

Switched Mode Power Supply

- Universal input voltage range
- Adjustable output voltage
- High Noise Immunity & Low Ripple
- High MTBF > 700,000 hrs
- Overload, Over voltage, Short Circuit & Over Temperature Protection
- CE, UKCA, RoHS Certified
- High Efficiency of Operation
- Wide operating temperature - 30°C to 70°C
- Peak Power Capacity
- Small form factor
- Din rail mount



Ordering Information

Cat ID	Description
PS120W24V	120W, 90V - 264 VAC/127V - 375 VDC, 24 VDC, 5A, Switched Mode Power Supply
PS120W12V	120W, 90V -264VAC / 127V- 375 VDC, 12 VDC, 10A, Switched Mode Power Supply
PS240W24V	240W, 90V - 264 VAC/127V - 375 VDC, 24 VDC, 10A, Switched Mode Power Supply

Switched Mode Power Supply

Technical Datasheet



Cat. No.	PS120W24V	PS120W12V	PS240W24V
Input Supply Characteristics	90V to 264V AC 127V to 375V DC		
Frequency Range	47 to 63Hz		
Efficiency	87.00%	85.00%	90.00%
AC Current	< 1.40 A @ 115 VAC, < 0.80 A @ 230 VAC	< 2.25 A @ 115 VAC, < 1.3 A @ 230 VAC	< 2.5 A @ 115 VAC, 1.3 A @ 230 VAC
Inrush Current	20A/115VAC; 35A/230VAC		20A/115VAC, 40A/230 VAC
No Load Power Consumption	<0.5W @230V AC		<2W @230V AC
Output Characteristics			
Output DC voltage	24V	12 V DC	24V
Output DC voltage adjustment range	22V to 28V DC	10.2 - 13.8 V DC	22V to 28V DC
Output Current	5A @24V DC	10 A @ 12 V DC	10A @24VDC
Output Power	120W		240W max
Line Regulation	+/- 0.5%		
Load Regulation	+/- 0.5%		
Ripple & Noise	120mV p-p max		150mV p-p max
Startup Time	<1000 ms @ nominal input (100% load)		500ms typ. @ 115 VAC & 230 VAC
Rise Time	30msec at full load	60 msec at full load	20ms typ. @ 115 VAC (100% load)
Hold up time	>35 ms @ 115 VAC,> 70 ms @ 230 VAC (100% load)	> 10 ms @ 115 VAC,> 16 ms @ 230 VAC (100% load)	30ms typ. @ 115 VAC & 230 VAC
Dynamic Response (Overshoot & Undershoot O/P Voltage)	± 5% @ 85 & 264 Vac input, 10-90% load (Slew Rate: 0.1A/μS, 50% duty cycle @ 5Hz & 1KHz)		± 10% @ 115 & 230Vac input, 10-100% load Slew Rate:2.5A/μS, 50% duty cycle @ 5Hz & 10KHz)
Start-up with Capacitive Loads	8,000μF Max		
Protections			
Over Voltage	28.8V to 33.6V (Output voltage turn off, Restart power to turn on device)	13.2 V ~ 17.4 V (Output voltage turn off, Restart power to turn on device)	28.8V to 33.6V (Output voltage turn off, Restart power to turn on device)
Over load/ Over current	105 to 150% of rated load current, Auto-recovery continuous current limite mode.		
Over temperature	Shut down output voltage, re-power ON to recover		
Short circuit	Hiccup mode, recovers automatically after fault recovery		
Protection against shock	Class 1 with Protection Earth connection, Earthing terminal required		
Internal Input Fuse	4A / 250V		
Recommended breaker for input	6A ... 16 A (Characteristics B,C,D,K or comparable)		
User Interface			
Pot	To set output voltage		
LED Indication			
Green LED	ON : DC O/P OK		
Environmental			
Operating Temperature	-30°C to +70°C		
Storage Temperature / Humidity	-40°C to +85°C		
Operating Relative humidity	20 - 90% RH non-condensing		
Operating Altitude	Up to 2000 meters		
Over voltage Category	II		
Pollution degree	2		
Vibration Test	Operating & Non-Operating as per : IEC 60068-2-6 20 - 500Hz (5g)		
Mechanical			
Case chassis	Aluminium		
Dimensions (WxHxD)	40x128.8x128.3 (in mm)		
Unit weight	Approx. 510g		
Cooling system	Convection		

Switched Mode Power Supply

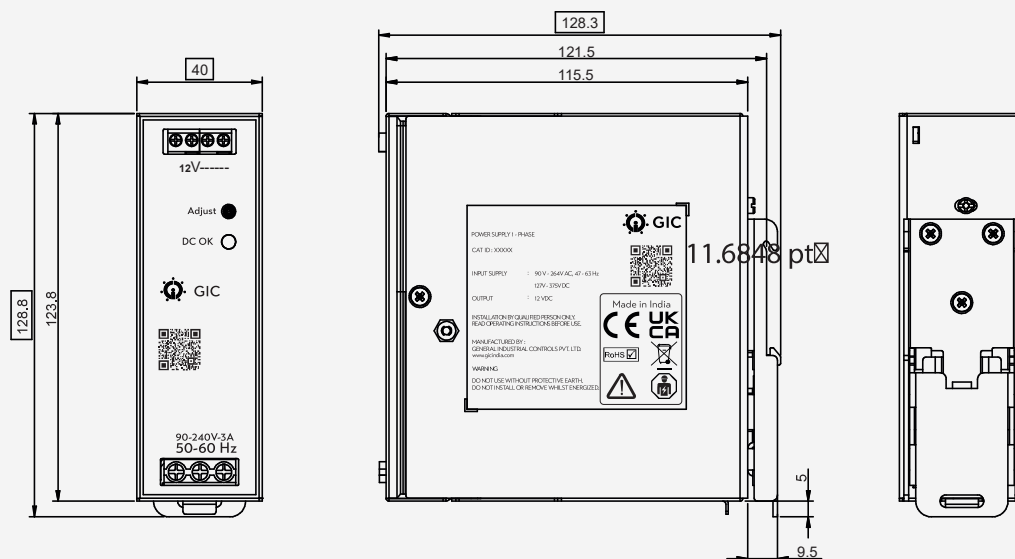
Technical Datasheet



Cat. No.	PS120W24V	PS120W12V	PS240W24V
Terminal Type	Front facing terminal		
Wire	AWG 26 - 10 / 24 - 12		AWG 26 - 10
Mounting type	DIN Rail Mount		
Reliability			
MTBF	> 700,000 hrs as per IEC 62380		
Certification	   Compliant		

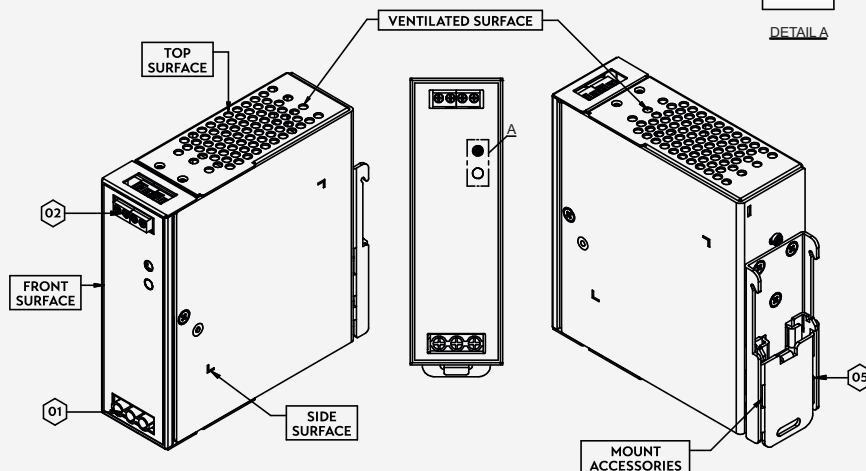
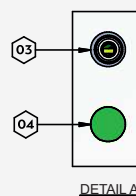
Overall Dimensions of PS120W12V / PS120W24V / PS240W24V :

WXHxD= 40 X 128.8 X 128.3 MM (1.574 X 5.070 X 5.051 INCH)



DEVICE DESCRIPTION :

- 1) INPUT TERMINAL BLOCK CONNECTOR
- 2) OUTPUT TERMINAL BLOCK CONNECTOR
- 3) DC VOLTAGE ADJUSTMENT POTENTIOMETER
- 4) DC OK CONTROL LED (GREEN)
- 5) UNIVERSAL MOUNTING RAIL SYSTEM



Switched Mode Power Supply

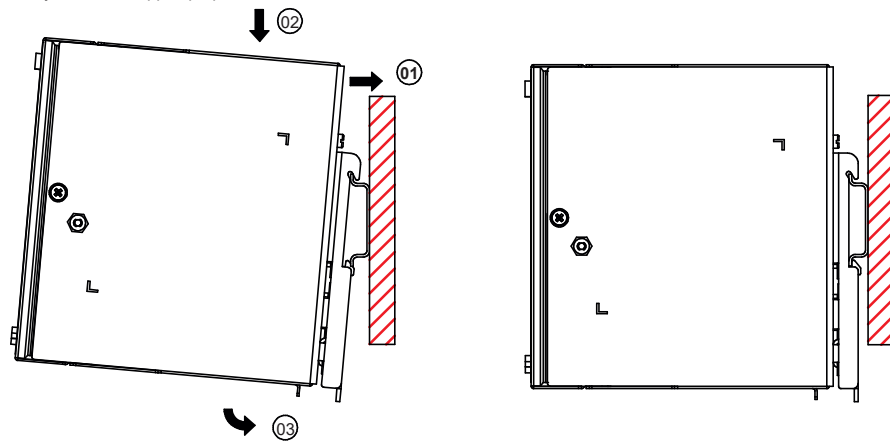
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MOUNTING & INSTALLATION

The power supply unit can be installed in compliance with EN 60715, using 35 mm DIN rails.

Installation of the device should be done with the input terminal block at the bottom.

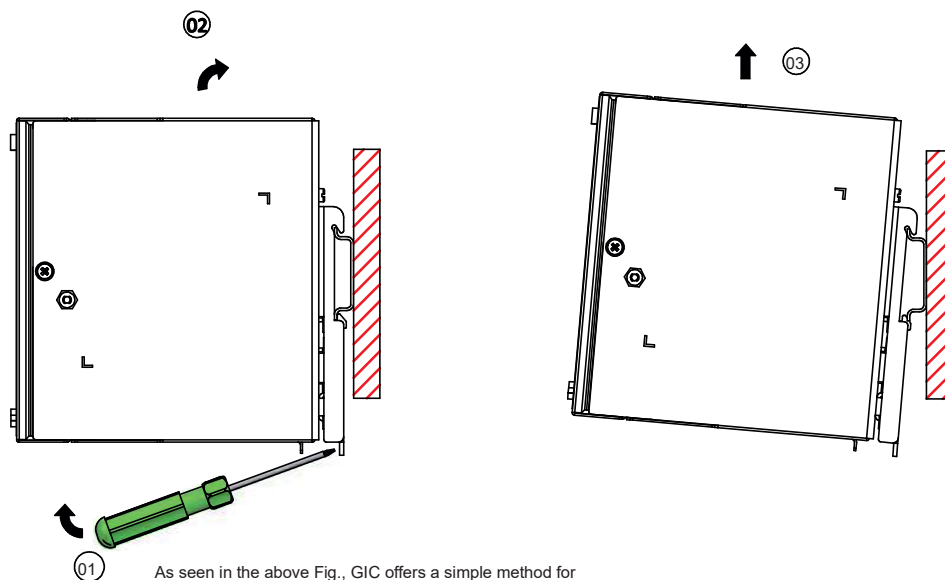
Every device is shipped prepared for installation.



As seen in the above figure, snap on the DIN rail.

1. Place the device on the DIN rail by tilting it upward.
2. Press down until the movement stops.
3. To lock, press against the front bottom side.
4. To ensure that sure the device is attached, give it a little shake.

DISMOUNTING



As seen in the above Fig., GIC offers a simple method for uninstalling that involves using a screwdriver to pull or slide down the latch. Next, release the latch and pull the power supply unit in the other direction.

The power supply unit is removed from the rail.

