


TRIO-PS/ 1AC/24DC/ 5

Order No.: 2866310

<http://eshop.phoenixcontact.co.uk/phoenix/treeViewClick.do?UID=2866310>DIN rail power supply unit, primary-switched mode, 1-phase, output:
24 V DC / 5 A**Commercial data**

| | |
|--------------------------|--|
| EAN |  4 046356 046640 |
| Pack | 1 |
| Customs tariff | 85044081 |
| Country of Origin | CN |
| Catalog page information | Page 591 (IF-2011) |

Product notesWEEE/RoHS-compliant since:
10/07/2006

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 at <http://www.download.phoenixcontact.com>. 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 5 V DC, 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 allow 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 minus 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

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|------------------------------|--|
| 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 | 1.65 A (120 V AC) 0.9 A (230 V AC) |
| Inrush surge current | < 15 A |
| Power failure bypass | > 20 ms (120 V AC) > 110 ms (230 V AC) |
| Input fuse | 3.15 A (slow-blow, internal) |
| Permissible backup fuse | B6 B10 B16 |
| Power factor (cos phi) | 0.72 |
| Type of protection | Transient surge protection |
| Protective circuit/component | Varistor |

Output data

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|--------------------------------------|--|
| Nominal output voltage | 24 V DC \pm 1% |
| Setting range of the output voltage | 22.5 V DC ... 29.5 V DC (> 24 V constant capacity) |
| Output current | 5 A (-25°C ... 55°C) |
| Derating | 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. 10 A (for 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 | < 20 mV _{PP} |
| Peak switching voltages nominal load | < 30 mV _{PP} |
| Maximum power dissipation idling | 1.1 W |

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| Power loss nominal load max. | 18 W |
| General data | |
| Width | 40 mm |
| Height | 130 mm |
| Depth | 115 mm |
| Net weight | 0.6 kg |
| Operating voltage display | Green LED |
| Efficiency | > 89 % (for 230 V AC and nominal values) |
| Insulation voltage input/output | 4 kV AC (type test) 2 kV AC (routine test) |
| Degree of protection | IP20 |
| Protection class | I |
| MTBF (IEC 61709, SN 29500) | > 500000 h |
| 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: Horizontally 0 mm, vertically 50 mm |
| 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 60950-1/VDE 0805 (SELV) EN 61558-2-17 |
| Shipbuilding approval | Germanischer Lloyd (EMC 2) |
| 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 60950-1 (SELV) EN 60204 (PELV) |
| Standard - Safe isolation | DIN VDE 0100-410 DIN VDE 0106-1010 |
| Standard – Protection against electric shock | DIN 57100-410 |

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| 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

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|--|---------------------|
| 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 | 9 mm |
| Screw thread | M2,5 |

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 | 9 mm |

Signaling

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|------------------------|--|
| Status display | "DC OK" LED green |
| Note on status display | U _{OUT} > 21.5 V: LED lights up |

Certificates

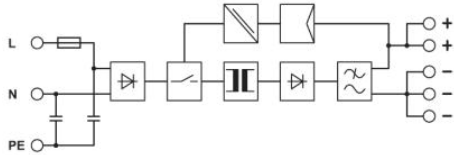


Certification

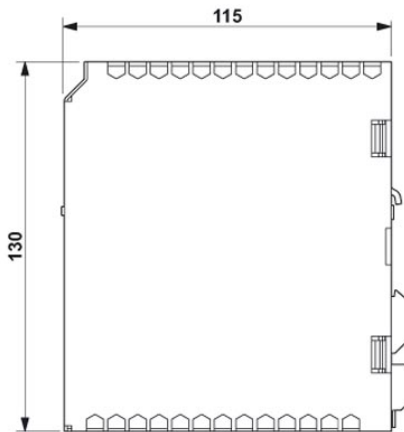
CUL, CUL Listed, GL, UL, UL Listed

Drawings

Block diagram



Dimensioned drawing



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