

ESSENTIAL-PS/1AC/24DC/240W/EE - Power supply unit



2910587

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Primary-switched ESSENTIAL edition power supply for DIN rail mounting, input: 1-phase, output: 24 V DC / 240 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

Commercial data

Item number	2910587
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CMP
Product key	CMPB13
GTIN	4055626464404
Weight per piece (including packing)	972.3 g
Weight per piece (excluding packing)	800 g
Customs tariff number	85044095
Country of origin	IN

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Technical data

Input data

AC operation

Nominal input voltage range	100 V AC ... 240 V AC
Input voltage range	85 V AC ... 264 V AC
Derating	< 100 V (1 %/V)
Input voltage range AC	85 V AC ... 264 V AC
Input voltage range DC	120 V DC ... 375 V DC
Inrush current	typ. 20 A (115 V AC) typ. 40 A (230 V AC)
AC frequency range	47 Hz ... 63 Hz
Mains buffering time	typ. 10 ms (115 V AC) typ. 20 ms (230 V AC)
Current consumption	2.8 A (115 V AC) 1.4 A (230 V AC)
Nominal power consumption	273.22 VA
Protective circuit	Transient surge protection; Varistor
Typical response time	1000 ms
Input fuse	6.3 A (slow-blow, internal)
Discharge current to PE	< 1 mA (264 V AC)

Output data

Efficiency	88 % (115 V AC) 90 % (230 V AC)
Output characteristic	HICCUP
Nominal output voltage	24 V DC ± 2 %
Setting range of the output voltage (U_{Set})	22 V DC ... 28 V DC (max. power ≤ 240 W)
Nominal output current (I_N)	10 A
Derating	> 40 °C (1.67 % / °C, 115 V AC) > 50 °C (2.5 % / °C, 230 V AC)
Max. capacitive load	8000 μ F
Active current limitation	105% - 150% of the max. output power (in the event of short circuit)
Control deviation	≤ 1 % (change in load, static 10 % ... 90 %) typ. ± 2 % (change in load, dynamic 10 % ... 90 %) < 0.1 % (change in input voltage ± 10 %)
Residual ripple	< 120 mV _{PP} (-10 °C ... +70 °C) < 240 mV _{PP} (-20 °C ... -10 °C)
Output power	240 W
Maximum no-load power dissipation	4.62 W (115 V AC) 2.14 W (230 V AC)
Power loss nominal load max.	31.53 W (115 V AC)

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25.44 W (230 V AC)

Connection data

Input

Connection method	Screw connection
Conductor cross section AWG min.	16
Conductor cross section AWG max.	12
Stripping length	7 mm

Output

Connection method	Screw connection
Conductor cross section AWG min.	16
Conductor cross section AWG max.	12
Stripping length	7 mm

Signaling

Types of signaling	LED
Operating voltage display	Green LED

Signal output

Status display	"DC OK" LED green
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Electrical properties

Number of phases	1.00
Insulation voltage input/output	3 kV AC
Insulation voltage output / PE	0.5 kV AC
Insulation voltage input / PE	2 kV AC

Product properties

Product type	Power supply
Product family	ESSENTIAL edition
MTBF (Telcordia SR-332)	> 700000 h

Insulation characteristics

Protection class	I (with PE connection)
Degree of pollution	2

Dimensions

Dimensional drawing



Width

60 mm