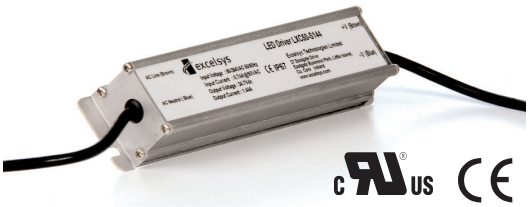
LXD36 *series*

LED Power Supply

Dimmable LED Power Supplies



LED POWER

next generation power source

FEATURES

- **High Efficiency (up to 90%)**
- **Active PFC (Typical 0.95)**
- **IP67 Waterproof**
- **OVP, SCP, OLP, OTP**
- **-35 to +70°C deg operation**
- **Universal Input 90-305VAC**
- **UL8750 recognised**
- **EN61347-1, -2-13 compliant**

The LXD36 series of Dimmable LED power supplies from Excelsys Technologies can deliver up to 36W of output power in an extremely compact package size.

The LXD36 series of Dimmable LED power supplies provides up to 1750mA of output current and 103V output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXD36 series provides high reliability and high performance in a compact package

The LXD36 series carries the UL and CE mark for safety and is also RoHS compliant.

Model Number	Output Voltage	Output Current	Input Voltage	Efficiency
LXD36-0350SW(2)	52-103V	350mA	90-305VAC	90.0%
LXD36-0450SW(2)	40-80V	450mA	90-305VAC	89.0%
LXD36-0700SW(3)	26-52V	700mA	90-305VAC	88.0%
LXD36-1050SW(4)	18-35V	1050mA	90-305VAC	88.0%
LXD36-1400SW(4)	13-26V	1400mA	90-305VAC	87.0%
LXD36-1750SW(4)	11-21V	1750mA	90-305VAC	86.0%

Input Specifications					
Parameter	**Conditions/Description**	**Min**	**Nom**	**Max**	**Units**
Input Voltage Range	Universal Input	90		305	VAC
Input Frequency Range		47		63	Hz
Input Current	100VAC in, 36W output			0.6	A
Leakage Current	277VAC Input, 50Hz			0.75	mA
Inrush Current	230VAC in, 25°C, Cold Start			60	A
Power Factor	220VAC, 110VAC	0.95		0.98	

Output Specifications					
Parameter	**Conditions/Description**	**Min**	**Nom**	**Max**	**Units**
Line Regulation				±1	%
Load Regulation				±3	%
Voltage Range	See individual models				VDC
Output Current	See individual models				mA
Output Current Tolerance				±5	%/Load
Overshoot				10	%
Turn-on Delay	Measured at 220VAC and full load		0.3	0.5	s
Short Circuit Protection	Auto Recovery				
Over Temperature Protection	Hiccup, Auto recovery	95	110	125	°C

General Specifications					
Parameter	**Conditions/Description**	**Min**	**Nom**	**Max**	**Units**
Isolation Voltage	Input to Output (See Note 1) Input to Chassis	3750 1500			VAC VAC
Efficiency	See individual models		88		%
Safety Agency Approvals	UL8750, EN61347-1, -2-13, UL1310 (See Note 2, 3 & 4)				
No load Power Dissipation	Measured at 230 Vac			6.0	W
MTBF	MIL-HDBK-217F, 110VAC input, 80% load, 25°C		469,000		Hours
Lifetime	110VAC input, 80% load, 45°C		74,000		Hours
Weight			480		g
Operating Temperature		-35		+70	°C
Storage Temperature		-40		+85	°C
Relative Humidity	Non-condensing (operating)	10		100	%RH

Note 1. Primary to Secondary Isolation test not to be carried out on power supply.
Note 2. Non - UL1310 Class 2 output in USA and Canada.
Note 3. UL1310 Class 2 output for USA only.
Note 4. UL1310 Class 2 outputs for USA and Canada.

Specifications are subject to change without notice

excelsys

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EMC					
Parameter	**Standard**		**Level**		**Units**
Emissions					
Conducted	EN55015		Compliant		
Radiated	EN55015		Compliant		
Harmonic Distortion	EN61000-3-2		Compliant		
Flicker and Fluctuation	EN61000-3-3		Compliant		
Immunity					
ESD	EN61000-4-2		Compliant		
Radiated RFI	EN61000-4-3		Compliant		
Fast Transients - burst	EN61000-4-4		Compliant		
Conducted RFI	EN61000-4-6		Compliant		
Power Freq Magnetic Field	EN61000-4-8		Compliant		
Voltage Dips	EN61000-4-11		Compliant		

Dimming Control					
Parameter		**Min**	**Nom**	**Max**	**Units**
12V Output Voltage		10.8	12	13.2	V
12V Output Source Current		0		20	mA
Control Voltage (1-10V input	Voltage applied on 1-10V input wire	-2		15	V
Source Current (1-10V input)	Source current on 1-10V input wire	0		200	uA

Note A. If dimming function is not used, 12V(yellow) and 1-10V(purple)wire must be connected together.
Note B. Primary to Secondary Isolation test not to be carried on power supply.
Note C. Load Voltage must be maintained above minimum voltage. See models for voltage range.
Note D. Dimming range is 10%-100%
Note E. Dimming Signal Voltage should be above 1V for linear dimming control.
Note F. See Dimming Implementation diagrams for various dimming methods.
Note G. Do not connect Dim - (Gray) cable to Output -V cable

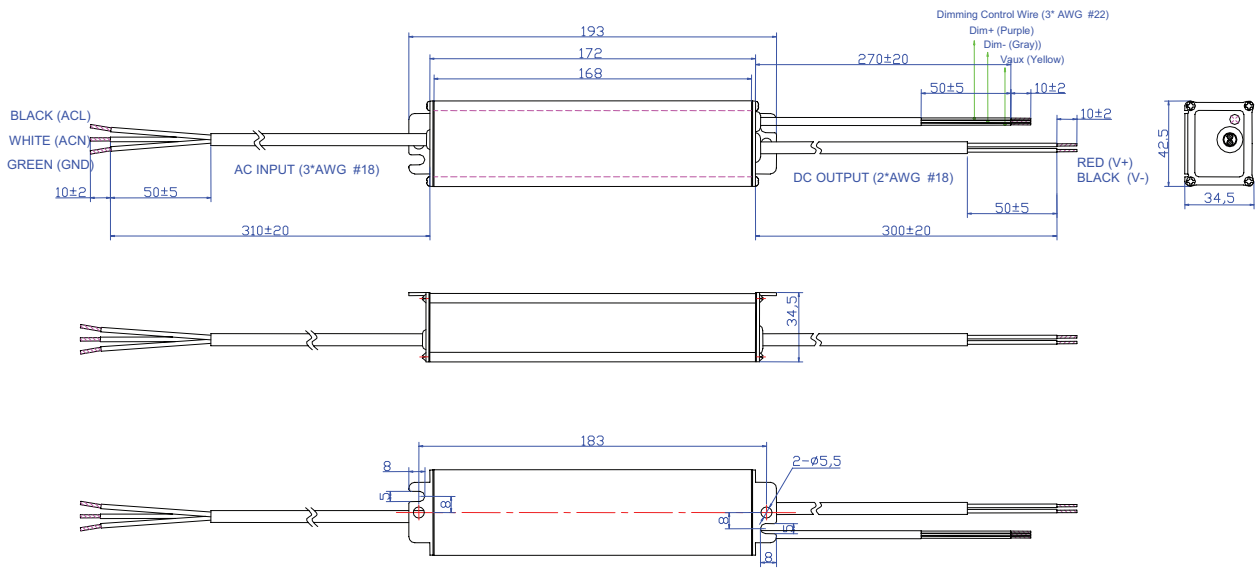
INPUT / OUTPUT WIRING

INPUT CABLE
SJTW 18AWG 3C
Black (L),White(N), Green (G)310±20mm

OUTPUT CABLE
SJTW 18AWG 2C
Black (-V) and Red (+V) 300±20mm

DIMMING CONTROL CABLE
22AWG 3C
Yellow (12V), Purple (1-10V), Gray (Dim -)
270±20mm

MECHANICAL SPECIFICATIONS



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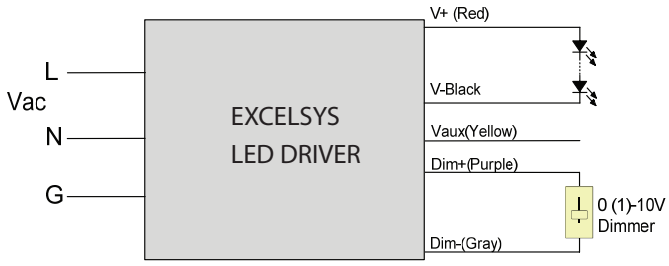
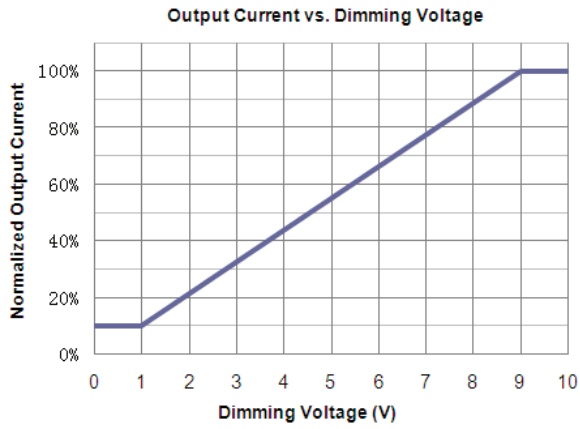
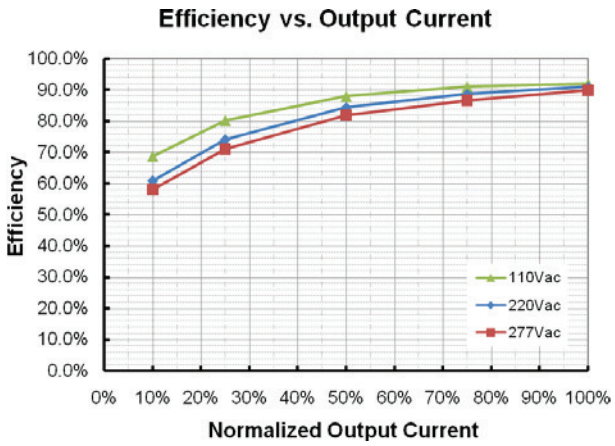
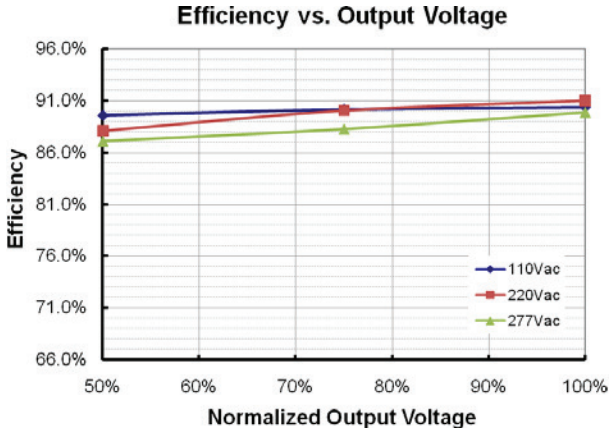
Dimming Implementation Diagrams



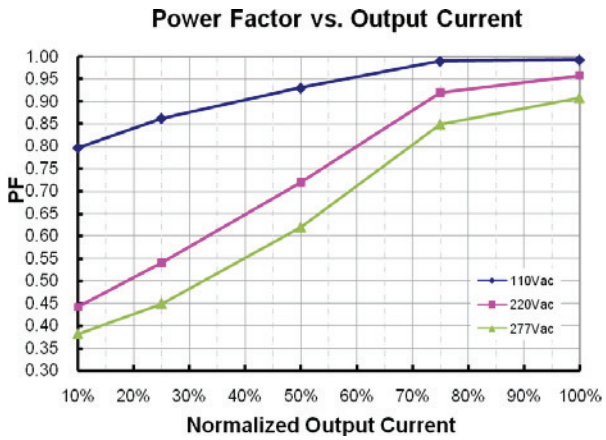


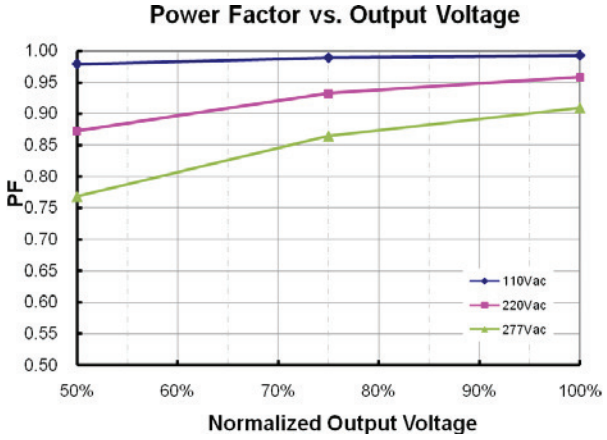
Efficiency vs. Load (350mA Model)





Power Factor Characteristics





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