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Extract from the online catalog

## TRIO-PS/ 1AC/48DC/ 5

Order No.: 2866491



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2866491>

DIN rail power supply unit, primary-switched mode, 1-phase, output: 48 V DC / 5 A

Commercial data	
GTIN (EAN)	4046356288378
sales group	H009
Pack	1 pcs.
Customs tariff	85044081
Weight/Piece	1.5235 KG
Catalog page information	Page 575 (IF-2009)

### Product notes

WEEE/RoHS-compliant since: 07/24/2008



<http://www.download.phoenixcontact.com>  
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### Product description

TRIO POWER is the DIN-rail-mountable power supply unit with basic functions. With an output voltage of 12 V DC, 24 V DC and 48 V DC and 1- and 3-phase versions with 60 W or 960 W, it is particularly suited for use in series production in mechanical engineering. The wide-range input and international certification package allows worldwide implementation.

The high MTBF of 500,000 h stands for high supply reliability. The devices can be connected in parallel to increase the capacity and redundancy.

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The clear LED signaling and the device connection with double terminal block for plus and minus for fast potential distribution are further advantages of this device series. A third terminal block simplifies the grounding on the secondary side. All power supply units are idle proof and short-circuit proof and provide a regulated and adjustable output voltage.

**Technical data**
**Input data**

Nominal input voltage	100 V AC ... 240 V AC
AC input voltage range	85 V AC ... 264 V AC (derating < 90 V AC: 2.5% per Kelvin)
Short-term input voltage	300 V AC
AC frequency range	45 Hz ... 65 Hz
Current consumption	Approx. 2.5 A (120 V AC) Approx. 1.3 A (230 V AC)
Nominal power consumption	(> 48 V constant capacity)
Inrush surge current	< 15 A
Power failure bypass	> 15 ms (120 V AC) > 16 ms (230 V AC)
Permissible backup fuse	B10 B16
Type of protection	Transient surge protection
Protective circuit/component	Varistor

**Output data**

Nominal output voltage	48 V DC $\pm$ 1%
Setting range of the output voltage	30 V DC ... 56 V DC (> 48 V constant capacity)
Output current	5 A (-25°C ... 55°C)
Derating	+55°C to +70°C: 2.5% per Kelvin 55 °C ... 70 °C (2.5%/K)
Connection in parallel	Yes, for redundancy and increased capacity
Connection in series	Yes
Max. capacitive load	Unlimited
Current limitation	Approx 5.7 A (in the event of a short-circuit)
Control deviation	< 1 % (change in load, static 10% ... 90%) < 2 % (change in load, dynamic 10% ... 90%) < 0.1 % (change in input voltage $\pm$ 10%)
Residual ripple	< 50 mV <sub>pp</sub>
Peak switching voltages nominal load	< 50 mV <sub>pp</sub>
Maximum power dissipation idling	7 W

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Power loss nominal load max.	28 W
<b>General data</b>	
Width	60 mm
Height	130 mm
Depth	152.5 mm
Net weight	1.4 kg
Operating voltage display	LED green
Efficiency	> 89 % (At 230 V AC and nominal values)
Insulation voltage input/output	4 kV AC (type test)
	2 kV AC (routine test)
Degree of protection	IP20
Class of protection	I, with PE connection
MTBF	> 500 000 h in acc. with IEC 61709 (SN 29500)
Ambient temperature (operation)	-25 °C ... 70 °C (> 55° C derating)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	95 % (at 25 °C, no condensation)
Mounting position	Horizontal DIN rail NS 35, EN 60715
Assembly instructions	Can be aligned: Horizontal 0 cm, vertical 5 cm
Electromagnetic compatibility	Conformance with EMC directive 2004/108/EC
Noise immunity	EN 61000-6-2:2005
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Standard – Electrical equipment of machines	EN 60204
Standard - Safety of transformers	EN 61558-2-17
Standard - Electrical safety	EN 60950/VDE 0805 (SELV)
	EN 61558-2-17
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	EN 60950 (SELV)
	EN 60204 (PELV)
Standard - Safe isolation	DIN VDE 0100-410
	DIN VDE 0106-1010
Standard – Protection against electric shock	DIN 57100-410
Standard – Protection against shock currents, basic requirements for protective separation in electrical equipment	DIN VDE 0106-101

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Standard – Limitation of mains harmonic currents	EN 61000-3-2
UL approvals	UL/C-UL listed UL 508
	UL/C-UL Recognized UL 60950
Surge voltage category	III

**Connection data, input**

Type of connection	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 stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	14
Stripping length	9 mm
Screw thread	M2,5

**Connection data, output**

Type of connection	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 stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	14
Stripping length	9 mm

**Signaling**

Status display	"DC OK" LED green
Note on status display	$U_{OUT} < 0.9 \times U_N$ : LED flashing

**Certificates / Approvals**



Certification

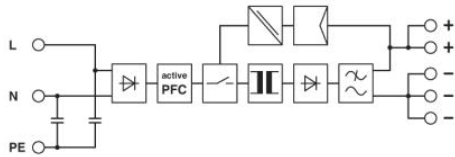
CUL, CUL Listed, UL, UL Listed

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## Diagrams/Drawings

### Block diagram



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**Address**

PHOENIX CONTACT Inc., USA  
586 Fulling Mill Road  
Middletown, PA 17057, USA  
Phone (800) 888-7388  
Fax (717) 944-1625  
<http://www.phoenixcon.com>



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