

TPLSU85 SERIES

85W LED Power Supply

Features:

- Wide Operating Voltage 90 to 305 VAC, 47 to 63 Hz
- Internal EMI filter
- Active Power Factor Correction
- C.C. Mode + C.V. Mode
 - Constant Current: 1.5~4.04A
 - Constant Voltage: 21~50V
- Over Voltage, Over Current, Over Temperature (optional)
- Class I
- 3 year warranty



Electrical Characteristics:

Vin	Safety Approvals Input Voltage Range		100~277VAC
	Operate Voltage Range		90~305VAC
fin	Input Frequency		47~63Hz
PF	Power Factor Correction	Io=Full load, Vin=90~280VAC	0.90~1.0
Po	Output Power Range		See rating chart
Vo	Output Voltage Range		See rating chart
Io	Output Current Range		See rating chart
Iil	Input Current (Low Line)	Io=Full load, Vin=100VAC	1.3A
Iih	Input Current (High Line)	Io=Full load, Vin=240VAC	0.5A
Ir	Low Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=115VAC	35A (max.)
	High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC	70A (max.)
Eff	Efficiency	Io=Full Load, Vin=230VAC	86~90%
REG-i	Line Regulation	Io=Full Load	0.5~1%
REG-o	Load Regulation	Vin=230VAC (C.C.)	3%
	Load Regulation	Vin=230VAC (C.V.)	3%
OVP	Over Voltage Protection		103~105%
OCP	Over Current Protection	C.C.	103~105%
	Over Current Protection	C.V.	140~180%
Ttr	Time of Transient Response	Io=Full Load to Half Load, Vin=100VAC	4mS (max.)
Th	Hold-Up Time (C.V.)	Io=Full Load, Vin=110VAC	8mS (min.)
Ts	Start Up Time	Io=Full Load, Vin=100VAC	1S (max.)
Vp-p	Ripple & Noise (Peak to Peak)	Full Load, Vin=90VAC	1% (max.)
Ilk	Safety Ground Leakage Current	Vin=240VAC/60Hz	0.75mA (max.)
TC	Temperature Coefficient	All output	±0.04%/°C
Pno	No-Load Power Consumption	No load, Vin=230VAC	See rating chart
Vps	Dielectric Withstanding Voltage	Primary to secondary	4242VDC (min.)
Vpg	Dielectric Withstanding Voltage for Primary to PE	Primary to PE	2121VDC (min.)
Ris	Isolation Resistance	Test Voltage=500VDC	50MΩ (min.)

Application:

- Outdoor installations

Safety Approvals:

UL US CE CB

IP67 RoHS 2002/95/EC COMPLIANT

UL/c-UL (UL8750:1st edition)

TUV (EN/IEC61347-1:2008, EN/IEC61347-2-13:2006)

CE-EMC (EN55015:2006 & EN61547:1995+A1:2000)

Environmental

To	Operating Temperature	See derating curve
Ts	Storage Temperature	-40~85°C
Ho	Operating Humidity	0~95%
Hr	Storage Humidity	0~95%
MTBF	Operating Temperature at 25°C, Calculated per MIL-HDBK-217F	0.1M Hrs (min.)
Pd	Derate linearly from 100% load at 60°C to 50% load at 70°C	



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Output Voltage And Current Rating Chart (Single Output) :

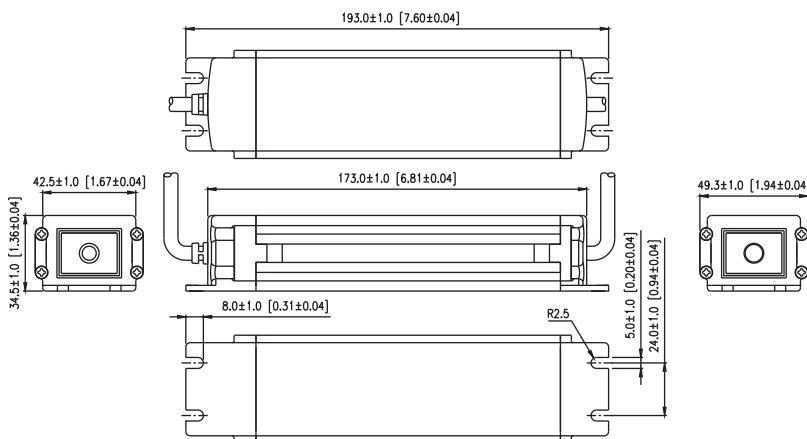
Model Number	Output Voltage	Output Current	Total Regulation		Max. Output Power	Pno (max.)
			C.C.	C.V.		
TPLSU85-108-21V	21 VDC	0 ~ 4.04 A	3%	3%	85W	1W
TPLSU85-108-22V	22 VDC	0 ~ 3.86 A	3%	3%	85W	1W
TPLSU85-108-23V	23 VDC	0 ~ 3.69 A	3%	3%	85W	1W
TPLSU85-108-24V	24 VDC	0 ~ 3.54 A	3%	3%	85W	1W
TPLSU85-108-25V	25 VDC	0 ~ 3.40 A	3%	3%	85W	1W
TPLSU85-108-26V	26 VDC	0 ~ 3.26 A	3%	3%	85W	1W
TPLSU85-108-27V	27 VDC	0 ~ 3.14 A	3%	3%	85W	1W
TPLSU85-109-27V	27 VDC	0 ~ 3.14 A	3%	3%	85W	1W
TPLSU85-109-28V	28 VDC	0 ~ 3.03 A	3%	3%	85W	1W
TPLSU85-109-29V	29 VDC	0 ~ 2.93 A	3%	3%	85W	1W
TPLSU85-109-30V	30 VDC	0 ~ 2.83 A	3%	3%	85W	1W
TPLSU85-109-31V	31 VDC	0 ~ 2.74 A	3%	3%	85W	1W
TPLSU85-109-32V	32 VDC	0 ~ 2.65 A	3%	3%	85W	1W
TPLSU85-109-33V	33 VDC	0 ~ 2.57 A	3%	3%	85W	1W
TPLSU85-110-33V	33 VDC	0 ~ 2.57 A	3%	3%	85W	1W
TPLSU85-110-34V	34 VDC	0 ~ 2.50 A	3%	3%	85W	1W
TPLSU85-110-35V	35 VDC	0 ~ 2.42 A	3%	3%	85W	1W
TPLSU85-110-36V	36 VDC	0 ~ 2.36 A	3%	3%	85W	1W
TPLSU85-110-37V	37 VDC	0 ~ 2.29 A	3%	3%	85W	1W
TPLSU85-110-38V	38 VDC	0 ~ 2.23 A	3%	3%	85W	1W
TPLSU85-110-39V	39 VDC	0 ~ 2.17 A	3%	3%	85W	1W
TPLSU85-110-40V	40 VDC	0 ~ 2.12 A	3%	3%	85W	1W
TPLSU85-111-40V	40 VDC	0 ~ 2.12 A	3%	3%	85W	1W
TPLSU85-111-41V	41 VDC	0 ~ 2.07 A	3%	3%	85W	1W
TPLSU85-111-42V	42 VDC	0 ~ 2.02 A	3%	3%	85W	1W
TPLSU85-111-43V	43 VDC	0 ~ 1.97 A	3%	3%	85W	1W
TPLSU85-111-44V	44 VDC	0 ~ 1.93 A	3%	3%	85W	1W
TPLSU85-111-45V	45 VDC	0 ~ 1.88 A	3%	3%	85W	1W
TPLSU85-111-46V	46 VDC	0 ~ 1.84 A	3%	3%	85W	1W
TPLSU85-111-47V	47 VDC	0 ~ 1.80 A	3%	3%	85W	1W
TPLSU85-111-48V	48 VDC	0 ~ 1.77 A	3%	3%	85W	1W
TPLSU85-111-49V	49 VDC	0 ~ 1.73 A	3%	3%	85W	1W
TPLSU85-111-50V	50 VDC	0 ~ 1.70 A	3%	3%	85W	1W

The output voltage range will from V_o to $0.6 \cdot V_o$ of each model on C.C. Mode.

Input Connector : SJTW, 18AWGx3C (1Ft)

Output Connector : SJTW, 18AWGx2C (1Ft)

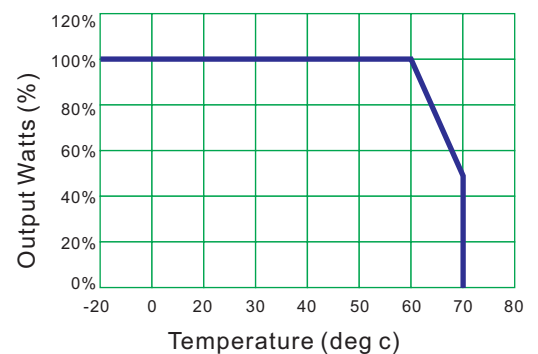
Mechanical Specifications:



Note:

- Dimensions are shown in inches or mm .
- Weight: 530~600gs approx.

Derating Curve :



- Operating Temperature: -20 to 70°C
- Derate linearly from 100% load at 60°C to 50% load at 70°C

