Power supply unit - STEP-PS-100-240AC/48DC/0.75

2938950

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DIN rail power supply unit 48 V DC/0.75 A, primary-switched mode, low-profile design

Commercial Data

Item number	2938950
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Sales Key	00
Product Key	CMPS14
Catalog Page	Page 509 (IF-2007)
GTIN	4017918892418
Weight per Piece (including packing)	265.5 g
Weight per Piece (excluding packing)	200 g
Customs tariff number	85044094
Country of origin	CN

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
Input voltage range AC	85 V AC ... 264 V AC
Inrush current	< 25 A (typical)
Inrush current integral (I^2t)	0.8 A^2s
AC frequency range	45 Hz ... 65 Hz
Frequency range DC	0 Hz
Mains buffering time	> 20 ms (120 V AC)
	> 100 ms (230 V AC)
Current consumption	0.8 A (120 V AC)
	0.4 A (230 V AC)
Nominal power consumption	36 W
Typical response time	< 1 s
Input fuse	1.25 A (Normal blow, internal)
Recommended breaker for input protection	16 A (Characteristic C)

Output data

Efficiency	> 82 %
Nominal output voltage	48 V DC ±1 %
Output current I_{max}	approx. 2.5 A
Nominal output current (I_N)	0.75 A (up to 55 °C)
Feedback voltage resistance	60 V DC
Control deviation	< 1 % (change in load, static 10 % ... 90 %)
	< 3 % (change in load, dynamic 10 % ... 90 %)
	< 0.1 % (change in input voltage ±10 %)
Residual ripple	< 40 mV_{PP}
Output power	36 W
Peak switching voltages nominal load	< 50 mV_{PP} (20 MHz)
Maximum no-load power dissipation	< 2 W
Power loss nominal load max.	< 8 W
Connection in parallel	yes, for redundancy and increased capacity
Connection in series	No

Connection data

Input

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm²
Conductor cross section solid max.	2.5 mm²

Conductor cross section flexible min.	0.2 mm²
Conductor cross section flexible max.	2.5 mm²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14
Stripping length	6.5 mm
Screw thread	M3

Output

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm²
Conductor cross section solid max.	2.5 mm²
Conductor cross section flexible min.	0.2 mm²
Conductor cross section flexible max.	2.5 mm²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14
Stripping length	6.5 mm
Screw thread	M3

LED signaling

Types of signaling	LED

Signal output: POWER

Status display	Green LED

Signal output: OVERLOAD

Status display	LED red

Electrical properties

Insulation voltage input/output	3 kV (routine test)
	4 kV (type test)

Product properties

Product type	Power supply
MTBF (IEC 61709, SN 29500)	> 500000 h

Insulation characteristics

Overvoltage category	III

Dimensions

Width	71 mm
Height	90 mm
Depth	55 mm

Mounting

Assembly instructions	alignable: 0 mm horizontally, 30 mm vertically
Mounting position	horizontal DIN rail NS 35, EN 60715

Material specifications

Color	green
Type of housing	Plastic PPE+PS GF 10 FR, color green

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	95 % (at 25 °C, non-condensing)

Standards and regulations

Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations	EN 50178/VDE 0160 (PELV)
Standard – Limitation of mains harmonic currents	EN 61000-3-2
Standard - Electrical safety	EN 60950-1/VDE 0805 (SELV)
	EN 61558-2-17
	EN 50178 (PELV)
Standard - Safe isolation	DIN VDE 0100-410
Standard - Safety of transformers	EN 61558-2-17
Standards/specifications	EN 60950
Standards/specifications	VDE 805
Standards/specifications	UL/C-UL recognized UL 60950-1
Standards/specifications	EN 61558-2-17
Standards/specifications	DIN VDE 0106-101
Standards/specifications	UL/C-UL listed UL 508
Standards/specifications	EN 50178
Standards/specifications	EN 50178
Standards/specifications	EN 60950
Standards/specifications	VDE 0160
Standards/specifications	in acc. with EN 61000-3-2

Approval data

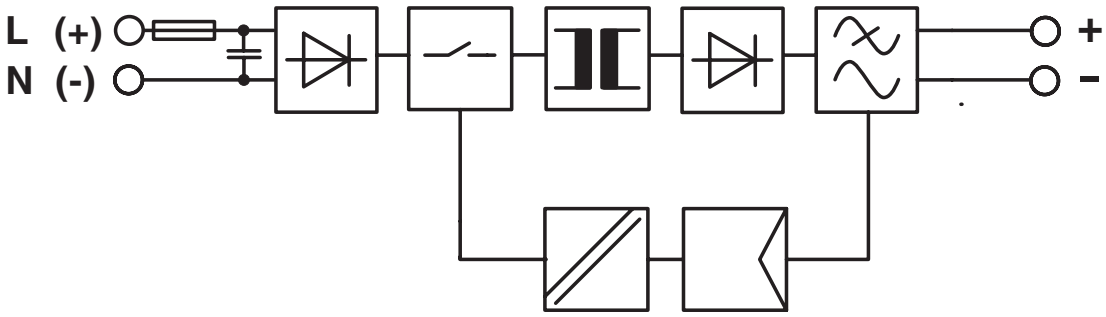
UL approvals	UL/C-UL listed UL 508
	UL/C-UL Recognized UL 60950-1

EMC data

Electromagnetic compatibility	Conformance with EMC directive 89/336/EC

Drawings

Block diagram



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