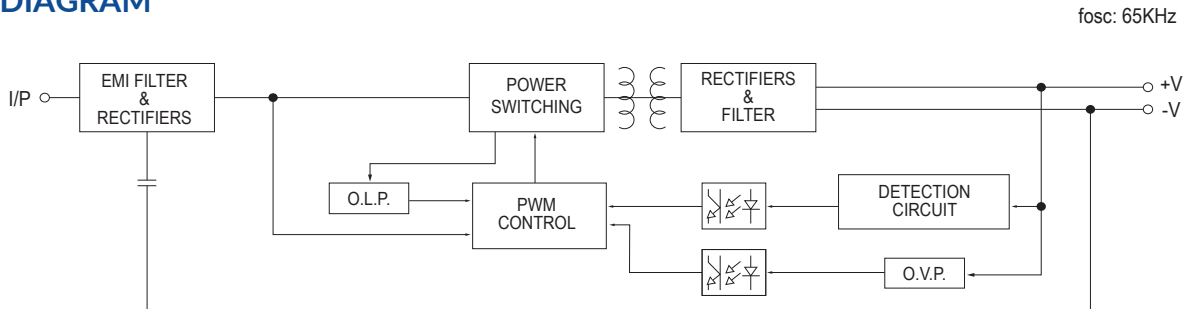
Case No. 946A Unit:mm



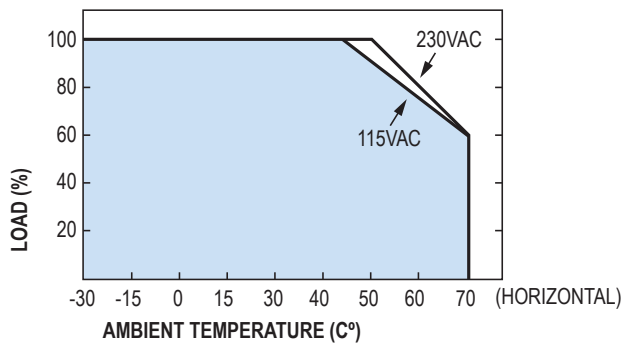
RECOMMENDED MOUNTING DIRECTION



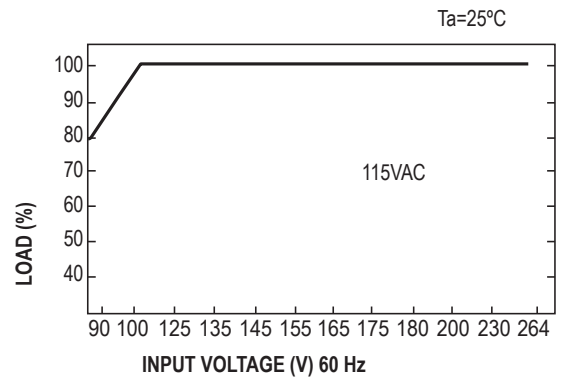
BLOCK DIAGRAM



DERATING CURVE



STATIC CHARACTERISTICS



Name: _____ Date: _____

Company Name: _____

Project: _____