

Power supply unit - UNO-PS/1AC/24DC/90W/C2LPS - 2902994

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Primary-switched UNO power supply for DIN rail mounting, input: 2-phase, output: 24 V DC/90 W/C2LPS, for NEC Class 2 applications

Product description

UNO POWER power supplies – compact with basic functionality

Thanks to their high power density, compact UNO POWER power supplies offer the ideal solution for loads up to 100 W, particularly in compact control boxes. Their high degree of efficiency and low idling losses ensure a high level of energy efficiency.

Product Features

- ✓ Flexible mounting by simply snapping onto the DIN rail
- ✓ More space in the control cabinet with up to 20 % higher power density
- ✓ Maximum energy efficiency, thanks to over 90 % efficiency and extremely low idling losses under 0.3 W



Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	400.0 GRM
Custom tariff number	85044030
Country of origin	Germany

Technical data

Dimensions

Width	55 mm
Height	90 mm
Depth	84 mm

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 70 °C (> 55° C derating)
Ambient temperature (storage/transport)	-40 °C ... 85 °C

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Ambient conditions

Max. permissible relative humidity (operation)	≤ 95 % (at 25 °C, non-condensing)
Noise immunity	EN 61000-6-2:2005

Input data

Input voltage range	85 V AC ... 264 V AC
AC frequency range	45 Hz ... 65 Hz
Current consumption	1.5 A (120 V AC)
	1 A (230 V AC)
Inrush surge current	< 40 A (typical)
Power failure bypass	> 25 ms (120 V AC)
	> 100 ms (230 V AC)
Input fuse	3.15 A (slow-blow, internal)
Choice of suitable fuses	6 A ... 16 A (Characteristics B, C, D, K)
Type of protection	Transient surge protection
Protective circuit/component	Varistor

Output data

Nominal output voltage	24 V DC ±1%
Output current	3.75 A $U_{in} = 85 \text{ V AC} \dots 264 \text{ V AC} (-25^\circ\text{C} \dots 55^\circ\text{C})$
Derating	55 °C ... 70 °C (2.5%/K)
Connection in parallel	No
Connection in series	No
Control deviation	< 1 % (change in load, static 10 % ... 90 %)
	< 3 % (Dynamic load change 10 % ... 90 %, 10 Hz)
	< 0.1 % (change in input voltage ±10 %)
Residual ripple	< 45 mV _{PP} (with nominal values)
Maximum power dissipation NO-Load	< 0.5 W
Power loss nominal load max.	< 12 W

General

Net weight	0.34 kg
Efficiency	> 88.5 % (for 230 V AC and nominal values)
Insulation voltage input/output	4 kV AC (type test)
	3 kV AC (routine test)
Protection class	II (in closed control cabinet)
MTBF (IEC 61709, SN 29500)	> 1159000 h
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	Alignable: 0 mm horizontally, 30 mm vertically
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC

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Technical data

General

Low Voltage Directive	Conformance with LV directive 2006/95/EC
Standard – Electrical equipment of machines	EN 60204-1
Standard - Electrical safety	IEC 60950-1/VDE 0805 (SELV)
Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations	EN 50178/VDE 0160 (PELV)
Standard – Safety extra-low voltage	IEC 60950-1 (SELV) and EN 60204 (PELV)
Standard - Safe isolation	DIN VDE 0100-410
Standard – Protection against electric shock	DIN 57100-410
Standard – Limitation of mains harmonic currents	EN 61000-3-2
Approval - requirement of the semiconductor industry with regard to mains voltage dips	EN 61000-4-11
Information technology equipment - safety (CB scheme)	CB Scheme
UL approvals	UL/C-UL listed UL 508
	UL/C-UL Recognized UL 60950
	NEC Class 2 as per UL 1310

Connection data, input

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	14
Stripping length	8 mm
Screw thread	M3

Connection data, output

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	14
Stripping length	8 mm

Signaling

Output name	LED status indicator
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Classifications

eCl@ss

eCl@ss 4.0	27040702
eCl@ss 4.1	27040702
eCl@ss 5.0	27049002
eCl@ss 5.1	27049002
eCl@ss 6.0	27049002
eCl@ss 7.0	27049002
eCl@ss 8.0	27049002

ETIM

ETIM 3.0	EC001039
ETIM 4.0	EC000599
ETIM 5.0	EC002540

UNSPSC

UNSPSC 6.01	30211502
UNSPSC 7.0901	39121004
UNSPSC 11	39121004
UNSPSC 12.01	39121004
UNSPSC 13.2	39121004

Approvals

Approvals


Approvals

UL Recognized / UL Listed / cUL Recognized / cUL Listed / IECEx CB Scheme / cULus Recognized / cULus Listed

Ex Approvals

Approvals submitted

Approval details

UL Recognized 

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Approvals

UL Listed

cUL Recognized

cUL Listed

IECEE CB Scheme

cULus Recognized

cULus Listed

Drawings

Block diagram

