DC/DC converters - QUINT-PS/24DC/24DC/10 - 2320092

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Primary-switched QUINT DC/DC converter for DIN rail mounting with SFB (Selective Fuse Breaking) Technology, input: 24 V DC, output: 24 V DC/10 A

Product Description

QUINT DC/DC converter with maximum functionality
DC/DC converters alter the voltage level, regenerate the voltage at the end of long cables or enable the creation of independent supply systems by means of electrical isolation.
QUINT DC/DC converters magnetically and therefore quickly trip circuit breakers with six times the nominal current, for selective and therefore cost-effective system protection. The high level of system availability is additionally ensured, thanks to preventive function monitoring, as it reports critical operating states before errors occur.

Why buy this product

- Reliable starting of difficult loads, thanks to the static POWER BOOST power reserve with up to 125% nominal current permanently
- Preventive function monitoring indicates critical operating states before errors occur
- Constant voltage: output voltage regenerated even at the end of long cables
- Support conversion to various voltage levels
- Electrical isolation: for setting up independent supply systems

Key Commercial Data

Packing unit	1 STK
GTIN	4 046356 481885
GTIN	4046356481885
Weight per Piece (excluding packing)	900.000 g
Custom tariff number	85044030
Country of origin	China

Technical data

Dimensions

Width	48 mm
Height	130 mm
Depth	125 mm

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Width with alternative assembly	122 mm
Height with alternative assembly	130 mm
Depth with alternative assembly	51 mm

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 70 °C (> 60 °C Derating: 2,5 %/K)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	≤ 95 % (at 25 °C, non-condensing)
Noise immunity	EN 61000-6-2:2005

Input data

Nominal input voltage range	24 V DC
Input voltage range	18 V DC ... 32 V DC
Current consumption	14 A (24 V, I_{BOOST})
Inrush surge current	< 15 A (typical)
Power failure bypass	> 12 ms (24 V DC)
Input fuse	25 A (internal (device protection))
Choice of suitable circuit breakers	16 A ... 20 A (Characteristics B, C, D, K)
Type of protection	Transient surge protection
Protective circuit/component	Varistor

Output data

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 restricted)
Nominal output current (I_N)	10 A (-25 °C ... 60 °C)
POWER BOOST (I_{Boost})	12.5 A (-25°C ... 40°C permanent, U_{OUT} = 24 V DC)
Selective Fuse Breaking (I_{SFB})	60 A (12 ms)
Derating	60 °C ... 70 °C (2.5%/K)
Connection in parallel	Yes, for redundancy and increased capacity
Connection in series	yes
Max. capacitive load	Unlimited
Active current limitation	Approx. 18 A
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	< 20 mV_{PP}
Peak switching voltages nominal load	< 10 mV_{PP} (20 MHz)
Maximum power dissipation in no-load condition	1.6 W
Power loss nominal load max.	24 W

General

Net weight	0.9 kg