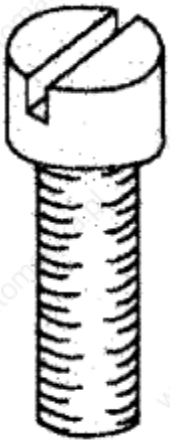
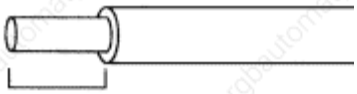
# QUINT-PS …AC/24DC/20…

Input: 3 x 168 to 240 V AC or 3 x 325 V to 460 V AC
Output: 24 V DC/20 A
Housing width 240
[lg ]



M 2.5



8

| | (IEC) [mm²] | rigid solid | flexible stranded | AWG |
|---|---|---|---|---|
| Input | | 0.2-2.5 | 0.2-2.5 | 24-14 |
| Output | | 0.2-4 | 0.2-4 | 24-10 |

| Description | Type | Order No. | Pcs. Pkt. |
|---|---|---|---|
| **Compact power supply,** primary switched-mode | **QUINT-PS-3x207AC/24DC/20** | **29 39 45 4** | 1 |
| | **QUINT-PS-3x207AC/24DC/20/F** | **29 39 55 1** | 1 |
| | **QUINT-PS-3x400AC/24DC/20** | **29 39 46 7** | 1 |
| | **QUINT-PS-3x400AC/24DC/20/F** | **29 39 56 4** | 1 |

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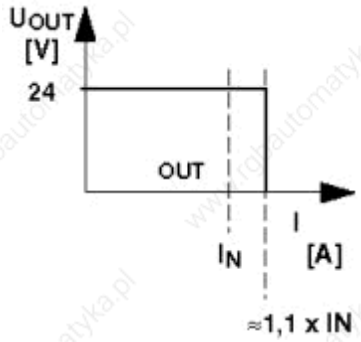
| Technical data | QUINT-PS-3x207AC/24DC/… | | QUINT-PS-3x400/24 DC/… | |
|---|---|---|---|---|
| | …20 | …20/F | …20 | …20/F |
| **Input data** | | | | |
| Input voltage | **3 x 207 V AC** | **3 x 207 V AC** | **3 x 400 V AC** | **3x 400 V AC** |
| – Input voltage range | 168-240 V AC | 168-240 V AC | 325-460 V AC | 325-460 V AC |
| – Input voltage range short-term (1 min.) | 165-250 V AC | 165-250 V AC | 320-500 V AC | 150-270 V AC |
| Direct current voltage | 126-186 V DC | 126-186 V DC | 253-373 V DC | 253-373 V DC |
| Frequency | 47-63 Hz | 47-63 Hz | 47-63 Hz | 47-63 Hz |
| Inrush surge current | < 36 A | < 36 A | < 19 A | < 19 A |
| Current consumption | approx. 3.6 A | approx. 2.4 A | approx. 1.8 A | approx. 1.1 A |
| Input fuse | externally via circuit breaker 6 A, characteristic B | | | |
| Power factor | 0.4 | 0.8 | 0.4 | 0.8 |
| Power failure bypass | > 20 ms | > 20 ms | > 20 ms | > 20 ms |
| Surge voltage protection | varistor | varistor | varistor | varistor |
| **Output data** | | | | |
| Nominal output voltage $U_N$ / Nominal output current $I_N$ | 24 V DC ± 1 % / 20 A | | | |
| Setting range | 22.5-28.5 V DC (>24 V const. capacity) | | | |
| Starting delay – ohmic load / capacitive load | approx. 100 ms | | | |
| Switching on after applying mains voltage | approx. 2.5 s | | | |
| Starting of capacitive loads | unrestricted | | | |
| Protection against internal surge voltages | yes | | | |
| Function display | LED | | | |
| Connection in parallel | yes, for assembling redundant systems and increasing efficiency | | | |
| Current limitation | 1.1 x $I_N$ ± 5 % | | | |
| Control deviation on load change: static 10-90 % | < 1 % | | | |
| dynamic 10-90 % | < 5 % | | | |
| System deviation with change of input voltage ±10 % | < 0.1 % | | | |
| Ascent time of $U_{out}$ (10-90 %) | 100 ms | | | |
| Residual ripple / peak switching voltages (1.2 MHz bandwidth) | 150 $mV_{pp}$ / 100 $mV_{pp}$ | | | |
| Max. power dissipation idling | approx. 7 W | | | |
| nominal load | approx. 92 W | | | |
| **Climatic data** | | | | |
| Ambient temperature (operation / storage) | -20 °C to +50 °C / -25 °C to +85 °C | | | |
| Humidity | up to 95 % at 25 °C, no condensation | | | |
| **General data** | | | | |
| Isolation voltage input/output | 3 kV (routine test) | | | |
| Electrical safety | EN 60950/VDE 0805, UL 1950/CSA C22.2 No.950, CSA C22.2 No.234, prEN 50178/DIN EN 50178/VDE 0160, UL 508C, CSA C22.2 No. 14-M91 | | | |
| Reliable separation | DIN VDE 0100-410, DIN VDE 0106-101 | | | |
| Electromagnetic compatibility | **C** in compliance with EMC guideline 89/336/EEC | | | |
| Installation position | on horizontal mounting rail NS 35/7.5 acc. to EN 50 045 | | | |

| | | | | |
|---|---|---|---|---|
| Mounting | spacing: | - vertically with distance ≥ 10 cm<br>- horizontally adjacent | | |
| Type of connection | screw/plug connection COMBICON | | | |
| Type of protection / Class of protection | IP 20 / I with PE connection | | | |
| MTBF (Mean Time Between Failure) | > 500 000 h acc. to SN 29 500 | | | |
| Efficiency | > 90 % | | | |
| Weight | approx. 2.3 kg | approx. 2.5 kg | approx. 2.3 kg | approx. 2.5 kg |
| Limitation of mains harmonic current waves acc. to EN 61000-3-2 | no | yes | no | yes |

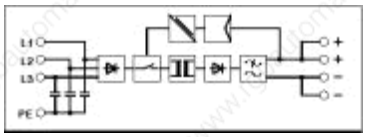
**Output characteristics QUINT-PS…/20**

The device cuts back the voltage if the current limit of 1.1 x $I_N$ is exceeded. The current remains constant at approx. 1.1 x $I_N$. The power is restricted in this fashion. This guarantees that down-circuit fuses are blown selectively.




**Type of housing**
**Steel plate, sealed**
Side parts **ABS V0**
see product-line info
color: green
**Torque value of terminals, see product-line info.**
**The rated cross section (see product-line info) refers to untreated conductors without ferrules.**

**Block diagram**

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