

### 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

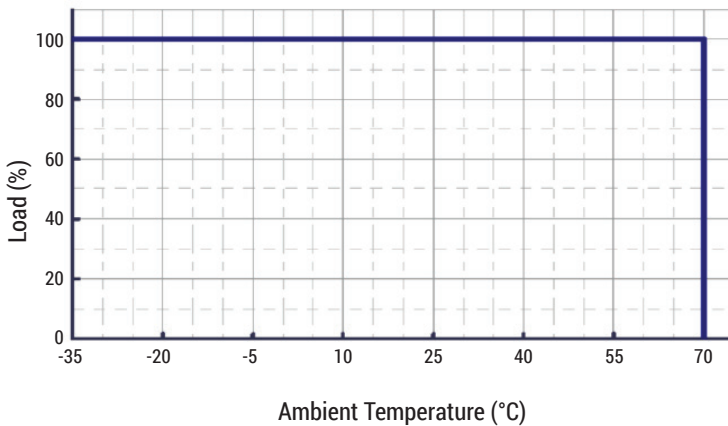
Safety Standards	UL8750, UL935, UL1012, UL1310 Class 2; CSA-C22.2 No. 107.1, CSA C22.2 No. 223-M91 Class 2; EN61347-1, EN61347-2-13
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### ENVIRONMENT

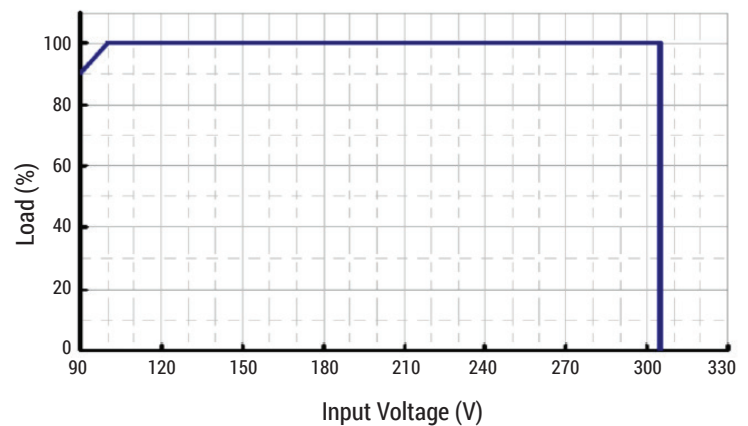
Operating Temperature	Operating: -35°C to +70°C Non-operating: -40°C to +85°C
Relative Humidity	10% to 95% operating 5% to 100%, non-operating
Dimension	W: 2.66" x L: 5.91" x H: 1.46"
Weight	750g

### DERATING CURVES

Derating Curve



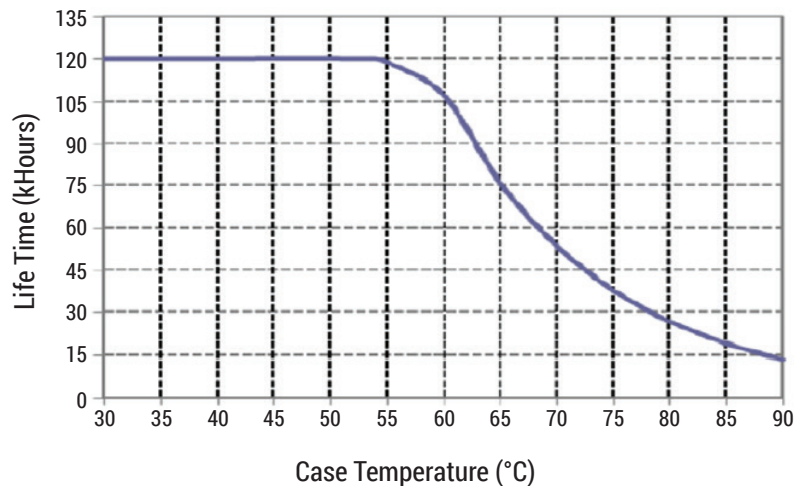
Derating Curve



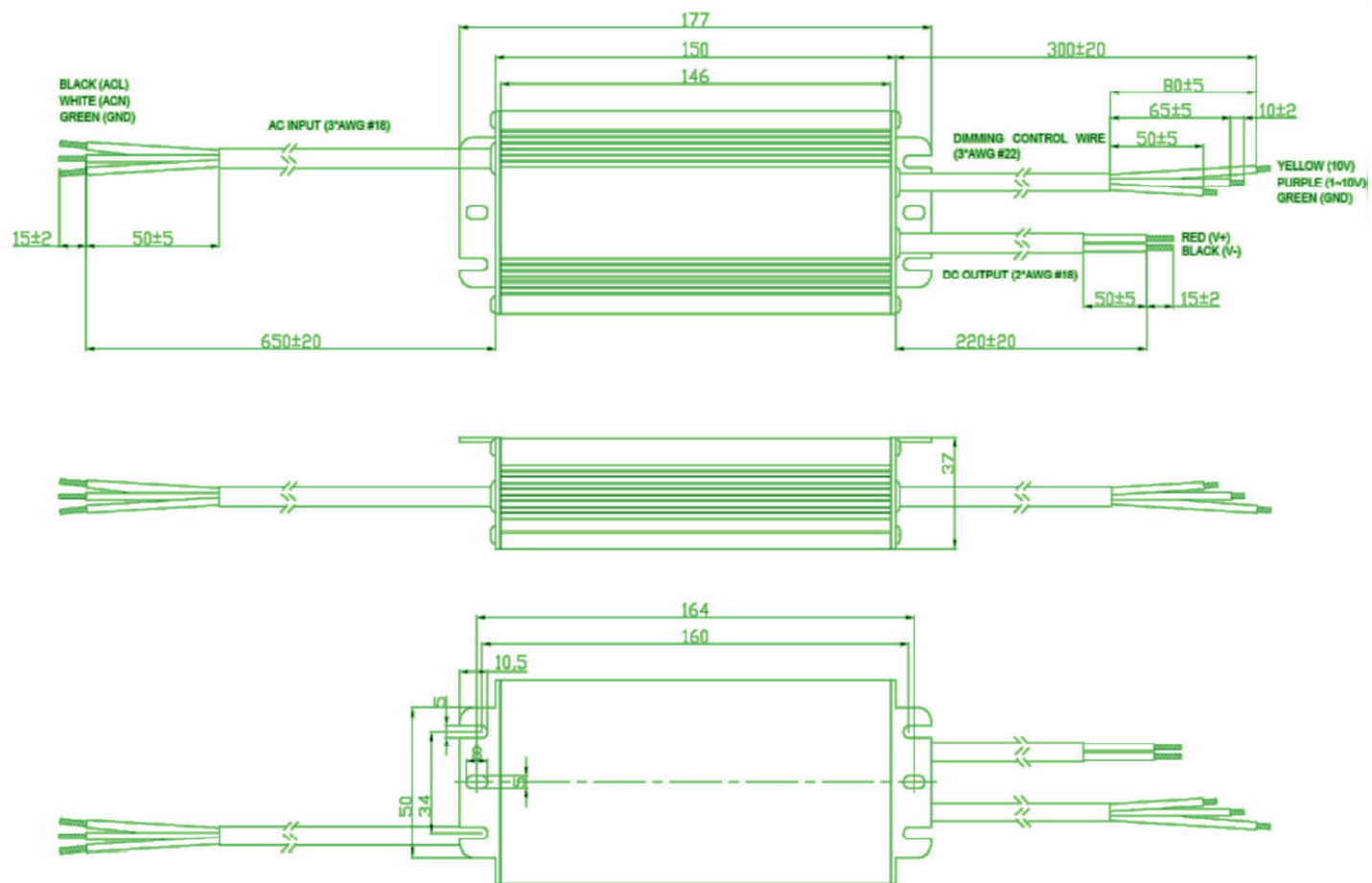


## LIFE TIME VS. CASE TEMPERATURE CURVE

Life Time vs. Case Temperature



## MECHANICAL DRAWING

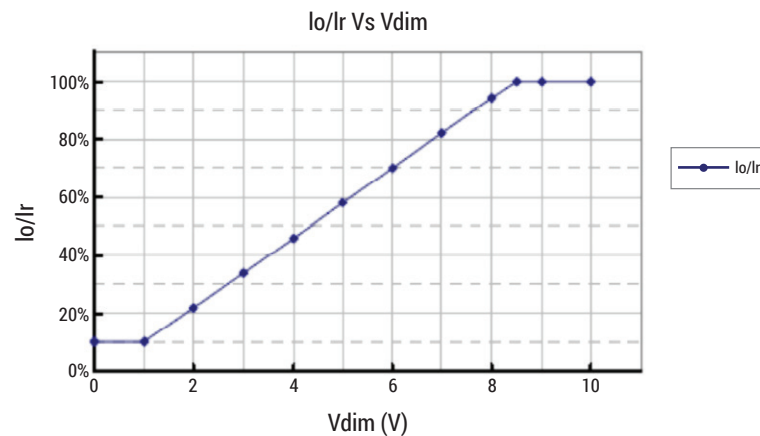
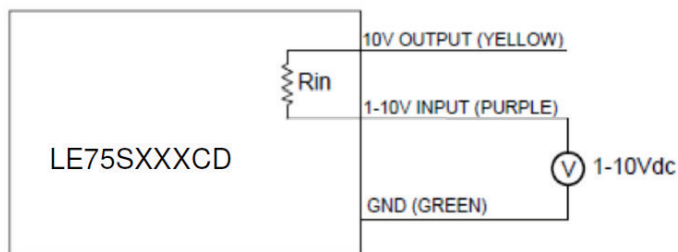




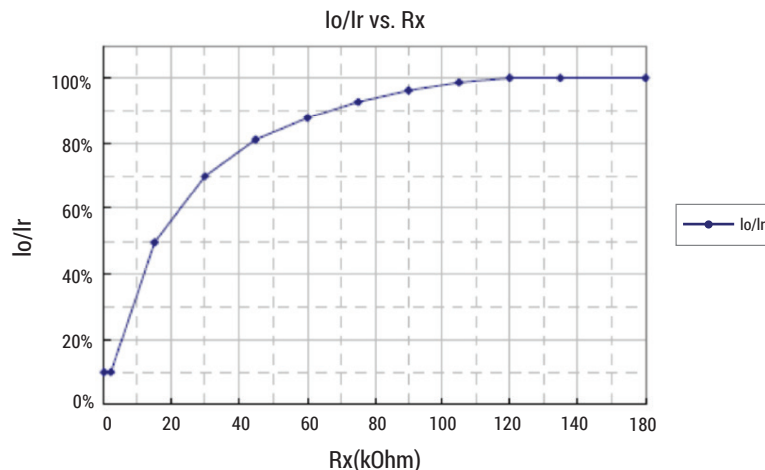
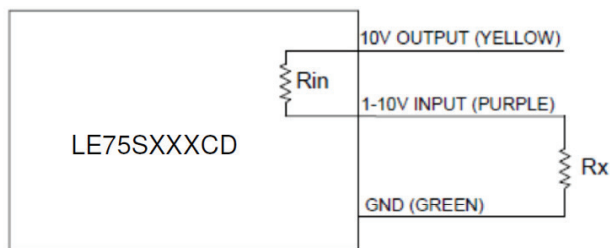
### DIMMING CONTROL

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.  $I_o$  is the actual output current and  $I_r$  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%  $I_r$ . When the signal voltage is ~8.5-10V, the output current can maintain ~100%  $I_r$ .
6. Do not connect the GND of the dimming leads to output. The driver will not function normally if it is.