



SITOP power supply

# Small. Clever. LOGO!Power

Brochure

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usa.siemens.com/sitop



The fourth generation of world-proven miniature power supply units now offers even more power in an even smaller design. Each performance variant has been narrowed by a modular width of 18 mm, setting a new standard in its class. At the same time, the new LOGO!Power family also offers a host of additional functionalities, such as flexible mounting, a current monitor, improved energy efficiency and an extended temperature range. For supplying small 12 V and 24 V loads, the product range has been expanded to include two compact units with a width of only 18 mm.

Thanks to the flat, stepped profile design they share with LOGO! 8 modules, these reliable miniature power supplies are ideally suited for low installation depths, such as in distribution boards. The narrow width of the innovative switched-mode power supplies means they only require a small installation area, with wall mounting allowing installation in practically any position.

Thanks to their extended functionality and two additional variants, LOGO!Power can now be used even more flexibly and universally. With low no-load losses, they are also ideal in applications that predominantly operate in standby mode. The high efficiency level also ensures low power consumption over the entire load range. The load current can be output as a voltage value via a measuring point, thereby eliminating the need to disconnect the line, meaning that the loads can continue to be supplied without interruption. The extended temperature range also allows for rugged use in cold environments down to -25 °C.

When switching on, these mini power units can tap into reserves, such as for charging capacitive loads. Thanks to their wide range input for connection to power networks with AC or DC supplies, as well as extensive certifications, the devices can be used universally anywhere in the world.

To further increase availability, the 24 V LOGO!Power power supply units can also be optionally combined with DC UPS, redundancy and selectivity modules.

### The benefits at a glance

- Comprehensive spectrum
   Stabilized power supplies 5 V, 12 V, 15 V and 24 V
- up to 100 watts
   Low width
  Every performance class 18 mm smaller (25% to 50%)
- High energy efficiency Efficiency levels up to 90% over the entire power range and no-load losses below 0.3 W
- Global use
   Extended operating temperature range from
   -25 °C to +70 °C and international certificates
- Current monitor 1)
  Simple output current measuring without disconnecting the cable, i.e. without interrupting the DC supply
- Flexible mounting
   DIN rail or wall mounting in different mounting positions
- Operational reliability
   Problem-free connection of loads with high inrush currents thanks to power reserves when starting up as well as constant current in the event of overload

<sup>1)</sup> Not for devices with a width of 18 mm

# LOGO!Power - all the connections, functions and options at a glance Output 85 V ... 264 V AC 5 V / 12 V / 15 V / 24 V DC 110 V ... 300 V DC Labeling field **Current monitor:** Diagnostics LED "DC OK" Voltage measuring point for actual output current (50 mV at rated output current) DataMatrix Code (readable with Siemens Industry Service & Support App) Potentiometer for output voltage Standard mounting rail or No lateral installation clearances direct wall mounting required from neighboring equipment

## Packed with other features too:

- High efficiency level of up to 90%
- Low no-load losses of up to only 0.3 watts
- Operating temperature from -25°C to +70°C
- Comprehensive certifications

### Flexible assembly

In addition to the mounting fixture for 35 mm standard mounting rails, the innovative power supply units have 2 extendable lugs for screw mounting. What is more, direct mounting is possible in a range of installation positions, such as on ceilings or floors. There is no minimum lateral clearance from neighboring devices to keep to.

### Reliable operation

When the power supply is started up, power reserves allow the problem-free connection of loads with high inrush currents, such as capacitors or DC motors. During operation, the constant current ensures that the supply is not immediately switched off in the event of an overload. LOGO!Power comes with extensive certifications for universal and worldwide use

CE

CUUS

CPAUS

DNV-GL

Liberton

### **Current measurement without downtimes**

LOGO!Power power supply units with a width of 36 mm come with a measuring point (MP) which can be used to read out the actual output current as a voltage value. This simple voltage measurement technique requires no interruption of the line and by extension, of the load supply. Systems are able to continue operation uninterrupted.



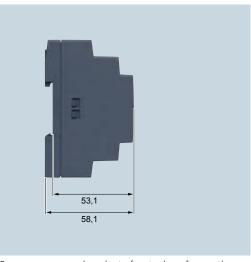
The LOGO!Power 24 V/2.5 A current monitor outputs a voltage of 50 mV at the rated current. In the case of the illustrated example measurement, a value of 20.7 mV is measured, corresponding to an output current of 1.035 A: 20.7 mV/50 mV x 2.5 A.

# The comprehensive portfolio:

Dimensions								
(W x H) in mm	18 x 90	36 x 90	54 x 90					
Rated output voltage/current								
5 V/		3.0 A	6.3 A					
12 V/	0.9 A	1.9 A	4.5 A					
15 V/		1.9 A	4.0 A					
24 V/	0.6 A	1.3 A	2.5 A					

Technical specifications	LOGO!Power 5 V		LOGO!Power 12 V			
	5 V/3 A	5 V/6.3 A	12 V/0.9 A	12 V/1.9 A	12 V/4.5 A	
Article No. 1)	6EP3310-6SB00-0AY0	6EP3311-6SB00-0AY0	6EP3320-6SB00-0AY0	6EP3321-6SB00-0AY0	6EP3322-6SB00-0AY0	
Input voltage, rated value	100 – 240 V AC		100 – 240 V AC			
– Range	85 264 V AC/110 300 V DC		85 264 V AC/110 300 V DC			
Mains buffering	> 40 ms (at 187 V)		> 40 ms (at 187 V)			
Line frequency, rated value	50/60 Hz		50/60 Hz			
Input current, rated value	0.36-0.22 A	0.71-0.37 A	0.3-0.2 A	0.53-0.30 A	1.13-0.61 A	
– Inrush current (25 °C)	< 26 A	< 50 A	< 20 A	< 25 A	< 50 A	
<ul> <li>Recommended miniature circuit breaker</li> </ul>	6 A or higher, characteristic B or 2 A or higher, characteristic C	10 A or higher, characteristic B or 6 A or higher, characteristic C	characteristic C teristic B or 6 A or		10 A or higher, characteristic B or 6 A or higher, characteristic C	
Output voltage, rated value	5 V DC		12 V DC			
- Tolerance	± 3 %		± 3 %			
– Adjustment range	4.6 V 5.4 V DC		none 10.5 V 16.1 V DC			
Output current, rated value	3.0 A	6.3 A	0.9 A	1.9 A	4.5 A	
Efficiency at rated values, approx.	76 %	80 %	78 %	81 %	87 %	
Power loss under no-load oper., appr.	< 0.3 W	< 0.3 W	< 0.3 W	< 0.3 W	< 0.3 W	
Connectable in parallel	Yes, 2 units		Yes, 2 units			
Electronic short-circuit protection	Yes, constant current		Yes, constant current			
Radio suppression level (EN 55022)	Class B		Class B			
Radio interference suppression (EN 61000-3-2)	Not applicable		Not applicable			
Degree of protection (EN 60529)	IP20		IP20			
Ambient temperature	-25 +70 °C		-25 +70 °C			
Dimensions (W x H x D) in mm	36 x 90 x 53	54 x 90 x 53	18 x 90 x 53	36 x 90 x 53	54 x 90 x 53	
Weight, approx.	0.12 kg	0.2 kg	0.07 kg	0.12 kg	0.2 kg	
Certifications	CE, CB Scheme, cULus, cURus, NEC Class 2, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, BV, LRS, ABS, EAC	Class 1 Div 2, FM, DNV	CE, CB Scheme, cULus, cURus, NEC Class 2, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, BV, LRS, ABS, EAC			





Depth of LOGO!Power power supply units to front edge of mounting rail and overall

LOGO!Power 15 V		LOGO!Power 24 V					
15 V/1.9 A	15 V/4 A	24 V/0.6 A	24 V/1.3 A	24 V/2.5 A	24 V/4 A		
6EP3321-6SB10-0AY0	6EP3322-6SB10-0AY0	6EP3330-6SB00-0AY0	6EP3331-6SB00-0AY0	6EP3332-6SB00-0AY0	6EP3333-6SB00-0AY0		
100 – 240 V AC		100 – 240 V AC					
85 264 V AC/110 300 V DC		85 264 V AC/110 300 V DC					
> 40 ms (at 187 V)		> 40 ms (at 187 V)					
50/60 Hz		50/60 Hz					
0.63-0.33 A	1.24-0.68 A	0.3-0.2 A	0.70-0.35 A	1.22-0.66 A	1.95-0.97 A		
< 25 A	< 55 A	< 20 A	< 25 A	< 52 A	< 31 A		
6 A or higher, characteristic B or 2 A or higher, characteristic C	10 A or higher, characteristic B or 6 A or higher, characteristic C	6 A or higher, characteristic B or 2 A or higher, characteristic C		10 A or higher, characteristic B or 6 A or higher, characteristic C			
15 V DC		24 V DC					
± 3 %		± 3 %					
10.5 V 16.1 V DC		none 22.2 26.4 V DC					
1.9 A	4.0 A	0.6 A	1.3 A	2.5 A	4.0 A		
83 %	88 %	81 %	86 %	90 %	89 %		
< 0.3 W	< 0.3 W	< 0.3 W	< 0.3 W	< 0.3 W	< 0.3 W		
Yes, 2 units		Yes, 2 units					
Yes, constant current		Yes, constant current					
Class B		Class B					
Not applicable		Not applicable	Yes				
IP20		IP20					
-25 +70 °C		-25 +70 °C					
36 x 90 x 53	54 x 90 x 53	18 x 90 x 53	36 x 90 x 53	54 x 90 x 53	72 x 90 x 53		
0.12 kg	0.2 kg	0.07 kg	0.12 kg	0.2 kg	0.29 kg		
CE, CB Scheme, cULus, cURus, NEC Class 2, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, BV, LRS, ABS, EAC		CE, CB Scheme, cULus, cU DNV GL, BV, LRS, ABS, SEM	CE, CB Scheme, cULus, cURus, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, BV, LRS, ABS, SEMI F47, EAC				

<sup>&</sup>lt;sup>1)</sup> Planned start of delivery: June 2016. The former product line (article no. 6EP13..., 3rd generation LOGO!Power) can be ordered until approx. end of 2017.

# Get more information

For more on the LOGO! Power: usa.siemens.com/sitop

Use the SITIOP Selection Tool to select the appropriate power supply:

siemens.com/sitop-selection-tool

Industry Mall for electronic ordering: usa.siemens.com/industrymall

SITOP contact:

usa.siemens.com/distributorlocator

Siemens Industry, Inc. 100 Technology Drive Alpharetta, GA 30005

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# **Security information**

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions only form one element of such a concept.

Customer is responsible to prevent unauthorized access to its plants, systems, machines and networks. Systems, machines and components should only be connected to the enterprise network or the internet if and to the extent necessary and with appropriate security measures (e.g. use of firewalls and network segmentation) in place.

Additionally, Siemens' guidance on appropriate security measures should be taken into account. For more information about industrial security, please visit http://www.siemens.com/industrialsecurity.

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends to apply product updates as soon as available and to always use the latest product versions. Use of product versions that are no longer supported, and failure to apply latest updates may increase customer's exposure to cyber threats.

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