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TIA Selection Tool

The smart configurator for the entire Siemens automation portfolio



Prime reasons for the TIA Selection Tool



Quick, easy and secure

Components can be selected, configured and ordered quickly, easily and securely from the Siemens automation portfolio.



Intelligent

Intelligent selection wizards check the compatibility of the configured components and enable error-free ordering.



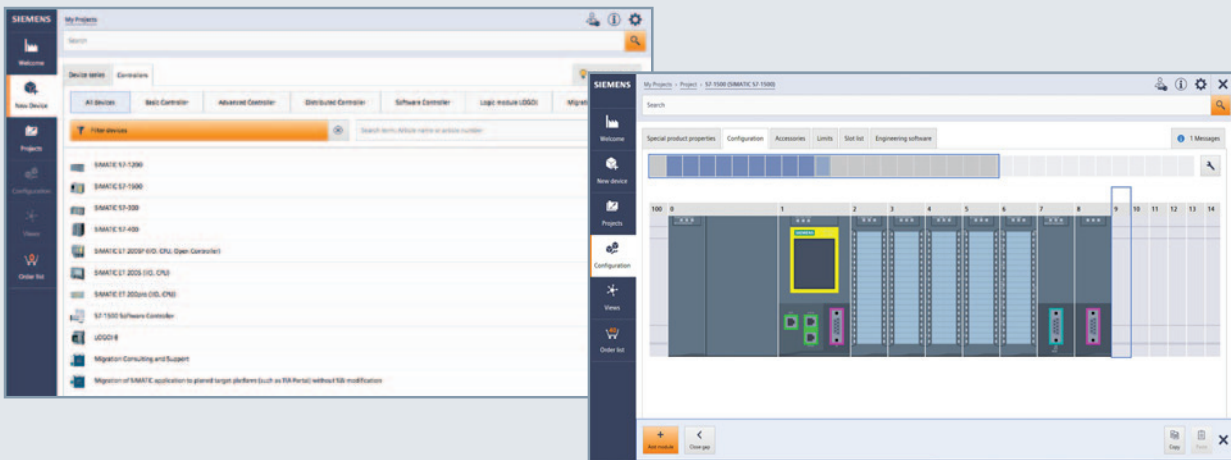
Clear

Required modules, devices and networks are automatically generated and clearly compared to one another.



Time-saving

Time savings of 80% in design – thanks to ease of use and intelligent support.



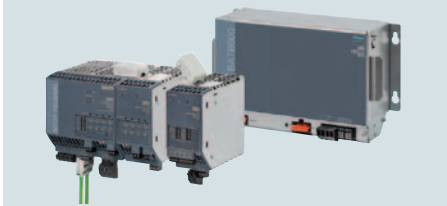
The TIA Selection Tool is a completely paperless solution.

Download it now:
www.siemens.com/tst

For more information, scan the QR code



Advanced power supplies



SITOP PSU8600 – the power supply system with complete TIA integration and open communication all the way to the cloud

Advanced power supplies



SITOP PSU8200 – the technology power supply for sophisticated solutions

Standard power supplies



SITOP PSU6200 – the all-round power supply for a wide variety of applications

Standard power supplies



SITOP smart – the high-performance standard power supply

Basic power supplies



SITOP lite – the low-cost basic power supply

Basic power supplies



LOGO!Power – the flat power supply for distribution boards

Basic power supplies



SITOP compact – the slim power supply for switchboxes

SIMATIC design power supplies



The optimum power supply for SIMATIC S7 and more

DC/DC converters



Stable supply despite fluctuating DC voltage

Special designs and applications



Designed for special tasks and conditions

**SITOP DC-UPS
Uninterruptible Power Supply**



SITOP UPS500 with capacitors
Protection against power failure on the input side through buffering into the minutes range

SITOP UPS1600 with SITOP PSU8600 battery modules plus DC-UPS
Protection against power failure on the input side through buffering into the hours range. DC UPS with Ethernet/PROFINET – open and systemintegrated in TIA

Add-on modules



Redundancy modules
Protection against power supply failure by means of redundant configuration of the power supply unit

Selectivity modules
Protection against overload and short circuit by means of electronic protection of 24 V feeds

Buffer modules
Protection against power failure in the seconds range

SITOP inrush current limiters
Protecting your loads

Part number selection table

	Input voltage	Output current	Advanced power supplies		Standard power supplies		Basic power supplies
			SITOP PSU8600	SITOP PSU8200	SITOP PSU6200	SITOP smart	SITOP lite
Output voltage 24 V DC	1-phase 120 V, 230 V AC	0.6 A			6EP3331-7SB00-0AX0		
		1.3 A					
		2 A					
		2.5 A			6EP3332-7SB00-0AX0	6EP1332-2BA20	6EP1332-1LB00
		3 A					
		3.5 A					
		3.7 A			6EP3333-7LB00-0AX0		
		4 A					
		5 A		6EP1333-3BA10 6EP3333-8SB00-0AY0	6EP3333-7SB00-0AX0	6EP1333-2BA20	6EP1333-1LB00
		6.2 A					
		8 A					
		10 A		6EP1334-3BA10 6EP3334-8SB00-0AY0	6EP3334-7SB00-3AX0	6EP1334-2BA20 6EP1334-2AA01-0AB0	6EP1334-1LB00
		12.5 A					
		20 A		6EP1336-3BA10	6EP3336-7SB00-3AX0	6EP1336-2BA10	6EP1336-1LB00
	40 A		6EP3337-8SB00-0AY0				
	3-phase 400–500 V AC	5 A		6EP1333-3BA10 ¹⁾		6EP1433-2BA20	
		8 A					
		10 A		6EP1334-3BA10 ¹⁾		6EP1434-2BA20	
		17 A					
		20 A	6EP3436-8SB00-2AY0	6EP3436-8SB00-0AY0		6EP1436-2BA10	
		20 A/4 x 5 A	6EP3436-8MB00-2CY0				
		30 A					
		40 A	6EP3437-8SB00-2AY0	6EP3437-8SB00-0AY0		6EP1437-2BA20	
	40 A/4 x 10 A	6EP3437-8MB00-2CY0					
	12 V DC	4 A					
	24–110 V DC	2 A					
24 V DC	5 A						
	10 A						
48 V DC	3.5 A						
	5 A						
	10 A						
110–300 V DC 120–240 V DC	0.6 A			6EP3331-7SB00-0AX0			
	1.3 A			6EP3332-7SB00-0AX0			
	2.5 A			6EP3333-7LB00-0AX0			
	3.7 A						
	4 A						
	5 A			6EP3333-7SB00-0AX0			
	10 A			6EP3334-7SB00-3AX0			
88...350 (370) V DC 600 V DC	20 A		6EP1336-3BA10			6EP1336-1LB00	
	20 A						
	20 A						
Output voltage 5, 12, 15, 48, ... V DC	1-phase 120 V, 230 V AC	5 V/3 A					
		5 V/6.3 A					
		12 V/0.9 A					
		12 V/1.9 A					
		12 V/2.0 A			6EP3321-7SB00-0AX0		
		12 V/3.0 A					
		12 V/4.5 A					
		12 V/6.5 A					
		12 V/7 A			6EP3323-7SB00-0AX0	6EP1322-2BA00	
		12 V/8.3 A					
		12 V/12 A			6EP3324-7SB00-3AX0		
		12 V/14 A				6EP1323-2BA00	
		15 V/1.9 A					
		15 V/4 A					
	48 V/5 A						
	3–52 V/2–10 A						
	2 x 15 V/3.5 A						
	24 V DC	12 V/2.5 A					
		12 V/8 A					
		12 V/15 A					
	3-phase 400–500 V AC	4–28 V/20 A	6EP3436-8SB00-2AY0				
		4–28 V/4 x 5 A	6EP3436-8MB00-2CY0				
		4–28 V/40 A	6EP3437-8SB00-2AY0				
		4–28 V/4 x 10 A	6EP3437-8MB00-2CY0				
		12 V/20 A					
		36 V/13 A		6EP3446-8SB10-0AY0			
48 V/10 A			6EP3446-8SB00-0AY0				
48 V/20 A		6EP3447-8SB00-0AY0					

1) Connection to two phases 230–500 V AC – sheet 24/25, SITOP PSU200M 1-/2-phase

Gray: more information in the Industry Mall

Part number selection table (cont.)

	Input voltage	Output current	Basic power supplies (cont.)		SIMATIC design	SITOP DC/DC converter	Special designs
			LOGO!Power	SITOP compact			
Output voltage 24 V DC	1-phase 120 V, 230 V AC	0.6 A	6EP3330-6SB00-0AY0	6EP1331-5BA00			
		1.3 A	6EP3331-6SB00-0AY0	6EP1331-5BA10			
		2 A			6ES7307-1BA01-0AA0		6EP1331-1LD00
		2.5 A	6EP3332-6SB00-0AY0	6EP1332-5BA00	6EP1332-1SH71		
		3 A			6EP1332-4BA00		6EP1332-1LD00
		3.5 A			6EP1332-1SH31		
		3.7 A		6EP1332-5BA20			
		4 A	6EP3333-6SB00-0AY0	6EP1332-5BA10			6EP1332-1LD10
		5 A			6ES7307-1EA01-0AA0		6EP1333-1AL12
					6ES7307-1EA80-0AA0		6EP1333-7CA00
					6EP7133-6AB00-0BNO		
			6.2 A				6EP1333-1LD00
			8 A			6EP1333-4BA00	6EP1334-7CA00
			10 A			6ES7307-1KA02-0AA0	6EP1334-1AL12
						6EP7133-6AE00-0BNO	6EP3343-0SA00-0AY0
			12.5 A				6EP1334-1LD00
		20 A					
		40 A					
	3-phase 400–500 V AC	5 A					6EP1433-0AA00
		8 A			6ES7148-4PC00-0HA0		6ES7148-4PC00-0HA0
		10 A					
		17 A					6EP3436-8UB00-0AY0
		20 A					
		20 A/4 x 5 A					
		30 A					6EP3437-8UB00-0AY0
		40 A					6EP3437-8UB00-0AY0
	40 A/4 x 10 A						
	12 V DC	4 A				6EP3133-0TA10-0AY0	
	24–110 V DC	2 A			6ES7305-1BA80-0AA0		6EP1732-0AA0 (as of 48 V DC)
	24 V DC	5 A				6EP3133-0TA00-0AY0	
		10 A				6EP3134-0TA00-0AY0	
	48 V DC	3.5 A				6EP3233-0TA10-0AY0	
5 A					6EP3233-0TA00-0AY0		
10 A					6EP3234-0TA00-0AY0		
0.6 A		6EP3330-6SB00-0AY0	6EP1331-5BA00				
110–300 V DC 120–240 V DC	1.3 A	6EP3331-6SB00-0AY0	6EP1331-5BA10				
	2.5 A	6EP3332-6SB00-0AY0	6EP1332-5BA00				
	3.7 A			6EP1332-5BA20			
	4 A	6EP3333-6SB00-0AY0	6EP1332-5BA10				
	5 A						
	10 A						
	20 A						
	20 A						
88...350 (370) V DC 600 V DC	20 A				6EP1536-3AA00		
	20 A						
Output voltage 5, 12, 15, 48, ... V DC	1-phase 120 V, 230 V AC	5 V/3 A	6EP3310-6SB00-0AY0				
		5 V/6.3 A	6EP3311-6SB00-0AY0				
		12 V/0.9 A	6EP3320-6SB00-0AY0				
		12 V/1.9 A	6EP3321-6SB00-0AY0				
		12 V/2.0 A		6EP1321-5BA00			
		12 V/3.0 A					6EP1321-1LD00
		12 V/4.5 A	6EP3322-6SB00-0AY0				
		12 V/6.5 A		6EP1322-5BA10			
		12 V/7 A					
		12 V/8.3 A					6EP1322-1LD00
		12 V/12 A					
		12 V/14 A					
		15 V/1.9 A	6EP3321-6SB10-0AY0				
		15 V/4 A	6EP3322-6SB10-0AY0				
		48 V/5 A					6EP3344-0SB00-0AY0
		3–52 V/2–10 A					6EP3343-0SA00-0AY0
	2 x 15 V/3.5 A					6EP3323-0SA00-0BY0	
	24 V DC	12 V/2.5 A				6EP1621-2BA00	
		12 V/8 A				6EP3123-0TA00-0AY0	
		12 V/15 A				6EP3124-0TA00-0AY0	
		4–28 V/20 A					
	3-phase 400–500 V AC	4–28 V/4 x 5 A					
		4–28 V/40 A					
		4–28 V/4 x 10 A					
		12 V/20 A					6EP3424-8UB00-0AY0
		36 V/13 A					
		48 V/10 A					
		48 V/20 A					

Overview

The three-phase basic units of the SITOP PSU8600 power supply system accommodate within their extremely compact width an Ethernet/PROFINET interface as well as four individually parameterizable outputs (voltage and current threshold) with selective monitoring.

Without wiring overhead, further modules from the modular system can be added to expand the number of outputs (CNX8600), to increase the mains buffering time (BUF8600), or to buffer longer power failures (UPS8600 with BAT8600) according to requirements.

Comprehensive diagnostic and maintenance information is available via PROFINET. It can be evaluated directly in SIMATIC S7 and visualized in SIMATIC WinCC.

Energy management is also optimally supported by collecting the energy data for each output as well as individual activation and deactivation of the outputs via PROFlenergy.

The integrated OPC UA server also allows direct integration into automation applications with OPC UA clients made by different manufacturers, e.g. of controllers or PCs. Not only the parameter assignment but also the diagnostics of the power supply system are possible via the open interface.

- Three-phase wide-range input 400 to 500 V 3 AC for global use
- Extremely slim design with very high efficiency of up to 94%
- Versions with a configurable output with up to 20 A or 40 A and selective monitoring.
- Versions with four integrated, individually configured outputs with up to 5 A or 10 A each and selective monitoring
- Voltage and response threshold can be set separately and are infinitely adjustable for each output
- Extra power with 1.5 times the rated current (5 s/min) for brief functional overload
- Integrated Ethernet/PROFINET interface (2 ports)
- Easy configuration in the TIA Portal
- Comprehensive diagnostic information during operation
- Outputs can be deactivated and activated selectively via PROFlenergy
- Individual expansion options from the modular system (CNX8600 expansion modules, BUF8600 buffer modules, or UPS8600 with BAT8600 for buffering longer power failures) without wiring overhead

Selection and ordering data

Rated current I_a rated	Inputs Rated voltage U_e rated	Outputs Rated voltage U_a rated	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
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24 V power supplies



6EP3437-8MB00-2CY0

SITOP PSU8600 power supply with Ethernet/PROFINET interface

20 A	400 ... 500 V 3 AC	4 ... 28 V DC	80 x 125 x 150	1	6EP3436-8SB00-2AY0	
40 A			125 x 125 x 150	1	6EP3437-8SB00-2AY0	
20 A (4 x 5 A)			100 x 125 x 150	1	6EP3436-8MB00-2CY0	
40 A (4 x 10 A)			125 x 125 x 150	1	6EP3437-8MB00-2CY0	



6EP4436-8XB00-0CY0

Modular system, expansion of outputs (CNX8600)

4 x 5 A	Infeed from PSU8600 basic unit via connector plug	4 ... 28 V DC	60 x 125 x 150	1	6EP4436-8XB00-0CY0	
4 x 10 A			60 x 125 x 150	1	6EP4437-8XB00-0CY0	
8 x 2.5 A			100 x 125 x 150	1	6EP4436-8XB00-0DY0	



6EP4297-8HB00-0XY0

Modular system, buffering (BUF8600)

100 ms/40 A	Infeed from PSU8600 basic unit via connector plug	--	60 x 125 x 150	1	6EP4297-8HB00-0XY0	
300 ms/40 A			125 x 125 x 150	1	6EP4297-8HB10-0XY0	
4 s/40 A			60 x 125 x 150	1	6EP4293-8HB00-0XY0	
10 s/40 A			125 x 125 x 150	1	6EP4295-8HB00-0XY0	

Rated current $I_{a \text{ rated}}$	Inputs Rated voltage $U_{e \text{ rated}}$	Outputs Rated voltage $U_{a \text{ rated}}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
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24 V power supplies (continued)

Modular system, buffering of longer power failures (UPS8600 with BAT8600)



6EP4197-8AB00-0XY0

**UPS8600
UPS module
960W**

Infeed from
PSU8600 basic
unit via connector
plug

48 V DC

60 x 125 x 150

X

6EP4197-8AB00-0XY0



6EP4143-8JB00-0XY0

**BAT8600 LiFePo4
battery module
264 Wh**

Energy exchange
with UPS8600

48 V DC

322 x 187 x 110

X

6EP4143-8JB00-0XY0



6EP4145-8GB00-0XY0

**BAT8600 Pb
battery module
380 Wh**

48 V DC

322 x 187 x 110

X

6EP4145-8GB00-0XY0

Overview

SITOP modular are the technology power supplies for demanding solutions and provide maximum functionality for use in complex systems and machines.

The wide-range input enables connection to any power system in the world and ensures high safety even in the event of extreme voltage fluctuations. The power boost provides up to three times the rated current for brief periods, and with the extra power of 150%, loads with high power consumption can be connected without problems. And in the event of an overload there is a choice between constant current or automatic restart. The very high degree of efficiency keeps energy consumption and heating in the control cabinet low, and the compact metal housing also saves space.

To further increase 24 V availability, the SITOP modular power supply units can be combined with buffer, UPS, redundancy and selectivity modules, [see pages 15/6 and 15/7](#).

For demanding applications from 5 A to 40 A







- 48 V/10 A and 20 A enable small conductor cross-sections
- Extremely slim design – no lateral clearances required
- Extra power function for brief operational overloads
- Power boost for tripping protective devices
- Selectable short-circuit behavior
- Optional symmetrical load distribution for parallel operation
- Very high degree of efficiency up to 95%
- Operating status indicated by 3 LEDs
- Wide temperature range from -25 °C to +70 °C
- Extensive certification such as cULus, ATEX, IECEx or GL

Selection and ordering data

Rated current $I_{a \text{ rated}}$	Inputs Rated voltage $U_e \text{ rated}$	Outputs Rated voltage $U_a \text{ rated}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
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24 V power supplies

SITOP modular, single-phase and single- and two-phase

	5 A	120/230 V AC (85 ... 132 V AC/ 170 ... 264 V AC)	24 V DC ± 3%	45 x 125 x 125	1	6EP3333-8SB00-0AY0
	10 A	120/230 V AC (85 ... 132 V AC/ 170 ... 264 V AC)	24 V DC ± 3%	55 x 125 x 125	1	6EP3334-8SB00-0AY0
	20 A	120 ... 230 V AC (85 ... 275 V AC or 88 ... 350 V DC)	24 V DC ± 3%	90 x 125 x 125	1	6EP1336-3BA10
	40 A	120/230 V AC (85 ... 132 V AC/ 170 ... 264 V AC)	24 V DC ± 3%	145 x 145 x 150	1	6EP3337-8SB00-0AY0
	5 A	120 ... 230 V AC/ 230 ... 500 V AC (85 ... 264 V AC/ 176 ... 550 V AC)	24 V DC ± 3%	70 x 125 x 121	1	6EP1333-3BA10 6EP1333-3BA10-8AC0*
	10 A	120 ... 230 V AC/ 230 ... 500 V AC (85 ... 264 V AC/ 176 ... 550 V AC)	24 V DC ± 3%	70 x 125 x 121	1	6EP1334-3BA10 6EP1334-3BA10-8AB0*

*Protective coating

SITOP power supplies



SITOP PSU8200

Single-, two- and three-phase

Rated current $I_{a \text{ rated}}$	Inputs Rated voltage $U_{e \text{ rated}}$	Outputs Rated voltage $U_{a \text{ rated}}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
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24 V power supplies (continued)

SITOP modular, three-phase

	20 A	400 ... 500 V 3 AC (320 ... 575 V 3 AC)	24 V DC ± 3%	70 x 125 x 125	1	6EP3436-8SB00-0AY0
	40 A	400 ... 500 V 3 AC (320 ... 575 V 3 AC)	24 V DC ± 3%	135 x 145 x 150	1	6EP3437-8SB00-0AY0



36 V power supplies

SITOP modular, three-phase

	13 A	400 ... 500 V 3 AC (320 ... 575 V 3 AC)	36 V DC ± 3%	70 x 125 x 125	1	6EP3446-8SB10-0AY0
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48 V power supplies

SITOP modular, three-phase

	10 A	400 ... 500 V 3 AC (320 ... 575 V 3 AC)	48 V DC ± 3%	70 x 125 x 125	1	6EP3446-8SB00-0AY0
	20 A	400 ... 500 V 3 AC (320 ... 575 V 3 AC)	48 V DC ± 3%	135 x 145 x 150	1	6EP3447-8SB00-0AY0

15

POWER SUPPLIES /
LOGIC MODULES

Overview

The SITOP PSU6200 product family is the new standard power supply for customers with extreme technical requirements regarding reliability, efficiency and integration.

The stabilized single-phase power supplies with a wide input range of 120–230 V AC nominal voltage and 120–240 V DC are available with an output voltage of 12 V in three performance classes and with an output voltage of 24 V in six performance classes. The high level of efficiency across the entire load range, as well as the minimal no-load losses, result in lower overall energy consumption. For power supply modules up to 10 A, a diagnostics LED indicates DC o.k.; this information is also reported by means of a relay for devices of 3.7 A and above.

To further increase the 24 V availability, the SITOP PSU6200 power supplies can be combined with buffer, DC UPS, redundancy and selectivity modules, see pages 15/6 and 15/7.

- Diagnostic monitor from 10 A output power
- Diagnostics interface from 10 A output power
- Constant current
- Robust AC input
- DC capability / wide-range input
- Narrow overall width
- Push-in terminals
- Selectivity and redundancy modules

Selection and ordering data

Rated current $I_{a \text{ rated}}$	Inputs Rated voltage $U_e \text{ rated}$	Outputs Rated voltage $U_a \text{ rated}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
12 V power supplies						
<i>SITOP PSU6200, single-phase</i>						
2 A NEW	120/230 V AC (85 ... 264 V AC) 120/240 V DC (110 ... 275 V DC)	12 V DC ± 3%	25 x 100 x 88	1	6EP3321-7SB00-0AX0	
7 A NEW	120/230 V AC (85 ... 164 V AC) 120/240 V DC (99 ... 275 V DC)	12 V DC ± 3%	35 x 135 x 125	1	6EP3323-7SB00-0AX0	
12 A NEW	120/230 V AC (85 ... 264 V AC) 110/240 V DC (85 ... 275 V DC)	12 V DC ± 3%	45 x 135 x 125	1	6EP3324-7SB00-3AX0	
24 V power supplies						
<i>SITOP PSU6200, single-phase</i>						
1.3 A NEW	120/230 V AC (85 ... 264 V AC) 120/240 V DC (110 ... 275 V DC)	24 V DC ± 3%	25 x 100 x 88	1	6EP3331-7SB00-0AX0	
2.5 A NEW	120/230 V AC (85 ... 264 V AC) 120/240 V DC (110 ... 275 V DC)	24 V DC ± 3%	40 x 100 x 88	1	6EP3332-7SB00-0AX0	
3.7 A NEW	120/230 V AC (85 ... 264 V AC) 110/240 V DC (99 ... 275 V DC)	24 V DC ± 3%	35 x 135 x 125	1	6EP3333-7LB00-0AX0	

SITOP power supplies




SITOP PSU6200

Single-phase

Rated current $I_{a \text{ rated}}$	Inputs Rated voltage $U_{e \text{ rated}}$	Outputs Rated voltage $U_{a \text{ rated}}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
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24 V power supplies (continued)

SITOP PSU6200, single-phase

 6EP3333-7SB00-0AX0	5 A NEW	120/230 V AC (85 ... 264 V AC) 120/240 V DC (99 ... 275 V DC)	24 V DC ± 3%	35 x 135 x 125	1	6EP3333-7SB00-0AX0
	 6EP3334-7SB00-3AX0	10 A NEW	120/230 V AC (85 ... 264 V AC) 120/240 V DC (85 ... 275 V DC)	24 V DC ± 3%	45 x 135 x 125	1
 6EP3336-7SB00-3AX0		20 A NEW	120/230 V AC (85 ... 264 V AC) 110/240 V DC (85 ... 275 V DC)	24 V DC ± 3%	70 x 135 x 155	1

Overview

SITOP smart are the universal and powerful standard power supplies for mechanical and plant engineering.

Despite their compact design, they offer excellent overload behavior: Thanks to a power boost of 150%, loads with high power consumption can be connected without any problems and the permanent overload capability of 120% offers power reserves in case of expansions.

The high degree of efficiency results in low energy consumption and minimal heat generation inside the control cabinet.

To further increase 24 V availability, the SITOP smart power supplies can be combined with buffer, DC-UPS, redundancy and selectivity modules, [see pages 15/6 and 15/7](#).

- Single- and three-phase standard applications up to 40 A
- Compact design, no lateral clearances required
- Extra power with 1.5 times the rated current (5 s/min) for brief operational overloads
- Permanent overload capability with 1.2 times the rated current up to 45 °C ambient temperature
- Adjustable output voltage for compensating voltage drops
- Parallel switching option to increase performance
- High degree of efficiency up to 91.5%
- Wide temperature range from -25 °C or 0 °C to +70 °C
- Comprehensive certification such as cULus, cCSAus, ATEX, IECEx and GL

Selection and ordering data

Rated current I_a rated	Inputs Rated voltage U_e rated	Outputs Rated voltage U_a rated	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
SITOP smart 1-phase						
2.5 A	120/230 V AC (85 ... 132 V AC/ 170 ... 264 V AC)	24 V DC ± 3%	32.5 x 125 x 120	1	6EP1332-2BA20	
Limitation of input current harmonics according to IEC 61000-3-2						
5 A	120/230 V AC (85 ... 132 V AC/ 170 ... 264 V AC)	24 V DC ± 3%	50 x 125 x 120	1	6EP1333-2BA20	
Limitation of input current harmonics according to IEC 61000-3-2						
7 A	120/230 V AC (85 ... 132 V AC/ 170 ... 264 V AC)	12 V DC ± 3%	50 x 125 x 120	1	6EP1322-2BA00	
10 A	120/230 V AC (85 ... 132 V AC/ 170 ... 264 V AC)	24 V DC ± 3%	70 x 125 x 120	1	6EP1334-2BA20	
14 A	120/230 V AC (85 ... 132 V AC/ 170 ... 264 V AC)	12 V DC ± 3%	70 x 125 x 120	1	6EP1323-2BA00	
20 A	120/230 V AC (85 ... 132 V AC/ 176 ... 264 V AC)	24 V DC ± 3%	115 x 145 x 150	1	6EP1336-2BA10	



6EP1332-2BA20



6EP1333-2BA20



6EP1322-2BA00



6EP1334-2BA20



6EP1323-2BA00



6EP1336-2BA10

Selection and ordering data

Rated current $I_{a \text{ rated}}$	Inputs Rated voltage $U_e \text{ rated}$	Outputs Rated voltage $U_a \text{ rated}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
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SITOP smart 3-phase



6EP1433-2BA20

5 A	400 ... 500 V 3 AC (340 ... 550 V 3 AC)	24 V DC ± 3%	50 x 125 x 120	1	6EP1433-2BA20	
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6EP1434-2BA20

10 A	400 ... 500 V 3 AC (340 ... 550 V 3 AC)	24 V DC ± 3%	70 x 125 x 120	1	6EP1434-2BA20	
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6EP1436-2BA10

20 A	400 ... 500 V 3 AC (340 ... 550 V 3 AC)	24 V DC ± 3%	90 x 145 x 150	1	6EP1436-2BA10	
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6EP1437-2BA20

40 A	400 ... 500 V 3 AC (340 ... 550 V 3 AC)	24 V DC ± 3%	150 x 145 x 150	1	6EP1437-2BA20	
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Overview

The SITOP lite power supplies are designed for standard requirements in industrial environments and offer all important functions at a favorable price.





The wide range input with manual switchover supports connection to a variety of single-phase supply systems.

Thanks to the slim design, the power supplies have a low space requirement on the standard mounting rail, and their excellent degree of efficiency ensures low thermal losses in the control cabinet.

To further increase 24 V availability, the SITOP lite power supplies can be combined with DC UPS, redundancy and selectivity modules, [see pages 15/6 and 15/7](#).

- 24 V/2.5 A, 5 A, 10 A and 20 A for industrial applications with standard requirements
- Single-phase wide range input with manual switchover
- Narrow width
- Excellent degree of efficiency
- Green LED for "24 V OK"
- Can be switched in parallel
- No lateral installation clearances required
- Ambient temperature range from 0 °C to 60 °C (from 45 °C with derating)
- Cooling through natural convection
- Short-circuit and overload protection
- Certification in accordance with CE, cULus and CB

Selection and ordering data

Version	Inputs Rated voltage $U_{e \text{ rated}}$	Outputs Rated voltage $U_{a \text{ rated}}$	Rated current $I_{a \text{ rated}}$ A	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
24 V power supplies							
 6EP1332-1LB00	2.5 A 120/230 V AC (93 ... 132 V AC/ 187 ... 264 V AC)	24 V DC ± 3%	2.5 A	32.5 x 125 x 120	1	6EP1332-1LB00	
 6EP1333-1LB00	5 A 120/230 V AC (93 ... 132 V AC/ 187 ... 264 V AC)	24 V DC ± 3%	5 A	50 x 125 x 120	1	6EP1333-1LB00	
 6EP1334-1LB00	10 A 120/230 V AC (93 ... 132 V AC/ 187 ... 264 V AC)	24 V DC ± 3%	10 A	70 x 125 x 120	1	6EP1334-1LB00	
 6EP1336-1LB00	20 A 100/240 V AC or DC (85...264 V AC/ 88...370 V DC)	24 V DC ± 3%	20 A	110 x 125 x 125	1	6EP1336-1LB00	

Overview

Our new miniature power supply units in the same design as the logic modules offer great performance in the smallest of spaces: Efficiency has been improved across the entire load range, and the low power losses in no-load operation ensure efficient operation.





The wide-range input for single-phase networks as well as operation with direct voltage, the wide operating temperature range, comprehensive certifications as well as the power reserve when switching on capacitive loads makes them suitable for universal use.

These reliable power supplies with their flat, stepped profile can be used extremely flexibly in numerous applications such as in distribution boards, for example.

To further increase 24 V availability, the LOGO!Power power supply units can be combined with DC-UPS, redundancy and selectivity modules, [see pages 15/6 and 15/7](#).

- Single-phase wide range input from 85 V to 264 V AC and 110 V to 300 V DC
- Low width from a minimum of 18 mm to a maximum of 72 mm saves space in the control cabinet
- Higher efficiency level up to 90% over the entire power range and ERP-compliant no-load losses of < 0.3 W
- Flexible mounting with standard rail or wall mounting in different installation positions
- Load monitoring due to real-time measurement of the output current without disconnecting the cable, i.e. without interrupting the DC supply
- Reliable thanks to assured connection of heavy loads when starting up as well as constant current in the event of overload
- Wide temperature range from -25 °C to +70 °C
- Extensive certification such as cULus, CB, FM, ATEX, cCSAus Class I Div. 2, GL and ABS

Selection and ordering data

	Version	Inputs Rated voltage $U_{e \text{ rated}}$	Outputs Rated voltage $U_{a \text{ rated}}$	Rated current $I_{a \text{ rated}}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
5 V power supplies								
	3 A	100 ... 240 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	5 V DC ± 3%	3 A	36 x 90 x 53	1	6EP3310-6SB00-0AY0	
	6.3 A	100 ... 240 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	5 V DC ± 3%	6.3 A	54 x 90 x 53	1	6EP3311-6SB00-0AY0	
12 V power supplies								
	0.9 A	100 ... 240 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	12 V DC ± 3%	0.9 A	18 x 90 x 53	1	6EP3320-6SB00-0AY0	
	1.9 A	100 ... 240 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	12 V DC ± 3%	1.9 A	36 x 90 x 53	1	6EP3321-6SB00-0AY0	
	4.5 A	100 ... 240 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	12 V DC ± 3%	4.5 A	54 x 90 x 53	1	6EP3322-6SB00-0AY0	
15 V power supplies								
	1.9 A	100 ... 240 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	15 V DC ± 3%	1.9 A	36 x 90 x 53	1	6EP3321-6SB10-0AY0	
	4 A	100 ... 240 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	15 V DC ± 3%	4 A	54 x 90 x 53	1	6EP3322-6SB10-0AY0	
24 V power supplies								
	0.6 A	100 ... 240 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	24 V DC ± 3%	0.6 A	18 x 90 x 53	1	6EP3330-6SB00-0AY0	
	1.3 A	100 ... 240 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	24 V DC ± 3%	1.3 A	36 x 90 x 53	1	6EP3331-6SB00-0AY0	
	2.5 A	100 ... 240 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	24 V DC ± 3%	2.5 A	54 x 90 x 53	1	6EP3332-6SB00-0AY0	
	4 A	100 ... 240 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	24 V DC ± 3%	4 A	72 x 90 x 53	1	6EP3333-6SB00-0AY0	

SITOP power supplies

SITOP compact

Single-phase

Overview

SITOP compact is a series of power supplies for the low performance range. Thanks to the extremely space-saving slim design, they are especially suited to distributed applications in switchboxes or in small control cabinets.

The switching power supply units are characterized by their low power loss over the entire load range. With losses being extremely small even in no-load operation, these units are predestined for supplying machines and plants which are often in stand-by mode, for example. The switching power supply units have a wide range input for AC and DC networks, with plug-in terminals that facilitate easy electrical connection.

To further increase 24 V availability, the SITOP compact power supply units can be combined with DC-UPS, redundancy and selectivity modules, [see pages 15/6 and 15/7](#).

- Small mounting area thanks to narrow design
- Single-phase wide range input for 85 V to 264 V AC and 110 V to 300 V DC
- High degree of efficiency over the entire load range, up to 28% energy savings compared to comparable units
- Low energy consumption in no-load operation and stand-by, possible energy savings of up to 53%
- Adjustable output voltage
- Green LED for "Output voltage OK"
- Plug-in terminals
- Temperature range from -20 °C to +70 °C

Extensive certification, such as UL, ATEX, GL and NEC Class 2 (24 V/3.7 A)

Selection and ordering data

Version	Inputs Rated voltage $U_{e \text{ rated}}$	Outputs Rated voltage $U_{a \text{ rated}}$	Rated current $I_{a \text{ rated}}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
12 V power supplies							
 6EP1321-5BA00	2 A	100 ... 230 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	12 V DC ± 3%	2 A	30 x 80 x 100	1	6EP1321-5BA00
 6EP1322-5BA10	6.5 A	100 ... 230 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	12 V DC ± 3%	6.5 A	52.5 x 80 x 100	1	6EP1322-5BA10
24 V power supplies							
 6EP1331-5BA00	0.6 A	100 ... 230 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	24 V DC ± 3%	0.6 A	22.5 x 80 x 100	1	6EP1331-5BA00
 6EP1331-5BA10	1.3 A	100 ... 230 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	24 V DC ± 3%	1.3 A	30 x 80 x 100	1	6EP1331-5BA10
 6EP1332-5BA00	2.5 A	100 ... 230 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	24 V DC ± 3%	2.5 A	45 x 80 x 100	1	6EP1332-5BA00
 6EP1332-5BA10	4 A	100 ... 230 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	24 V DC ± 3%	4 A	52.5 x 80 x 100	1	6EP1332-5BA10
 6EP1332-5BA20	3.7 A NEC Class 2	120 ... 230 V AC or DC (85 ... 264 V AC/ 110 ... 300 V DC)	24 V DC ± 3%	3.7 A	52.5 x 80 x 100	1	6EP1332-5BA20

Overview

The original SIMATIC power supplies harmonize perfectly with the PLC network in terms of their design and functionality. This ensures that controller and power supply are perfectly matched.

In addition, the start up and power reserves of the power supply units meet the requirements of the respective controllers. The mounting options of both components are the same. The issued certifications and the permitted temperature range allow the components to be used together in almost all areas.

The system test that was performed for each of the SITOP power supply units in SIMATIC design together with the respective SIMATIC controller is particularly noteworthy.




In addition to the following SIMATIC systems, the SITOP power supply units in SIMATIC design also supply further consumers reliably with 24 V.

- SIMATIC S7-300
- SIMATIC S7-1200
- SIMATIC S7-1500
- SIMATIC ET 200M
- SIMATIC ET 200MP
- SIMATIC ET 200pro
- SIMATIC ET 200SP

Selection and ordering data

Version	Inputs Rated voltage $U_{e \text{ rated}}$	Outputs Rated voltage $U_{a \text{ rated}}$	Rated current $I_{a \text{ rated}}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
SIMATIC S7-1200 design							
 6EP1332-1SH71	2.5 A	120/230 V AC, automatic range selection (85 ... 132 V AC, 176 ... 264 V AC)	24 V DC ± 3%	2.5 A	70 x 100 x 75	1	6EP1332-1SH71
SIMATIC S7-300 design							
 6ES7307-1BA01-0AA0	2 A	120/230 V AC, automatic range selection (85 ... 132 V AC, 170 ... 264 V AC)	24 V DC ± 3%	2 A	40 x 125 x 120	1	6ES7307-1BA01-0AA0
 6ES7307-1EA01-0AA0	5 A	120/230 V AC, automatic range selection (85 ... 132 V AC, 170 ... 264 V AC)	24 V DC ± 3%	5 A	60 x 125 x 120	1	6ES7307-1EA01-0AA0
 6ES7307-1K A02-0AA0	10 A	120/230 V AC, automatic range selection (85 ... 132 V AC, 170 ... 264 V AC)	24 V DC ± 3%	10 A	80 x 125 x 120	1	6ES7307-1K A02-0AA0
SIMATIC S7-1500 design							
 6EP1332-4BA00	3 A	120/230 V AC, automatic range selection (85 ... 132 V AC, 176 ... 264 V AC)	24 V DC ± 3%	3 A	50 x 147 x 135	1	6EP1332-4BA00
 6EP1333-4BA00	8 A	120/230 V AC, automatic range selection (85 ... 132 V AC, 176 ... 264 V AC)	24 V DC ± 3%	8 A	75 x 147 x 135	1	6EP1333-4BA00

Selection and ordering data

Version	Inputs Rated voltage U_e rated	Outputs Rated voltage U_a rated	Rated current I_a rated	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
SIMATIC ET 200SP PS							
 6EP7133-6AB00-0BN0	5 A	120/230 V AC, automatic range selection (85 ... 132 V AC, 170 ... 264 V AC)	24 V DC ± 3%	5 A	160 x 117 x 75	1	6EP7133-6AB00-0BN0
 6EP7133-6AE00-0BN0	10 A	120/230 V AC, automatic range selection (85 ... 132 V AC, 170 ... 264 V AC)	24 V DC ± 3%	10 A	160 x 117 x 75	1	6EP7133-6AE00-0BN0
SIMATIC ET 200pro design							
 6ES7148-4PC00-0HA0	5 A	120/230 V AC, automatic range selection (85 ... 132 V AC, 170 ... 264 V AC)	24 V DC ± 3%	5 A	160 x 117 x 75	1	6ES7148-4PC00-0HA0

SITOP power supplies

SITOP PSU3400

DC/DC Converter

Overview

DC-DC converters transform DC voltage supplied at the input into DC voltage with a higher, equal or lower voltage level.

This module is particularly suitable for using with battery-operated devices. The output voltage of the battery varies depending on the state of charge.







DC/DC converters ensure a stable 12 V DC or 24 V DC supply from connected loads, such as control units (CPUs).

If the power supply is unstable, these modules also serve to stabilize the voltage supply in the downstream branch.

- Reverse polarity protection at the input
- Adjustable output voltage for compensation of voltage drops
- Slim design: 32 mm width

- Wide input voltage range—optimized for operation with 24 V DC and 48 V DC batteries (for all states of charge)
- Permanent overload capability with 1.2 times the rated current up to 40 °C ambient temperature
- High efficiency of 89%–93%
- Minimal no-load losses of max. 1.5 W
- Ambient temperature range from -25 to +70 °C (derating > 60 °C)
- LED display for easy recognition of operating state
- Overvoltage protection on input side through insulation voltage input/output 1.5 kV DC
- CE marking and cULus approval
- Approvals for DNV GL, ABS (available soon)
- Parallel switching for enhanced performance

Selection and ordering data



Version	Inputs Rated voltage $U_{e \text{ rated}}$	Outputs Rated voltage $U_{a \text{ rated}}$	Rated current $I_{a \text{ rated}}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
12 V power supplies							
 6EP3123-0TA00-0AY0	8 A NEW	24 V DC (18 ... 32 V DC, 14 ... 18 V DC, short-term with derating possible)	12 V DC ± 2%	4.5 A	32 x 100 x 100	1	6EP3123-0TA00-0AY0
 6EP3124-0TA00-0AY0	15 A	24 V DC (14 ... 32 V DC, derating for 14 ... 18 V DC)	12 V DC ± 2%	8.4 A	42 x 125 x 120	1	6EP3124-0TA00-0AY0
24 V power supplies							
 6EP3133-0TA00-0AY0	5 A NEW	24 V DC (18 ... 32 V DC, 14 ... 18 V DC, short-term with derating possible)	24 V DC ± 1%	5.5 A	32 x 100 x 100	1	6EP3133-0TA00-0AY0
 6EP3233-0TA00-0AY0	5 A NEW	48 V DC (32 ... 60 V DC, derating for 32 ... 42 V DC, 28 ... 32 V DC short-term with derating possible)	24 V DC ± 1%	2.7 A	32 x 100 x 100	1	6EP3233-0TA00-0AY0
 6EP3233-0TA10-0AY0	3.5 A NEC Class 2 NEW	48 V DC (32 ... 60 V DC, derating for 32 ... 42 V DC), 28 ... 32 V DC short-term with derating possible)	24 V DC ± 1%	1.9 A	32 x 100 x 100	1	6EP3233-0TA10-0AY0
 6EP3133-0TA10-0AY0	4 A NEW	12 V DC (9 ... 18 V DC)	24 V DC ± 2%	9 A	32 x 100 x 100	1	6EP3133-0TA10-0AY0

SITOP power supplies

SITOP PSU3400, PSU400M

DC/DC Converter

Selection and ordering data

Version	Inputs Rated voltage $U_{e \text{ rated}}$	Outputs		Rated current $I_{a \text{ rated}}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
		Rated voltage $U_{a \text{ rated}}$						
24 V power supplies (continued)								
 6EP3134-0TA00-0AY0	10 A	24 V DC (14 ... 32 V DC, derating for 14 ... 18 V DC)	24 V DC ± 1%	10.8 A	42 x 125 x 120	1	6EP3134-0TA00-0AY0	
 6EP3234-0TA00-0AY0	10 A	48 V DC (14 ... 32 V DC, derating for 14 ... 18 V DC)	24 V DC ± 1%	5.4 A	42 x 125 x 120	1	6EP3234-0TA00-0AY0	


SITOP PSU400M

Overview

The SITOP PSU400M power supply with a 600 V DC input is suitable as an efficient DC/DC converter for drive and battery systems, wide input and temperature range, high efficiency, slim design and with 50% extra power for 5 s/min.

A voltage surge limiter is available as an accessory as ballast for the PSU400M. This gives the option of connecting the DC/DC converter directly to a DC voltage of up to 900 V DC.

Selection and ordering data

Version	Inputs Rated voltage $U_{e \text{ rated}}$	Outputs		Rated current $I_{a \text{ rated}}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
		Rated voltage $U_{a \text{ rated}}$						
24 V power supplies								
 6EP1536-3AA00	20 A	600 V DC (300 ... 900 V DC)	24 V DC ± 3%	20 A	90 x 125 x 125	1	6EP1536-3AA00	

Overview








The PSU100D switch mode power supplies extend the Siemens power supply portfolio to include single-phase devices for direct wall mounting using screws.

The flat and rugged aluminum enclosure with IP20 degree of protection can be installed in various orientations and is therefore ideal for installation locations with limited space or for mounting in control cabinets and enclosures without a DIN rail.

The low-cost devices meet all the basic requirements for a power supply, typical applications being apparatus, automated equipment and automation solutions.

- For 12-V standard applications from 3 A to 8.3 A
- For 24 V standard applications from 2.1 A to 12.5 A
- Compact metal enclosure
- Wide-range input
- Green LED for "24 V OK"
- Certification in accordance with CE and UL
- Adjustable output voltage from 22 to 28 V or from 11 to 14 V for compensating voltage drops
- Temperature range from -10 °C to +70 °C

Selection and ordering data

	Rated current $I_{a \text{ rated}}$	Inputs Rated voltage $U_{e \text{ rated}}$	Outputs Rated voltage $U_{a \text{ rated}}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
Single-phase, 12 V DC (PSU100D), Wall Mounting							
 6EP1321-1LD00	3 A	100/240 V AC (85 ... 264 V AC)	12 V DC ± 2%	97 x 98 x 38	▶	6EP1321-1LD00	
 6EP1322-1LD00	8.3 A	100/240 V AC (85 ... 264 V AC)	12 V DC ± 2%	97 x 158 x 38	▶	6EP1322-1LD00	
Single-phase, 24 V DC (PSU100D), Wall Mounting							
 6EP1331-1LD00	2.1 A	100/240 V AC (85 ... 264 V AC)	24 V DC ± 2%	97 x 128 x 38	▶	6EP1331-1LD00	
 6EP1332-1LD00	3.1 A	100/240 V AC (85 ... 264 V AC)	24 V DC ± 2%	97 x 128 x 38	▶	6EP1332-1LD00	
 6EP1332-1LD10	4.1 A	100/240 V AC (85 ... 264 V AC)	24 V DC ± 2%	97 x 158 x 38	▶	6EP1332-1LD10	
 6EP1333-1LD00	6.2 A	100/240 V AC (85 ... 264 V AC)	24 V DC ± 2%	97 x 178 x 38	▶	6EP1333-1LD00	
 6EP1334-1LD00	12.5 A	100/240 V AC (85 ... 264 V AC)	24 V DC ± 2%	105 x 199 x 41	▶	6EP1334-1LD00	

Overview

The SITOP PSU3600 single-phase power supply dual was designed as a two-voltage power supply with two independent outputs in order to allow electronic loads to be supplied with both a positive and negative voltage at the same time. If the two potential-free outputs are connected in series, a positive and negative supply voltage of e.g. ± 15 V can be generated.

Or you can leave the independent outputs separate and supply different loads with different nominal voltages, e.g. 24 V and 15 V, with only a single power supply unit due to the wide adjustment range of the output voltage from 12 V to 28 V for each output.

In addition, both outputs are power limited according to NEC Class 2, opening up further application possibilities.

What to do if, for example, you need a power supply unit for 5 V, one for 15 V—and then one for 38.5 V as well? Install a special power supply every time?

SITOP PSU3600 power supply is the clever solution in this case! The output voltage can be flexibly adjusted between 3 and 52 V, with a maximum output power of 120 W. The current limitation can also be set between 2 and 10 A. Since you now only need one standard device for multiple applications, you save a lot of time in procurement and avoid costs for logistics and service.

But conventional use as a power supply is not the only conceivable application. The possibility of dynamically changing the output voltage during operation along with numerous additional functions open up a wide range of potential uses.

Selection and ordering data

Rated current $I_{a \text{ rated}}$	Inputs Rated voltage $U_{e \text{ rated}}$	Outputs Rated voltage $U_{a \text{ rated}}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
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2 x 15 V/3.5 A SITOP PSU3600, two outputs



6EP3323-0SA00-0BY0

Limitation of input current harmonics according to IEC 61000-3-2; adjustable output voltage 12 V to 28 V, output max. 2 x 3.5 A or 60 W

**max. 2 x 3.5 A
or 60 W**
NEW

120/230 V AC
(85 ... 264 V AC)
110/220 V DC
(88 ... 250 V DC)

2 x 15 V DC
 $\pm 1\%$

42 x 125 x 125

▶ **6EP3323-0SA00-0BY0**

3 ... 52 V/10 A SITOP PSU3600, flexible output 3-52 V



6EP3343-0SA00-0AY0

Limitation of input current harmonics according to IEC 61000-3-2; adjustable output voltage 0 to 52 V, output max. 2-10 A or 120 W

**max. 2-10 A
or 120 W**
NEW

120/230 V AC
(85 ... 264 V AC)
110/220 V DC
(88 ... 250 V DC)

24 V DC
 $\pm 1\%$

42 x 125 x 125



▶ **6EP3343-0SA00-0AY0**

Overview

The SITOP PSU100P 1-phase power supplies for wall mounting, with their rugged design and IP 67 degree of protection are ideal for distributed applications outside the control cabinet.

- 24 V DC/ 5 A and 8 A
- Automatic switchover of the input voltage
- Temperature range from -25 °C to +60 °C without derating
- High efficiency of 93 % for low internal power consumption
- Isolated relay contact "24 V OK"
- Operation display on the device by means of LED (green = "24 V OK", flashing red = overload)

Selection and ordering data

Rated current $I_{a \text{ rated}}$	Inputs Rated voltage $U_{e \text{ rated}}$	Outputs Rated voltage $U_{a \text{ rated}}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
Single-phase, 24 V DC (SITOP PSU100P, IP67), High degree of protection						
 6EP1333-7CA00	5 A	120/230 V AC, automatic range switching (85 ... 132 V AC, 170 ... 264 V AC)	24 V DC ± 3%	120 x 181 x 60.5 ▶	6EP1333-7CA00	
 6EP1334-7CA00	8 A	120/230 V AC, automatic range switching (85 ... 132 V AC, 170 ... 264 V AC)	24 V DC ± 3%	120 x 181 x 60.5 ▶	6EP1334-7CA00	

SITOP power supplies

SITOP PSU300E, PSU100E

Special design, special use



Overview

The SITOP PSU300E 3-phase power supply is designed with a 5 A output current for 24 V applications with low power requirements. The metal enclosure is only 42 mm wide and does not require any lateral gap to other devices on the DIN rail. This is made possible by the low heat dissipation (90% efficiency). The wide-range input from 320 V to 550 V AC permits mains buffering times of 50 ms and thus allows the supply to be used in unstable three-phase networks, thanks to UL certification also in North America. The removable plug-in terminals simplify the AC and DC connection.

This power supply is optimized for 48 V industrial applications with a focus on single-series and special-purpose machines in the manufacturing industry with power demands up to 5 A.

Thanks to the higher voltage of 48 V (instead of 24 V), the same amount of power can be used to achieve a higher performance – even over longer distances. Examples include low-cost machines for cost-efficient switching of valves and magnets, tool systems with electric controls instead of compressed air supplies, supplies for 48 V DC motors or devices which are connected with long cables.

Selection and ordering data




Rated current $I_{a \text{ rated}}$	Inputs Rated voltage $U_{e \text{ rated}}$	Outputs Rated voltage $U_{a \text{ rated}}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
Three-phase, 24 V DC (SITOP PSU300E), Slim design						
 6EP1433-0AA00	5 A	400 V 3 AC (320 ... 480 V 3 AC)	24 V DC ± 3%	42 x 125 x 125 ▶	6EP1433-0AA00	
Single-phase, 48 V DC (SITOP PSU100E), Slim design						
 6EP3344-0SB00-0AY0	5 A	100/230 V AC (85 ... 132 V AC, 170 ... 264 V AC)	48 V DC ± 3%	42 x 125 x 125 ▶	6EP3344-0SB00-0AY0	

Overview

The SITOP PSU3800 3-phase power supplies are suitable for battery charging, thanks to their constant-current characteristic. For other applications, the output characteristic can also be switched to latching shutdown. The three-phase, wide-range input enables them to be used worldwide. The slim design requires little space on the DIN rail. Installation gaps are not required.

Thanks to their constant-current characteristic, SITOP PSU3800 3-phase power supplies (24 V DC/17 A and 30 A/40 A) are suitable for battery charging, thanks to their constant-current characteristic. For other applications the output characteristic can also be switched to latching shutdown. The three-phase, wide-range input enables them to be used worldwide. The slim design requires little space on the DIN rail. Installation gaps are not required.

Selection and ordering data

Rated current I_a rated	Inputs Rated voltage U_e rated	Outputs Rated voltage U_a rated	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
Three-phase, 12 V DC						
 6EP3424-8UB00-0AY0	20 A	400-500 V 3 AC (320 ... 575 V 3 AC)	12 V DC ± 3%	70 x 125 x 125 ▶	6EP3424-8UB00-0AY0	
Three-phase, 24 V DC						
 6EP3436-8UB00-0AY0	17 A	400-500 V 3 AC (320 ... 575 V 3 AC)	24 V DC ± 3%	70 x 125 x 125 ▶	6EP3436-8UB00-0AY0	
 6EP3437-8UB00-0AY0	30 A, 40 A	400-500 V 3 AC (320 ... 575 V 3 AC)	24 V DC ± 3%	135 x 145 x 150 ▶	6EP3437-8UB00-0AY0	

Overview

To combat prolonged power failures, the 24 V SITOP power supply units can be upgraded into a 24 V DC uninterruptible power supply.

SITOP offers two systems with different energy stores for this purpose:

- Capacitors for 24 V buffering in the minute range
- Battery modules which provide a buffer in the hours range

The DC UPS systems are used, for example, in machine tool manufacturing, in the textile industry, on all types of production lines and filling plants, and in conjunction with 24 V industrial PCs. They prevent the negative consequences which often result from mains failures.

To bridge brief power failures, 24 V SITOP power supply units can be expanded with a SITOP UPS500 uninterruptible DC power supply (DC-UPS).

In PC-based automation solutions, the highly capacitive double-layer capacitors of the SITOP UPS500 supply enough energy to safeguard operating and application data and close software applications in a defined manner.

- Buffering into the minutes range depending on the load current and DC-UPS configuration
- SITOP UPS500S basic units for standard mounting rails can be combined with up to three UPS501S expansion modules
- SITOP UPS500P in degree of protection IP65 for distributed applications
- Absolutely maintenance-free double-layer capacitors
- Short charging times
- Long service life even at high ambient temperatures
- No ventilation of the installation location required
- USB interface for PC communication
- Easy PC integration thanks to free software tool



	SITOP UPS500S/UPS501S configurations							
Basic unit	2.5 kW	5 kW	2.5 kW	5 kW	2.5 kW	5 kW	2.5 kW	5 kW
Expansion modules	--	--	1 x 5 kW	1 x 5 kW	2 x 5 kW	2 x 5 kW	3 x 5 kW	3 x 5 kW
Total energy	2.5 kW	5 kW	7.5 kW	10 kW	12.5 kW	15 kW	17.5 kW	20 kW
Load current	Buffer times							
0.5 A	134 s	236 s	390 s	478 s	632 s	748 s	851 s	1 007 s
0.8 A	90 s	167 s	266 s	346 s	440 s	527 s	580 s	706 s
1 A	75 s	138 s	219 s	296 s	365 s	414 s	490 s	572 s
2 A	38 s	76 s	122 s	156 s	203 s	230 s	265 s	306 s
3 A	26 s	52 s	82 s	106 s	136 s	159 s	186 s	213 s
4 A	19 s	39 s	61 s	81 s	101 s	120 s	139 s	160 s
5 A	15 s	31 s	49 s	65 s	81 s	95 s	111 s	130 s
6 A	12 s	26 s	40 s	55 s	67 s	80 s	94 s	106 s
7 A	10 s	21 s	34 s	47 s	58 s	69 s	81 s	82 s
8 A	8 s	18 s	29 s	40 s	50 s	59 s	69 s	79 s
10 A	6 s	15 s	23 s	32 s	39 s	47 s	54 s	62 s
12 A	4 s	12 s	19 s	26 s	32 s	38 s	44 s	52 s
15 A	3 s	9 s	14 s	20 s	25 s	30 s	35 s	40 s
Charging current	Charging times							
2 A	54 s	120 s	158 s	223 s	263 s	318 s	355 s	417 s
1 A	110 s	205 s	311 s	425 s	503 s	625 s	695 s	816 s

Selection and ordering data

Version	Inputs Rated voltage $U_{e \text{ rated}}$	Outputs Rated voltage $U_{a \text{ rated}}$	Rated current $I_{a \text{ rated}}$	Dimensions (W × H × D) mm	SD d	Article No.	Price per PU
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SITOP UPS500S

Basic units 15 A



2.5 kW	24 V DC (22 ... 29 V DC)	24 V DC ± 3%	15.2 A + approx. 2.3 A (charging mode)	120 x 125 x 125	1	6EP1933-2EC41	
5 kW	Infeed through SITOP 24 V DC			120 x 125 x 125	1	6EP1933-2EC51	

SITOP UPS501 expansion module

5 kW	Infeed through basic unit	--	--	70 x 125 x 125	1	6EP1935-5PG01	
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6EP1933-2EC.1,
6EP1935-5PG01

Note:

For DC-UPS with battery modules, [see from page 15/32](#).

Overview

To bridge longer power failures, 24 V SITOP power supply units can be expanded with a SITOP UPS1600 uninterruptible DC power supply (DC-UPS) and SITOP UPS1100 battery modules.

Intelligent battery management using Energy Storage Link automatically detects the UPS1100 energy storage device, and ensures optimum temperature-controlled charging and continuous monitoring. The compact DC-UPS modules have overload capability, for example, to supply the inrush current of industrial PCs. They enable starting from the battery for stand-alone operation.

The DC-UPS communicates openly through USB or Ethernet/PROFINET and can be easily integrated into the PC or PLC world. Complete integration in TIA offers user-friendly engineering in the TIA Portal and is supported by ready-to-use function blocks for S7 user programs and WinCC faceplates for rapid visualization.

Use of the SITOP UPS manager also enables easy monitoring and configuration in PC systems, e.g. the shutting down of several PCs in accordance with the master-slave principle.




- 24 V buffering for a few hours for continuing processes
- Open communication via USB or two Ethernet/PROFINET ports
- High overload capability for mains and buffering operation

- Intelligent battery management using Energy Storage Link: Automatic detection of the battery modules and selection of the optimum, temperature-controlled charging curve, monitoring of readiness, incoming cable, -aging and charge status
- All diagnostic data and alarm messages are available via USB and Ethernet/PROFINET
- Integrated OPC UA server facilitates flexible, multi-vendor communication with other systems (versions with Ethernet/PROFINET)
- Remote monitoring via integrated web server
- SITOP UPS Manager (free software download) supports configuration and monitoring on PC-based systems, see <https://support.industry.siemens.com/cs/ww/en/view/75854607>
- Complete integration in TIA:
 - User-friendly engineering in the TIA Portal, see <https://support.automation.siemens.com/WWW/view/en/75854606>
 - SIMATIC S7 function blocks for integration in user programs (free download), see <https://support.industry.siemens.com/cs/ww/en/view/78817848>
 - Ready-to-use "faceplates" for SIMATIC Panels and SIMATIC WinCC (free download), see <https://support.industry.siemens.com/cs/ww/en/view/78817848>

Selection and ordering data

Rated current $I_{a \text{ rated}}$	Inputs Rated voltage $U_{e \text{ rated}}$	Outputs Rated voltage $U_{a \text{ rated}}$	Dimensions (W x H x D)	SD	Article No.	Price per PU
			mm	d		

SITOP UPS1600

 6EP4134-3AB00-.AY0	10 A	24 V DC (21 ... 29 V DC)	24 V DC	50 x 125 x 125		
	• SITOP UPS1600				3	6EP4134-3AB00-0AY0
	- With USB interface				3	6EP4134-3AB00-1AY0
	- With Ethernet/PROFINET				3	6EP4134-3AB00-2AY0
 6EP4136-3AB00-.AY0	20 A	24 V DC (21 ... 29 V DC)	24 V DC	50 x 125 x 125		
	• SITOP UPS1600				3	6EP4136-3AB00-0AY0
	- With USB interface				3	6EP4136-3AB00-1AY0
	- With Ethernet/PROFINET				3	6EP4136-3AB00-2AY0
 6EP4137-3AB00-.AY0	40 A	24 V DC (21 ... 29 V DC)	24 V DC	70 x 125 x 150		
	• SITOP UPS1600				3	6EP4137-3AB00-0AY0
	- With USB interface				3	6EP4137-3AB00-1AY0
	- With Ethernet/PROFINET				3	6EP4137-3AB00-2AY0

Overview

SITOP UPS1100 maintenance-free battery modules with 1.2 Ah to 12 Ah for SITOP UPS1600 DC-UPS modules. The intelligent UPS1600 battery management charges the UPS1100 with the optimal, temperature-controlled charging characteristics and monitors the status (operating data and diagnostics information) via the energy storage link of the connected battery modules.

For longer buffer times, up to six battery modules can be connected in parallel. Mounting is on a standard mounting rail or directly on a wall.








Battery modules	SITOP UPS1100 24 V/1.2 Ah 6EP4131-0GB00-0AY0	SITOP UPS1100 24 V/2.5 Ah high temperature 6EP4132-GB00-0AY0	SITOP UPS1100 24 V/3.2 Ah 6EP4133-0GB00-0AY0	SITOP UPS1100 24 V/5 Ah LiFePo 6EP4133-0JB00-0AY0	SITOP UPS1100 24 V/7 Ah 6EP4134-0GB00-0AY0	SITOP UPS1100 24 V/12 Ah 6EP4135-0GB00-0AY0
Load current	Buffering times¹⁾					
1 A	27 min	1 h 30 min	2 h	4 h	5 h	8 h 30 min
2 A	14 min	50 min	1 h	2 h 10 min	2 h 40 min	4 h 30 min
3 A	10 min	36 min	45 min	1 h 30 min	1 h 50 min	3 h 10 min
4 A	7 min 50 s	26 min	34 min	1 h 10 min	1 h 20 min	2 h 30 min
6 A	4 min 40 s	15 min	21 min	48 min	48 min	1 h 30 min
8 A	3 min	11 min	15 min	37 min	34 min	1 h
10 A	1 min 30 s	6 min 40 s	9 min 30 s	26 min	21 min	42 min
12 A	--	5 min 40 s	8 min 10 s	23 min	19 min	37 min
14 A	--	4 min 40 s	6 min 50 s	21 min	16 min	32 min
16 A	--	3 min 40 s	5 min 30 s	18 min	13 min	27 min
20 A	--	1 min 40 s	2 min 50 s	13 min	7 min 50 s	17 min
30 A	--	3 min 20s, 2x ²⁾	--	17 min, 2x ²⁾	3 min 50 s	10 min
40 A	--	3 min 20s, 2x ²⁾	--	13 min, 2x ²⁾	1 min 40 s	5 min 30 s
Ambient temperature	Service life (with drop to approx. 80% of original capacity), depending on battery temperature, approx.					
+20 °C	4 years	10 years	4 years	15 years	4 years	4 years
+30 °C	2 years	7 years	2 years	10 years	2 years	2 years
+40 °C	1 year	3 years	1 year	9 years	1 year	1 year
+50 °C	0.5 years	1.5 years	0.5 years	2 years	0.5 years	0.5 years
+60 °C	—	1 year	—	—	—	—

¹⁾ The determination of the buffer times is based on the discharge period of new and completely charged battery modules with a battery temperature of not less than +25 °C until shutdown of the DC UPS (19 V).

²⁾ With two parallel connected UPS1100 battery modules and UPS1600 40 A.

Buffer times for additional values can be determined using the SITOP Selection Tool, see siemens.com/sitop-selection-tool.

Selection and ordering data

	Rated current $I_{a \text{ rated}}$	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
SITOP UPS1100 battery modules					
 6EP4131-0GB00-0AY0	For UPS1100 10 A				
	1.2 Ah	89 x 130 x 107	3	6EP4131-0GB00-0AY0	
 6EP4133-0JB00-0AY0	For UPS1100 10 A and 20 A				
	3.2 Ah	190 x 169 x 79	3	6EP4133-0GB00-0AY0	
	5 Ah LiFePo	189 x 186 x 113	1	6EP4133-0JB00-0AY0	
 6EP4134-0GB00-0AY0	For UPS1100 10 A, 20 A and 40 A				
	7 Ah	186 x 186 x 110	3	6EP4134-0GB00-0AY0	
 6EP4135-0GB00-0AY0	For UPS1100 10 A, 20 A and 40 A				
	12 Ah	253 x 186 x 110	3	6EP4135-0GB00-0AY0	
SITOP UPS1100 battery modules, high-temperature					
 6EP4132-0GB00-0AY0	For UPS1600 10 A and 20 A				
	2.5 Ah	265 x 115 x 76	3	6EP4132-0GB00-0AY0	

Overview

A power supply unit on its own cannot guarantee fault-free 24 V supply. Power failures, extreme variations in the mains voltage, or a faulty load can bring plant operation to a standstill and cause high costs. The expansion modules offer extensive protection against malfunctions on the primary and secondary sides, right through to complete all-round protection.

The redundancy module disconnects two 24 V power supply units of the same type, enabling the configuration of a redundant 24 V power supply. If a power supply fails, the 24 V supply is reliably maintained. Signaling takes place via LED as well as signaling contacts whereby the switching threshold for LED and signaling contacts can be adjusted.

For the redundant configuration, power supplies up to:

- 5 A → one redundancy module with 10 A summation current
- 10 A → two redundancy modules with 10 A summation current
- 20 A → one redundancy module with 40 A summation current
- 40 A → two redundancy modules with 40 A summation current

The buffer module bridges brief mains failures for up to several seconds for SITOP smart or SITOP modular 24 V power supply units. Maintenance-free capacitors are used as energy stores.

Buffering times:

- 200 ms at 40 A,
- 400 ms at 20 A,
- 800 ms at 10 A

To increase the buffer time (max. 10 s), up to 8 buffer modules can be connected in parallel. To bridge longer mains failures we recommend using uninterruptible power supplies with capacitors (up into the minutes range) or with battery modules (up into the hours range).

Selection and ordering data

	Inputs Rated voltage U_e rated	Outputs Rated voltage U_a rated	Rated current I_a rated	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
SITOP RED1200 redundancy module							
	12/24/48 V DC (3 ... 100 V DC) NEW		20 A (Summation current)	35 x 135 x 125	1	6EP4346-7RB00-0AX0	
6EP4346-7RB00-0AX0							
	12/24/48 V DC (3 ... 100 V DC) NEW		40 A (Summation current)	45 x 135 x 125	1	6EP4347-7RB00-0AX0	
6EP4347-7RB00-0AX0							
SITOP PSE202U redundancy module							
	24 V DC (19 ... 29 V DC)		10 A (Summation current)	30 x 80 x 100	1	6EP1964-2BA00	
6EP1964-2BA00							
	24 V DC (19 ... 29 V DC)		3.5 A (NEC Class 2)	30 x 80 x 100	1	6EP1962-2BA00	
6EP1962-2BA00							
	24 V DC (24 ... 28.8 V DC)		40 A (Summation current)	70 x 125 x 125	1	6EP1961-3BA21	
6EP1961-3BA21							

Overview

The SITOP PSE200U selectivity modules and the SITOP select diagnostics module are used in combination with 24 V power supplies for distributing the load current among several current branches and for monitoring the individual partial currents.

Faults caused by overload or short circuits in individual branches are detected and selectively switched off so that the remaining load current paths remain unaffected. Rapid fault diagnosis is achieved and downtimes are minimized.

Signaling is performed via a group alarm contact or single-channel signaling. The selectivity modules with single-channel signaling output the status of the four channels cyclically by means of a serial code which can be read in by a digital PLC input.

Function blocks for SIMATIC S7-1500/1200/300/400 and for SIMOTION CPUs are available free of charge for the evaluation, see <https://support.industry.siemens.com/cs/ww/en/view/61450284>

Selection and ordering data

	Inputs Rated voltage U_e rated	Outputs Rated voltage U_a rated	Rated current I_a rated	Dimensions (W x H x D) mm	SD d	Article No.	Price per PU
SITOP SEL1200 selectivity module with switching characteristic							
	24 V DC (22 ... 30 V DC) NEW		8 x 10 A (2 ... 10 A)	43 x 135 x 125	1	6EP4438-7FB00-3DX0	
6EP4438-7FB00-3DX0							
SITOP SEL1400 selectivity module with current limiting characteristic							
	24 V DC (22 ... 30 V DC) NEW		8 x 10 A (2 ... 10 A)	43 x 135 x 125	1	6EP4438-7EB00-3DX0	
6EP4438-7EB00-3DX0							
SITOP PSE200U selectivity modules with summation signal							
	24 V DC (22 ... 30 V DC)	$U_e - 0.2 V$	4 x 3 A (0.5 ... 3 A)	72 x 80 x 72	1	6EP1961-2BA11	
	24 V DC (22 ... 30 V DC)		4 x 3 A (0.5 ... 3 A NEC Class 2)	72 x 80 x 72	1	6EP1961-2BA51	
	24 V DC (22 ... 30 V DC)	$U_e - 0.2 V$	4 x 10 A (3 ... 10 A)	72 x 80 x 72	1	6EP1961-2BA21	
6EP1961-2BA.1							
SITOP PSE200U selectivity modules with single-channel signaling							
	24 V DC (22 ... 30 V DC)		4 x 3 A (0.5 ... 3 A)	72 x 80 x 72	1	6EP1961-2BA31	
	24 V DC (22 ... 30 V DC)		4 x 3 A (0.5 ... 3 A NEC Class 2)	72 x 80 x 72	1	6EP1961-2BA61	
	24 V DC (22 ... 30 V DC)		4 x 10 A (3 ... 10 A)	72 x 80 x 72	1	6EP1961-2BA41	
6EP1961-2BA.1							
SITOP select diagnostics modules							
	24 V DC (22 ... 30 V DC)	$U_e - 0.2 V$	4 x 10 A (2 ... 10 A)	72 x 90 x 90	▶	6EP1961-2BA00	
6EP1961-2BA00							
Buffer modules							
	24 V DC (24 .. 28.8 V DC)		40 A	70 x 125 x 125	1	6EP1961-3BA01	
6EP1961-3BA01							
Buffer modules							
	100/240 V AC (85 .. 264 V AC)		5 A	18 x 90 x 58	1	6EP4638-6LB00-0AY0	
6EP4638-6LB00-0AY0							

Overview



Particularly harsh industrial environments demand products with special characteristics - products that are more rugged than standard products.

Siemens offers the perfect answer to these requirements with SIPLUS extreme. SIPLUS product variants are based on the SITOP, LOGO!Power standard power supplies and the power supplies for SIMATIC S7 and expansion modules, and feature the following characteristics:

- Extended ambient temperature range (e.g. -40 ... +70 °C) and conformal coating as protection against extreme and difficult conditions and contact with substances
- DIN EN 50155:
Conforms with standard for electronic equipment used on rolling stock (EN 50155, temperature T1, category)

Ambient conditions

Conformal coating	Coating of the printed circuit boards and the electronic components
Technical specifications	The technical data of the standard product applies except for the ambient conditions.
Relative humidity	100%, condensation/frost permitted. No commissioning in bedewed state.
Biologically active substances, compliance with EN 60721-3-3	Class 3B2 mold and fungal spores (excluding fauna). The supplied plug covers must remain in place over the unused interfaces during operation!
Chemically active substances, compliance with EN 60721-3-3	Class 3C4 incl. salt spray in accordance with EN60068-2-52 (degree of severity 3). The supplied plug covers must remain in place over the unused interfaces during operation!
Mechanically active substances, compliance with EN 60721-3-3	Class 3S4 incl. conductive sand, dust. The supplied plug covers must remain in place over the unused interfaces during operation!
Air pressure (depending on the highest positive temperature range specified)	1080 ... 795 hPa (-1000 ... +2000 m) see ambient temperature range 795 ... 658 hPa (+2000 ... +3500 m) derating 10 K 658 ... 540 hPa (+3500 ... +5000 m) derating 20 K

For further technical specifications, see the standard products, or visit www.siemens.com/siplus-extreme

Ordering data	Article No.	Ordering data	Article No.
SIPLUS LOGO!Power		SIPLUS S7 design	
SIPLUS LOGO!Power 24 V 1.3 A	6AG1331-1SH03-7AA0	<i>For industrial applications with particularly demanding ambient conditions</i>	
Input: 100 ... 240 V AC Output: 24 V DC, 1.3 A		SIPLUS S7-300 PS 305	6AG1305-1BA80-2AA0
Extended temperature range and exposure to media		Input: 24 ... 110 V DC Output: 24 V DC/2 A	
SIPLUS LOGO!Power 24 V 2.5 A	6AG1332-1SH43-7AA0	Extended temperature range and exposure to media	
Input: 100 ... 240 V AC Output: 24 V DC, 2.5 A		SIPLUS S7-300 PS 305 5 A	6AG1307-1EA01-7AA0
Extended temperature range and exposure to media		Incl. connection bracket Input: 120/230 V AC Output: 24 V DC/5 A	
SIPLUS LOGO!Power 24 V 4 A	6AG1332-1SH52-7AA0	Extended temperature range and exposure to media	
Input: 100 ... 240 V AC Output: 24 V DC, 4 A		SIPLUS S7-300 PS 305 10 A	6AG1307-1KA02-7AA0
Extended temperature range and exposure to media		Incl. connection bracket Input: 120/230 V AC Output: 24 V DC/10 A (dimensions 80 x 125 x 120)	
SIPLUS smart		<i>For rolling stock railway applications</i>	
SIPLUS PSU100S 24 V/10 A	6AG1334-2BA20-4AA0	SIPLUS S7-300 PS 305	6AG1305-1BA80-2AA0
Stabilized power supply Input: 120/230 V AC Output: 24 V DC/10 A		Input: 24 ... 110 V DC Output: 24 V DC/2 A	
Extended temperature range and Exposure to media		Conforms to EN 50155	
SIPLUS PSU300S 3-phase, 24 V DC/10 A	6AG1434-2BA10-7AA0	Extended temperature range and exposure to media	
Stabilized power supply Input: 400 ... 500 V 3 AC Output: 24 V DC/20 A		SIPLUS S7-1200 PM 1207 power supply	
Exposure to media		Input: 120/230 V AC Output: 24 V DC, 2.5 A; Derating from + 55 °C to + 70 °C 1.2 A output current	
SIPLUS PSU300S 3-phase, 24 V DC/20 A	6AG1436-2BA10-7AA0	• Ambient temperature -25 ... +70 °C	6AG1332-1SH71-7AA0
Stabilized power supply Input: 400 ... 500 V 3 AC Output: 24 V DC/20 A		• Ambient temperature 0... +60 °C	6AG1332-1SH71-4AA0
Extended Temperature range and exposure To media		Extended temperature range and exposure to media	
SIPLUS modular		SIPLUS S7-1500 PM 1507	
SIPLUS Modular 40 A		Input: 120/230 V AC	
Stabilized power supply Input: 120/230 V AC Output: 24 V DC/40 A		• Output: 24 V DC, 3 A	6AG1332-4BA00-7AA0
• Exposure to media	6AG1337-3BA00-4AA0	• Output: 24 V DC, 8 A	6AG1333-4BA00-7AA0
• Extended temperature range and exposure to media	6AG1337-3BA00-7AA0	Extended temperature range and exposure to media	
SIPLUS PS PSU200M 1-phase and 2-phase, 24 V DC/5 A		SIPLUS S7-1500 system power supply	
Stabilized power supply Input: 120 ... 230 V/230 ... 500 V AC		For supplying the backplane bus of the S7-1500	
• Output: 24 V DC/5 A	6AG1333-3BA10-7AA0	• 24 V DC input voltage, power 25 W	6AG1505-0KA00-7AB0
• Output: 24 V DC / 10 A	6AG1334-3BA10-7AA0	• 24/48/60 V DC input voltage, power 60 W	6AG1505-ORA00-7AB0
Exposure to media		• 120/230 V AC input voltage, power 60 W	6AG1507-ORA00-7AB0
SIPLUS PS PSU8200 3-phase, 24 V DC/40 A	6AG1437-3BA10-7AA0	Extended temperature range and exposure to media	
Stabilized power supply Input: 400 ... 500 V 3 AC Output: 24 V DC/20 A			
Exposure to media			

Ordering data	Article No.	Ordering data	Article No.
<i>SIPLUS DC/DC converter</i>		SIPLUS modular buffer module	
SIPLUS PS 24V/0.375A	6AG1931-2BA00-3AA0	For 6AG1961-3BA01-7AA0; buffer time 100 ms to 10 s, dependent on load current	6AG1961-3BA01-7AA0
DC/DC stabilized power supply Input: 48 ... 220 V DC Output: 24 V DC/0.375 A condensation permissible Exposure to media		SIPLUS PS signaling module modular	6AG1961-3BA10-7AA0
<i>SIPLUS add-on modules</i>		For 6AG1XXX-3BA00 -XXXX signaling contacts: Output voltage ok, operational availability ok, remote ON/OFF Extended temperature range and exposure to media	
SIPLUS PS E202U redundancy module		SIPLUS SITOP signaling module	6AG1961-3BA10-6AA0
Input/output: 24 V DC/40 A suitable for decoupling two SITOP power supplies with a maximum of 20 A output current		Hard gold-plated contacts; for 6AG1XXX-3BA00 -XXXX signaling contacts: Output voltage ok, operational availability ok, remote ON/OFF	
• Extended temperature range and exposure to media	6AG1961-3BA21-7AX0	<i>SIPLUS DC-UPS, uninterruptible power supply</i>	
• Exposure to media	6AG1961-3BA21-4AX0	SIPLUS PS DC UPS module 15 A	6AG1931-2EC21-2AA0
SIPLUS PSE200U 3 A	6AG1961-2BA31-7AA0	Uninterruptible power supply without interface Input: 24 V DC/16 A, Output: 24 V DC/15 A Extended temperature range and exposure to media	
4-channel selectivity module Input: 24 V DC Output: 24 V DC/3A per channel output current adjustable 0.5 ... 3 A Exposure to media		SIPLUS PS DC UPS module 40 A	6AG1931-2FC21-7AA0
SIPLUS PSE200U 10 A	6AG1961-2BA41-7AA0	Uninterruptible power supply without interface; Input: 24 V DC/43 A, Output: 24 V DC/40 A Extended temperature range and exposure to media	
4-channel selectivity module Input: 24 V DC Output: 24 V DC/10 A per channel output current adjustable 3 ... 10 A Exposure to media			

Overview



AS-Interface power supply unit for 3 A

AS-Interface power supply units feed 30 V DC into the AS-Interface cable and supply the AS-Interface components. They contain performance-optimized data decoupling for separating communication signals and supply voltage. As the result, AS-Interface is able to convey both data and power along a single line. The power packs are overload and short-circuit proof.

Dimensions

AS-Interface power supply units have compact dimensions in widths of 50 / 70 / 120 mm. No clearance to other devices is required when mounting.

Features

- Higher rating: The power supply units deliver currents of 2.6 to 8 A.
- Integrated data decoupling: As the result, AS-Interface is able to convey both data and power along a single line.
- Integrated ground-fault detection: The power supply units perform the reliable detection and signaling of ground faults according to IEC 60204-1. The AS-Interface voltage can be disconnected automatically in the event of a ground fault.
- Integrated overload detection: An output overload is identified and signaled over a diagnostics LED.
- Diagnostics memory: Any ground faults or overloads on the output side are stored in a diagnostics memory until the device is RESET.
- Remote RESET and remote signaling: A ground fault can be signaled and evaluated by relay contacts over a central control and/or indicator light.
- Diagnostics LEDs: Three different LEDs indicate the status of the AS-Interface power supply locally at the power supply unit.
- Ultra-wide input range / 2-phase connection: The ultra-wide input range of 120 to 500 V of the 8 A version means that the supply units can be used in virtually any network worldwide. In addition, this version dispenses with the need for an N conductor as the device can be connected directly between 2 phases of a network.
- Operation with 24 V DC: The 3 A power supply unit is also available as a version with a 24 V DC input. This power supply unit is suitable for use in battery-operated plants or plants with uninterrupted power supply (UPS).
- Removable terminal blocks in spring-type connection: The power supply units are equipped with three removable terminal blocks for simple device replacement: for the input side, for the output side and for Signal/RESET connections.

Benefits

- Complete solution for supplying AS-Interface networks while making full use of the maximum possible cable length per AS-i segment
- Only AS-i masters and AS-i slaves need to be connected to the AS-Interface cable to operate AS-Interface
- Compact, room-saving footprint
- Reliable power supply even for large numbers of AS-Interface modules with high power requirements
- Increased safety and savings on additional components owing to the integrated ground fault and overload detection
- Fast fault detection and reduced downtimes thanks to diagnostics memory, remote signaling and remote RESET
- Reduced downtimes as the result of removable terminal blocks which enable the fast exchanging of devices
- Ultra-wide input range of the 8 A version permits single-phase and two-phase operation and removes the need for an N conductor
- Can be used world-wide thanks to, for example, UL/CSA approval (UL 508)
- With the 2.6 A version, the output power is restricted to max. 100 W for use in Class 2 circuits in accordance with NEC (National Electrical Code)

Ordering data

Article No.

AS-Interface power supply units, IP20

- AS-i single output 30 V DC
- With integrated ground-fault detection
- With spring-type terminals, removable terminals,
- 2.6 A version with output power restricted to max. 100 W (for Class 2 circuits in accordance with NEC)

Dimensions:

Width:
50 mm (2.6 A / 3 A),
70 mm (5 A),
120 mm (8 A);
Height: 125 mm;
Depth: 125 mm

• Output current: 2.6 A / max. 100 W Input voltage: 120 / 230 V AC (selectable)	3RX9501-2BA00
• Output current: 3 A Input voltage: 120 / 230 V AC (selectable)	3RX9501-0BA00
• Output current: 3 A Input voltage: 24 V DC	3RX9501-1BA00
• Output current: 5 A Input voltage: 120 / 230 V AC (selectable)	3RX9502-0BA00
• Output current: 8 A Input voltage: 120 / 230 ... 500 V AC (selectable)	3RX9503-0BA00

More information

More information on AS-Interface, see Catalog IC 10, Chapter 2 "Industrial Communication".

Overview



PSN130S 30 V power supply units for 3 A, 4 A and 8 A

The PSN130S 30 V power supplies feed 30 V DC into the AS-Interface cable and supply the AS-Interface components, but do not include data decoupling. Additional data decoupling units are needed to separate communication signals and supply voltage, see "S22.5 Data Decoupling Modules" or "DCM 1271 Data Decoupling Module", see Accessories, page 14/4

The power supplies are overload and short-circuit proof.

Dimensions

The 30 V power supply units have compact dimensions in widths of 50 and 70 mm. No distances to other devices must be observed during the installation.

Features

- Primary-clocked power supplies for connecting to a single-phase AC power supply system
- Power for currents of 3 A, 4 A and 8 A
- The output voltage is floating, and resistant to short-circuits and no-load operation. In the event of an overload, the output voltage will be reduced or switched off. After a short-circuit or overload the devices will start up again automatically.
- In the event of a device fault, the output voltage will be limited to max. 37 V.
- Modular installation devices in degree of protection IP20 and safety class I
- Diagnostics: With an output voltage > 26.5 V DC, the green LED (30V O.K.) is lit and the signaling contact 13-14 is closed.

Benefits

- Low-cost alternative solution for supplying AS-Interface networks while making full use of the maximum possible cable length per AS-i segment
- Cost advantage particularly for multiple networks
- Compact, space-saving dimensions
- Reliable power supply even for large numbers of AS-Interface modules with high power requirements
- Can be used worldwide thanks to, for example, UL/CSA approval (UL 508)

Application



Data decoupling modules S22.5 and DCM 1271

A data decoupling module is also required in order to use a PSN130S 30 V power supply unit for AS-Interface.

With the aid of the data decoupling module, the AS-Interface network can be supplied with 30 V DC from a standard power supply unit and the transmission of data and power can be realized along one cable.

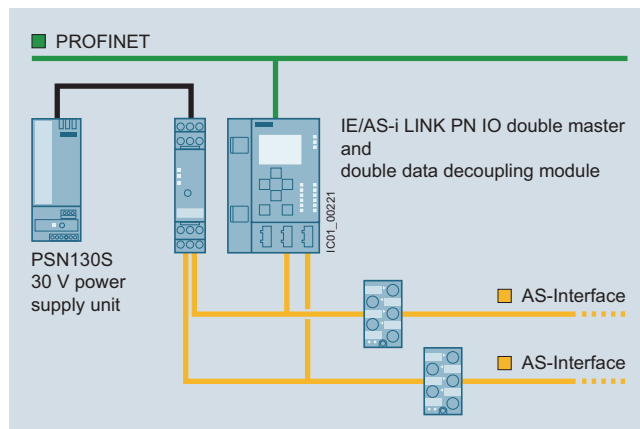
Alternatively, it is also possible to use a standard 24 V DC power supply unit (AS-i Power24V). However, in this case please note that all components involved must be designed for the reduced voltage and that the maximum length of an AS-i Power24V network is limited to 50 m.

The power supply units must comply with the PELV (Protective Extra Low Voltage) or SELV (Safety Extra Low Voltage) standards, have a residual ripple of < 250 mVpp and in the event of a fault, must limit the output voltage to a maximum of 40 V.

The combination of data decoupling modules and standard power supply units is therefore a cost-efficient alternative to the service-proven AS-Interface power supply units.

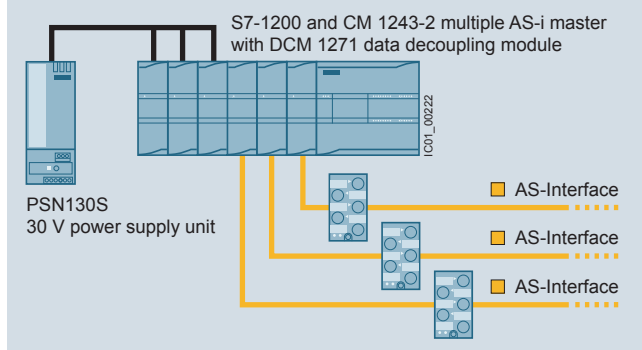
The quality of the data signals and the reliable operation of the AS-i network are not negatively affected as the result.

Configuration examples of AS-Interface networks with a 30 V power supply unit



Configuration of AS-Interface multiple networks, each with one PSN130S 30 V power supply unit (examples with schematic representation): Double network based on S22.5 double data decoupling module and double master IE/AS-i LINK PN IO

Application (continued)



Configuration of AS-Interface multiple networks, each with one PSN130S 30 V power supply unit (examples with schematic representation): Triple network based on SIMATIC S7-1200 with DCM 1271 data decoupling modules and CM 1243-2 communication processors

Technical specifications

Product	PSN130S 30 V DC power supply unit			
	Version	3 A	4 A	8 A
Input data				
• Input voltage, rated value U_e	V AC	120 / 230 V, single-phase, automatic selection		
• Input voltage range	V AC	85 ... 132 / 174 ... 264		
• Mains frequency	Hz	50 / 60		
• Power consumption at full load, typ.	W	103	139	270
Output data				
• Output voltage, rated value U_a	V DC	30		
• Residual ripple	mV _{SS}	< 150		
• Output current, rated value at -20 ... +60 °C	A	3	4	8
• Max. output current at +60 ... +70 °C	A	3	3	4
Degree of efficiency in rated conditions				
• Degree of efficiency	%	87	88	90
• Power loss, typ.	W	12	17	25
Protection and monitoring				
• Output overvoltage protection	V	< 37		
• Current limit, typ.	A	4	5,5	11
Safety				
• Electrical separation primary / secondary		Output voltage PELV / SELV according to IEC 60950 and EN 50178		
• Protection class		I		
• Degree of protection		IP20		
Approvals				
• UL		UL 508 / CSA 22.2		
• Pollution degree		IEC 60950		
• Overvoltage category and electrical separation		EN 50178 and IEC 61558		
EMC				
• Emitted interference (class B)		IEC 61000-6-3		
• Line harmonics limit		IEC 61000-3-2		
• Interference immunity		IEC 61000-6-2		
Operating data				
Ambient temperature				
• Operation	°C	-20 ... +70		
• Transport / storage	°C	-40 ... +85		
Pollution degree		2		
Humidity class		Climate class according to DIN 50010, relative air humidity max. 100 %, without condensation		
Dimensions and weight				
• Width	mm	50	50	70
• Height x depth	mm	125 x 126.5		
• Weight	kg	0.4	0.4	

Ordering data

Article No.

PSN130S 30 V DC power supply units
(without AS-i data decoupling)

Output voltage 30 V DC, with screw terminals,

Dimensions:
Width: 50 mm (3 A / 4 A), 70 mm (8 A);
Height: 125 mm; Depth: 126.5 mm

- Output current: 3 A
Input voltage: 120 / 230 V AC (automatic selection)
- Output current: 4 A
Input voltage: 120 / 230 V AC (automatic selection)
- Output current: 8 A
Input voltage: 120 / 230 V AC (automatic selection)

3RX9511-0AA00

3RX9512-0AA00

3RX9513-0AA00

Accessories

Article No.

Data decoupling modules in enclosure, 22.5 mm

S22.5 data decoupling modules

With screw terminals, removable terminals,
Dimensions:
Width: 22.5 mm;
Height: 101 mm; Depth: 115 mm

- Single data decoupling module, 1 x 4 A
- Double data decoupling module, 2 x 4 A

3RK1901-1DE12-1AA0

3RK1901-1DE22-1AA0

With spring-type terminals, removable terminals,
Dimensions:
Width: 22.5 mm;
Height: 105 mm; Depth: 115 mm

- Single data decoupling module, 1 x 4 A
- Double data decoupling module, 2 x 4 A

3RK1901-1DG12-1AA0

3RK1901-1DG22-1AA0

Data decoupling modules in enclosure for S7-1200

DCM 1271 data decoupling module

3RK7271-1AA30-0AA0

With screw terminals, removable terminals (included in the scope of supply),
Dimensions:
Width: 30 mm;
Height: 100 mm; Depth: 75 mm

Screw terminals (replacement) for AS-i DCM 1271 data decoupling module

- 5-pole
- 3-pole for connecting the power supply unit

3RK1901-3MA00

3RK1901-3MB00

More information

For operating instructions and other technical information see <http://support.automation.siemens.com/WW/view/en/64364000>.

More information on AS-Interface, see Catalog IC 10, Chapter 2 "Industrial Communication".

Why choose the SCALANCE XB family of unmanaged switches?

Designed for simple and cost effective entry into the Industrial Ethernet switch market, the Scalance XB family allows engineers to increase the number of end devices or network segments without the need for configuration.

- Cost-effective solutions starting at \$95
- FastEthernet and Gigabit models for maximum performance
- Seamless integration with SIMATIC design
- Compact design
- Plug-and-Play networking; no configuration required
- Distances up to 26km using Fiber
- DIN and wall mountable

Reliability

Experience the rugged durability and extended reliability designed into all Siemens Industrial Ethernet products.

- Mean Time Between Failure (MTBF) over 100 years
- UL, CSA, CE and C-Tick Certified
- Large operating temperature range from -10° C to 60° C
- LED-diagnostics conveniently indicate power, link and transmission status on the faceplate

Fiber Optics

Utilize SCALANCE XB Fiber Optic data transmission to evade electromagnetic interference and reach vast distances with minimal data loss.

- Optical SC-Port available
- Length of fiber-optic transmission:
 - Max. 5 km with Industrial Ethernet FO cables Multimode
 - Max. 26 km with Industrial Ethernet FO cables Singlemode

Expand your industrial network with Siemens reliable unmanaged switching solutions

Compact Design

Pocket-sized design allows for convenient placement of your industrial switch inside a panel, especially when space is at a premium.

- Dimensions: 45mm x 100mm x 87mm
- Weight: 165g to 260g

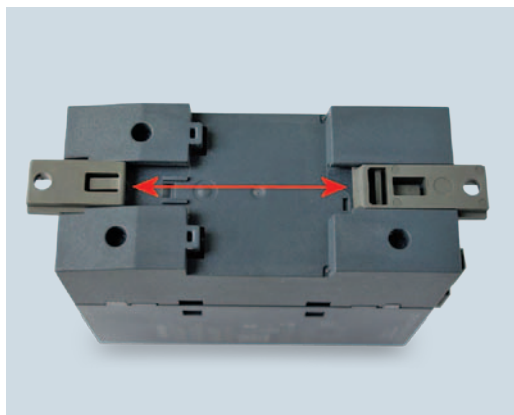
Flexibility

The SCALANCE XB line offers a comprehensive variety of unmanaged switches: full Gigabit capability and distances reaching up to 26 km with optional Fiber Optic ports. All eight switches come with the innovative dual-purpose DIN and Wall mount.

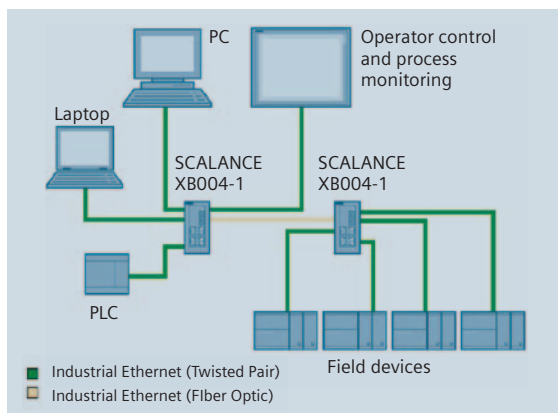
- 4 + 1, 5 and 8 Port models
- RJ45 and SC Fiber Optic connectors
- FastEthernet and Gigabit capability
- Singlemode or Multimode Fiber Optics
- Hybrid DIN/Wall mount

Simply connect your end devices to a SCALANCE XB and allow autosensing, autocrossover detection and autonegotiation features to set data transmission parameters. Large MAC learning tables allow seamless integration of Bus and Star topologies into your Industrial Ethernet network.

- Easy integration with PROFINET networks
- Data transmission rate detection via autosensing
- Autocrossover and autonegotiation
- MAC address learning tables up to 8 k



Hybrid DIN/wall mount







Mixed star topology with SCALANCE XB004-1

Fast Ethernet

SCALANCE XB-000 Industrial Ethernet switches





Unmanaged Industrial Ethernet switches for 10/100 Mbit/s, IP20 degree of protection, including operating instructions, Industrial Ethernet Network manual on CD-ROM

SCALANCE XB005	Ordering Data	Order No.
	5 x 10/100 Mbit/s electrical RJ45 ports	6GK5005-0BA00-1AB2
	8 x 10/100 Mbit/s electrical RJ45 ports	6GK5008-0BA10-1AB2
	4 x 10/100 Mbit/s electrical RJ45 ports and 1 x 100 Mbit/s optical SC port (multimode, glass), up to 5 km	6GK5004-1BD00-1AB2
	4 x 10/100 Mbit/s electrical RJ45 ports and 1 x 100 Mbit/s optical SC port (singlemode, glass), up to 26 km	6GK5004-1BF00-1AB2

Gigabit

SCALANCE XB-000 Industrial Ethernet switches

Unmanaged Industrial Ethernet switches for 10/100/1000 Mbit/s, IP20 degree of protection, including operating instructions, Industrial Ethernet Network manual on CD-ROM

SCALANCE XB005G	Ordering Data	Order No.
	5 x 10/100/1000 Mbit/s electrical RJ45 ports	6GK5005-0GA10-1AB2
	8 x 10/100/1000 Mbit/s electrical RJ45 ports	6GK5008-0GA10-1AB2
	4 x 10/100/1000 Mbit/s electrical RJ45 ports and 1 x 1000 Mbit/s optical SC port (multimode, glass), up to 750 m	6GK5004-1GL10-1AB2
	4 x 10/100/1000 Mbit/s electrical RJ45 ports and 1 x 1000 Mbit/s optical SC port (singlemode, glass), up to 10 km	6GK5004-1GM10-1AB2

Technical specifications

Interfaces	
Connection of terminal equipment or network components via twisted pair	4, 5 or 8 x 10/100/1000 Mbit/s RJ45 electrical ports
Number of optical ports for fiber-optic cables	1 x 100 or 1 x 1000 Mbit/s optical SC port in multimode and singlemode versions
Connection for power supply	1 x 3 plug-in terminal block
Electrical data	
Power supply Permissible range	+24 V DC +19.2 to +28.8 V DC
Power loss at 24 V DC	1.68 W to 12.5 W
Current consumption at rated voltage	70 mA to 520 mA
Power supply input fuse design	0.6 A / 60 V
Permissible ambient conditions/EMC	
Operating temperature	-10 °C to +60 °C
Transport/storage temperature	-40 °C to +80 °C
Relative humidity in operation	< 95% (no condensation)
Interference immunity	EN 6100-6-2
Emitted interference	EN 6100-6-4
Degree of protection	IP20
Safety certifications	UL, CSA, CE and C-Tick
Construction	
Dimensions (W x H x D)	45mm x 100mm x 87mm
Weight	0.165 kg to 0.260 kg
Installation options	DIN rail, wall mounting

Accessories

FastConnect	Part Number
TP cable 2 x 2 (per meter)	
IE FC Standard Cable 2x2	6XV1840-2AH10
IE FC Flexible Cable GP 2x2	6XV1870-2B
TP cable 4 x 2 (per meter)	
IE FC TP Standard Cable GP 4 x 2 (AWG24)	6XV1878-2A
IE FL TP Flexible Cable GP 4x2 (AWG24)	6XV1878-2B
Tools	
IE FC Stripping Tool	6GK1901-1GA00
Connectors	
IE FC RJ45 180° Connector	6GK1901-1BB10-2AA0
IE FC RJ45 Plug 180° Gigabit Connector	6GK1901-1BB11-2AA0
Cables	
FO Standard Cable GP 50/125 Fiber-optic Cable pre-assembled for use with multimode switches	
80 m	6XV1873-6AN80
100 m	6XV1873-6AT10
150 m	6XV1873-6AT15
200 m	6XV1873-6AT20
300 m	6XV1873-6AT30
IE Standard Cable TP RJ45/RJ45 TP cable 4x2 with 2 RJ45 connectors	
0.5 m	6XV1870-3QE50
1 m	6XV1870-3QH10
2 m	6XV1870-3QH20
6 m	6XV1870-3QH60
10 m	6XV1870-3QN10
20 m	6XV1871-5BN20
24 V DC Power Supply	
SITOP compact 24 V/0.6 A	6EP1331-5BA00

FastConnect Cabling System

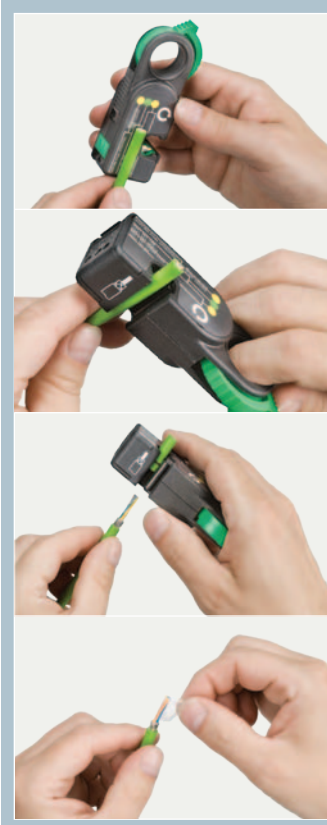
The FastConnect system provides a complete cabling solution for on-site assembly of custom length industrial Ethernet cables. The system comprises of a stripping tool, a full range of connectors, and various cable options.

Regardless of the type of connector you need, the assembly follows the same procedure.

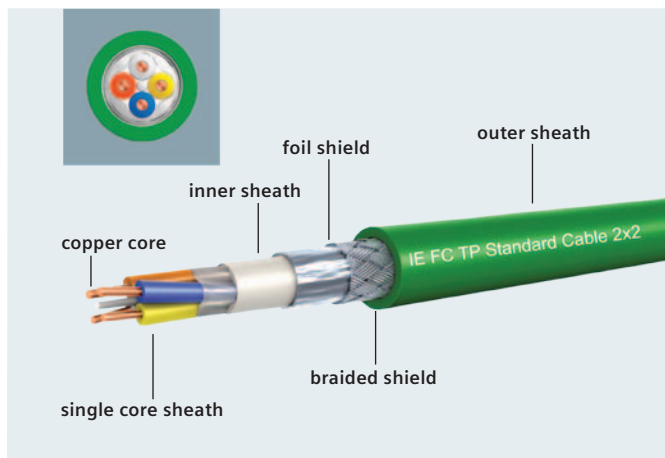
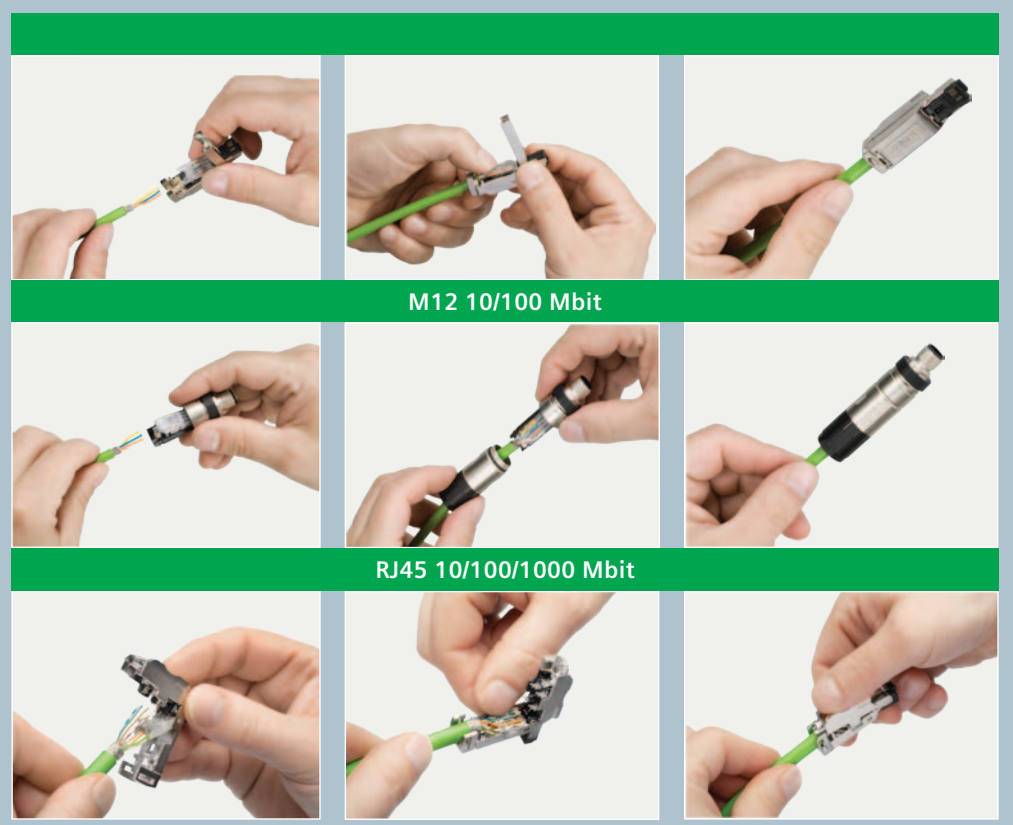
Your benefits:

- Greater flexibility for configuring the optimum cable length with the right connector on site
- Reduced stocking costs for ordering pre-assembled cables
- Easy installation using just one tool
- Easy routing of cables with pre-assembled, angled connectors
- Wiring is simplified due to color coding and the transparent contact cover






Cable Preparation






Termination




Connectors for Industrial Ethernet FastConnect System

	Product	Comments	Article no *)	
IE FC RJ45 Plug 2 x 2				
	10/100 FastConnect RJ45 Plug 180	RJ45 data connector; for connecting to IE FC TP cables 2x2, 180° cable outlet	1 pack = 1 piece	6GK1901-1BB10-2AA0
			1 pack = 10 pieces	6GK1901-1BB10-2AB0
			1 pack = 50 pieces	6GK1901-1BB10-2AE0
	10/100 FastConnect RJ45 Plug 90	90° cable outlet;	1 pack = 1 piece	6GK1901-1BB20-2AA0
			1 pack = 10 pieces	6GK1901-1BB20-2AB0
			1 pack = 50 pieces	6GK1901-1BB20-2AE0
	10/100 FastConnect RJ45 Plug 145	145° cable outlet;	1 pack = 1 piece	6GK1901-1BB30-0AA0
			1 pack = 10 pieces	6GK1901-1BB30-0AB0
			1 pack = 50 pieces	6GK1901-1BB30-0AE0
IE FC RJ45 Plug 4 x 2				
	10/100/1000 FastConnect RJ45 Plug (4x2)	RJ45 data connector; for connecting to IE FC TP cables 4x2	1 pack = 1 piece	6GK1901-1BB12-2AA0
			1 pack = 10 pieces	6GK1901-1BB12-2AB0
			1 pack = 50 pieces	6GK1901-1BB12-2AE0
M12 connectors				
	10/100 FastConnect M12 PRO	M12 connector with high degree of protection, 4-pin, D-coded for connection of electrical cables to SCALANCE X208PRO, ET 200 PRO PN or ET 200 eco PN	1 piece	6GK1901-0DB30-6AA0
			8 pieces	6GK1901-0DB30-6AA8
	10/100/1000 FastConnect M12 PRO	M12 connector with high degree of protection, 8-pin, X-coded for connection of electrical cables to SCALANCE W (Gigabit M12 interface),	1 piece	6GK1901-0DB30-6AA0
			8 pieces	6GK1901-0DB30-6AA8

Cables for Industrial Ethernet FastConnect System

	Product	Comments	Article no *)	
Industrial Ethernet FastConnect cables 2 x 2 at 100 Mbit/s, sold by the meter, in bulk				
	IE FC TP Standard Cable GP 2 x 2 (Type A)	Standard bus cable (4-core) with rigid cores for fast assembly	6XV1840-2AH10	
	IE FC TP Flexible Cable GP 2 x 2 (Type B)	Flexible bus cable (4-core), for occasionally moved machine components	6XV1870-2B	
	IE FC TP FRNC Cable GP 2 x 2 (Type B)	Flexible, halogen-free bus cable (4-core), for occasionally moved machine components	6XV1871-2F	
	IE FC TP Trailing Cable GP 2 x 2 (Type C)	Highly flexible bus cable (4-core) for continuous movement in cable carriers	6XV1870-2D	
	IE FC TP Trailing Cable 2 x 2 (Type C)	Highly flexible bus cable (4-core) for continuous movement in cable carriers	6XV1840-3AH10	
	IE TP Torsion Cable 2 x 2 (Type C)	Highly flexible bus cable (4-core) for continuous movement when using with robots	6XV1870-2F	
	IE FC TP Food Cable 2 x 2 (Type C)	Flexible bus cable (4-core), for food, beverages and tobacco industries	6XV1871-2L	
	IE FC TP Marine Cable 2 x 2 (Type B)	Bus cable (4-core), for marine and offshore use	6XV1840-4AH10	
	IE TP Ground Cable 2 x 2 (Type C)	Bus cable (4-core) for fixed routing in soil	6XV1871-2G	
	IE TP Train Cable GP 2 (Type C)	Bus cable (4-core) for special applications in trains; certified for railway applications	6XV1871-2T	
Industrial Ethernet FastConnect cables 4 x 2 at 1000 Mbit/s, sold by the meter, in bulk				
	IE FC TP Standard Cable GP 4 x 2	Standard bus cable (8-core), AWG22, Standard cable with rigid cores for fast assembly, for fixed installation	6XV1870-2E	
	IE FC TP Flexible Cable GP 4 x 2	Bus cable (8-core, AWG24) with flexible cores, Flexible cable for quick assembly, for occasionally moving machine parts	6XV1878-2B	

Pre-molded Industrial Ethernet cables

	IE TP Cord RJ45/RJ45	Patch cord, preferred length, pre-assembled with two RJ45 connectors	0.5 m	6XV1870-3QE50
			1.0 m	6XV1870-3QH10
			2.0 m	6XV1870-3QH20
			6.0 m	6XV1870-3QH60
			10 m	6XV1870-3QN10

*For additional cabling options, please refer to U.S. Part Number NTB-1BK02-0114.

Overview



LOGO! logic module

- The compact, easy-to-use and low-cost solution for simple control tasks
- Compact, easy to operate, universally applicable without accessories
- "All in one": Integrated display and operator panel
- 36 different functions can be connected at the press of a button or by means of PC software; up to 130 times over
- LOGO! 8: 38/43 different functions can be linked at the press of a button or using PC software; up to 200/400 times
- Functions are easy to change at the press of a button. No more time-consuming rewiring

SIPLUS LOGO!

- The controller for use in the toughest environmental conditions
- With extended temperature range from -40/-25 °C to +70 °C
- Suitable for exposure to environmental substances (harmful gas atmosphere)
- Condensation permissible
- With the proven PLC technology of LOGO!
- Easy to handle, program, maintain, and service
- Ideal for use in automotive engineering, environmental engineering, mining, chemical plants, material handling, food industry, etc.

Accessories:

- The front panel mounting set also allows simple and reliable installation of the logic modules in front panels; IP65 protection is thus possible.
- In order to ensure dependable operation of SIPLUS devices supplied by the battery in conjunction with combustion engines, it is necessary to put in a SIPLUS upmiter upstream device between the battery and the SIPLUS LOGO!.

For more information, please go to:

<http://www.siemens.com/siplus-extreme>

Technical specifications SIPLUS LOGO!

Ambient temperature range	-40/-25 ... +70 °C
Conformal coating	Coating of the printed circuit boards and the electronic components
Technical data	The technical data of the standard product applies except for the ambient conditions.

Ambient conditions

Extended range of environmental conditions

<ul style="list-style-type: none"> • with reference to ambient temperature, air pressure and altitude 	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // Tmin ... (Tmax - 10K) at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // Tmin ... (Tmax - 20K) at 658 hPa ... 540 hPa (+3500 m ... +5000 m)
<ul style="list-style-type: none"> • At cold restart, min. 	0° C

Relative humidity	
<ul style="list-style-type: none"> • with condensation, max. 	100 %; RH incl. bedewing/frost (no commissioning in bedewed state)

Resistance	
<ul style="list-style-type: none"> • to biologically active substances/ compliance with EN 60721-3-3 	Yes; Class 3B2 mold and fungal spores (except fauna); the supplied plug covers must remain in place on the unused interfaces during operation.
<ul style="list-style-type: none"> • to chemically active substances/ compliance with EN 60721-3-3 	Yes; Class 3C4 (RH < 75%) incl. salt spray in accordance with EN 60068-2-52 (severity 3); the supplied plug covers must remain in place on the unused interfaces during operation.
<ul style="list-style-type: none"> • to mechanically active substances, compliance with EN 60721-3-3 	Yes; Class 3S4 incl. sand, dust; the supplied plug covers must remain in place on unused interfaces during operation.

Overview



- The space-saving basic variants
- Interface for the connection of expansion modules, up to 24 digital inputs, 20 digital outputs, 8 analog inputs and 8 analog outputs can be addressed
- All basic units with integrated web server
- Enclosure width 72 mm (4 U)
- All basic units with Ethernet interface for communication with LOGO! 8, LOGO! TDE, SIMATIC Controllers, SIMATIC Panels and PCs
- Use of standard micro CF cards

Technical specifications

Article number	6ED1052-1CC08-0BA0	6ED1052-1MD08-0BA0	6ED1052-1HB08-0BA0	6ED1052-1FB08-0BA0
	LOGO! 24CE, 8DI(4AI)/4DQ, 400 Blocks	LOGO!12/24RCE, 8DI(4AI)/4DQ, 400 Blocks	LOGO! 24RCE, 8DI/4DQ, 400 Blocks	LOGO!230RCE, 8DI/4DQ, 400 Blocks
Display				
with display	Yes	Yes	Yes	Yes
Installation type/mounting				
Mounting	on 35 mm DIN rail, 4 spacing units wide	on 35 mm DIN rail, 4 spacing units wide	on 35 mm DIN rail, 4 spacing units wide	on 35 mm DIN rail, 4 spacing units wide
Supply voltage				
Rated value (DC)				
• 12 V DC		Yes		
• 24 V DC	Yes	Yes	Yes	
• 115 V DC				Yes
• 230 V DC				Yes
permissible range, lower limit (DC)	20.4 V	10.8 V	20.4 V	100 V
permissible range, upper limit (DC)	28.8 V	28.8 V	28.8 V	253 V
Rated value (AC)				
• 24 V AC			Yes	
• 115 V AC				Yes
• 230 V AC				Yes
Time of day				
Time switching clocks				
• Number	400; Max. 400, function-specific	400; Max. 400, function-specific	400; Max. 400, function-specific	400; Max. 400, function-specific
• Power reserve	480 h	480 h	480 h	480 h
Digital inputs				
Number of digital inputs	8; Of which 4 can be used in analog mode (0 to 10 V)	8; Of which 4 can be used in analog mode (0 to 10 V)	8	8
Digital outputs				
Number of digital outputs	4; Transistor	4; Relays	4; Relays	4; Relays
Short-circuit protection	Yes; electrical (1 A)	No; external fusing necessary	No; external fusing necessary	No; external fusing necessary
Output current				
• for signal "1" permissible range for 0 to 55 °C, max.	0.3 A	10 A		
Relay outputs				
Switching capacity of contacts				
- with inductive load, max.		3 A	3 A	3 A
- with resistive load, max.		10 A	10 A	10 A

Technical specifications (continued)

Article number	6ED1052-1CC08-0BA0	6ED1052-1MD08-0BA0	6ED1052-1HB08-0BA0	6ED1052-1FB08-0BA0
	LOGO! 24CE, 8DI(4AI)/4DQ, 400 Blocks	LOGO!12/24RCE, 8DI(4AI)/4DQ, 400 Blocks	LOGO! 24RCE, 8DI/4DQ, 400 Blocks	LOGO!230RCE, 8DI/4DQ, 400 Blocks
EMC				
Emission of radio interference acc. to EN 55 011				
• Limit class B, for use in residential areas	Yes; Radio interference suppression according to EN55011, Limit Value Class B	Yes	Yes	Yes
Degree and class of protection				
Degree of protection acc. to EN 60529				
• IP20	Yes	Yes	Yes	Yes
Standards, approvals, certificates				
CE mark	Yes	Yes	Yes	Yes
CSA approval	Yes	Yes	Yes	Yes
UL approval	Yes	Yes	Yes	Yes
FM approval	Yes	Yes	Yes	Yes
developed in accordance with IEC 61131	Yes	Yes	Yes	Yes
according to VDE 0631	Yes	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes	Yes
Ambient conditions				
Ambient temperature during operation				
• min.	-20 °C; No condensation	-20 °C; No condensation	-20 °C; No condensation	-20 °C; No condensation
• max.	55 °C	55 °C	55 °C	55 °C
Ambient temperature during storage/transportation				
• min.	-40 °C	-40 °C	-40 °C	-40 °C
• max.	70 °C	70 °C	70 °C	70 °C
Altitude during operation relating to sea level				
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)		Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)	Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)
Dimensions				
Width	71.5 mm	71.5 mm	71.5 mm	71.5 mm
Height	90 mm	90 mm	90 mm	90 mm
Depth	60 mm	60 mm	60 mm	60 mm

Ordering data

Article No.

Article No.

LOGO! 8 logic module		LOGO! 24RCE	6ED1052-1HB08-0BA0
LOGO! 24CE	6ED1052-1CC08-0BA0	Supply voltage 24 V AC/DC, 8 digital inputs 24 V AC/DC, 4 relay outputs 10 A, integrated time switch, Ethernet interface; 400 function blocks can be interlinked, modular expansion capability	
Supply voltage 24 V DC, 8 digital inputs 24 V DC, of which 4 can be used in analog mode (0 to 10 V), 4 digital outputs 24 V DC, 0.3 A, integrated time switch, Ethernet interface; 400 function blocks can be interlinked, modular expansion capability		LOGO! 230RCE	6ED1052-1FB08-0BA0
LOGO! 12/24RCE	6ED1052-1MD08-0BA0	Supply voltage 115...230 V AC/DC, 8 digital inputs 115...230 V AC/DC, 4 relay outputs 10 A, integrated time switch, Ethernet interface; 400 function blocks can be interlinked, modular expansion capability	
Supply voltage 12...24 V DC, 8 digital inputs 12/24 V DC, of which 4 can be used in analog mode (0 to 10 V) 4 relay outputs 10 A, integrated time switch, Ethernet interface; 400 function blocks can be interlinked, modular expansion capability			

Ordering data	Article No.	Article No.
Accessories		
LOGO! 8 text display HMI 6-line text display, can be connected to all LOGO! 8 variants with and without display, with 2 Ethernet interfaces; incl. installation accessories. Requires additional 12 V DC or 24 V AC/DC power supply	6ED1055-4MH08-0BA0	
LOGO!Soft Comfort V8 For programming on the PC in LAD/FBD; executes on Windows 8, 7, XP, Linux and Mac OSX; on DVD	6ED1058-0BA08-0YA1	
LOGO! Starter Kits In TANOS Box, with LOGO! Soft Comfort V8, WinCC Basic, Ethernet cable		
LOGO! Starter Kit 12/24 RCE With LOGO! 12/24 RCE, power supply, screwdriver, in Systainer	6ED1057-3BA01-0AA8	LOGO! Starter Kit 12/24 V With LOGO! 12/24 RCEO, LOGO! TD, power supply, screwdriver, in Systainer
LOGO! Starter Kit 130 RCE With LOGO! 230 RCE, power supply, screwdriver, in Systainer	6ED1057-3BA03-0AA8	LOGO! 8 KP300 Basic Starter Kit With LOGO! 12/24RCE, LOGO! Power 24 V 1.3 A, KP300 Basic mono PN
		LOGO! 8 KTP400 Basic Starter Kit With LOGO! 12/24RCE, LOGO! Power 24 V 1.3 A, KTP400 Basic
		LOGO! 8 KTP700 Basic Starter Kit With LOGO! 12/24RCE, LOGO! Power 24 V 1.3 A, KTP700 Basic
		Front panel mounting set Width 4 U, with keys Width 8 U, with keys
		6ED1057-3BA11-0AA8
		6AV2132-0HA00-0AA1
		6AV2132-0KA00-0AA1
		6AV2132-3GB00-0AA1
		6AG1057-1AA00-0AA3
		6AG1057-1AA00-0AA2

Overview



- Basic variants optimized for costs
- Interface for the connection of expansion modules, up to 24 digital inputs, 20 digital outputs, 8 analog inputs and 8 analog outputs can be addressed
- With connection option for LOGO! TDE text display
- All basic units with integrated web server
- Enclosure width 72 mm (4 U)
- All basic units with Ethernet interface for communication with LOGO! 8, LOGO! TDE, SIMATIC Controllers, SIMATIC Panels and PCs
- Use of standard micro CF cards

Technical specifications

Article number	6ED1052-2CC08-0BA0 LOGO! 24CEO, 8DI(4AI)/4DQ, 400 Blocks	6ED1052-2MD08-0BA0 LOGO!12/24RCEO, 8DI(4AI)/4DQ,400 Blocks	6ED1052-2HB08-0BA0 LOGO! 24RCEO, 8DI/4DQ, 400 Blocks
Installation type/mounting			
Mounting	on 35 mm DIN rail, 4 spacing units wide	on 35 mm DIN rail, 4 spacing units wide	on 35 mm DIN rail, 4 spacing units wide
Supply voltage			
Rated value (DC)		Yes	
• 12 V DC		Yes	
• 24 V DC	Yes	Yes	Yes
permissible range, lower limit (DC)	20.4 V	10.8 V	20.4 V
permissible range, upper limit (DC)	28.8 V	28.8 V	28.8 V
Rated value (AC)			
• 24 V AC			Yes
Time of day			
Time switching clocks			
• Number	400; Max. 400, function-specific	400; Max. 400, function-specific	400; Max. 400, function-specific
• Power reserve	480 h	480 h	480 h
Digital inputs			
Number of digital inputs	8; Of which 4 can be used in analog mode (0 to 10 V)	8; Of which 4 can be used in analog mode (0 to 10 V)	8
Digital outputs			
Number of digital outputs	4; Transistor	4; Relays	4; Relays
Short-circuit protection	Yes; electrical (1 A)	No; external fusing necessary	No; external fusing necessary
Output current			
• for signal "1" permissible range for 0 to 55 °C, max.	0.3 A	10 A	
Relay outputs			
Switching capacity of contacts			
- with inductive load, max.		3 A	3 A
- with resistive load, max.		10 A	10 A
EMC			
Emission of radio interference acc. to EN 55 011			
• Limit class B, for use in residential areas	Yes; Radio interference suppression according to EN55011, Limit Value Class B	Yes	Yes
Degree and class of protection			
Degree of protection acc. to EN 60529			
• IP20	Yes	Yes	Yes

Technical specifications (continued)

Article number	6ED1052-2CC08-0BA0 LOGO! 24CEO, 8DI(4AI)/4DQ, 400 Blocks	6ED1052-2MD08-0BA0 LOGO!12/24RCEO, 8DI(4AI)/4DQ,400 Blocks	6ED1052-2HB08-0BA0 LOGO! 24RCEO, 8DI/4DQ, 400 Blocks
Standards, approvals, certificates			
CE mark	Yes	Yes	Yes
CSA approval	Yes	Yes	Yes
UL approval	Yes	Yes	Yes
FM approval	Yes	Yes	Yes
developed in accordance with IEC 61131	Yes	Yes	Yes
according to VDE 0631	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes
Ambient conditions			
Ambient temperature during operation	• min. -20 °C; No condensation • max. 55 °C	-20 °C; No condensation 55 °C	-20 °C; No condensation 55 °C
Ambient temperature during storage/transportation	• min. -40 °C • max. 70 °C	-40 °C 70 °C	-40 °C 70 °C
Altitude during operation relating to sea level	• Ambient air temperature-barometric pressure-altitude Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)		Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)
Dimensions			
Width	71.5 mm	71.5 mm	71.5 mm
Height	90 mm	90 mm	90 mm
Depth	58 mm	60 mm	58 mm
Article number		Article number	
6ED1052-2FB08-0BA0 LOGO!230RCEO, 8DI/4DQ,400 Blocks		6ED1052-2FB08-0BA0 LOGO!230RCEO, 8DI/4DQ,400 Blocks	
Display		Degree and class of protection	
with display	No	Degree of protection acc. to EN 60529 • IP20 Yes	
Installation type/mounting		Standards, approvals, certificates	
Mounting	on 35 mm DIN rail, 4 spacing units wide	CE mark Yes CSA approval Yes UL approval Yes FM approval Yes developed in accordance with IEC 61131 Yes according to VDE 0631 Yes Marine approval Yes	
Supply voltage		Ambient conditions	
Rated value (DC)		Ambient temperature during operation	
• 115 V DC Yes		• min. -20 °C; No condensation	
• 230 V DC Yes		• max. 55 °C	
permissible range, lower limit (DC) 100 V		Ambient temperature during storage/transportation	
permissible range, upper limit (DC) 253 V		• min. -40 °C	
Rated value (AC)		• max. 70 °C	
• 115 V AC Yes		Altitude during operation relating to sea level	
• 230 V AC Yes		• Ambient air temperature-barometric pressure-altitude Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)	
Time of day		Dimensions	
Time switching clocks		Width 71.5 mm	
• Number 400; Max. 400, function-specific		Height 90 mm	
• Power reserve 480 h		Depth 60 mm	
Digital inputs			
Number of digital inputs 8			
Digital outputs			
Number of digital outputs 4; Relays			
Short-circuit protection No; external fusing necessary			
Relay outputs			
Switching capacity of contacts			
- with inductive load, max. 3 A			
- with resistive load, max. 10 A			
EMC			
Emission of radio interference acc. to EN 55 011			
• Limit class B, for use in residential areas Yes			

Ordering data	Article No.	Article No.
LOGO! 8 logic module		Accessories
LOGO! 24CEo logic module 24 V DC supply voltage, 8 digital inputs 24 V DC, of which 4 can be used in analog mode (0 to 10 V), 4 digital outputs 24 V DC, 0.3 A, integrated time switch, Ethernet interface; without display and keyboard; 400 function blocks can be interlinked, modular expansion capability	6ED1052-2CC08-0BA0	LOGO! TDE text display 6-line text display, can be connected to all LOGO! 8 variants with and without display, with 2 Ethernet interfaces; incl. installation accessories. Requires additional 12 V DC or 24 V AC/DC power supply
LOGO! 12/24RCEo logic module 12...24 V DC supply voltage, 8 digital inputs 12...24 V DC, of which 4 can be used in analog mode (0 to 10 V), 4 relay outputs 10 A, integrated time switch, Ethernet interface; without display or keyboard; 400 function blocks can be interlinked, modular expansion capability	6ED1052-2MD08-0BA0	LOGO!Soft Comfort V8 For programming on the PC in LAD/FBD; executes on Windows 8, 7, XP, Linux and Mac OSX; on DVD
LOGO! 24RCEo logic module 24 V AC/DC supply voltage, 8 digital inputs 24 V AC/DC, 4 relay outputs 10 A, integrated time switch, Ethernet interface; without display or keyboard; 400 function blocks can be interlinked, modular expansion capability	6ED1052-2HB08-0BA0	LOGO! Starter Kits In TANOS Box, with LOGO! Soft Comfort V8, WinCC Basic, Ethernet cable
LOGO! 230RCEo logic module 115...230 V AC/DC supply voltage, 8 digital inputs 115...230 V AC/DC, 4 relay outputs 10 A, integrated time switch, Ethernet interface; without display or keyboard; 400 function blocks can be interlinked, modular expansion capability	6ED1052-2FB08-0BA0	LOGO! Starter Kit 12/24 RCE With LOGO! 12/24 RCE, power supply, screwdriver, in Systainer
		LOGO! Starter Kit 130 RCE With LOGO! 230 RCE, power supply, screwdriver, in Systainer
		LOGO! Starter Kit 12/24 V With LOGO! 12/24 RCEO, LOGO! TD, power supply, screwdriver, in Systainer
		LOGO! 8 KP300 Basic Starter Kit With LOGO! 12/24RCE, LOGO! Power 24 V 1.3 A, KP300 Basic mono PN
		LOGO! 8 KTP400 Basic Starter Kit With LOGO! 12/24RCE, LOGO! Power 24 V 1.3 A, KTP400 Basic
		LOGO! 8 KTP700 Basic Starter Kit With LOGO! 12/24RCE, LOGO! Power 24 V 1.3 A, KTP700 Basic

Overview



- Expansion modules for connection to LOGO! Modular
- With digital inputs and outputs, analog inputs, or analog outputs

Technical specifications

Article number	6ED1055-1CB00-0BA2	6ED1055-1HB00-0BA2	6ED1055-1MB00-0BA2	6ED1055-1FB00-0BA2
	LOGO! DM8 24 Exp. mod., 4DI/4DQ	LOGO! DM8 24R Exp. mod. 2 MW, 4DI/4DQ	LOGO! DM8 12/24R Exp. mod. 2 MW, 4DI/DQ	LOGO! DM8 230R Exp. mod. 2 MW, 4DI/4DQ
Installation type/mounting				
Mounting	on 35 mm DIN rail, 2 spacing units wide	on 35 mm DIN rail, 2 spacing units wide	on 35 mm DIN rail, 2 spacing units wide	on 35 mm DIN rail, 2 spacing units wide
Supply voltage				
Rated value (DC)				
• 12 V DC			Yes	
• 24 V DC	Yes	Yes	Yes	
• 115 V DC				Yes
• 230 V DC				Yes
permissible range, lower limit (DC)	20.4 V	20.4 V	10.8 V	100 V
permissible range, upper limit (DC)	28.8 V	28.8 V	28.8 V	253 V
Rated value (AC)				
• 24 V AC		Yes		
• 115 V AC				Yes
• 230 V AC				Yes
Line frequency				
• permissible range, lower limit		47 Hz		47 Hz
• permissible range, upper limit		63 Hz		63 Hz
Digital inputs				
Number of digital inputs	4	4	4	4
Input voltage				
• Type of input voltage	DC	AC/DC	DC	AC/DC
• for signal "0"	< 5 V DC	< 5 V AC/DC	< 5 V DC	< 40 V AC, < 30 V DC
• for signal "1"	> 12 V DC	> 12 V AC/DC	> 8.5 V	> 79 V AC, > 79 V DC
Input current				
• for signal "0", max. (permissible quiescent current)	0.88 mA	1.1 mA	0.88 mA	0.06 mA; 0.05 mA with AC, 0.06 mA with DC
• for signal "1", typ.	2.1 mA	2.63 mA	1.5 mA	0.13 mA
Input delay (for rated value of input voltage)				
for standard inputs				
- at "0" to "1", max.	1.5 ms	1.5 ms	1.5 ms	40 ms
- at "1" to "0", max.	1.5 ms	15 ms	1.5 ms	75 ms

Technical specifications (continued)

Article number	6ED1055-1CB00-0BA2	6ED1055-1HB00-0BA2	6ED1055-1MB00-0BA2	6ED1055-1FB00-0BA2
	LOGO! DM8 24 Exp. mod., 4DI/4DQ	LOGO! DM8 24R Exp. mod. 2 MW, 4DI/4DQ	LOGO! DM8 12/24R Exp. mod. 2 MW, 4DI/DQ	LOGO! DM8 230R Exp. mod. 2 MW, 4DI/4DQ
Digital outputs				
Number of digital outputs	4	4; Relays	4; Relays	4; Relays
Short-circuit protection	Yes	No	No	No
Controlling a digital input		Yes	Yes	Yes
Switching capacity of the outputs				
• on lamp load, max.		1 000 W	1 000 W	1 000 W; 500 W at 115V AC
Parallel switching of two outputs				
• for uprating	No	No	No	No
Switching frequency				
• with resistive load, max.	10 Hz	2 Hz	2 Hz	2 Hz
• with inductive load, max.	0.5 Hz	0.5 Hz	0.5 Hz	0.5 Hz
• mechanical, max.		10 Hz	10 Hz	10 Hz
Relay outputs				
Switching capacity of contacts				
- with inductive load, max.		3 A	3 A	3 A
- with resistive load, max.		5 A	5 A	5 A
EMC				
Emission of radio interference acc. to EN 55 011				
• Limit class B, for use in residential areas	Yes	Yes	Yes	Yes
Degree and class of protection				
Degree of protection acc. to EN 60529				
• IP20	Yes	Yes	Yes	Yes
Standards, approvals, certificates				
CE mark	Yes	Yes	Yes	Yes
CSA approval	Yes	Yes	Yes	Yes
UL approval	Yes	Yes	Yes	Yes
FM approval	Yes	Yes	Yes	Yes
developed in accordance with IEC 61131	Yes	Yes	Yes	Yes
according to VDE 0631	Yes	Yes		Yes
Marine approval	Yes	Yes	Yes	Yes
Ambient conditions				
Ambient temperature during operation				
• min.	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C
• max.	55 °C	55 °C	55 °C	55 °C
Dimensions				
Width	35.5 mm	35.5 mm	35.5 mm	35.5 mm
Height	90 mm	90 mm	90 mm	90 mm
Depth	58 mm	58 mm	58 mm	58 mm

Technical specifications (continued)

Article number	6ED1055-1CB10-0BA2 LOGO! DM16 24 Exp. mod., 4 MW, 8DI/8DQ	6ED1055-1NB10-0BA2 LOGO! DM16 24R Exp. mod. 4 MW, 8DI/8DQ	6ED1055-1FB10-0BA2 LOGO! DM16 230R Exp. mod. 4 MW, 8DI/8DQ
Installation type/mounting			
Mounting	on 35 mm DIN rail, 4 spacing units wide	on 35 mm DIN rail, 4 spacing units wide	on 35 mm DIN rail, 4 spacing units wide
Supply voltage			
Rated value (DC)			
• 24 V DC	Yes	Yes	
• 115 V DC			Yes
• 230 V DC			Yes
permissible range, lower limit (DC)	20.4 V	20.4 V	100 V
permissible range, upper limit (DC)	28.8 V	28.8 V	253 V
Rated value (AC)			
• 24 V AC		No	
• 115 V AC			Yes
• 230 V AC			Yes
Line frequency			
• permissible range, lower limit			47 Hz
• permissible range, upper limit			63 Hz
Digital inputs			
Number of digital inputs	8	8	8
Input voltage			
• Type of input voltage	DC	DC	AC/DC
• for signal "0"	< 5 V DC	< 5 V DC	< 40 V AC, < 30 V DC
• for signal "1"	> 12 V DC	> 12 V DC	> 79 V AC, > 79 V DC
Input current			
• for signal "0", max. (permissible quiescent current)	0.85 mA	0.85 mA	0.06 mA; 0.05 mA with AC, 0.06 mA with DC
• for signal "1", typ.	2 mA	2 mA	0.13 mA
Input delay (for rated value of input voltage)			
for standard inputs			
- at "0" to "1", max.	1.5 ms	1.5 ms	40 ms
- at "1" to "0", max.	1.5 ms	1.5 ms	75 ms
Digital outputs			
Number of digital outputs	8	8; Relays	8; Relays
Short-circuit protection	Yes	No	No
Controlling a digital input		Yes	Yes
Switching capacity of the outputs			
• on lamp load, max.		1 000 W	1 000 W; 500 W at 115V AC
Parallel switching of two outputs			
• for uprating	No	No	No
Switching frequency			
• with resistive load, max.	10 Hz	2 Hz	2 Hz
• with inductive load, max.	0.5 Hz	0.5 Hz	0.5 Hz
• mechanical, max.		10 Hz	10 Hz
Relay outputs			
Switching capacity of contacts			
- with inductive load, max.		3 A	3 A
- with resistive load, max.		5 A	5 A

Technical specifications (continued)

Article number	6ED1055-1CB10-0BA2 LOGO! DM16 24 Exp. mod., 4 MW, 8DI/8DQ	6ED1055-1NB10-0BA2 LOGO! DM16 24R Exp. mod. 4 MW, 8DI/8DQ	6ED1055-1FB10-0BA2 LOGO! DM16 230R Exp. mod. 4 MW, 8DI/8DQ
EMC			
Emission of radio interference acc. to EN 55 011			
• Limit class B, for use in residential areas	Yes	Yes	Yes
Degree and class of protection			
Degree of protection acc. to EN 60529			
• IP20	Yes	Yes	Yes
Standards, approvals, certificates			
CE mark	Yes	Yes	Yes
CSA approval	Yes	Yes	Yes
UL approval	Yes	Yes	Yes
FM approval	Yes	Yes	Yes
developed in accordance with IEC 61131	Yes	Yes	Yes
according to VDE 0631	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes
Ambient conditions			
Ambient temperature during operation			
• min.	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C
• max.	55 °C	55 °C	55 °C
Dimensions			
Width	71.5 mm	71.5 mm	71.5 mm
Height	90 mm	90 mm	90 mm
Depth	58 mm	58 mm	58 mm
Article number	6ED1055-1MA00-0BA2 LOGO! AM2 Exp. mod., 12/24V, 2AI,		6ED1055-1MD00-0BA2 LOGO! AM2 RDT, 2AI, -50...+200°C
Installation type/mounting			
Mounting	on 35 mm DIN rail, 2 spacing units wide		on 35 mm DIN rail, 2 spacing units wide
Supply voltage			
Rated value (DC)			
• 12 V DC	Yes; 10.8 V DC to 28.8 V DC		Yes; 10.8 V DC to 28.8 V DC
• 24 V DC	Yes; 10.8 V DC to 28.8 V DC		Yes; 10.8 V DC to 28.8 V DC
Analog inputs			
Number of analog inputs	2	2; 2 or 3 wire connection	
Input ranges			
• Voltage	Yes	No	
• Current	Yes	No	
• Resistance thermometer	No	Yes; For PT100/PT1000 sensors	
Input ranges (rated values), voltages			
• 0 to +10 V	Yes	No	
Input ranges (rated values), currents			
• 0 to 20 mA	Yes; 0 mA or 4 mA to 20 mA	No	
Input ranges (rated values), resistance thermometer			
• Pt 100	No	Yes	
EMC			
Emission of radio interference acc. to EN 55 011			
• Limit class B, for use in residential areas	Yes	Yes	
Degree and class of protection			
Degree of protection acc. to EN 60529			
• IP20	Yes	Yes	

Technical specifications (continued)

Article number	6ED1055-1MA00-0BA2	6ED1055-1MD00-0BA2
	LOGO! AM2 Exp. mod., 12/24V, 2AI,	LOGO! AM2 RDT, 2AI, -50..+200°C
Standards, approvals, certificates		
CE mark	Yes	Yes
CSA approval	Yes	Yes
UL approval	Yes	Yes
FM approval	Yes	Yes
developed in accordance with IEC 61131	Yes	Yes
according to VDE 0631	Yes	
Marine approval	Yes	Yes
Ambient conditions		
Ambient temperature during operation		
• min.	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C
• max.	55 °C	55 °C
Dimensions		
Width	35.5 mm	35.5 mm
Height	90 mm	90 mm
Depth	58 mm	58 mm

Article number	6ED1055-1MM00-0BA2
	LOGO! AM2 AQ, 2AQ, 0-10V, 0/4-20mA
Installation type/mounting	
Mounting	on 35 mm DIN rail, 2 spacing units wide
Supply voltage	
Rated value (DC)	
• 12 V DC	No
• 24 V DC	Yes
Analog outputs	
Number of analog outputs	2
Output ranges, voltage	
• 0 to 10 V	Yes
Output ranges, current	
• 0 to 20 mA	Yes
• 4 mA to 20 mA	Yes
EMC	
Emission of radio interference acc. to EN 55 011	
• Limit class B, for use in residential areas	Yes
Degree and class of protection	
Degree of protection acc. to EN 60529	
• IP20	Yes

Article number	6ED1055-1MM00-0BA2
	LOGO! AM2 AQ, 2AQ, 0-10V, 0/4-20mA
Standards, approvals, certificates	
CE mark	Yes
CSA approval	Yes
UL approval	Yes
FM approval	Yes
developed in accordance with IEC 61131	Yes
according to VDE 0631	Yes
Marine approval	Yes
Ambient conditions	
Ambient temperature during operation	
• min.	0 °C; ES03 and higher: -20 °C
• max.	55 °C
Dimensions	
Width	35.5 mm
Height	90 mm
Depth	58 mm

Ordering data	Article No.	Article No.
LOGO! 8 expansion modules		Accessories for LOGO! 8
LOGO! DM8 24 24 V DC supply voltage, 4 digital inputs 24 V DC, 4 digital outputs 24 V DC, 0.3 A	6ED1055-1CB00-0BA2	LOGO!Soft Comfort V8 6ED1058-0BA08-0YA1 For programming on the PC in LAD/FBD; executes on Windows 8, 7, XP, Linux and Mac OSX; on DVD
LOGO! DM16 24 24 V DC supply voltage, 8 digital inputs 24 V DC, 8 digital outputs 24 V DC, 0.3 A	6ED1055-1CB10-0BA2	
LOGO! DM8 12/24R 12...24 V DC supply voltage, 4 digital inputs 12...24 V DC, 4 relay outputs 5 A	6ED1055-1MB00-0BA2	
LOGO! DM8 24R 24 V AC/DC supply voltage, 4 digital inputs 24 V AC/DC, 4 relay outputs 5 A	6ED1055-1HB00-0BA2	
LOGO! DM16 24R 24 V DC supply voltage, 8 digital inputs 24 V DC, 8 relay outputs 5 A	6ED1055-1NB10-0BA2	
LOGO! DM8 230R 115...230 V AC/DC supply voltage, 4 digital inputs 115...230 V AC/DC, 4 relay outputs 5 A	6ED1055-1FB00-0BA2	
LOGO! DM16 230R 115...230 V AC/DC supply voltage, 8 digital inputs 115...230 V AC/DC, 8 relay outputs 5 A	6ED1055-1FB10-0BA2	
LOGO! AM2 12...24 V DC supply voltage, 2 analog inputs 0 to 10 V or 0 to 20 mA, resolution 10 bits	6ED1055-1MA00-0BA2	
LOGO! AM2 PT 100 12...24 V DC supply voltage, 2 analog inputs Pt100, temperature range -50 °C to 200 °C	6ED1055-1MD00-0BA2	
LOGO! AM2 AQ 24 V DC supply voltage, 2 analog outputs 0 to 10 V, 0/4 to 20 mA	6ED1055-1MM00-0BA2	

Overview



- The space-saving basic variants
- Interface for connecting expansion modules, up to 24 digital inputs, 20 (16) digital outputs, 8 analog inputs and 8 (2) analog outputs can be addressed
- With connection option for LOGO! TDE text display
- All basic units with integrated web server
- Same enclosure width as LOGO! 0BA6 (4 U)
- All basic units with Ethernet interface for communication with LOGO!, SIMATIC Controllers, SIMATIC Panel and PC
- Use of standard micro CF cards

Note:

SIPLUS extreme products are based on SIMATIC standard products. The contents listed here were taken from the respective standard products. SIPLUS extreme specific information was added.

Technical specifications

Article number	6AG1052-1CC08-7BA0	6AG1052-1MD08-7BA0	6AG1052-1HB08-7BA0	6AG1052-1FB08-7BA0
Based on	6ED1052-1CC08-0BA0	6ED1052-1MD08-0BA0	6ED1052-1HB08-0BA0	6ED1052-1FB08-0BA0
	SIPLUS LOGO! 24CE	SIPLUS LOGO! 12/24RCE	SIPLUS LOGO! 24RCE	SIPLUS LOGO! 230RCE
Ambient conditions				
Ambient temperature during operation				
• min.	-25 °C; = Tmin; Startup @ -20 °C	-25 °C; = Tmin; Startup @ -20 °C	-25 °C; = Tmin; Startup @ -20 °C	-25 °C; = Tmin; Startup @ -20 °C
• max.	70 °C; Tmax; Tmax > +55 °C max. load 0.2 A per output	70 °C; Tmax; Tmax > +55 °C max. load 1 A per relay or max. load 3 A per relay and half the number of DIs (no adjacent points)	70 °C; Tmax; Tmax > +55 °C max. load 1 A per relay or max. load 3 A per relay and half the number of DIs (no adjacent points)	70 °C; Tmax; Tmax > +55 °C max. load 1 A per relay
• At cold restart, min.	-20 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	-20 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	-20 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	-20 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)
Ambient temperature during storage/transportation				
• min.	-40 °C	-40 °C	-40 °C	-40 °C
• max.	70 °C	70 °C	70 °C	70 °C
Altitude during operation relating to sea level				
• Installation altitude above sea level, max.	5 000 m	5 000 m	5 000 m	2 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)
Relative humidity				
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation

Technical specifications (continued)

Article number	6AG1052-1CC08-7BA0	6AG1052-1MD08-7BA0	6AG1052-1HB08-7BA0	6AG1052-1FB08-7BA0
Based on	6ED1052-1CC08-0BA0	6ED1052-1MD08-0BA0	6ED1052-1HB08-0BA0	6ED1052-1FB08-0BA0
	SIPLUS LOGO! 24CE	SIPLUS LOGO! 12/24RCE	SIPLUS LOGO! 24RCE	SIPLUS LOGO! 230RCE
Resistance				
Coolants and lubricants				
- Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems				
- to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
- to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust; *	Yes; Class 3S4 incl. sand, dust; *	Yes; Class 3S4 incl. sand, dust; *	Yes; Class 3S4 incl. sand, dust; *
Use on ships/at sea				
- to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
- to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *
Remark				
- Note regarding classification of environmental conditions acc. to EN 60721	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating				
• Coatings for printed circuit board assemblies acc. to EN 61086	Yes; Class 2 for high availability	Yes; Class 2 for high availability	Yes; Class 2 for high availability	Yes; Class 2 for high availability
• Protection against fouling acc. to EN 60664-3	Yes; Type 1 protection	Yes; Type 1 protection	Yes; Type 1 protection	Yes; Type 1 protection
• Military testing according to MIL-I-46058C, Amendment 7	Yes; Discoloration of coating possible during service life	Yes; Discoloration of coating possible during service life	Yes; Discoloration of coating possible during service life	Yes; Discoloration of coating possible during service life
• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A

Ordering data	Article No.	Article No.
SIPLUS LOGO! 8 logic module		
SIPLUS LOGO! 24CE Supply voltage 24 V DC, 8 digital inputs 24 V DC, of which 4 can be used in analog mode (0 to 10 V), 4 digital outputs 24 V DC, 0.3 A, integrated time switch, Ethernet interface; 400 function blocks can be interlinked, modular expansion capability Extended temperature range and exposure to environmental substances	6AG1052-1CC08-7BA0	
SIPLUS LOGO! 12/24RCE Supply voltage 12...24 V DC, 8 digital inputs 12/24 V DC, of which 4 can be used in analog mode (0 to 10 V), 4 relay outputs 10 A, integrated time switch, Ethernet interface; 400 function blocks can be interlinked, modular expansion capability Extended temperature range and exposure to environmental substances	6AG1052-1MD08-7BA0	
SIPLUS LOGO! 24RCE Supply voltage 24 V AC/DC, 8 digital inputs 24 V AC/DC, 4 relay outputs 10 A, integrated time switch, Ethernet interface; 400 function blocks can be interlinked, modular expansion capability Extended temperature range and exposure to environmental substances	6AG1052-1HB08-7BA0	
SIPLUS LOGO! 230RCE Supply voltage 115...230 V AC/DC, 8 digital inputs 115...230 V AC/DC, 4 relay outputs 10 A, integrated time switch, Ethernet interface; 400 function blocks can be interlinked, modular expansion capability Extended temperature range and exposure to environmental substances	6AG1052-1FB08-7BA0	
		Accessories
		SIPLUS LOGO! TDE (Extended temperature range -10 ... +60 °C and exposure to environmental substances) 6-line text display, can be connected to all LOGO! 8 variants with and without display, with 2 Ethernet interfaces; incl. installation accessories. Requires additional 12 V DC or 24 V AC/DC power supply
		6AG1055-4MH08-2BA0
		Accessories for SIPLUS LOGO! 6, 7, 8
		LOGO!Soft Comfort V8 For programming on the PC in LAD/FBD; executes on Windows 8, 7, XP, Linux and Mac OSX; on DVD
		6ED1058-0BA08-0YA1
		Front panel mounting set Width 8 U, with keys
		6AG1057-1AA00-0AA2

Overview



- Basic variants optimized for costs
- Interface for connecting expansion modules, up to 24 digital inputs, 16 (20) digital outputs, 8 analog inputs and 2 (8) analog outputs can be addressed
- With connection option for LOGO! TDE text display
- All basic units with integrated web server
- Same enclosure width as LOGO! 0BA6 (4 U)
- All basic units with Ethernet interface for communication with LOGO!, SIMATIC Controllers, SIMATIC Panel and PC
- Use of standard micro CF cards

Note:

SIPLUS extreme products are based on SIMATIC standard products. The contents listed here were adopted from the respective standard products. SIPLUS extreme specific information was added.

Technical specifications

Article number	6AG1052-2CC08-7BA0	6AG1052-2MD08-7BA0	6AG1052-2HB08-7BA0	6AG1052-2FB08-7BA0
Based on	6ED1052-2CC08-0BA0 SIPLUS LOGO! 24CEO	6ED1052-2MD08-0BA0 SIPLUS LOGO! 12/24RCEO	6ED1052-2HB08-0BA0 SIPLUS LOGO! 24RCEO (AC)	6ED1052-2FB08-0BA0 SIPLUS LOGO! 230RCEO
Ambient conditions				
Ambient temperature during operation				
• min.	-40 °C; = Tmin; Startup @ -25 °C	-40 °C; = Tmin; Startup @ -25 °C	-40 °C; = Tmin; Startup @ -25 °C	-40 °C; = Tmin; Startup @ -25 °C
• max.	70 °C; Tmax; Tmax > +55 °C max. load 0.2 A per output	70 °C; Tmax; Tmax > +55 °C max. load 1 A per relay or max. load 3 A per relay and half the number of DIs (no adjacent points)	70 °C; Tmax; Tmax > +55 °C max. load 1 A per relay or max. load 3 A per relay and half the number of DIs (no adjacent points)	70 °C; Tmax; Tmax > +55 °C max. load 1 A per relay
• At cold restart, min.	-25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	-25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	-25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	-25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)
Ambient temperature during storage/transportation				
• min.	-40 °C	-40 °C	-40 °C	-40 °C
• max.	70 °C	70 °C	70 °C	70 °C
Altitude during operation relating to sea level				
• Installation altitude above sea level, max.	5 000 m	5 000 m	5 000 m	2 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)
Relative humidity				
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation

Technical specifications (continued)

Article number	6AG1052-2CC08-7BA0	6AG1052-2MD08-7BA0	6AG1052-2HB08-7BA0	6AG1052-2FB08-7BA0
Based on	6ED1052-2CC08-0BA0	6ED1052-2MD08-0BA0	6ED1052-2HB08-0BA0	6ED1052-2FB08-0BA0
	SIPLUS LOGO! 24CEO	SIPLUS LOGO! 12/24RCEO	SIPLUS LOGO! 24RCEO (AC)	SIPLUS LOGO! 230RCEO
Resistance				
Coolants and lubricants				
- Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems				
- to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
- to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust; *	Yes; Class 3S4 incl. sand, dust; *	Yes; Class 3S4 incl. sand, dust; *	Yes; Class 3S4 incl. sand, dust; *
Use on ships/at sea				
- to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
- to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *
Remark				
- Note regarding classification of environmental conditions acc. to EN 60721	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating				
• Coatings for printed circuit board assemblies acc. to EN 61086	Yes; Class 2 for high availability	Yes; Class 2 for high availability	Yes; Class 2 for high availability	Yes; Class 2 for high availability
• Protection against fouling acc. to EN 60664-3	Yes; Type 1 protection	Yes; Type 1 protection	Yes; Type 1 protection	Yes; Type 1 protection
• Military testing according to MIL-I-46058C, Amendment 7	Yes; Discoloration of coating possible during service life	Yes; Discoloration of coating possible during service life	Yes; Discoloration of coating possible during service life	Yes; Discoloration of coating possible during service life
• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A

Ordering data	Article No.	Accessories	Article No.
<p>SIPLUS LOGO! 8 logic module</p> <p>SIPLUS LOGO! 24CEo</p> <p>24 V DC supply voltage 8 digital inputs 24 V DC, of which 4 can be used in analog mode (0 to 10 V) 4 digital outputs 24 V DC, 0.3 A, integrated time switch, Ethernet interface; without display and keyboard 400 function blocks can be interlinked, modular expansion capability</p> <p>Extended temperature range and exposure to environmental substances</p>	6AG1052-2CC08-7BA0	<p>SIPLUS LOGO! TDE</p> <p>(Extended temperature range -10 ... +60 °C and exposure to environmental substances)</p> <p>6-line text display, can be connected to all LOGO! 8 variants with and without display, with 2 Ethernet interfaces; incl. installation accessories. Requires additional 12 V DC or 24 V AC/DC power supply</p>	6AG1055-4MH08-2BA0
<p>SIPLUS LOGO! 230RCEo</p> <p>115...230 V AC/DC supply voltage 8 digital inputs 115...230 V AC/DC 4 relay outputs 10 A integrated time switch, Ethernet interface; without display or keyboard 400 function blocks can be interlinked, modular expansion capability</p> <p>Extended temperature range and exposure to environmental substances</p>	6AG1052-2FB08-7BA0	<p>Accessories for SIPLUS LOGO! 6, 8</p> <p>LOGO!Soft Comfort V8</p> <p>For programming on the PC in LAD/FBD; executes on Windows 8, 7, XP, Linux and Mac OSX; on DVD</p>	6ED1058-0BA08-0YA1
<p>SIPLUS LOGO! 24RCEo</p> <p>24 V AC/DC supply voltage, 8 digital inputs 24 V AC/DC, 4 relay outputs 10 A, integrated time switch, Ethernet interface; without display or keyboard; 400 function blocks can be interlinked, modular expansion capability</p> <p>Extended temperature range and exposure to environmental substances</p>	6AG1052-2HB08-7BA0	<p>Front panel mounting set</p> <p>Width 8 U, with keys</p>	6AG1057-1AA00-0AA2
<p>SIPLUS LOGO! 12/24RCEo</p> <p>12...24 V DC supply voltage 8 digital inputs 12...24 V DC, of which 4 can be used in analog mode (0 to 10 V) 4 relay outputs 10 A integrated time switch, Ethernet interface; without display and keyboard 400 function blocks can be interlinked, modular expansion capability</p> <p>Extended temperature range and exposure to environmental substances</p>	6AG1052-2MD08-7BA0		

Overview



- Expansion modules for connection to LOGO! modular
- With digital inputs and outputs, analog inputs, or analog outputs

Note:

SIPLUS extreme products are based on SIMATIC standard products. The contents listed here were adopted from the respective standard products. SIPLUS extreme specific information was added.

Technical specifications

Article number	6AG1055-1CB00-7BA2	6AG1055-1HB00-7BA2	6AG1055-1MB00-7BA2
Based on	6ED1055-1CB00-0BA2 SIPLUS LOGO! DM8 24 V8	6ED1055-1HB00-0BA2 SIPLUS LOGO! DM8 24R V8	6ED1055-1MB00-0BA2 SIPLUS LOGO! DM8 12/24R (LOGO 8)
Ambient conditions			
Ambient temperature during operation			
• min.	-40 °C; = Tmin; Startup @ -25 °C	-40 °C; = Tmin; Startup @ -25 °C	-40 °C; = Tmin; Startup @ -25 °C
• max.	70 °C; Tmax; Tmax > +55 °C max. load 0.2 A per output	70 °C; = Tmax; Tmax > +55 °C max. load 3 A per relay or max. total current 10 A	70 °C; = Tmax; Tmax > +55 °C max. load 3 A per relay or max. total current 10 A
• At cold restart, min.	-25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	-25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	-25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)
Ambient temperature during storage/transportation			
• min.	-40 °C	-40 °C	-40 °C
• max.	70 °C	70 °C	70 °C
Altitude during operation relating to sea level			
• Installation altitude above sea level, max.	5 000 m	5 000 m	5 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
Relative humidity			
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation
Resistance			
Coolants and lubricants			
- Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems			
- to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
- to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *	Yes; Class 3S4 incl. sand, dust, *	Yes; Class 3S4 incl. sand, dust, *

Technical specifications (continued)

Article number	6AG1055-1CB00-7BA2	6AG1055-1HB00-7BA2	6AG1055-1MB00-7BA2
Based on	6ED1055-1CB00-0BA2 SIPLUS LOGO! DM8 24 V8	6ED1055-1HB00-0BA2 SIPLUS LOGO! DM8 24R V8	6ED1055-1MB00-0BA2 SIPLUS LOGO! DM8 12/24R (LOGO 8)
Use on ships/at sea			
- to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
- to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *
Remark			
- Note regarding classification of environmental conditions acc. to EN 60721	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating			
• Coatings for printed circuit board assemblies acc. to EN 61086	Yes; Class 2 for high availability	Yes; Class 2 for high availability	Yes; Class 2 for high availability
• Protection against fouling acc. to EN 60664-3	Yes; Type 1 protection	Yes; Type 1 protection	Yes; Type 1 protection
• Military testing according to MIL-I-46058C, Amendment 7	Yes; Discoloration of coating possible during service life	Yes; Discoloration of coating possible during service life	Yes; Discoloration of coating possible during service life
• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A
Dimensions			
Width	35.5 mm	35.5 mm	35.5 mm
Height	90 mm	90 mm	90 mm
Depth	58 mm	58 mm	58 mm
<hr/>			
Article number	6AG1055-1FB00-7BA2	6AG1055-1NB10-7BA2	
Based on	6ED1055-1FB00-0BA2 SIPLUS LOGO! DM8 230R V8	6ED1055-1NB10-0BA2 SIPLUS LOGO! DM16 24R V8	
Ambient conditions			
Ambient temperature during operation			
• min.	-40 °C; = Tmin; Startup @ -25 °C	-40 °C; = Tmin; Startup @ -25 °C	
• max.	70 °C; = Tmax; Tmax > +55 °C max. load 3 A per relay or max. total current 10 A	70 °C; = Tmax; Tmax > +55 °C max. load 3 A per relay	
• At cold restart, min.	-25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	-25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	
Ambient temperature during storage/transportation			
• min.	-40 °C	-40 °C	
• max.	70 °C	70 °C	
Altitude during operation relating to sea level			
• Installation altitude above sea level, max.	2 000 m	5 000 m	
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	
Relative humidity			
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	
Resistance			
Coolants and lubricants			
- Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air	

Technical specifications (continued)

Article number	6AG1055-1FB00-7BA2	6AG1055-1NB10-7BA2
Based on	6ED1055-1FB00-0BA2 SIPLUS LOGO! DM8 230R V8	6ED1055-1NB10-0BA2 SIPLUS LOGO! DM16 24R V8
Use in stationary industrial systems		
- to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
- to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust; *	Yes; Class 3S4 incl. sand, dust; *
Use on ships/at sea		
- to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
- to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *
Remark		
- Note regarding classification of environmental conditions acc. to EN 60721	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating		
• Coatings for printed circuit board assemblies acc. to EN 61086	Yes; Class 2 for high availability	Yes; Class 2 for high availability
• Protection against fouling acc. to EN 60664-3	Yes; Type 1 protection	Yes; Type 1 protection
• Military testing according to MIL-I-46058C, Amendment 7	Yes; Discoloration of coating possible during service life	Yes; Discoloration of coating possible during service life
• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A

Article number	6AG1055-1MA00-7BA2
Based on	6ED1055-1MA00-0BA2 SIPLUS LOGO! AM2 V8
Ambient conditions	
Ambient temperature during operation	
• min.	-40 °C; = Tmin; Startup @ -25 °C
• max.	70 °C; = Tmax
• At cold restart, min.	-25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	5 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
Relative humidity	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation
Resistance	
Coolants and lubricants	
- Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air

Article number	6AG1055-1MA00-7BA2
Based on	6ED1055-1MA00-0BA2 SIPLUS LOGO! AM2 V8
Use in stationary industrial systems	
- to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
- to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust; *
Use on ships/at sea	
- to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
- to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
Remark	
- Note regarding classification of environmental conditions acc. to EN 60721	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating	
• Coatings for printed circuit board assemblies acc. to EN 61086	Yes; Class 2 for high availability
• Protection against fouling acc. to EN 60664-3	Yes; Type 1 protection
• Military testing according to MIL-I-46058C, Amendment 7	Yes; Discoloration of coating possible during service life
• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, Class A

Technical specifications (continued)

Article number	6AG1055-1MM00-7BA2
Based on	6ED1055-1MM00-0BA2 SIPLUS LOGO! AM2 AQ V8
Ambient conditions	
Ambient temperature during operation	
• min.	-40 °C; = Tmin; Startup @ -25 °C
• max.	70 °C; = Tmax
• At cold restart, min.	-25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	5 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
Relative humidity	
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation

Article number	6AG1055-1MM00-7BA2
Based on	6ED1055-1MM00-0BA2 SIPLUS LOGO! AM2 AQ V8
Resistance	
Coolants and lubricants	
- Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems	
- to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
- to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust; *
Use on ships/at sea	
- to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
- to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
Remark	
- Note regarding classification of environmental conditions acc. to EN 60721	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating	
• Coatings for printed circuit board assemblies acc. to EN 61086	Yes; Class 2 for high availability
• Protection against fouling acc. to EN 60664-3	Yes; Type 1 protection
• Military testing according to MIL-I-46058C, Amendment 7	Yes; Discoloration of coating possible during service life
• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, Class A

Ordering data	Article No.	Accessories	Article No.
SIPLUS LOGO! 8 expansion modules		LOGO!Soft Comfort V8	6ED1058-0BA08-0YA1
SIPLUS LOGO! DM8 24 Supply voltage 24 V DC, 4 digital inputs 24 V DC, 4 digital outputs 24 V DC, 0.3 A Extended temperature range and exposure to environmental substances	6AG1055-1CB00-7BA2	For programming on the PC in LAD/FBD; executes on Windows 8, 7, XP, Linux and Mac OSX; on DVD	
SIPLUS LOGO! DM8 230R 115...230 V AC/DC supply voltage, 4 digital inputs 115...230 V AC/DC, 4 relay outputs 5 A Extended temperature range and exposure to environmental substances	6AG1055-1FB00-7BA2	Front panel mounting set Width 8 U, with keys	6AG1057-1AA00-0AA2
SIPLUS LOGO! DM8 24R Supply voltage 24 V AC/DC, 4 digital inputs 24 V AC/DC, 4 relay outputs 5 A Extended temperature range and exposure to environmental substances	6AG1055-1HB00-7BA2		
SIPLUS LOGO! AM2 12...24 V DC supply voltage, 2 analog inputs 0 to 10 V or 0 to 20 mA, 10-bit resolution Extended temperature range and exposure to environmental substances	6AG1055-1MA00-7BA2		
SIPLUS LOGO! DM8 12/24R 12...24 V DC supply voltage, 4 digital inputs 12...24 V DC, 4 relay outputs 5 A Extended temperature range and exposure to environmental substances	6AG1055-1MB00-7BA2		
SIPLUS LOGO! AM2 AQ Supply voltage 24 V DC, 2 analog outputs 0 to 10 V, 0/4 to 20 mA Extended temperature range and exposure to environmental substances	6AG1055-1MM00-7BA2		
SIPLUS LOGO! DM16 24R Supply voltage 24 V DC, 8 digital inputs 24 V DC, 8 relay outputs 5 A Extended temperature range and exposure to environmental substances	6AG1055-1NB10-7BA2		

Overview



- Communication modules for connecting LOGO! Modular to different bus systems.

Note on compatibility:

Communication module	Can be used with:
LOGO! CMK2000 communication module	LOGO! ...0BA8
LOGO! CSM 12/24	LOGO! ...0BA7/...0BA8
LOGO! CSM 230	LOGO! ...0BA7
LOGO! CMR2020	LOGO! ...0BA8
LOGO! CMR2040	LOGO! ...0BA8

Overview



- Expansion module for LOGO! 8 basic versions
- For integrating LOGO! 8 in KNX installations
- With 24 digital inputs, 20 digital outputs as well as 8 analog inputs and outputs for processing process signals via KNX.

Technical specifications

Article number	6BK1700-0BA20-0AA0 LOGO! CMK2000
General information	
Firmware version	
• FW update possible	Yes
Installation type/mounting	
Mounting	on 35 mm DIN rail, 4 spacing units wide
Supply voltage	
Rated value (DC)	24 V
• 12 V DC	No
• 24 V DC	Yes
Rated value (AC)	
• 24 V AC	No
Input current	
Current consumption, max.	0.04 A
Power loss	
Power loss, max.	1.1 W
Memory	
Flash	Yes
Time of day	
Clock synchronization	
• supported	Yes
Interfaces	
Number of industrial Ethernet interfaces	1; Ethernet, 1 port, RJ45
Number of other interfaces	1; EIB/KNX
Transmission rate, max.	100 Mbit/s over Ethernet, 9 600 bit/s over KNX
Protocols	
EIB/KNX	Yes
Web server	
• supported	Yes

Article number	6BK1700-0BA20-0AA0 LOGO! CMK2000
Communication functions	
S7 basic communication	
• supported	No
LOGO! communication	
• supported	Yes
Interrupts/diagnostics/status information	
Diagnostics indication LED	
• RUN/STOP LED	Yes
EMC	
Emission of radio interference acc. to EN 55 011	
• Limit class B, for use in residential areas	Yes; In accordance with EN 61000-6-3
Degree and class of protection	
Degree of protection acc. to EN 60529	
• IP20	Yes
Standards, approvals, certificates	
CE mark	Yes
CSA approval	Yes
UL approval	Yes
cULus	Yes
FM approval	No
RCM (formerly C-TICK)	No
KC approval	Yes
EAC (formerly Gost-R)	Yes
according to VDE 0631	No
Marine approval	No
Ambient conditions	
Ambient temperature during operation	
• min.	0 °C
• max.	55 °C
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Relative humidity	
• Operation, max.	95 %
Connection method	
Design of electrical connection for supply voltage	2 screw-type terminals: L+, M 0.5 mm ² - 2.5 mm ² Screw-type terminal: FE 0.5 mm ² ... 6.0 mm ²
Design of plug-in connection	KNX terminal 0.6 mm ² - 1.0 mm ²
Dimensions	
Width	71.5 mm; 4TE
Height	90 mm
Depth	58.5 mm
Weights	
Weight, approx.	0.14 kg

Ordering data

Article No.

LOGO! CMK2000 communication module	6BK1700-0BA20-0AA0
For integrating LOGO! 8 in the KNX building system bus, max. 50 communication objects can be configured; RJ45 port for Ethernet; supply voltage 24 V DC/40 mA	

Overview



The module is used to connect a LOGO! and up to three other nodes to an Industrial Ethernet network with 10/100 Mbps in an electrical linear, tree or star topology.

The essential features of the LOGO! CSM are:

- Unmanaged 4-port switch, of which one port is on the front for easy diagnostics access
- Two versions for the voltage ranges 12/24 V DC or 230 V AC/DC
- Problem-free connection using four RJ45 standard connectors
- Space-saving, optimized for connection to LOGO!
- Low-cost solution for implementing small, local Ethernet networks
- Stand-alone use for networking any Ethernet devices

Technical specifications

	6GK7177-1FA10-0AA0	6GK7177-1MA20-0AA0
Article number	6GK7177-1FA10-0AA0	6GK7177-1MA20-0AA0
Product type designation	LOGO! CSM 230	LOGO! CSM 12/24
Transmission rate		
Transfer rate	10 Mbit/s, 100 Mbit/s	10 Mbit/s, 100 Mbit/s
Interfaces for communication integrated		
Number of electrical connections		
• for network components or terminal equipment	4	4
Number of 100 Mbit/s SC ports		
• for multimode	0	0
Number of 1000 Mbit/s LC ports		
• for multimode	0	0
• for single mode (LD)	0	0
Interfaces others		
Number of electrical connections		
• for power supply	1	1
Type of electrical connection		
• for power supply	3-pole terminal block	3-pole terminal block
Supply voltage, current consumption, power loss		
Type of voltage of the supply voltage	115...240 V AC/DC	12/24 V DC
Supply voltage		
• external	230 V	24 V
• external minimum	100 V	10.2 V
• external maximum	240 V	30.2 V
Product component fusing at power supply input	Yes	Yes
Consumed current maximum	0.02 A	0.15 A
Power loss [W]		
• at DC at 24 V		1.5 W
• at AC at 230 V	1.8 W	
Permitted ambient conditions		
Ambient temperature		
• during operation	0 ... 55 °C	0 ... 55 °C
• during storage	-40 ... +70 °C	-40 ... +70 °C
• during transport	-40 ... +70 °C	-40 ... +70 °C
Relative humidity		
• at 25 °C without condensation during operation maximum	90 %	90 %
Protection class IP	IP20	IP20

Technical specifications (continued)

Article number	6GK7177-1FA10-0AA0	6GK7177-1MA20-0AA0
Design, dimensions and weight		
Design	LOGO! module	LOGO! module
Width	72 mm	71.5 mm
Height	90 mm	90 mm
Depth	55 mm	58.2 mm
Net weight	0.155 kg	0.15 kg
Mounting type		
• 35 mm DIN rail mounting	Yes	Yes
• wall mounting	Yes	Yes
• S7-300 rail mounting	No	No
• S7-1500 rail mounting	No	No
Product functions management, configuration		
Product function		
• multiport mirroring	No	No
Product function switch-managed	No	No
Standards, specifications, approvals		
Standard		
• for FM	FM3600 and 3611: CL I, Div2, Group A,B,C,D T4, CL I, Zone 2, Group IIC, T4, Ta=55°C	
• for hazardous zone	no	ATEX: EN 60079-0 : 2009, EN 60079-15 :2010 (Directive 94/9/EC), IECEx: IEC 60079-0 :2011, IEC 60079-15 :2010
• for safety from CSA and UL	UL60079-0, UL60079-15, CSA C22.2	UL 508, CSA C22.2 No. 142
• for hazardous zone from CSA and UL		Haz-Loc ANSI/ISA 12.12.01: CL I, Div2, Group A,B,C,D T4, CL I, Zone 2, Group IIC, T4, Ta=55°C
Standards, specifications, approvals CE		
Certificate of suitability CE marking	Yes	Yes
Standards, specifications, approvals miscellaneous		
Certificate of suitability		
• C-Tick	Yes	Yes
• KC approval	No	No
Standards, specifications, approvals ship classification		
Marine classification association		
• American Bureau of Shipping Europe Ltd. (ABS)	No	No
• Bureau Veritas (BV)	No	No
• Det Norske Veritas (DNV)	No	No
• Germanische Lloyd (GL)	No	No
• Lloyds Register of Shipping (LRS)	No	No
• Nippon Kaiji Kyokai (NK)	No	No
• Polski Rejestr Statkow (PRS)	No	No

Ordering data

Article No.

Article No.

LOGO! CSM compact switch modules

Unmanaged switch for connection of one LOGO! and up to three further nodes on Industrial Ethernet with 10/100 Mbps; 4 x RJ45 ports; LED diagnostics, LOGO! module

- **LOGO! CSM12/24** external 12 V DC or 24 V DC power supply, for LOGO! ... 0BA7/... 0BA8

6GK7177-1MA20-0AA0

- **LOGO! CSM230** external 115 ... 240 V AC power supply, for LOGO! ... 0BA7

6GK7177-1FA10-0AA0

Accessories

IE TP cord RJ45/RJ45

TP cable 4 x 2 with 2 RJ45 plugs

- 0.5 m
- 1 m
- 2 m
- 6 m
- 10 m

6XV1870-3QE50
6XV1870-3QH10
6XV1870-3QH20
6XV1870-3QH60
6XV1870-3QN10

IE FC outlet RJ45

6GK1901-1FC00-0AA0

For connection of Industrial Ethernet FC cables and TP cords; graduated prices for 10 and 50 units or more

Overview



LOGO! CMR in combination with the LOGO! logic module is a cost-efficient communication system suitable for monitoring and controlling distributed plants and systems via text message or email.

LOGO! CMR can send text messages or emails to predefined mobile network numbers as well as receive text messages from predefined mobile network numbers.

Sending a text message/email can be initiated by events in the LOGO! basic module as well as by the two digital alarm inputs of the LOGO! CMR. The values in the LOGO! logic module can be directly influenced by receiving a text message.

The LOGO! CMR offers comfortable Web Based Management commissioning and diagnostics via local and/or remote access.

The two digital outputs can also be switched remotely by incoming text messages/emails.

LOGO! CMR determines the current position of the module based on the GPS signal received by the GPS antenna. In addition, the LOGO! 8 logic module can be time-synchronized by means of the time included in the GPS signal. Determination of time by means of an NTP server or from the data of the mobile network provider offers more options for synchronization of the LOGO! BM with the current time of day.

Product version:

- LOGO! CMR2020 for use in GSM/GPRS mobile wireless networks
- LOGO! CMR2040 for use in LTE mobile wireless networks

Warning! The country-specific mobile network approvals must be observed:

<http://www.siemens.com/mobilenetwork-approvals>

Technical specifications

Article number	6GK7142-7BX00-0AX0	6GK7142-7EX00-0AX0
Product type designation	LOGO! CMR2020	LOGO! CMR2040
Transmission rate		
Transfer rate		
• at the 1st interface	10 ... 100 Mbit/s	10 ... 100 Mbit/s
• for GPRS transmission		
- with downlink maximum	80 kbit/s	85.6 kbit/s
- with uplink maximum	40 kbit/s	85.6 kbit/s
• for LTE transmission		
- with downlink maximum		100 Mbit/s
- with uplink maximum		50 Mbit/s
Interfaces		
Number of interfaces acc. to Industrial Ethernet	1	1
Number of electrical connections		
• at the 1st interface acc. to Industrial Ethernet	1	1
• for external antenna(s)	2	2
• for power supply	1	1
Number of slots		
• for SIM cards	1	1
• for memory cards	1	1
Type of electrical connection		
• at the 1st interface acc. to Industrial Ethernet	RJ45 port	RJ45 port
• for external antenna(s)	SMA socket (50 ohms)	SMA socket (50 ohms)
• for power supply	3-pole terminal block	3-pole terminal block
Type of antenna		
• at port 1 connectable	GPS Antenna	GPS Antenna
• at port 2 connectable	Mobile radio antenna (GPRS/GSM)	Mobile radio antenna (GPRS/GSM, UMTS, LTE)
Wire length of antenna cable maximum	15 m	15 m

Technical specifications (continued)

Article number	6GK7142-7BX00-0AX0	6GK7142-7EX00-0AX0
Product type designation	LOGO! CMR2020	LOGO! CMR2040
Slot version		
<ul style="list-style-type: none"> • for SIM card • of the memory card 	Standard microSD	Standard microSD
Storage capacity of the memory card maximum	32 Gbyte	32 Gbyte
Performance class of the memory card minimum necessary	Class 6	Class 6
Type of file system	FAT32	FAT32
Signal-Inputs/outputs		
Number of electrical connections for digital input signals	2	2
Type of electrical connection for digital input signals	3 pole terminal block	3 pole terminal block
Digital input version	not galvanically isolated, not debounced	not galvanically isolated, not debounced
Input voltage at digital input		
<ul style="list-style-type: none"> • with signal <0> at DC • for signal <1> at DC 	0 ... 5 V 8.5 ... 24 V	0 ... 5 V 8.5 ... 24 V
Input current at digital input for signal <1> maximum	5.5 mA	5.5 mA
Number of electrical connections for digital output signals	2	2
Type of electrical connection for digital output signals	3 pole terminal block	3 pole terminal block
Digital output version	transistor, not potential seperated	transistor, not potential seperated
Output voltage at digital output		
<ul style="list-style-type: none"> • for signal <1> • for signal <0> 	12 ... 24 V; Value of the actual supply voltage 0 ... 5 V	12 ... 24 V; Value of the actual supply voltage 0 ... 5 V
Output current at digital output for signal <1> maximum	0.3 A	0.3 A
Wireless technology		
Type of mobile wireless service		
<ul style="list-style-type: none"> • is supported SMS • is supported GPRS • Note 	Yes Yes GPRS (Multislot Class 10, Mobile Station Class B)	Yes Yes LTE
Type of mobile network is supported		
<ul style="list-style-type: none"> • GSM • UMTS • LTE 	Yes No No	Yes Yes Yes
Operating frequency		
<ul style="list-style-type: none"> • for GSM transmission 850 MHz • for GSM transmission 900 MHz • for GSM transmission 1800 MHz • for GSM transmission 1900 MHz • with UMTS transmission 850 MHz • with UMTS transmission 900 MHz • with UMTS transmission 2100 MHz • for LTE transmission 800 MHz • for LTE transmission 1800 MHz • for LTE transmission 2600 MHz 	Yes Yes Yes Yes No No No No No No No	No Yes Yes No Yes Yes Yes Yes Yes Yes Yes

Technical specifications (continued)

Article number	6GK7142-7BX00-0AX0	6GK7142-7EX00-0AX0
Product type designation	LOGO! CMR2020	LOGO! CMR2040
Supply voltage, current consumption, power loss		
Type of voltage of the supply voltage	DC	DC
Supply voltage external	12 ... 24 V	12 ... 24 V
Supply voltage external at DC	12 ... 24 V	12 ... 24 V
Supply voltage for GPS antenna maximum	3.8 V; at 5 mA: 3,575 V / at 10 mA: 3,35 V / at 15 mA: 3,125 V	3.8 V; at 5 mA: 3,575 V / at 10 mA: 3,35 V / at 15 mA: 3,125 V
Relative positive tolerance at DC at 24 V	20 %	20 %
Relative negative tolerance at DC at 12 V	10 %	10 %
Consumed current		
• from external supply voltage at DC at 12 V maximum	0.25 A	0.25 A
• from external supply voltage at DC at 24 V maximum	0.125 A	0.125 A
Output current for GPS antenna maximum	15 mA	15 mA
Power loss [W]	3 W	3 W
Permitted ambient conditions		
Ambient temperature		
• during operation	-20 ... +70 °C	-20 ... +70 °C
• during storage	-40 ... +85 °C	-40 ... +85 °C
• during transport	-40 ... +85 °C	-40 ... +85 °C
Relative humidity at 25 °C without condensation during operation maximum	95 %	95 %
Protection class IP	IP20	IP20
Design, dimensions and weight		
Module format	Compact module, for rail mounting	Compact module, for rail mounting
Width	71.5 mm	71.5 mm
Height	90 mm	90 mm
Depth	58.2 mm	58.2 mm
Net weight	0.16 kg	0.16 kg
Mounting type		
• 35 mm DIN rail mounting	Yes	Yes
• wall mounting	Yes	Yes
Product properties, functions, components general		
Product function		
• DynDNS client	Yes	Yes
• no-ip.com client	Yes	Yes
Performance data		
Number of possible connections to the LOGO! logic module	1	1
Number of users/telephone numbers/email addresses definable maximum	20	20
Number of user groups definable maximum	10	10
Number of signals for monitoring or device control definable maximum	32	32
Number of events for monitoring definable maximum	32	32
number of actions definable maximum	32	32
Number of assignments definable maximum	32	32
Number of alias SMS commands definable maximum	20	20
Number of constants definable maximum	10	10

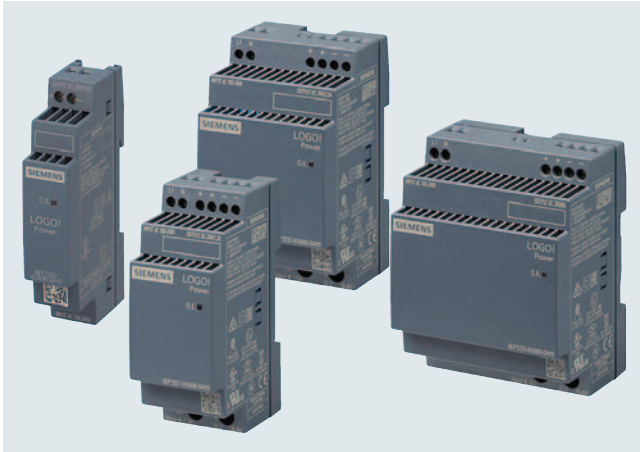
Technical specifications (continued)

Article number	6GK7142-7BX00-0AX0	6GK7142-7EX00-0AX0
Product type designation	LOGO! CMR2020	LOGO! CMR2040
Performance data IT functions		
Number of possible connections		
• as server by means of HTTP maximum	2	2
• as server by means of HTTPS maximum	2; http and https can be combined (max. number of 2 connections cannot be exceeded). Max. one connection via https is possible on the mobile wireless interface.	2; http and https can be combined (max. number of 2 connections cannot be exceeded). Max. one connection via https is possible on the mobile wireless interface.
• as e-mail client maximum	1	1
Number of free texts for e-mails definable by user	20	20
Performance data Teleservice		
Product function		
• Remote firmware update	Yes	Yes
• remote configuration	Yes	Yes
Product functions Diagnosis		
Product function Web-based diagnostics	Yes	Yes
Product functions Security		
Suitability for operation Virtual Private Network	Yes	Yes
Operating mode Virtual Private Network note	Open VPN server in PSK mode	Open VPN server in PSK mode
Product function with VPN connection	OpenVPN PSK	OpenVPN PSK
Type of encryption algorithms with VPN connection	AES-128 CBC	AES-128 CBC
Type of authentication with Virtual Private Network PSK	Yes	Yes
Type of hashing algorithms with VPN connection	SHA-256	SHA-256
Number of possible connections with VPN connection	1	1
Product function		
• password protection for Web applications	Yes	Yes
• password protection for VPN	Yes	Yes
• encrypted data transmission	Yes	Yes
• switch-off of non-required services	Yes	Yes
• log file for unauthorized access	Yes	Yes
Product functions Time		
Product function pass on time synchronization	Yes	Yes
Accuracy of the hardware real-time clock per day maximum time synchronization	7.5 s	7.5 s
• from NTP-server	Yes	Yes
• from GPS-signal	Yes	Yes
• from mobile network provider	Yes	Yes
• PC	Yes	Yes
• manual setting	Yes	Yes
Product functions Position recognition		
Product function		
• position detection with GPS	Yes	Yes
• pass on position data	Yes	Yes

Ordering data	Article No.	Article No.
<p>LOGO! CMR Communication Module Radio</p> <p>Communication modules for connection of LOGO! OBA8 to GSM/GPRS or LTE network; 1x RJ45 port for Industrial Ethernet connection; 2x digital input; 2x digital output; read/write access to LOGO! tags; possible to send/receive text messages; GPS position detection; time-of-day synchronization/forwarding with real time clock; configuration and diagnostics per web interface; Note country approvals: http://www.siemens.com/mobilenetwork-approvals</p>		
<p>LOGO! CMR2020</p> <p>For connecting LOGO! OBA8 to a GSM/GPRS network</p>	6GK7142-7BX00-0AX0	
<p>LOGO! CMR2040</p> <p>For connecting LOGO! OBA8 to an LTE network</p>	6GK7142-7EX00-0AX0	
<p>Accessories</p>		
<p>Mobile radio antennas</p>		
<p>ANT794-4MR</p> <p>For indoor and outdoor use; 5 m connecting cable permanently connected to antenna; SMA connector; incl. installation bracket, screws, wall anchors</p>	6NH9860-1AA00	
<p>ANT896-4MA</p> <p>Rod antenna for direct mounting on device; SMA male connector</p>	6GK5896-4MA00-0AA3	
<p>ANT896-4ME</p> <p>Cylinder-shaped antenna for remote installation, e.g. on a control cabinet; N-Connect female connector</p>	6GK5896-4ME00-0AA0	
		<p>GPS antenna</p> <p>ANT895-6ML</p> <p>GPS/Glonass antenna for remote installation indoor and outdoor, magnet or screw mounting, 30 cm cable with N-Connect female connector</p> <p>Antenna adapter cable</p> <p>N-Connect/SMA male/male Flexible Connection Cable, pre-assembled, connection cable; suitable for 0 ... 6 GHz, IP68</p> <ul style="list-style-type: none"> • 0.3 m • 1 m • 2 m • 5 m <p>IWLAN RCoax/antenna N-Connect male/male flexible connection cable</p> <p>Flexible connection cable for connecting an RCoax cable or antenna to a SCALANCE W-700 access point with N-Connect connectors; pre-assembled with two N-Connect male connectors; suitable from 0 ... 6 GHz, IP68</p> <ul style="list-style-type: none"> • 1 m • 2 m • 5 m • 10 m <p>Cabinet feedthrough</p> <p>IWLAN RCOAX N-Connect/ N-Connect female/female panel feedthrough; Control cabinet feedthrough for wall thickness max. 4.5 mm; 2.4 GHz and 5 GHz, suitable from 0 ... 6 GHz, IP67</p> <p>Lightning protector LP798-2N</p> <p>Lightning protector with N/N female/female connection for ANT 790 antennas, IP67 (-40 to +85 °C), frequency range: 0 ... 6 GHz</p>
		<p>6GK5895-6ML00-0AA0</p> <p>6XV1875-5LE30 6XV1875-5LH10 6XV1875-5LH20 6XV1875-5LH50</p> <p>6XV1875-5AH10 6XV1875-5AH20 6XV1875-5AH50 6XV1875-5AN10</p> <p>6GK5798-2PP00-2AA6</p> <p>6GK5798-2LP00-2AA6</p>

Ordering data	Article No.	Article No.
Patch cable		
IE TP Cord RJ45/RJ45		
TP cable 4 x 2 with 2 RJ45 plugs		
<ul style="list-style-type: none"> • 0.5 m • 1 m • 2 m • 6 m • 10 m 	<p>6XV1870-3QE50 6XV1870-3QH10 6XV1870-3QH20 6XV1870-3QH60 6XV1870-3QN10</p>	
IE FC outlet RJ45	6GK1901-1FC00-0AA0	
For connection of Industrial Ethernet FC cables and TP Cords; graduated prices for 10 and 50 units or more		
LOGO! CSM12/24	6GK7177-1MA20-0AA0	
Compact switch module for connecting a LOGO! (...0BA7/...0BA8) and up to 3 additional nodes to Industrial Ethernet; 12/24 V DC power supply		
LOGO! CSM230	6GK7177-1FA10-0AA0	
Compact switch module for connecting a LOGO! (...0BA7) and up to 3 additional nodes to Industrial Ethernet 115 ... 240 V AC/DC		
		Stainless steel enclosure in IP68 degree of protection
		Stainless steel enclosure in IP68 degree of protection; suitable for SIMATIC RTU3030C; temperature range -60 to +135 °C; matte surface; cover with Pin Torx screws and padlock 7 cable openings and opening for mobile radio antenna prepared; please order the needed quantity of cable glands and sealing plugs separately
		6NH3112-3BA00-1XX1
		Aluminum enclosure in IP68 degree of protection
		Aluminum enclosure in IP68 degree of protection; suitable for SIMATIC RTU3030C; temperature range -40 to +80 °C; cover with Pin Torx screws; 7 cable openings and opening for mobile radio antenna prepared; please order the needed quantity of cable glands and sealing plugs separately
		6NH3112-3BA00-1XX3
		Cable gland PG16 F for IP68 enclosure
		Cable gland, M16, IP68, -40 to +100 °C; nickel-plated brass; suitable for enclosure with article numbers 6NH3112-3BA00-1x X1 and 6NH3112-3BA00-1x X3 pack quantity = 2 units
		6NH3112-3BA00-1XX4
		Sealing plug M16 for IP68 enclosure
		Sealing plug, M16, IP68, -40 to +100 °C; nickel-plated brass; suitable for enclosure with article numbers 6NH3112-3BA00-1x X1 and 6NH3112-3BA00-1x X3 pack quantity = 2 units
		6NH3112-3BA00-1XX5

Overview



The flat power supply unit for distribution boards

Small. Clever. LOGO!Power

Small. Clever. LOGO!Power: Thanks to its stepped profile design, the LOGO! 8 product line is ideally suited for installation in small distribution boards. The stabilized power supplies with a wide range input of 100 ... 240 V AC (85 ... 264 V) and 110 ... 300 V DC are available in two performance classes with an output voltage of 5 V and 15 V, in three performance classes with 12 V and in four performance classes with 24 V. The 12 V and 24 V versions are ideal for supplying LOGO! controllers with the corresponding voltage input. The high level of efficiency across the entire load range as well as the low no-load losses result in lower overall energy consumption. Greater convenience when commissioning and servicing thanks to the integrated current monitor. The extended temperature range from -25 °C to +70 °C enables a host of additional applications.

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

LOGO!Power is the ideal choice when components need to be supplied with DC voltage. It can provide currents up to 4 A. This mini power pack can be used regardless of industry, e.g. in building technology applications for light and heating controllers or for access control systems. LOGO!Power is also well-suited for use in industrial automation, such as in packaging machine, machine tool, conveyor belt or sorting system applications.

Main product highlights

- Low width with minimum of 18 mm to maximum of 72 mm, thus requiring very little space in the control cabinet or distribution board
- High energy efficiency with efficiency levels of up to 90% over the entire power range and ERP-compliant no-load losses of < 0.3 W
- Global use due to operating temperature range from -25 °C to +70 °C and international certificates
- Load monitoring due to real-time measurement of the output current without disconnecting the cable, i.e. without interrupting the DC supply
- Flexible mounting with DIN rail or wall mounting in different installation positions
- Broad portfolio including 11 devices with 5 V, 12 V, 15 V and 24 V DC up to 100 watts (new: 12 V/0.9 A and 24 V/0.6 A)
- Flexible operation in all standard 1-phase supply networks thanks to wide range input of 100 ... 240 V AC without switchover and operation on DC networks with 110 ... 300 V DC
- Reliability due to problem-free connection of loads with high inrush currents thanks to power reserve when starting up as well as constant current in the event of overload

Baubreite	18 mm	36 mm	54 mm	72 mm
24 V	0,6 A	1,3 A	2,5 A	4,0 A
12 V	0,6 A	1,8 A	4,5 A	
5 V		3,0 A	6,3 A	
15 V		1,85 A	4,0 A	

Overview



Thanks to its stepped profile design, the LOGO!Power product family is ideally suited for low installation depths, such as in miniature distribution boards. The stabilized power supplies with a wide range input of 100 ... 240 V AC (85 ... 264 V) and 110 ... 300 V DC are available with an output voltage of 5 V in two performance classes. The high level of efficiency across the entire load range as well as the low no-load losses result in lower overall energy consumption. Greater convenience when commissioning and servicing thanks to the integrated current monitor. The extended temperature range from -25 °C to +70 °C enables a host of additional applications.

Main product highlights

- 5 V DC / 3 A and 6.3 A
- Narrow unit with 36 mm or 54 mm width and overall depth of 53 mm in LOGO! design
- Flexible mounting: DIN rail or wall mounting in a range of installation positions
- Higher energy efficiency: over the entire load range as well as no-load power losses of < 0.3 W
- Integrated current monitor: Actual output current measurement directly at the power supply unit
- Global use: Operating temperature range from -25 °C to +70 °C as well as international certifications such as UL, CSA, FM or ATEX

Technical specifications

Article number	6EP3310-6SB00-0AY0	6EP3311-6SB00-0AY0
Product	LOGO!Power	LOGO!Power
Power supply, type	5 V/3 A	5 V/6.3 A
Input		
Input	1-phase AC or DC	1-phase AC or DC
Rated voltage value $V_{in rated}$	100 ... 240 V	100 ... 240 V
Voltage range AC	85 ... 264 V	85 ... 264 V
Input voltage		
• at DC	110 ... 300 V	110 ... 300 V
Wide-range input	Yes	Yes
Overvoltage resistance	300 V AC for 1 s	300 V AC for 1 s
Mains buffering at $I_{out rated}$, min.	40 ms; at $V_{in} = 187 V$	40 ms; at $V_{in} = 187 V$
Rated line frequency 1	50 Hz	50 Hz
Rated line frequency 2	60 Hz	60 Hz
Rated line range	47 ... 63 Hz	47 ... 63 Hz
Input current		
• at rated input voltage 120 V	0.36 A	0.71 A
• at rated input voltage 230 V	0.22 A	0.37 A
Switch-on current limiting (+25 °C), max.	26 A	50 A
I^2t , max.	0.8 A ² ·s	3 A ² ·s
Built-in incoming fuse	internal	internal
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C	Recommended miniature circuit breaker: from 10 A characteristic B or from 6 A characteristic C

Technical specifications (continued)

Article number	6EP3310-6SB00-0AY0	6EP3311-6SB00-0AY0
Product	LOGO!Power	LOGO!Power
Power supply, type	5 V/3 A	5 V/6.3 A
Output		
Output	Controlled, isolated DC voltage	Controlled, isolated DC voltage
Rated voltage V_{out} DC	5 V	5 V
Total tolerance, static \pm	3 %	3 %
Static mains compensation, approx.	0.1 %	0.1 %
Static load balancing, approx.	0.1 %	0.1 %
Residual ripple peak-peak, max.	100 mV	100 mV
Residual ripple peak-peak, typ.	30 mV	30 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	100 mV	100 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	50 mV	50 mV
Adjustment range	4.6 ... 5.4 V	4.6 ... 5.4 V
Product function Output voltage adjustable	Yes	Yes
Output voltage setting	via potentiometer	via potentiometer
Status display	Green LED for output voltage OK	Green LED for output voltage OK
On/off behavior	No overshoot of V_{out} (soft start)	No overshoot of V_{out} (soft start)
Startup delay, max.	0.5 s	0.5 s
Voltage rise, typ.	100 ms	100 ms
Rated current value $I_{out rated}$	3 A	6.3 A
Current range	0 ... 3 A	0 ... 6.3 A
• Note	+55 ... +70 °C: Derating 2%/K	+55 ... +70 °C: Derating 2%/K
Supplied active power typical	15 W	31.5 W
Parallel switching for enhanced performance	Yes	Yes
Numbers of parallel switchable units for enhanced performance	2	2
Efficiency		
Efficiency at $V_{out rated}$, $I_{out rated}$, approx.	76 %	80 %
Power loss at $V_{out rated}$, $I_{out rated}$, approx.	5 W	8 W
Power loss [W] during no-load operation maximum	0.3 W	0.3 W
Closed-loop control		
Dynamic mains compensation ($V_{in rated} \pm 15 \%$), max.	0.2 %	0.2 %
Dynamic load smoothing (I_{out} : 10/90/10 %), $U_{out} \pm$ typ.	5 %	7 %
Load step setting time 10 to 90%, typ.	1 ms	1 ms
Load step setting time 90 to 10%, typ.	1 ms	1 ms
Protection and monitoring		
Output overvoltage protection	Yes, according to EN 60950-1	Yes, according to EN 60950-1
Current limitation, typ.	3.8 A	8.2 A
Property of the output Short-circuit proof	Yes	Yes
Short-circuit protection	Constant current characteristic	Constant current characteristic
Enduring short circuit current RMS value		
• maximum	3.8 A	8.2 A
Overcurrent overload capability in normal operation	overload capability 150% $I_{out rated}$ typ. 200 ms	overload capability 150% $I_{out rated}$ typ. 200 ms
Overload/short-circuit indicator	-	-
measuring point for output current	50 mV $\hat{=}$ 3 A	50 mV $\hat{=}$ 6.3 A
Overcurrent overload capability when switching on	150% $I_{out rated}$ typ. 200 ms	150% $I_{out rated}$ typ. 200 ms

Technical specifications (continued)

Article number	6EP3310-6SB00-0AY0	6EP3311-6SB00-0AY0
Product	LOGO!Power	LOGO!Power
Power supply, type	5 V/3 A	5 V/6.3 A
Safety		
Primary/secondary isolation	Yes	Yes
Galvanic isolation	Safety extra-low output voltage U _{out} acc. to EN 60950-1 and EN 50178	Safety extra-low output voltage U _{out} acc. to EN 60950-1 and EN 50178
Protection class	Class II (without protective conductor)	Class II (without protective conductor)
CE mark	Yes	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310)	cULus-listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-recognized (UL 60950, CSA C22.2 No. 60950), File E151273
Explosion protection	ATEX (EX) II 3G Ex nA IIC T3; cULus Class I Div. 2 (ANSI/ISA-12.12.01, CSA C22.2 No. 213) Group ABCD, T4, File E488866	ATEX (EX) II 3G Ex nA IIC T3; cULus Class I Div. 2 (ANSI/ISA-12.12.01, CSA C22.2 No. 213) Group ABCD, T4, File E488866
FM approval	Class I, Div. 2, Group ABCD, T4	Class I, Div. 2, Group ABCD, T4
CB approval	Yes	Yes
Marine approval	ABS, DNV GL	ABS, DNV GL
Degree of protection (EN 60529)	IP20	IP20
EMC		
Emitted interference	EN 55022 Class B	EN 55022 Class B
Supply harmonics limitation	not applicable	not applicable
Noise immunity	EN 61000-6-2	EN 61000-6-2
Operating data		
Ambient temperature		
• during operation	-25 ... +70 °C	-25 ... +70 °C
- Note	with natural convection	with natural convection
• during transport	-40 ... +85 °C	-40 ... +85 °C
• during storage	-40 ... +85 °C	-40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation	Climate class 3K3, no condensation
Mechanics		
Connection technology	screw-type terminals	screw-type terminals
Connections		
• Supply input	L, N: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded	L, N: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded
• Output	+, -: 1 screw terminal each for 0.5 ... 2.5 mm ²	+, -: 1 screw terminal each for 0.5 ... 2.5 mm ²
• Auxiliary	-	-
Width of the enclosure	36 mm	54 mm
Height of the enclosure	90 mm	90 mm
Depth of the enclosure	53 mm	53 mm
Required spacing		
• top	20 mm	20 mm
• bottom	20 mm	20 mm
• left	0 mm	0 mm
• right	0 mm	0 mm
Weight, approx.	0.12 kg	0.2 kg
Product feature of the enclosure housing for side-by-side mounting	Yes	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions
MTBF at 40 °C	2 931 709 h	2 654 280 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)

Ordering data

Article No.

Article No.

LOGO!Power 1-phase, 5 V DC/3 A

Stabilized power supply
Input: 100 ... 240 V AC
(110 ... 300 V AC)
Output: 5 V DC/3 A

6EP3310-6SB00-0AY0

LOGO!Power 1-phase, 5 V DC/6.3 A

Stabilized power supply
Input: 100 ... 240 V AC
(110 ... 300 V AC)
Output: 5 V DC/6.3 A

6EP3311-6SB00-0AY0

Overview



Thanks to its stepped profile design, the LOGO!Power product family is ideally suited for low installation depths, such as in miniature distribution boards. The stabilized power supplies with a wide range input of 100 ... 240 V AC (85 ... 264 V) and 110 ... 300 V DC are available with an output voltage of 12 V in three performance classes. The 12 V versions are ideal for supplying LOGO! controllers with the corresponding voltage input. The high level of efficiency across the entire load range as well as the low no-load losses result in lower overall energy consumption. Greater convenience when commissioning and servicing thanks to integrated current monitor (for devices at least 36 mm wide). The extended temperature range from -25 °C to +70 °C enables a host of additional applications.

Main product highlights

- 12 V DC / 0.9 A, 1.9 A and 4.5 A
- Narrow unit with width of 18 mm, 36 mm or 54 mm and overall depth of 53 mm in LOGO! design
- Flexible mounting: DIN rail or wall mounting in a range of installation positions
- Higher energy efficiency: over the entire load range as well as no-load power losses of < 0.3 W
- Integrated current monitor: Actual output current measurement directly at the power supply unit (for devices at least 36 mm wide)
- Global use:
Operating temperature range from -25 °C to +70 °C as well as international certifications such as UL, CSA, FM or ATEX

Technical specifications

Article number	6EP3320-6SB00-0AY0	6EP3321-6SB00-0AY0	6EP3322-6SB00-0AY0
Product	LOGO!Power	LOGO!Power	LOGO!Power
Power supply, type	12 V/0.9 A	12 V/1.9 A	12 V/4.5 A
Input			
Input	1-phase AC or DC	1-phase AC or DC	1-phase AC or DC
Rated voltage value $V_{in rated}$	100 ... 240 V	100 ... 240 V	100 ... 240 V
Voltage range AC	85 ... 264 V	85 ... 264 V	85 ... 264 V
Input voltage			
• at DC	110 ... 300 V	110 ... 300 V	110 ... 300 V
Wide-range input	Yes	Yes	Yes
Overvoltage resistance	300 V AC for 1 s	300 V AC for 1 s	300 V AC for 1 s
Mains buffering at $I_{out rated}$, min.	40 ms; at $V_{in} = 187 V$	40 ms; at $V_{in} = 187 V$	40 ms; at $V_{in} = 187 V$
Rated line frequency 1	50 Hz	50 Hz	50 Hz
Rated line frequency 2	60 Hz	60 Hz	60 Hz
Rated line range	47 ... 63 Hz	47 ... 63 Hz	47 ... 63 Hz
Input current			
• at rated input voltage 120 V	0.3 A	0.53 A	1.13 A
• at rated input voltage 230 V	0.2 A	0.3 A	0.61 A
Switch-on current limiting (+25 °C), max.	20 A	25 A	50 A
I^2t , max.	0.8 A ² ·s	0.8 A ² ·s	3 A ² ·s
Built-in incoming fuse	internal	internal	internal
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C	Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C	Recommended miniature circuit breaker: from 10 A characteristic B or from 6 A characteristic C

Technical specifications (continued)

Article number	6EP3320-6SB00-0AY0	6EP3321-6SB00-0AY0	6EP3322-6SB00-0AY0
Product	LOGO!Power	LOGO!Power	LOGO!Power
Power supply, type	12 V/0.9 A	12 V/1.9 A	12 V/4.5 A
Output			
Output	Controlled, isolated DC voltage	Controlled, isolated DC voltage	Controlled, isolated DC voltage
Rated voltage V_{out} DC	12 V	12 V	12 V
Total tolerance, static \pm	3 %	3 %	3 %
Static mains compensation, approx.	0.1 %	0.1 %	0.1 %
Static load balancing, approx.	0.1 %	0.1 %	0.1 %
Residual ripple peak-peak, max.	200 mV	200 mV	200 mV
Residual ripple peak-peak, typ.	30 mV	30 mV	30 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	300 mV	300 mV	300 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	50 mV	50 mV	50 mV
Adjustment range		10.5 ... 16.1 V	10.5 ... 16.1 V
Product function Output voltage adjustable	No	Yes	Yes
Output voltage setting		via potentiometer	via potentiometer
Status display	Green LED for output voltage OK	Green LED for output voltage OK	Green LED for output voltage OK
On/off behavior	No overshoot of V_{out} (soft start)	No overshoot of V_{out} (soft start)	No overshoot of V_{out} (soft start)
Startup delay, max.	0.5 s	0.5 s	0.5 s
Voltage rise, typ.	100 ms	100 ms	100 ms
Rated current value $I_{out rated}$	0.9 A	1.9 A	4.5 A
Current range	0 ... 0.9 A	0 ... 1.9 A	0 ... 4.5 A
• Note	+55 ... +70 °C: Derating 2%/K	+55 ... +70 °C: Derating 2%/K	+55 ... +70 °C: Derating 2%/K
Supplied active power typical	10.8 W	22.8 W	54 W
Parallel switching for enhanced performance	No	Yes	Yes
Numbers of parallel switchable units for enhanced performance		2	2
Efficiency			
Efficiency at $V_{out rated}$, $I_{out rated}$, approx.	78 %	81 %	87.1 %
Power loss at $V_{out rated}$, $I_{out rated}$, approx.	3 W	5 W	8 W
Power loss [W] during no-load operation maximum	0.3 W	0.3 W	0.3 W
Closed-loop control			
Dynamic mains compensation ($V_{in rated} \pm 15 \%$), max.	0.2 %	0.2 %	0.2 %
Dynamic load smoothing (I_{out} : 10/90/10 %), $U_{out} \pm$ typ.	3 %	2 %	4 %
Load step setting time 10 to 90%, typ.	1 ms	1 ms	1 ms
Load step setting time 90 to 10%, typ.	1 ms	1 ms	1 ms
Protection and monitoring			
Output overvoltage protection	Yes, according to EN 60950-1	Yes, according to EN 60950-1	Yes, according to EN 60950-1
Current limitation, typ.	1.3 A	2.5 A	5 A
Property of the output	Yes	Yes	Yes
Short-circuit proof			
Short-circuit protection	Constant current characteristic	Constant current characteristic	Constant current characteristic
Enduring short circuit current RMS value			
• maximum	1.3 A	2.5 A	5 A
Overcurrent overload capability in normal operation	overload capability 150% $I_{out rated}$ typ. 200 ms	overload capability 150% $I_{out rated}$ typ. 200 ms	overload capability 150% $I_{out rated}$ typ. 200 ms
Overload/short-circuit indicator measuring point for output current	-	-	-
Overcurrent overload capability when switching on	150% $I_{out rated}$ typ. 200 ms	50 mV = ^ 1.9 A 150% $I_{out rated}$ typ. 200 ms	50 mV = ^ 4.5 A 150% $I_{out rated}$ typ. 200 ms

Technical specifications (continued)

	6EP3320-6SB00-0AY0	6EP3321-6SB00-0AY0	6EP3322-6SB00-0AY0
Article number	6EP3320-6SB00-0AY0	6EP3321-6SB00-0AY0	6EP3322-6SB00-0AY0
Product	LOGO!Power	LOGO!Power	LOGO!Power
Power supply, type	12 V/0.9 A	12 V/1.9 A	12 V/4.5 A
Safety			
Primary/secondary isolation	Yes	Yes	Yes
Galvanic isolation	Safety extra-low output voltage U_{out} acc. to EN 60950-1 and EN 50178	Safety extra-low output voltage U_{out} acc. to EN 60950-1 and EN 50178	Safety extra-low output voltage U_{out} acc. to EN 60950-1 and EN 50178
Protection class	Class II (without protective conductor)	Class II (without protective conductor)	Class II (without protective conductor)
CE mark	Yes	Yes	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310)	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310)	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310)
Explosion protection	ATEX (EX) II 3G Ex nA IIC T3; cULus Class I Div. 2 (ANSI/ISA-12.12.01, CSA C22.2 No. 213) Group ABCD, T4, File E488866	ATEX (EX) II 3G Ex nA IIC T3; cULus Class I Div. 2 (ANSI/ISA-12.12.01, CSA C22.2 No. 213) Group ABCD, T4, File E488866	ATEX (EX) II 3G Ex nA IIC T3; cULus Class I Div. 2 (ANSI/ISA-12.12.01, CSA C22.2 No. 213) Group ABCD, T4, File E488866
FM approval	Class I, Div. 2, Group ABCD, T4	Class I, Div. 2, Group ABCD, T4	Class I, Div. 2, Group ABCD, T4
CB approval	Yes	Yes	Yes
Marine approval	ABS, DNV GL	ABS, DNV GL	ABS, DNV GL
Degree of protection (EN 60529)	IP20	IP20	IP20
EMC			
Emitted interference	EN 55022 Class B	EN 55022 Class B	EN 55022 Class B
Supply harmonics limitation	not applicable	not applicable	not applicable
Noise immunity	EN 61000-6-2	EN 61000-6-2	EN 61000-6-2
Operating data			
Ambient temperature			
• during operation	-25 ... +70 °C	-25 ... +70 °C	-25 ... +70 °C
- Note	with natural convection	with natural convection	with natural convection
• during transport	-40 ... +85 °C	-40 ... +85 °C	-40 ... +85 °C
• during storage	-40 ... +85 °C	-40 ... +85 °C	-40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation	Climate class 3K3, no condensation	Climate class 3K3, no condensation
Mechanics			
Connection technology	screw-type terminals	screw-type terminals	screw-type terminals
Connections			
• Supply input	L, N: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded	L, N: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded	L, N: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded
• Output	+, -: 1 screw terminal each for 0.5 ... 2.5 mm ²	+, -: 1 screw terminal each for 0.5 ... 2.5 mm ²	+, -: 1 screw terminal each for 0.5 ... 2.5 mm ²
• Auxiliary	-	-	-
Width of the enclosure	18 mm	36 mm	54 mm
Height of the enclosure	90 mm	90 mm	90 mm
Depth of the enclosure	53 mm	53 mm	53 mm
Required spacing			
• top	20 mm	20 mm	20 mm
• bottom	20 mm	20 mm	20 mm
• left	0 mm	0 mm	0 mm
• right	0 mm	0 mm	0 mm
Weight, approx.	0.07 kg	0.12 kg	0.2 kg
Product feature of the enclosure housing for side-by-side mounting	Yes	Yes	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions
MTBF at 40 °C	3 793 080 h	2 938 542 h	2 566 680 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)

Ordering data	Article No.		Article No.
<p>LOGO!Power 1-phase, 12 V DC/0.9 A</p> <p>Stabilized power supply Input: 100 ... 240 V DC (110 ... 300 V AC) Output: 12 V DC/0.9 A</p>	<p>6EP3320-6SB00-0AY0</p>	<p>LOGO!Power 1-phase, 12 V DC/4.5 A</p> <p>Stabilized power supply Input: 100 ... 240 V AC (110 ... 300 V AC) Output: 12 V DC/4.5 A</p>	<p>6EP3322-6SB00-0AY0</p>
<p>LOGO!Power 1-phase, 12 V DC/1.9 A</p> <p>Stabilized power supply Input: 100 ... 240 V AC (110 ... 300 V DC) Output: 12 V DC/1.9 A</p>	<p>6EP3321-6SB00-0AY0</p>		

Overview



Thanks to its stepped profile design, the LOGO!Power product family is ideally suited for low installation depths, such as in miniature distribution boards. The stabilized power supplies with a wide range input of 100 ... 240 V AC (85 ... 264 V) and 110 ... 300 V DC are available with an output voltage of 15 V in two performance classes. The high level of efficiency across the entire load range as well as the low no-load losses result in lower overall energy consumption. Greater convenience when commissioning and servicing thanks to the integrated current monitor. The extended temperature range from -25 °C to +70 °C enables a host of additional applications.

Main product highlights

- 15 V DC / 1.9 A and 4.0 A
- Narrow unit with 36 mm or 54 mm width and overall depth of 53 mm in LOGO! design
- Flexible mounting: DIN rail or wall mounting in a range of installation positions
- Higher energy efficiency: over the entire load range as well as no-load power losses of < 0.3 W
- Integrated current monitor: Actual output current measurement directly at the power supply unit
- Global use: Operating temperature range from -25 °C to +70 °C as well as international certifications such as UL, CSA, FM or ATEX

Technical specifications

Article number	6EP3321-6SB10-0AY0	6EP3322-6SB10-0AY0
Product	LOGO!Power	LOGO!Power
Power supply, type	15 V/1.9 A	15 V/4 A
Input		
Input	1-phase AC or DC	1-phase AC or DC
Rated voltage value $V_{in rated}$	100 ... 240 V	100 ... 240 V
Voltage range AC	85 ... 264 V	85 ... 264 V
Input voltage		
• at DC	110 ... 300 V	110 ... 300 V
Wide-range input	Yes	Yes
Overvoltage resistance	300 V AC for 1 s	300 V AC for 1 s
Mains buffering at $I_{out rated, min.}$	40 ms; at $V_{in} = 187 V$	40 ms; at $V_{in} = 187 V$
Rated line frequency 1	50 Hz	50 Hz
Rated line frequency 2	60 Hz	60 Hz
Rated line range	47 ... 63 Hz	47 ... 63 Hz
Input current		
• at rated input voltage 120 V	0.63 A	1.24 A
• at rated input voltage 230 V	0.33 A	0.68 A
Switch-on current limiting (+25 °C), max.	25 A	55 A
$I^2t, max.$	0.8 A ² ·s	3 A ² ·s
Built-in incoming fuse	internal	internal
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C	Recommended miniature circuit breaker: from 10 A characteristic B or from 6 A characteristic C

Technical specifications (continued)

Article number	6EP3321-6SB10-0AY0	6EP3322-6SB10-0AY0
Product	LOGO!Power	LOGO!Power
Power supply, type	15 V/1.9 A	15 V/4 A
Output		
Output	Controlled, isolated DC voltage	Controlled, isolated DC voltage
Rated voltage V_{out} DC	15 V	15 V
Total tolerance, static \pm	3 %	3 %
Static mains compensation, approx.	0.1 %	0.1 %
Static load balancing, approx.	0.1 %	0.1 %
Residual ripple peak-peak, max.	200 mV	200 mV
Residual ripple peak-peak, typ.	30 mV	30 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	300 mV	300 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	50 mV	50 mV
Adjustment range	10.5 ... 16.1 V	10.5 ... 16.1 V
Product function Output voltage adjustable	Yes	Yes
Output voltage setting	via potentiometer	via potentiometer
Status display	Green LED for output voltage OK	Green LED for output voltage OK
On/off behavior	No overshoot of V_{out} (soft start)	No overshoot of V_{out} (soft start)
Startup delay, max.	0.5 s	0.5 s
Voltage rise, typ.	100 ms	100 ms
Rated current value $I_{out\ rated}$	1.9 A	4 A
Current range	0 ... 1.9 A	0 ... 4 A
• Note	+55 ... +70 °C: Derating 2%/K	+55 ... +70 °C: Derating 2%/K
Supplied active power typical	28.5 W	60 W
Parallel switching for enhanced performance	Yes	Yes
Numbers of parallel switchable units for enhanced performance	2	2
Efficiency		
Efficiency at $V_{out\ rated}$, $I_{out\ rated}$, approx.	83 %	88.4 %
Power loss at $V_{out\ rated}$, $I_{out\ rated}$, approx.	6 W	8 W
Power loss [W] during no-load operation maximum	0.3 W	0.3 W
Closed-loop control		
Dynamic mains compensation ($V_{in\ rated} \pm 15\%$), max.	0.2 %	0.2 %
Dynamic load smoothing (I_{out} : 10/90/10 %), $U_{out} \pm$ typ.	2 %	3 %
Load step setting time 10 to 90%, typ.	1 ms	1 ms
Load step setting time 90 to 10%, typ.	1 ms	1 ms
Protection and monitoring		
Output overvoltage protection	Yes, according to EN 60950-1	Yes, according to EN 60950-1
Current limitation, typ.	2.5 A	5 A
Property of the output Short-circuit proof	Yes	Yes
Short-circuit protection	Constant current characteristic	Constant current characteristic
Enduring short circuit current RMS value		
• maximum	2.5 A	5 A
Overcurrent overload capability in normal operation	overload capability 150% $I_{out\ rated}$ typ. 200 ms	overload capability 150% $I_{out\ rated}$ typ. 200 ms
Overload/short-circuit indicator measuring point for output current	-	-
	50 mV \Rightarrow 1.9 A	45 mV \Rightarrow 4 A
Overcurrent overload capability when switching on	150% $I_{out\ rated}$ typ. 200 ms	150% $I_{out\ rated}$ typ. 200 ms

Technical specifications (continued)

Article number	6EP3321-6SB10-0AY0	6EP3322-6SB10-0AY0
Product	LOGO!Power	LOGO!Power
Power supply, type	15 V/1.9 A	15 V/4 A
Safety		
Primary/secondary isolation	Yes	Yes
Galvanic isolation	Safety extra-low output voltage U_{out} acc. to EN 60950-1 and EN 50178	Safety extra-low output voltage U_{out} acc. to EN 60950-1 and EN 50178
Protection class	Class II (without protective conductor)	Class II (without protective conductor)
CE mark	Yes	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310)	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310)
Explosion protection	ATEX (EX) II 3G Ex nA IIC T3; cULus Class I Div. 2 (ANSI/ISA-12.12.01, CSA C22.2 No. 213) Group ABCD, T4, File E488866	ATEX (EX) II 3G Ex nA IIC T3; cULus Class I Div. 2 (ANSI/ISA-12.12.01, CSA C22.2 No. 213) Group ABCD, T4, File E488866
FM approval	Class I, Div. 2, Group ABCD, T4	Class I, Div. 2, Group ABCD, T4
CB approval	Yes	Yes
Marine approval	ABS, BV, DNV GL, LRS	ABS, BV, DNV GL, LRS
Degree of protection (EN 60529)	IP20	IP20
EMC		
Emitted interference	EN 55022 Class B	EN 55022 Class B
Supply harmonics limitation	not applicable	not applicable
Noise immunity	EN 61000-6-2	EN 61000-6-2
Operating data		
Ambient temperature		
• during operation	-25 ... +70 °C	-25 ... +70 °C
- Note	with natural convection	with natural convection
• during transport	-40 ... +85 °C	-40 ... +85 °C
• during storage	-40 ... +85 °C	-40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation	Climate class 3K3, no condensation
Mechanics		
Connection technology	screw-type terminals	screw-type terminals
Connections		
• Supply input	L, N: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded	L, N: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded
• Output	+, -: 1 screw terminal each for 0.5 ... 2.5 mm ²	+, -: 1 screw terminal each for 0.5 ... 2.5 mm ²
• Auxiliary	-	-
Width of the enclosure	36 mm	54 mm
Height of the enclosure	90 mm	90 mm
Depth of the enclosure	53 mm	53 mm
Required spacing		
• top	20 mm	20 mm
• bottom	20 mm	20 mm
• left	0 mm	0 mm
• right	0 mm	0 mm
Weight, approx.	0.12 kg	0.2 kg
Product feature of the enclosure housing for side-by-side mounting	Yes	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions
MTBF at 40 °C	2 938 542 h	2 566 680 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)

Ordering data

LOGO!Power 1-phase, 15 V DC/1.9 A

Stabilized power supply
Input: 100 ... 240 V AC
(110 ... 300 V DC)
Output: 15 V DC/1.9 A

Article No.

6EP3321-6SB10-0AY0

Article No.

LOGO!Power 1-phase, 15 V DC/4 A

Stabilized power supply
Input: 100 ... 240 V AC
(110 ... 300 V DC)
Output: 15 V DC/4 A

6EP3322-6SB10-0AY0

Overview



Thanks to its stepped profile design, the LOGO!Power product family is ideally suited for low installation depths, such as in miniature distribution boards. The stabilized power supplies with a wide range input of 100 ... 240 V AC (85 ... 264 V) and 110 ... 300 V DC are available with an output voltage of 24 V in four performance classes. The 24 V versions are ideal for supplying LOGO! controllers with the corresponding voltage input. The high level of efficiency across the entire load range as well as the low no-load losses result in lower overall energy

consumption. Greater convenience when commissioning and servicing thanks to integrated current monitor (for devices at least 36 mm wide). The extended temperature range from -25 °C to +70 °C enables a host of additional applications.

To further increase the 24 V availability, the LOGO!Power power supplies can be combined with **DC UPS, redundancy** and **selectivity modules**.

Main product highlights

- 24 V DC / 0.6 A, 1.3 A, 2.5 A and 4.0 A
- Narrow unit with width of 18 mm, 36 mm, 54 mm or 72 mm and overall depth of 53 mm in LOGO! design
- Flexible mounting: DIN rail or wall mounting in a range of installation positions
- Higher energy efficiency: up to 90 % efficiency over the entire load range as well as no-load power losses of < 0.3 W
- Integrated current monitor: Actual output current measurement directly at the power supply unit (for devices at least 36 mm wide)
- Global use: Operating temperature range from -25 °C to +70 °C as well as international certifications such as UL, CSA, FM or ATEX

Technical specifications

Article number	6EP3330-6SB00-0AY0	6EP3331-6SB00-0AY0	6EP3332-6SB00-0AY0	6EP3333-6SB00-0AY0
Product	LOGO!Power	LOGO!Power	LOGO!Power	LOGO!Power
Power supply, type	24 V/0.6 A	24 V/1.3 A	24 V/2.5 A	24 V/4 A
Input				
Input	1-phase AC or DC	1-phase AC or DC	1-phase AC or DC	1-phase AC or DC
Rated voltage value $V_{in rated}$	100 ... 240 V	100 ... 240 V	100 ... 240 V	100 ... 240 V
Voltage range AC	85 ... 264 V	85 ... 264 V	85 ... 264 V	85 ... 264 V
Input voltage				
• at DC	110 ... 300 V	110 ... 300 V	110 ... 300 V	110 ... 300 V
Wide-range input	Yes	Yes	Yes	Yes
Overvoltage resistance	300 V AC for 1 s	300 V AC for 1 s	300 V AC for 1 s	300 V AC for 1 s
Mains buffering at $I_{out rated}$, min.	40 ms; at $V_{in} = 187$ V	40 ms; at $V_{in} = 187$ V	40 ms; at $V_{in} = 187$ V	40 ms; at $V_{in} = 187$ V
Rated line frequency 1	50 Hz	50 Hz	50 Hz	50 Hz
Rated line frequency 2	60 Hz	60 Hz	60 Hz	60 Hz
Rated line range	47 ... 63 Hz	47 ... 63 Hz	47 ... 63 Hz	47 ... 63 Hz
Input current				
• at rated input voltage 120 V	0.3 A	0.7 A	1.22 A	1.95 A
• at rated input voltage 230 V	0.2 A	0.35 A	0.66 A	0.97 A
Switch-on current limiting (+25 °C), max.	20 A	25 A	52 A	31 A
I^2t , max.	0.8 A ² ·s	0.8 A ² ·s	3 A ² ·s	2.5 A ² ·s
Built-in incoming fuse	internal	internal	internal	internal
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C	Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C	Recommended miniature circuit breaker: from 10 A characteristic B or from 6 A characteristic C	Recommended miniature circuit breaker: from 10 A characteristic B or from 6 A characteristic C

Technical specifications (continued)

Article number	6EP3330-6SB00-0AY0	6EP3331-6SB00-0AY0	6EP3332-6SB00-0AY0	6EP3333-6SB00-0AY0
Product	LOGO!Power	LOGO!Power	LOGO!Power	LOGO!Power
Power supply, type	24 V/0.6 A	24 V/1.3 A	24 V/2.5 A	24 V/4 A
Output				
Output	Controlled, isolated DC voltage	Controlled, isolated DC voltage	Controlled, isolated DC voltage	Controlled, isolated DC voltage
Rated voltage V_{out} DC	24 V	24 V	24 V	24 V
Total tolerance, static \pm	3 %	3 %	3 %	3 %
Static mains compensation, approx.	0.1 %	0.1 %	0.1 %	0.1 %
Static load balancing, approx.	0.1 %	0.1 %	0.1 %	0.1 %
Residual ripple peak-peak, max.	200 mV	200 mV	200 mV	200 mV
Residual ripple peak-peak, typ.	30 mV	30 mV	30 mV	30 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	300 mV	300 mV	300 mV	300 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	50 mV	50 mV	50 mV	50 mV
Adjustment range		22.2 ... 26.4 V	22.2 ... 26.4 V	22.2 ... 26.4 V
Product function Output voltage adjustable	No	Yes	Yes	Yes
Output voltage setting		via potentiometer	via potentiometer	via potentiometer
Status display	Green LED for output voltage OK	Green LED for output voltage OK	Green LED for output voltage OK	Green LED for output voltage OK
On/off behavior	No overshoot of V_{out} (soft start)	No overshoot of V_{out} (soft start)	No overshoot of V_{out} (soft start)	No overshoot of V_{out} (soft start)
Startup delay, max.	0.5 s	0.5 s	0.5 s	0.5 s
Voltage rise, typ.	100 ms	100 ms	100 ms	100 ms
Rated current value $I_{out rated}$	0.6 A	1.3 A	2.5 A	4 A
Current range	0 ... 0.6 A	0 ... 1.3 A	0 ... 2.5 A	0 ... 4 A
• Note	+55 ... +70 °C: Derating 2%/K	+55 ... +70 °C: Derating 2%/K	+55 ... +70 °C: Derating 2%/K	+55 ... +70 °C: Derating 2%/K
Supplied active power typical	14.4 W	31.2 W	60 W	96 W
Parallel switching for enhanced performance	No	Yes	Yes	Yes
Numbers of parallel switchable units for enhanced performance		2	2	2
Efficiency				
Efficiency at $V_{out rated}$, $I_{out rated}$, approx.	81 %	86 %	90 %	89 %
Power loss at $V_{out rated}$, $I_{out rated}$, approx.	3 W	5 W	7 W	12 W
Power loss [W] during no-load operation maximum	0.3 W	0.3 W	0.3 W	0.3 W
Closed-loop control				
Dynamic mains compensation ($V_{in rated} \pm 15\%$), max.	0.2 %	0.2 %	0.2 %	0.2 %
Dynamic load smoothing (I_{out} : 10/90/10 %), $U_{out} \pm$ typ.	2 %	1 %	2 %	2 %
Load step setting time 10 to 90%, typ.	1 ms	1 ms	1 ms	1 ms
Load step setting time 90 to 10%, typ.	1 ms	1 ms	1 ms	1 ms
Protection and monitoring				
Output overvoltage protection	Yes, according to EN 60950-1	Yes, according to EN 60950-1	Yes, according to EN 60950-1	Yes, according to EN 60950-1
Current limitation, typ.	0.8 A	1.7 A	3.2 A	5 A
Property of the output Short-circuit proof	Yes	Yes	Yes	Yes
Short-circuit protection	Constant current characteristic	Constant current characteristic	Constant current characteristic	Constant current characteristic
Enduring short circuit current RMS value • maximum	0.8 A	1.7 A	3.2 A	5 A
Overcurrent overload capability in normal operation	overload capability 150% $I_{out rated}$ typ. 200 ms	overload capability 150% $I_{out rated}$ typ. 200 ms	overload capability 150% $I_{out rated}$ typ. 200 ms	overload capability 150% $I_{out rated}$ typ. 200 ms
Overload/short-circuit indicator measuring point for output current	-	50 mV $\hat{=}$ 1.3 A	50 mV $\hat{=}$ 2.5 A	50 mV $\hat{=}$ 4 A
Overcurrent overload capability when switching on	150% $I_{out rated}$ typ. 200 ms	150% $I_{out rated}$ typ. 200 ms	150% $I_{out rated}$ typ. 200 ms	150% $I_{out rated}$ typ. 200 ms

Technical specifications (continued)

Article number	6EP3330-6SB00-0AY0	6EP3331-6SB00-0AY0	6EP3332-6SB00-0AY0	6EP3333-6SB00-0AY0
Product	LOGO!Power	LOGO!Power	LOGO!Power	LOGO!Power
Power supply, type	24 V/0.6 A	24 V/1.3 A	24 V/2.5 A	24 V/4 A
Safety				
Primary/secondary isolation	Yes	Yes	Yes	Yes
Galvanic isolation	Safety extra-low output voltage U _{out} acc. to EN 60950-1 and EN 50178	Safety extra-low output voltage U _{out} acc. to EN 60950-1 and EN 50178	Safety extra-low output voltage U _{out} acc. to EN 60950-1 and EN 50178	Safety extra-low output voltage U _{out} acc. to EN 60950-1 and EN 50178
Protection class	Class II (without protective conductor)	Class II (without protective conductor)	Class II (without protective conductor)	Class II (without protective conductor)
CE mark	Yes	Yes	Yes	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310)	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310)	cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273, NEC class 2 (acc. to UL 1310)	cULus-listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-recognized (UL 60950, CSA C22.2 No. 60950), File E151273
Explosion protection	ATEX (EX) II 3G Ex nA IIC T3; cULus Class I Div. 2 (ANSI/ISA-12.12.01, CSA C22.2 No. 213) Group ABCD, T4, File E488866	ATEX (EX) II 3G Ex nA IIC T3; cULus Class I Div. 2 (ANSI/ISA-12.12.01, CSA C22.2 No. 213) Group ABCD, T4, File E488866	ATEX (EX) II 3G Ex nA IIC T3; cULus Class I Div. 2 (ANSI/ISA-12.12.01, CSA C22.2 No. 213) Group ABCD, T4, File E488866	ATEX (EX) II 3G Ex nA IIC T3; cULus Class I Div. 2 (ANSI/ISA-12.12.01, CSA C22.2 No. 213) Group ABCD, T4, File E488866
FM approval	Class I, Div. 2, Group ABCD, T4	Class I, Div. 2, Group ABCD, T4	Class I, Div. 2, Group ABCD, T4	Class I, Div. 2, Group ABCD, T4
CB approval	Yes	Yes	Yes	Yes
Marine approval	ABS, BV, DNV GL, LRS	ABS, BV, DNV GL, LRS	ABS, BV, DNV GL, LRS	ABS, BV, DNV GL, LRS
Degree of protection (EN 60529)	IP20	IP20	IP20	IP20
EMC				
Emitted interference	EN 55022 Class B	EN 55022 Class B	EN 55022 Class B	EN 55022 Class B
Supply harmonics limitation	not applicable	not applicable	not applicable	EN 61000-3-2
Noise immunity	EN 61000-6-2	EN 61000-6-2	EN 61000-6-2	EN 61000-6-2
Operating data				
Ambient temperature				
• during operation	-25 ... +70 °C	-25 ... +70 °C	-25 ... +70 °C	-25 ... +70 °C
- Note	with natural convection	with natural convection	with natural convection	with natural convection
• during transport	-40 ... +85 °C	-40 ... +85 °C	-40 ... +85 °C	-40 ... +85 °C
• during storage	-40 ... +85 °C	-40 ... +85 °C	-40 ... +85 °C	-40 ... +85 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation	Climate class 3K3, no condensation	Climate class 3K3, no condensation	Climate class 3K3, no condensation
Mechanics				
Connection technology	screw-type terminals	screw-type terminals	screw-type terminals	screw-type terminals
Connections				
• Supply input	L, N: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded	L, N: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded	L, N: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded	L, N: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded
• Output	+, -: 1 screw terminal each for 0.5 ... 2.5 mm ²	+, -: 1 screw terminal each for 0.5 ... 2.5 mm ²	+, -: 1 screw terminal each for 0.5 ... 2.5 mm ²	+, -: 1 screw terminal each for 0.5 ... 2.5 mm ²
• Auxiliary	-	-	-	-
Width of the enclosure	18 mm	36 mm	54 mm	72 mm
Height of the enclosure	90 mm	90 mm	90 mm	90 mm
Depth of the enclosure	53 mm	53 mm	53 mm	53 mm
Required spacing				
• top	20 mm	20 mm	20 mm	20 mm
• bottom	20 mm	20 mm	20 mm	20 mm
• left	0 mm	0 mm	0 mm	0 mm
• right	0 mm	0 mm	0 mm	0 mm
Weight, approx.	0.07 kg	0.12 kg	0.2 kg	0.29 kg

Technical specifications (continued)

Article number	6EP3330-6SB00-0AY0	6EP3331-6SB00-0AY0	6EP3332-6SB00-0AY0	6EP3333-6SB00-0AY0
Product	LOGO!Power	LOGO!Power	LOGO!Power	LOGO!Power
Power supply, type	24 V/0.6 A	24 V/1.3 A	24 V/2.5 A	24 V/4 A
Product feature of the enclosure housing for side-by-side mounting	Yes	Yes	Yes	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions
MTBF at 40 °C	4 415 040 h	3 094 996 h	2 864 520 h	2 391 480 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.		Article No.
LOGO!Power 1-phase, 24 V DC/0.6 A		LOGO!Power 1-phase, 24 V DC/2.5 A	
Stabilized power supply Input: 100 ... 240 V AC (110 ... 300 V DC) Output: 24 V DC/0.6 A	6EP3330-6SB00-0AY0	Stabilized power supply Input: 100 ... 240 V AC (110 ... 300 V DC) Output: 24 V DC/2.5 A	6EP3332-6SB00-0AY0
LOGO!Power 1-phase, 24 V DC/1.3 A		LOGO!Power 1-phase, 24 V DC/4 A	
Stabilized power supply Input: 100 ... 240 V AC (110 ... 300 V DC) Output: 24 V DC/1.3 A	6EP3331-6SB00-0AY0	Stabilized power supply Input: 100 ... 240 V AC (110 ... 300 V DC) Output: 24 V DC/4 A	6EP3333-6SB00-0AY0

Overview



Thanks to its stepped profile design, the SIPLUS LOGO!Power product family is ideally suited for low installation depths, such as in miniature distribution boards. The stabilized power supplies with a wide range input of 100 ... 240 V AC (85 ... 264 V) and 110 ... 300 V DC are available with an output voltage of 24 V in four performance classes. The 24 V versions are ideal for supplying SIPLUS LOGO! controllers with the corre-

sponding voltage input. The high level of efficiency across the entire load range as well as the low no-load losses result in lower overall energy consumption. Greater convenience when commissioning and servicing thanks to integrated current monitor (for devices at least 36 mm wide). The extended temperature range enables a host of additional applications.

Main product highlights

- 24 V DC / 0.6 A, 1.3 A, 2.5 A and 4.0 A
- Narrow unit with width of 18 mm, 36 mm, 54 mm or 72 mm and overall depth of 53 mm in LOGO! design
- Flexible mounting: DIN rail or wall mounting in a range of installation positions
- Higher energy efficiency: up to 90% efficiency over the entire load range as well as no-load power losses of < 0.3 W
- Integrated current monitor: Actual output current measurement directly at the power supply unit (for devices at least 36 mm wide)
- Global use: International certifications such as UL, CSA, FM or ATEX

Technical specifications

Article number	6AG1331-6SB00-7AY0	6AG1332-6SB00-7AY0	6AG1333-6SB00-7AY0
Based on	6EP3331-6SB00-0AY0	6EP3332-6SB00-0AY0	6EP3333-6SB00-0AY0
Product	SIPLUS LOGO!Power	SIPLUS LOGO!Power	SIPLUS LOGO!Power
Power supply, type	24 V/1.3 A	24 V/2.5 A	24 V/4 A
Operating data			
Ambient temperature			
• during operation	-40 ... +70 °C	-40 ... +70 °C	-40 ... +70 °C
- Note	with natural convection	with natural convection	with natural convection
• during transport	-40 ... +85 °C	-40 ... +85 °C	-40 ... +85 °C
• during storage	-40 ... +85 °C	-40 ... +85 °C	-40 ... +85 °C
• on cold restart minimum	-25 °C	-25 °C	-25 °C
Relative humidity with condensation maximum	100 %; Relative humidity, incl. condensation/frost permitted (no commissioning under condensation conditions)	100 %; Relative humidity, incl. condensation/frost permitted (no commissioning under condensation conditions)	100 %; Relative humidity, incl. condensation/frost permitted (no commissioning under condensation conditions)
Resistance to biologically active substances conformity acc. to EN 60721-3-3	Yes	Yes	Yes
Resistance to chemically active substances conformity acc. to EN 60721-3-3	Yes	Yes	Yes
Resistance to mechanically active substances conformity acc. to EN 60721-3-3	Yes	Yes	Yes

Ordering data

Ordering data	Article No.	Ordering data	Article No.
SIPLUS LOGO!Power 24 V 1.3 A Extended temperature range and exposure to environmental substances Input 100 ... 240 V AC Output 24 V DC, 1.3 A	6AG1331-6SB00-7AY0	SIPLUS LOGO!Power 24 V 4 A Extended temperature range and exposure to environmental substances Input 100 ... 240 V AC Output 24 V DC, 4 A	6AG1333-6SB00-7AY0
SIPLUS LOGO!Power 24 V 2.5 A Extended temperature range and exposure to environmental substances Input 100 ... 240 V AC Output 24 V DC, 2.5 A	6AG1332-6SB00-7AY0		

Overview



Overview



LOGO! and SIPLUS LOGO! are designed for quick and easy mounting on DIN rails. With the mounting kit, these devices can also be easily and safely installed in front panels. If the supplied washer and seals are used, the devices are reliably protected against harsh environmental conditions up to the IP65 degree of protection.

Ordering data

Article No.

Front panel mounting kit

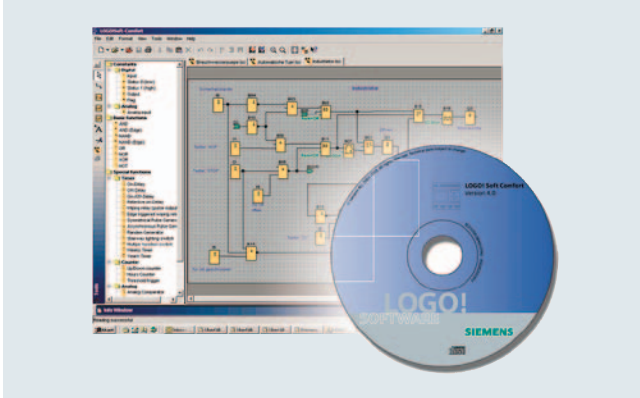
Width 4 U, with keys

6AG1057-1AA00-0AA3

Width 8 U, with keys

6AG1057-1AA00-0AA2

Overview



- The user-friendly software for generating switching programs on the PC for single-user mode and network mode
- Generation of switching programs in a function block diagram (FBD) or ladder logic (LAD)
- Furthermore, testing, simulation, online testing and archiving of the switching programs
- Professional documentation due to manifold comment and print functions

Minimum system requirements

Windows XP (32-bit), 7 (32/64-bit) or 8 (32/64-bit)

- PC Pentium IV.
- 150 MB free disk capacity.
- 256 MB RAM.
- SVGA graphics card with minimum resolution 800 x 600 (256 colors).
- DVD-ROM

Mac OS X

- Mac OS X 10.4

Linux

- Tested with SUSE Linux 11.3 SP2, kernel 3.0.76
- Runs on all Linux distributions on which Java 2 runs.
- Please refer to your relevant Linux distribution for the necessary hardware requirements.

Ordering data

Article No.

LOGO!Soft Comfort V8

for programming on the PC in LAD/FBD; executes on Windows 8, 7, XP, Linux and Mac OSX; on DVD

6ED1058-0BA08-0YA1

