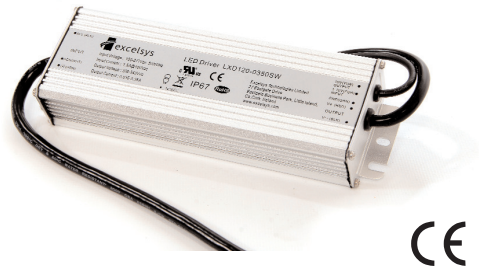
LXD120 *series*

LED Power Supply

Dimmable LED Power Supplies



LED POWER

next generation power source

FEATURES

- **High Efficiency (up to 91%)**
- **Dimming Control**
- **Active PFC (Typical 0.99)**
- **IP67 Waterproof**
- **OVP, SCP**
- **-35 to 65°C deg operation**
- **Universal Input 90-305VAC**
- **UL8750 compliant**
- **EN61347-1, -2-13 compliant**

The LXD120 series of dimmable LED power supplies from Excelsys Technologies can deliver up to 120W of output power in an extremely compact package size.

The LXD120 series of constant current power supplies provides up to 4900mA of output current and 343V output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXD120 series provides high reliability and high performance in a compact package.

Model Number	Output Voltage	Output Current	Input Voltage	OVP Latching max	Efficiency
LXD120-0350SW	206-343V	350mA	90-305VAC	480V	91.0%
LXD120-0450SW	160-266V	450mA	90-305VAC	373V	91.0%
LXD120-0700SW	103-171V	700mA	90-305VAC	240V	91.0%
LXD120-1050SW	68-114V	1050mA	90-305VAC	160V	90.5%
LXD120-1400SW	52-86V	1400mA	90-305VAC	121V	90.5%
LXD120-1750SW	41-68V	1750mA	90-305VAC	96V	90.5%
LXD120-2100SW	34-57V	2100mA	90-305VAC	80V	90.5%
LXD120-2450SW	29-49V	2450mA	90-305VAC	69V	90.5%
LXD120-2800SW	26-43V	2800mA	90-305VAC	61V	90.5%
LXD120-3150SW	23-38V	3500mA	90-305VAC	54V	90.0%
LXD120-3500SW	20-34V	3500mA	90-305VAC	48V	90.0%
LXD120-4200SW	17-28V	4200mA	90-305VAC	40V	90.0%
LXD120-4900SW	14-24V	4900mA	90-305VAC	34V	90.0%

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, 120W output			1.5	A
Inrush Current	230VAC in, 25°C, Cold Start			65	A
Power Factor	220VAC, 110VAC	0.96		0.99	

Output Specifications

Parameter	Conditions/Description	Min	Nom	Max	Units
Line Regulation				±1	%
Load Regulation				±3	%
Voltage Range	See table of outputs				
Output Current Range	% of Vout			±5	%
Ripple and Noise	20MHz Bandwidth. See Note H			3.0	% pk-pk
Overshoot				10	%
Turn-on Delay	Measured at 220VAC and full load		0.6	1	s
Short Circuit Protection	Auto Recovery				
Over Voltage Protection	Latching. See individual models OVP levels				

General Specifications

Parameter	Conditions/Description	Min	Nom	Max	Units
Isolation Voltage	Input to Output See Note B Input to Chassis	3750 1500			VAC VAC
Efficiency	See individual models		90.5		%
Safety Agency Approvals	UL8750, EN61347-1, -2-13				
No load Power Dissipation	Measured at 230 Vac			1.0	W
MTBF	MIL HDBK-217F, 110VAC input, 80% load, 25°C		303,000		Hours
Lifetime	45°C, 110VAC input, 80% load		93,000		Hours
Weight			1000		g
Operating Temperature		-35		+65	°C
Storage Temperature		-40		+85	°C
Relative Humidity	Non-condensing (operating)	10		100	%RH

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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	Level 4	
Radiated RFI	EN61000-4-3	Level 3	
Fast Transients - burst	EN61000-4-4	Level 4	
Surge Immunity	EN61000-4-5	Level 4	
Conducted RFI	EN61000-4-6	Compliant	
Power Freq Magnetic Field	EN61000-4-8	Compliant	
Voltage Dips	EN61000-4-11		

Dimming Control

Parameter		Min	Nom	Max	Units
10V Output Voltage		9.8	10.0	10.2	VDC
10V Output Source Current		-10		10	mA
Control Voltage (1-10V input	Voltage applied on 1-10V input wire	0		12	V
Source Current (1-10V input)	Source current on 1-10V input wire	0		1	mA

Note A. If dimming function is not required, dimming wires are to be floating
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. See graphs for Dimming control. If Dimming Signal Voltage is 0-1V, output current is 10% rated current. If Dimming Sgnal Voltage is 8.5-10V,, output current is 100% rated current
Note F. See Dimming Implementation diagrams for various dimming methods.
Note G. Do not connect GND of Dimming cable to Output..

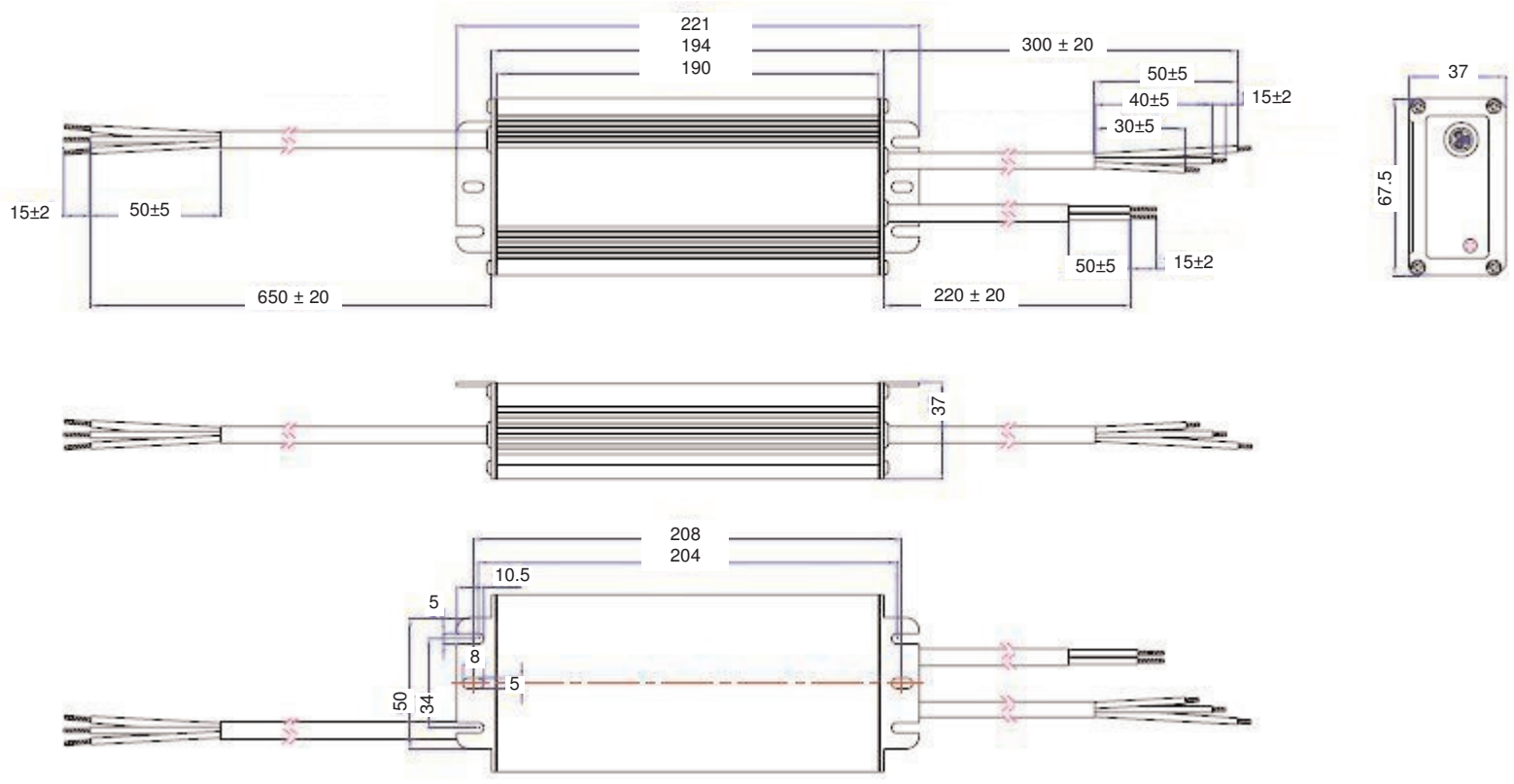
INPUT / OUTPUT WIRING

INPUT CABLE
SJTW 18AWG 3C
Black (L),White(N), Green (G)650±20mm

OUTPUT CABLE
SJTW 18AWG 2C
Black (-V) and Red (+V) 220±20mm

DIMMING CABLE
SJTW 22AWG 3C
Yellow (10V), Purple (0-10V), Green (GND)

MECHANICAL SPECIFICATIONS



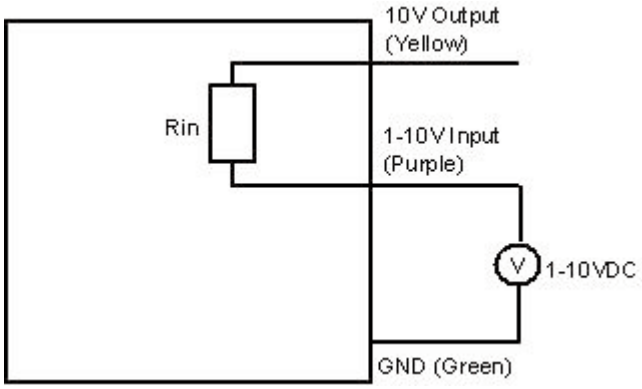
Specifications are subject to change without notice

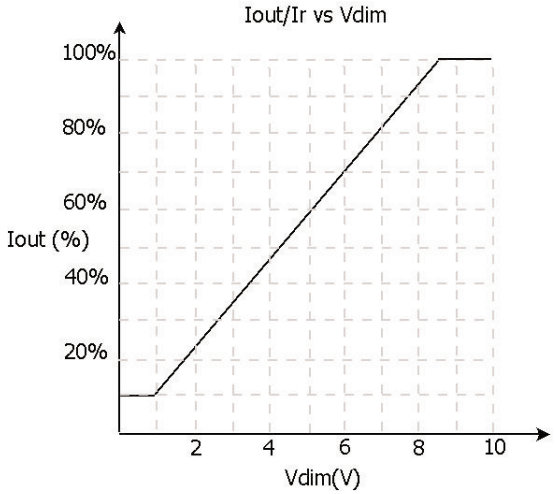
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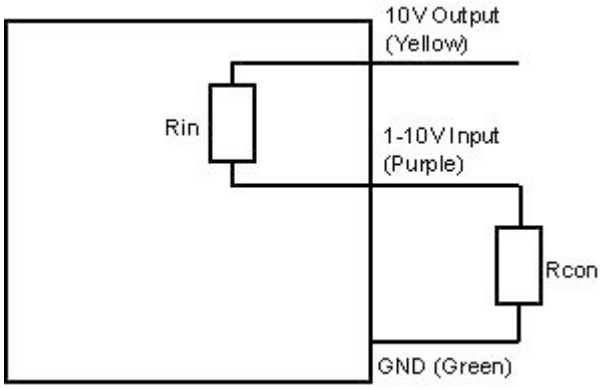
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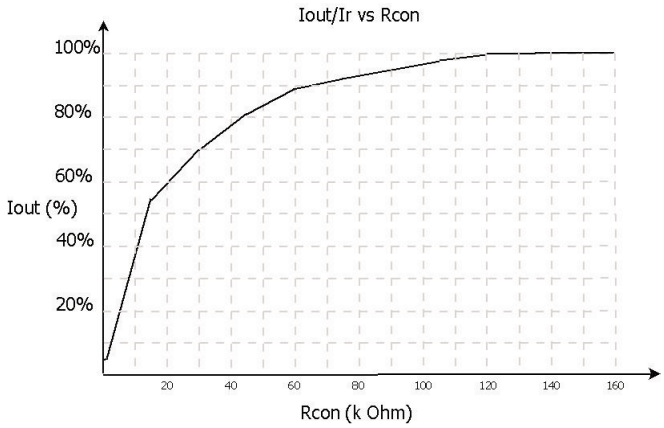
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Dimming Implementation Diagrams









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