

Power supply unit - QUINT4-PS/1AC/24DC/1.3/PT - 2909575

Rețineți că datele furnizate aici sunt luate din catalogul online. Pentru informații și date complete, consultați documentația de utilizare. În cazul descărcărilor de pe internet se aplică Termenii și condițiile de utilizare generale.
(<http://download.phoenixcontact.de>)



Primary-switched power supply unit, QUINT POWER, Push-in connection, DIN rail mounting, input: 1-phase, output: 24 V DC / 1.3 A

Descriere articol


In the power range of up to 100 W, QUINT POWER provides superior system availability in the smallest size. Preventative function monitoring and exceptional power reserves are available for applications in the low-power range.

Caracteristici articol

- Starting of heavy loads with dynamic boost
- Preventive function monitoring indicates critical operating states before errors occur
- High efficiency and long service life, with low power dissipation and low heating
- Space savings in the control cabinet, thanks to a narrow, slim-line design
- Free selection between Push-in and screw connection



Date comerciale

| | |
|---------------------|---|
| Unitate de ambalare | 1 buc |
| GTIN |  4 055626 356471 |
| GTIN | 4055626356471 |

Date tehnice

Dimensions

| | |
|----------------------------------|---------------|
| Width | 22.5 mm |
| Height | 106 mm |
| Depth | 90 mm |
| Installation distance right/left | 0 mm / 0 mm |
| Installation distance top/bottom | 30 mm / 30 mm |

Ambient conditions

| | |
|---|------|
| Degree of protection | IP20 |
| Inflammability class in acc. with UL 94 (housing / terminal blocks) | V0 |

Power supply unit - QUINT4-PS/1AC/24DC/1.3/PT - 2909575

Date tehnic

Ambient conditions

| | |
|--|--|
| Ambient temperature (operation) | -25 °C ... 70 °C (> 60 °C Derating: 2.5 %/K) |
| Ambient temperature (start-up type tested) | -40 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Max. permissible relative humidity (operation) | ≤ 95 % (at 25 °C, non-condensing) |
| Climatic class | 3K3 (in acc. with EN 60721) |
| Degree of pollution | 2 |
| Installation height | ≤ 5000 m (> 2000 m, observe derating) |

Input data

| | |
|------------------------------|--|
| Input voltage range | 100 V AC ... 240 V AC -15 % ... +10 % 110 V DC ... 250 V DC -20 % ... +40 % |
| Dielectric strength maximum | 300 V AC 30 s |
| Frequency range (f_N) | 50 Hz ... 60 Hz -10 % ... +10 % |
| Discharge current to PE | < 0.25 mA (264 V AC, 60 Hz) |
| Current consumption | 0.46 A (100 V AC) 0.37 A (120 V AC) 0.2 A (230 V AC) 0.2 A (240 V AC) |
| Nominal power consumption | 37 VA |
| Inrush current | typ. 5.9 A (at 25 °C) |
| Mains buffering time | typ. 43 ms (120 V AC) typ. 43 ms (230 V AC) |
| Input fuse | 3.15 A (slow-blow, internal) |
| Type of protection | Transient surge protection |
| Protective circuit/component | Varistor |

Output data

| | |
|--|---|
| Nominal output voltage | 24 V DC |
| Setting range of the output voltage (U_{Set}) | 24 V DC ... 28 V DC (constant capacity) |
| Nominal output current (I_N) | 1.3 A |
| Static Boost ($I_{Stat.Boost}$) | 1.625 A (≤ 40 °C) |
| Dynamic Boost ($I_{Dyn.Boost}$) | 2.6 A (≤ 60 °C (5 s)) |
| Derating | > 60 °C (2.5%/K) |
| Connection in parallel | Yes, for redundancy and increased capacity |
| Connection in series | yes |
| Feedback voltage resistance | ≤ 35 V DC |
| Protection against overvoltage at the output (OVP) | ≤ 32 V DC |
| Control deviation | < 0.5 % (Static load change 10 % ... 90 %) < 2 % (Dynamic load change 10 % ... 90 %, (10 Hz)) < 0.1 % (change in input voltage ±10 %) |
| Residual ripple | < 40 mV _{PP} (with nominal values) |

Power supply unit - QUINT4-PS/1AC/24DC/1.3/PT - 2909575

Date tehnic

Output data

| | |
|--|--------------------|
| Output power | 30 W |
| Typical response time | 500 ms |
| Maximum power dissipation in no-load condition | < 0.4 W (230 V AC) |
| | < 0.4 W (120 V AC) |
| Power loss nominal load max. | < 3.7 W (120 V AC) |
| | < 3.1 W (230 V AC) |

General

| | |
|---|---------------------------|
| Net weight | 0.188 kg |
| Environmental protection directive | RoHS Directive 2011/65/EU |
| | WEEE |
| | Reach |
| Efficiency | typ. 89.2 % (120 V AC) |
| | typ. 90.7 % (230 V AC) |
| MTBF (IEC 61709, SN 29500) | > 1904000 h (25 °C) |
| | > 1107000 h (40 °C) |
| | > 486000 h (60 °C) |
| Insulation voltage input/output | 4 kV AC (type test) |
| | 3 kV AC (routine test) |
| Degree of protection | IP20 |
| Protection class | II |
| Inflammability class in acc. with UL 94 (housing / terminal blocks) | V0 |
| Assembly instructions | DIN rail mounting |

Connection data, input

| | |
|---------------------------------------|---------------------|
| Connection method | Push-in connection |
| Conductor cross section solid min. | 0.2 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section flexible min. | 0.2 mm ² |
| Conductor cross section flexible max. | 2.5 mm ² |
| Conductor cross section AWG min. | 24 |
| Conductor cross section AWG max. | 14 |
| Stripping length | 10 mm |

Connection data, output

| | |
|---------------------------------------|---------------------|
| Connection method | Push-in connection |
| Conductor cross section solid min. | 0.2 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section flexible min. | 0.2 mm ² |
| Conductor cross section flexible max. | 2.5 mm ² |
| Conductor cross section AWG min. | 24 |
| Conductor cross section AWG max. | 14 |

Power supply unit - QUINT4-PS/1AC/24DC/1.3/PT - 2909575

Date tehnic

Connection data, output

| | |
|------------------|-------|
| Stripping length | 10 mm |
|------------------|-------|

Connection data for signaling

| | |
|---------------------------------------|---------------------|
| Connection method | Push-in connection |
| Conductor cross section solid min. | 0.2 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section flexible min. | 0.2 mm ² |
| Conductor cross section flexible max. | 2.5 mm ² |
| Conductor cross section AWG min. | 24 |
| Conductor cross section AWG max. | 14 |
| Stripping length | 10 mm |

Standards

| | |
|--|------------------------|
| EMC requirements for noise immunity | EN 61000-6-1 |
| | EN 61000-6-2 |
| EMC requirements for noise emission | EN 61000-6-3 |
| | EN 61000-6-4 |
| Standard - Safety of transformers | EN 61558-2-16 |
| Standard - Electrical safety | IEC 61010-2-201 (SELV) |
| Standard - safety for equipment for measurement, control, and laboratory use | IEC 61010-1 |
| Standard - Safety extra-low voltage | IEC 61010-1 (SELV) |
| | IEC 61010-2-201 (PELV) |
| Standard - Safe isolation | IEC 61558-2-16 |
| Standard - power supply devices for low voltage with DC output | EN 61204-3 |
| Standard - Limitation of mains harmonic currents | EN 61000-3-2 |

Conformance/approvals

| | |
|--------------|--|
| UL approvals | UL Listed UL 61010-1 |
| | UL Listed UL 61010-2-201 |
| | UL 1310 Class 2 Power Units |
| | ANSI/UL 121201 Class I, Division 2, Groups A, B, C, D (Hazardous Location) |
| SIQ | CB-Scheme (IEC 61010-1, IEC 61010-2-201) |

EMC data

| | |
|-------------------------------|---|
| Electromagnetic compatibility | Conformance with EMC Directive 2014/30/EU |
| Conducted noise emission | EN 55016 |
| | EN 61000-6-3 (Class B) |
| Noise emission | EN 55016 |
| | EN 61000-6-3 (Class B) |
| Harmonic currents | EN 61000-3-2 |
| | EN 61000-3-2 (Class A) |
| Flicker | EN 61000-3-3 |

Power supply unit - QUINT4-PS/1AC/24DC/1.3/PT - 2909575

Date tehnic

EMC data

| | |
|--------------------------------|-------------------------------------|
| Electrostatic discharge | EN 61000-4-2 |
| Contact discharge | 8 kV (Test Level 4) |
| Discharge in air | 8 kV (Test Level 3) |
| Electromagnetic HF field | EN 61000-4-3 |
| Frequency range | 80 MHz ... 1 GHz |
| Test field strength | 20 V/m (Test Level 3) |
| Frequency range | 1 GHz ... 6 GHz |
| Test field strength | 10 V/m (Test Level 3) |
| Comments | Criterion A |
| Fast transients (burst) | EN 61000-4-4 |
| Input | 4 kV (Test Level 4 - asymmetrical) |
| Output | 4 kV (Test Level X - asymmetrical) |
| Signal | 4 kV (Test Level X - asymmetrical) |
| Comments | Criterion A |
| Surge voltage load (surge) | EN 61000-4-5 |
| Input | 2 kV (Test Level 4 - symmetrical) |
| | 4 kV (Test Level 4 - asymmetrical) |
| Output | 1 kV (Test Level 3 - symmetrical) |
| | 2 kV (Test Level 3 - asymmetrical) |
| Signal | 0.5 kV (Test Level 2 - symmetrical) |
| Comments | Criterion A |
| Conducted interference | EN 61000-4-6 |
| I/O/S | asymmetrical |
| Frequency range | 0.15 MHz ... 80 MHz |
| Voltage | 10 V (Test Level 3) |
| Comments | Criterion A |
| Power frequency magnetic field | EN 61000-4-8 |
| Frequency | 16.67 Hz |
| | 50 Hz |
| | 60 Hz |
| Test field strength | 100 A/m |
| Additional text | 60 s |
| Comments | Criterion A |
| Frequency | 50 Hz |
| | 60 Hz |
| Frequency range | 50 Hz ... 60 Hz |
| Test field strength | 1 kA/m |
| Additional text | 3 s |
| Frequency | 0 Hz |
| Test field strength | 300 A/m |

Power supply unit - QUINT4-PS/1AC/24DC/1.3/PT - 2909575

Date tehnic

EMC data

| | |
|--|--|
| Additional text | DC, 60 s |
| Voltage dips | EN 61000-4-11 |
| Voltage | 100 V AC |
| Frequency | 60 Hz |
| Voltage dip | 70 % |
| Number of periods | 0.5 / 1 / 30 periods |
| Additional text | Test Level 2 |
| Comments | Criterion A |
| Voltage dip | 40 % |
| Number of periods | 5 / 10 / 50 periods |
| Additional text | Test Level 2 |
| Comments | Criterion B |
| Voltage dip | 0 % |
| Number of periods | 0.5 / 1 / 5 / 50 periods |
| Additional text | Test Level 2 |
| Comments | Criterion B |
| Pulse-shape magnetic field | EN 61000-4-9 |
| Test field strength | 1000 A/m |
| Comments | Criterion A |
| Attenuated sinusoidal oscillations (ring wave) | EN 61000-4-12 |
| Input | 2 kV (symmetrical) |
| | 4 kV (asymmetrical) |
| Comments | Criterion A |
| Asymmetrical conducted disturbance variables | EN 61000-4-16 |
| Test level 1 | 16.67 Hz 50 Hz 60 Hz (Test Level 2) |
| Voltage | 30 V (10 s) |
| Test level 2 | 16.67 Hz 50 Hz 60 Hz (Test Level 4) |
| Voltage | 300 V (1 s) |
| Comments | Criterion A |
| | Criterion A |
| Criterion A | Normal operating behavior within the specified limits. |
| Criterion B | Temporary impairment to operational behavior that is corrected by the device itself. |
| Criterion C | Temporary adverse effects on the operating behavior, which the device corrects automatically or which can be restored by actuating the operating elements. |

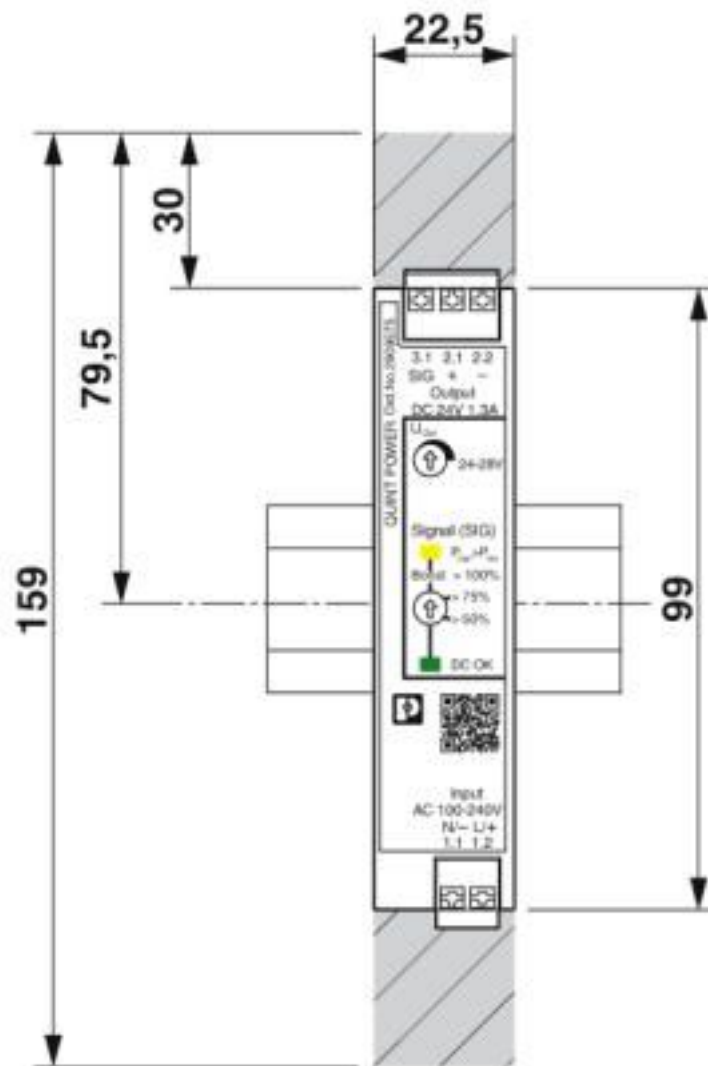
Environmental Product Compliance

| | |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 25; |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Power supply unit - QUINT4-PS/1AC/24DC/1.3/PT - 2909575

Desene

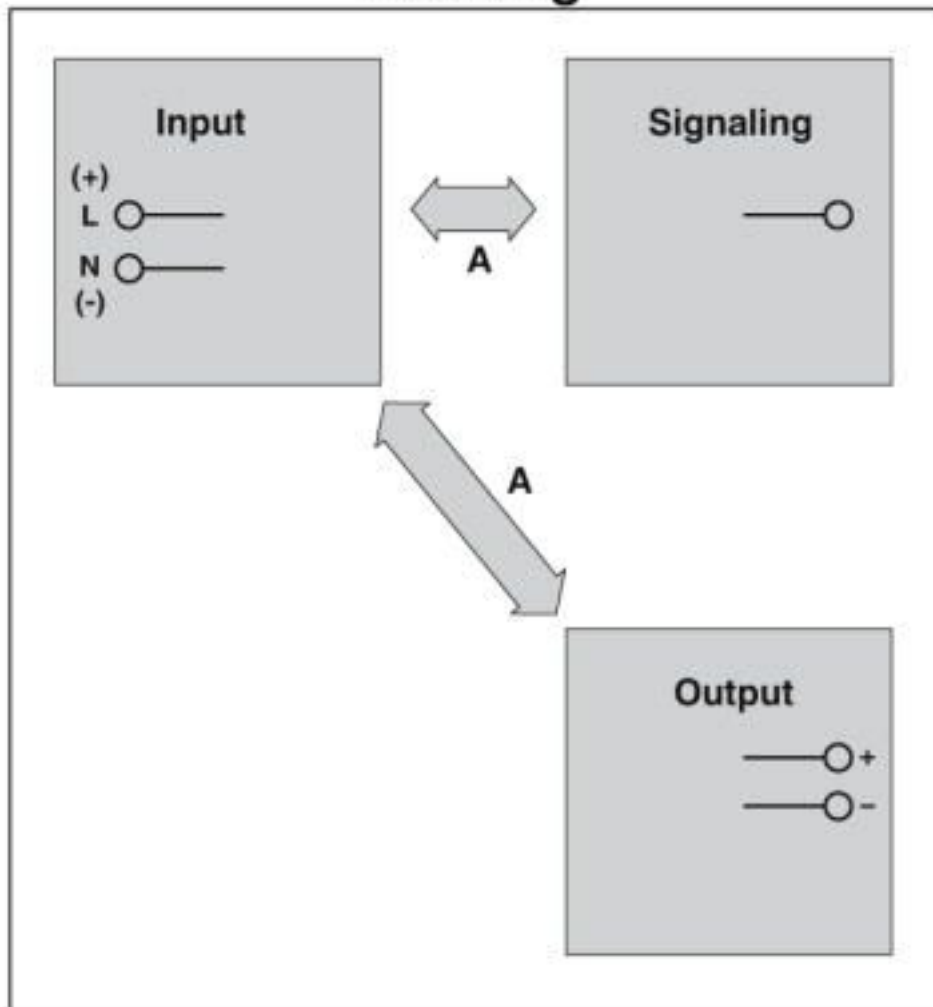
Dimensional drawing



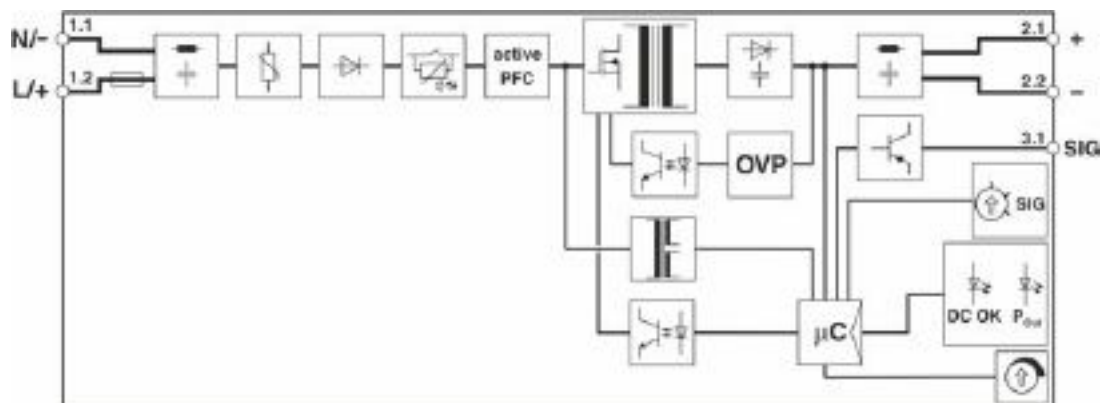
Power supply unit - QUINT4-PS/1AC/24DC/1.3/PT - 2909575

Schematic diagram

Housing

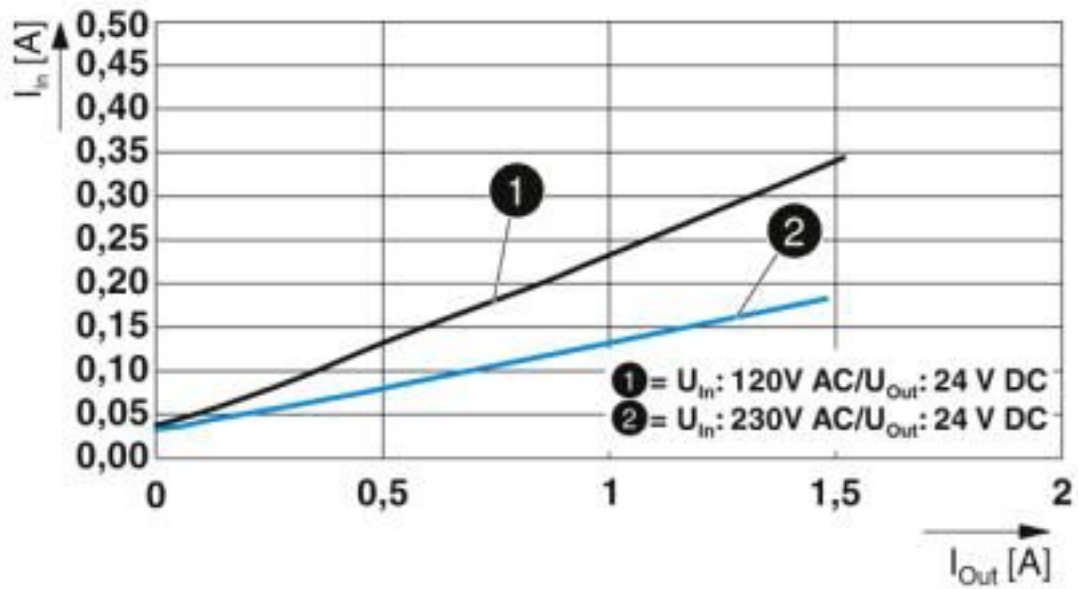


Block diagram

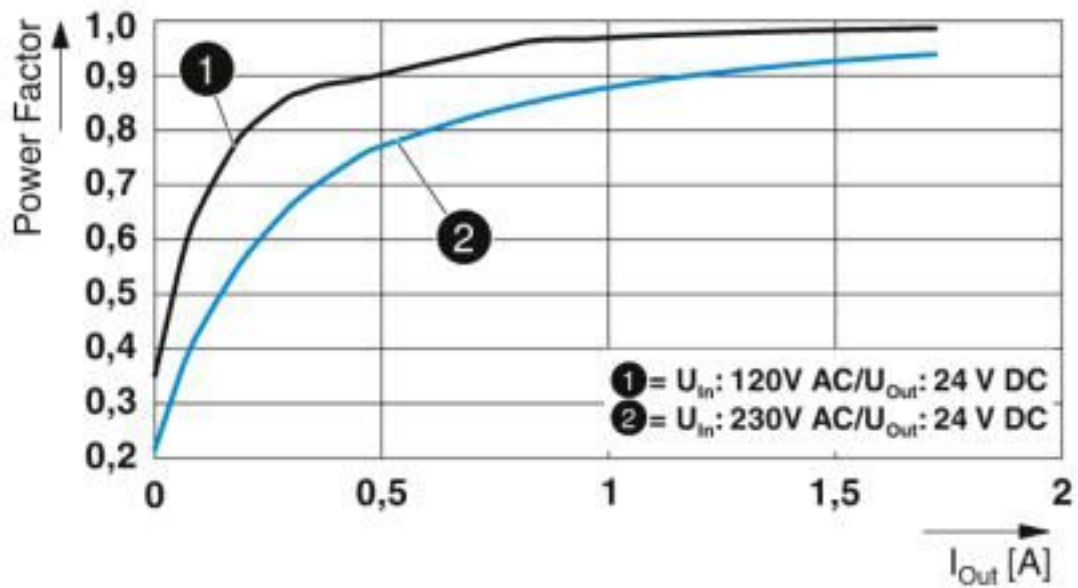


Power supply unit - QUINT4-PS/1AC/24DC/1.3/PT - 2909575

Diagram

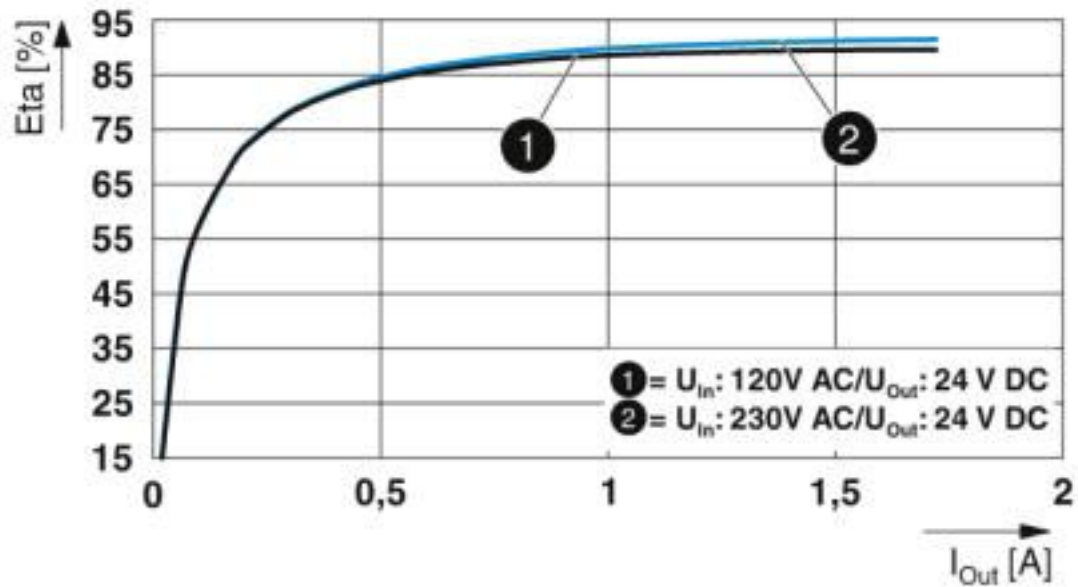


Diagram



Power supply unit - QUINT4-PS/1AC/24DC/1.3/PT - 2909575

Diagram



Aprobări

Aprobări

Aprobări


UL Listed / IECCEB Scheme / cUL Listed / EAC / DNV GL / IECCEB Scheme / UL Listed / cUL Listed / EAC


Aprobări EX

UL Listed / cUL Listed / UL Listed / cUL Listed

Detalii de aprobare







| | | | |
|-----------|---|---|---------------|
| UL Listed |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 123528 |
|-----------|---|---|---------------|

| | | | |
|-----------------|---|---|---------|
| IECEE CB Scheme |  | http://www.iecee.org/ | SI-6241 |
|-----------------|---|---|---------|

| | | | |
|------------|---|---|---------------|
| cUL Listed |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 123528 |
|------------|---|---|---------------|

Power supply unit - QUINT4-PS/1AC/24DC/1.3/PT - 2909575

Aprobări

| | | | |
|-----------------|---|---|---------------------|
| EAC |  | | RU*DE*08.B.01873/19 |
| DNV GL |  | https://approvalfinder.dnvgl.com/ | TAA00001SN |
| IECEE CB Scheme |  | http://www.iecee.org/ | SI-6241 |
| UL Listed |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 123528 |
| cUL Listed |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 123528 |
| EAC |  | | RU*DE*08.B.01873/19 |

Accesorii

Accesorii

Device circuit breakers

Electronic device circuit breaker - CBMC E4 24DC/1-10A NO - 2906032



Multi-channel electronic device circuit breaker for protecting four loads at 24 V DC in the event of overload and short circuit. With electronic locking of the set nominal currents. For installation on DIN rails.

Electronic device circuit breaker - CBMC E4 24DC/1-4A NO - 2906031



Multi-channel electronic device circuit breaker for protecting four loads at 24 V DC in the event of overload and short circuit. With electronic locking of the set nominal currents. For installation on DIN rails.

Power supply unit - QUINT4-PS/1AC/24DC/1.3/PT - 2909575

Accesorii

Electronic device circuit breaker - CBMC E4 24DC/1-4A NO-C - 2908713



Multi-channel electronic device circuit breaker that can be preconfigured, for protecting four loads at 24 V DC in the event of overload and short circuit. With electronic locking of the set nominal currents. For installation on DIN rails.

Device protection

Type 3 surge protection device - PLT-SEC-T3-230-FM-PT - 2907928



Type 2/3 surge protection, consisting of protective plug and base element with Push-in connection. For single-phase power supply network with integrated status indicator and remote signaling. Nominal voltage 230 V AC/DC.

Type 3 surge protection device - PLT-SEC-T3-24-FM-PT - 2907925



Type 3 surge protection, consisting of protective plug and base element, with integrated status indicator and remote signaling for single-phase power supply networks. Nominal voltage 24 V AC/DC.

Screwdriver tools

Screwdriver - SF-SL 0,4X2,0-60 - 1212546



Screwdriver, flat bladed, size: 0.4 x 2.0 x 60 mm, 2-component grip, with non-slip grip

Phoenix Contact 2020 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT ROMANIA
Splaiul Unirii 165 Timpuri Noi Square TNO1, Etaj 1
Bucuresti 030133
Romania
+40 21 350 88 12 - 3
+40 37 448 56 32 - 7
<http://www.phoenixcontact.ro>