

## FEATURES

- AC100-240V /DC 127-370V Wide-range Input.
- Protection type:Short-circuit , Overload ,Overvoltage and Over-temperature protection.
- Natural Air Cooling,Full-load Operation.
- 100% Burn-in Test.
- Comply with CE and CB Certification.
- Comply with ROHS.
- 3 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, office, communication, and instrumentation equipment. Do not use this power supply in aircraft, trains and nuclear equipment 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℃ 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℃ 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 DIN-rails according to EN 60715 or EN 55032 with a height of 7.5 or 15mm. Mounting orientation must be output terminals on top and input terminals on the bottom. For other grid must be kept free of any obstructions. The following 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.

## 产品特性:

- 交流100-240V/直流127-370V宽范围输入。
- 保护类型: 短路, 过载, 过压和过温保护。
- 自然风冷, 满载工作。
- 100% 满载老化测试。
- 符合 CE 和CB认证。
- 符合 ROHS。
- 3年质保。

操作此电源前, 请仔细阅读本手册, 并保留本手册, 以供将来参考。

此设备的安装和使用由专业的技术人员操作。如果在使用过程中有损坏或故障, 请立即切断电源。如有更改不另行通知。

使用范围: 本电源适用于安装在机柜和一般用途, 如工业控制, 办公, 通讯, 仪器设备。

不要将此电源用在飞机, 火车和核电设备上, 电源故障可能会引起人身伤害或威胁人类生命安全。

## 警告

- 触电, 火灾, 人身伤害的风险。
- 使用电源前确保接地端有效接地(接地保护)。
- 操作电源前请切断电源供电。
- 请确保正确接线。
- 请勿打开或维修电源当内部存在危险高压时。
- 请谨慎使用, 防止任何异物进入外壳。
- 电源请不要于以下环境使用: 潮湿, 受潮, 有凝露风险的环境。
- 通电时请勿触摸, 如果触摸请立即断电, 否则会造成热灼伤。
- 当设备安装受限制区域, 金属外壳的温度允许90℃。

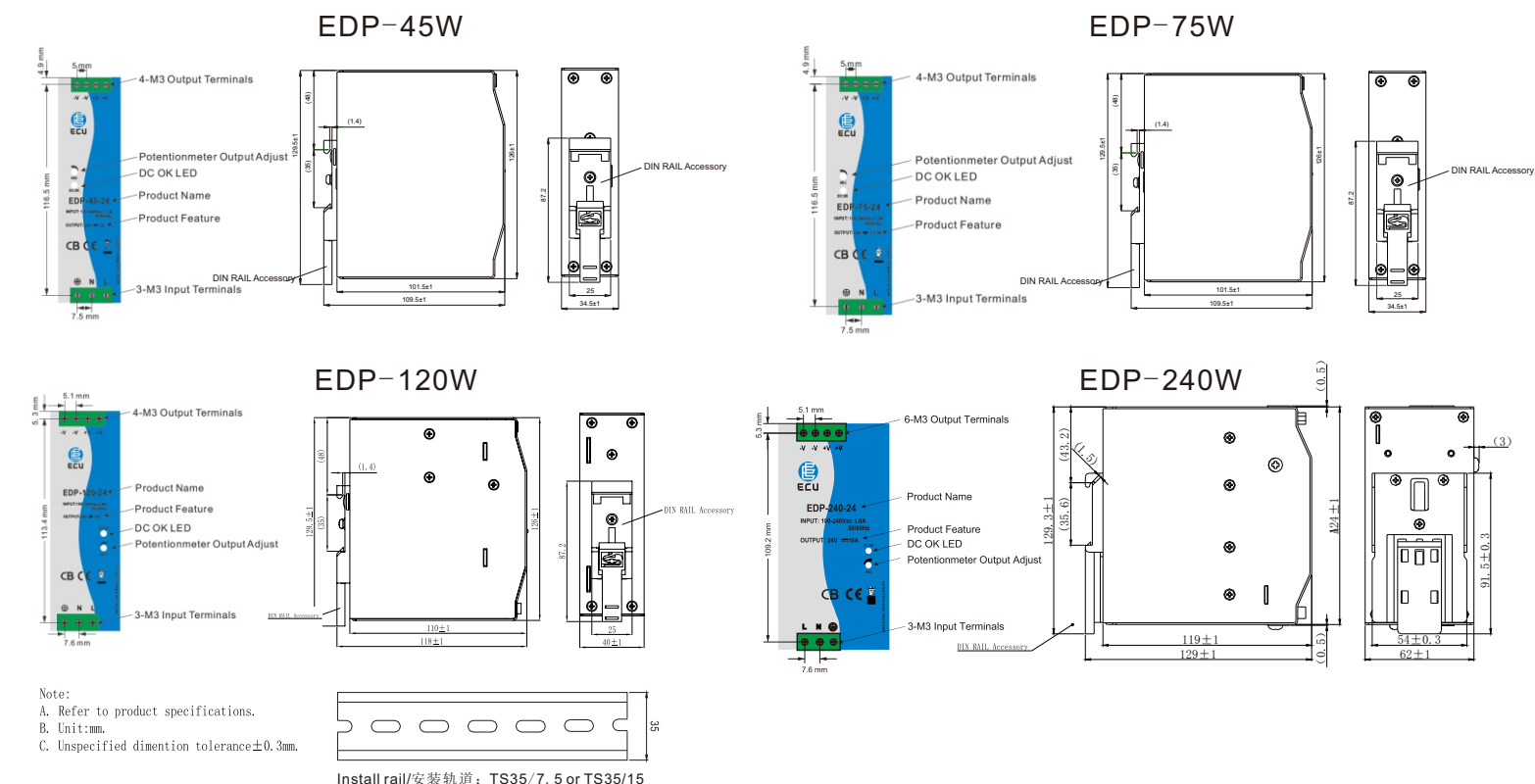
## 注意

- 当出现以下情况可能需要减小电流:
- 当不满足最小安装距离时。
- 使用海拔高度大于2000米。
- 产品使用环境高于50度。
- 产品安装方向与“输出安装在上方输入安装在下方”的定位相反。
- 对流冷却气流受阻。

## 安装

使用符合EN60715或EN55032的7.5mm或15mm高度的导轨, 安装方向必须为输出端子在上, 输入端子在下, 当设备采用自然冷却时请勿堵塞空气自然流动, 当设备持续满载工作时, 下面的间距必须保证:  
-左右各5mm, 如果相邻设备为一个热源, 需要有15mm空隙  
-顶部40mm, 底部20mm

## PRODUCT ASSEMBLY 装配示意图



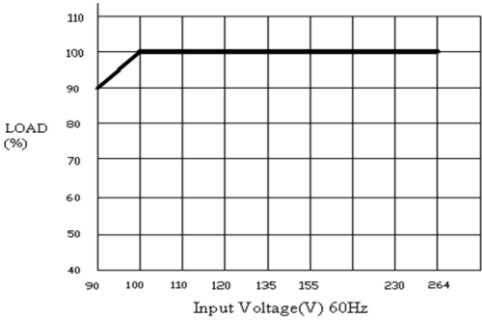
Technical data

Type		EDP-45-24	EDP-75-24	EDP-120-24	EDP-240-24		
Input circuit - Supply circuit		L,N,PE					
Input Voltage range		AC90-264V/DC127-370V					
Input Frequency range		47-63Hz/≡					
AC Input Current	at 115Vac	1.2A	1.4A	2.8A	3.0A		
	at 230Vac	0.6A	0.9A	1.4A	1.5A		
Power factor	at 115Vac	0.5			0.99		
	at 230Vac				0.96		
Input Inrush Current	at 230Vac	cold start, 35A					
Hold-up Time	at 115Vac	≥10mS			≥20mS		
	at 230Vac	≥20mS					
Input Fuse	(internal)	2A	3.15A	4A	5A		
Output circuit-power output		+,-					
Rated output power		45W	75W	120W	240W		
Rated output voltage		24VDC					
Adjustment range of the output voltage		24V-28VDC					
Rated output current		2A	3.13A	5A	10A		
Output Ripple&noise <sup>1</sup>		≤100mV	≤100mV	≤150mV	≤120mV		
Efficiency <sup>2</sup>	at 230Vac	88.00%	88.00%	86.00%	91.00%		
Protection							
Over-temp Protection		NO			YES		
Over-current Protection <sup>3</sup>		110%-150%Io					
Over-load Protection <sup>3</sup>		YES					
Over-voltage Protection <sup>4</sup>		120%-150%Vo					
Environmental data							
Ambient temperature range <sup>5</sup>	operation	-20---+70℃					
	rated load	-20---+60℃		-20---+50℃			
	storage	-40---+85℃					
Humidity range	operation	5%---90%r. h.					
	storage	5%---95%r. h.					
Altitude		≤2000m					
Standard							
Approvals		CE+CB					
Safety		EN60950-1					
EMC		EN55032 Class B,EN55024,EN61000-3-2,EN61000-3-3					
Withstand voltage		I/P-O/P:3kVAC 60s I/P-FG:1.5kVAC 60s O/P-FG:0.5kVAC 60s					
Degree of pollution		2					
Degree of protection		Ip20					
Dimensions L*W*H(Unit :mm)		126*101.5*34.5	126*101.5*34.5	126*110*40	124*119*62		
Weight		0.31kg	0.36kg	0.54kg	0.81kg		

Note:Unless otherwise noted,all parameters are at 230Vac input votage,rated output current,25℃ ambient.  
1.Oscilloscope should be limited at 20MHzbandwidth,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 Fig1.

(EN)Characteristics curves of input voltage Ta=25℃  
(CH)输入电压降额曲线 Ta=25℃



(EN)Characteristics curves of temperature  
(CH)温度降额曲线

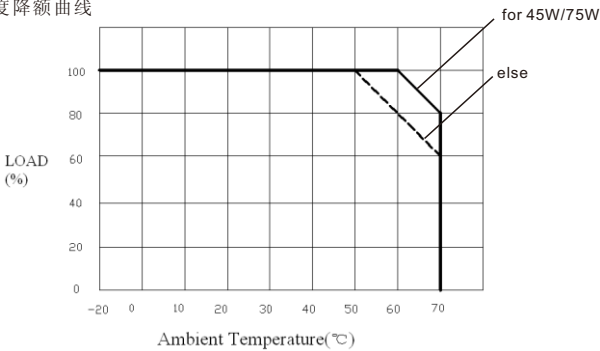


Fig1

Terminals and wiring

(EN)Do not use the unit without PE(Ground) connection! Use appropriate copper cables that are designed for a minimum operating temperatures of 60℃ (for ambient up to 45℃)and 75℃(for ambient up to 60℃). 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.

(CH)禁止在不接地情况下使用本设备!对于最小操作温度60度(环境温度高于45度)和70度(环境温度高于60度),设计时请选用合适的铜电缆。请按照国家的安装规范和法规!确保连接线的所有线股完全进入到接线端子。同一个接线端子允许两个相同截面的绞线电缆连接(接地线除外)。绞线外允许加线套,但不是必须的。

INPUT	45W	75W	120W	240W
Solid wire	0.5-4mm <sup>2</sup>		0.5-6mm <sup>2</sup>	
Stranded wire	0.5-2.5mm <sup>2</sup>		0.5-4mm <sup>2</sup>	
American wire	12-26AWG		10-26AWG	
Wire stripping length	7mm/0.28inch		7mm/0.28inch	
OUTPUT	45W	75W	120W	240W
Solid wire	0.5-4mm <sup>2</sup>			
Stranded wire	0.5-2.5mm <sup>2</sup>			
American wire	12-20AWG		12-26AWG	
Wire stripping length	7mm/0.28inch			