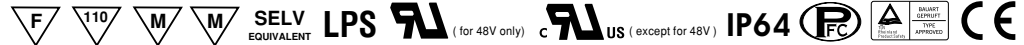




TOP100 Series 60-96 WATT AC/DC SWITCHING POWER SUPPLIES



- Features :
 - Universal AC input / Full range
 - Protections: Short circuit / Overload / Over voltage / Over temperature
 - Built-in active PFC function
 - IP64 design for indoor or outdoor installations
 - UL1310 Class 2 power unit
 - Cooling by free air convection
 - 100% full load burn-in test
 - High reliability
 - Suitable for LED lighting and moving sign applications
 - 2 years warranty



SPECIFICATION

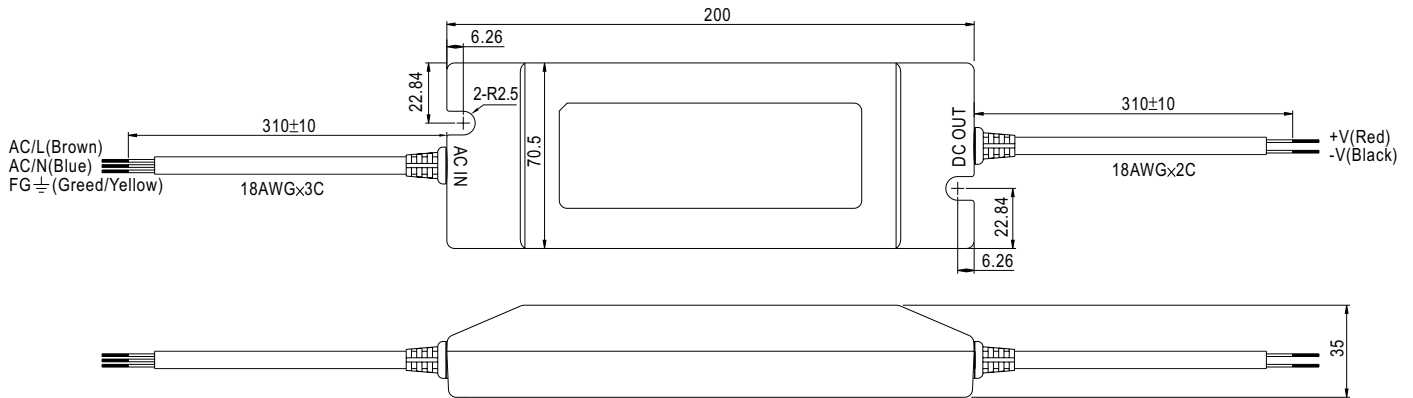
P/N		TOP100-12	TOP100-15	TOP100-20	TOP100-24	TOP100-27	TOP100-36	TOP100-48	
OUTPUT	DC VOLTAGE	12V	15V	20V	24V	27V	36V	48V	
	CONSTANT CURRENT REGION <small>Note.7</small>	6 ~ 12V	7.5 ~ 15V	10 ~ 20V	12 ~ 24V	13.5 ~ 27V	18 ~ 36V	24 ~ 48V	
	RATED CURRENT <small>Note.6</small>	5A	5A	4.8A	4A	3.55A	2.65A	2A	
	CURRENT RANGE <small>Note.6</small>	0 ~ 5A	0 ~ 5A	0 ~ 4.8A	0 ~ 4A	0 ~ 3.55A	0 ~ 2.65A	0 ~ 2A	
	RATED POWER <small>Note.6</small>	60W	75W	96W	96W	95.85W	95.4W	96W	
	RIPPLE & NOISE (max.) <small>Note.2</small>	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	
	VOLTAGE ADJ. RANGE	0% ~ -15%. Can be adjusted by internal potential meter SVR1							
	CURRENT ADJ. RANGE	3% ~ -25%. Can be adjusted by internal potential meter SVR2							
	VOLTAGE TOLERANCE <small>Note.3</small>	±3.0%	±3.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	
	LINE REGULATION	±1.0%							
LOAD REGULATION	±2.0%								
SETUP, RISE TIME	1200ms, 80ms/230VAC 1200ms, 80ms/115VAC at full load								
HOLD UP TIME (Typ.)	60ms/230VAC 30ms/115VAC at full load								
INPUT	VOLTAGE RANGE <small>Note.5</small>	90 ~ 264VAC		127 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz							
	POWER FACTOR (Typ.)	PF>0.95/230VAC		PF>0.95/115VAC at full load					
	EFFICIENCY (Typ.)	83%	85%	87%	87%	87%	87%	87%	
	AC CURRENT (Typ.)	12V:0.8A/115VAC	0.4A/230VAC	15V:0.9A/115VAC	0.45A/230VAC	20V ~ 48V:1.1A/115VAC	0.55A/230VAC		
	INRUSH CURRENT (Typ.)	COLD START 40A/230VAC							
LEAKAGE CURRENT	0.5mA / 240VAC								
PROTECTION	OVER CURRENT <small>Note.4</small>	95 ~ 100% Protection type : Constant current limiting, recovers automatically after fault condition is removed							
	OVER VOLTAGE	13 ~ 16V	16.5 ~ 20V	22 ~ 27V	27 ~ 34V	29 ~ 36V	39 ~ 48V	52 ~ 64V	
	OVER TEMPERATURE	90°C ±10°C (RTH2) Protection type : Shut down o/p voltage, re-power on to recover							
ENVIRONMENT	WORKING TEMP.	-30 ~ +50°C (Refer to output load derating curve)							
	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)							
SAFETY & EMC	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes							
	SAFETY STANDARDS	UL1310 Class 2, UL879 (listed in UL Sign Components Manual (SAM)), TUV EN60950-1, EN61347-1, EN61347-2-13 CAN/CSA C22.2 No. 223-M91(except for 48V), IP64 approved							
	WITHSTAND VOLTAGE	I/P-O/P:4.25KVDC							
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH							
	EMI CONDUCTION & RADIATION	Compliance to EN55015, EN55022 (CISPR22) Class B							
	HARMONIC CURRENT	Compliance to EN61000-3-2 Class C (>50% load) ; EN61000-3-3							
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61547, EN55024, light industry level, criteria A							
	MTBF	303.1Khrs min. MIL-HDBK-217F (25°C)							
	DIMENSION	200*70.5*35mm (L*W*H)							
NOTE	PACKING	0.52Kg; 20pcs/11.4Kg/0.76CUFT							
	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. Please refer to OLP characteristics. 5. Derating may be needed under low input voltage. Please check the derating curve for more details. 6. This is the maximum possible output current and power. Over load protection may be activated slightly below this level to comply with the requirement of UL1310 class 2. 7. Constant current operation region is within 50% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.								



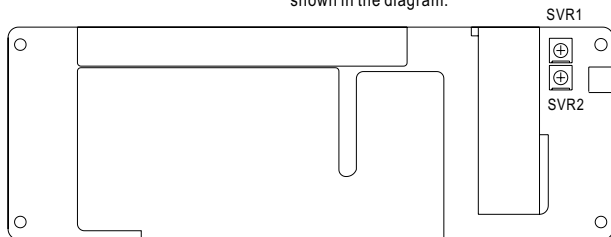
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Mechanical Specification

Case No.955A Unit:mm



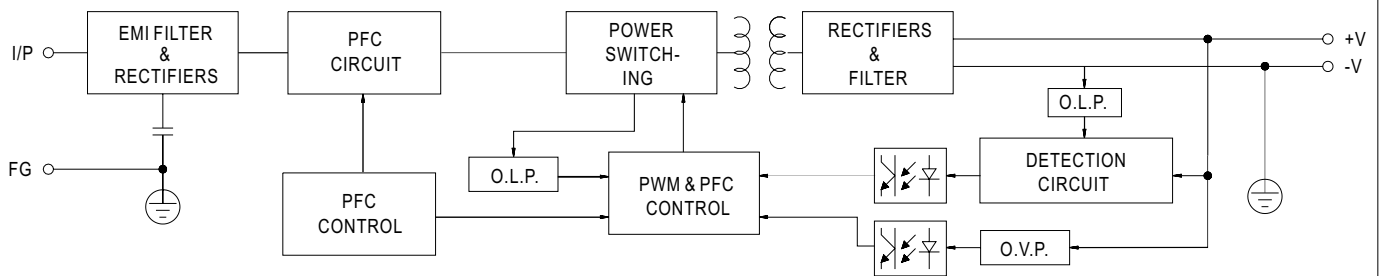
Output voltage and current adjustment : remove the upper case and adjust through SVR1 & SVR2 shown in the diagram.



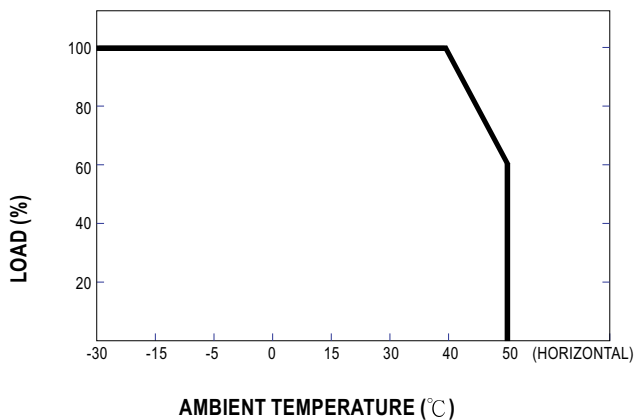
SVR1	Output voltage adjustment
SVR2	Output current adjustment

Block Diagram

Fosc : 100KHz



Derating Curve



Static Characteristics

