

**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>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

**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.

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  |

|  |  |
|--|--|
| 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                               |

|  |                             |
|--|-----------------------------|
| 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



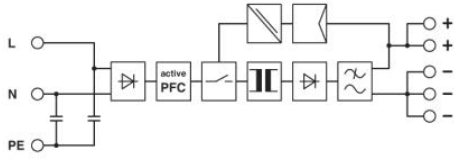
Certification

CUL, CUL Listed, UL, UL Listed

## Diagrams/Drawings

### Block diagram

---



**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>



© 2010 Phoenix Contact  
Technical modifications reserved;



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.