

## Power supply unit - ESSENTIAL-PS/1AC/24DC/480W/EE - 2910588

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Primary-switched ESSENTIAL POWER power supply for DIN rail mounting, input: 1-phase, output: 24 V DC / 480 W

### Your advantages

- ✓ Worldwide use thanks to the wide range input and international approval package
- ✓ Fast installation, thanks to easy DIN rail mounting
- ✓ Greater availability, thanks to fanless convection cooling



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 463391
GTIN	4055626463391
Weight per Piece (excluding packing)	1,480.000 g
Custom tariff number	85044030
Country of origin	Thailand

### Technical data

#### Dimensions

Width	85.5 mm
Height	123.6 mm
Depth	128.5 mm
Installation distances left/right	10 mm
Installation distances top/bottom	50 mm

#### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	≤ 95 % (at 25 °C, non-condensing)

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## Technical data

### Ambient conditions

Degree of pollution	2
Installation height	≤ 5000 m (> 2000 m, Derating: 10 %/1000 m)

### Input data

Nominal input voltage range	100 V AC ... 240 V AC
Input voltage range	85 V AC ... 264 V AC
AC frequency range	47 Hz ... 63 Hz
Discharge current to PE	< 1 mA (264 V AC)
Current consumption	5.4 A (115 V AC)
	2.7 A (230 V AC)
Nominal power consumption	523.27 VA
Inrush current	typ. 40 A (115 V AC)
	typ. 80 A (230 V AC)
Mains buffering time	typ. 10 ms (115 V AC)
	typ. 16 ms (230 V AC)
Input fuse	10 A (fast blow, internal)
Type of protection	Transient surge protection
Protective circuit/component	Varistor

### Output data

Nominal output voltage	24 V DC ±2 %
Setting range of the output voltage ( $U_{Set}$ )	22 V DC ... 28 V DC (max. power ≤ 280 W)
Nominal output current ( $I_N$ )	20 A
Derating	> 40 °C (1.67 % / °C, 115 V AC)
	> 50 °C (2.5 % / °C, 230 V AC)
Max. capacitive load	8000 µF
Active current limitation	109% - 130% of the max. output power (in the event of short circuit)
Residual ripple	< 120 mV <sub>PP</sub> (-10 °C ... +70 °C)
	< 240 mV <sub>PP</sub> (-20 °C ... -10 °C)
Output power	480 W
Typical response time	1000 ms
Maximum power dissipation in no-load condition	5 W (115 V AC)
	4 W (230 V AC)
Power loss nominal load max.	50 W (115 V AC)
	40 W (230 V AC)

### General

Net weight	1.3 kg
Operating voltage display	Green LED
Efficiency	85 % (115 V AC)
	88 % (230 V AC)
Insulation voltage input/output	3 kV AC