

Buffer module - QUINT-BUFFER/24DC/24DC/40 - 2320393

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QUINT buffer module with maintenance-free capacitor-based energy storage for DIN rail mounting, input: 24 V DC, output: 24 V DC/40 A, with integrated SFB (selective fuse breaking) technology, including mounted universal DIN rail adapter UTA 107

Product Description

Short-term mains interruptions are bridged by QUINT BUFFER, a maintenance-free capacitor-based buffer module with SFB technology (selective fuse breaking technology). Systems can therefore also run in unstable networks or, in the event of longer failures, are correctly shut down after all relevant process data is saved. The buffer module also acts as a energy storage device for peak loads and for tripping fuses. For function monitoring, an active switching output and a control lamp are used. With the integrated diode, loads can be divided into buffered and unbuffered loads. The buffer time is thus extended and the buffered loads are protected against errors in the internal network.

Your advantages

- ✓ Longer buffer time, thanks to integrated decoupling function
- ✓ Robust, thanks to reliable supply at temperatures from -25°C to +80°C
- ✓ Saves space: electronic switchover unit and energy storage in the same housing
- ✓ Flexible – supports operation in auto mode as well as manual adjustment



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 554114
GTIN	4046356554114
Weight per Piece (excluding packing)	1,100.000 g
Custom tariff number	85049091
Country of origin	China

Technical data

Dimensions

Width	64 mm
Height	130 mm
Depth	125 mm
Width with alternative assembly	122 mm
Height with alternative assembly	130 mm

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Dimensions

Depth with alternative assembly	67 mm
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Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 80 °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	2000 m

Input data

Input voltage	24 V DC
Input voltage range	18 V DC ... 30 V DC
Current consumption (maximum)	45 A (Conduction current)
Current consumption (idle)	0.1 A (No-load)
Current consumption (charging process)	0.7 A (charging process)
Fixed connect threshold	< 20 V DC (< 22 V; < 24 V; < 26 V)
Variable connect threshold	(U _{IN} - 1 V)/0.1 s

Output data (24 V DC mains operation)

Nominal output voltage	24 V DC
Output voltage range (depends on the input voltage)	18 V DC ... 30.5 V DC
Nominal output current (I _N)	40 A

Output data (24 V DC battery operation)

Nominal output voltage	24 V DC
Output voltage range (depends on the input voltage)	19.2 V DC ... 27.6 V DC
Nominal output current (I _N)	40 A

General output data

Efficiency	> 99 % (Mains operation, with charged energy storage)
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General

IQ technology	no
Net weight	1.1 kg
Memory medium	Electrolytic capacitor
Protection class	III
MTBF (IEC 61709, SN 29500)	> 902000 h (40 °C)
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	alignable: horizontally 0 mm, vertically 50 mm

Connection data, input

Connection method	Screw connection
Conductor cross section solid min.	0.5 mm ²

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Technical data

Connection data, input

Conductor cross section solid max.	16 mm ²
Conductor cross section flexible min.	0.5 mm ²
Conductor cross section flexible max.	16 mm ²
Conductor cross section AWG min.	8
Conductor cross section AWG max.	6
Stripping length	10 mm
Screw thread	M4

Connection data, output

Connection method	Screw connection
Conductor cross section solid min.	0.5 mm ²
Conductor cross section solid max.	16 mm ²
Conductor cross section flexible min.	0.5 mm ²
Conductor cross section flexible max.	16 mm ²
Conductor cross section AWG min.	8
Conductor cross section AWG max.	6
Stripping length	10 mm
Screw thread	M4

Signaling

Output name	Power Good signal output active (high = buffer module charged)
Output description	Power Good
Output voltage	+ 24 V
Continuous load current	20 mA
Status display	LED "Power Good", green
Note on status display	Buffer module is loaded: LED ON
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	4 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.	12
Tightening torque, min	0.5 Nm
Tightening torque max	0.6 Nm
Screw thread	M4

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Noise immunity	EN 61000-6-2:2005
Connection in acc. with standard	CUL
Standards/regulations	EN 61000-4-2
Contact discharge	4 kV (Test Level 2)

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Standards and Regulations

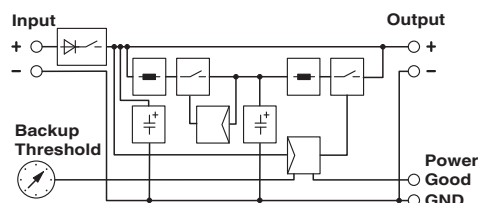
Standards/regulations	EN 61000-4-3
Frequency range	80 MHz ... 1 GHz
Test field strength	10 V/m
Frequency range	1.4 GHz ... 2 GHz
Test field strength	3 V/m
Standards/regulations	EN 61000-4-4
Comments	Criterion B
Standards/regulations	EN 61000-6-3
	EN 61000-4-6
Frequency range	0.15 MHz ... 80 MHz
Voltage	10 V (Test Level 3)
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Standard - Safety of transformers	EN 61558-2-17
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) and EN 60204 (PELV)
Standard - Safe isolation	DIN VDE 0106-101
UL approvals	UL/C-UL Recognized UL 60950-1
	UL Listed UL 508
	UL ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D (Hazardous Location)
Shock	18 ms, 30g, in each space direction (according to IEC 60068-2-27)
Vibration (operation)	< 15 Hz, amplitude ± 2.5 mm (according to IEC 60068-2-6)
	15 Hz ... 150 Hz, 2.3g, 90 min.

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 25;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Block diagram



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Classifications

eCl@ss

eCl@ss 4.0	27040702
eCl@ss 4.1	27040702
eCl@ss 5.0	27242213
eCl@ss 5.1	34174000
eCl@ss 6.0	27049200
eCl@ss 7.0	27049201
eCl@ss 8.0	27049201
eCl@ss 9.0	27049201

ETIM

ETIM 3.0	EC001039
ETIM 4.0	EC000599
ETIM 5.0	EC000382

UNSPSC

UNSPSC 6.01	30211510
UNSPSC 7.0901	39121011
UNSPSC 11	39121011
UNSPSC 12.01	39121011
UNSPSC 13.2	39121011

Approvals

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DNV GL / BV / LR / ABS / UL Listed / UL Recognized / cUL Recognized / cUL Listed / EAC / EAC / cULus Recognized / cULus Listed

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

DNV GL		http://exchange.dnv.com/tari/	61457-13 HH
Nominal voltage UN	500 V		
Nominal current IN	41 A		
mm²/AWG/kcmil	6		

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Approvals

BV		http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials	41516/A0 BV
LR		http://www.lr.org/en	17/20032
ABS		http://www.eagle.org/eagleExternalPortalWEB/	15-GD1438179-PDA
UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 123528
UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 211944
cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 211944
cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 123528
EAC			EAC-Zulassung
EAC			RU C- DE.A*30.B.01082
cULus Recognized			
cULus Listed			

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Accessories

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Assembly adapter

Assembly adapters - UWA 182/52 - 2938235



Universal wall adapter for securely mounting the power supply in the event of strong vibrations. The power supply is screwed directly onto the mounting surface. The universal wall adapter is attached at the top/bottom.

Assembly adapters - QUINT-PS-ADAPTERS7/2 - 2938206



Assembly adapter for QUINT POWER 10A on S7-300 rail

Mounting rail adapter

DIN rail adapter - UTA 107 - 2853983



Universal DIN rail adapter