

PSU.0007.0

96 W Single Output Switching Power Supply



■ **Features :**

- Universal AC input / Full range
- High efficiency up to 88.5%
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- Built-in active PFC function
- Class 2 power unit
- Pass LPS
- 100% full load burn-in test
- High reliability
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- 2 years warranty



SPECIFICATION

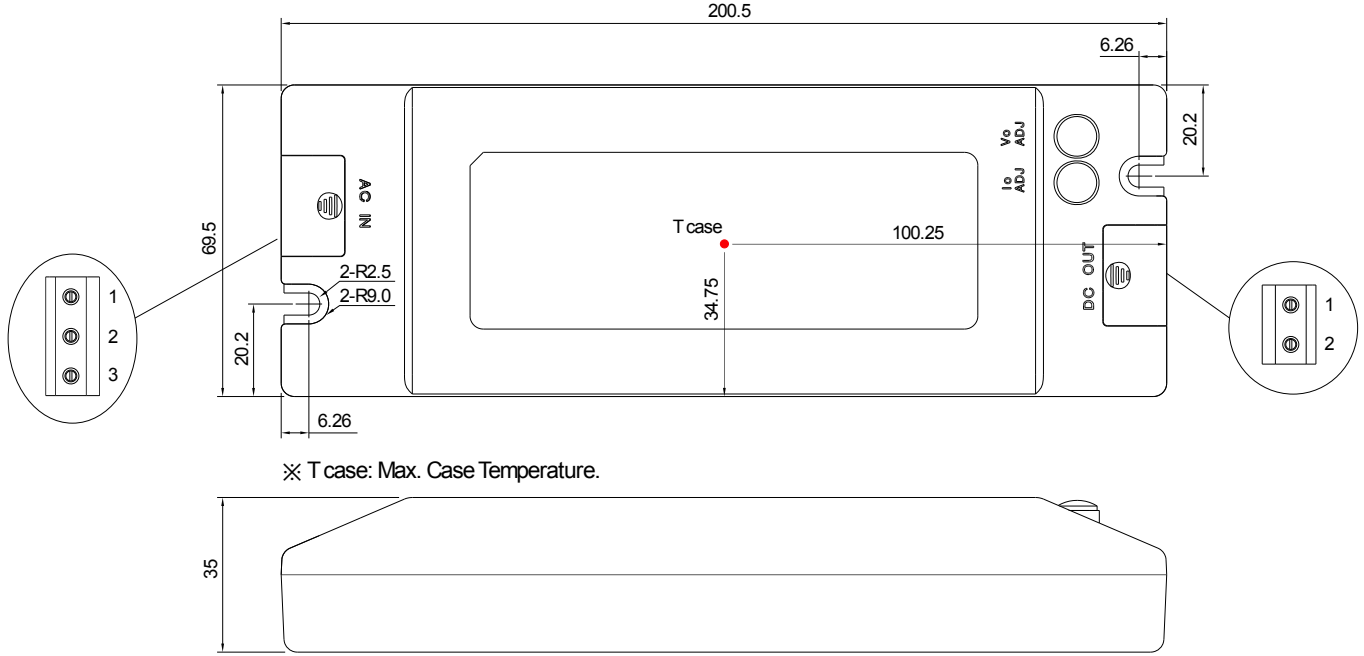
OUTPUT	DC VOLTAGE	24V
	CONSTANT CURRENT REGION <small>Note.4</small>	18 ~ 24V
	RATED CURRENT <small>Note.6</small>	4A
	CURRENT RANGE <small>Note.6</small>	0 ~ 4A
	RATED POWER <small>Note.6</small>	96W
	RIPPLE & NOISE (max.) <small>Note.2</small>	150mVp-p
	VOLTAGE ADJ. RANGE (V _o ADJ)	20.4 ~ 24V
	CURRENT ADJ. RANGE (I _o ADJ)	3 ~ 4A
	VOLTAGE TOLERANCE <small>Note.3</small>	±3.0%
	LINE REGULATION	±1.0%
	LOAD REGULATION	±2.0%
	SETUP, RISE TIME	500ms, 80ms/230VAC 1200ms, 80ms/115VAC at full load
HOLD UP TIME (Typ.)	60ms/230VAC 16ms/115VAC at full load	
INPUT	VOLTAGE RANGE <small>Note.5</small>	90 ~ 264VAC 127 ~ 370VDC
	FREQUENCY RANGE	47 ~ 63Hz
	POWER FACTOR (Typ.)	PF>0.95/115VAC, PF>0.95/230VAC at full load (Please refer to "Power Factor Characteristic" curve)
	TOTAL HARMONIC DISTORTION	THD< 20% when output loading≥75% at 115VAC/230VAC input
	EFFICIENCY (Typ.)	88.5%
	AC CURRENT (Typ.)	1.1A/115VAC 0.55A/230VAC
	INRUSH CURRENT (Typ.)	COLD START 40A(twidth=950μs measured at 50% I _{peak}) at 230VAC
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	3 units (circuit breaker of type B) / 5 units (circuit breaker of type C) at 230VAC
PROTECTION	OVER CURRENT (Typ.) <small>Note.4</small>	95 ~ 102% Protection type : Constant current limiting, recovers automatically after fault condition is removed
	OVER VOLTAGE	27 ~ 34V Protection type : Shut down and latch off o/p voltage, re-power on to recover
	OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover
ENVIRONMENT	WORKING TEMP.	-30 ~ +50°C (Refer to "Derating Curve")
	WORKING HUMIDITY	20 ~ 95% RH non-condensing
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)
	VIBRATION	10 ~ 500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes
SAFETY & EMC	SAFETY STANDARDS <small>Note.7</small>	UL1310, TUV EN60950-1, EN61347-1, EN61347-2-13, GB19510.14, GB19510.1, CAN/CSAC22.2 No. 223-M91(except for 48V), J61347-1, J61347-2-13 approved
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH
	EMC EMISSION	Compliance to EN55015, GB17743, GB17625.1, EN61000-3-2,-3, Class C (≥70% load) ; EN61000-3-3
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, EN55024, light industry level, (surge 4kV), criteria A
OTHERS	MTBF	297.9Khrs min. MIL-HDBK-217F (25°C)
	DIMENSION	200.5*69.5*35mm (L*W*H)
	PACKING	0.52kg; 25pcs/14Kg/0.65CUFT

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Mechanical Specification

Case No.981A Unit:mm



※ T case: Max. Case Temperature.

Terminal Pin No. Assignment (TB1):
SWITCHLAB MB310-75003

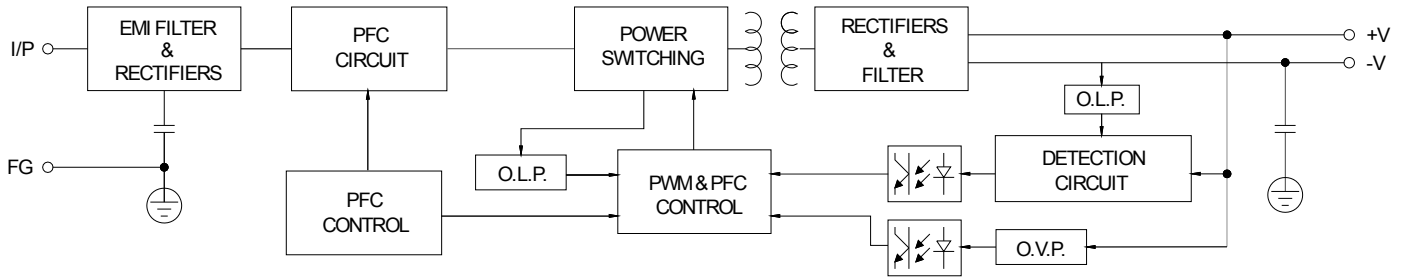
Pin No.	Assignment
1	FG ⊕
2	AC/N
3	AC/L

Terminal Pin No. Assignment (TB2):
SWITCHLAB MB310-75002

Pin No.	Assignment
1	+V
2	-V

Block Diagram

Fosc : 100KHz



Derating Curve

Static Characteristics

