QUINT-PS/1AC/24DC/ 5/CO - Power supply, with protective coating

2320908

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Primary-switched power supply unit QUINT POWER, Screw connection, DIN rail mounting, SFB Technology (Selective Fuse Breaking), input: 1-phase, output: 24 V DC / 5 A

Product description

QUINT POWER power supplies with maximum functionality
QUINT POWER circuit breakers magnetically and therefore quickly trip at six times the nominal current, for selective and therefore cost-effective system protection. In addition, the high system availability is ensured by preventive function monitoring which reports critical operating states before errors can occur.
Reliable starting of heavy loads takes place via the static power reserve POWER BOOST. Thanks to the adjustable voltage, all ranges between 18 V DC ... 29.5 V DC are covered.

Your advantages

- For superior system availability
- Reliable starting of difficult loads with the static POWER BOOST power reserve with up to 1.5 times the nominal current permanently
- Fast tripping of standard circuit breakers with dynamic power reserve SFB (selective fuse breaking) technology with up to 6 times the nominal current for 12 ms
- Preventive function monitoring
- Optimum protection with dip coating for 100 % humidity

Commercial data

Item number	2320908
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CMP
Product key	CMPQ13
Catalog page	Page 246 (C-4-2019)
GTIN	4046356520010
Weight per piece (including packing)	1,081.3 g
Weight per piece (excluding packing)	777 g
Customs tariff number	85044095
Country of origin	TH

Technical data

Input data

AC operation

Nominal input voltage range	100 V AC ... 240 V AC
	110 V DC ... 250 V DC
Input voltage range	85 V AC ... 264 V AC
	90 V DC ... 410 V DC +5 % (UL 508: ≤ 250 V DC)
Input voltage range AC	85 V AC ... 264 V AC
Input voltage range DC	90 V DC ... 410 V DC +5 % (UL 508: ≤ 250 V DC)
Electric strength, max.	300 V AC
Voltage type of supply voltage	AC/DC
Inrush current	< 15 A
Inrush current integral (I^2t)	< 1 A^2s
AC frequency range	50 Hz ... 60 Hz
Mains buffering time	typ. 55 ms (120 V AC)
	typ. 55 ms (230 V AC)
Current consumption	1.5 A (100 V AC)
	0.6 A (240 V AC)
	1.2 A (120 V AC)
	0.6 A (230 V AC)
	1.3 A (110 V DC)
	0.6 A (220 V DC)
	1.4 A (100 V DC)
	0.6 A (250 V DC)
Nominal power consumption	141 VA
Protective circuit	Transient surge protection; Varistor
Typical response time	< 0.15 s
Input fuse	5 A (slow-blow, internal)
Permissible backup fuse	B6 B10 B16 AC:
Recommended breaker for input protection	6 A ... 16 A (AC: Characteristics B, C, D, K)
Discharge current to PE	< 3.5 mA

Output data

Efficiency	typ. 90 % (230 V AC)
Nominal output voltage	24 V DC ±1 %
Setting range of the output voltage (U_{Set})	18 V DC ... 29.5 V DC (> 24 V DC, constant capacity)
Nominal output current (I_N)	5 A (-25 °C ... 60 °C, U_{OUT} = 24 V DC)
POWER BOOST (I_{Boost})	7.5 A (-25 °C ... 40 °C permanent, U_{OUT} = 24 V DC)
Selective Fuse Breaking (I_{SFB})	30 A (12 ms)
Magnetic circuit breaker tripping	B2 / B4 / C2

Derating	60 °C ... 70 °C (2.5%/K)
Feedback voltage resistance	≤ 35 V DC
Protection against overvoltage at the output (OVP)	≤ 32 V DC
Control deviation	< 1 % (change in load, static 10 % ... 90 %)
	< 2 % (change in load, dynamic 10 % ... 90 %)
	< 0.1 % (change in input voltage ±10 %)
Residual ripple	< 40 mV_{PP} (with nominal values)
Output power	120 W
Maximum no-load power dissipation	3 W
Power loss nominal load max.	15 W
Rise time	< 0.1 s (U_{OUT} (10 % ... 90 %))
Connection in parallel	yes, for redundancy and increased capacity
Connection in series	yes

Signal: DC OK active

Output description	U_{OUT} > 0.9 x U_N: High signal
Switching voltage range	18 V DC ... 24 V DC
Maximum inrush current	20 mA (short-circuit-proof)
Continuous load current	≤ 20 mA

Signal: DC OK floating

Output description	Relay contact, U_{OUT} > 0.9 x U_N: Contact closed
Maximum switching voltage	30 V AC
	24 V DC
Maximum inrush current	0.5 A (ATEX/IECEx: Ohmic loads only)
	1 A (ATEX/IECEx: Ohmic loads only)
Continuous load current	1 A

Signal: POWER BOOST, active

Output description	I_{OUT} < I_N: High signal
Switching voltage range	18 V DC ... 24 V DC
Output voltage	+ 24 V DC
Maximum inrush current	20 mA (short-circuit-proof)
Continuous load current	≤ 20 mA

Connection data

Input

Connection method	Screw connection
Conductor cross section, rigid min.	0.2 mm²
Conductor cross section, rigid max.	2.5 mm²
Conductor cross section flexible min.	0.2 mm²
Conductor cross section flexible max.	2.5 mm²
Conductor cross section AWG min.	20