

CONTROLLERS & TRANSFORMERS

IMPACT LIGHTING INC'S CLASS 2 POWER SUPPLY - 80W DIMMABLE & NON DIMMABLE

- Universal AC input / Full range (up to 305VAC)
- Built-in active PFC function
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- OCP point adjustable through output cable or internal potentiometer
- IP67 / IP65 design for indoor or outdoor installations
- Three in one dimming function (1~10Vdc or PWM signal or resistance)
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- 5 years warranty (Note.10)



APPLICATION

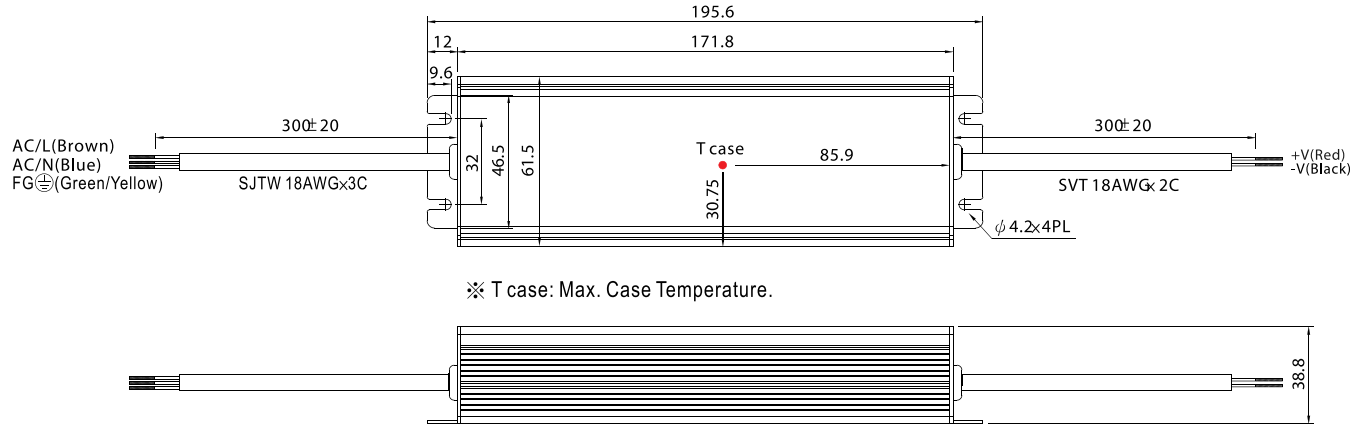
- LED Lighting
- Moving Signs and Back Lighting
- Outdoor or Harsh Environment

DESCRIPTION

A 80W UL LED lighting power supply with universal AC input and active PFC function. This limited power source complies with UL1310 Class 2 and has a high IP level design at IP67, protecting the components from dust and moisture damage and making it useable for indoor and outdoor applications.

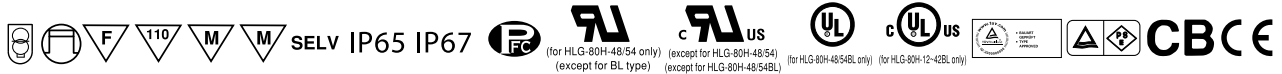
SPECIFICATION

Voltage Range	90 ~ 305VAC	127 ~ 431VDC
Frequency Range	47 ~ 63Hz	
Input Current	0.85A/ 115VAC 0.425A/ 230VAC 0.4A/ 277VAC	
Inrush Current	COLD START 70A/230VAC	
Leakage Current	<0.75mA/ 277VAC	
Setup, Rise Time	2000ms, 80ms / 115VAC at full load; 1000ms,80ms/230VAC at full load	
Hold Up Time	16msat full load 230VAC /115VAC	
Over Current Protection	95 ~ 108%	
Over Temperature Protection	100°C±10°C	
Working Temperature	-40 ~ +40°C@ full load; +50°C@ 60% load	
Temperature Coefficient	±0.03%/°C(0 ~ 40°C)	
Vibration	10 ~ 500Hz, 2G 12min./1cycle, period for 72min. each along X,Y, Z axes	
Safety Standards	UL8750, CSA C22.2 No. 250.0-08(except for HLG-80H-48/54V & HLG-80H-48/54BL), UL8750 listed for HLG-80H- BL EN61347-1, EN61347-2-13 independent, J61347-1, J61347-2-13, IP65 or IP67 approved ; Design refer to UL60950-1, TUV EN60950-1	
EMC	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, EN55024, heavy industry level (surge 4KV), criteria A	
MTBF	356.4Khrs min. MIL-HDBK-217F (25°C)	



※ T case: Max. Case Temperature.

※IP67 rated. Cable for I/O connection.



IL-80 SERIES SPECIFICATIONS

Part Number	Output Voltage	Rated Current	Rated Power	R & N	Current Adj. Range	Vol. Tol.	Line Reg.	Load Reg.	Eff.	OVP
ILI-80HUL-12A	12V	5A	60W	150mVp-p	3 ~ 5A	±2.5%	±0.5%	±2.0%	88%	14 ~ 17V
ILI-80HUL-15A	15V	5A	75W	150mVp-p	3 ~ 5A	±2.0%	±0.5%	±1.5%	89%	18 ~ 21V
ILI-80HUL-20A	20V	4A	80W	150mVp-p	2.4 ~ 4A	±1.0%	±0.5%	±1.0%	90%	23 ~ 27V
ILI-80HUL-24A	24V	3.4A	81.6W	150mVp-p	2.04 ~ 3.4A	±1.0%	±0.5%	±0.5%	90.5%	28 ~ 34V
ILI-80HUL-30A	30V	2.7A	81W	200mVp-p	1.62 ~ 2.7A	±1.0%	±0.5%	±0.5%	91%	34 ~ 38V
ILI-80HUL-36A	36V	2.3A	82.8W	200mVp-p	1.38 ~ 2.3A	±1.0%	±0.5%	±0.5%	91%	41 ~ 46V
ILI-80HUL-42A	42V	1.95A	81.9W	200mVp-p	1.17 ~ 1.95A	±1.0%	±0.5%	±0.5%	91%	47 ~ 53V
ILI-80HUL-48A	48V	1.7A	81.6W	200mVp-p	1.02 ~ 1.7A	±1.0%	±0.5%	±0.5%	91%	54 ~ 60V
ILI-80HUL-54A	54V	1.5A	81W	200mVp-p	0.9 ~ 1.5A	±1.0%	±0.5%	±0.5%	91%	59 ~ 65V

CONTROLLERS & TRANSFORMERS

IMPACT LIGHTING INC'S CLASS 2 POWER SUPPLY - 80W DIMMABLE

- Universal AC input / Full range (up to 305VAC)
- Built-in active PFC function
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- OCP point adjustable through output cable or internal potential meter
- Fully isolated plastic case IP64 design for indoor or outdoor installations
- Three in one dimming function (1~10Vdc or PWM signal or resistor)
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp locations
- Output voltage and constant current level can be adjusted through internal potential meter



APPLICATION

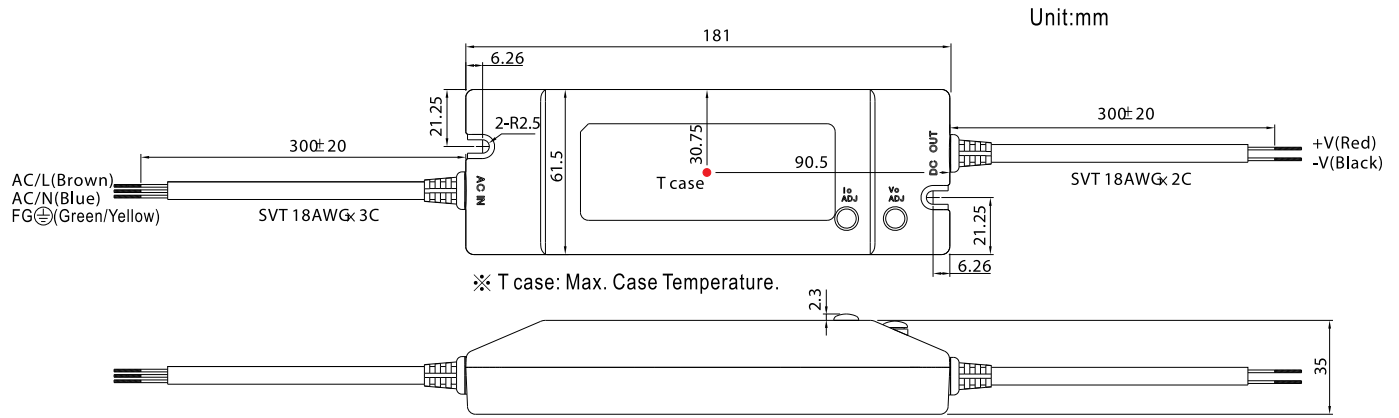
- LED Lighting
- Moving Signs and Back Lighting
- Outdoor or Harsh Environment

DESCRIPTION

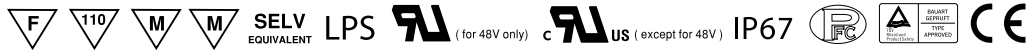
A 80W LED lighting power supply with universal AC input and active PFC function. This limited power source complies with UL1310 Class 2 and has a high IP level design at IP67, protecting the components from dust and moisture damage and making it useable for indoor and outdoor applications.

SPECIFICATION

Voltage Range	90 ~ 305VAC 127 ~ 431VDC
Frequency Range	47 ~ 63Hz
Input Current	0.85A/ 115VAC 0.425A/ 230VAC 0.4A/ 277VAC
Inrush Current	COLD START 70A/230VAC
Leakage Current	<0.75mA/ 277VAC
Setup, Rise Time	2000ms, 80ms / 115VAC at full load; 1000ms,80ms/230VAC at full load
Hold Up Time	16msat full load 230VAC /115VAC
Over Current Protection	95 ~ 108%
Over Temperature Protection	100°C±10°C
Working Temperature	-40 ~ +40°C@ full load; +50°C@ 60% load
Temperature Coefficient	±0.03%/°C(0 ~ 40°C)
Vibration	10 ~ 500Hz, 2G 12min./1cycle, period for 72min. each along X,Y, Z axes
Safety Standards	EN61347-1, EN61347-2-13 independent, IP64 approved ; Design refer to UL60950-1,TUV EN60950-1
EMC	Compliance toEN55015 Class B; EN61000-3-2 Class C (60% load, 12V model) ; EN61000-3-3 EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61547, EN55024, heavy industry level (surge 4KV), criteriaA
MTBF	356.4Khrs min. MIL-HDBK-217F (25°C)



※IP64 rated. Output voltage and constant current level can be adjusted through internal potentiometer.
(can access by removing the rubber stopper on the case).



IL-80 SERIES SPECIFICATIONS

Part Number	Output Voltage	Rated Current	Rated Power	R & N	Current Adj. Range	Vol. Tol.	Line Reg.	Load Reg.	Eff.	OVP
ILI-80H-12A	12V	5A	60W	150mVp-p	3 ~ 5A	±2.5%	±0.5%	±2.0%	88%	14 ~ 17V
ILI-80H-15A	15V	5A	75W	150mVp-p	3 ~ 5A	±2.0%	±0.5%	±1.5%	89%	18 ~ 21V
ILI-80H-20A	20V	4A	80W	150mVp-p	2.4 ~ 4A	±1.0%	±0.5%	±1.0%	90%	23 ~ 27V
ILI-80H-24A	24V	3.4A	81.6W	150mVp-p	2.04 ~ 3.4A	±1.0%	±0.5%	±0.5%	90.5%	28 ~ 34V
ILI-80H-30A	30V	2.7A	81W	200mVp-p	1.62 ~ 2.7A	±1.0%	±0.5%	±0.5%	91%	34 ~ 38V
ILI-80H-36A	36V	2.3A	82.8W	200mVp-p	1.38 ~ 2.3A	±1.0%	±0.5%	±0.5%	91%	41 ~ 46V
ILI-80H-42A	42V	1.95A	81.9W	200mVp-p	1.17 ~ 1.95A	±1.0%	±0.5%	±0.5%	91%	47 ~ 53V
ILI-80H-48A	48V	1.7A	81.6W	200mVp-p	1.02 ~ 1.7A	±1.0%	±0.5%	±0.5%	91%	54 ~ 60V
ILI-80H-54A	54V	1.5A	81W	200mVp-p	0.9 ~ 1.5A	±1.0%	±0.5%	±0.5%	91%	59 ~ 65V

CONTROLLERS & TRANSFORMERS

IMPACT LIGHTING INC'S CLASS 2 POWER SUPPLY - 60W DIMMABLE

- Universal Full Range AC Input
- High Efficiency 89%
- IP67 design for indoor or outdoor applications
- UL1310 class 2 Power supply
- Built in Active PFC function
- Short circuit, over load, over voltage, over temperature protections
- Cooling by free air convection
- 100% full load burn-in test
- High reliability
- Compliance to worldwide safety regulations for lighting

APPLICATION

- LED Lighting
- Moving Signs and Back Lighting
- Outdoor or Harsh Environment

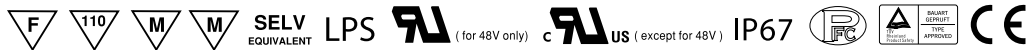
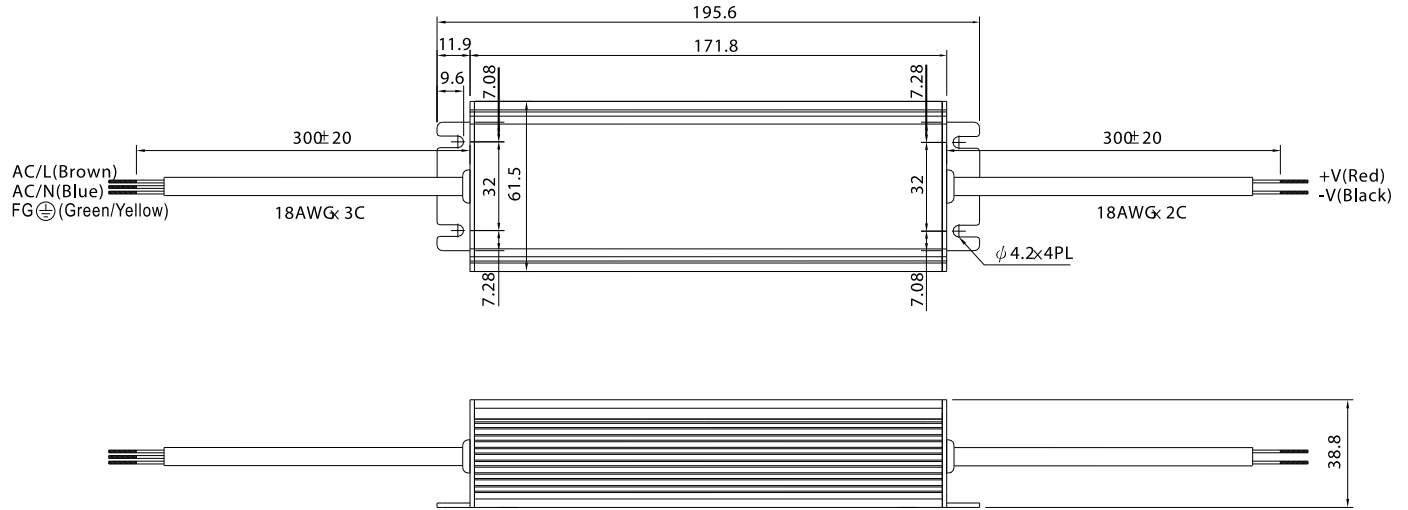
DESCRIPTION

A 60W LED lighting power supply with universal AC input and active PFC function. This limited power source complies with UL1310 Class 2 and has a high IP level design at IP67, protecting the components from dust and moisture damage and making it useable for indoor and outdoor applications.

SPECIFICATION

Input Voltage	90 ~ 264VAC 127 ~ 370VDC
Input Frequency	47 ~ 63Hz
Power Factor	PF0.9 at 75 ~ 100% load, 115VAC / 230VAC
AC Current	0.8A/115Vac 0.4A/230Vac
Inrush Current	10A/230Vac
Leakage Current	<0.75mA/240VAC
Current Adjustment Range	Fixed. Can be modified between 3% ~ -25% rated output voltage
Voltage Tolerance	±10%
Line Regulation	±3.0%
Load Regulation	±5.0%
Set Up, Rise Time	3000ms / 230VAC 5000ms / 115VAC at full load
Over Current Protection	110% max; 95 ~ 110% on 12V model Constant current limiting, recovers automatically after fault condition is removed
Short Circuit Protection	Hiccup mode, recovers automatically after fault condition is removed.
Over Voltage Protection	Shut down o/p voltage, re-power on to recover
Over Temperature Protection	12V: 90°C ±10°C (TSW1) detect on heatsink of power transistor 15V ~ 48V: 85°C ±10°C (TSW1) detect on heatsink of power transistor Shut down o/p voltage, recovers automatically after temperature goes down
Working Temperature	-30°C to +70°C (Refer to output load derating curve)
Working Humidity	20 ~ 90% RH non-condensing
Storage Temperature, Humidity	-40°C to +80°C, 10 ~ 95% RH
Temperature Coefficient	±0.03%/°C (0 ~ 50°C)
Vibration	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes
Withstand Voltage	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC
Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH
Safety Standards	UL1310 Class 2, TUV EN61347-1, EN61347-2-13, CAN/CSA C22.2 No. 223-M91(except for 48V)





CON'T

EMC	Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (>75% load); ENV50204, EN61000-3-3; EN61000-4-2,3,4,5,6,8,11; EN55024, EN61547, light industry level (surge 4KV), criteria A
MTBF	495.7Khrs min. MIL-HDBK-217F (25°C)
Dimensions	195.6 x 61.5 x 38.8mm

IL-60 SERIES SPECIFICATIONS

Part Code	Voltage	Constant Current Region	Rated Current	Current Range	Rated Pwr	R&N	Volt. Adj. Range	Eff.	OVP
ILI-60-12	12V	8.4 ~ 12V	5A	0 ~ 5A	60W	2V	11.5 ~ 13V	85%	13.8 ~ 16V
ILI-60-15	15V	10.5 ~ 15V	4A	0 ~ 4A	60W	2.4V	14.5 ~ 16.2V	86%	17.5 ~ 21V
ILI-60-20	20V	14 ~ 20V	3A	0 ~ 3A	60W	1.8V	19.5 ~ 22V	87.5%	23 ~ 26V
ILI-60-24	24V	16.8 ~ 24V	2.5A	0 ~ 2.5A	60W	2.7V	24 ~ 26V	87%	28 ~ 32V
ILI-60-27	27V	18.9 ~ 27V	2.3A	0 ~ 2.3A	62.1W	2.7V	25 ~ 30V	88%	31 ~ 35V
ILI-60-36	36V	25.2 ~ 36V	1.7A	0 ~ 1.7A	61W	3.6V	32.5 ~ 39V	89%	41 ~ 46V
ILI-60-48	48V	33.6 ~ 48V	1.3A	0 ~ 1.3A	62.5W	4.6V	43.6 ~ 51.8V	89%	54 ~ 60V

CONTROLLERS & TRANSFORMERS

IMPACT LIGHTING INC'S CLASS 2 POWER SUPPLY - 40W DIMMABLE

- Universal AC input / Full range (up to 305VAC)
- Built-in active PFC function
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- OCP point adjustable through output cable or internal potentiometer
- IP64 design for indoor or outdoor installations
- Three in one dimming function (1~10Vdc or PWM signal or resistance)
- Suitable for LED lighting and moving sign applications
- Compliance to worldwide safety regulations for lighting
- 3 years warranty

APPLICATION

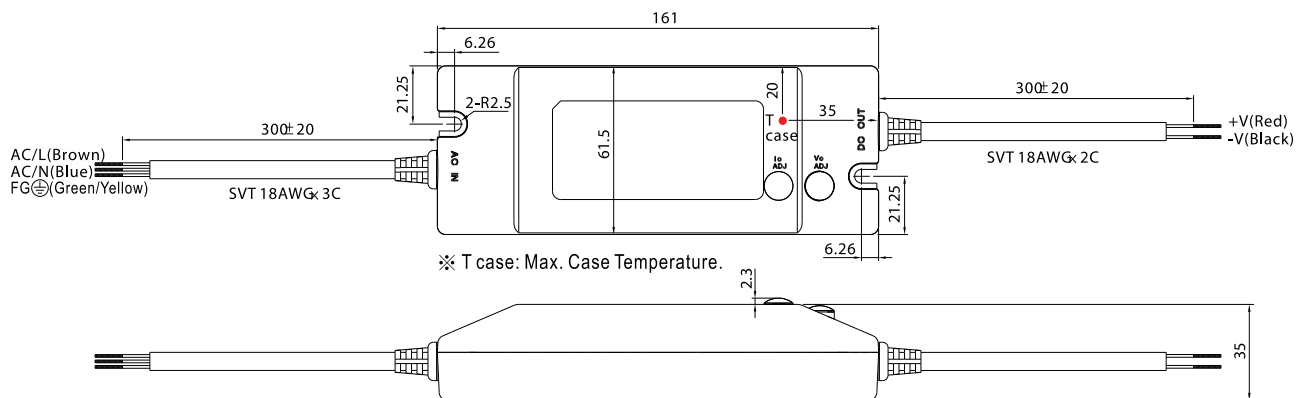
- LED Lighting
- Moving Signs and Back Lighting
- Outdoor or Harsh Environment



Mechanical Specification

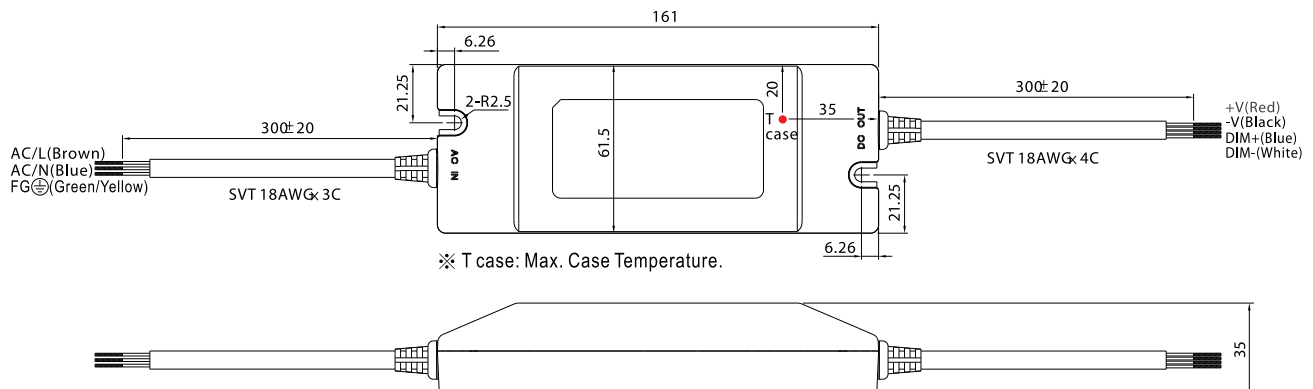
Unit:mm

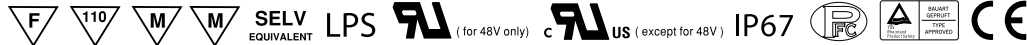
A Type:



※IP64 rated. Output voltage and constant current level can be adjusted through internal potentiometer.
(can access by removing the rubber stopper on the case).

B Type:





SPECIFICATION

MODEL		HLN-40H-12	ILI-40H-15	ILI-40H-20	ILI-40H-24	ILI-40H-30	ILI-40H-36	ILI-40H-42	ILI-40H-48	ILI-40H-54	
OUTPUT	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V	
	CONSTANT CURRENT REGION Note.4	7.2 ~ 12V	9 ~ 15V	12 ~ 20V	14.4 ~ 24V	18 ~ 30V	21.6 ~ 36V	25.2 ~ 42V	28.8 ~ 48V	32.4 ~ 54V	
	RATED CURRENT	3.33A2	67A	2A	1.67A	1.34A	1.12A	0.96A	0.84A	0.75A	
	RATED POWER	40W4	0W	40W	40.1W	40.2W	40.3W	40.3W	40.3W	40.5W	
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	300mVp-p	300mVp-p	300mVp-p	
	VOLTAGE ADJ. RANGE Note.6	10.8 ~ 13.5V	13.5 ~ 17V	17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	40 ~ 46V	44 ~ 53V	49 ~ 58V	
	CURRENT ADJ. RANGE	Can be adjusted by internal potentiometer or through output cable									
		2 ~ 3.33A	1.6 ~ 2.67A	1.2 ~ 2A	1 ~ 1.67A	0.8 ~ 1.34A	0.67 ~ 1.12A	0.58 ~ 0.96A	0.5 ~ 0.84A	0.45 ~ 0.75A	
	VOLTAGE TOLERANCE Note.3	±2.5%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION	±2.0%	±1.5%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
SETUP, RISE TIME Note.7	1500ms, 80ms / 115VAC at full load					1000ms, 80ms / 230VAC at full load					
HOLD UP TIME (Typ.)	16ms/230VAC		16ms/115VAC at full load								
INPUT	VOLTAGE RANGE Note.5	90 ~ 305VAC		127 ~ 431VDC							
	FREQUENCY RANGE	47 ~ 63Hz									
	POWER FACTOR (Typ.)	PF>0.97/115VAC, PF>0.95/230VAC, PF>0.92/277VAC at full load (Please refer to "Power Factor Characteristic" curve)									
	EFFICIENCY (Typ.)	86.5%	86.5%	87.5%	88%	88.5%	88.5%	88.5%	89%	89%	
	AC CURRENT (Typ.)	0.43A / 115VAC		0.24A / 230VAC		0.23A / 277VAC					
	INRUSH CURRENT(Typ.)	COLD START 70A/230VAC									
LEAKAGE CURRENT	<0.75mA / 277VAC										
PROTECTION	OVER CURRENT Note.4	95 ~ 108%									
		Protection type : Constant current limiting, recovers automatically after fault condition is removed									
	OVER VOLTAGE	12 ~ 21V	18 ~ 24V	23 ~ 30V	28 ~ 35V	35 ~ 43V	41 ~ 49V	48 ~ 58V	54 ~ 63V	59 ~ 68V	
	Protection type : Shut down o/p voltage, re-power on to recover										
OVER TEMPERATURE	70°C ±10°C (RTH2)										
	Protection type : Shut down o/p voltage, re-power on to recover										
ENVIRONMENT	WORKING TEMP.	-40 ~ +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 ~ 40°C)									
	VIBRATION	10 ~ 500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes									
SAFETY & EMC	SAFETY STANDARDS	UL8750, CSA C22.2 No. 250.0-08 (except for 48V, 54V), EN61347-1, EN61347-2-13 independent, J61347-1, J61347-2-13, IP64 approved ; Design refer to UL60950-1, TUV EN60950-1, EN60335-1									
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC		I/P-FG:1.88KVAC		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, EN61000-3-2 Class C (≥60% 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	336.5Khrs min. MIL-HDBK-217F (25°C)									
	DIMENSION	161*61.5*35mm (L*W*H)									
	PACKING	0.35Kg/32pcs/12.2Kg/1.10CUF T									
NOTE	<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance : includes set up tolerance, line regulation and load regulation. Constant current operation region is within 60% ~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. Derating may be needed under low input voltages. Please check the static characteristics for more details. Type A only. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again. 										

CONTROLLERS & TRANSFORMERS

MPACT LIGHTING INC'S CLASS 2 POWER SUPPLY - 45W

- Universal AC input / Full range
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- Built-in constant current limiting circuit with adjustable OCP level
- Fully isolated plastic case with IP64 level
- Built-in active PFC function
- IP64 design for indoor or outdoor installations
- Pass LPS
- UL1310 Class 2 power unit
- 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

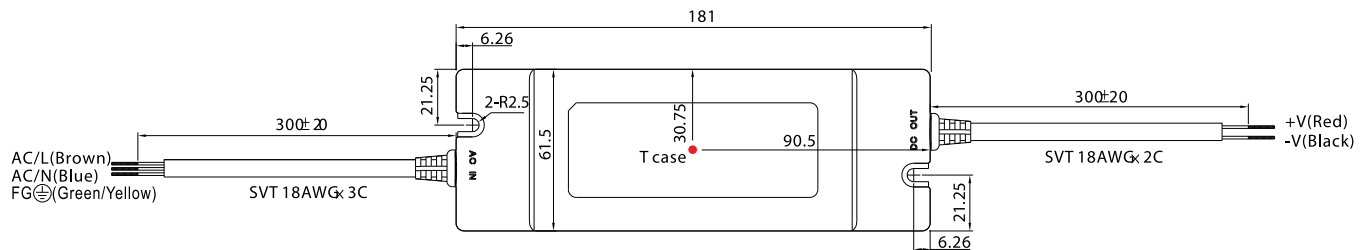


APPLICATION

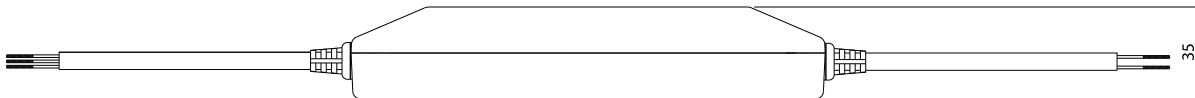
- LED Lighting
- Moving Signs and Back Lighting
- Outdoor or Harsh Environment

Mechanical Specification

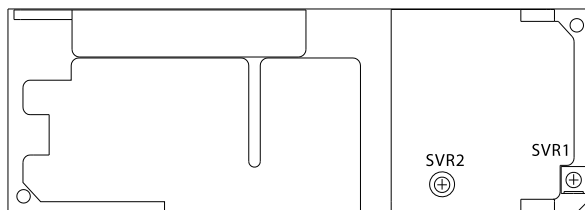
Case No.960A Unit:mm



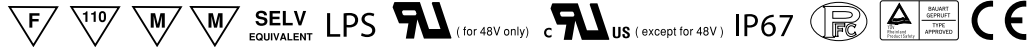
※ T case: Max. Case Temperature.



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



SPECIFICATION

MODEL	ILI-45-12	ILI-45-15	ILI-45-20	ILI-45-24	ILI-45-27	ILI-45-36	ILI-45-48	
OUTPUT	DC VOLTAGE	12V1	5V	20V2	4V	27V3	6V	48V
	CONSTANT CURRENT OPERATION VOLTAGE Note.6	9 ~ 12V	11.25 ~15V	15 ~ 20V	18 ~24V	20.25 ~27V	27 ~ 36V	36 ~ 48V
	RATED CURRENT	3.8A	3A	2.3A	1.9A	1.7A	1.25A	0.95A
	CURRENT RANGE	0 ~ 3.8A	0 ~ 3A	0 ~ 2.3A	0 ~ 1.9A	0 ~ 1.7A	0 ~ 1.25A	0 ~ 0.95A
	RATED POWER	45.6W	45W4	6W	45.6W	45.9W	45W	45.6W
	RIPPLE & NOISE (max.) Note 2	2Vp-p2	.4Vp-p1	.8Vp-p2	.7Vp-p2	.7Vp-p3	.6Vp-p4	.6Vp-p
	VOLTAGE ADJ. RANGE Note 5	11.5 ~ 13V	14.5 ~ 16.2V	19.5 ~ 22V	24 ~ 26V	25 ~ 30V	32.5 ~ 39V	43.6 ~ 51.8V
	CURRENT ADJ. RANGE Note.5	Can be adjusted by internal potentiometer SVR1						
	VOLTAGE TOLERANCE Note 3	3% ~ -25%. Can be adjusted by internal potentiometer SVR2						
	LINE REGULATION	±10%						
LOAD REGULATION	±3.0%							
SETUP TIME	±5.0%							
SETUP TIME	1500ms / 230VAC 3000ms / 115VAC at full load							
INPUT	VOLTAGE RANGE Note.4	90 ~ 295VAC		127 ~ 417VDC				
	FREQUENCY RANGE	47 ~ 63Hz						
	POWER FACTOR (Typ.)	PF>0.92/115VAC, PF>0.9/230VAC, PF>0.9/277VAC at full load (Please refer to "Power Factor Characteristic" curve)						
	EFFICIENCY (Typ.)	83.5%	85%	86.5%	86.5%	86.5%	87.5%	87.5%
	AC CURRENT (Typ.)	0.55A/115VAC		0.25A/230VAC				
	INRUSH CURRENT (max.)	40A/230VAC						
LEAKAGE CURRENT	<0.75mA / 240VAC							
PROTECTION	OVER CURRENT	95 ~ 110%						
		Protection type : Constant current limiting, recovers automatically after fault condition is removed						
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed.						
	OVER VOLTAGE	13.8 ~ 16V	17.5 ~ 21V	22.8 ~ 25V	28 ~ 32V	31 ~ 35V	41 ~ 46V	54 ~ 60V
	Protection type : Shut down o/p voltage, re-power on to recover							
OVER TEMPERATURE	95°C ±10°C (TSW1) detect on heatsink of power transistor							
	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down							
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	UL879, UL8750, UL1310 Class 2, TUV EN61347-1, EN61347-2-13 independent CAN/CSA C22.2 No. 223-M91(except for 48V); J61347-1, J61347-2-13, IP64 approved						
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC						
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH						
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C (≥ 75% load) ; EN61000-3-3						
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, light industry level, criteria A						
OTHERS	MTBF	497.8Khrs min. MIL-HDBK-217F (25°C)						
	DIMENSION	181*61.5*35mm (L*W*H)						
	PACKING	0.5Kg; 24pcs/13Kg/0.75CUFT						
NOTE	<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor. Tolerance : includes set up tolerance, line regulation and load regulation. Derating may be needed under low input voltage. Please check the static characteristics for more details. Output voltage can be adjusted through the SVR1 on the PCB ; limit of output constant current level can be adjusted through the SVR2 on the PCB. Constant current operation region is within 75% ~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. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-quality EMC Directive on the complete installation again. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers. 							

CONTROLLERS & TRANSFORMERS

MPACT LIGHTING INC'S CLASS 2 POWER SUPPLY - 60W

- Universal AC input / Full range
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- Built-in constant current limiting circuit with adjustable OCP level
- Fully isolated plastic case with IP64 level
- Built-in active PFC function
- IP64 design for indoor or outdoor installations
- Pass LPS
- UL1310 Class 2 power unit
- 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

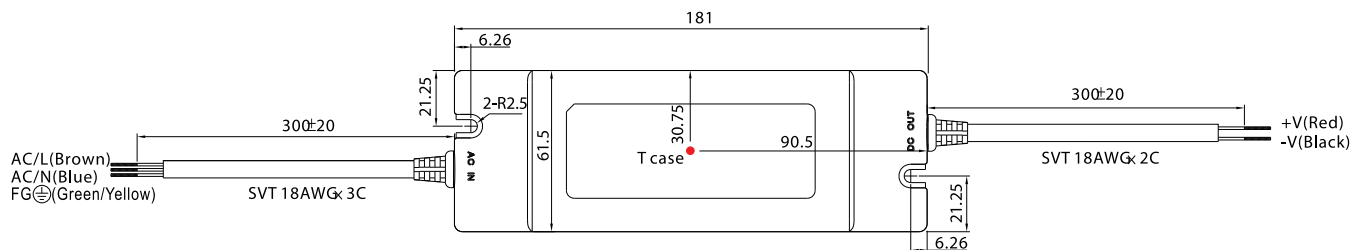


APPLICATION

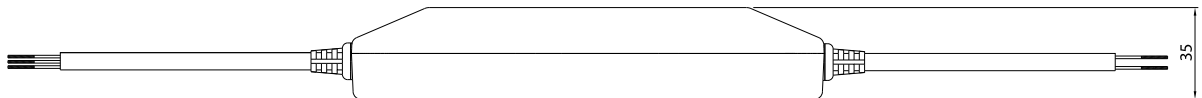
- LED Lighting
- Moving Signs and Back Lighting
- Outdoor or Harsh Environment

Mechanical Specification

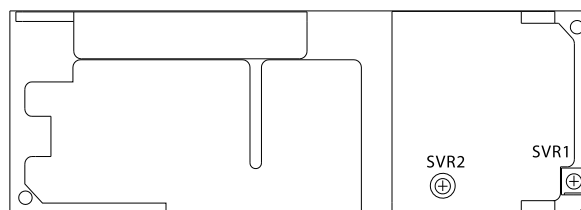
Case No.960A Unit:mm



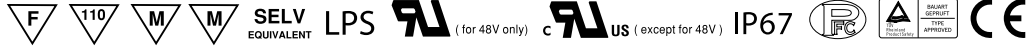
※ T case: Max. Case Temperature.



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



SPECIFICATION

MODEL		ILI-60-12	ILI-60-15	ILI-60-20	ILI-60-24	ILI-60-27	ILI-60-36	ILI-60-48	
OUTPUT	DC VOLTAGE	12V1	5V	20V2	4V	27V3	6V	48V	
	CONSTANT CURRENT REGION Note.6	8.4 ~ 12V	10.5 ~15V	14 ~ 20V	16.8 ~24V	18.9 ~27V	25.2 ~ 36V	33.6 ~ 48V	
	RATED CURRENT	5A	4A	3A	2.5A	2.3A	1.7A	1.3A	
	CURRENT RANGE	0 ~ 5A	0 ~ 4A	0 ~ 3A	0 ~ 2.5A	0 ~ 2.3A	0 ~ 1.7A	0 ~ 1.3A	
	RATED POWER	60W6	0W	60W6	0W	62.1W	61W	62.5W	
	RIPPLE & NOISE (max.) Note.2	2Vp-p	2.4Vp-p	1.8Vp-p	2.7Vp-p2	.7Vp-p3	.6Vp-p	4.6Vp-p	
	VOLTAGE ADJ. RANGE Note.5	11.5 ~ 13V	14.5 ~ 16.2V	19.5 ~ 22V	24 ~ 26V	25 ~ 30V	32.5 ~ 39V	43.6 ~ 51.8V	
		Can be adjusted by internal potentiometer SVR1							
	CURRENT ADJ. RANGE Note.5	3% ~ -25%. Can be adjusted by internal potentiometer SVR2							
	VOLTAGE TOLERANCE Note.3	±10%							
	LINE REGULATION	±3.0%							
LOAD REGULATION	±5.0%								
SETUPT IME	1500ms / 230VAC 3000ms / 115VAC at full load								
INPUT	VOLTAGE RANGE Note.4	90 ~ 295VAC		127 ~ 417VDC					
	FREQUENCY RANGE	47 ~ 63Hz							
	POWER FACTOR (Typ.)	PF>0.98/115VAC, PF>0.9/230VAC, PF>0.9/277VAC at full load (Please refer to "Power Factor Characteristic" curve)							
	EFFICIENCY(Typ.)	85%8	6%	87.5%	87%8	8%	89%8	9%	
	AC CURRENT (Typ.)	0.8A/115VAC		0.4A/230VAC					
	INRUSH CURRENT (max.)	40A/230 VAC							
	LEAKAGE CURRENT	<0.75mA / 240VAC							
PROTECTION	OVER CURRENT	95 ~ 110%							
		Protection type : Constant current limiting, recovers automatically after fault condition is removed							
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed.							
	OVER VOLTAGE	13.8 ~ 16V	17.5 ~ 21V	23 ~ 26V	28 ~ 32V	31 ~ 35V	41 ~ 46V	54 ~ 60V	
	Protection type : Shut down o/p voltage, re-power on to recover								
OVER TEMPERATURE	95°C ±10°C (TSW1) detect on heatsink of power transistor								
	Protection type : Shut down o/p voltage, recovers automatically after temperature goes down								
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	SAFETYS TANDARDS	UL879, UL8750, UL1310 Class 2, TUV EN61347-1, EN61347-2-13 independent CAN/CSA C22.2 No. 223-M91(except for 48V); J61347-1, J61347-2-13, IP64 approved							
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC							
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH							
	EMC EMISSION	Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (≥ 75% load) ; EN61000-3-3							
EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024,EN61547, light industry level, criteria A								
OTHERS	MTBF	497.8Khrs min. MIL-HDBK-217F (25°C)							
	DIMENSION	181*61.5*35mm (L*W*H)							
	PACKING	0.5Kg; 24pcs/13Kg/0.75CUFT							
NOTE	<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance : includes set up tolerance, line regulation and load regulation. Derating may be needed under low input voltage. Please check the static characteristics for more details. Output voltage can be adjusted through the SVR1 on the PCB ; limit of output constant current level can be adjusted through the SVR2 on the PCB. Constant current operation region is within 70% ~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. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-quality EMC Directive on the complete installation again. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers. 								

CONTROLLERS & TRANSFORMERS

MPACT LIGHTING INC'S CLASS 2 POWER SUPPLY - 100W

- Universal AC input / Full range
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- Built-in active PFC function
- IP64 design for indoor or outdoor installations
- Pass LPS
- UL1310 Class 2 power unit
- 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

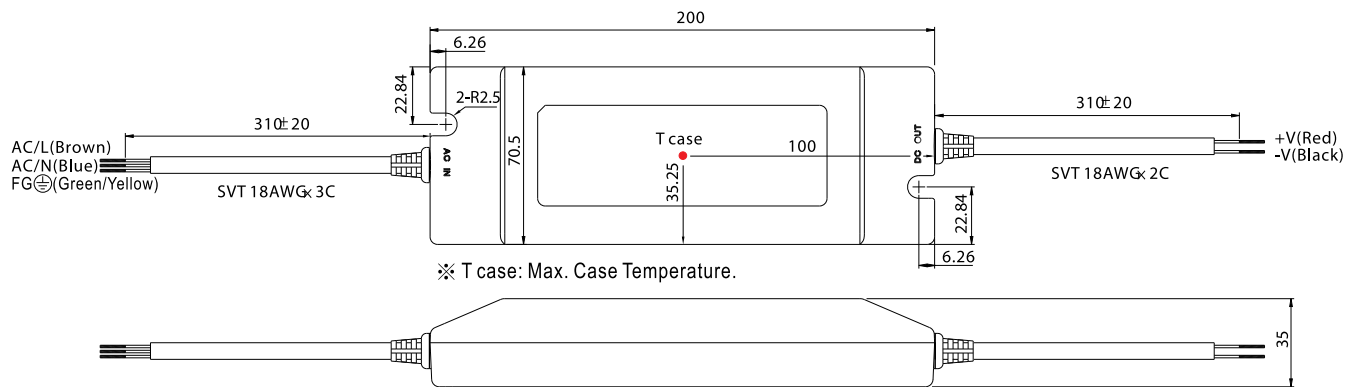


APPLICATION

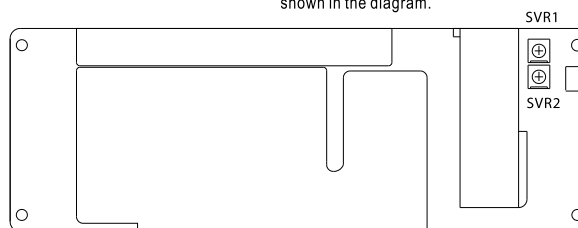
- LED Lighting
- Moving Signs and Back Lighting
- Outdoor or Harsh Environment

Mechanical Specification

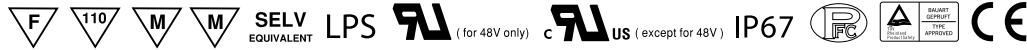
Case No.955A Unit:mm



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



SPECIFICATION

MODEL		ILI -100-12	ILI -100-15	ILI -100-20	ILI -100-24	ILI -100-27	ILI-100-36	ILI-100-48	
OUTPUT	DC VOLTAGE	12V1	5V	20V2	4V	27V3	6V	48V	
	CONSTANT CURRENT REGION Note.6	9 ~ 12V	11.25 ~ 15V	15 ~ 20V	18 ~ 24V	20.25 ~ 27V	27 ~ 36V	36 ~ 48V	
	RATED CURRENT Note.5	5A	5A	4.8A	4A	3.55A2	.65A	2A	
	RATED POWER Note.5	60W7	5W	96W9	6W	95.85W	95.4W	96W	
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p2	mVp-p	
	VOLTAGE ADJ. RANGE (SVR1)	10.2 ~ 12V	12.8 ~ 15V	17 ~ 20V	20.4 ~ 24V	23 ~ 27V	30.6 ~ 36V	40.8 ~ 48V	
	CURRENT ADJ. RANGE(SVR2)	3.75 ~ 5A	3.75 ~ 5A	3.6 ~ 4.8A	3 ~ 4A	2.6 ~ 3.55A	2 ~ 2.65A	1.5 ~ 2A	
	VOLTAGE TOLERANCE Note.3	±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 Note.4	90 ~ 295VAC 127 ~ 417VDC							
	FREQUENCY RANGE	47 ~ 63Hz							
	POWER FACTOR (Typ.)	PF>0.95/115VAC, PF>0.95/230VAC, PF>0.92/277VAC at full load (Please refer to "Power Factor Characteristic" curve)							
	EFFICIENCY (Typ.)	84.5%	86.5%	90%	90%	90%	90%	89%	
	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	<0.75mA / 240VAC								
PROTECTION	OVER CURRENT	95 ~ 102% Protection type : Constant current limiting, recovers automatically after fault condition is removed							
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed							
	OVER VOLTAGE	13 ~ 16V	16.5 ~ 20V	22 ~ 27V	27 ~ 34V	30 ~ 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 "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 Note.7	UL879, UL8750, UL1310 Class 2, TUV EN60950-1, EN61347-1, EN61347-2-13 independent CAN/CSA C22.2 No. 223-M91(except for 48V); J61347-1, J61347-2-13, IP64 approved							
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC							
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH							
	EMC EMISSION	Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (>75% 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	303.1Khrs min. MIL-HDBK-217F (25°C)							
	DIMENSION	200*70.5*35mm (L*W*H)							
	PACKING	0.52Kg; 20pcs/12.5Kg/0.76CUFT							
NOTE	<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance : includes set up tolerance, line regulation and load regulation. Derating may be needed under low input voltage. Please check the static characteristics for more details. 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. Constant current operation region is within 75% ~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. Safety and EMC design refer to EN60598-1, subject 8750(UL), CNS15233, GB7000.1, FCC part18. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again. 								