■ Features
- Constant current design
- Universal AC input（90-305Vac）
- Current adjustable:(0.6-1.0)I_O
- Protections: SCP, OVP, OTP,OPP
- Class 2 power units(for $V_o \leqslant 36V$ models only)
- High Efficiency (Up to 90%)
- Active power factor correction (0.99 typ.)
- Lightning Protection
- Waterproof (IP67)
- Comply with UL8750 & EN61347 safety regulations
- 5 years warranty

■ Application
- Suitable for LED street lights, tunnel lights, landscape lights.

General Description

The document detail the electrical, mechanical and environmental specifications for LSC-075V(B) series LED driver, these driver are single channel output and can provide 75 W max. continuous output power.

Models & Key parameters

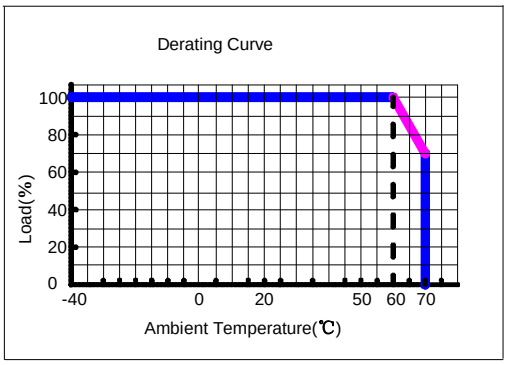
Model	Output Power (W)	Rated Output Voltage(Vdc)	Output Current (A)	Typ. Efficiency ※1	Power Factor	
					110Vac	230Vac
LSC-075V(B)012 ※3	60	12	5.00	82.5%	>0.99	>0.95
LSC-075V(B)015	60	15	4.00	84.0%	>0.99	>0.95
LSC-075V(B)020	75	20	3.75	85.0%	>0.99	>0.95
LSC-075V(B)024	75	24	3.15	87.0%	>0.99	>0.95
LSC-075V(B)030	75	30	2.50	87.0%	>0.99	>0.95
LSC-075V(B)036	75	36★ ※2	2.10	87.0%	>0.99	>0.95
LSC-075V(B)042	75	42★	1.80	88.0%	>0.99	>0.95
LSC-075V(B)048	75	48★	1.60	90.0%	>0.99	>0.95
LSC-075V(B)054	75	54	1.40	90.0%	>0.99	>0.95
NOTE	※1：Typ. Efficiency are measured at full load and 230 Vac input. ※2：★ means the popular models, we will keep sufficient stock for prompt delivery. ※3：V means the current of this model is adjustable, B means the current is fixed.					

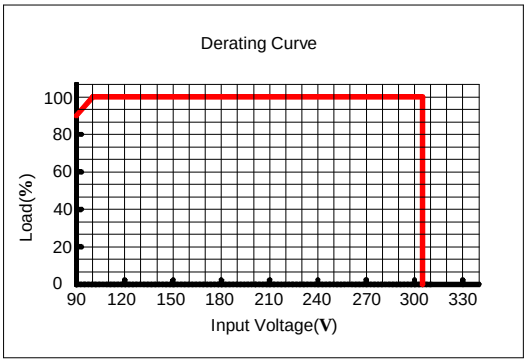
Specification

OUTPUT SPECIFICATION										
OUTPUT	Rated Output（Vdc）	12	15	20	24	30	36	42	48	54
	CONSTANT CURRENT RANGE(V)	3～12	3～15	3～20	3～24	3～30	3～36	3～42	3～48	3～54
	RATED CURRENT(A)	5.00	4.00	3.75	3.15	2.50	2.10	1.80	1.60	1.40
	CURRENT ADJUSTABLE RANGE(A)	3.0-5.0	2.4-4.0	2.3-3.75	1.9-3.15	1.5-2.5	1.26-2.1	1.08-1.8	0.96-1.6	0.84-1.4
	RATED POWER(W)	60	60	75	75	75	75	75	75	75
	RIPPLE& NOISE(max.)※4	10%Vo								
	VOLTAGE TOLERANCE	5%Vo								
	LINE REGULATION	1%Vo								

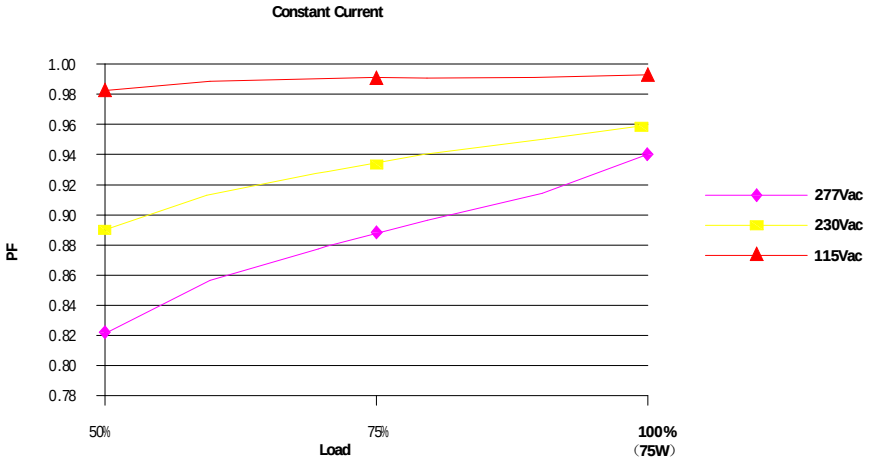
	LOAD REGULATION	3%Vo							
	HOLD UP TIME (Typ.)	8.5mS min. @ Full load &110Vac, 10mS min. @ Full load &230Vac							
NOTE	※4: Ripple & Noise: Measurement is done by 20MHz bandwidth oscilloscope and the output paralleled a 0.1uF ceramic- capacitor and a 10uF electrolysis capacitor. And the test under the condition of rated input and rated output)								
INPUT SPECIFICATION									
INPUT	VOLTAGE RANGE	90-305Vac							
	FREQUENCY RANGE	47-63Hz							
	EFFICIENCY (Typ.)	82.5%	84.0%	85.0%	87.0%	87.0%	87.0%	88.0%	90.0%	90.0%
	AC CURRENT (Typ.)	1.0Amax. @ 100-277Vac input & Full load.							
	INRUSH CURRENT	60Amax. @ 230Vac input,25℃.							
	LEAKAGE CURRENT	0.6mA max. at input 277Vac							
PROTECTION									
PROTECTION	Input OVP ※5	315Vac							
	Output OVP ※6	(1.2-1.4)V_O							
	SCP	No damage shall occur when any output operating in a short circuit condition. The power supply shall be self-recovery when the fault condition is removed.							
NOTE	※4: The driver return to normal operation when voltage drop to operating voltage range. ※5: Latch mode. The power supply shall return to normal operation only after the power is turn-on again.								
ENVIRONMENT REQUIREMENTS									
ENVIRONMENT REQUIREMENTS	Operating Temperature	-35℃ to +70℃							
	Operating Relative Humidity	10%RH to 100%RH							
	Storage Temperature	-40℃ to +85℃							
	Storage Relative Humidity	5% to 100%RH non-condensing @ Sea level shall be low 10,000 feet.							
	Vibration	10 to 300Hz sweep at a constant acceleration of 1.0G(Breadth: 3.5mm) for 1Hour for each of the perpendicular axes X, Y, Z.							
	Waterproof grade	IP67							
SAFETY&EMC									
SAFETY& EMC	SAFETY STANDARDS	UL8750, UL1310, UL1012, IEC61347,GB19510.							
	WITHSTAND VOLTAGE	L/N-GND:4KV, L-N:2KV							
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25 / 70% RH							
	EMC IMMUNITY	Compliance to EN 61000-3-2, 3EN 61000-4-2, 3,4,5,6,8,11, EN 61547							
SAFETY APPROVAL									
CERTIFIED		UL,CB,CE,CQC ※7							
NOTE: ※7 The driver should not rely upon the luminaire enclosure to protect against electric shock, it shall be sufficiently protected against accidental contact with live parts when installed as in normal use.									
RELIABILITY REQUIREMENTS									
RELIABILITY REQUIREMENTS	Burn-in	The power supply shall undergo a minimum of 4 Hours burn-in test at 40℃±5℃ under full load condition							
	Life Time	≥50,000 hours at 60℃ measured at 110Vac input,and 80% load.							
	MTBF	≥ 360,000 hours at 25℃, measured at 110Vac input,and 80% load. (MIL-HDBK-217F)							

n Derating Curve

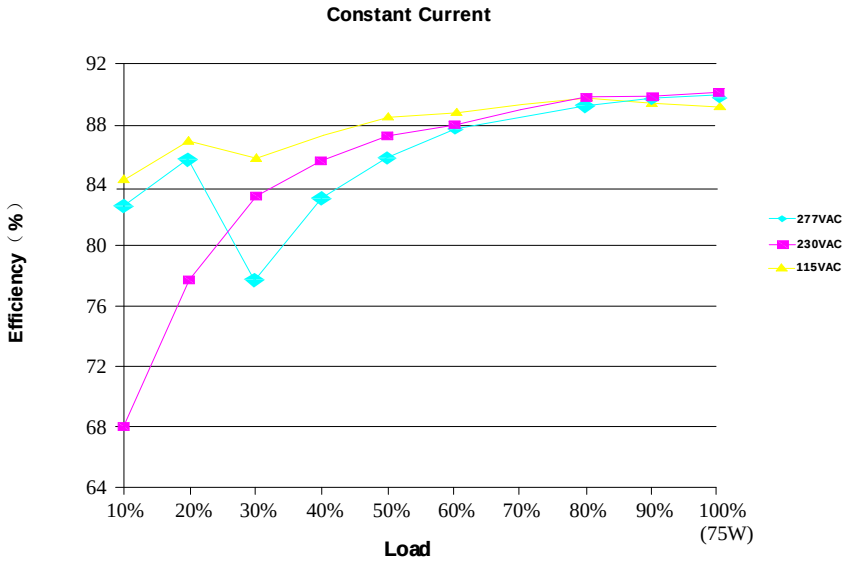




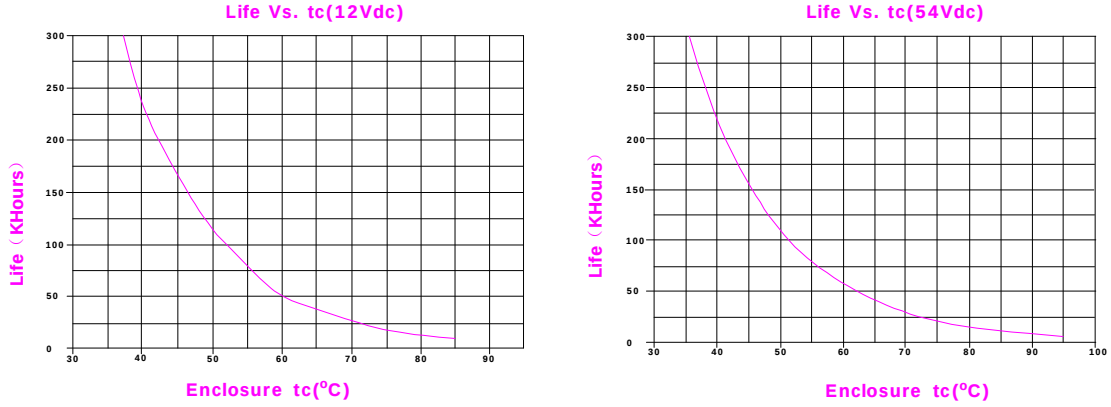
n Power Factor Characteristic



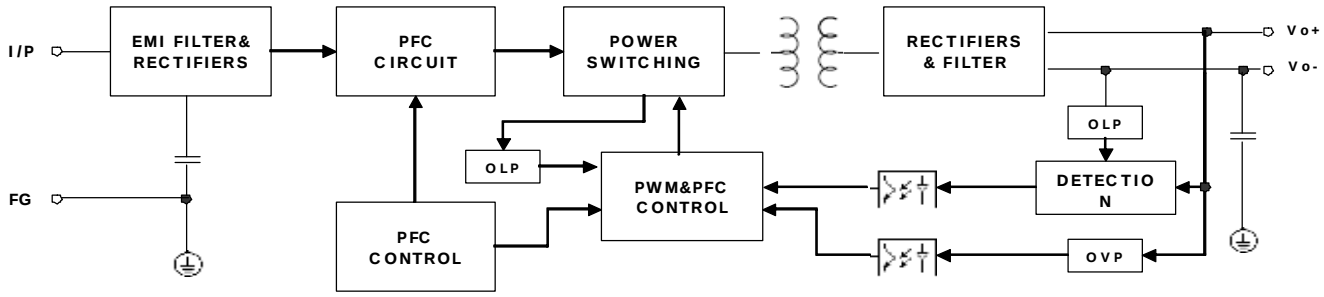
n Efficiency curve(Typ.Voltage 36V)



n Life vs tc curve



n Block Diagram



n Mechanical Specification