

## Portfolio overview SITOP Power Supplies



SITOP Lib for PCS 7

#### **SITOP** smart

The powerful standard power supply



Universal use on a global scale due to extensive input voltage range with automatic switchover and comprehensive certification package with UL, GL, ATEX or IECEx
 Minimal space requirements on the DIN rail due to slim design and installation without lateral clearances
 Integrated »Output voltage OK« signaling contact for reliable monitoring of the 24 V
 Increased 24 V availability through expansion with selective output monitoring and buffering of network failures
 With 24 V: additional power reserve through continuous output power of 120% up to 45 °C
 150% extra power for 5 s/min for brief operating overload



	SITOP smart – Powerful s	standard power supply			
	12 V DC/7 A, PSU100S	120/230 V AC (85 132/170 264 V AC)	50 x 125 x 120	6EP1322-2BA00	<ul> <li>Space-saving, slim design</li> <li>PSU100S with automatic range switch over 120/230 V AC</li> <li>Extra-Power (1.5 x I<sub>rated</sub> for 5 s) for brief operational overload</li> <li>Permanent overload capacity (1.2 x I<sub>rated</sub>) to 45 °C ambient temperature</li> </ul>
	12 V DC/14 A, PSU100S		70 x 125 x 120	6EP1323-2BA00	
	24 V DC/2.5 A, PSU100S		32,5 x 125 x 120	6EP1332-2BA20	
	24 V DC/5 A, PSU100S		50 x 125 x 120	6EP1333-2BA20	
	24 V DC/10 A, PSU100S		70 x 125 x 120	6EP1334-2BA20	
	24 V DC/20 A, PSU100S		115 x 145 x 150	6EP1336-2BA10	<ul> <li>(24 V devices)</li> <li>Green LED and signaling contact "Output voltage OK"</li> </ul>
	24 V DC/5 A, PSU300S	400 – 500 V 3 AC (340 550 V 3 AC)	50 x 125 x 120	6EP1433-2BA20	Adjustable output voltage up to 28.0 V DC or 15.5 V DC (12 V devices) Expandable with, redundancy module, selectivity/ diagnostics module, buffer
	24 V DC/10 A, PSU300S		70 x 125 x 120	6EP1434-2BA20	
	24 V DC/20 A, PSU300S		90 x 145 x 150	6EP1436-2BA10	
	24 V DC/40 A, PSU300S		150 x 145 x 150	6EP1437-2BA20	module and DC UPS

## The powerful standard power supply for 1- and 3-phase networks

SITOP smart is the optimal power supply for many 24-V and 12-V applications, featuring compact design, powerful performance, and low price. Despite its compact size, it offers outstanding overload characteristics thanks to the extra power feature that provides 1.5 times the rated current for five seconds: Even large loads can be easily switched on. And with a rated capacity of 120 percent, these slim power supplies are among the most reliable of their kind.







SITOP smart 1-phase, DC 12 V

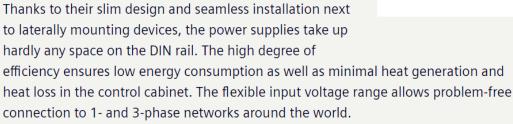
SITOP smart 1-phase, DC 24 V

SITOP smart 3-phase, DC 24 V

The 1-phase and 3-phase SITOP smart are the universal and powerful standard power supplies for machinery and plant engineering with 24 V or 12 V electronics.

## A high standard for optimal power ...

With SITOP smart, even loads with high power demand can be connected without difficulty, thanks to its overload capability of 150 percent "Extra Power." The 24 V power supplies can continuously manage 120 percent of the rated power.





Data sheet 6EP1322-2BA00



SITOP PSU100S/1AC/12VDC/7A

SITOP PSU100S 12 V/7 A stabilized power supply input: 120/230 V AC output: 12 V DC/7 A  $^*$ Ex approval no longer available $^*$ 

type of the power supply network	1-phase AC
supply voltage at AC	T phase 70
• initial value	Automatic range selection
supply voltage	Automatic range selection
1 at AC rated value	120 V
2 at AC rated value	230 V
	230 V
input voltage	0F 422 V
• 1 at AC • 2 at AC	85 132 V 170 264 V
	No
design of input wide range input	
overvoltage overload capability	2.3 × Vin rated, 1.3 ms
operating condition of the mains buffering	at Vin = 93/187 V
buffering time for rated value of the output current in the event of power failure minimum	20 ms
operating condition of the mains buffering	at Vin = 93/187 V
line frequency	
1 rated value	50 Hz
2 rated value	60 Hz
line frequency	47 63 Hz
input current	
<ul> <li>at rated input voltage 120 V</li> </ul>	1.73 A
<ul> <li>at rated input voltage 230 V</li> </ul>	0.99 A
current limitation of inrush current at 25 °C maximum	45 A
fuse protection type	T 3,15 A/250 V (not accessible)
• in the feeder	Recommended miniature circuit breaker: from 6 A characteristic C
Output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	12 V
output voltage	
at output 1 at DC rated value	12 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
<ul> <li>on slow fluctuation of input voltage</li> </ul>	0.1 %
<ul> <li>on slow fluctuation of ohm loading</li> </ul>	1 %
residual ripple	
maximum	150 mV
• typical	20 mV
voltage peak	
maximum	240 mV

Data sheet 6EP1323-2BA00



#### SITOP PSU100S/1AC/12VDC/14A

SITOP PSU100S 12 V/14 A stabilized power supply input: 120/230 V AC output: 12 V DC/14 A \*Ex approval no longer available\*

Input	
type of the power supply network	1-phase AC
supply voltage at AC	
• initial value	Automatic range selection
supply voltage	
1 at AC rated value	120 V
• 2 at AC rated value	230 V
input voltage	
• 1 at AC	85 132 V
• 2 at AC	170 264 V
design of input wide range input	No
overvoltage overload capability	2.3 × Vin rated, 1.3 ms
operating condition of the mains buffering	at Vin = 93/187 V
buffering time for rated value of the output current in the event of power failure minimum	20 ms
operating condition of the mains buffering	at Vin = 93/187 V
line frequency	
1 rated value	50 Hz
2 rated value	60 Hz
line frequency	47 63 Hz
input current	
<ul> <li>at rated input voltage 120 V</li> </ul>	3.24 A
<ul> <li>at rated input voltage 230 V</li> </ul>	1.41 A
current limitation of inrush current at 25 °C maximum	60 A
fuse protection type	T 6.3 A/250 V (not accessible)
• in the feeder	Recommended miniature circuit breaker: from 10 A characteristic C
Output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	12 V
output voltage	
<ul> <li>at output 1 at DC rated value</li> </ul>	12 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
on slow fluctuation of input voltage	0.1 %
<ul> <li>on slow fluctuation of ohm loading</li> </ul>	1 %
residual ripple	
• maximum	150 mV
• typical	20 mV
voltage peak	
maximum	240 mV

Data sheet 6EP1332-2BA20



SITOP PSU100S/1AC/24VDC/2.5A

SITOP PSU100S 24 V/2.5 A stabilized power supply input: 120/230 V AC output: 24 V DC/2.5 A \*Ex approval no longer available\*

Input	
type of the power supply network	1-phase AC
supply voltage at AC	
initial value	Automatic range selection
supply voltage	
<ul> <li>1 at AC rated value</li> </ul>	120 V
• 2 at AC rated value	230 V
input voltage	
• 1 at AC	85 132 V
• 2 at AC	170 264 V
design of input wide range input	No
overvoltage overload capability	2.3 × Vin rated, 1.3 ms
operating condition of the mains buffering	at Vin = 93/187 V
buffering time for rated value of the output current in the event of power failure minimum	20 ms
operating condition of the mains buffering	at Vin = 93/187 V
line frequency	
1 rated value	50 Hz
2 rated value	60 Hz
line frequency	47 63 Hz
input current	
<ul> <li>at rated input voltage 120 V</li> </ul>	1.25 A
• at rated input voltage 230 V	0.74 A
current limitation of inrush current at 25 °C maximum	33 A
I2t value maximum	0.4 A <sup>2</sup> ·s
fuse protection type	T 3,15 A/250 V (not accessible)
• in the feeder	Recommended miniature circuit breaker: from 3 A characteristic C
utput	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
at output 1 at DC rated value	24 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
<ul> <li>on slow fluctuation of input voltage</li> </ul>	0.1 %
<ul> <li>on slow fluctuation of ohm loading</li> </ul>	1 %
residual ripple	
maximum	150 mV
• typical	30 mV
voltage peak	

Data sheet 6EP1333-2BA20



#### SITOP PSU100S/1AC/24VDC/5A

SITOP PSU100S 24 V/5 A Stabilized power supply input: 120/230 V AC, output: 24 V DC/5 A \*Ex approval no longer available\*

Input	
type of the power supply network	1-phase AC
supply voltage at AC	
initial value	Automatic range selection
supply voltage	
1 at AC rated value	120 V
2 at AC rated value	230 V
input voltage	
• 1 at AC	85 132 V
• 2 at AC	170 264 V
design of input wide range input	No
overvoltage overload capability	2.3 × Vin rated, 1.3 ms
operating condition of the mains buffering	at Vin = 93/187 V
buffering time for rated value of the output current in the event of power failure minimum	20 ms
operating condition of the mains buffering	at Vin = 93/187 V
line frequency	
1 rated value	50 Hz
2 rated value	60 Hz
line frequency	47 63 Hz
input current	
<ul> <li>at rated input voltage 120 V</li> </ul>	2.34 A
<ul> <li>at rated input voltage 230 V</li> </ul>	1.36 A
current limitation of inrush current at 25 °C maximum	40 A
I2t value maximum	1 A²·s
fuse protection type	T 3,15 A/250 V (not accessible)
• in the feeder	Recommended miniature circuit breaker: from 6 A characteristic C
Output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
<ul> <li>at output 1 at DC rated value</li> </ul>	24 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
<ul> <li>on slow fluctuation of input voltage</li> </ul>	0.1 %
<ul> <li>on slow fluctuation of ohm loading</li> </ul>	1 %
residual ripple	
maximum	150 mV
• typical	30 mV
voltage peak	

Data sheet 6EP1334-2BA20



#### SITOP PSU100S/1AC/24VDC/10A

SITOP PSU100S 24 V/10 A Stabilized power supply input: 120/230 V AC, output: DC 24 V/10 A \*Ex approval no longer available\*

Input	
type of the power supply network	1-phase AC
supply voltage at AC	
• initial value	Automatic range selection
supply voltage	
<ul> <li>1 at AC rated value</li> </ul>	120 V
<ul> <li>2 at AC rated value</li> </ul>	230 V
input voltage	
• 1 at AC	85 132 V
• 2 at AC	170 264 V
design of input wide range input	No
overvoltage overload capability	2.3 × Vin rated, 1.3 ms
operating condition of the mains buffering	at Vin = 93/187 V
buffering time for rated value of the output current in the event of power failure minimum	20 ms
operating condition of the mains buffering	at Vin = 93/187 V
line frequency	
1 rated value	50 Hz
• 2 rated value	60 Hz
line frequency	47 63 Hz
input current	
<ul> <li>at rated input voltage 120 V</li> </ul>	4.49 A
● at rated input voltage 230 V	1.91 A
current limitation of inrush current at 25 °C maximum	60 A
l2t value maximum	5.6 A <sup>2</sup> ·s
fuse protection type	T 6.3 A/250 V (not accessible)
• in the feeder	Recommended miniature circuit breaker: from 10 A characteristic C
Output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
at output 1 at DC rated value	24 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
<ul> <li>on slow fluctuation of input voltage</li> </ul>	0.1 %
on slow fluctuation of ohm loading	1 %
residual ripple	
• maximum	150 mV
• typical	20 mV
voltage peak	

Data sheet 6EP1336-2BA10



SITOP PSU100S/1AC/24VDC/20A

SITOP PSU100S 20 A stabilized power supply input: 120/230  $\lor$  AC output: 24  $\lor$  DC/20 A \*Ex approval no longer available\*

Input	
type of the power supply network	1-phase AC
supply voltage at AC	
initial value	Automatic range selection
supply voltage	
<ul> <li>1 at AC rated value</li> </ul>	120 V
2 at AC rated value	230 V
input voltage	
• 1 at AC	85 132 V
• 2 at AC	176 264 V
design of input wide range input	No
overvoltage overload capability	2.3 × Vin rated, 1.3 ms
operating condition of the mains buffering	at Vin = 120/230 V
buffering time for rated value of the output current in the event of power failure minimum	20 ms
operating condition of the mains buffering	at Vin = 120/230 V
line frequency	
1 rated value	50 Hz
2 rated value	60 Hz
line frequency	47 63 Hz
input current	
<ul> <li>at rated input voltage 120 V</li> </ul>	7.5 A
at rated input voltage 230 V	3.5 A
current limitation of inrush current at 25 °C maximum	11 A
I2t value maximum	10 A <sup>2</sup> ·s
fuse protection type	T 10 A (not accessible)
• in the feeder	Recommended miniature circuit breaker: from 10 A characteristic C or circuit-breaker 3RV2411-1JA10 (120 V) or 3RV2411-1FA10 (230 V)
Output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
at output 1 at DC rated value	24 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
<ul> <li>on slow fluctuation of input voltage</li> </ul>	0.5 %
on slow fluctuation of ohm loading	1 %
residual ripple	
maximum	150 mV
voltage peak	

Data sheet 6EP1433-2BA20



#### SITOP PSU300S/3AC/24VDC/5A

SITOP PSU300S 24 V/5 A Stabilized power supply input: 400-500 V 3 AC output: 24 V DC/5 A \*Ex approval no longer available\*

Input	
type of the power supply network	3-phase AC
supply voltage at AC	
minimum rated value	400 V
maximum rated value	500 V
• initial value	340 V
• full-scale value	550 V
design of input wide range input	Yes
operating condition of the mains buffering	at Vin = 400 V
buffering time for rated value of the output current in the event of power failure minimum	18 ms
operating condition of the mains buffering	at Vin = 400 V
line frequency	
1 rated value	50 Hz
2 rated value	60 Hz
line frequency	47 63 Hz
input current	
<ul> <li>at rated input voltage 400 V</li> </ul>	0.45 A
<ul> <li>at rated input voltage 500 V</li> </ul>	0.4 A
current limitation of inrush current at 25 °C maximum	20 A
I2t value maximum	0.5 A <sup>2</sup> ·s
fuse protection type	none
• in the feeder	Required: 3-pole connected miniature circuit breaker 3 16 A characteristic C or circuit breaker 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489-listed, DIVQ)
Output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
<ul> <li>at output 1 at DC rated value</li> </ul>	24 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
<ul> <li>on slow fluctuation of input voltage</li> </ul>	0.1 %
on slow fluctuation of ohm loading	0.1 %
residual ripple	
maximum	200 mV
voltage peak	
maximum	240 mV
adjustable output voltage	24 28 V
product function output voltage adjustable	Yes

Data sheet 6EP1434-2BA20



#### SITOP PSU300S/3AC/24VDC/10A

SITOP PSU300S 24 V/10 A Stabilized power supply input: 400-500 V 3 AC output: 24 V DC/ 10 A \*Ex approval no longer available\*

Input	
type of the power supply network	3-phase AC
supply voltage at AC	
minimum rated value	400 V
maximum rated value	500 V
• initial value	340 V
• full-scale value	550 V
design of input wide range input	Yes
operating condition of the mains buffering	at Vin = 400 V
buffering time for rated value of the output current in the event of power failure minimum	7 ms
operating condition of the mains buffering	at Vin = 400 V
line frequency	
1 rated value	50 Hz
• 2 rated value	60 Hz
line frequency	47 63 Hz
input current	
<ul> <li>at rated input voltage 400 V</li> </ul>	0.7 A
<ul> <li>at rated input voltage 500 V</li> </ul>	0.6 A
current limitation of inrush current at 25 °C maximum	20 A
I2t value maximum	0.5 A <sup>2</sup> ·s
fuse protection type	none
• in the feeder	Required: 3-pole connected miniature circuit breaker 3 16 A characteristic C or circuit breaker 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489-listed, DIVQ)
Output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
<ul> <li>at output 1 at DC rated value</li> </ul>	24 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
<ul> <li>on slow fluctuation of input voltage</li> </ul>	0.1 %
on slow fluctuation of ohm loading	0.15 %
residual ripple	
• maximum	200 mV
voltage peak	
• maximum	240 mV
adjustable output voltage	24 28 V
product function output voltage adjustable	Yes

Data sheet 6EP1436-2BA10



## SITOP PSU300S/3AC/24VDC/20A

SITOP PSU300S 20 A stabilized power supply input: 400-500 V 3 AC output: 24 V DC/20 A \*Ex approval no longer available\*

Input	
type of the power supply network	3-phase AC
supply voltage at AC	
minimum rated value	400 V
<ul> <li>maximum rated value</li> </ul>	500 V
initial value	340 V
full-scale value	550 V
design of input wide range input	Yes
operating condition of the mains buffering	at Vin = 400 V
buffering time for rated value of the output current in the event of power failure minimum	6 ms
operating condition of the mains buffering	at ∀in = 400 ∀
line frequency	
1 rated value	50 Hz
2 rated value	60 Hz
line frequency	47 63 Hz
input current	
<ul> <li>at rated input voltage 400 V</li> </ul>	1.2 A
at rated input voltage 500 V	_ 1A
current limitation of inrush current at 25 °C maximum	36 A
I2t value maximum	0.9 A <sup>2</sup> ·s
fuse protection type	none
• in the feeder	Required: 3-pole connected miniature circuit breaker 6 16 A characteristic C or circuit breaker 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489-listed, DIVQ)
Output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
<ul> <li>at output 1 at DC rated value</li> </ul>	24 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
<ul> <li>on slow fluctuation of input voltage</li> </ul>	0.5 %
on slow fluctuation of ohm loading	1 %
residual ripple	
maximum	150 mV
voltage peak	
maximum	240 mV
adjustable output voltage	24 28 V
product function output voltage adjustable	Yes

Data sheet 6EP1437-2BA20



#### SITOP PSU300S/3AC/24VDC/40A

SITOP PSU300S 40 A stabilized power supply input: 400-500 V 3 AC output: 24 V DC/40 A \*Ex approval no longer available\*

Input	
type of the power supply network	3-phase AC
supply voltage at AC	
minimum rated value	400 V
maximum rated value	500 V
● initial value	340 V
• full-scale value	550 V
design of input wide range input	Yes
operating condition of the mains buffering	at Vin = 400 V
buffering time for rated value of the output current in the event of power failure minimum	6 ms
operating condition of the mains buffering	at Vin = 400 V
line frequency	
1 rated value	50 Hz
2 rated value	60 Hz
line frequency	47 63 Hz
input current	
<ul> <li>at rated input voltage 400 V</li> </ul>	2 A
<ul> <li>at rated input voltage 500 V</li> </ul>	1.7 A
current limitation of inrush current at 25 °C maximum	60 A
I2t value maximum	3.4 A <sup>2</sup> ·s
fuse protection type	none
• in the feeder	Required: 3-pole connected miniature circuit breaker 10 16 A characteristic C or circuit breaker 3RV2011-1DA10 (setting 3 A) or 3RV2711-1DD10 (UL 489-listed, DIVQ)
Output	
voltage curve at output	Controlled, isolated DC voltage
output voltage at DC rated value	24 V
output voltage	
<ul> <li>at output 1 at DC rated value</li> </ul>	24 V
relative overall tolerance of the voltage	3 %
relative control precision of the output voltage	
on slow fluctuation of input voltage	1 %
<ul> <li>on slow fluctuation of ohm loading</li> </ul>	2 %
residual ripple	
maximum	150 mV
voltage peak	
• maximum	240 mV
adjustable output voltage	24 28 V
product function output voltage adjustable	Yes

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#### **SITOP lite**

## The low-cost basic power supply









#### Technology overview

Input	120/230 V AC (85132/170 264 V AC) 20 A: 120 – 230 V AC (85 264 V AC/88 370 V DC)
Output	24 V DC/2.5 A; 5 A; 10 A; 20 A
Output adjustment range Efficiency Status signaling	22.8 26.4 V DC Approx. 85 92% Green LED »24 V OK«
Temperature range  Certifications	0 +60 ° C (derating >45 ° C) 20 A: -25 +70 ° C

- Wide range input AC with manual switchover; 20 A version even features automatic switchover and DC compatibility
- Minimal installation width with no lateral clearance requirement to neighboring devices
- Green LED for »24 V OK«
- Parallel connection option for enhanced performance
- Provides all important functions at a favorable price - without compromising on quality or reliability



#### LOGO!Power

## The flat power supply for distribution boards



#### Technology overview

Input	AC 100 - 240 V (AC 85 264 V/DC 110 300 V)
Output	DC 5 V/3 A; 6,3 A, DC 12 V/0,9 A; 1,9 A; 4,5 A, DC 15 V/1,9 A; 4 A, DC 24 V/0,6 A; 1,3 A; 2,5 A; 4 A
Efficiency No-load loss Status signaling Temperature range	81 90% (24 V) <0.3 W LED for »Output voltage OK« -25 +70 ° C
Certifications	( 6 10 1 ECCE FM GROUP G
(Partial) certifications	nec & Uoyds Register

- Minimal width up to 18 mm
- High energy efficiency: <0.3 W power loss in</li> standby, efficiency over entire load range up to 90%
- For global use, operating temperature from -25 °C to +70 °C and international certificates
- Power reserve for reliable operation during start-up, as well as constant current in the event of overload
- · Current monitor for real-time measurement of output current
- Flexible mounting options for standard DIN rail or wall mounting
- Extensive portfolio up to 11 devices with 5 V/12 V/15 V and 24 V DC up to 100 W



