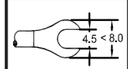
TECHNICAL SPECIFICATIONS:		
Cat. No.:	**PS100W24V**	**PS100W24VF**
INPUT SUPPLY CHARACTERISTICS:		
Supply Voltage Range	84V to 264V AC & 120V to 373V DC	
Frequency Range	47 - 63 Hz	
Efficiency @ 115 VAC/100% load	87 % Typ.	
Efficiency @ 230 VAC/100% load	89 % Typ.	
AC Input Current (Max.)	1.9A typ. @ 115V AC & 1.2A typ. @ 230V AC	
Inrush Current	Cold start 50A @ 230V AC	
No load power consumption	<0.3W @ 230V AC	
OUTPUT CHARACTERISTICS:		
Nominal Output DC Voltage	24 V DC	
Output DC voltage adjustment range (Pot. setable)	21.6 - 28.8 V DC	
Rated Output Current	4.5 A @ 24 V DC	
Rated Output Power	108 W	
Load Regulation	± 0.5 % typ.	
Line Regulation	± 0.5 % typ.	
Ripple & Noise	150 mV p-p max.	
Start Up Time	500 msec at full load	
Hold UP Time	50 msec at full load	
Rise Time	30 msec at full load	
Dynamic Response (Overshoot & Undershoot O/P Voltage)	± 5 % @ 115 & 230Vac input, 0-100% load @ 5Hz & 10KHz	
Start Up with capacitive load	8000uF	
PROTECTIONS :		
Over Voltage	28.8 V ~ 33.6 V (Output voltage turn off, Restart power to turn on device).	
Over Load/Over current	110% or higher of rated load current (Hiccup mode, Auto recover when fault clear)	
Over Temperature	Shut down output voltage, Re-power ON to recover. (Refer derating curve)	
Short Circuit	Hiccup mode & Auto Recover after fault recovery.	
Protection against shock	Earth Protection.	
Internal Input Fuse	5A / 300V	
AMBIENT CONDITIONS		
Operating Temperature	-30° C to + 70° C (Refer Derating curve)	
Storage Temperature	-40° C to + 85° C	
Relative Humidity	20 to 90 % (Non-Condensing)	
Operating Altitude	Up to 2000 meters	
Operating Positions	Vertical & Horizontal on Top	
Over Voltage category	III	
Pollution Degree	3	
USER INTERFACE		
Potentiometer	To set output voltage	
LED INDICATION		
Green Led	ON : DC Output OK	
MECHANICAL		
Case Chassis (Base)	Aluminum	
Casing (Top)	Galvanize	
Dimensions (L X W X H)	129 x 97 x 37.1 (in mm)	137.39 x 97 x 37.1 (in mm)
Terminal facing	Upward facing terminal	Horizontal facing terminal
Weight (unpacked)	340 g	
Cooling	Convection	

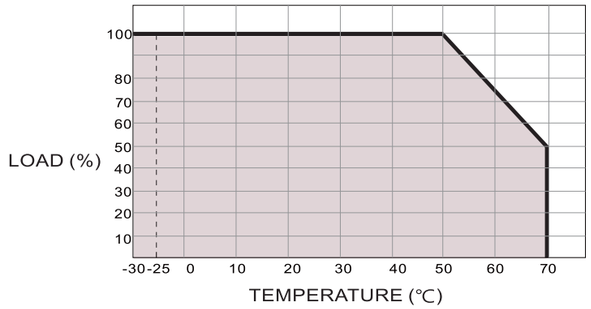
Compliance with Standards EMI/EMC:

Standard	**IEC 62368-01, IEC 60335-01 & IEC 61204**	
Harmonic Current Emission	IEC 61000-3-2	CLASS A
Voltage Flicker and Fluctuations	IEC 61000-3-3	CLASS A
ESD	IEC 61000-4-2	LEVEL IV
Radiated Susceptibility	IEC 61000-4-3	LEVEL III
Electrical Fast Transients	IEC 61000-4-4	LEVEL IV
Surge	IEC 61000-4-5	LEVEL IV
Conducted Susceptibility	IEC 61000-4-6	LEVEL III
Voltage Dips and Interruptions (AC)	IEC 61000-4-11	
Voltage Dips and Interruptions (DC)	IEC 61000-4-29	
Conducted Emission	CISPR 32	CLASS B
Radiated Emission	CISPR 32	CLASS B
Safety:		
Test Voltage Between I/P & O/P	UL 508	4KV
Test Voltage Between I/P & Earth	UL 508	2KV
Test Voltage Between O/P & Earth	UL 508	1.25KV
Test Voltage Between Enclosure & all Terminals (Except: Earth Terminal)	UL 508	1.25KV
Impulse Voltage Between I/P & O/P	IEC 61204	4KV
Insulation Resistance	UL508	>100MOhm
Leakage Current	UL508	<0.75 mA @240VAC
Environmental:		
Operating Temperature	-30°C to + 70°C	
Storage Temperature	-40°C to + 85°C	
Relative Humidity	20- 90% RH (Non-condensation)	
Max. Operating Altitude	2000 meters	
Vibration	IEC 60068-2-6	20 - 500Hz (5g)

Terminal Details:

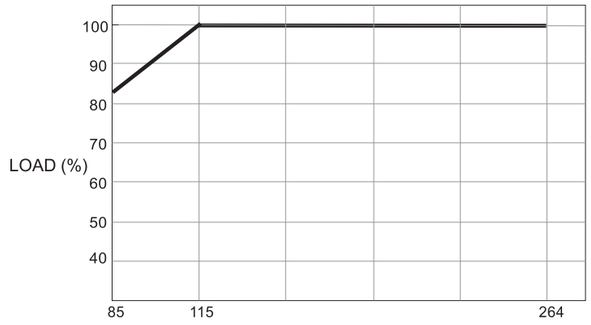
Tightening Torque	1.2 N.m. (10.6 lb.in.) Terminal Screw - M4
	1 x 4 mm Wire with lug
AWG	1 x 22 to 12

Derating Curve:



At 84-264VAC input voltage operation, the output load should be as per mention derating curve graph.

Output Load Derating VS Input Voltage:



There is no output derating applicable from 115 to 264VAC.Refer graph.

PROTECTION AGAINST FAULTS:

Over voltage Protection

Power supply output voltage may increase due to failure in feedback circuit of SMPS.Output voltage of SMPS should not increase above specified limit. In over voltage protection output of SMPS turns off. This feature prevent damage of loads due to over voltage. Reset the input power supply on successful removal of over voltage fault.

Overload/Overcurrent Protection

Power supply protect from overload/overcurrent when load current increase above 110% of rated current. Power supply auto-recover when output load current decrease & return in rated supply band.

Over Temperature Protection

Power supply have thermal protection mode, If internal temperature of SMPS rises extremely during functioning then over temperature protection circuit activate & protect SMPS by shutting down output. Turn off input power supply of SMPS up to 3min & then power on input supply to recover SMPS..

Short circuit Protection

In short circuit protection mode, due sudden rise in output current product goes in hiccup mode by shutting down output voltage. SMPS auto-recover when output short circuit removed.

E-Waste Regulatory Notice:

Kindly treat, recycle or dispose of this equipment in an environmentally sound manner after End of Life, as per WEEE (Waste Electrical and Electronic Equipment) regulations or as per local norms or hand it over to General Industrial Controls Pvt. Ltd, through website https://www.gicindia.com/get-in-touch/

SWITCH MODE POWER SUPPLY 100W/24VDC

Catalog Nos.:

PS100W24V
PS100W24VF

PRODUCT DESCRIPTION:

Switched Mode Power Supply is a circuit which is designed for obtaining the regulated DC output voltage from an unregulated DC or AC voltage. SMPS is electronic power supply that incorporates a switching regulator to convert electrical power efficiently.

FEATURES:

- Wide input voltage range.
- Excellent load & line regulation.
- Excellent Load Transient Response
- No load Power consumption of 0.3W max.
- High noise Immunity & Low ripple.
- High efficiency of Operation.
- Wide operating temperature -30°C to 70°C.
- Protection to overload,over voltage,short circuit & over temperature.
- High MTBF > 700,000 hrs.
- Over voltage category III.
- Pollution degree III.
- Small form factor
- Din rail/Base mount.
- CE & RoHS compliance.

⚠ CAUTION:

- Do not touch the terminals while power is being supplied.
- Tighten terminal screws with the specified torque.
- Always follow instructions stated in product leaflet
- Do not touch casing when power ON or immediately after turns off, Due to hot surface may chances of burning.
- During installation avoid conducted items entering into the opening area of device it may create chances of electric shock.
- Device kept away from wet, dust & humidity environments.
- During installation, keep 10mm distance on both sides of product from adjacent devices.
- Do not open device or try to rework, In case of failure return it to supplier for troubleshooting it may cause electric shock.
- Device manufacturer will not be responsible if any incident occur due to negligence of cautions.

NOTE:

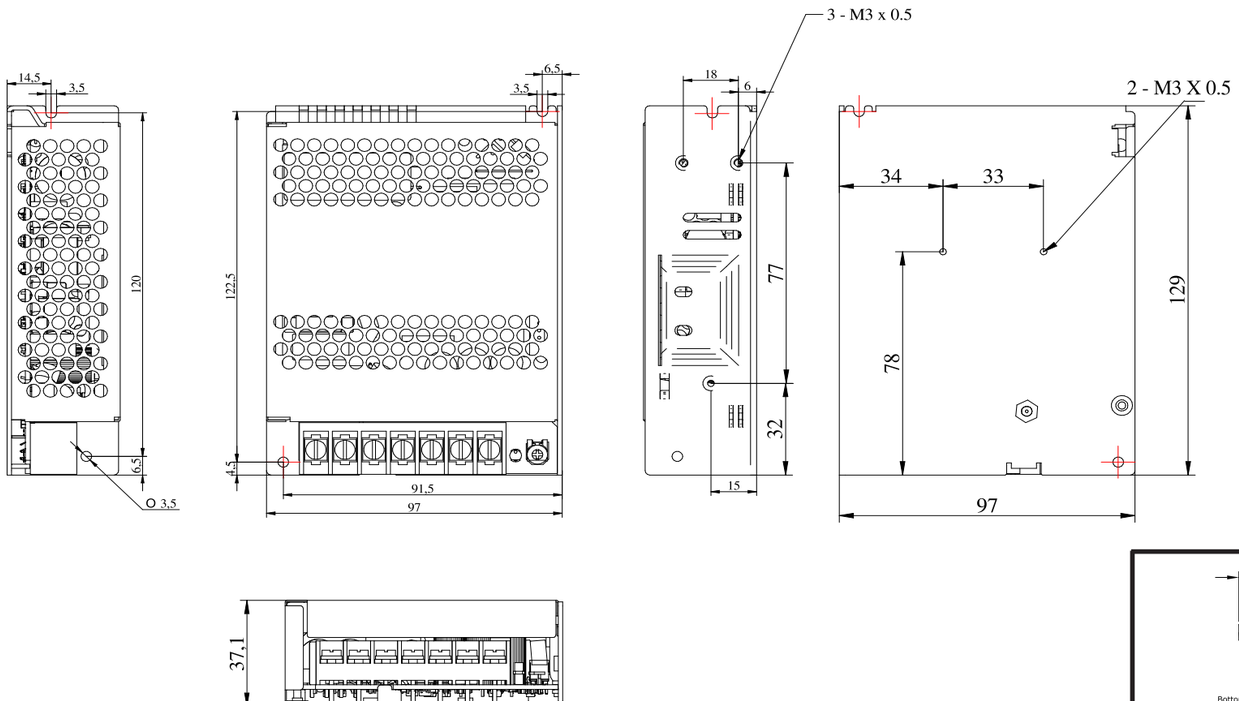
- The technical information provided in this document was correct at the time of publish.
- Product innovation being a continuous process, we reserve the right to alter specifications.

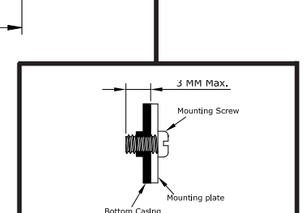
Accessory Ordering Code:

Cat No.	Description
L10024	Mounting Bracket for 100W SMPS

Overall Dimensions of PS100W24V:

L x W x H : 129 x 97 x 37.1 mm (5.07 x 3.82 x 1.46 inch)

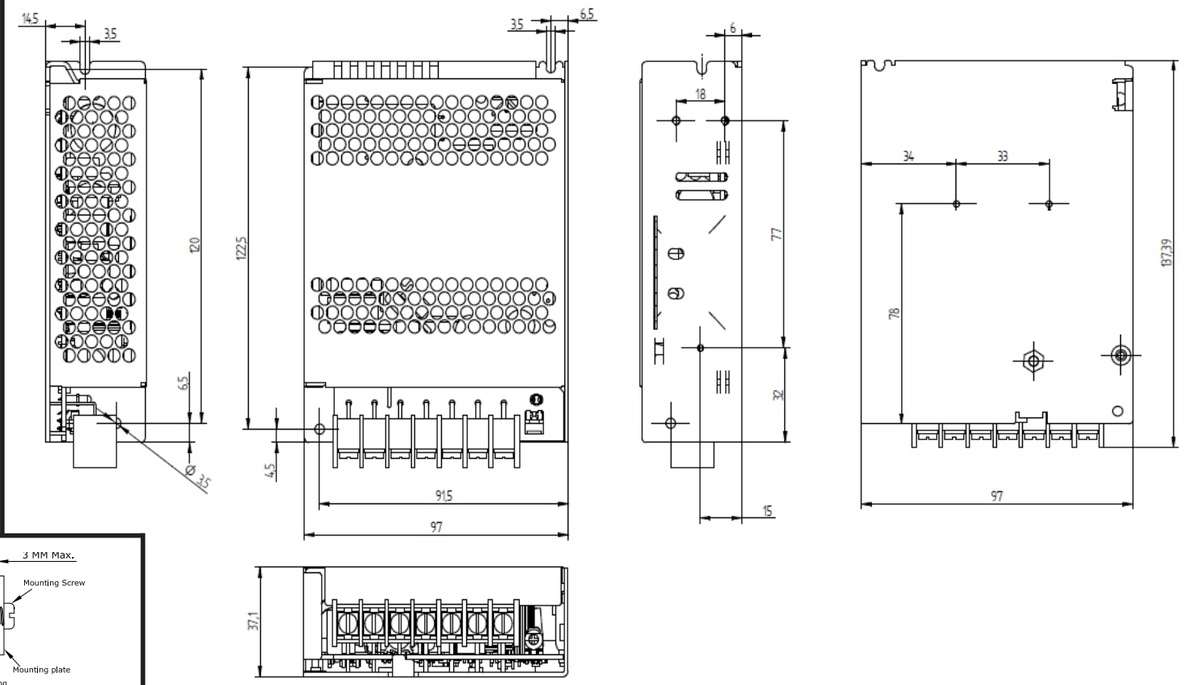




Mounting Screw

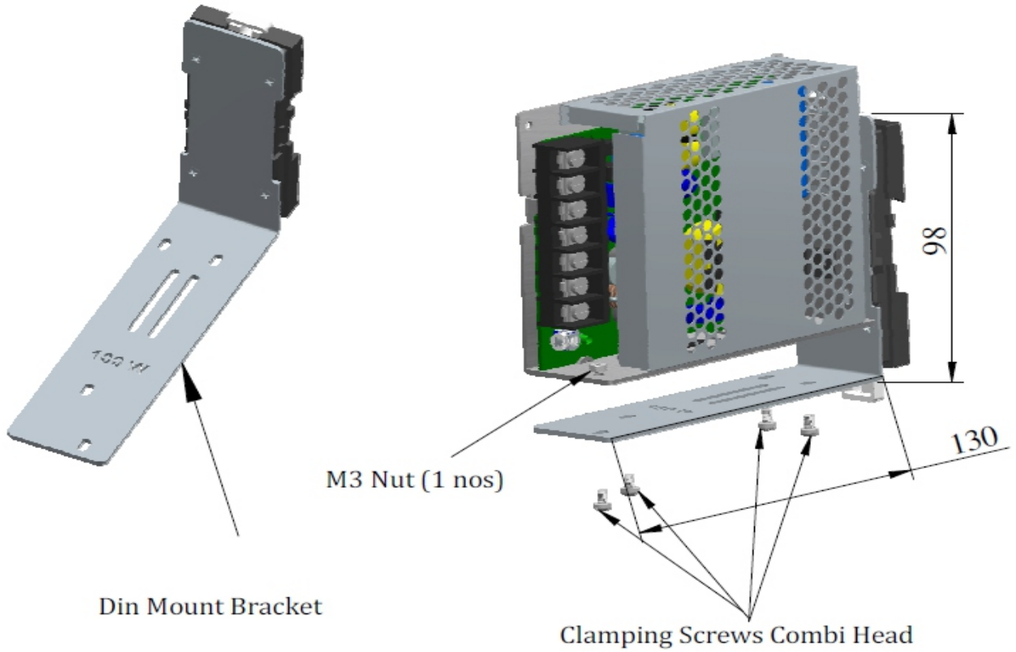
Overall Dimensions of PS100W24VF:

L x W x H : 137.39 x 97 x 37.1 mm (5.40 x 3.82 x 1.46 inch)



Dinrail Mounting Method

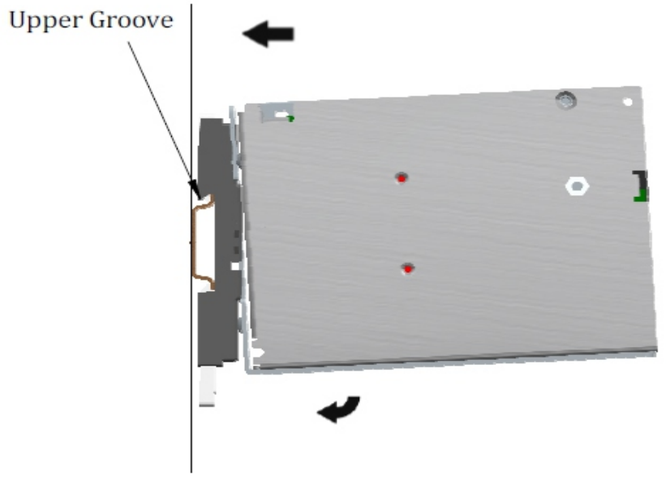
1 . Connect the main Unit & Clamping Bracket with using Screw as shown.

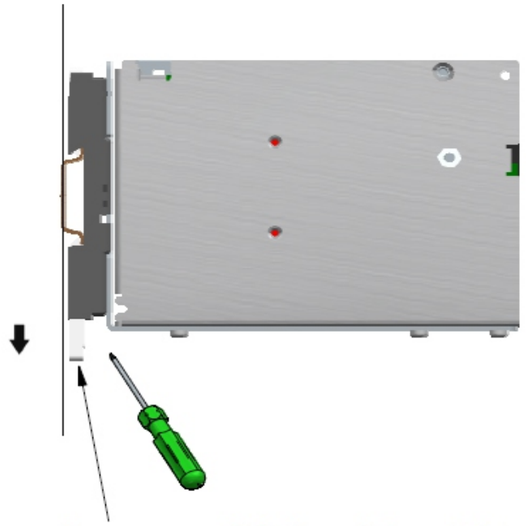


Din Mount Bracket

Clamping Screws Combi Head
M3 x 5 mm (4x)

2. Clip the upper groove of the bracket over the DIN rail & push the lower end





To remove pull the lever below & detach the lower side from the dinrail