

### Features:

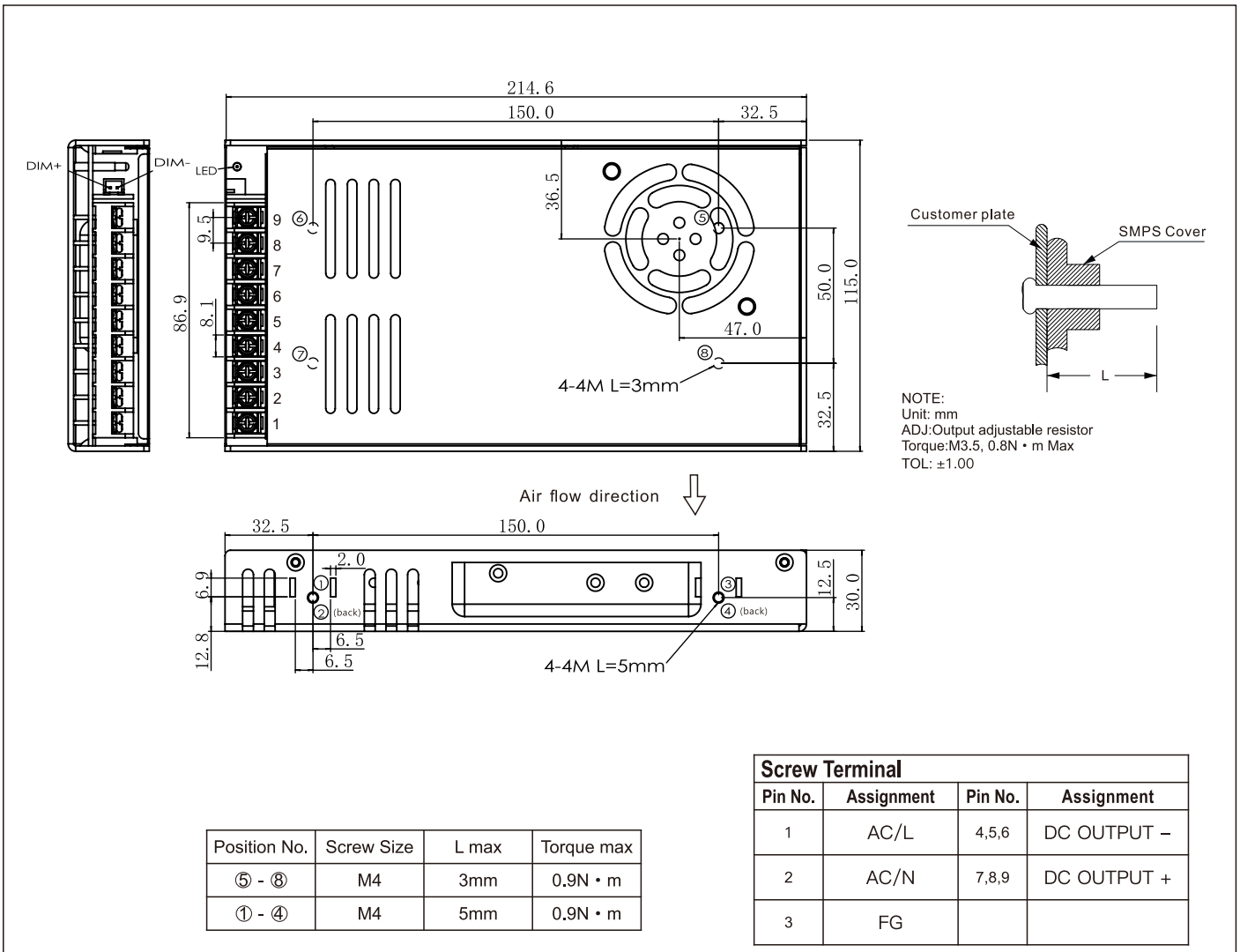
- AC input 180~264VAC
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Built-in cooling Fan ON-OFF control
- Withstand 300VAC surge input for 5 second
- Dimming function (0~10Vdc and resistance)
- Constant current mode output
- LED indicator for power on
- High reliability
- 3 years warranty
- Compliance to IEC/EN/UL 62368-1

### Specification

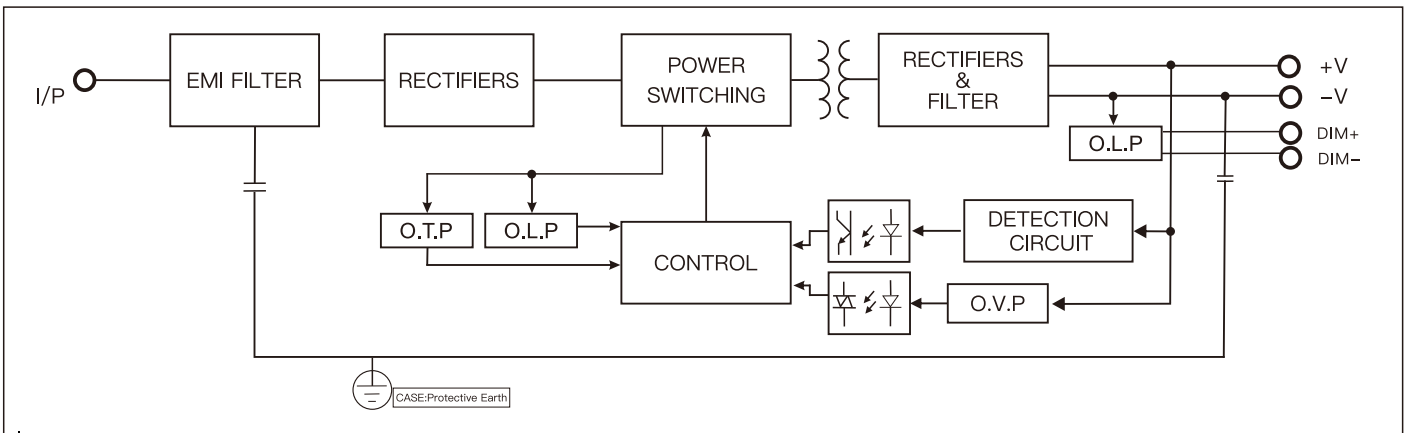
MODEL		LS-450C-48
INPUT	VOLTAGE RANGE	180~264Vac 240~370Vdc (refer to 'static characteristic')
	FREQUENCY RANGE	47~63Hz
	EFFICIENCY(Typ.)	88%
	AC CURRENT(Typ.)	5A/230Vac
	INRUSH CURRENT(Typ.)	65A/230Vac (cold start)
	LEAKAGE CURRENT	<2mA/240Vac
OUTPUT	CONSTANT CURRENT REGION	36~48V
	RATED CURRENT	9.4A
	CURRENT ADJ. RANGE	0~9.4A
	RATED POWER	451.2W
	CURRENT RIPPLE	5.0% max. @rated current
	OPEN CIRCUIT VOLTAGE max.	52.5~53V @ no load
	CURRENT TOLERANCE	±5.0%
	SETUP TIME	3000ms/230Vac
PROTECTION	SHORT CIRCUIT	Protection type: Hiccup mode or shutdown, recovers after re-power on
	OVER VOLTAGE	55.2~64.8V
		Protection type: Hiccup mode, recovers automatically after fault condition is removed
OVER TEMPERATURE	Protection type: Hiccup mode, recovers automatically after fault condition is removed	
FUNCTION	FAN ON/OFF CONTROL(Typ.)	RTH2≥50°C FAN ON, ≤40°C FAN OFF
	DIMMING FUNCTION	Output constant current level can be adjusted by applying one of two methodologies between DIM+ and DIM-: 0~10VDC and resistance. Min. dimming level is about 5%
ENVIRONMENT	WORKING TEMP., HUMIDITY	-30~+70°C (Refer to "Derating curve") , 20~90%RH non-condensing
	STORAGE TEMP., HUMIDITY	-40~+85°C, 10~95%RH
	TEMP. COEFFICIENT	±0.03%/°C (0~50°C)
	VIBRATION	10~500Hz, 5G 10min./1 cycle, each along X、Y、Z axes

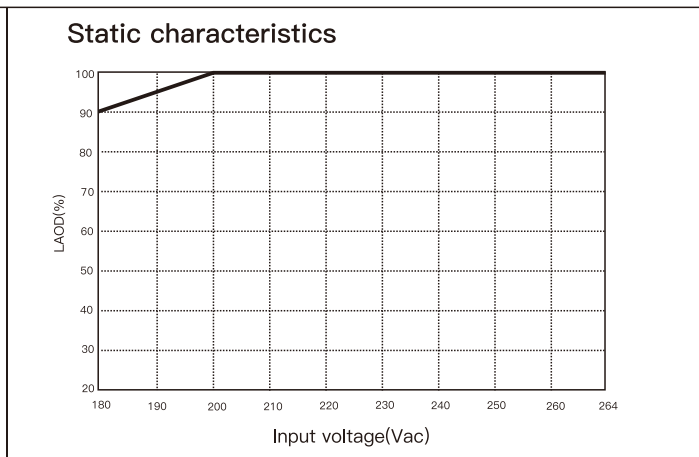
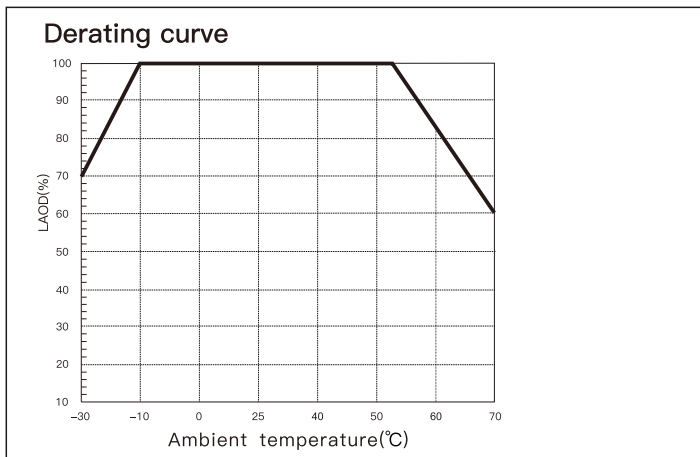
Safety and electromagnetic compatibility	Safety standards	Refer to UL62368-1,TUV EN62368-1,CCC GB4943.1		
	Withstand voltage and isolation resistance	I/P-O/P: 3KVac; 100MΩ / 500Vdc / 25°C / 70%RH		
		I/P-FG: 2KVac; 100MΩ / 500Vdc / 25°C / 70%RH		
		O/P-FG: 0.5KVac; 100MΩ / 500Vdc / 25°C / 70%RH		
	Electromagnetic	Parameter	Standard	Test Level / Note
		Conducted emission	BS EN/EN55032(CISPR32),FCC PART 15 / CISPR22 ,GB9254.1	Class A
		Radiated emission	BS EN/EN55032(CISPR32),FCC PART 15 / CISPR22 ,GB9254.1	Class A
		Harmonic current	BS EN/EN61000-3-2,GB17625.1	Dos not meet
		Voltage flicker	BS EN/EN61000-3-3	----
	Electromagnetic compatibility immunity	BS EN/EN55035		
		Parameter	Standard	Test Level /Note
		ESD	BS EN/EN61000-4-2	Level 4, 8KV air, Level 2, 4KV contact, criteria A
		RF field susceptibility	BS EN/EN61000-4-3	Level 3, criteria A
EFT bursts		BS EN/EN61000-4-4	Level 3, criteria A	
Surge susceptibility		BS EN/EN61000-4-5	Level 3, 1KV/L-N, 2KV/L/N-FG criteria A	
Conducted susceptibility		BS EN/EN61000-4-6	Level 3, criteria A	
Magnetic field immunity		BS EN/EN61000-4-8	Level 4, criteria A	
Voltage dips and interruptions	BS EN/EN61000-4-11	>95% dip 0.5 periods, 30% dip 25 periods , >95% interruptions 250 periods		
OTHERS	MTBF	≥300Khrs MIL-HDBK-217F(25°C)		
	DIMENSION	215*115*30mm(L*W*H)		
	PACKING	0.75Kg; 15pcs/ 12.25Kg/ 0.77CUFT		
NOTE	<ol style="list-style-type: none"> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF &amp; 47uF parallel capacitor.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>Line regulation is measured from low line to high line at rated load.</li> <li>Load regulation is measured from 0% to 100% rated load</li> <li>Length of set up time is measured at cold first start, Turning ON/OFF the power supply very quickly may lead to increase of the set up time.</li> <li>The ambient temperature derating of 5°C/1000m is needed for operating altitude great than 2000m(6500ft).</li> <li>The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives.</li> </ol>			

## Mechanical specification



## Block diagram

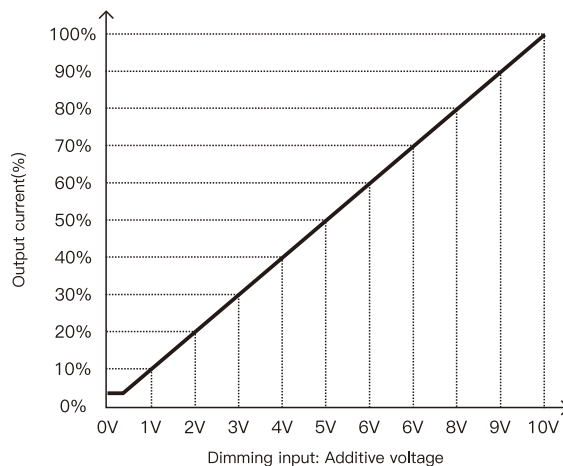
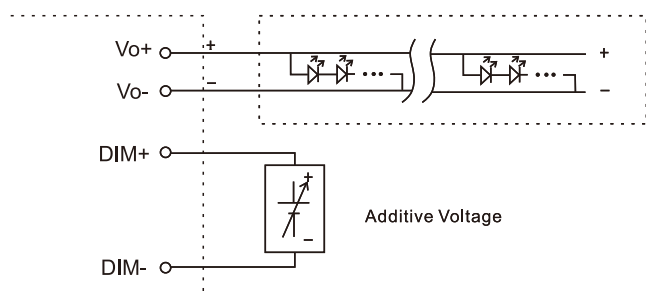




## Dimming function

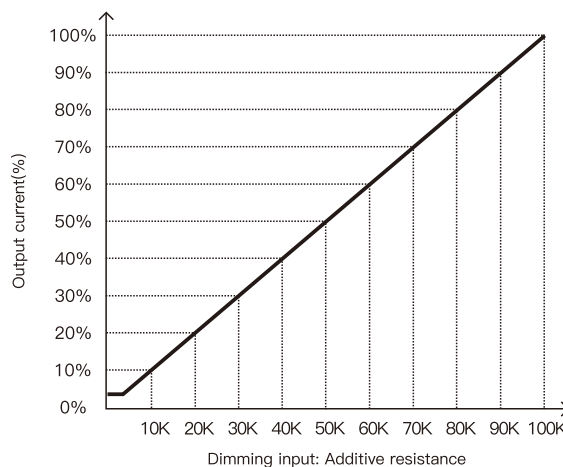
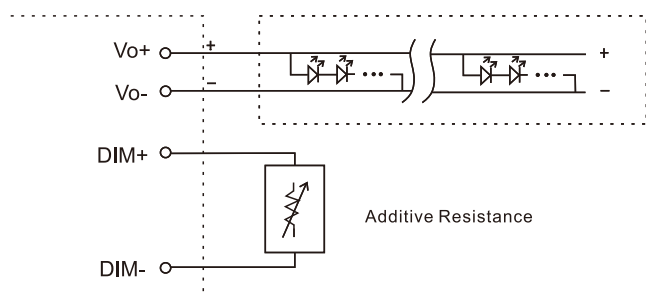
Output constant current level can be adjusted by applying one of two methodologies between DIM+ and DIM-: 0-10VDC and resistance

### 1, Applying additive 0-10VDC



“DO NOT connect DIM- to Vo-“

### 2, Applying additive resistance



“DO NOT connect DIM- to Vo-“

Min. dimming level is about 5%