

FEATURES

- Wide-range Input: 100-240V~ / 140-340V==
- Protection type:
Short-circuit , Overload, Overvoltage and Over-temperature.
- Natural Air Cooling, Full-load Operation.
- 100% Burn-in Test.
- Comply with CE and CB Certification.
- Comply with ROHS.
- 2 Year Warranty.



Before operating this unit, please read this manual thoroughly and retain this manual for future reference!

This device may only be installed and put into operation by qualified personnel.

If damage or malfunction should occur during operation, immediately turn power off.

Products are subject to change without notice.

Intended Use:

This power supply is designed for installation in an enclosure and is intended for general use such as in industrial control, communication, office, and instrumentation equipment.

Do not use this power supply in aircraft, trains and nuclear equipment or where malfunction may cause severe personal injury or threaten human life.

WARNING

Risk of electrical shock, fire, personal injury or death.

- Do not use the power supply without proper grounding (Protective Earth).
- Turn power off before working on the device.
- Make sure that the wiring is correct.
- Do not open or repair the unit as high voltage are present inside.
- Use caution to prevent any foreign objects from entering the housing.
- Do not use in wet locations or in areas where moisture or condensation can be expected.
- Do not touch during power-on, power-off before touching.
Hot surfaces may cause burns.
- A Temperature of 90°C is permitted for metal enclosure when equipment intended for installation in a restricted access location.

CAUTION

Reduction of output current may be necessary when:

- Minimum installation clearance can not be met.
- Altitude is higher than 2000m.
- Device is used above 50°C ambient.
- Mounting orientation is other than output terminal located at the top and input at the bottom.
- Airflow for convection cooling is obstructed.

INSTALLATION

Use only DIN-rails according to EN 60715 or EN 55032 with a height of 7.5 or 15mm.

Mounting orientation must be output terminals on the top and input terminals on the bottom.

For other grid must be kept free of any obstructions.

The installation clearances must be kept orientations, see datasheet.

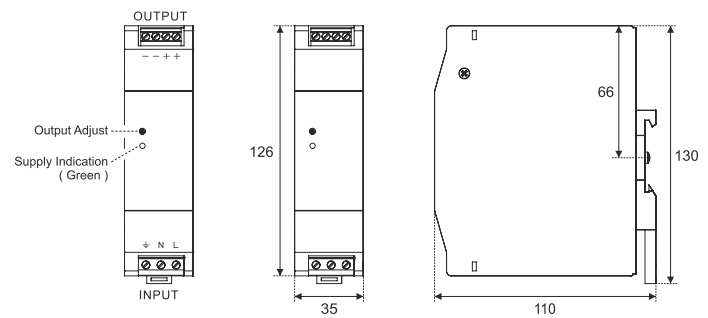
Do not obstruct air flow as the unit is convection cooled.

Ventilation when power supplies are permanently fully loaded:

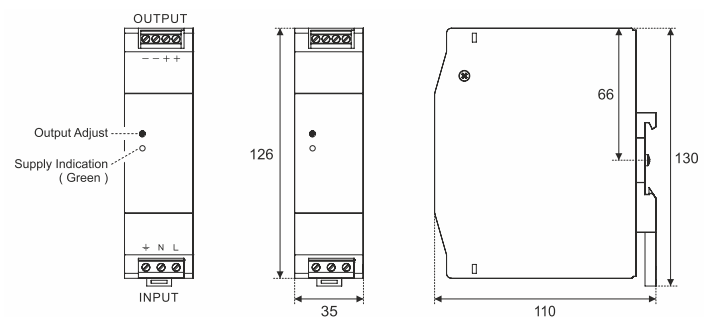
- Left/right: 5mm, 15mm in case the adjacent device is a heat source.
- 40mm on top, 20mm on the bottom of the unit.

PRODUCT ASSEMBLY (mm)

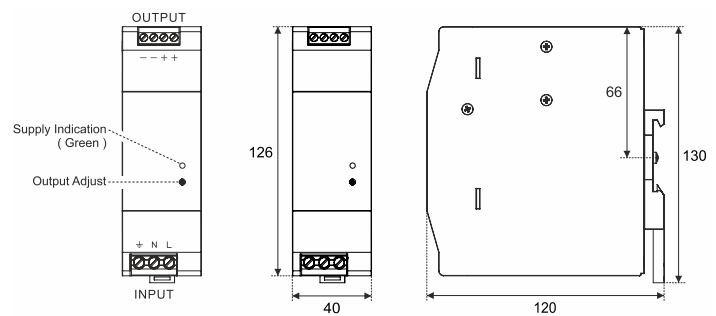
SWMT2445e



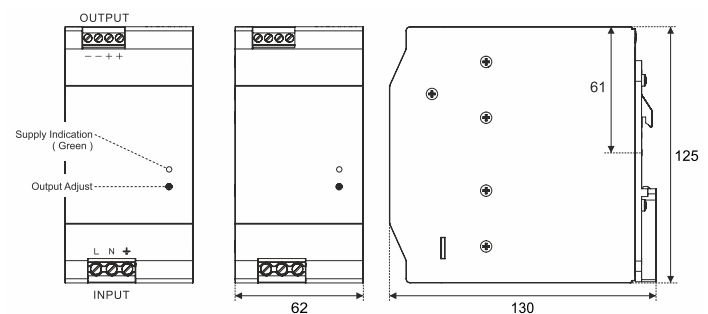
SWMT2475e



SWMT24120e



SWMT24240e



Install rail: TS35/7.5 or TS35/15

TECHNICAL DATA

TYPE		SWMT2445e	SWMT2475e	SWMT24120e	SWMT24240e
Input circuit - Supply circuit		L, N, PE			
Input Voltage range ($\pm 10\%$)		100 - 240V \sim / 140 - 340V \equiv			
Input Frequency range ($\pm 3\text{Hz}$)		50 - 60Hz/ \equiv			
AC Input Current	at 115V \sim	1.2A	1.4A	2.8A	3A
	at 230V \sim	0.6A	0.9A	1.4A	1.5A
Power factor	at 115V \sim	0.5			0.99
	at 230V \sim				0.96
Input Inrush Current	at 230V \sim	cold start, 35A			
Hold-up Time	at 115V \sim	$\geq 10\text{ms}$			$\geq 20\text{ms}$
	at 230V \sim	$\geq 20\text{ms}$			
Input Fuse	(internal)	2A	3.15A	4A	5A

Output circuit - Power output		+, -			
Rated output power		45W	75W	120W	240W
Rated output voltage		24V \equiv			
Adjustment range of the output voltage		24 - 28V \equiv			
Rated output current		2A	3A	5A	10A
Output Ripple & noise ¹		$\leq 100\text{mV}$		$\leq 150\text{mV}$	
Efficiency ²		88%		91%	

Protection			
Over-temp Protection		NO	
Over-current Protection ³		110 - 150% I _o	
Over-load Protection ³		YES	
Over-voltage Protection ⁴		120 - 150% V _o	

Environmental data			
Ambient temperature range ⁵	operation	-20 / +70°C	
	rated load	-20 / +60°C	-20 / +50°C
	storage	-40 / +85°C	
Humidity range	operation	5 - 90% RH	
	storage	5 - 95% RH	
Altitude		$\leq 2000\text{m}$	

Standard					
Approvals		CE + CB			
Safety		EN60950-1			
EMC		EN55032 Class B, EN55024, EN61000-3-2, EN61000-3-3			
Withstand voltage		I/P-O/P:3kV \sim 60s I/P-FG:1.5kV \sim 60s O/P-FG:0.5kV \sim 60s			
Degree of pollution		2			
Degree of protection		IP20			
Dimensions L x W x H (mm)		130 x 35 x 110	130 x 35 x 110	130 x 40 x 120	130 x 62 x 125
Weight		310g	360g	540g	810g

Note: Unless otherwise noted, all parameters are at 230V \sim input voltage, rated output current, 25°C ambient.

1 - Oscilloscope should be limited at 20MHz bandwidth, at output terminals with parallel 0.1uF ceramic and 47uF electrolytic capacitors.

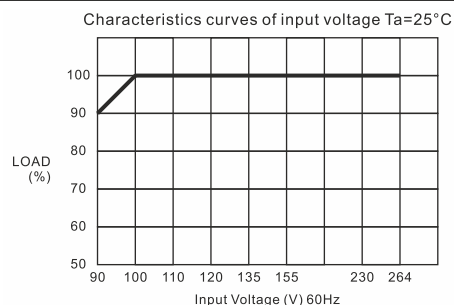
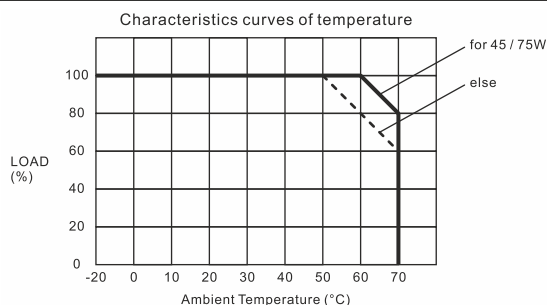
2 - Efficiency is measured 30min later.

3 - Hiccup mode, recovers automatically after fault condition is removed.

4 - Latch off mode, re-power on to recover.

5 - Output derate curve refer to Fig. 1

Fig. 1



TERMINALS AND WIRING

INPUT	45W	75W	120W	240W
Solid wire	0.5 - 4mm ²		0.5 - 6mm ²	
Stranded wire	0.5 - 2.5mm ²		0.5 - 4mm ²	
American wire	12 - 26AWG		10 - 26AWG	
Wire stripping length	7mm / 0.28inch			

OUTPUT	45W	75W	120W	240W
Solid wire	0.5 - 4mm ²			
Stranded wire	0.5 - 2.5mm ²			
American wire	12 - 20AWG		12 - 26AWG	
Wire stripping length	7mm / 0.28inch			

Do not use the unit without PE (Ground) connection!

Use appropriate copper cables that are designed for a minimum operating temperatures of 60°C (for ambient up to 45°C) and 75°C (for ambient up to 60°C).

Follow national installation codes and regulations! Ensure that all strands of a stranded wire enter the terminal connection!

Up to two stranded wires with the same cross section are permitted in one connection point (except PE wire).

Ferrules are allowed, but not required.