

SWITCH MODE POWER SUPPLY

35W 12V / 24V

Catalogue Number :
PS35W12V
PS35W24V



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 > 1,300,000 hrs.
- Over voltage category III.
- Pollution degree III.
- Small form factor
- 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.
- The PE (Protective Earth) conductor must be continuously identified with green and yellow color coding throughout its entire length.

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.

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/>



TECHNICAL SPECIFICATIONS:

CAT. No.:	PS35W12V	PS35W24V
SUPPLY CHARACTERISTICS:		
Supply Voltage Range	90V to 264V AC & 120V to 373V DC	
Frequency Range	47 - 63 Hz	
Efficiency@ 230 VAC/100% load	86% Typ.	88% Typ.
AC Input Current (Max.)	0.7A typ. @ 115V AC & 0.42A typ. @ 230V AC	
Inrush Current	Cold start 45A @ 230V AC	
No load power consumption	<0.3W @ 230V AC	
Insulation Voltage	250V	
OUTPUT CHARACTERISTICS:		
Nominal Output DC Voltage	12 V DC	24 V DC
Output DC voltage adjustment range (Pot. setable)	10.8 - 13.2 V DC	21.6 - 26.4 V DC
Rated Output Current	3 A	1.5 A
Rated Output Power	36 W	
Load Regulation	± 0.5% typ.	
Line Regulation	± 0.5% typ.	
Ripple & Noise	<150 mV p-p max.	
Start Up Time	1000 ms typ. @ 115 Vac and 500 ms typ. @ 230 Vac	
Hold UP Time	16ms typ. @ 115Vac, 70ms typ. @ 230Vac	
Rise Time	30 ms typ. @ 115 Vac & 230 Vac	
Dynamic Response (Overshoot & Undershoot O/P Voltage)	± 10% @ 115 & 230Vac input, 10-100% load (Slew Rate: 2.5A/μS, 50% duty cycle @ 5Hz & 10KHz)	
Start Up with capacitive load	8000uF Max	
PROTECTIONS :		
Over Voltage	140% or higher of rated output voltage (Hiccup mode & Auto Recover after fault recovery).	
Over Load/Over current	110-175% of rated load current, Hiccup Mode, Non-Latching (Auto-Recovery)	
Over Temperature	Hiccup mode & Auto Recover after fault recovery.	
Short Circuit	Hiccup mode & Auto Recover after fault recovery.	
Protection against shock	Class 1 with Protection Earth connection.	
Internal Input Fuse	4A / 250V	
ENVIRONMENTAL PARAMETERS:		
Operating Temperature	-30° C to + 70° C (Refer Derating curve)	
Storage Temperature	-40° C to + 85° C	
Relative Humidity	10 to 90% RH(Non-Condensing)	
Operating Altitude	Up to 5000 meters (The ambient temperature derating of 5° C /1000m is needed for operating altitude > 2000m)	
Operating Positions	Vertical & Horizontal on Top	
Over Voltage category	III (Altitude upto 2000 meters)	
Pollution Degree	3	
USER INTERFACE:		
Potentiometer	To set output voltage	
LED INDICATION:		
Green Led	ON : DC Output OK	
MECHANICAL:		
Case Cover	Aluminium	
Dimensions (L X W X H)	98 X 82.4 X 30 mm(3.86 X 3.24 X 1.18 inch)	
Unit Weight (unpacked)	184.8gm	
Cooling	Convection	

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 Power supply auto-recover when output voltage decrease & return in rated supply band. This feature prevent damage of loads due to over voltage.

Overload/Overcurrent Protection

The power supply is designed to protect against overload and over current conditions when the load current exceeds 110% of the rated current. In such cases, the power supply will automatically enter in hiccup mode and prevent damage. The power supply will auto-recover when the load current decreases and returns within the rated supply band, restoring normal operation automatically.

Over Temperature Protection

The power supply is equipped with a thermal protection mode. When the internal temperature of the SMPS rises excessively during operation, the over-temperature protection feature is activated. This causes the product to enter a hiccup mode by shutting down the output voltage. The SMPS automatically recovers and resumes normal operation once the internal temperature falls within the specified operating range.

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.

CONFORMITY TO STANDARDS :

Safety Standard	EN IEC 62368-1
EMC Standard	EN IEC 61000-6-2
	EN IEC 61000-6-4

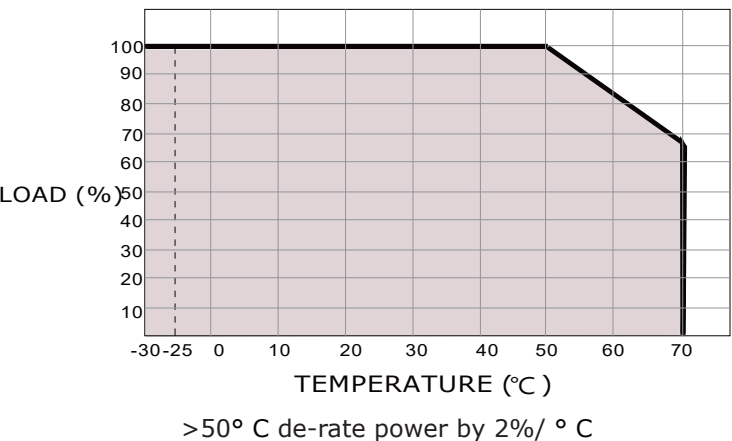
SAFETY DATA:

Dielectric strength	4 KV AC
Rated Impulse withstand voltage(Uimp)	4 KV(1.2/50 us)
Insulation Resistance	>100 Mohm
Leakage Current	<0.50 mA@230VAC

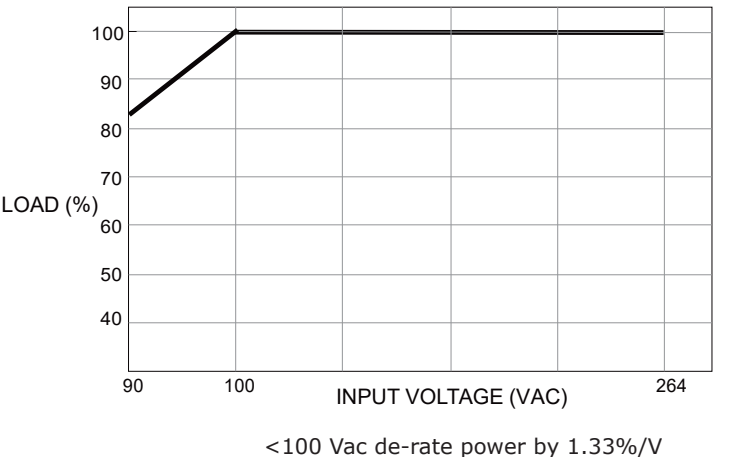
ENVIRONMENTAL DATA:

Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6 5-500Hz : 5g, 60min. each along X, Y, Z axes
Shock	IEC 60068-2-27 50G(11ms) for not in operation 10G(11ms) for in operation

DERATING CURVE:

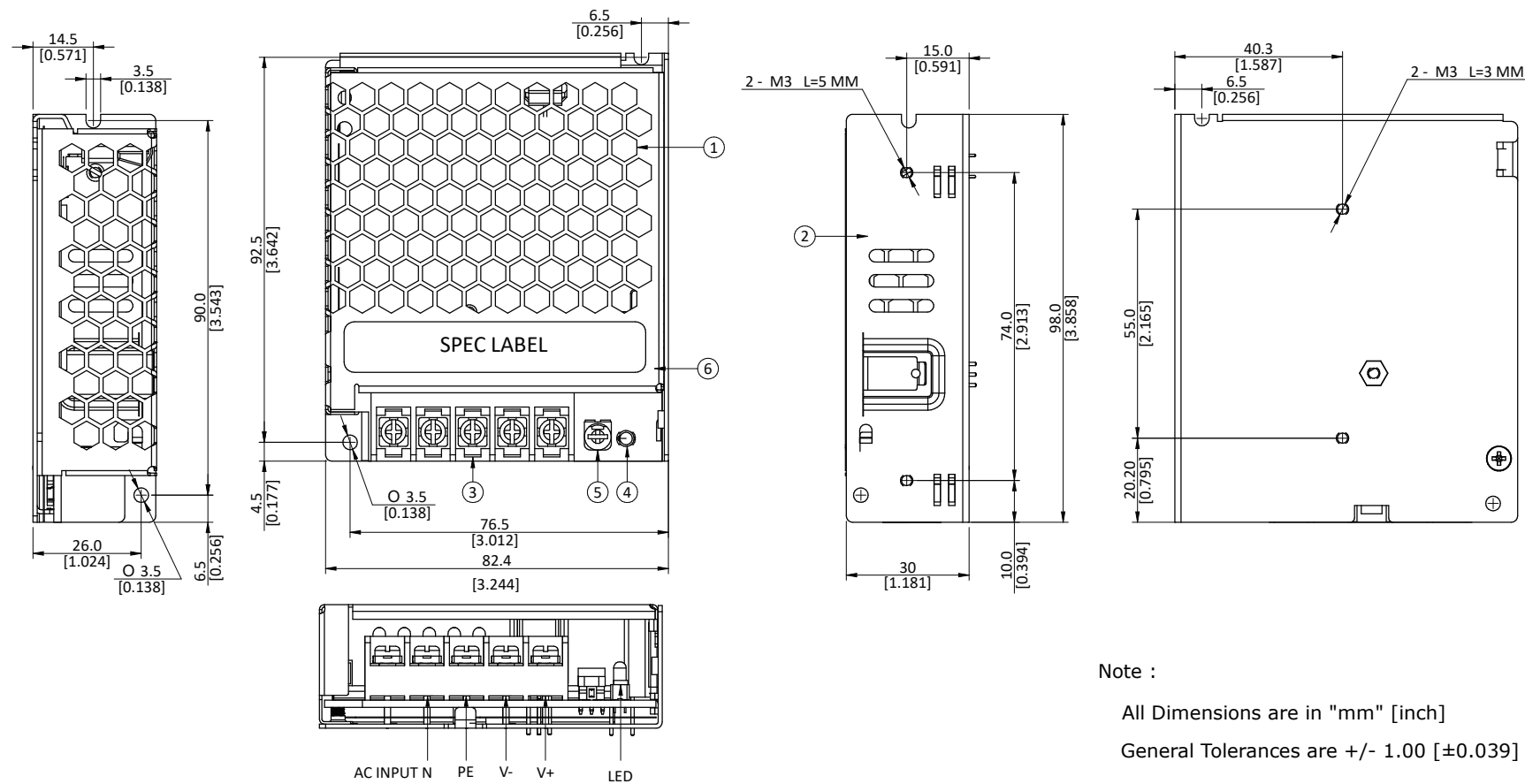


OUTPUT LOAD DERATING VS INPUT VOLTAGE:



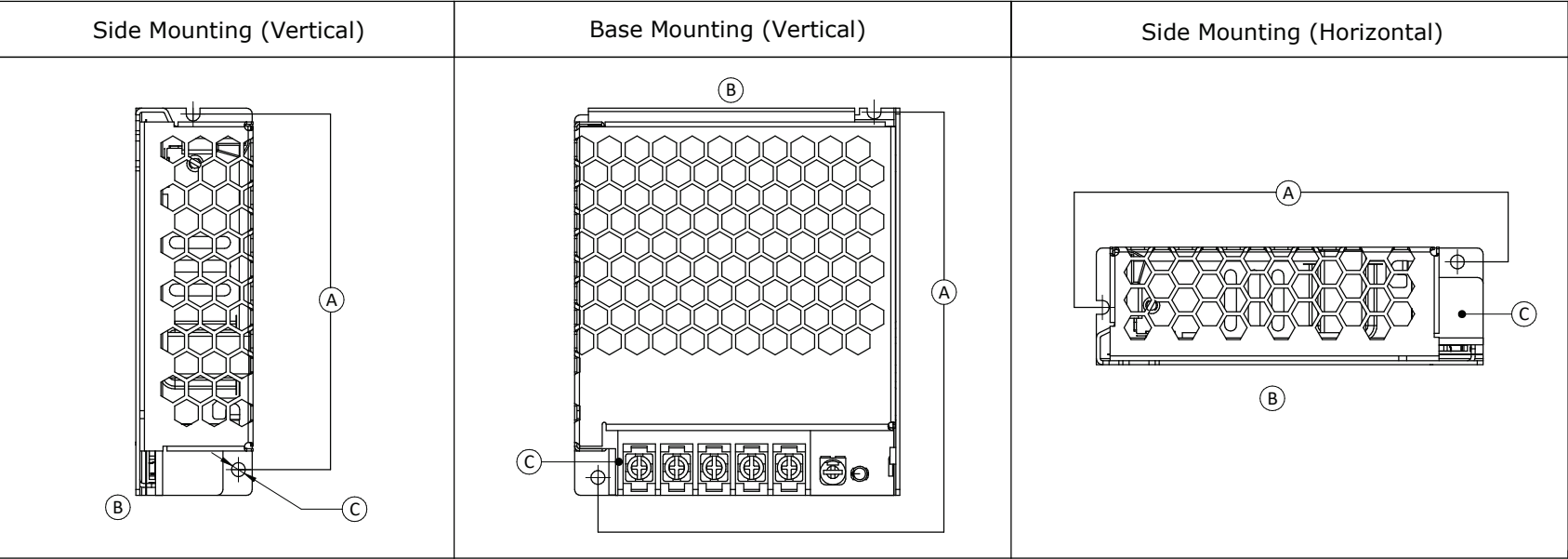
OVERALL DIMENSION:

L X W X H : 98 x 82.4 x 30 mm (3.86 x 3.24 x 1.18 inch)



ASSEMBLY & INSTALLATION :

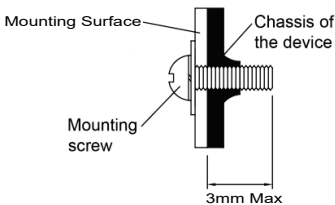
- A) Mounting holes for power supply assembly onto the mounting surface.
The power supply shall be mounted on minimum 2 mounting holes using M3 screw minimum 5 mm (0.20 inch) length.
- B) This surface belongs to customer's end system or panel where the power supply is mounted.
- C) Connector



TERMINAL DETAILS:

Tightening Torque	1.2 N.m. (10.6 lb.in.) Terminal Screw - M4	
Wire with lug	6 ~ 7mm Stripping length of wire	
Wire Range	22 to 12 AWG	4 mm ²

INSTALLATION OF MOUNTING ACCESSORIES:



- 1) Only use M3 screw ≤ 3 mm (0.24 inch) through the base mounting holes.
- 2) This is to keep a safety distance between the screw and internal components. Recommended mounting tightening torque: 0.5~0.6 N.m (4.42~5.31 lbf.in).

SWITCH MODE POWER SUPPLY

50W 12V / 24V

Catalogue Number :
PS50W12V
PS50W24V



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 > 1,300,000 hrs.
- Over voltage category III.
- Pollution degree III.
- Small form factor
- 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.
- The PE (Protective Earth) conductor must be continuously identified with green and yellow color coding throughout its entire length.

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.

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TECHNICAL SPECIFICATIONS:

CAT. No.:	PS50W12V	PS50W24V
SUPPLY CHARACTERISTICS:		
Supply Voltage Range	90V to 264V AC & 120V to 373V DC	
Frequency Range	47 - 63 Hz	
Efficiency@ 230 VAC/100% load	86% Typ.	88% Typ.
AC Input Current (Max.)	0.95A typ. @ 115V AC & 0.6A typ. @ 230V AC	
Inrush Current	Cold start 45A @ 230V AC	
No load power consumption	<0.3W @ 230V AC	
Insulation Voltage	250V	
OUTPUT CHARACTERISTICS:		
Nominal Output DC Voltage	12 V DC	24 V DC
Output DC voltage adjustment range (Pot. setable)	10.8 - 13.2 V DC	21.6 - 26.4 V DC
Rated Output Current	4.2 A	2.2 A
Rated Output Power	50.4 W	52.8 W
Load Regulation	± 0.5% typ.	
Line Regulation	± 0.5% typ.	
Ripple & Noise	<150 mV p-p max.	
Start Up Time	1000 ms typ. @ 115 Vac and 500 ms typ. @ 230 Vac	
Hold UP Time	12ms typ. @ 115Vac, 60ms typ. @ 230Vac	
Rise Time	30 ms typ. @ 115 Vac & 230 Vac	
Dynamic Response (Overshoot & Undershoot O/P Voltage)	± 10% @ 115 & 230Vac input, 10-100% load (Slew Rate: 2.5A/μS, 50% duty cycle @ 5Hz & 10KHz)	
Start Up with capacitive load	8000uF Max	
PROTECTIONS :		
Over Voltage	115% or higher of rated output voltage (Hiccup mode & Auto Recover after fault recovery).	
Over Load/Over current	>110% of rated load current, Hiccup Mode, Non-Latching (Auto-Recovery)	
Over Temperature	Hiccup mode & Auto Recover after fault recovery.	
Short Circuit	Hiccup mode & Auto Recover after fault recovery.	
Protection against shock	Class 1 with Protection Earth connection.	
Internal Input Fuse	5A / 300V	
ENVIRONMENTAL PARAMETERS:		
Operating Temperature	-30° C to + 70° C (Refer Derating curve)	
Storage Temperature	-40° C to + 85° C	
Relative Humidity	20 to 90% RH(Non-Condensing)	
Operating Altitude	Up to 5000 meters (The ambient temperature derating of 5° C /1000m is needed for operating altitude > 2000m)	
Operating Positions	Vertical & Horizontal on Top	
Over Voltage category	III (Altitude upto 2000 meters)	
Pollution Degree	3	
USER INTERFACE:		
Potentiometer	To set output voltage	
LED INDICATION:		
Green Led	ON : DC Output OK	
MECHANICAL:		
Case Cover	Aluminium	
Dimensions (L X W X H)	98 X 82.4 X 30 mm(3.86 X 3.24 X 1.18 inch)	
Unit Weight (unpacked)	184.8gm	
Cooling	Convection	

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 Power supply auto-recover when output voltage decrease & return in rated supply band. This feature prevent damage of loads due to over voltage.

Overload/Overcurrent Protection

The power supply is designed to protect against overload and over current conditions when the load current exceeds 110% of the rated current. In such cases, the power supply will automatically enter in hiccup mode and prevent damage. The power supply will auto-recover when the load current decreases and returns within the rated supply band, restoring normal operation automatically.

Over Temperature Protection

The power supply is equipped with a thermal protection mode. When the internal temperature of the SMPS rises excessively during operation, the over-temperature protection feature is activated. This causes the product to enter a hiccup mode by shutting down the output voltage. The SMPS automatically recovers and resumes normal operation once the internal temperature falls within the specified operating range.

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.

CONFORMITY TO STANDARDS :

Safety Standard	EN IEC 62368-1
EMC Standard	EN IEC 61000-6-2
	EN IEC 61000-6-4

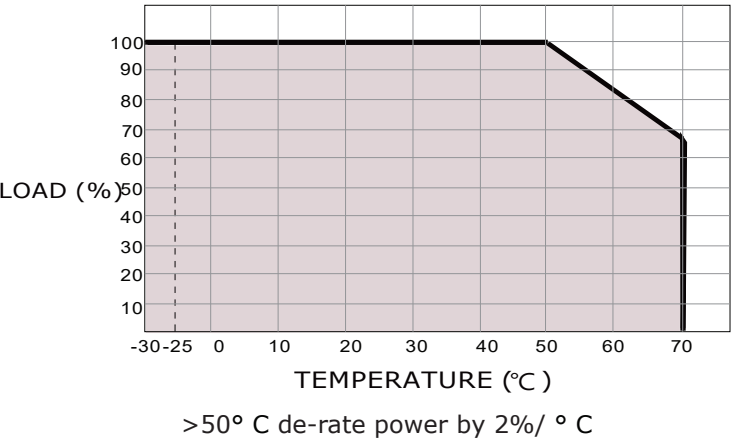
SAFETY DATA:

Dielectric strength	4 KV AC
Rated Impulse withstand voltage(Uimp)	4 KV(1.2/50 us)
Insulation Resistance	>100 Mohm
Leakage Current	<0.50 mA@230VAC

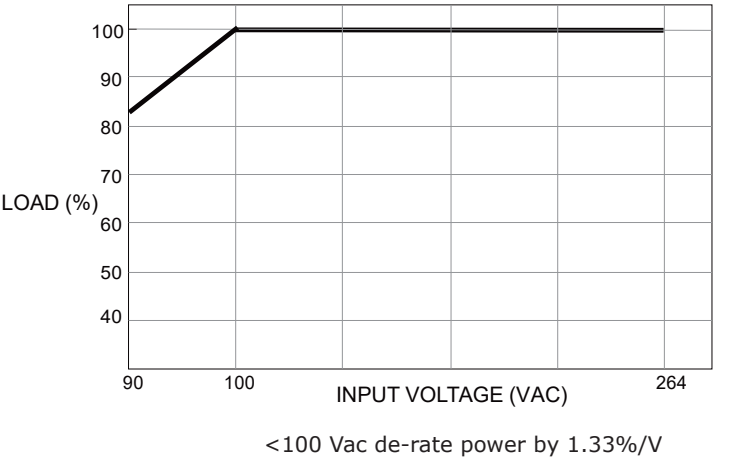
ENVIRONMENTAL DATA:

Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6 5-500Hz : 5g, 60min. each along X, Y, Z axes
Shock	IEC 60068-2-27 50G(11ms) for not in operation 10G(11ms) for in operation

DERATING CURVE:

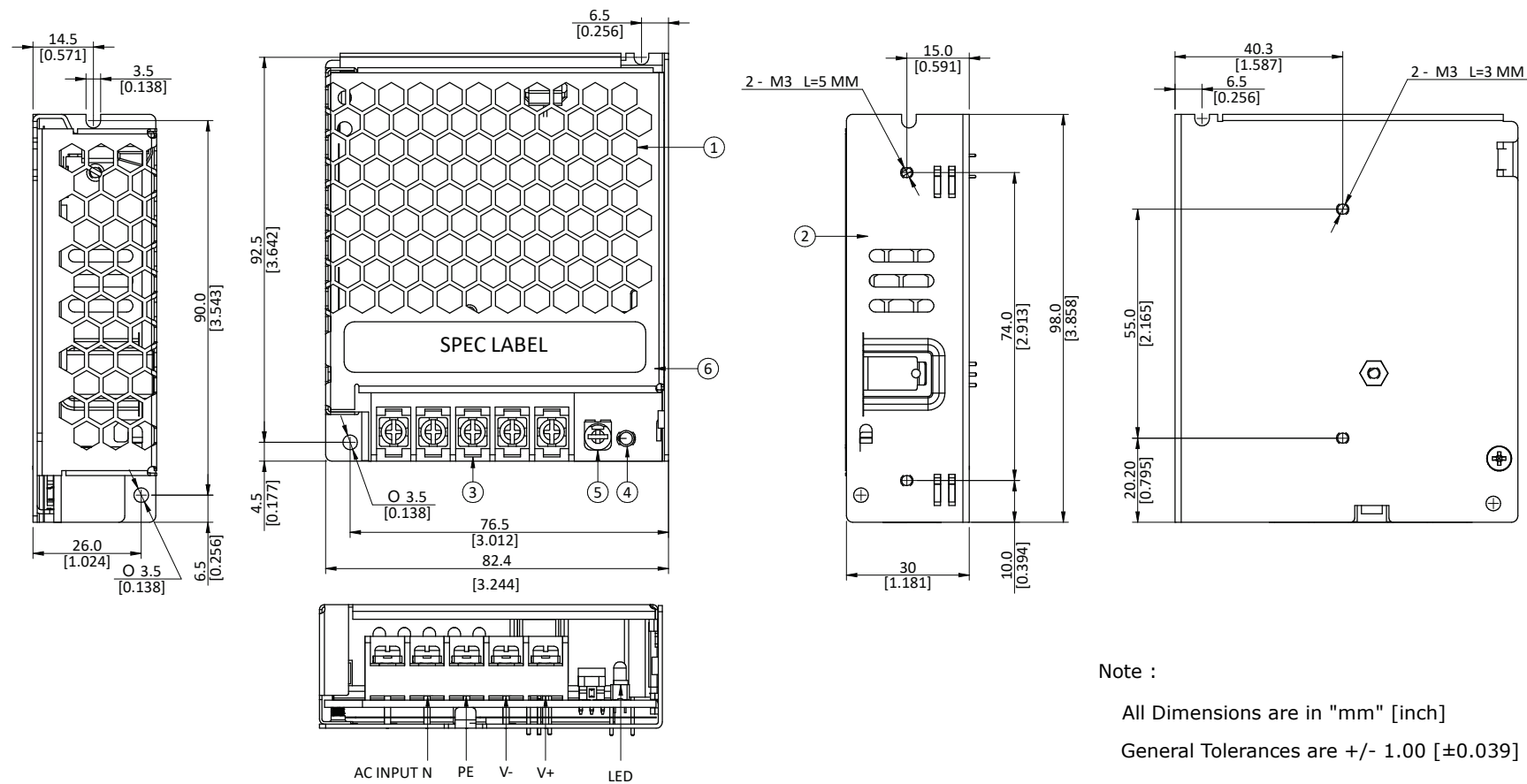


OUTPUT LOAD DERATING VS INPUT VOLTAGE:



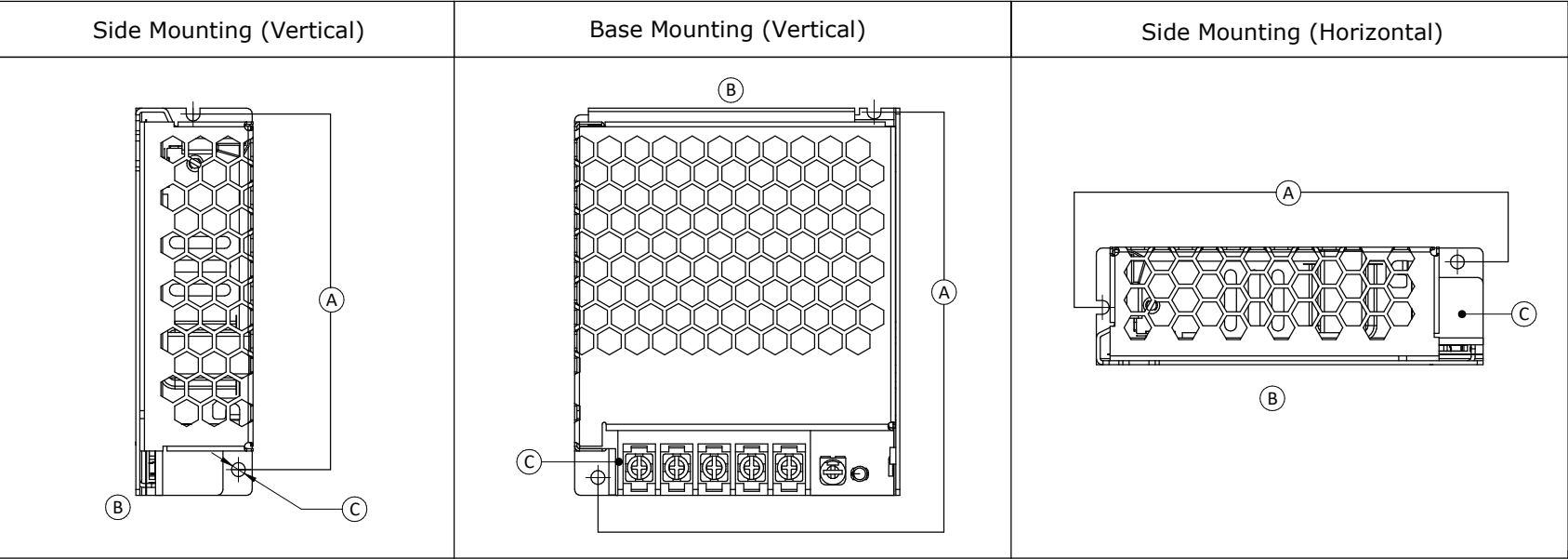
OVERALL DIMENSION:

L X W X H : 98 x 82.4 x 30 mm (3.86 x 3.24 x 1.18 inch)

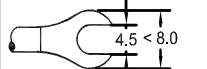


ASSEMBLY & INSTALLATION :

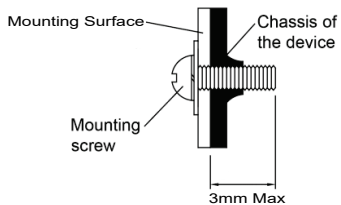
- A) Mounting holes for power supply assembly onto the mounting surface.
The power supply shall be mounted on minimum 2 mounting holes using M3 screw minimum 5 mm (0.20 inch) length.
- B) This surface belongs to customer's end system or panel where the power supply is mounted.
- C) Connector



TERMINAL DETAILS:

Tightening Torque	1.2 N.m. (10.6 lb.in.) Terminal Screw - M4	
Wire with lug	 6 ~ 7mm Stripping length of wire	
Wire Range	22 to 12 AWG	4 mm ²

INSTALLATION OF MOUNTING ACCESSORIES:



- 1) Only use M3 screw ≤ 3 mm (0.24 inch) through the base mounting holes.
- 2) This is to keep a safety distance between the screw and internal components.
Recommended mounting tightening torque: 0.5~0.6 N.m (4.42~5.31 lbf.in).

SWITCH MODE POWER SUPPLY

75W 12V / 24V

Catalogue Number :
PS75W12V
PS75W24V



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
- Protection to overload, over voltage, short circuit & over temperature.
- High MTBF > 1,300,000 hrs.
- Small form factor
- 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.
- The PE (Protective Earth) conductor must be continuously identified with green and yellow color coding throughout its entire length.

NOTE:

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TECHNICAL SPECIFICATIONS:

CAT. No.:	PS75W12V	PS75W24V
SUPPLY CHARACTERISTICS:		
Supply Voltage Range	90V to 264V AC & 127V to 373V DC	
Frequency Range	47 - 63 Hz	
Efficiency@ 230 VAC/100% load	86% Typ.	88% Typ.
AC Input Current (Max.)	1.4A typ. @ 115V AC & 0.85A typ. @ 230V AC	
Inrush Current	65A @ 230V AC	
No load power consumption	<0.3W @ 230V AC	
Insulation Voltage	250V	
OUTPUT CHARACTERISTICS:		
Nominal Output DC Voltage	12 V DC	24 V DC
Output DC voltage adjustment range (Pot. setable)	10.8 - 13.2 V DC	21.6 - 26.4 V DC
Rated Output Current	6 A	3.2 A
Rated Output Power	72 W	76.8 W
Load Regulation	± 0.5% typ.	
Line Regulation	± 0.5% typ.	
Ripple & Noise	<150 mV p-p max.	
Start Up Time	500 ms typ. @ 115 Vac and @ 230 Vac	
Hold UP Time	11ms typ. @ 115Vac, 52ms typ. @ 230Vac	
Rise Time	30 ms typ. @ 115 Vac & 230 Vac	
Dynamic Response (Overshoot & Undershoot O/P Voltage)	± 10% @ 115 & 230Vac input, 10-100% load (Slew Rate: 2.5A/μS, 50% duty cycle @ 5Hz & 10KHz)	
Start Up with capacitive load	8000uF Max	
PROTECTIONS :		
Over Voltage	115% or higher of rated output voltage (Hiccup mode & Auto Recover after fault recovery).	
Over Load/Over current	>110% of rated load current, Hiccup Mode, Non-Latching (Auto-Recovery)	
Over Temperature	Hiccup and Autorecovery Mode	
Short Circuit	Hiccup mode & Auto Recover after fault recovery.	
Protection against shock	Class 1 with Protection Earth connection.	
Internal Input Fuse	4A / 250V	
ENVIRONMENTAL PARAMETERS:		
Operating Temperature	-30° C to + 70° C (Refer Derating curve)	
Storage Temperature	-40° C to + 85° C	
Relative Humidity	20 to 90% RH(Non-Condensing)	
Operating Altitude	Up to 5000 meters (The ambient temperature derating of 5° C /1000m is needed for operating altitude > 2000m)	
Operating Positions	Vertical & Horizontal on Top	
Over Voltage category	III (Altitude upto 2000 meters)	
Pollution Degree	3	
USER INTERFACE:		
Potentiometer	To set output voltage	
LED INDICATION:		
Green Led	ON : DC Output OK	
MECHANICAL:		
Case Cover	Aluminium	
Dimensions (L X W X H)	99 X 97 X 30 mm(3.9 X 3.82 X 1.18 inch)	
Unit Weight (unpacked)	200.6gm	
Cooling	Convection	

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 Power supply auto-recover when output voltage decrease & return in rated supply band. This feature prevent damage of loads due to over voltage.

Overload/Overcurrent Protection

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Over Temperature Protection

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Short circuit Protection

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CONFORMITY TO STANDARDS :

Safety Standard	EN IEC 62368-1
EMC Standard's	EN IEC 61000-6-2 EN IEC 61000-6-4

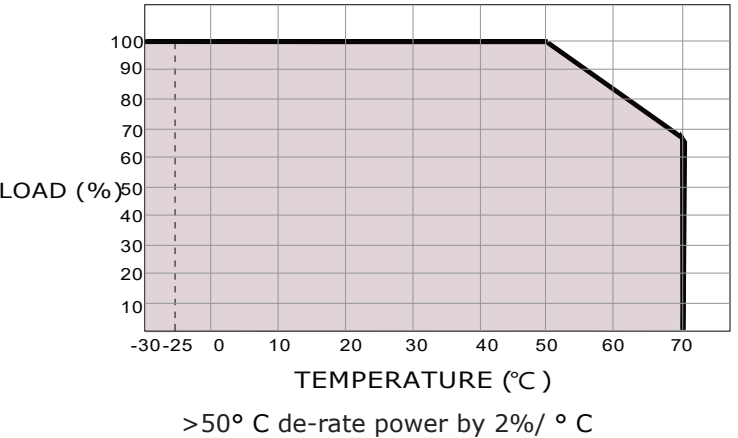
SAFETY DATA:

Dielectric strength	4 KV AC
Rated Impulse withstand Voltage(Uimp)	4 KV(1.2/50 us)
Insulation Resistance	>100 Mohm
Leakage Current	<0.50 mA@230VAC

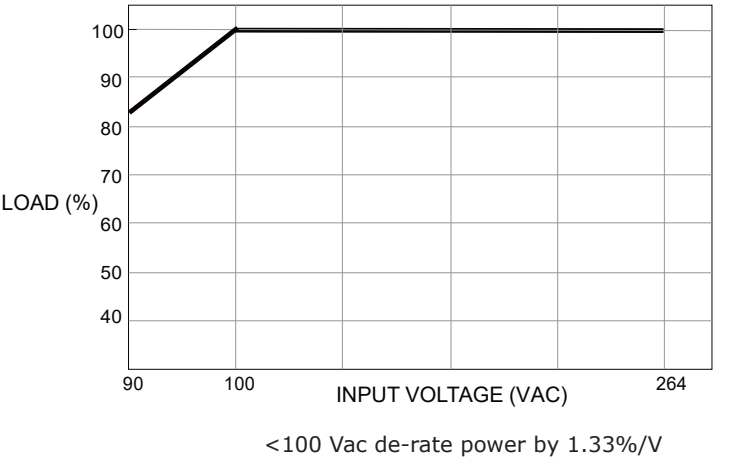
ENVIRONMENTAL DATA:

Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6 5-500Hz : 5g, 60min. each along X, Y, Z axes
Shock	IEC 60068-2-27 50G(11ms) for not in operation 10G(11ms) for in operation

DERATING CURVE:

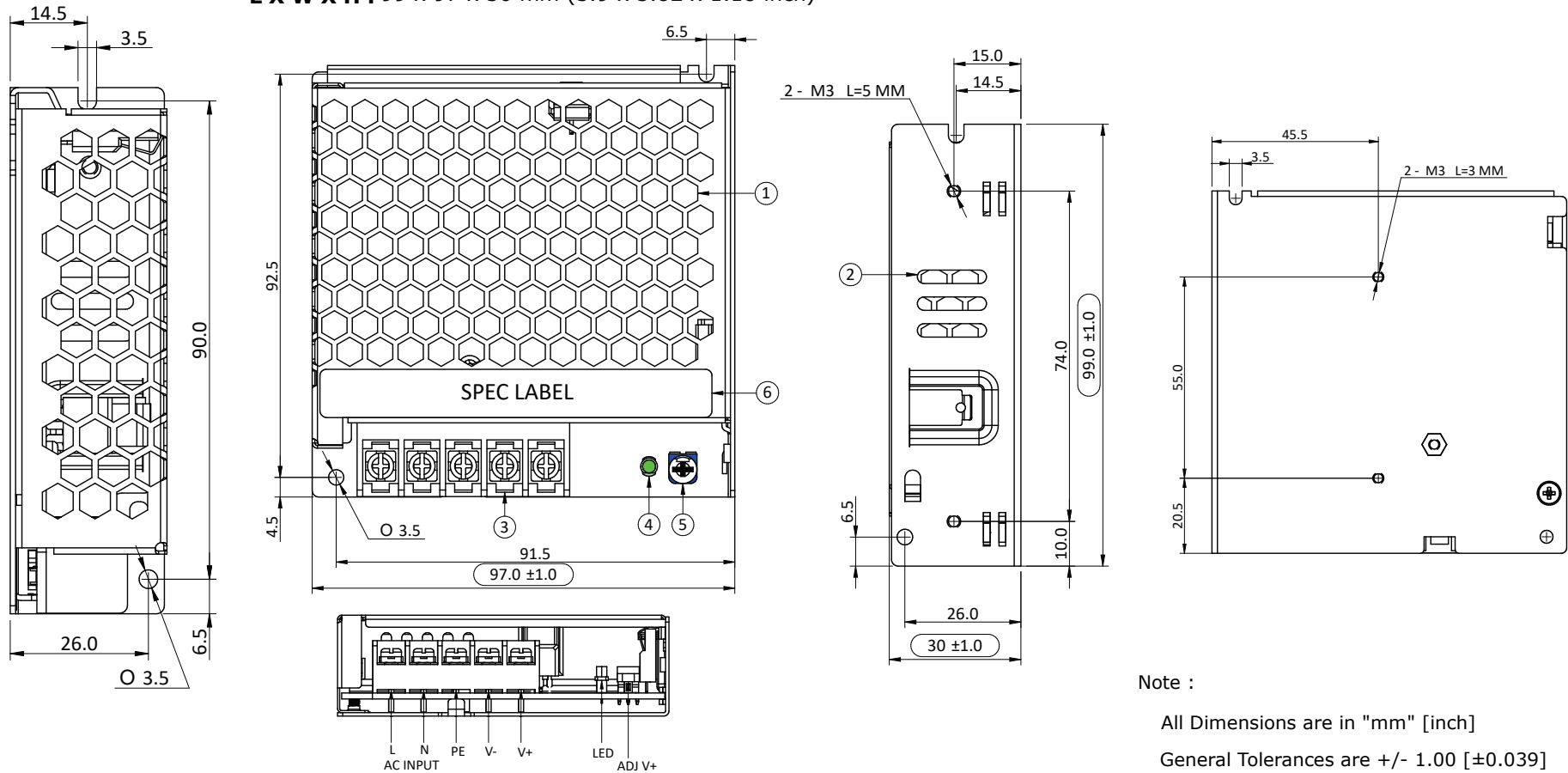


OUTPUT LOAD DERATING VS INPUT VOLTAGE:



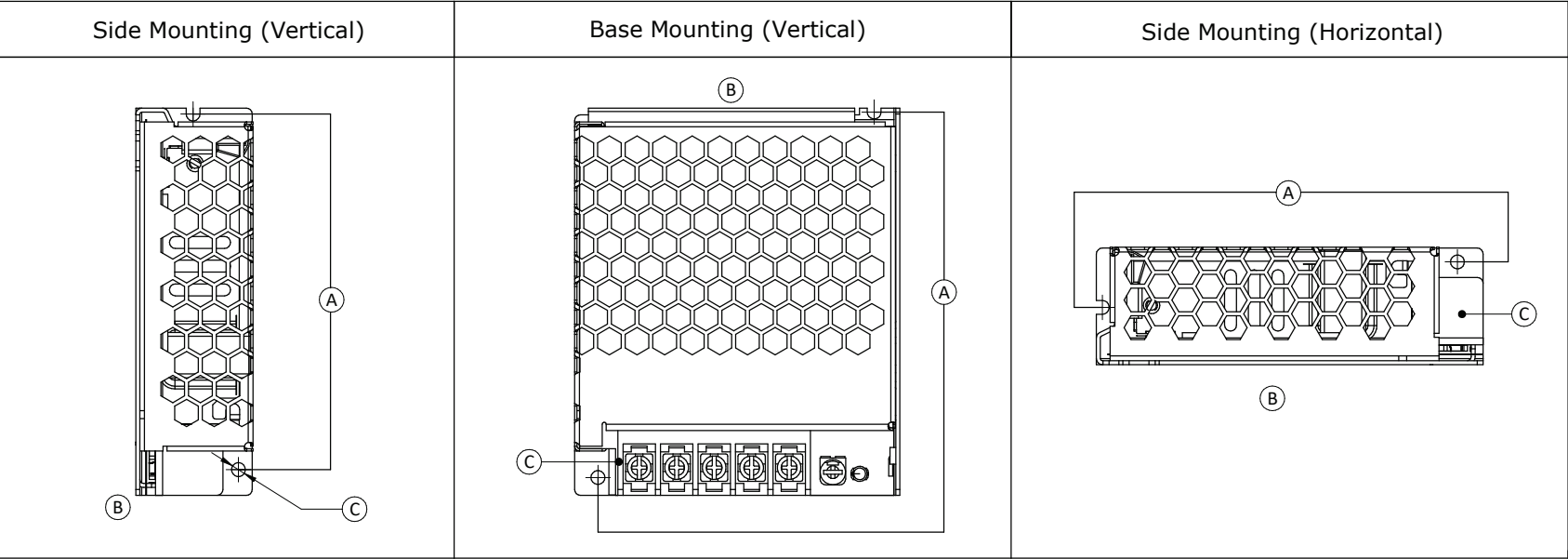
OVERALL DIMENSION:

L X W X H : 99 x 97 x 30 mm (3.9 x 3.82 x 1.18 inch)



ASSEMBLY & INSTALLATION :

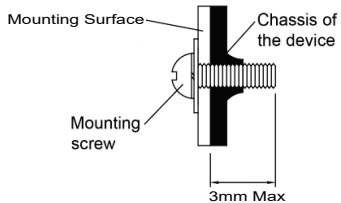
- A) Mounting holes for power supply assembly onto the mounting surface.
The power supply shall be mounted on minimum 2 mounting holes using M3 screw minimum 5 mm (0.196 inch) length.
- B) This surface belongs to customer's end system or panel where the power supply is mounted.
- C) Connector



TERMINAL DETAILS:

Tightening Torque	1.2 N.m. (10.6 lb.in.) Terminal Screw - M4	
Wire with lug	6 ~ 7mm Stripping length of wire	
Wire Range	22 to 12 AWG	4 mm ²

INSTALLATION OF MOUNTING ACCESSORIES:



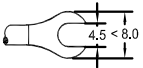
- 1) Only use M3 screw ≤ 3 mm (0.118 inch) through the base mounting holes.
- 2) This is to keep a safety distance between the screw and internal components. Recommended mounting tightening torque: 0.5~0.6 N.m (4.42~5.31 lbf.in).

TECHNICAL SPECIFICATIONS:		
Cat. No.:		PS100W12V
		PS100W12VF
INPUT SUPPLY CHARACTERISTICS:		
Supply Voltage Range		90V to 264V AC & 130V to 373V DC
Frequency Range		47 - 63 Hz
Efficiency	@ 115 VAC/100% load	87 % Typ.
	@ 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		12 V DC
Output DC voltage adjustment range (Pot. setable)		10.2 - 13.8 V DC
Rated Output Current		8.33 A @ 12 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		>30 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		13.2 V ~ 17.4 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)
Terminal facing		Upward facing terminal
Weight (unpacked)		340 g
Cooling		Convection

CONFORMITY TO STANDARDS :	
Safety Standard	EN IEC 62368-1
EMC Standard	EN IEC 61000-6-2
	EN IEC 61000-6-4

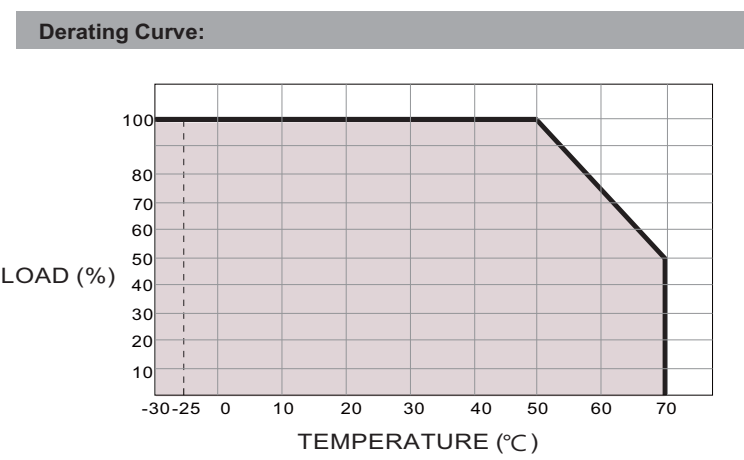
SAFETY DATA:	
Dielectric strength	3 KV AC
Rated Impulse withstand voltage(Uimp)	4 KV(1.2/50 us)
Insulation Resistance	>100 Mohm
Leakage Current	<0.50 mA@230VAC

ENVIRONMENTAL DATA:	
Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6 5-500Hz : 5g, 60min. each along X, Y, Z axes
Shock	IEC 60068-2-27 50G(11ms) for not in operation 10G(11ms) for in operation

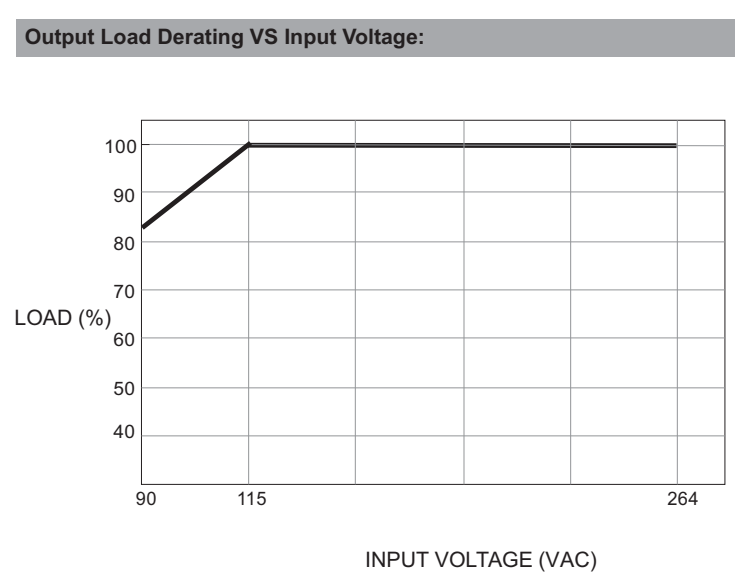
TERMINAL DETAILS:	
Tightening Torque	1.2 N.m. (10.6 lb.in.) Terminal Screw - M4
	1 x 4 mm Wire with lug
AWG	1 x 22 to 12

Accessory Ordering Code:

Cat No.	Description
L10024	Mounting Bracket for 100W SMPS



At 90-264VAC input voltage operation, the output load should be as per mention derating curve graph.



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.



SWITCH MODE POWER SUPPLY 100W/12VDC

Catalog Nos.: **PS100W12V**
PS100W12VF



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.

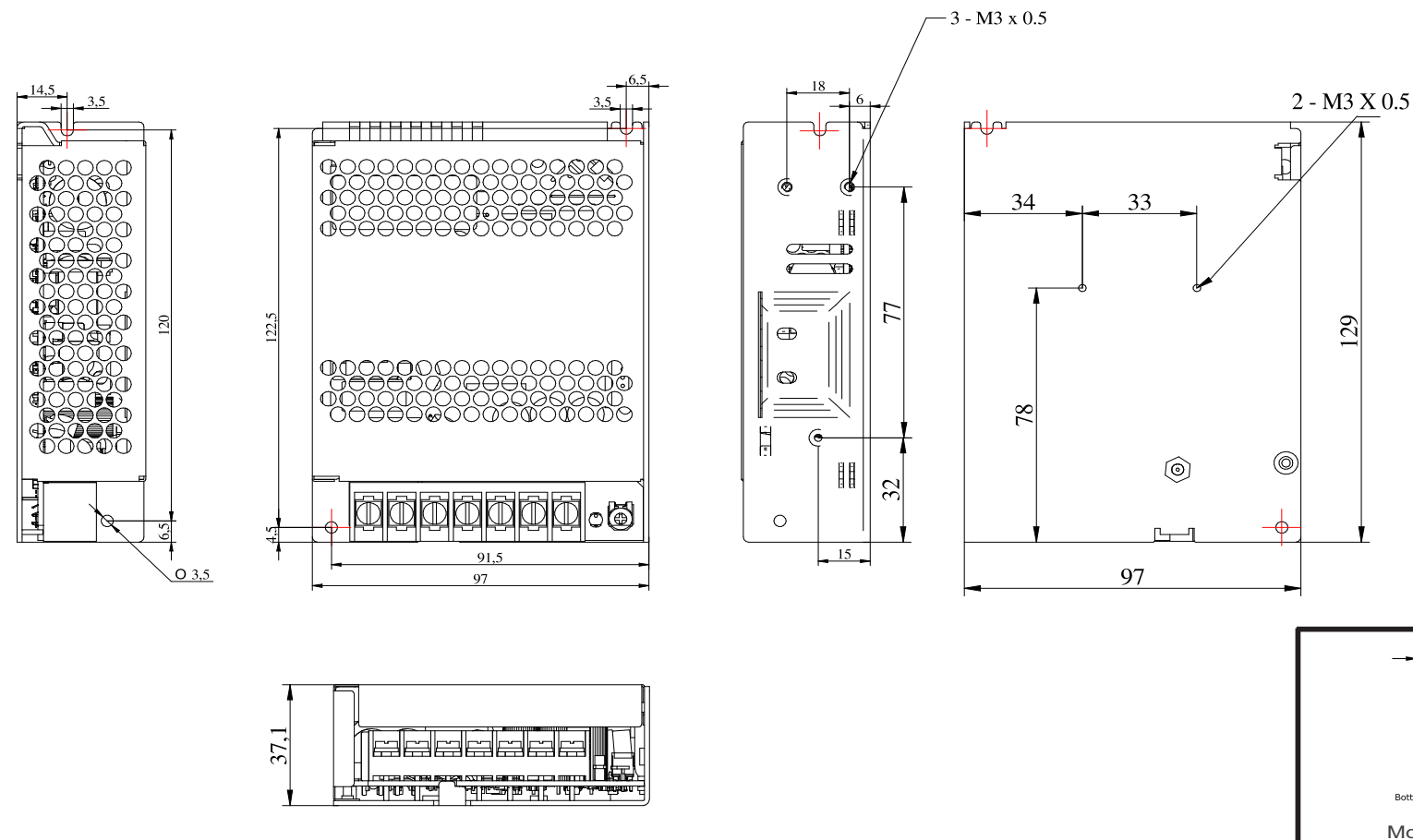
- NOTE:**
- The technical information provided in this document was correct at the time of publish.
 - Product innovation being a continuous process, we reserve the right to alter specifications.

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/>



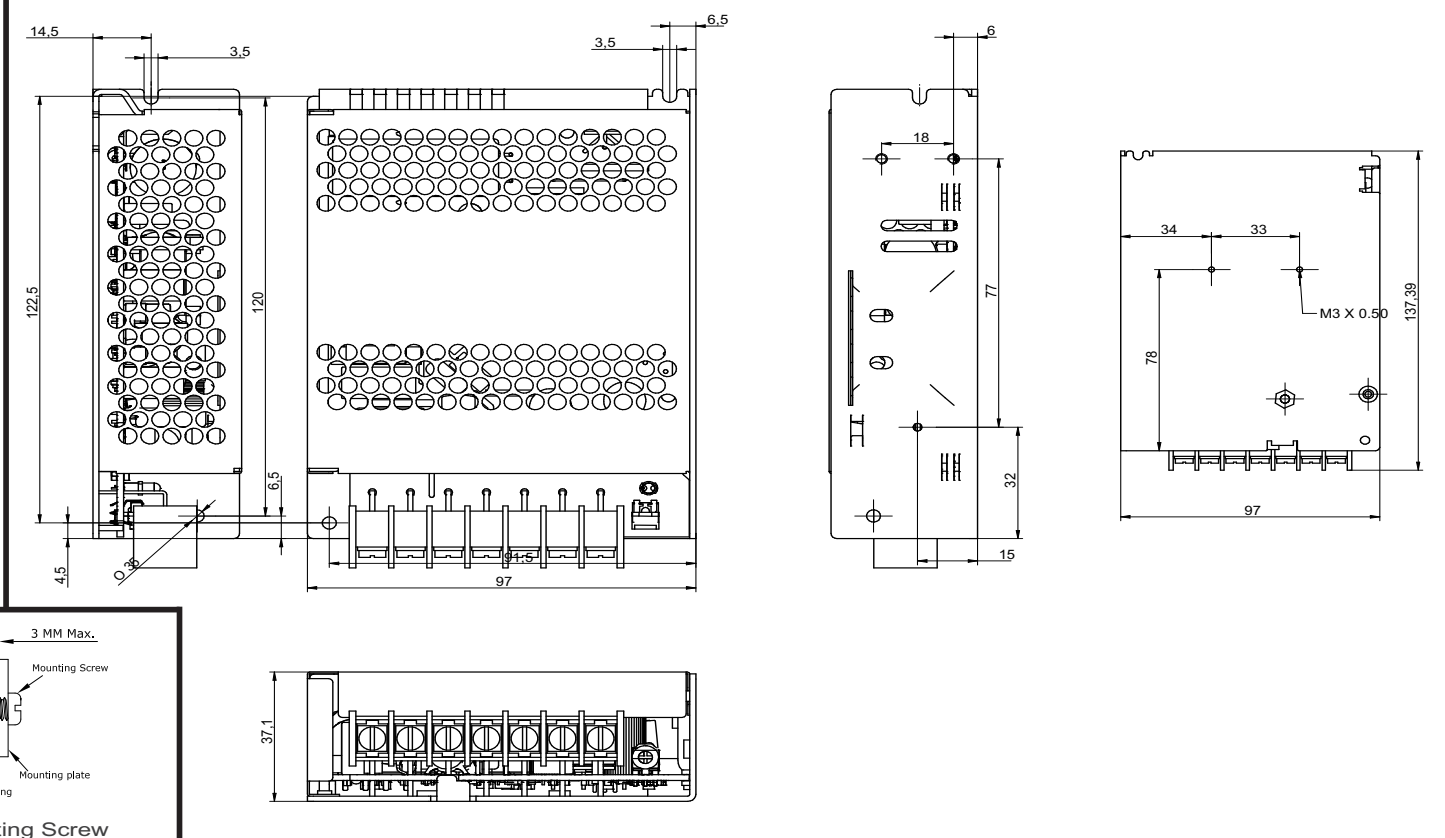
Overall Dimensions of PS100W12V:

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



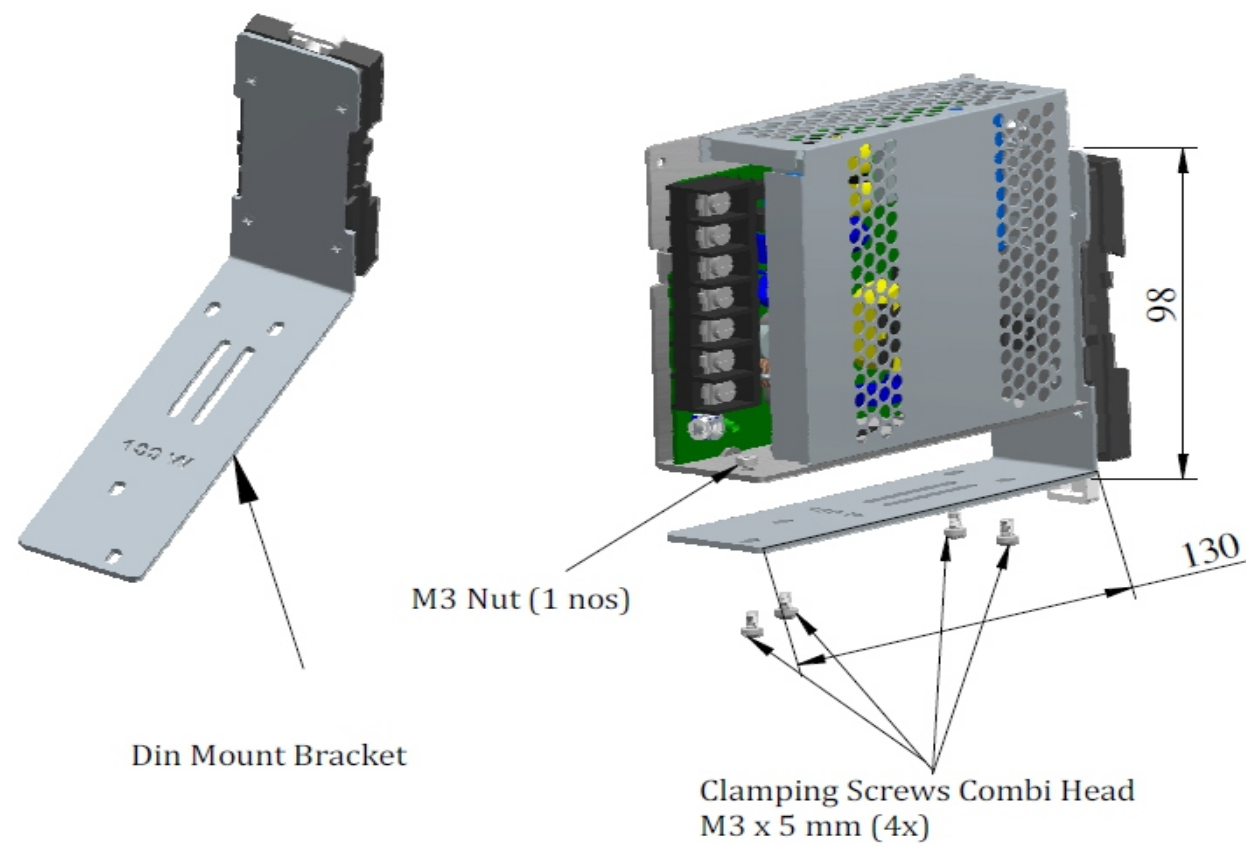
Overall Dimensions of PS100W12VF:

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

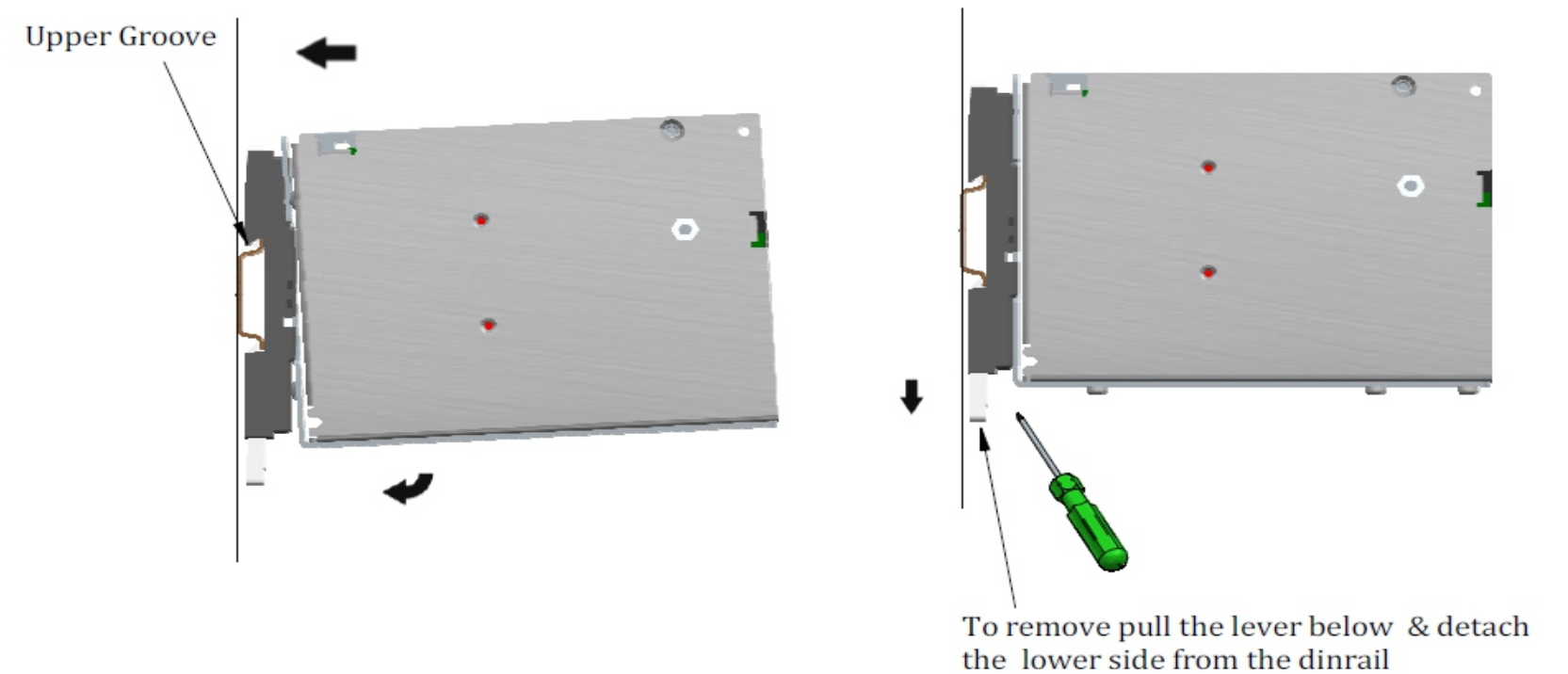


Dinrail Mounting Method

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



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



TECHNICAL SPECIFICATIONS:		
Cat. No.:		PS100W24V
		PS100W24VF
INPUT SUPPLY CHARACTERISTICS:		
Supply Voltage Range		90V to 264V AC & 130V to 373V DC
Frequency Range		47 - 63 Hz
Efficiency	@ 115 VAC/100% load	87 % Typ.
	@ 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)
Terminal facing		Upward facing terminal
Weight (unpacked)		340 g
Cooling		Convection

CONFORMITY TO STANDARDS :

Safety Standard	EN IEC 62368-1
EMC Standard	EN IEC 61000-6-2
	EN IEC 61000-6-4

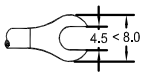
SAFETY DATA:

Dielectric strength	3 KV AC
Rated Impulse withstand voltage(Uimp)	4 KV(1.2/50 us)
Insulation Resistance	>100 Mohm
Leakage Current	<0.50 mA@230VAC

ENVIRONMENTAL DATA:

Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6 5-500Hz : 5g, 60min. each along X, Y, Z axes
Shock	IEC 60068-2-27 50G(11ms) for not in operation 10G(11ms) for in operation

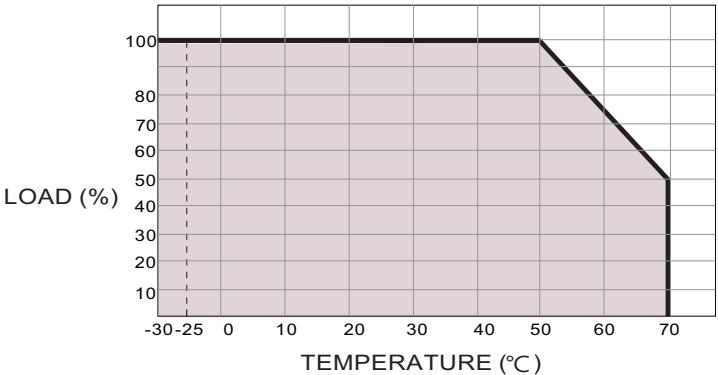
TERMINAL DETAILS:

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

Accessory Ordering Code:

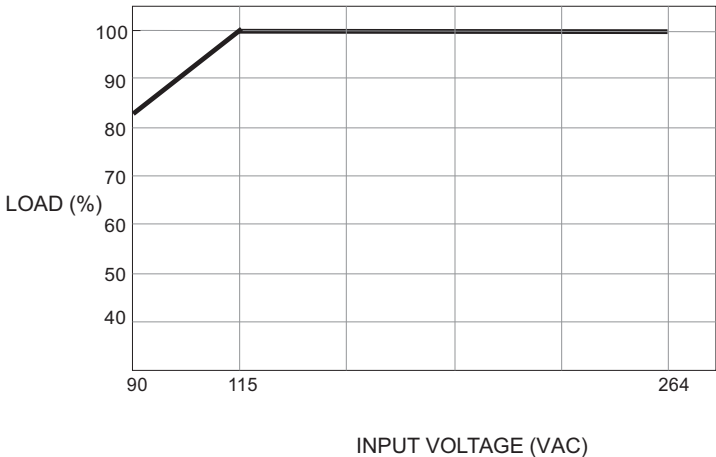
Cat No.	Description
L10024	Mounting Bracket for 100W SMPS

Derating Curve:



At 90-264VAC 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.



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.

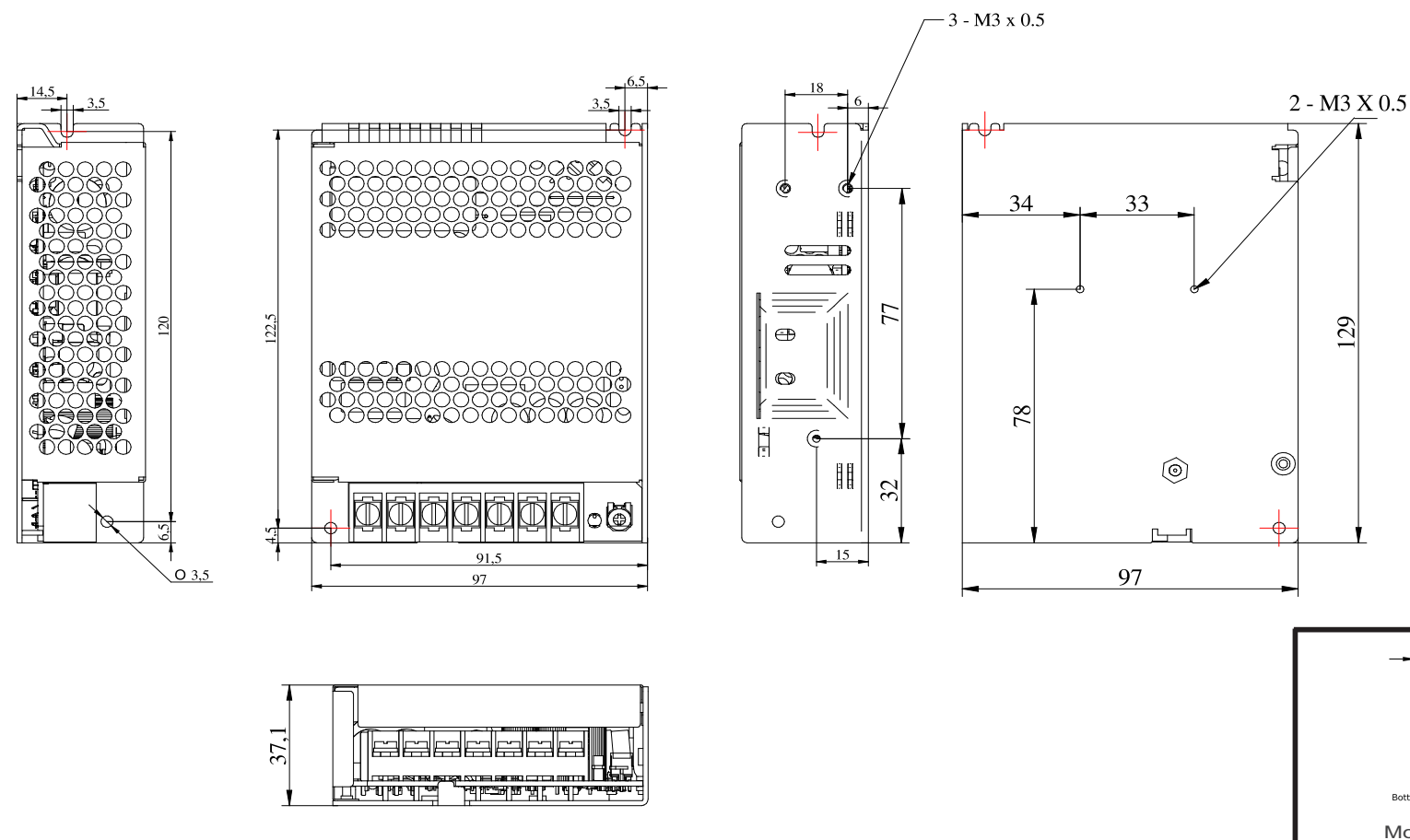
E-Waste Regulatory Notice:

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/>



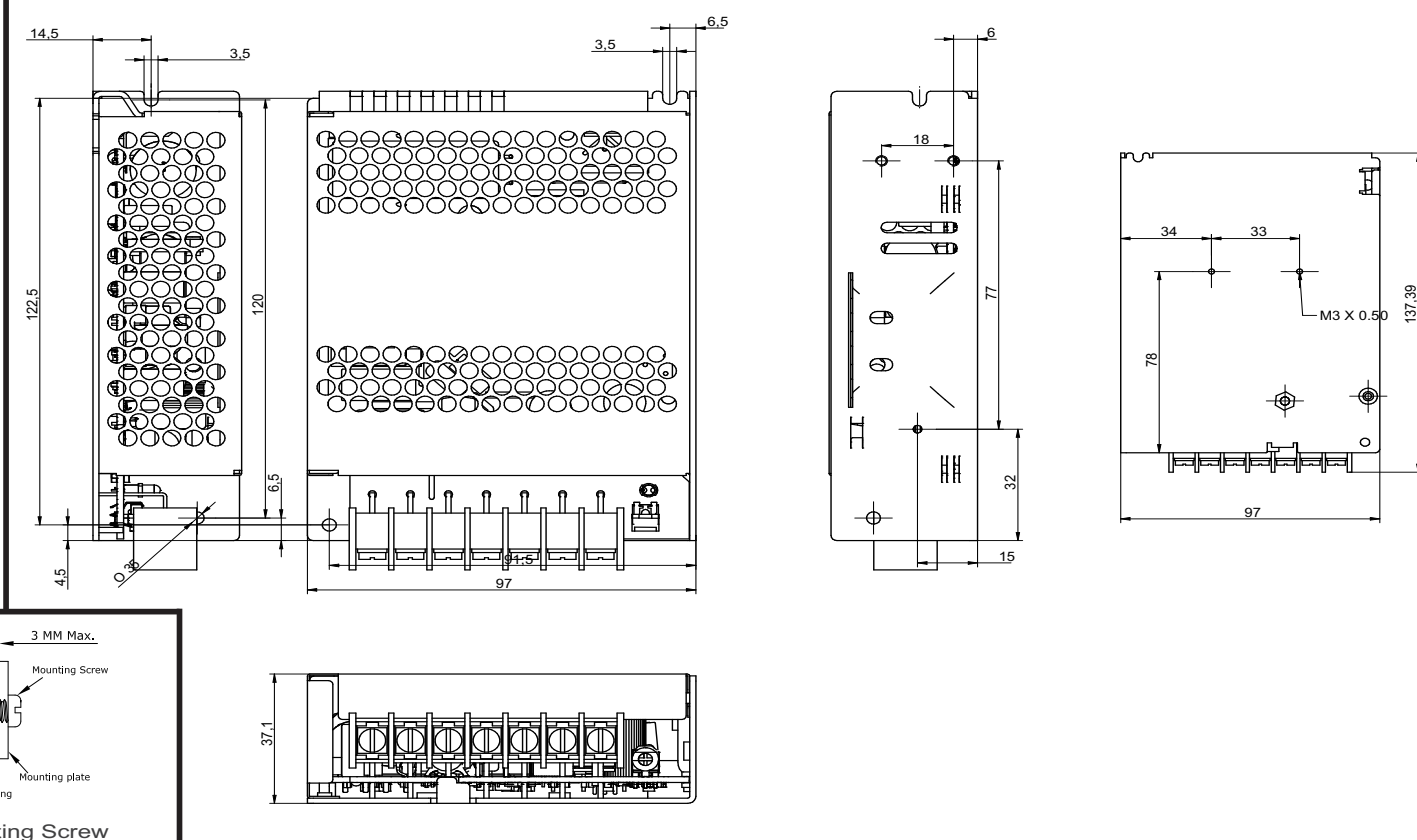
Overall Dimensions of PS100W24V:

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



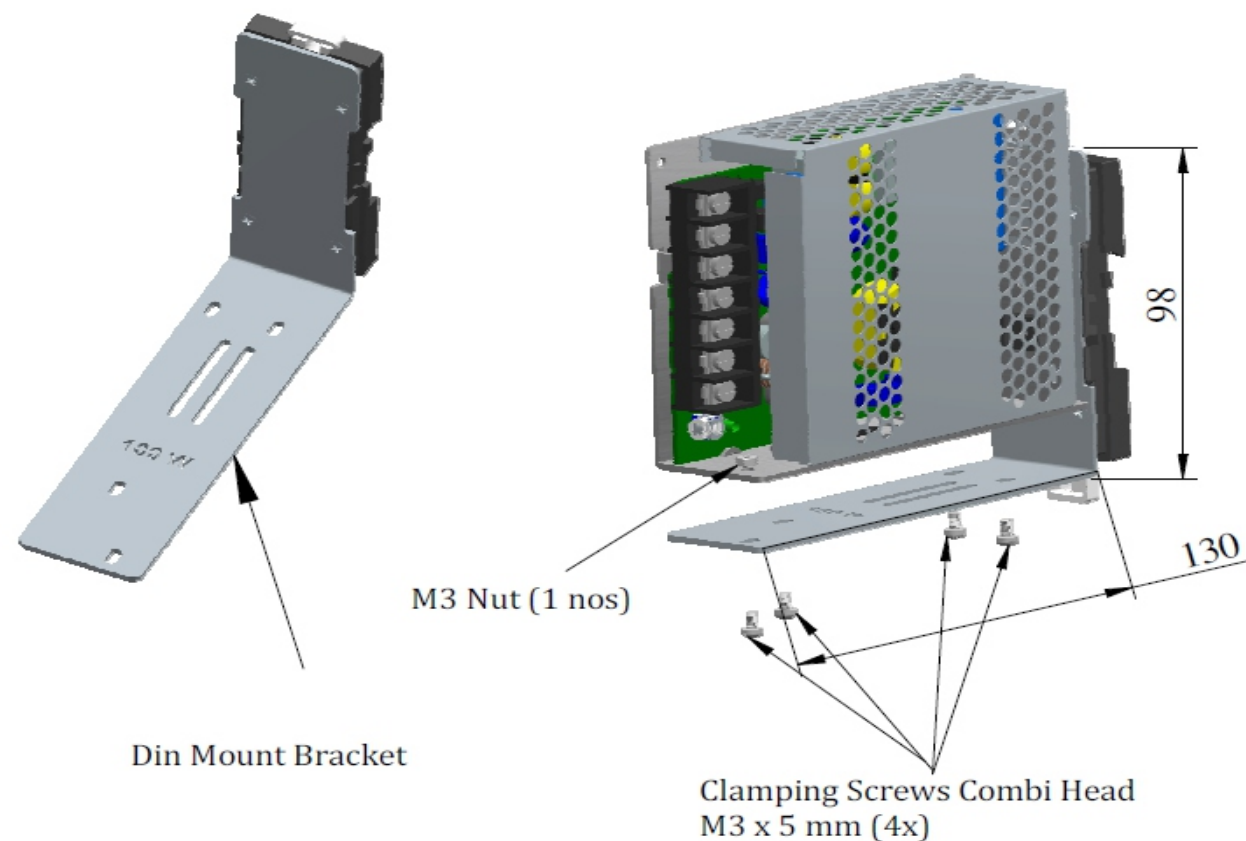
Overall Dimensions of PS100W24VF:

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

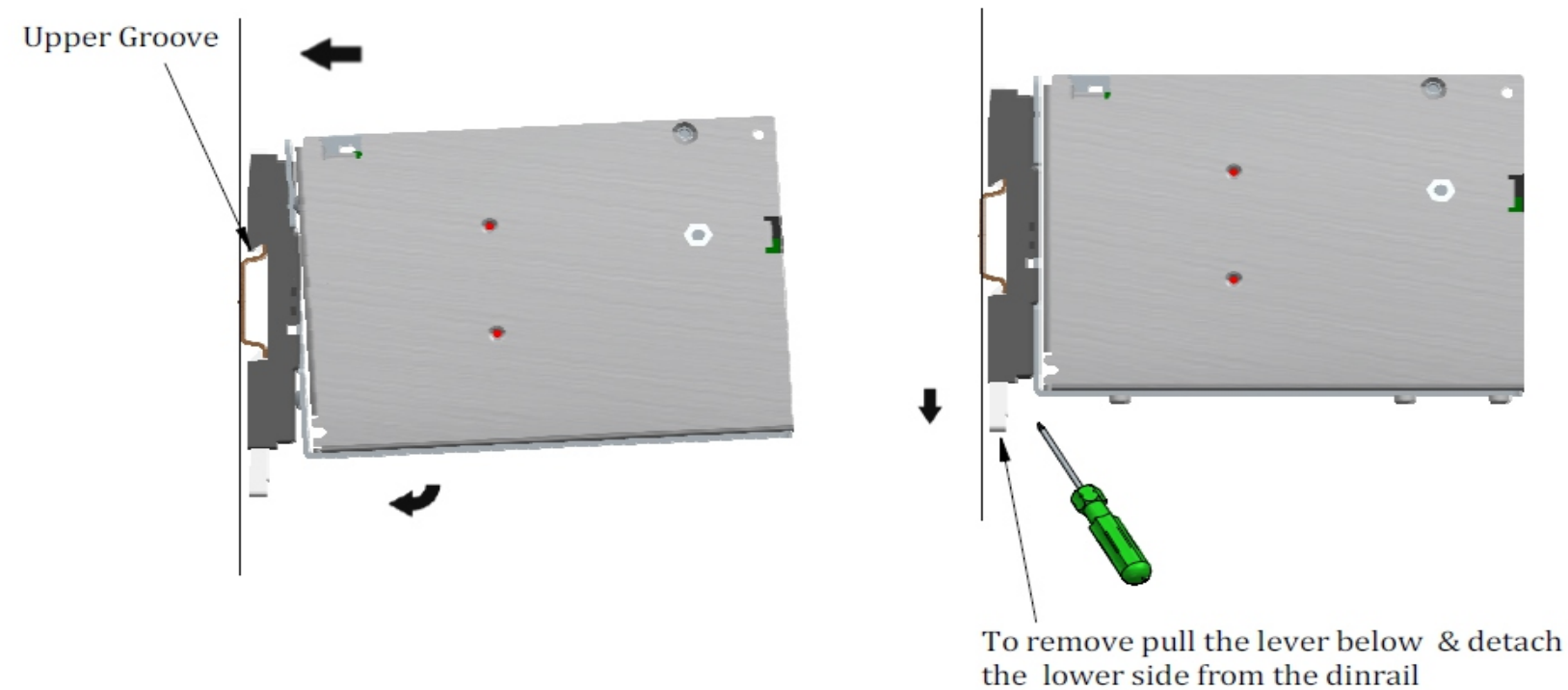


Dinrail Mounting Method

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



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



TECHNICAL SPECIFICATIONS:			
Cat. No.:		PS150W12V	PS150W12VF
INPUT SUPPLY CHARACTERISTICS:			
Supply Voltage Range		85V to 132V AC - When Switch is on 115V 170V to 264V AC or (240V DC to 370V DC) - When Switch is on 230V	
Frequency Range		47 - 63 Hz	
Efficiency	@ 115 VAC/100% load	87 % Typ.	
	@ 230 VAC/100% load	89 % Typ.	
AC Input Current (Max.)		3A typ. @ 115V AC & 1.7A typ. @ 230V AC	
Inrush Current		Cold start 60A @ 230V AC	
No load power consumption		<0.5W @ 230V AC	
OUTPUT CHARACTERISTICS:			
Nominal Output DC Voltage		12 V DC	
Output DC voltage adjustment range (Pot. setable)		10.2 - 13.8 V DC	
Rated Output Current		12.5 A @ 12 V DC	
Rated Output Power		150 W	
Load Regulation		± 0.5 % typ.	
Line Regulation		± 0.5 % typ.	
Ripple & Noise		120 mV p-p max.	
Start Up Time		500 msec at full load	
Hold UP Time		30 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		13.8 V ~ 16.4 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	
Power Supply selection switch		To select input supply voltage 115V or 230V	
LED INDICATION			
Green Led		ON : DC Output OK	
MECHANICAL			
Case Chassis (Base)		Aluminum	
Casing (Top)		Galvanize	
Dimensions (L X W X H)		159 x 97 x 37.1 (in mm)	167 x 97 x 37.1 (in mm)
Terminal facing		Upward facing terminal	Horizontal facing terminal
Weight (unpacked)		400 g	
Cooling		Convection	

CONFORMITY TO STANDARDS :

Safety Standard	EN IEC 62368-1
EMC Standard	EN IEC 61000-6-2 EN IEC 61000-6-4

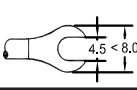
SAFETY DATA:

Dielectric strength	4 KV AC
Rated Impulse withstand voltage(Uimp)	4 KV(1.2/50 us)
Insulation Resistance	>100 Mohm
Leakage Current	<0.50 mA@230VAC

ENVIRONMENTAL DATA:

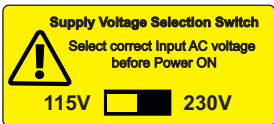
Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6 5-500Hz : 5g, 60min. each along X, Y, Z axes
Shock	IEC 60068-2-27 50G(11ms) for not in operation 10G(11ms) for in operation

Terminal Details:

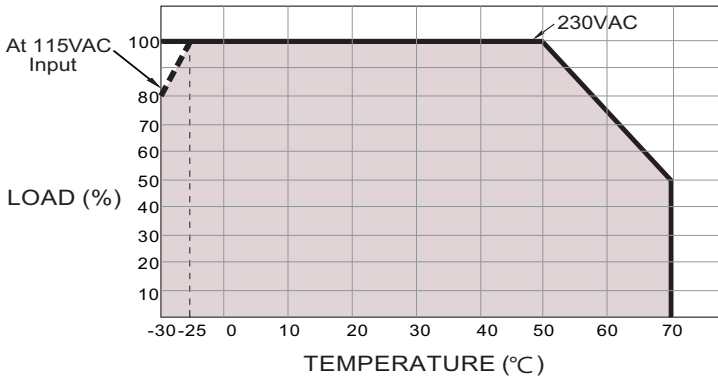
Tightening Torque	1.2 N.m. (10.6 lb.in.) Terminal Screw - M4
	1 x 4 mm Wire with lug
AWG	1 x 22 to 12

Caution note for Slide Switch:

- Factory default setting is 230V.
- Select input voltage switch position 115V or 230V as per input voltage source.
- Select 230V switch position for DC input voltage source.
- Do not change switch position during runtime operation.

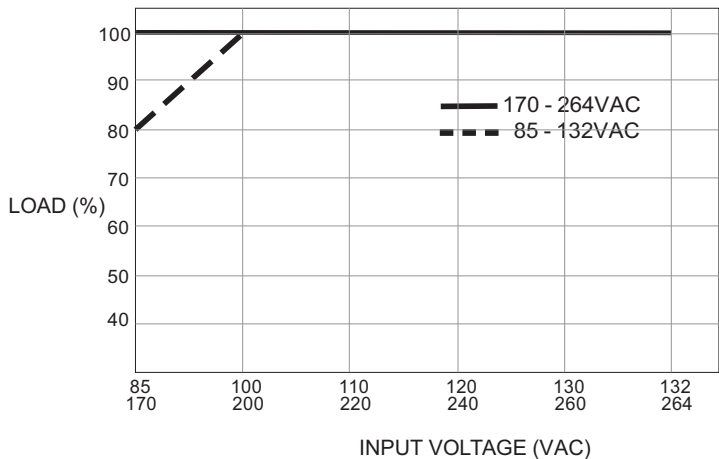


Derating Curve:



At 85-132VAC & 170-264VAC 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 100 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:

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SWITCH MODE POWER SUPPLY
150W/12VDC

Catalog Nos.: PS150W12V
PS150W12VF



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 selectable by switch.
- Excellent load & line regulation.
- Excellent Load Transient Response
- No load Power consumption of 0.5W 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:

- Select correct position of slide switch before Power ON.
- 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:

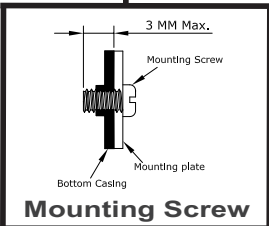
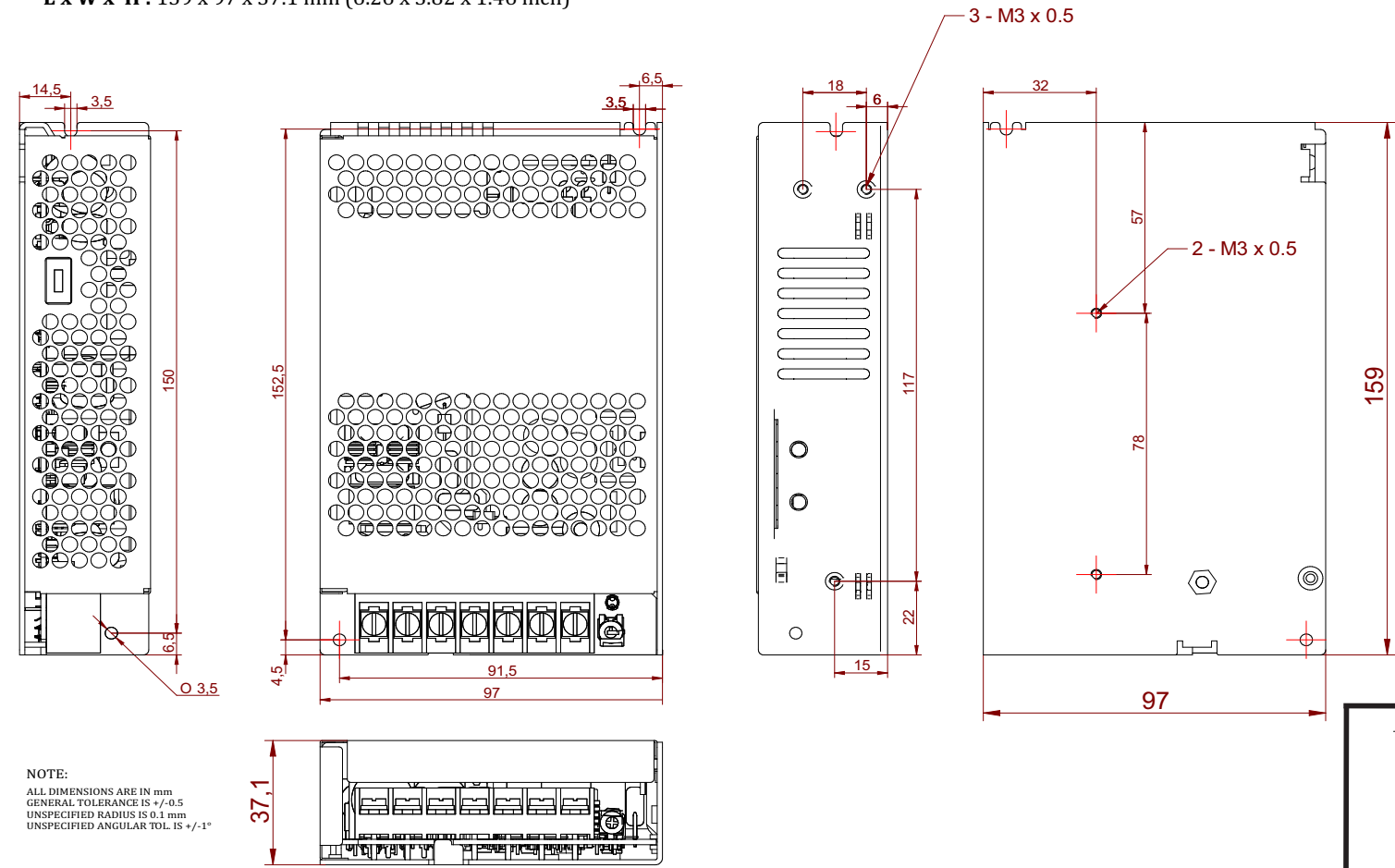
- The technical information provided in this document was correct at the time of publish.
- Product innovation being a continuous process, we reserve the right to alter specifications.

Accessory Ordering Code:

Cat No.	Description
L15024	Mounting Bracket for 150W SMPS

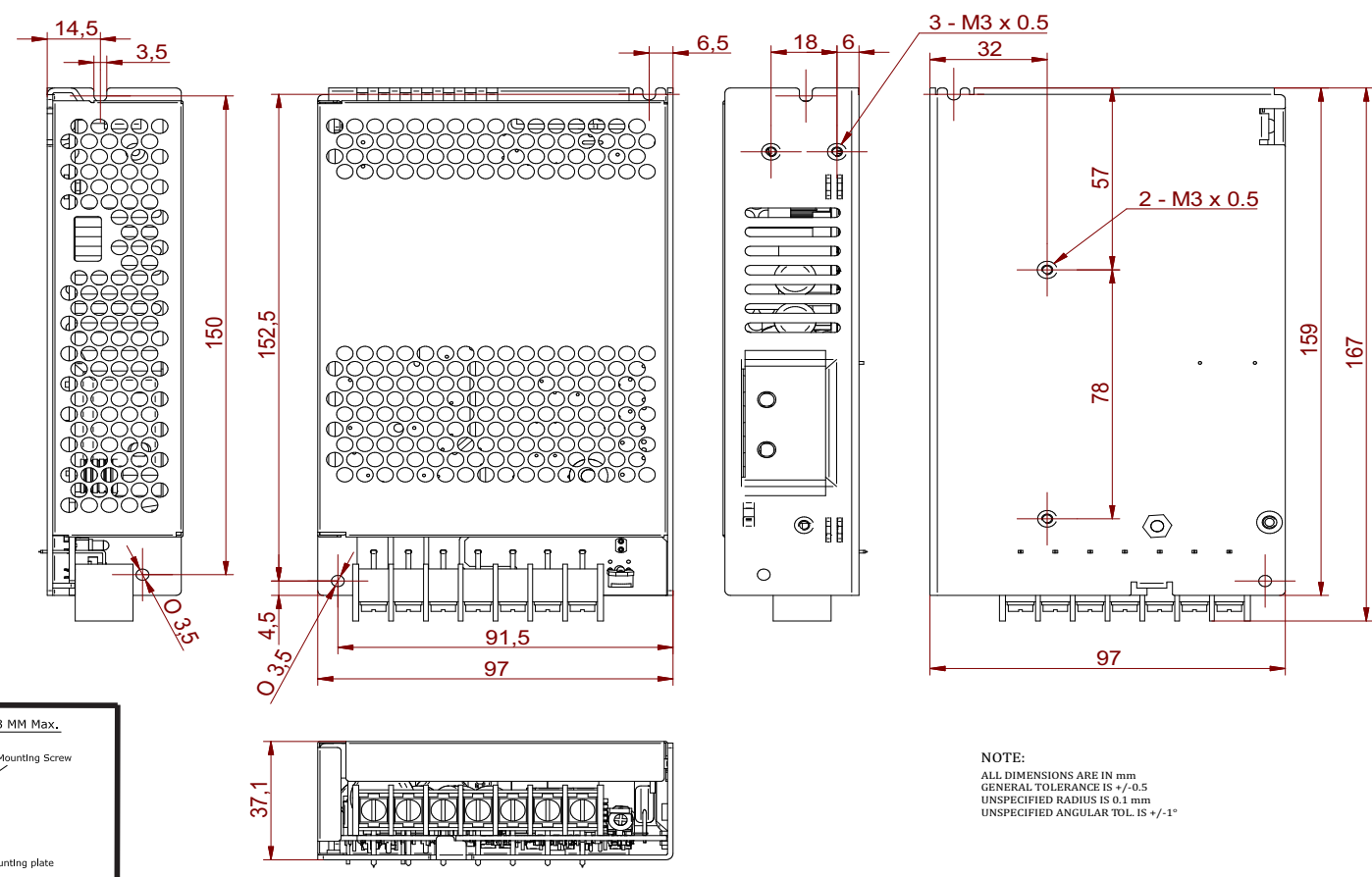
Overall Dimensions of PS150W12V:

L x W x H : 159 x 97 x 37.1 mm (6.26 x 3.82 x 1.46 inch)



Overall Dimensions of PS150W12VF:

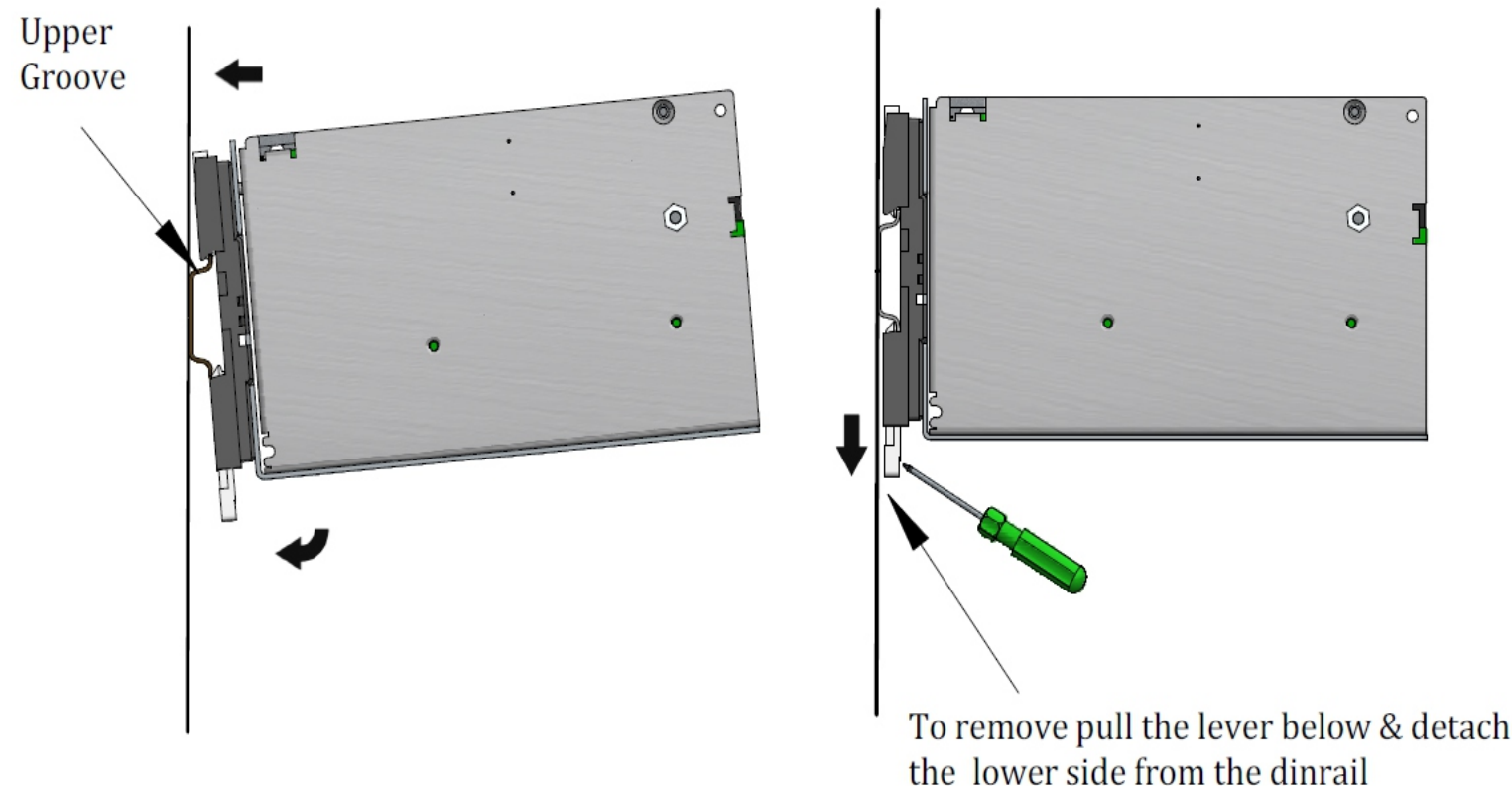
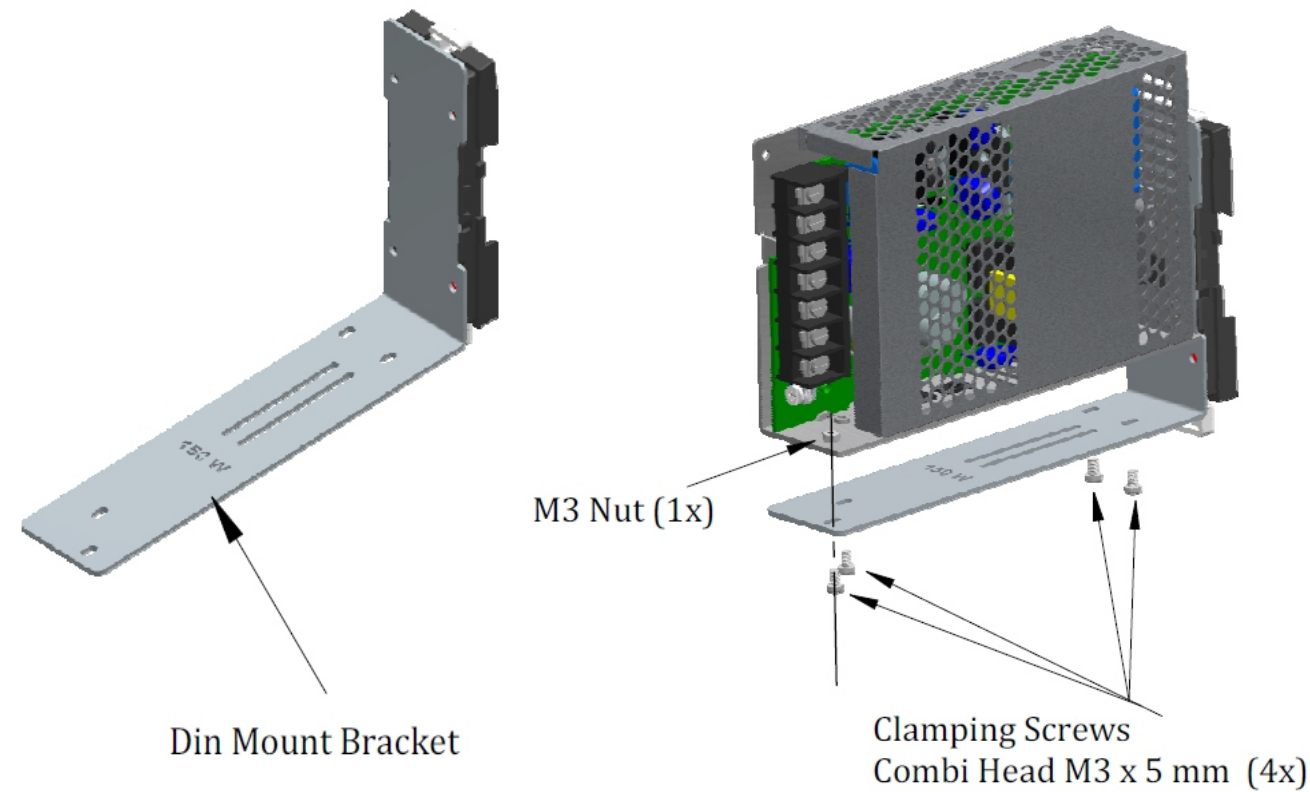
L x W x H : 167 x 97 x 37.1 mm (6.57 x 3.82 x 1.46 inch)



Dinrail Mounting Accessory

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

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



TECHNICAL SPECIFICATIONS:			
Cat. No.:		PS150W24V	PS150W24VF
INPUT SUPPLY CHARACTERISTICS:			
Supply Voltage Range		85V to 132V AC - When Switch is on 115V 170V to 264V AC or (240V DC to 370V DC) - When Switch is on 230V	
Frequency Range		47 - 63 Hz	
Efficiency	@ 115 VAC/100% load	87 % Typ.	
	@ 230 VAC/100% load	89 % Typ.	
AC Input Current (Max.)		3A typ. @ 115V AC & 1.7A typ. @ 230V AC	
Inrush Current		Cold start 60A @ 230V AC	
No load power consumption		<0.5W @ 230V AC	
OUTPUT CHARACTERISTICS:			
Nominal Output DC Voltage		24 V DC	
Output DC voltage adjustment range (Pot. setable)		21 - 28 V DC	
Rated Output Current		6.25 A @ 24 V DC	
Rated Output Power		150 W	
Load Regulation		± 0.5 % typ.	
Line Regulation		± 0.5 % typ.	
Ripple & Noise		120 mV p-p max.	
Start Up Time		500 msec at full load	
Hold UP Time		30 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		29 V ~ 33 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	
Power Supply selection switch		To select input supply voltage 115V or 230V	
LED INDICATION			
Green Led		ON : DC Output OK	
MECHANICAL			
Case Chassis (Base)		Aluminum	
Casing (Top)		Galvanize	
Dimensions (L X W X H)		159 x 97 x 37.1 (in mm)	167 x 97 x 37.1 (in mm)
Terminal facing		Upward facing terminal	Horizontal facing terminal
Weight (unpacked)		400 g	
Cooling		Convection	

CONFORMITY TO STANDARDS :

Safety Standard	EN IEC 62368-1
EMC Standard	EN IEC 61000-6-2 EN IEC 61000-6-4

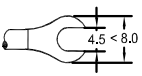
SAFETY DATA:

Dielectric strength	4 KV AC
Rated Impulse withstand voltage(Uimp)	4 KV(1.2/50 us)
Insulation Resistance	>100 Mohm
Leakage Current	<0.50 mA@230VAC

ENVIRONMENTAL DATA:

Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6 5-500Hz : 5g, 60min. each along X, Y, Z axes
Shock	IEC 60068-2-27 50G(11ms) for not in operation 10G(11ms) for in operation

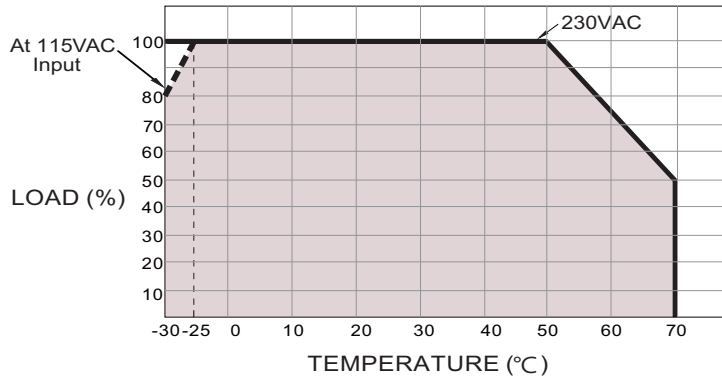
Terminal Details:

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

Accessory Ordering Code:

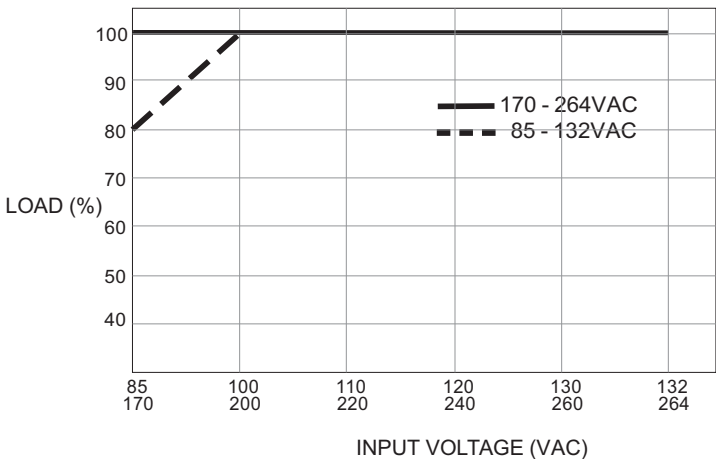
Cat No.	Description
L15024	Mounting Bracket for 150W SMPS

Derating Curve:



At 85-132VAC & 170-264VAC 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 100 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

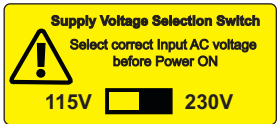
Power supply have thermal protection mode, If internal temperature of SMPS rises extremely during functioning then over temperature protection circuit activate & protect SMPS by shutting down output. Turn off input power supply of SMPS up to 3min & then power on input supply to recover SMPS..

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.

Caution note for Slide Switch:

- Factory default setting is 230V.
- Select input voltage switch position 115V or 230V as per input voltage source.
- Select 230V switch position for DC input voltage source.
- Do not change switch position during runtime operation.



SWITCH MODE POWER SUPPLY 150W/24VDC

Catalog Nos.: **PS150W24V**
PS150W24VF



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 selectable by switch.
- Excellent load & line regulation.
- Excellent Load Transient Response
- No load Power consumption of 0.5W 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:

- Select correct position of slide switch before Power ON.
- 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.

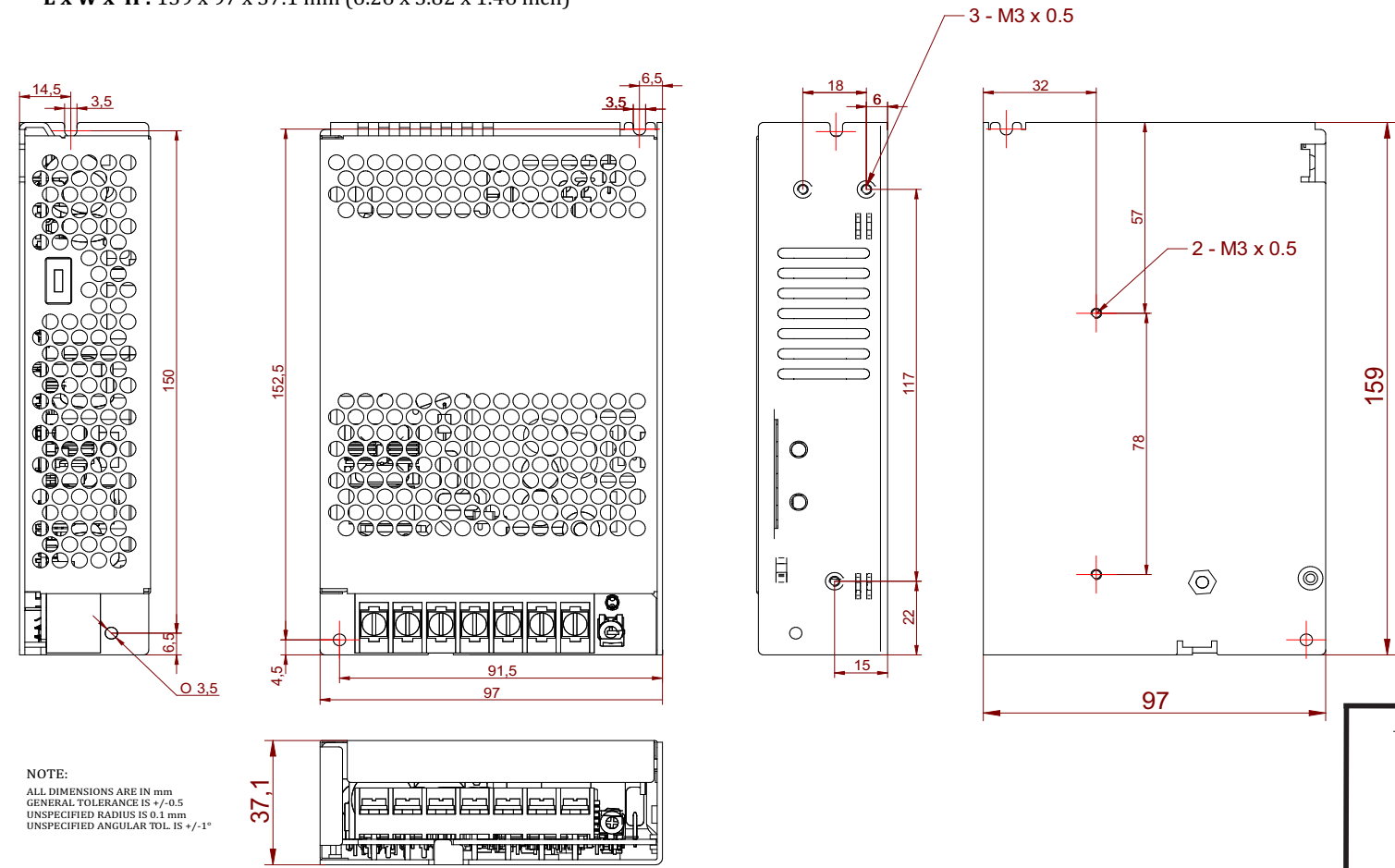
E-Waste Regulatory Notice:

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/>



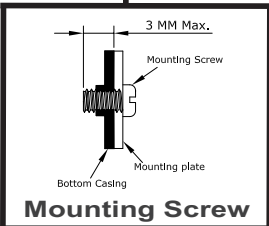
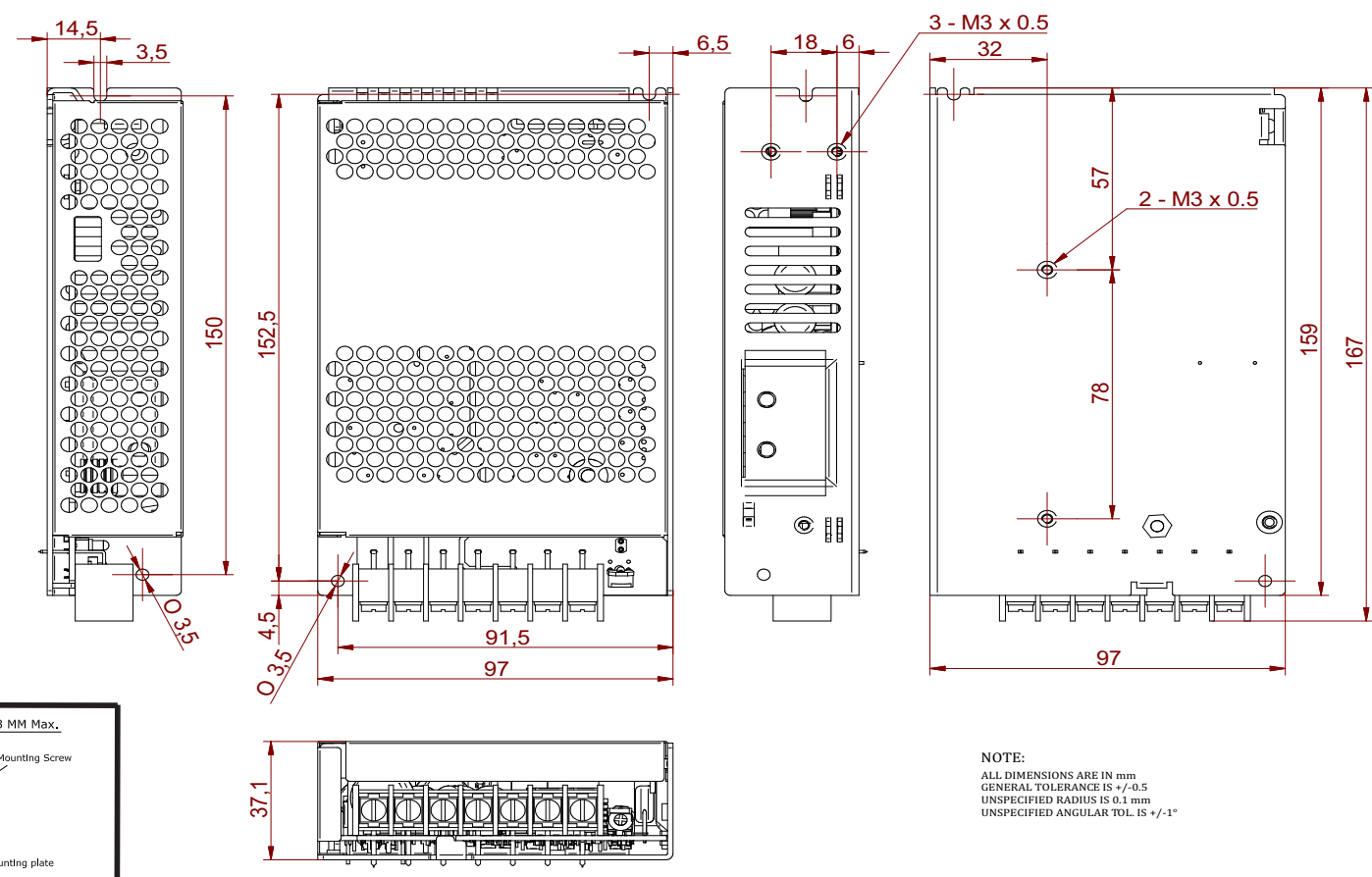
Overall Dimensions of PS150W24V:

L x W x H : 159 x 97 x 37.1 mm (6.26 x 3.82 x 1.46 inch)



Overall Dimensions of PS150W24VF:

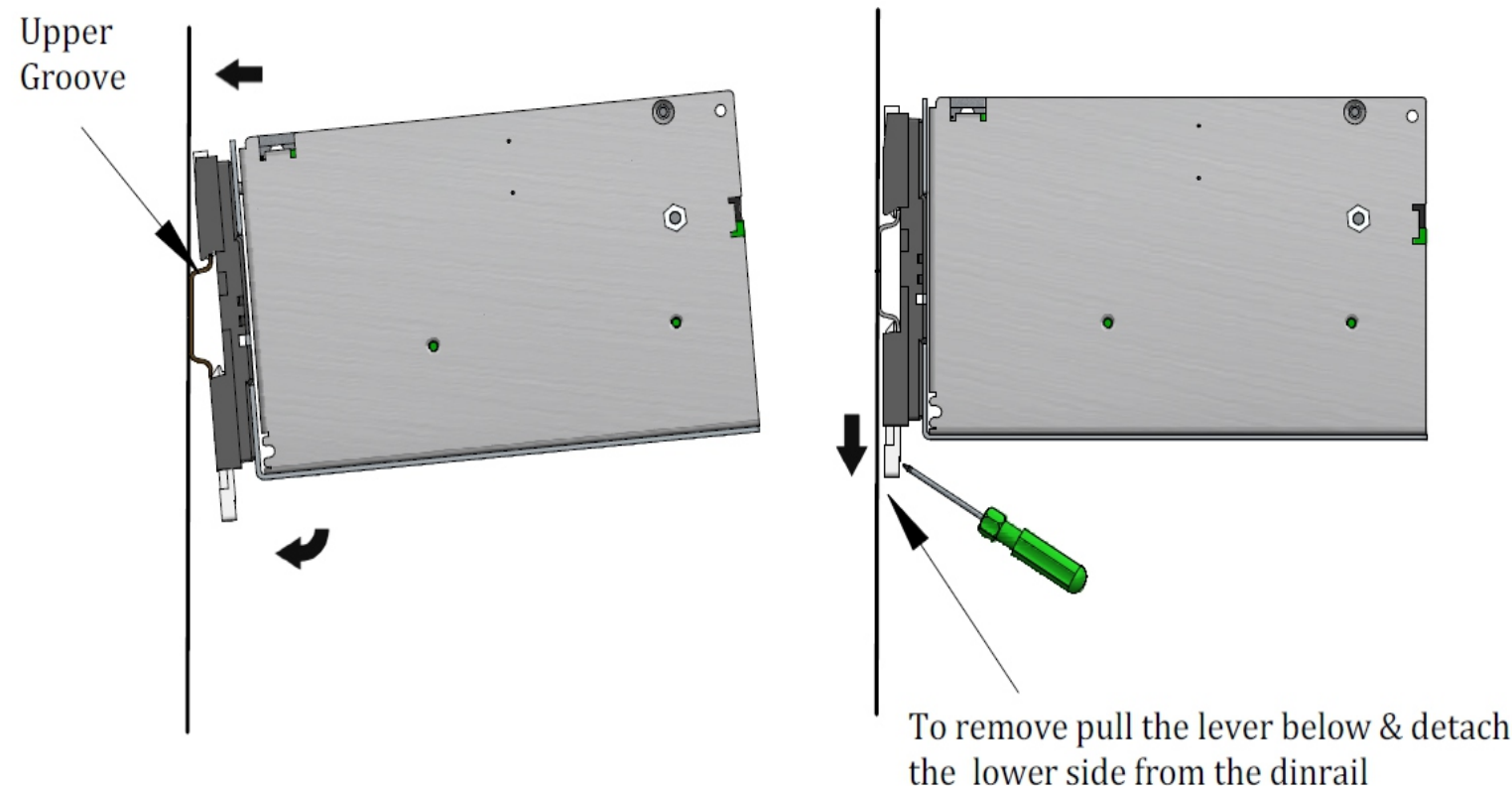
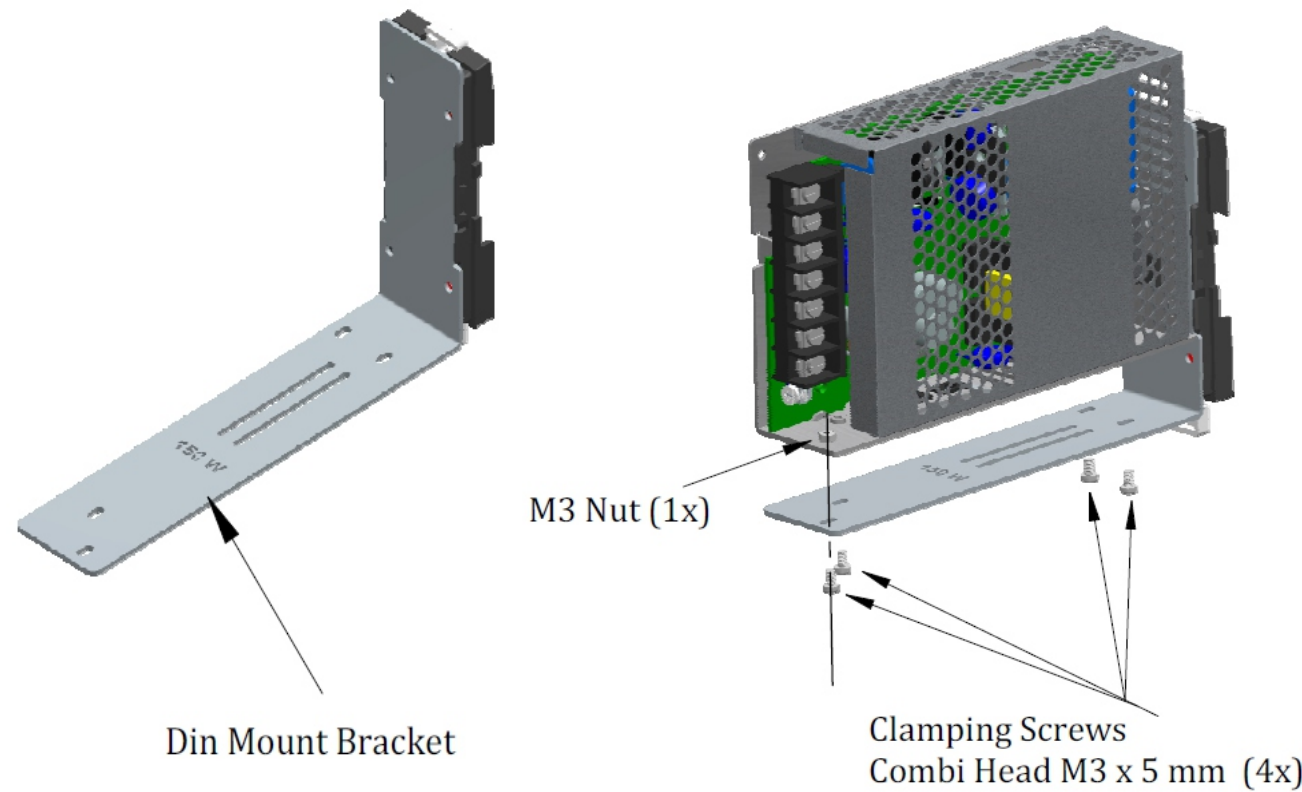
L x W x H : 167 x 97 x 37.1 mm (6.57 x 3.82 x 1.46 inch)



Dinrail Mounting Accessory

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

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





SWITCH MODE POWER SUPPLY 350W/24VDC

Catalog No.: PS350W24V



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 selectable by switch.
- Excellent load & line regulation.
- Excellent Load Transient Response
- 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.
- Forced air cooling by built in DC fan.
- Small form factor
- Base mount.
- CE & RoHS compliance.

CAUTION:

- Select correct position of slide switch before Power ON.
- 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:

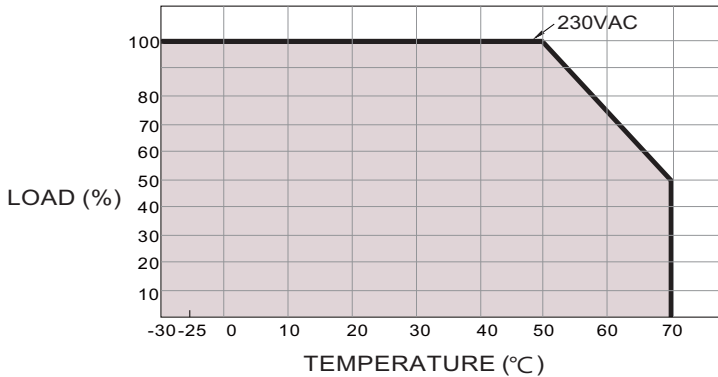
- The technical information provided in this document was correct at the time of publish.
- Product innovation being a continuous process, we reserve the right to alter specifications.

E-Waste Regulatory Notice:

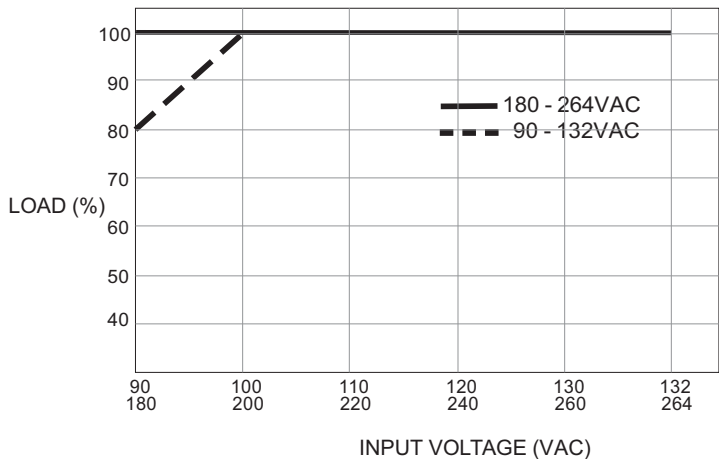
Kindly treat, recycle or dispose of this equipment in an environmentally sound manner after End of Life, as per WEEE (Waste Electrical and Electronic Equipment) regulations or as per local norms or hand it over to General Industrial Controls Pvt. Ltd, through website <https://www.gicindia.com/get-in-touch/>



Temperature Derating Curve:



Output Load Derating VS Input Voltage:



There is no output derating applicable from 100 to 264VAC.Refer graph.

Protection against fault:

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 goes in hiccup mode. recovers automatically after fault condition is removed.

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

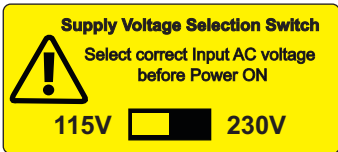
Power supply have thermal protection mode, If internal temperature of SMPS rises extremely during functioning then over temperature protection circuit activate & SMPS goes in hiccup mode. Turn off input power supply of SMPS up to 3min & then power on input supply to recover SMPS.

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.

Caution note for Slide Switch:

- Factory default setting is 230V.
- Select input voltage switch position 115V or 230V as per input voltage source.
- Select 230V switch position for DC input voltage source.
- Do not change switch position during runtime operation.



TECHNICA SPECIFICATIONS:	
Cat. No.:	PS350W24V
INPUT SUPPLY CHARACTERISTICS:	
Supply Voltage Range	90V to 132V AC - When Switch is on 115V 180V to 264V AC or (240V DC to 370V DC) - When Switch is on 230V
Frequency Range	47 - 63 Hz
Efficiency	@ 115 VAC/100% load 87 % Typ.
	@ 230 VAC/100% load 88 % Typ.
AC Input Current (Max.)	6A typ. @ 115V AC & 3.4A typ. @ 230V AC
Inrush Current	Cold start 60A @ 230V AC
No load power consumption	<3.2W @ 230V AC
OUTPUT CHARACTERISTICS:	
Nominal Output DC Voltage	24 V DC
Output DC voltage adjustment range (Pot. setable)	21 - 28 V DC
Rated Output Current	14.6 A @ 24 V DC
Rated Output Power	350 W
Load Regulation	± 0.5 % typ.
Line Regulation	± 0.5 % typ.
Ripple & Noise	200 mV p-p max.
Start Up Time	1500 msec at full load
Hold UP Time	20 msec at full load
Rise Time	30 msec at full load
Dynamic Response (Overshoot & Undershoot O/P Voltage)	± 10 % @ 115 & 230Vac input, 10-100% load @ 5Hz & 10KHz
Start Up with capacitive load	8000uF
PROTECTIONS :	
Over Voltage	28.1 V ~ 33 V (Output voltage hiccup).
Over Load/Over current	110% or higher of rated load current (Hiccup mode, Auto recover when fault clear)
Over Temperature	Hiccup output voltage, Auto recover after temperature become in range. (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	II
Pollution Degree	2
USER INTERFACE	
Potentiometer	To set output voltage
Power Supply selection switch	To select input supply voltage 115V or 230V
LED INDICATION	
Green Led	ON : DC Output OK Blink : HICCUP
MECHANICAL	
Case Chassis (Base)	Aluminum
Casing (Top)	Galvanize
Dimensions (L X W X H)	215 x 115 x 30 (in mm)
Terminal facing	Upward facing terminal
Weight	Unpacked : 677 gm Packed : 740 gm
Cooling	Force cooling

CONFORMITY TO STANDARDS :	
Safety Standard	EN IEC 62368-1
EMC Standard	EN IEC 61000-6-2 EN IEC 61000-6-4

SAFETY DATA:	
Dielectric strength	3 KV AC
Rated Impulse withstand voltage(Uimp)	4 KV(1.2/50 us)
Insulation Resistance	>100 Mohm
Leakage Current	<0.50 mA@230VAC

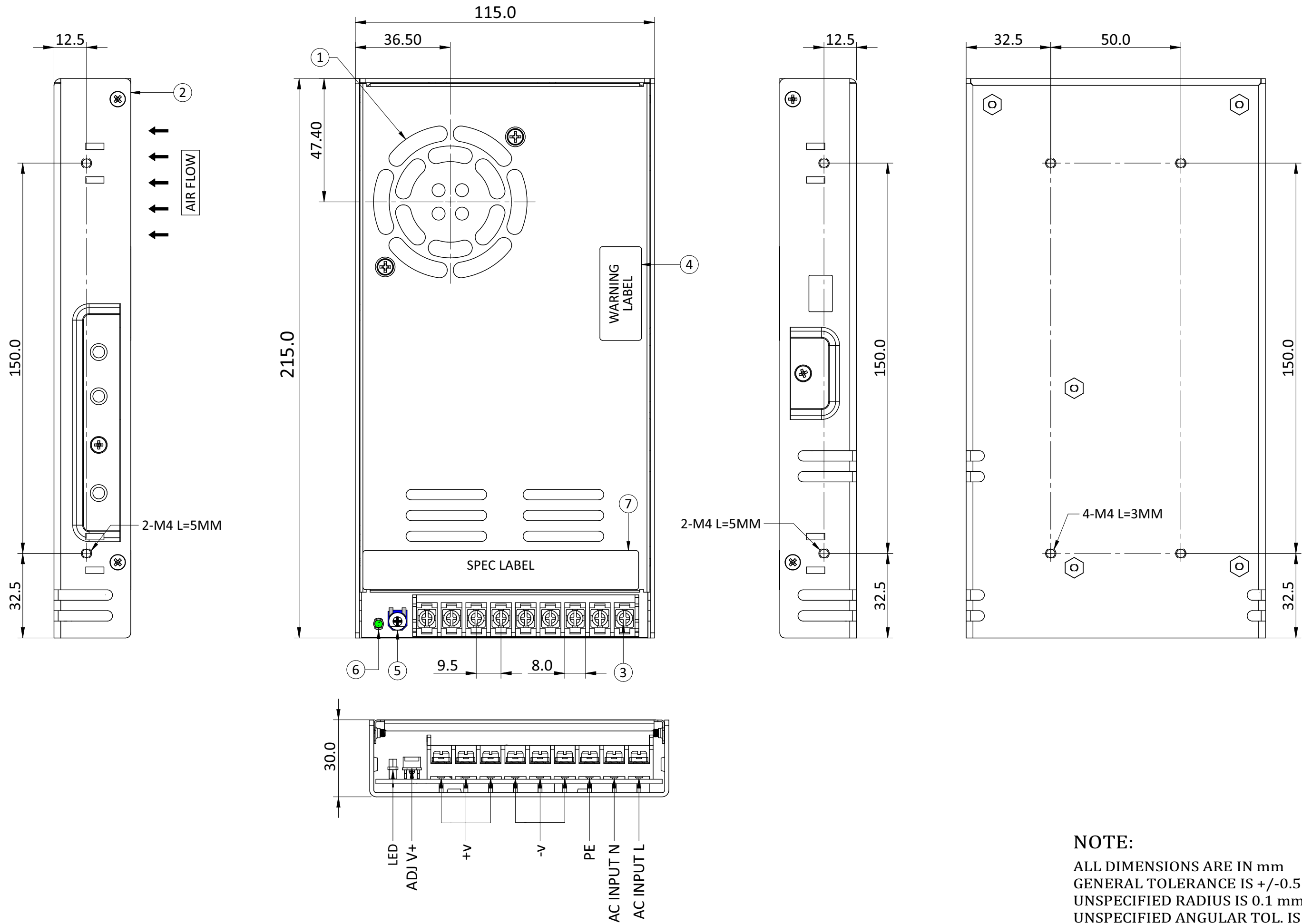
ENVIRONMENTAL DATA:	
Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6 5-500Hz : 5g, 60min. each along X, Y, Z axes
Shock	IEC 60068-2-27 50G(11ms) for not in operation 10G(11ms) for in operation

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

Overall Dimensions

L X W X H : 215 x 115 x 30 mm (8.46 x 4.53 x 1.18 inch)



NOTE:
ALL DIMENSIONS ARE IN mm
GENERAL TOLERANCE IS +/-0.5
UNSPECIFIED RADIUS IS 0.1 mm
UNSPECIFIED ANGULAR TOL. IS +/-1°