

## Power supply unit - UNO-PS/2AC/24DC/90W/C2LPS - 2904371

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



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

### Product Description

UNO POWER power supplies with basic functionality

Thanks to their high power density, compact UNO POWER power supplies are the ideal solution for loads up to 100 W, particularly in compact control boxes. The power supply units are available in various performance classes and overall widths. 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)	363.6 g
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 : 2.5%/K)

# Power supply unit - UNO-PS/2AC/24DC/90W/C2LPS - 2904371

## Technical data

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	≤ 95 % (at 25 °C, non-condensing)
Noise immunity	EN 61000-6-2:2005

### Input data

Nominal input voltage range	2x 400 V AC ... 500 V AC
Input voltage range	2x 264 V AC ... 575 V AC
AC frequency range	45 Hz ... 65 Hz
Inrush surge current	< 30 A (typical)
Power failure bypass	> 65 ms (400 V AC) > 100 ms (500 V AC)
Input fuse	2 A (slow-blow, internal)
Choice of suitable circuit breakers	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 %
Nominal output current (I <sub>N</sub> )	3.75 A 3.38 A (Derating 10 %)
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	< 50 mV <sub>PP</sub> (with nominal values)
Output power	90 W
Maximum power dissipation in no-load condition	< 0.7 W
Power loss nominal load max.	< 12 W

### General

Net weight	0.32 kg
Efficiency	> 89.5 %
Insulation voltage input/output	4 kV AC (type test) 3 kV AC (routine test)
Protection class	II (in closed control cabinet)
MTTF/ MTBF (IEC 61709, SN 29500)	> 828000 h (40°C)
Mounting position	horizontal DIN rail NS 35, EN 60715

# Power supply unit - UNO-PS/2AC/24DC/90W/C2LPS - 2904371

## Technical data

### General

Assembly instructions	Alignable: 0 mm horizontally, 30 mm vertically
-----------------------	--

### Connection data, input

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

### Connection data, output

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

### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Shock	30g in each direction, according to IEC 60068-2-27
Noise immunity	EN 61000-6-2:2005
Connection in acc. with standard	CUL
Standards/regulations	EN 61000-4-3
	EN 61000-4-4
	EN 61000-4-6
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 60204-1 (PELV)
Standard - Safe isolation	DIN VDE 0100-410
Standard – Limitation of mains harmonic currents	EN 61000-3-2

# Power supply unit - UNO-PS/2AC/24DC/90W/C2LPS - 2904371

## Technical data

### Standards and Regulations

UL approvals	UL/C-UL listed UL 508
	UL/C-UL Recognized UL 60950
	NEC Class 2 as per UL 1310
	UL ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D T4 (Hazardous Location)
Vibration (operation)	< 15 Hz, amplitude $\pm 2.5$ mm (according to IEC 60068-2-6)
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Approval - requirement of the semiconductor industry with regard to mains voltage dips	EN 61000-4-11
Information technology equipment - safety (CB scheme)	CB Scheme

## 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
eCl@ss 9.0	27040701

### ETIM

ETIM 4.0	EC002540
ETIM 5.0	EC002540

## Approvals

### Approvals

#### Approvals

UL Recognized / UL Listed / cUL Recognized / cUL Listed / IEC EE CB Scheme / cULus Recognized / cULus Listed

#### Ex Approvals

UL Listed / cUL Listed / cULus Listed

# Power supply unit - UNO-PS/2AC/24DC/90W/C2LPS - 2904371

## Approvals

Approvals submitted

### Approval details

UL Recognized
UL Listed
cUL Recognized
cUL Listed
IECEE CB Scheme
cULus Recognized
cULus Listed

## Drawings

Block diagram



