

SIEMENS



SITOP power supply

Small. Clever.
LOGO!Power

Brochure

Edition
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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.

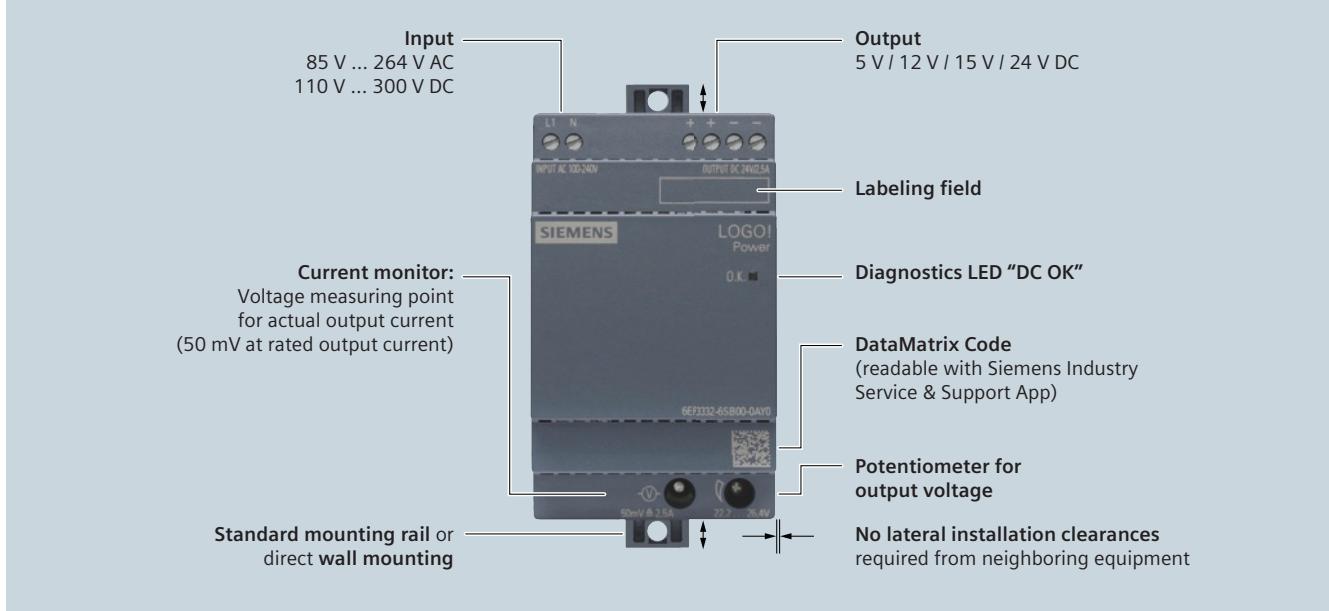
To further increase availability, the 24 V LOGO!Power power supply units can also be optionally combined with DC UPS, redundancy and selectivity modules.

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 monitor¹⁾**
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

¹⁾ Not for devices with a width of 18 mm

LOGO!Power – all the connections, functions and options at a glance



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



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: $20.7 \text{ mV} / 50 \text{ mV} \times 2.5 \text{ A}$.

The comprehensive portfolio:

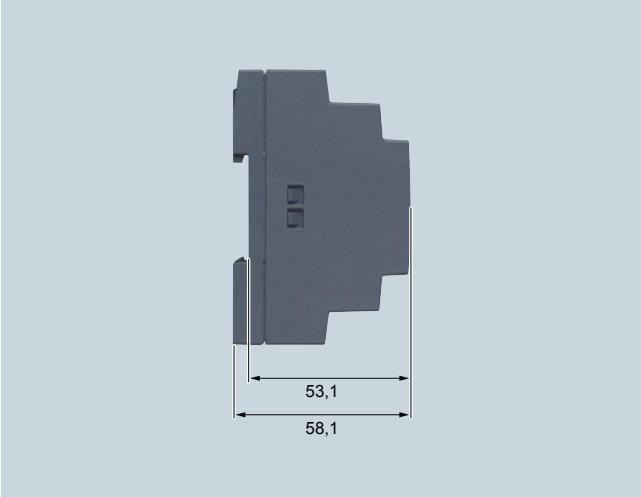


Dimensions

(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
– Recommended miniature circuit breaker	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
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	CE, CB Scheme, cULus, cURus, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, BV, LRS, ABS, EAC	CE, CB Scheme, cULus, cURus, NEC Class 2, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, BV, LRS, ABS, EAC		

¹⁾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.



72 x 90

4.0 A

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, cURus, NEC Class 2, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, BV, LRS, ABS, SEMI F47, EAC	CE, CB Scheme, cULus, cURus, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, BV, LRS, ABS, SEMI F47, EAC			CE, CB Scheme, cULus, cURus, ATEX, IECEx, Class 1 Div 2, FM, DNV GL, BV, LRS, ABS, SEMI F47, EAC

Get more information

More information on LOGO!Power:
www.siemens.com/logo-power

Information material for downloading:
www.siemens.com/sitop-infomaterial

SITOP Selection Tool for the right power supply:
www.siemens.com/sitop-selection-tool

Operating instructions for downloading:
www.siemens.com/sitop/manuals

More information on LOGO! 8 logic module
www.siemens.com/logo

CAx data (2D, 3D, circuit diagram macros) for downloading:
www.siemens.com/sitop-cax

Electronic ordering via Internet with the Industry Mall:
www.siemens.com/industrymall

Find your personal contact partner at:
www.siemens.com/automation-contact

Siemens AG
Process Industries and Drives
Process Automation
Postfach 48 48
90026 Nürnberg
Germany

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