

SITOP PSU8600 power supply system

Modular system, buffer (BUF8600)

Overview



The BUF8600 buffer modules with maintenance free energy storage units are part of the SITOP PSU8600 modular system and are designed to bridge short-term power failures. They automatically take over the DC power supply in case of a line voltage failure. You can connect up to two BUF8600 buffer modules to the PSU8600 basic unit. Connection takes place on top of the modules without any wiring by means of the System Clip Link, a connecting plug for system data and power supply.

Main product highlights

- Reliable bridging of short-term power failures up to max. 20 s for an output power of 960 W
- Buffer module with maintenance free electrolytic capacitors for bridging short-term power failures (brownouts) between 100 ms and max. 600 ms (at 24 V DC/40 A)
- Buffer module with maintenance free double-layer capacitors for bridging longer power failures between 4 s and max. 20 s (at 24 V DC/40 A)
- The two buffer modules can be combined as required.
- Easy connection without wiring overhead

Technical specifications

Article number	6EP4297-8HB00-0XY0	6EP4297-8HB10-0XY0	6EP4293-8HB00-0XY0	6EP4295-8HB00-0XY0
Product brand name	SITOP BUF8600	SITOP BUF8600	SITOP BUF8600	SITOP BUF8600
Type of current supply	100 ms/40 A	300 ms/40 A	4 s/40 A	10 s/40 A
Mains buffering				
Type of energy storage	electrolytic capacitors	electrolytic capacitors	Double-layer capacitors	Double-layer capacitors
Design of the mains power cut bridging-connection	Backup time with 40 A load current: 100 ms	Backup time with 40 A load current: 300 ms	Backup time with 40 A load current: 4 s	Backup time with 40 A load current: 10 s
Buffering time for rated value of the output current in the event of power failure	100 ms	300 ms	4 000 ms	10 000 ms
Output				
Output current				
• Rated value	40 A	40 A	40 A	40 A
Signaling				
Display version	3-color LED for operating state module	3-color LED for operating state module	3-color LED for operating state module	3-color LED for operating state module
• for normal operation	LED green for "buffer standby exist"	LED green for "buffer standby exist"	LED green for "buffer standby exist"	LED green for "buffer standby exist"
• in buffering mode	LED yellow for "buffered mode"	LED yellow for "buffered mode"	LED yellow for "buffered mode"	LED yellow for "buffered mode"
Interface				
Design of the interface	Ethernet/PROFINET via power supply unit PSU8600	Ethernet/PROFINET via power supply unit PSU8600	Ethernet/PROFINET via power supply unit PSU8600	Ethernet/PROFINET via power supply unit PSU8600
Safety				
Operating resource protection class	Class III	Class III	Class III	Class III
Certificate of suitability				
• CE marking	Yes	Yes	Yes	Yes
• as approval for USA	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cCSAus (CSA C22.2 No. 60950-1, UL 60950-1)
• relating to ATEX	IECEx nA IIC T5 Gc; ATEX (EX) II 3G Ex nA IIC T5 Gc; cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T5	IECEx nA IIC T5 Gc; ATEX (EX) II 3G Ex nA IIC T5 Gc; cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T5	IECEx nA IIC T5 Gc; ATEX (EX) II 3G Ex nA IIC T5 Gc; cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T5	IECEx nA IIC T5 Gc; ATEX (EX) II 3G Ex nA IIC T5 Gc; cCSAus (CSA C22.2 No. 213, ANSI/ISA-12.12.01) Class I, Div. 2, Group ABCD, T5
• C-Tick	No	No	No	No
Type of certification CB-certificate	Yes	Yes	Yes	Yes
Shipbuilding approval	DNV GL, ABS	DNV GL, ABS	DNV GL, ABS	DNV GL, ABS
Protection class IP	IP20	IP20	IP20	IP20
EMC				
Standard				
• for emitted interference	EN 55022 Class B	EN 55022 Class B	EN 55022 Class B	EN 55022 Class B
• for interference immunity	EN 61000-6-2	EN 61000-6-2	EN 61000-6-2	EN 61000-6-2

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Technical specifications (continued)

Article number	6EP4297-8HB00-0XY0	6EP4297-8HB10-0XY0	6EP4293-8HB00-0XY0	6EP4295-8HB00-0XY0
Product brand name	SITOP BUF8600	SITOP BUF8600	SITOP BUF8600	SITOP BUF8600
Type of current supply	100 ms/40 A	300 ms/40 A	4 s/40 A	10 s/40 A
Operating data				
Ambient temperature				
• during operation	-25 ... +60 °C; with natural convection	-25 ... +60 °C; with natural convection	-25 ... +60 °C; with natural convection	-25 ... +60 °C; with natural convection
• during transport	-40 ... +70 °C	-40 ... +70 °C	-40 ... +70 °C	-40 ... +70 °C
• during storage	-40 ... +70 °C	-40 ... +70 °C	-40 ... +70 °C	-40 ... +70 °C
Humidity class according to EN 60721	Climate class 3K3 according to EN 60721; further, maximum relative humidity 95%, however no condensation	Climate class 3K3 according to EN 60721; further, maximum relative humidity 95%, however no condensation	Climate class 3K3 according to EN 60721; further, maximum relative humidity 95%, however no condensation	Climate class 3K3 according to EN 60721; further, maximum relative humidity 95%, however no condensation
Mechanics				
Type of electrical connection	-	-	Plug-in terminal with screw connectors	Plug-in terminal with screw connectors
• at input	-	-	-	-
• at output	-	-	-	-
• for control circuit and status message	-	-	X1, X2 (control contact) and 13, 14, 23, 24 (message signals): 1 screw terminal each for 0.2 ... 1.5 mm ²	X1, X2 (control contact) and 13, 14, 23, 24 (message signals): 1 screw terminal each for 0.2 ... 1.5 mm ²
Type of connection to system components	Via integrated connector	Via integrated connector	Via integrated connector	Via integrated connector
Width of the enclosure	60 mm	125 mm	60 mm	125 mm
Height of the enclosure	125 mm	125 mm	125 mm	125 mm
Depth of the enclosure	150 mm	150 mm	150 mm	150 mm
Required spacing				
• top	50 mm	50 mm	50 mm	50 mm
• bottom	50 mm	50 mm	50 mm	50 mm
• left	0 mm	0 mm	0 mm	0 mm
• right	0 mm	0 mm	0 mm	0 mm
Net weight	1.33 kg	2.26 kg	1.25 kg	1.95 kg
Product feature of the enclosure housing for side-by-side mounting	Yes	Yes	Yes	Yes
Mounting type	Snaps onto DIN rail EN 60715 35x15	Snaps onto DIN rail EN 60715 35x15	Snaps onto DIN rail EN 60715 35x15	Snaps onto DIN rail EN 60715 35x15
Mechanical accessories	Device identification label 20 mm x 7 mm, TI-grey 3RT2900-1SB20	Device identification label 20 mm x 7 mm, TI-grey 3RT2900-1SB20	Device identification label 20 mm x 7 mm, TI-grey 3RT2900-1SB20	Device identification label 20 mm x 7 mm, TI-grey 3RT2900-1SB20
MTBF at 40 °C	4 505 531 h	4 505 531 h	1 374 707 h	1 190 747 h
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

Ordering data

Article No.

SITOP BUF8600 100 ms buffer module
For SITOP PSU8600
Buffer capacity 100 ms/40 A

6EP4297-8HB00-0XY0

SITOP BUF8600 300 ms buffer module
For SITOP PSU8600
Buffer capacity 300 ms/40 A

6EP4297-8HB10-0XY0

SITOP BUF8600 4 s buffer module
For SITOP PSU8600
Buffer capacity 4 s/40 A

6EP4293-8HB00-0XY0

SITOP BUF8600 10 s buffer module
For SITOP PSU8600
Buffer capacity 10 s/40 A

6EP4295-8HB00-0XY0

Accessories

Article No.

Device labeling plates

3RT2900-1SB20