



### FEATURES AND BENEFITS

High Efficiency (up to 91%)	Waterproof (IP67)
Wide Range Universal Input 90-305 VAC	Overcurrent, Overvoltage, Overtemperature Protection
Active Power Factor Correction (0.99 Typical)	Meets UL8750 & EN61347 Safety
Constant Current Output	Compliant to ANSI/IEEE C62.41, Class A
Dimming Function	Minimum of 3 Year Warranty, Consult Factory for 5 Years
Lightning Protection	



### MODEL SELECTION

Model Number	Output Current	Output Voltage	Efficiency*		Ripple & Noise**	Regulation		Overvoltage Trip Level
			110 Vac	220 Vac		Line	Load	
LE75S28CD	2660mA - 2940mA	13V - 27V	85% - 87%	87% - 89%	5% of Vo pk-pk	±1%	±3%	35V - 38V
LE75S140CD	1330mA - 1470mA	27V - 54V	86% - 88%	88% - 90%	5% of Vo pk-pk	±1%	±3%	65V - 70V
LE75S70CD	665mA - 735mA	54V - 108V	87% - 89%	89% - 91%	5% of Vo pk-pk	±1%	±3%	118V - 130V

- Notes :**
1. Efficiency measured at full load, at input voltage noted. Efficiency will be 2% lower if measured immediately after start-up.
  2. Measured at 20MHz bandwidth, with noise probe directly across output terminals, and load terminated with 0.1µF ceramic and 10µF low ESR electrolytic capacitors.
  3. LE75S070CD: Non-Class 2 output (USR & CNR)
  4. LE75S140CD: Class 2 output (USR), Non-Class 2 output (CNR)
  5. LE75S280CD: Class 2 output (USR & CNR)

### INPUT

AC Input	90-305Vac, 47-63Hz, 1Ø 120-370Vdc
Input Current	100Vac: 0.9A, 220Vac: 0.42A
Inrush Current	230Vac, cold start: will not exceed 50A
Input Fuses	XA, 250VAC fuses provided on all models
Earth Leakage Current	<1mA@277Vac, 50Hz
Efficiency	See models chart

### OUTPUT

Turn On Time	110Vac: 0.8s – 1.2s 220Vac: 0.4s – 0.6s
Dimming Function	1-10Vdc source or External Resistor can be used for dimming control. See pg. 4
Output Power	75W continuous
Output Voltage	See chart
Ripple and Noise	See chart
Total Regulation	+/- 3%, See chart

### PROTECTION

Overtemperature Protection	Latch mode. AC input will need to be reset to return to normal operation after an OTP condition. Trip Temperature = 110°C typical
Overload Protection	Constant Current
Short Circuit Protection	Provided - no damage to unit, self-recovery
Overvoltage Protection	Latch mode. AC input will need to be reset to return to normal operation after an OVP condition. See chart for trip range



### EMI/EMC COMPLIANCE

Emissions	EN55015, Radiated & Conducted with 6db of margin
EMI for Lighting Equipment	EN61547
Static Discharge Immunity	EN61000-4-2, 4kV Contact Discharge, 8kV air discharge
Radiated RF Immunity	EN61000-4-3
EFT/Burst Immunity	EN61000-4-4
Line Surge Immunity	EN61000-4-5, 2kV line-line, 4kV line-earth
Conducted RF Immunity	EN61000-4-6
Power Frequency Magnetic Field Immunity	EN61000-4-8
Voltage Dip Immunity	EN61000-4-11
Line Harmonic Emissions	EN61000-3-2
Flicker Test	EN61000-3-3
Transient Protection	ANSI/IEEE C62.41-1991: Class A operation. Line transient of 7 strikes of a 100kHz ring wave, 2.5kV level, common and differential mode

### RELIABILITY

MTBF	450,000 hours (2800mA model, at 110Vac input, 80% load, 25°C ambient, per MIL-HDBK-217F)
Lifetime	65,000 hours (2800mA model, at 110Vac input, 80% load, 45°C ambient temperature)

### SAFETY

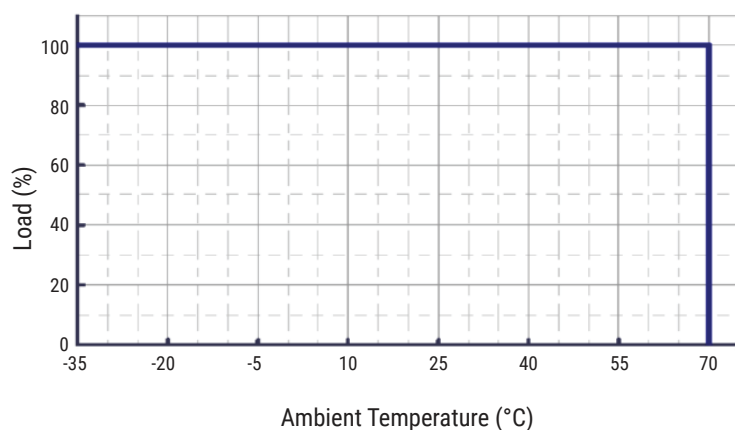
Safety Standards	UL8750, UL935, UL1012, UL1310 Class 2; CSA-C22.2 No. 107.1, CSA C22.2 No. 223-M91 Class 2; EN61347-1, EN61347-2-13
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### ENVIRONMENT

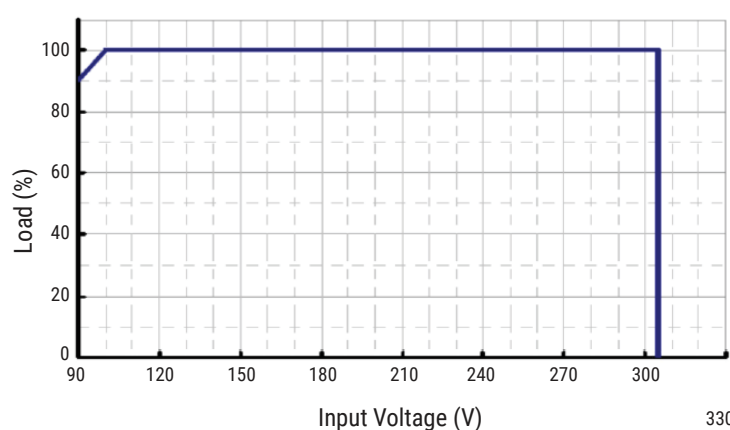
Operating Temperature	Operating: -35°C to +70°C Non-operating: -40°C to +85°C
Relative Humidity	10% to 95% operating 5% to 100%, non-operating
Dimension	W: 2.66" x L: 5.91" x H: 1.46"
Weight	750g

### DERATING CURVES

Derating Curve



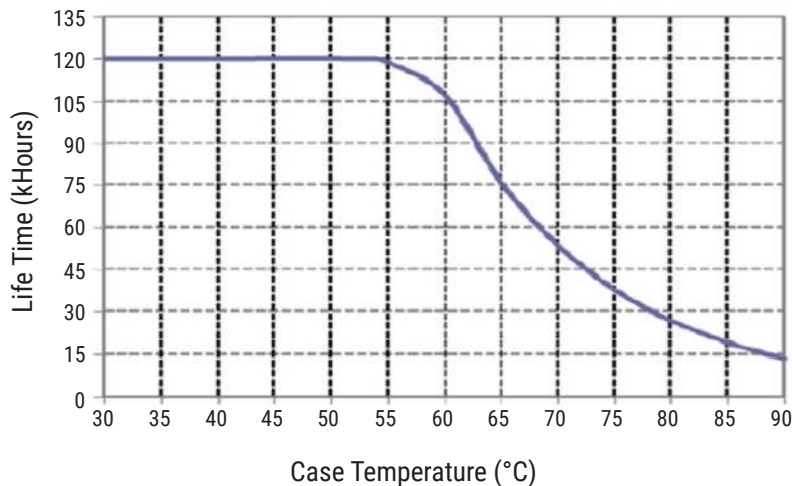
Derating Curve



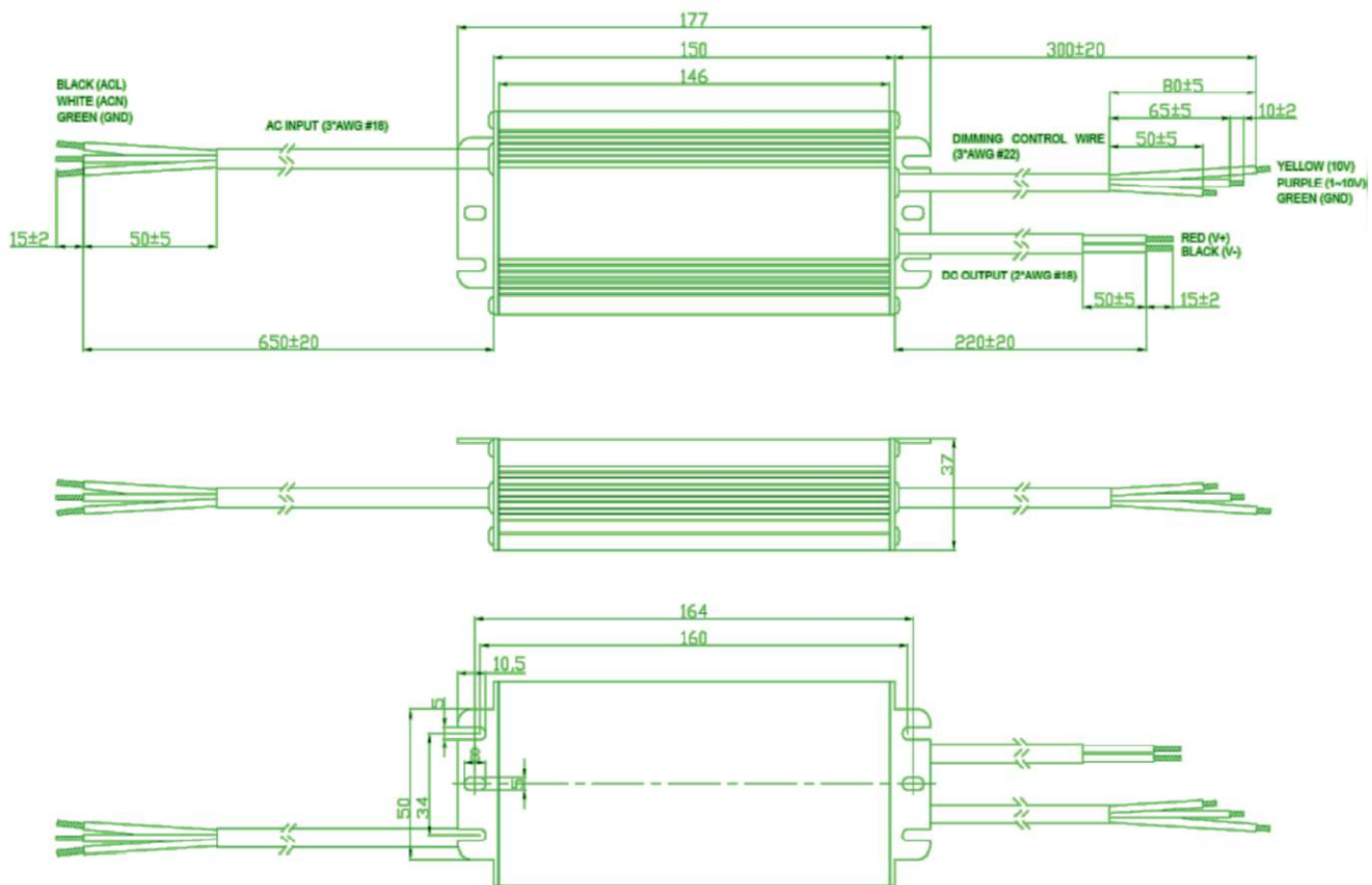


## LIFE TIME VS. CASE TEMPERATURE CURVE

Life Time vs. Case Temperature



## MECHANICAL DRAWING

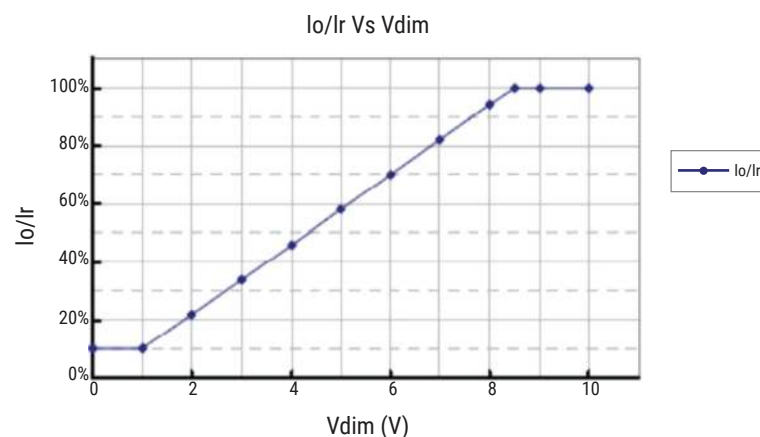




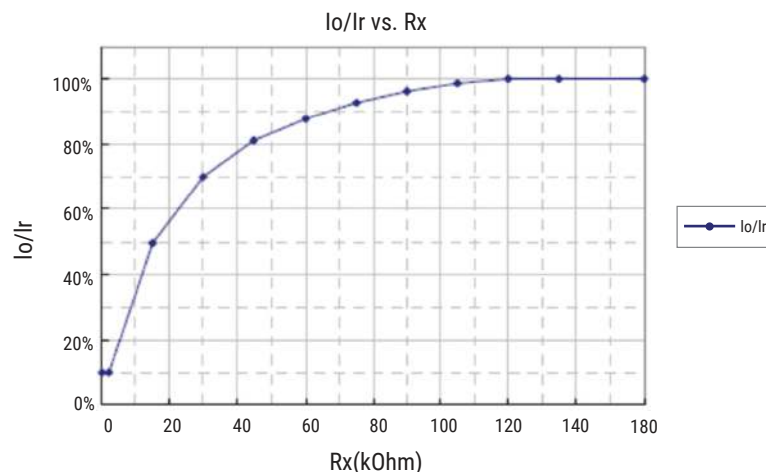
## DIMMING CONTROL

The dimming function shown below uses an internal pull-up resistor, with the output at full load when the dimming leads are not connected (floated).

Parameter	Min.	Typ.	Max.	Notes
10V Output Voltage	9.8V	10V	10.2V	
10V Output Source Current	0mA	-	10mA	
Absolute Max. Voltage on the 1-10V input	-2V	-	12V	
Source Current on the 1-10V input	0mA	-	0.5mA	
Value of Rin (resistor inside the LED Driver, which is located between the 1-10V input and 10V output)	19.8K	20K	20.2K	



Dimming Configuration using External Voltage



Dimming Configuration using External Resistance

### Dimming Control Notes:

1. If the dimming function is not used, leave the dimming leads unconnected (floating).
2. Io is the actual output current and Ir is the rated current without dimming control.
3. For the driver to operate properly, the load voltage must be maintained above the minimum voltage threshold (~50% of the maximum output voltage for the specific model).
4. If the output voltage is maintained above 50% of the maximum output voltage, the dimming control may be operated over the entire 1-10V range with the output current varying from 100% down to ~10% of nominal.
5. The dimming signal may be <1V, but if this voltage is <1V, the output current can only maintain ~10% Ir. When the signal voltage is ~8.5-10V, the output current can maintain ~100% Ir.
6. Do not connect the GND of the dimming leads to output. The driver will not function normally if it is.

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