

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

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QUINT buffer module with maintenance-free capacitor-based power 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 power 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.



### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	1480.0 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
Depth with alternative assembly	67 mm

#### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

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### Technical data

#### Ambient conditions

Max. permissible relative humidity (operation)	≤ 95 % (at 25 °C, non-condensing)
Noise immunity	EN 61000-6-2:2005
Maximum altitude	2000 m

#### Input data

Nominal input voltage	24 V DC
Input voltage range	18 V DC ... 30 V DC
Current consumption (maximum)	45 A ()
Current consumption (charging process)	0.7 A (charging process)
Buffer period	0.2 s (40 A)
	8 s (1 A)
Type of protection	Transient surge protection

#### 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	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	40 A

#### General output data

Efficiency	> 99 % (Mains operation, with charged power 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	Can be aligned: Horizontally 0 mm, vertically 50 mm

#### Connection data, input

Connection method	Screw connection
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	16 mm <sup>2</sup>
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	16 mm <sup>2</sup>

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

### Technical data

#### Connection data, input

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 <sup>2</sup>
Conductor cross section solid max.	16 mm <sup>2</sup>
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	16 mm <sup>2</sup>
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 <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
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 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

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#### Standards and Regulations

	EN 61000-4-4
	EN 61000-4-6
Standard – Electrical equipment of machines	EN 60204-1
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
	UL Listed UL 508
	UL ANSI/ISA-12.12.01 Class I, Division 2, Groups A, B, C, D (Hazardous Location)
Vibration (operation)	< 15 Hz, amplitude $\pm 2.5$ mm (according to IEC 60068-2-6)
Low Voltage Directive	Conformance with LV directive 2006/95/EC

### Classifications

#### eCl@ss

eCl@ss 4.0	27040702
eCl@ss 4.1	27040702
eCl@ss 5.0	27242213
eCl@ss 5.1	27242213
eCl@ss 6.0	27049190
eCl@ss 7.0	27049190
eCl@ss 8.0	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

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## Approvals

### Approvals

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#### Approvals

UL Recognized / UL Listed / cUL Recognized / cUL Listed / cUL Recognized / UL Recognized / UL Listed / cUL Listed / EAC / EAC / GL / cULus Recognized / cULus Listed

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#### Ex Approvals


UL Listed / cUL Listed / UL Listed / cULus Listed


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#### Approvals submitted

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## Approval details

UL Recognized 

UL Listed 

cUL Recognized 

cUL Listed 

cUL Recognized 

UL Recognized 

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

## Approvals

UL Listed

cUL Listed

EAC

EAC

GL	
mm <sup>2</sup> /AWG/kcmil	6
Nominal current I <sub>N</sub>	41 A
Nominal voltage U <sub>N</sub>	500 V

cULus Recognized

cULus Listed

## Drawings

Block diagram

