

MINI-PS-12-24DC/24DC/1

Order No.: 2866284

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2866284>DC-DC converter, primary switched mode, slimline design, input: 12
-24 V DC, output: 24 V DC / 1 A**Commercial data**

| | |
|--------------------------|--------------------|
| EAN | 4017918960902 |
| Pack | 1 Pcs. |
| Customs tariff | 85044081 |
| Weight/Piece | 0.257 KG |
| Catalog page information | Page 507 (IF-2007) |

Product notesWEEE/RoHS-compliant since:
02/27/2007

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Technical data**Input data**

| | |
|------------------------|-------------------------|
| Nominal input voltage | 12 V DC ... 24 V DC |
| DC input voltage range | 10 V DC ... 32 V DC |
| DC frequency range | 0 Hz |
| Current consumption | Approx. 3.2 A (10 V DC) |
| | 1 A (32 V DC) |
| Inrush surge current | < 15 A (typical) |

| | |
|----------------------|-----------------------------|
| Power failure bypass | > 3 ms (12 V DC) |
| | > 20 ms (24 V DC) |
| Input fuse | 6.3 A (slow-blow, internal) |

Output data

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|--------------------------------------|-----------------------------------------------------------------|
| Nominal output voltage | 24 V DC \pm 1% |
| Setting range of the output voltage | 22.5 V DC ... 28.5 V DC |
| Output current | 1 A (up to 60°C) |
| Connection in parallel | Yes, for assembling redundant systems and increasing efficiency |
| Connection in series | No |
| Residual ripple | < 30 mVPP |
| Peak switching voltages nominal load | < 30 mVPP (20 MHz) |
| Maximum power dissipation idling | 2.5 W |
| Power loss nominal load max. | 7.5 W |

General data

| | |
|---------------------------------------------------------------------|------------------------------------------------|
| Width | 22.5 mm |
| Height | 99 mm |
| Depth | 107 mm |
| Weight | 0.2 kg |
| Operating voltage display | LED green |
| Efficiency | > 78 % (at 24 V DC and nominal values) |
| Insulation voltage input/output | 1 kV (routine test) 1.5 kV (type test) |
| Degree of protection | IP20 |
| Class of protection | II |
| MTBF | > 500 000 h in acc. with IEC 61709 (SN 29500) |
| Ambient temperature (operation) | -25 °C ... 70 °C (> 60°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 89/336/EEC |
| Emitted interference | EN 50081-2 |
| Immunity to interference | EN 61000-6-2 |
| Standard – Safety transformers for switched-mode power supply units | EN 61558-2-17 |

| | |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| Standard - Electrical safety | EN 60950/VDE 0805 (SELV) |
| Standard – Shipbuilding | Germanischer Lloyd |
| Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations | EN 50178/VDE 0160 (PELV) |
| Standard - Safe isolation | DIN VDE 0100-410 |
| | DIN VDE 0106-1010 |
| UL approvals | UL/C-UL listed UL 508 |
| | UL/C-UL Recognized UL 60950 |
| | UL/C-UL Listed UL 1604 Class I, Division 2, Groups A, B, C, D |

Connection data, input

| | |
|----------------------------------------|--------------------------------|
| Type of connection | COMBICON screw/plug 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 | 12 |
| Stripping length | 7 mm |
| Screw thread | M 3 |

Connection data, output

| | |
|----------------------------------------|--------------------------------|
| Type of connection | COMBICON screw/plug 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 | 12 |
| Stripping length | 7 mm |

Signaling

| | |
|---------------------------|----------------------------------------|
| Output name | DC OK active |
| Output description | U _{OUT} > 21.5 V: High signal |
| Maximum switching voltage | ≤ 24 V DC |
| Output voltage | + 24 V (signal) |

| | |
|----------------------------------------|---------------------|
| Continuous load current | ≤ 20 mA |
| Status display | "DC OK" LED green |
| 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 | 12 |
| Tightening torque, min | 0.5 Nm |
| Tightening torque max | 0.6 Nm |
| Screw thread | M 3 |

Certificates / Approvals

Approval logo

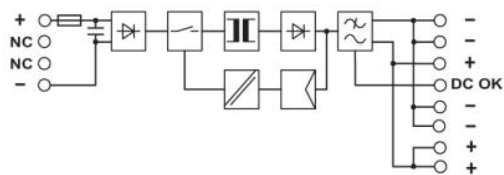


requested approbations

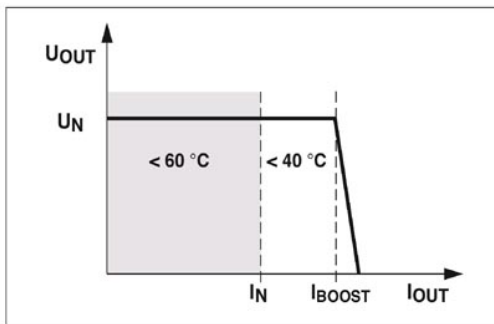
| | |
|-------------------|------------------------------------|
| Certification | CUL, CUL Listed, GL, UL, UL Listed |
| Certification Ex: | CUL-EX LIS, UL-EX LIS |

Drawings

Block diagram



Diagram



POWER BOOST

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