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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









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Primary-switched QUINT DC/DC converter for DIN rail mounting with SFB (Selective Fuse Breaking) Technology, input: 12 V DC, output: 24 V DC/5 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.

Product Features

- 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
- Support conversion to various voltage levels
- Electrical isolation: for setting up independent supply systems









Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	880.0 g
Custom tariff number	85044030
Country of origin	China

Technical data

Dimensions

Width	32 mm
Height	130 mm
Depth	125 mm



Technical data

Dimensions

Width with alternative assembly	122 mm
Height with alternative assembly	130 mm
Depth with alternative assembly	35 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	12 V DC
Input voltage range	9 V DC 18 V DC
Inrush surge current	< 15 A (typical)
Power failure bypass	> 3 ms (12 V DC)
Input fuse	25 A (internal (device protection))
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	18 V DC 29.5 V DC (> 24 V DC, constant capacity restricted)
Nominal output current	5 A (-25 °C 60 °C)
POWER BOOST	6.25 A (-25°C 40°C permanent, U _{OUT} = 24 V DC)
SFB technology current reserve	30 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	Approximately 6.9 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	< 75 mV _{PP}
Peak switching voltages nominal load	< 10 mV _{PP} (20 MHz)
Maximum power dissipation in no-load condition	2 W
Power loss nominal load max.	13.5 W



Technical data

General

Net weight	0.7 kg
Efficiency	> 90 %
Insulation voltage input/output	1.5 kV (type test)
	1 kV (routine test)
Protection class	III
	> 1005000 h (40°C)
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	Alignable: 5 mm horizontally, 15 mm next to active components, 50 mm vertically

Connection data, input

Connection method	Pluggable screw 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.	18
Conductor cross section AWG max.	12
Stripping length	8 mm
Screw thread	M3

Connection data, output

Connection method	Pluggable screw connection
Conductor cross section solid min.	0.2 mm²
Conductor cross section solid 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.	18
Conductor cross section AWG max.	12
Stripping length	7 mm
Screw thread	M3

Connection data for signaling

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 mm²
Conductor cross section flexible max.	2.5 mm²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12



Technical data

Connection data for signaling

Screw thread	M3

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Shock	30g in each direction, according to IEC 60068-2-27
Noise immunity	EN 61000-6-2:2005
Connection in acc. with standard	CUL
Standards/regulations	EN 61000-4-3
	EN 61000-4-4
	EN 61000-4-6
Standard – Electrical equipment of machines	EN 60204-1
Standard - Electrical safety	EN 60950-1/VDE 0805 (SELV)
Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations	EN 50178/VDE 0160 (PELV)
Standard – Safety extra-low voltage	EN 60950-1 (SELV)
	EN 60204-1 (PELV)
Standard - Safe isolation	DIN VDE 0100-410
UL approvals	UL/C-UL listed UL 508
	UL/C-UL Recognized UL 60950
	UL ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D (Hazardous Location)
Vibration (operation)	< 15 Hz, amplitude ±2.5 mm (according to IEC 60068-2-6)
Rail applications	EN 50121-4

Classifications

eCl@ss

eCl@ss 4.0	27250311
eCl@ss 4.1	27250311
eCl@ss 5.0	27242213
eCl@ss 5.1	27210901
eCl@ss 6.0	27210901
eCl@ss 7.0	27210901
eCl@ss 8.0	27210901

ETIM

ETIM 4.0	EC002540
ETIM 5.0	EC002046

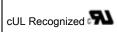


Classifications

UNSPSC

UNSPSC 6.01	30211502
UNSPSC 7.0901	39121004
UNSPSC 11	39121004
UNSPSC 12.01	39121004
UNSPSC 13.2	39121004

UNSPSC 12.01	39121004	
UNSPSC 13.2	39121004	
Approvals		
Approvals		
Approvals		
IECEE CB Scheme / UL Recognized / UL Listed / cUL Recognized / cUL Listed / GL / EAC / LR / RINA / NK / EAC / BV / DNV / ABS / cULus Recognized / cULus Listed		
Ex Approvals		
UL Listed / cUL Listed / cULus Listed		
Approvals submitted		
Approval details		
IECEE CB Scheme		
UL Recognized 5		
•		
UL Listed (II)		





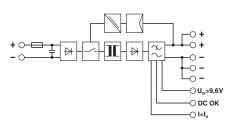
Approvals

EAC LR RINA NK EAC BV DNV mm²/AWG/kcnil 4 Nominal current IN 15 A Nominal voltage UN 750 V ABS cULus Recognized • Nus	cUL Listed (W)		
LR	GL		
RINA	EAC		
NK	LR		
EAC BV DNV	RINA		
DNV	NK		
DNV mm²/AWG/kcmil 4 Nominal current IN 15 A Nominal voltage UN 750 V ABS	EAC		
mm²/AWG/kcmil 4 Nominal current IN 15 A Nominal voltage UN 750 V ABS	BV		
Nominal current IN 15 A Nominal voltage UN 750 V ABS	DNV		
Nominal voltage UN 750 V ABS	mm²/AWG/kcmil	4	
ABS	Nominal current IN	15 A	
	Nominal voltage UN	750 V	
cULus Recognized CSA US	ABS		
cULus Recognized CSU US			
	cULus Recognized • Suus		
cULus Listed ***	clli us l isted (10)		

Drawings



Block diagram



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