LOGO! logic module

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Brochures

For brochures serving as selection guides for SIMATIC products refer to:

www.siemens.com/simatic/printmaterial

LOGO! logic module

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 click of a button or by means of PC software; up to 130 times over
- Functions are easily changed at the press of a key. 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 medial exposure (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 further information, please go to:

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

For brochures serving as selection guides for SIMATIC products refer to:

http://www.siemens.com/simatic/printmaterial

General technical data of the 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	
Relative humidity	100%, condensation/frost permissible. No commissioning if condensation present.
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. 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

Overview

- The space-saving basic variants
- Interface for the connection of expansion modules, up to 24 digital inputs, 16 digital outputs, 8 analog inputs and 2 analog outputs can be addressed
- With connection option for LOGO! text display TD (can be connected to all LOGO! 0BA6 basic variants)

New in LOGO! 0BA7 variants:

- Ethernet interface for communication with SIMATIC Controller, SIMATIC Panel and PC
- Networking of max. 8 LOGO! devices
- Use of standard SD card or SIMATIC memory card

Technical specifications

	6ED1 052-1CC01-0BA6	6ED1 052-1MD00-0BA6	6ED1 052-1HB00-0BA6	6ED1 052-1FB00-0BA6
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				
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
24 V AC			Yes	
115 V AC				Yes
230 V AC				Yes
Time of day				
Time switching clocks				
• Power reserve	80 h	80 h	80 h	80 h
Digital inputs				
Number/binary 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/binary outputs	4; Transistor	4; Relay	4; Relay	4; Relay
Functionality/short-circuit strength	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			
Relay outputs				
• Switching capacity of contacts				
- with inductive load, max.		3 A	3 A	3 A
- Switching frequency/contacts/ at ohmic load/maximum		10 A	10 A	10 A
EMC				
Emission of radio interference acc. to EN 55 011				
• Emission of radio interference acc. to EN 55 011 (limit class B)	Yes; Radio interference suppression according to EN55011, Limit Value Class B	Yes	Yes	Yes
Degree and class of protection				
IP20	Yes	Yes	Yes	Yes

Technical specifications (continued)

	6ED1 052-1CC01-0BA6	6ED1 052-1MD00-0BA6	6ED1 052-1HB00-0BA6	6ED1 052-1FB00-0BA6
Standards, approvals, certificates				
CSA approval	Yes	Yes	Yes	Yes
UL approval	Yes	Yes	Yes	Yes
FM approval	Yes	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes	Yes
Developed according to IEC 61131	Yes	Yes	Yes	Yes
according to VDE 0631	Yes	Yes	Yes	Yes
Ambient conditions				
Operating temperature				
• Min.	0 °C	0 °C	0 °C	0 °C
• max.	55 °C	55 °C	55 °C	55 °C
Dimensions				
Width	72 mm	72 mm	72 mm	72 mm
Height	90 mm	90 mm	90 mm	90 mm
Depth	55 mm	55 mm	55 mm	55 mm

	6ED1 052-1MD00-0BA7	6ED1 052-1FB00-0BA7
Installation type/mounting		
Mounting	On 35 mm DIN rail, 6 spacing units wide	On 35 mm DIN rail, 6 spacing units wide
Supply voltage		
12 V DC	Yes	
24 V DC	Yes	
115 V DC		Yes
230 V DC		Yes
permissible range, lower limit (DC)	10.8 V	100 V
permissible range, upper limit (DC)	28.8 V	253 V
115 V AC		Yes
230 V AC		Yes
Time of day		
Time switching clocks		
• Power reserve	480 h	480 h
Digital inputs		
Number/binary inputs	8; Of which 4 can be used in analog mode (0 to 10 V)	8
Digital outputs		
Number/binary outputs	4; Relay	4; Relay
Functionality/short-circuit strength	No; external fusing necessary	No; external fusing necessary
Relay outputs		
• Switching capacity of contacts		
- with inductive load, max.	3 A	3 A
- Switching frequency/contacts/at ohmic load/maximum	10 A	10 A
EMC		
Emission of radio interference acc. to EN 55 011		
• Emission of radio interference acc. to EN 55 011 (limit class B)	Yes; Radio interference suppression according to EN55011, Limit Value Class B	Yes; Radio interference suppression according to EN55011, Limit Value Class B
Degree and class of protection		
IP20	Yes	Yes
Standards, approvals, certificates		
CSA approval	Yes	Yes
UL approval	Yes	Yes
FM approval	Yes	Yes
Marine approval	Yes	Yes
Developed according to IEC 61131	Yes	Yes
according to VDE 0631	Yes	Yes

Technical specifications (continued)

	6ED1 052-1MD00-0BA7	6ED1 052-1FB00-0BA7
Ambient conditions		
Operating temperature		
• Min.	0 °C	0 °C
• max.	55 °C	55 °C
Dimensions		
Width	107 mm	107 mm
Height	90 mm	90 mm
Depth	55 mm	55 mm

Ordering data

	Order No.
LOGO! logic module 24C 24 V DC power supply, 8x 24 V DC digital inputs, of which 4 can be used in analog mode (0 to 10 V), 4x 24 V DC digital outputs, 0.3 A, integral time switch; 200 function blocks can be interlinked, modular expansion capability	**6ED1 052-1CC01-0BA6**
LOGO! logic module 12/24RC 12/24 V DC power supply, 8x 12/24 V DC digital inputs, of which 4 can be used in analog mode (0 to 10 V) 4x 10 A relay outputs, integral time switch; 200 function blocks can be interlinked, modular expansion capability	**6ED1 052-1MD00-0BA6**
LOGO! logic module 24RC 24 V AC/DC power supply, 8x 24 V AC/DC digital inputs, 4x 10 A relay outputs, integral time switch; 200 function blocks can be interlinked, modular expansion capability	**6ED1 052-1HB00-0BA6**
LOGO! logic module 230RC 115/230 V AC/DC power supply, 8x 115/230 V AC/DC digital inputs, 4x 10 A relay outputs, integral time switch; 200 function blocks can be interlinked, modular expansion capability	**6ED1 052-1FB00-0BA6**
LOGO! logic module 12/24RCE 12/24 V DC power supply, 8x 12/24 V DC digital inputs, of which 4 can be used in analog mode (0 to 10 V) 4x 10 A relay outputs, integral time switch; 400 function blocks can be interlinked, Ethernet interface, modular expansion capability	**6ED1 052-1MD00-0BA7**
LOGO! logic module 230RCE 115/230 V AC/DC power supply, 8x 115/230 V AC/DC digital inputs, 4x 10 A relay outputs, integral time switch; 400 function blocks can be interlinked, Ethernet interface, modular expansion capability	**6ED1 052-1FB00-0BA7**

	Order No.
Accessories	
LOGO! TD text display 4-line text display, can be connected to all LOGO! 0BA6 Basic and Pure versions, including connecting cable	**6ED1 055-4MH00-0BA0**
SIPLUS LOGO! TD text display (extended temperature range -10 ... +60 °C and medial loading) 4-line text display, can be connected to all LOGO! Basic and Pure versions as of -0BA6, including connecting cable	**6AG1 055-4MH00-2BA0**
LOGO! Manual	
German	**6ED1 050-1AA00-0AE8**
English	**6ED1 050-1AA00-0BE8**
French	**6ED1 050-1AA00-0CE8**
Spanish	**6ED1 050-1AA00-0DE8**
Italian	**6ED1 050-1AA00-0EE8**
Chinese	**6ED1 050-1AA00-0KE8**
LOGO! Memory Card Program module for copying, with know-how protection	**6ED1 056-1DA00-0BA0**
LOGO! battery card Battery module for backing up the integral real-time clock (not LOGO! 24)	**6ED1 056-6XA00-0BA0**
LOGO! memory/battery card Combined program and battery module, with know-how protection and for backing up the integral real-time clock (not LOGO! 24)	**6ED1 056-7DA00-0BA0**
LOGO! PROM Programming device used to simultaneously reproduce program module contents on up to 8 program modules	**6AG1 057-1AA01-0BA6**
LOGO!Soft Comfort V7.0 For programming on the PC in LAD/FBD; executes on Windows 7, VISTA, XP, NT4.0, 2000, 98SE, Linux and MAC OSX; on CD-ROM	**6ED1 058-0BA02-0YA1**
LOGO!Soft Comfort V7.0 upgrade Upgrade from V1.0 to V7.0	**6ED1 058-0CA02-0YE1**

LOGO! modular basic variants

Ordering data

	Order No.
LOGO! PC cable For program transfer between LOGO! and the PC	**6ED1 057-1AA00-0BA0**
LOGO! USB PC cable For transferring the program between LOGO! and PC, including driver on CD-ROM	**6ED1 057-1AA01-0BA0**
LOGO! modem cable Adapter cable for analog modem communication	**6ED1 057-1CA00-0BA0**
Front panel mounting set	
Width 4 MW	**6AG1 057-1AA00-0AA0**
Width 4 MW, with keys	**6AG1 057-1AA00-0AA3**
Width 8 MW	**6AG1 057-1AA00-0AA1**
Width 8 MW, with keys	**6AG1 057-1AA00-0AA2**

	Order No.
LOGO! Starter kits (0BA6) In TANOS box, with USB cable, LOGO!, LOGO! Soft Comfort V6	
LOGO! Starter kit 12/24 V Language-neutral with LOGO! 12/24RC (0BA6)	**6ED1 057-3BA00-0AA6**
LOGO! Starter kit 230 V Language-neutral with LOGO! 230RC (0BA6)	**6ED1 057-3BA02-0AA6**
LOGO! Starter kits (0BA7) In TANOS box, with Ethernet cable, LOGO!, LOGO! Soft Comfort V7, WinCC Basic V11	
LOGO! Starter kit 12/24 V Language-neutral with LOGO! 12/24RCE (0BA7) + LOGO! Power 24 V 1.3 A	**6ED1 057-3BA00-0AA7**
LOGO! Starter kit 230 V Language-neutral with LOGO! 230RCE (0BA7)	**6ED1 057-3BA02-0AA7**

Overview

- The space-saving basic variants
- Interface for the connection of expansion modules, up to 24 digital inputs, 16 digital outputs, 8 analog inputs and 2 analog outputs can be addressed
- With connection option for LOGO! text display TD (can be connected to all LOGO! 0BA6 basic versions)

New in LOGO! 0BA7 variants:

- Ethernet interface for communication with SIMATIC Controller, SIMATIC Panel and PC
- Networking of max. 8 LOGO! devices
- Use of standard SD card or SIMATIC memory card

Note:

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

Technical specifications

The technical data correspond to those of the based-on modules apart from the values listed in the table:

	6AG1 052-1CC01-2BA6	**6AG1 052-1MD00-2BA6**	**6AG1 052-1HB00-2BA6**	**6AG1 052-1FB00-2BA6**
Based on	**6ED1 052-1CC01-0BA6**	**6ED1 052-1MD00-0BA6**	**6ED1 052-1HB00-0BA6**	**6ED1 052-1FB00-0BA6**
Ambient conditions				
Operating temperature				
• Min.	-25 °C; = Tmin	-25 °C; = Tmin	-25 °C; = Tmin	-25 °C; = Tmin
• max.	70 °C; = Tmax; 55 °C @ UL/cUL use	70 °C; = Tmax; 55 °C @ UL/cUL use	70 °C; = Tmax; 55 °C @ UL/cUL use	70 °C; = Tmax; 55 °C @ UL/cUL use
Extended ambient conditions				
• Relative to ambient temperature-atmospheric pressure-installation 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)	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)	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)	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m)
• Relative humidity				
- with condensation	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)	100 %; Relative humidity, incl. condensation / frost permitted (no commissioning under condensation conditions)
• Resistance				
- to biologically active substances	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!
- to chemically active substances	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!
- to mechanically active substances	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!

Technical specifications (continued)

Based on	6AG1 052-1MD00-2BA7 6ED1 052-1MD00-0BA7	6AG1 052-1FB00-2BA7 6ED1 052-1FB00-0BA7
Ambient conditions		
Operating temperature		
• Min.	-25 °C; = Tmin	-25 °C; = Tmin
• max.	70 °C; = Tmax	70 °C; = Tmax
Extended ambient conditions		
• Relative to ambient temperature-atmospheric pressure-installation 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)	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m)
• Relative humidity		
- with condensation	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	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!
- to chemically active substances	Yes; Class 3C4 incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector covers must remain on the unused interfaces during operation!
- to mechanically active substances	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!

Ordering data

	Order No.
SIPLUS LOGO! 24 (extended temperature range and medial exposure) 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; 200 function blocks can be interlinked, modular expansion capability	**6AG1 052-1CC01-2BA6**
SIPLUS LOGO! 12/24RC (Extended temperature range and medial exposure) 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, integral time switch; 200 function blocks can be interlinked, modular expansion capability	**6AG1 052-1MD00-2BA6**
SIPLUS LOGO! 24RC (Extended temperature range and medial exposure) 24 V AC/DC supply voltage, 8 digital inputs 24 V AC/DC, 4 relay outputs 10 A, integral time switch; 200 function blocks can be interlinked, modular expansion capability	**6AG1 052-1HB00-2BA6**
SIPLUS LOGO! 230RC (Extended temperature range and medial exposure) 115/230 V AC/DC supply voltage, 8 digital inputs 115/230 V AC/DC, 4 relay outputs 10 A, integral time switch; 200 function blocks can be interlinked, modular expansion capability	**6AG1 052-1FB00-2BA6**
SIPLUS LOGO! 12/24RCE (Extended temperature range and medial exposure) 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, integral time switch; 400 function blocks can be interlinked, Ethernet interface, modular expansion capability	**6AG1 052-1MD00-2BA7**
SIPLUS LOGO! 230RCE (Extended temperature range and medial exposure) 115/230 V AC/DC supply voltage, 8 digital inputs 115/230 V AC/DC, 4 relay outputs 10 A, integral time switch; 400 function blocks can be interlinked, Ethernet interface, modular expansion capability	**6AG1 052-1FB00-2BA7**
Accessories	
SIPLUS Upmiter upstream device for reliable operation at the battery of combustion engines	**6AG1 053-1AA00-2AA0**
Additional accessories	See LOGO! modular basic variants, page 2/5

Overview

- The cost-optimized basic variants
- Interface for the connection of expansion modules, up to 24 digital inputs, 16 digital outputs, 8 analog inputs and 2 analog outputs can be addressed
- With connection option for LOGO! TD text display (can be connected to all LOGO! 0BA6 basic variants)

Technical specifications

	6ED1 052-2CC01-0BA6	6ED1 052-2MD00-0BA6	6ED1 052-2HB00-0BA6	6ED1 052-2FB00-0BA6
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				
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
24 V AC			Yes	
115 V AC				Yes
230 V AC				Yes
Time of day				
Time switching clocks				
• Number	190	8	8	8
• Power reserve	80 h	80 h	80 h	80 h
Digital inputs				
Number/binary 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/binary outputs	4; Transistor	4; Relay	4; Relay	4; Relay
Functionality/short-circuit strength	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			
Relay outputs				
• Switching capacity of contacts				
- with inductive load, max.		3 A	3 A	3 A
- Switching frequency/contacts/at ohmic load/maximum		10 A	10 A	10 A
EMC				
Emission of radio interference acc. to EN 55 011				
• Emission of radio interference acc. to EN 55 011 (limit class B)	Yes; Radio interference suppression according to EN55011, Limit Value Class B	Yes	Yes	Yes
Degree and class of protection				
IP20	Yes	Yes	Yes	Yes

Technical specifications (continued)

	6ED1 052-2CC01-0BA6	6ED1 052-2MD00-0BA6	6ED1 052-2HB00-0BA6	6ED1 052-2FB00-0BA6
Standards, approvals, certificates				
CSA approval	Yes	Yes	Yes	Yes
UL approval	Yes	Yes	Yes	Yes
FM approval	Yes	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes	Yes
Developed according to IEC 61131	Yes	Yes	Yes	Yes
according to VDE 0631	Yes	Yes	Yes	Yes
Ambient conditions				
Operating temperature				
• Min.	0 °C	0 °C	0 °C	0 °C
• max.	55 °C	55 °C	55 °C	55 °C
Dimensions				
Width	72 mm	72 mm	72 mm	72 mm
Height	90 mm	90 mm	90 mm	90 mm
Depth	55 mm	55 mm	55 mm	55 mm

Ordering data

	Order No.
LOGO! logic module 24Co 24 V DC power supply, 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; without display and keyboard; 200 function blocks can be interlinked, modular expansion capability	**6ED1 052-2CC01-0BA6**
LOGO! logic module 12/24RCo 12/24 V DC power supply, 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, integral time switch; without display and keyboard; 200 function blocks can be interlinked, modular expansion capability	**6ED1 052-2MD00-0BA6**
LOGO! logic module 24RCo 24 V AC/DC power supply, 8 digital inputs 24 V AC/DC, 4 relay outputs 10 A, integral time switch; without display and keyboard; 200 function blocks can be interlinked, modular expansion capability	**6ED1 052-2HB00-0BA6**
LOGO! logic module 230RCo 115/230 V AC/DC power supply, 8 digital inputs 115/230 V AC/DC, 4 relay outputs 10 A, integral time clock; without display and keyboard; 200 function blocks can be interlinked, modular expansion capability	**6ED1 052-2FB00-0BA6**

	Order No.
Accessories	
LOGO! TD text display 4-line text display, can be connected to all LOGO! 0BA6 Basic and Pure versions, including connecting cable	**6ED1 055-4MH00-0BA0**
SIPLUS LOGO! TD text display (extended temperature range -10 ... +60 °C and medial loading) 4-line text display, can be connected to all LOGO! 0BA6 Basic and Pure versions, including connecting cable	**6AG1 055-4MH00-2BA0**
LOGO! Manual	
German	**6ED1 050-1AA00-0AE8**
English	**6ED1 050-1AA00-0BE8**
French	**6ED1 050-1AA00-0CE8**
Spanish	**6ED1 050-1AA00-0DE8**
Italian	**6ED1 050-1AA00-0EE8**
Chinese	**6ED1 050-1AA00-0KE8**
LOGO! Memory Card Program module for copying, with know-how protection	**6ED1 056-1DA00-0BA0**
LOGO! battery card Battery module for backing up the integral real-time clock (not LOGO! 24)	**6ED1 056-6XA00-0BA0**

Ordering data

	Order No.
LOGO! memory/battery card Combined program and battery module, with know-how protection and for backing up the integral real-time clock (not LOGO! 24o)	**6ED1 056-7DA00-0BA0**
LOGO! PROM Programming device used to simultaneously reproduce program module contents on up to 8 program modules	**6AG1 057-1AA01-0BA6**
LOGO!Soft Comfort V7.0 For programming on the PC in LAD/FBD; executes on Windows 7, VISTA, XP, NT4.0, 2000, 98SE, Linux and MAC OSX; on CD-ROM	**6ED1 058-0BA02-0YA1**
LOGO!Soft Comfort V7.0 upgrade Upgrade from V1.0 to V7.0	**6ED1 058-0CA02-0YE1**

	Order No.
LOGO! PC cable For program transfer between LOGO! and the PC	**6ED1 057-1AA00-0BA0**
LOGO! USB PC cable For transferring the program between LOGO! and PC, including driver on CD-ROM	**6ED1 057-1AA01-0BA0**
LOGO! modem cable Adapter cable for analog modem communication	**6ED1 057-1CA00-0BA0**
LOGO! Starter kits (0BA6)	
LOGO! TD Starter kit Language-neutral with LOGO! 12/24RCo + LOGO! TD	**6ED1 057-3BA10-0AA6**

SIPLUS LOGO! modular pure variants

Overview

- Basic variants optimized for costs
- Interface for the connection of expansion modules, up to 24 digital inputs, 16 digital outputs, 8 analog inputs and 2 analog outputs can be addressed
- With connection option for LOGO! text display TD (can be connected to all LOGO! 0BA6 basic versions)

Note:

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

Technical specifications

The technical data correspond to those of the based-on modules apart from the values listed in the table:

	6AG1 052-2CC01-2BA6	**6AG1 052-2MD00-2BA6**	**6AG1 052-2HB00-2BA6**	**6AG1 052-2FB00-2BA6**
Based on	**6ED1 052-2CC01-0BA6**	**6ED1 052-2MD00-0BA6**	**6ED1 052-2HB00-0BA6**	**6ED1 052-2FB00-0BA6**
Ambient conditions				
Operating temperature				
• Min.	-40 °C; = Tmin	-40 °C; = Tmin	-40 °C; = Tmin	-40 °C; = Tmin
• max.	70 °C; = Tmax; 55 °C @ UL/cUL use	70 °C; = Tmax; 55 °C @ UL/cUL use	70 °C; = Tmax; 55 °C @ UL/cUL use	70 °C; = Tmax; 55 °C @ UL/cUL use
Extended ambient conditions				
• Relative to ambient temperature-atmospheric pressure-installation 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)	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)	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)	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m)
• Relative humidity				
- with condensation	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)	100 %; Relative humidity, incl. condensation / frost permitted (no commissioning under condensation conditions)
• Resistance				
- to biologically active substances	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!
- to chemically active substances	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!
- to mechanically active substances	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!

Ordering data

	Order No.
SIPLUS LOGO! 24o (extended temperature range and medial exposure) 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; without display and keyboard; 200 function blocks can be interlinked, modular expansion capability	**6AG1 052-2CC01-2BA6**
SIPLUS LOGO! 12/24RCo (extended temperature range and medial exposure) 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, integral time switch; without display and keyboard; 200 function blocks can be interlinked, modular expansion capability	**6AG1 052-2MD00-2BA6**
SIPLUS LOGO! 24RCo (extended temperature range and medial exposure) 24 V AC/DC supply voltage, 8 digital inputs 24 V AC/DC, 4 relay outputs 10 A, integral time switch; without display and keyboard; 200 function blocks can be interlinked, modular expansion capability	**6AG1 052-2HB00-2BA6**
SIPLUS LOGO! 230RCo (extended temperature range and medial exposure) 115/230 V AC/DC supply voltage, 8 digital inputs 115/230 V AC/DC, 4 relay outputs 10 A, integral time switch; without display and keyboard; 200 function blocks can be interlinked, modular expansion capability	**6AG1 052-2FB00-2BA6**

	Order No.
Accessories	
SIPLUS Upmiter upstream device for reliable operation at the battery of combustion engines	**6AG1 053-1AA00-2AA0**
Additional accessories	See LOGO! modular pure variants, page 2/10

LOGO! modular expansion modules

Overview

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

Technical specifications

	6ED1 055-1CB00-0BA0	6ED1 055-1HB00-0BA0	6ED1 055-1MB00-0BA1	6ED1 055-1FB00-0BA1
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				
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
24 V AC		Yes		
115 V AC				Yes
230 V AC				Yes
Digital inputs				
Number/binary inputs	4	4	4	4
Input voltage				
• Type of input voltage	DC	AC/DC	DC	AC/DC
Digital outputs				
Number/binary outputs	4	4; Relay	4; Relay	4; Relay
Functionality/short-circuit strength	Yes; electrical (1 A)	No; external fusing necessary	No; external fusing necessary	No; external fusing necessary
Relay outputs				
• Switching capacity of contacts				
- with inductive load, max.		3 A	3 A	3 A
- Switching frequency/contacts/at ohmic load/maximum		5 A	5 A	5 A
- Thermal continuous current, max.	0.3 A			
EMC				
Emission of radio interference acc. to EN 55 011				
• Emission of radio interference acc. to EN 55 011 (limit class B)	Yes	Yes	Yes	Yes
Degree and class of protection				
IP20	Yes	Yes	Yes	Yes

Technical specifications (continued)

	6ED1 055-1CB00-0BA0	6ED1 055-1HB00-0BA0	6ED1 055-1MB00-0BA1	6ED1 055-1FB00-0BA1
Standards, approvals, certificates				
CSA approval	Yes	Yes	Yes	Yes
UL approval	Yes	Yes	Yes	Yes
FM approval	Yes	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes	Yes
Developed according to IEC 61131	Yes	Yes	Yes	Yes
according to VDE 0631	Yes	Yes	Yes	Yes
Ambient conditions				
Operating temperature				
• Min.	0 °C	0 °C	0 °C	0 °C
• max.	55 °C	55 °C	55 °C	55 °C
Dimensions				
Width	36 mm; 2 DU	36 mm; 2 DU	36 mm; 2 DU	36 mm; 2 DU
Height	90 mm	90 mm	90 mm	90 mm
Depth	55 mm	55 mm	55 mm	55 mm

	6ED1 055-1CB10-0BA0	6ED1 055-1NB10-0BA0	6ED1 055-1FB10-0BA0
Installation type/mounting			
Mounting	on 35 mm DIN rail, 4 spacing units wide	on 35 mm DIN rail, 4 spacing units wide	on DIN rail 25 mm, 4 module spaces wide
Supply voltage			
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
115 V AC			Yes
230 V AC			Yes
Line frequency			
• Frequency of the supply voltage			63 Hz
Digital inputs			
Number/binary 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)	1 mA	1 mA	0.03 mA
• for signal "1", typ.	2 mA	2 mA	0.08 mA
Input delay (for rated value of input voltage)			
• for standard inputs			
- at "0" to "1", max.	1.5 ms	1.5 ms	50 ms
- at "1" to "0", max.	1.5 ms	1.5 ms	50 ms

Technical specifications (continued)

	6ED1 055-1CB10-0BA0	6ED1 055-1NB10-0BA0	6ED1 055-1FB10-0BA0
Digital outputs			
Number/binary outputs	8	8; Relay	8; Relay
Functionality/short-circuit strength	Yes; electrical (1 A)	No; external fusing necessary	external fusing necessary
Lamp load, max.		1 000 W; 500 W at 115 V AC	1 000 W; 500 W at 115 V AC
Controlling a digital input	Yes	Yes	Yes
Parallel switching of 2 outputs • for increased power	No	No	No
Switching frequency • with resistive load, max. • with inductive load, max. • mechanical, max.	10 Hz 0.5 Hz	2 Hz 0.5 Hz 10 Hz	2 Hz 0.5 Hz 10 Hz
Relay outputs • Switching capacity of contacts - with inductive load, max. - Switching frequency/contacts/at ohmic load/maximum - Thermal continuous current, max.	0.3 A	3 A 5 A	3 A 5 A
EMC			
Emission of radio interference acc. to EN 55 011 • Emission of radio interference acc. to EN 55 011 (limit class B)	Yes	Yes	Yes
Degree and class of protection			
IP20	Yes	Yes	Yes
Standards, approvals, certificates			
CSA approval	Yes	Yes	Yes
UL approval	Yes	Yes	Yes
FM approval	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes
Developed according to IEC 61131	Yes	Yes	Yes
according to VDE 0631	Yes	Yes	Yes
Ambient conditions			
Operating temperature • Min. • max.	0 °C 55 °C	0 °C 55 °C	0 °C 55 °C
Dimensions			
Width	72 mm; 4 WU	72 mm; 4 WU	72 mm; 4 WU
Height	90 mm	90 mm	90 mm
Depth	53 mm	53 mm	53 mm

	6ED1 055-1MA00-0BA0	6ED1 055-1MD00-0BA1
Installation type/mounting		
Mounting	on 35 mm DIN rail, 2 spacing units wide	
Supply voltage		
12 V DC	Yes	Yes; 10.8 to 28.8 V DC
24 V DC	Yes	Yes; 10.8 to 28.8 V DC
Analog inputs		
Number of analog inputs	2	2; 2 or 3 wire connection
Input ranges • Voltage • Current • Resistance thermometer	Yes Yes	Yes; For PT100/PT1000 sensors
Input ranges (rated values), voltages • 0 to +10 V	Yes	
Input ranges (rated values), currents • 0 to 20 mA	Yes	

Technical specifications (continued)

	6ED1 055-1MA00-0BA0	6ED1 055-1MD00-0BA1
EMC		
Emission of radio interference acc. to EN 55 011		
• Emission of radio interference acc. to EN 55 011 (limit class B)	Yes	Yes; Radio interference suppression according to EN55011, Limit Value Class B
Degree and class of protection		
IP20	Yes	Yes
Standards, approvals, certificates		
CSA approval	Yes	Yes; C22.2 Number 142
UL approval	Yes	Yes; UL 508
FM approval	Yes	Yes; FM-Standards No. 3611, 3600, 3810 Class I, Division 2, Group A, B, C, D
Marine approval	Yes	Yes; ABS, BV, DNV, GL, LRS, Class NK
Developed according to IEC 61131	Yes	Yes; EN 61131-2 (IEC 1131-2)
according to VDE 0631	Yes	
Ambient conditions		
Operating temperature		
• Min.	0 °C	0 °C
• max.	55 °C	55 °C
Dimensions		
Width	36 mm	36 mm
Height	90 mm	90 mm
Depth	55 mm	53 mm

	6ED1 055-1MM00-0BA1
Installation type/mounting	
Mounting	on 35 mm DIN rail, 2 spacing units wide
Supply voltage	
12 V DC	No
24 V DC	Yes
Analog outputs	
Number of analog outputs	2
Output ranges, voltage	
• 0 to 10 V	Yes
EMC	
Emission of radio interference acc. to EN 55 011	
• Emission of radio interference acc. to EN 55 011 (limit class B)	Yes; Radio interference suppression according to EN55011, Limit Value Class B
Degree and class of protection	
IP20	Yes

	6ED1 055-1MM00-0BA1
Standards, approvals, certificates	
CSA approval	Yes
UL approval	Yes
FM approval	Yes
Marine approval	Yes
Developed according to IEC 61131	Yes
according to VDE 0631	Yes
Ambient conditions	
Operating temperature	
• Min.	0 °C
• max.	55 °C
Dimensions	
Width	36 mm
Height	90 mm
Depth	55 mm

LOGO! modular expansion modules

Ordering data	Order No.
LOGO! DM8 24 Supply voltage 24 V DC, 4 digital inputs 24 V DC, 4 digital outputs 24 V DC, 0.3 A	**6ED1 055-1CB00-0BA0**
LOGO! DM16 24 Supply voltage 24 V DC, 8 digital inputs 24 V DC, 8 digital outputs 24 V DC, 0.3 A	**6ED1 055-1CB10-0BA0**
LOGO! DM8 12/24R Supply voltage 12/24 V DC, 4 digital inputs 12/24 V DC, 4 relay outputs 5 A	**6ED1 055-1MB00-0BA1**
LOGO! DM8 24R Supply voltage24 V AC/DC, 4 digital inputs 24 V AC/DC, 4 relay outputs 5 A	**6ED1 055-1HB00-0BA0**
LOGO! DM16 24R Supply voltage 24 V DC, 8 digital inputs 24 V DC, 8 relay outputs 5 A	**6ED1 055-1NB10-0BA0**
LOGO! DM8 230R Supply voltage 115/230 V AC/DC, 4 digital inputs 115/230 V AC/DC, 4 relay outputs 5 A	**6ED1 055-1FB00-0BA1**
LOGO! DM16 230R Supply voltage 115/230 V AC/DC, 8 digital inputs 115/230 V AC/DC, 8 relay outputs 5 A	**6ED1 055-1FB10-0BA0**
LOGO! AM2 Supply voltage 12/24 V DC, 2 analog inputs 0 ... 10 V or 0 ... 20 mA, 10-bit resolution	**6ED1 055-1MA00-0BA0**
LOGO! AM2 PT 100 Supply voltage 12/24 V DC, 2 analog inputs Pt100, temperature range -50 °C ... 200 °C	**6ED1 055-1MD00-0BA1**
LOGO! AM2 AQ Supply voltage 24 V DC, 2 analog outputs 0 to 10 V, 0/4 to 20 mA	**6ED1 055-1MM00-0BA1**

	Order No.
Accessories	
LOGO! Manual	
German	**6ED1 050-1AA00-0AE8**
English	**6ED1 050-1AA00-0BE8**
French	**6ED1 050-1AA00-0CE8**
Spanish	**6ED1 050-1AA00-0DE8**
Italian	**6ED1 050-1AA00-0EE8**
Chinese	**6ED1 050-1AA00-0KE8**
LOGO! Memory Card for copying, with know-how protection	**6ED1 056-1DA00-0BA0**
LOGO!Soft Comfort V7.0 For programming on the PC in LAD/FBD; executes on Windows 7, VISTA, XP, NT4.0, 2000, 98SE, Linux and MAC OSX; on CD-ROM	**6ED1 058-0BA02-0YA1**
LOGO!Soft Comfort V7.0 upgrade Upgrade from V1.0 to V7.0	**6ED1 058-0CA02-0YE1**
LOGO! PC cable For program transfer between LOGO! and the PC	**6ED1 057-1AA00-0BA0**

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 Siemens Industry standard products. The contents listed here were taken from the respective standard products. SIPLUS extreme-specific information was added.

Technical specifications

The technical data correspond to those of the based-on modules apart from the values listed in the table:

	6AG1 055-1CB00-2XB0	**6AG1 055-1CB00-2BY0**	**6AG1 055-1PB00-2XB0**	**6AG1 055-1PB00-2BY0**
Based on	**6ED1 055-1CB00-0BA0**	**6ED1 055-1CB00-0BA0**	**6ED1 055-1CB00-0BA0**	**6ED1 055-1CB00-0BA0**
Ambient conditions				
Operating temperature				
• Min.	-25 °C; = Tmin	-40 °C; = Tmin	-25 °C; = Tmin	-40 °C; = Tmin
• max.	70 °C; = Tmax; 55 °C @ UL/cUL use	70 °C; = Tmax; 55 °C @ UL/cUL use	70 °C; = Tmax; 55 °C @ UL/cUL use	70 °C; = Tmax; 55 °C @ UL/cUL use
Extended ambient conditions				
• Relative to ambient temperature-atmospheric pressure-installation 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)	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)	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)	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)
• Relative humidity				
- with condensation	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)	100 %; Relative humidity, incl. condensation / frost permitted (no commissioning under condensation conditions)
• Resistance				
- to biologically active substances	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!
- to chemically active substances	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!
- to mechanically active substances	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!

Technical specifications (continued)

	6AG1 055-1HB00-2XB0	**6AG1 055-1HB00-2BY0**	**6AG1 055-1MB00-2XB1**	**6AG1 055-1MB00-2BY1**
Based on	**6ED1 055-1HB00-0BA0**	**6ED1 055-1HB00-0BA0**	**6ED1 055-1MB00-0BA1**	**6ED1 055-1MB00-0BA1**
Ambient conditions				
Operating temperature				
• Min.	-25 °C; = Tmin	-40 °C; = Tmin	-25 °C; = Tmin	-40 °C; = Tmin
• max.	70 °C; = Tmax; 55 °C @ UL/cUL use	70 °C; = Tmax; 55 °C @ UL/cUL use	70 °C; = Tmax; 55 °C @ UL/cUL use	70 °C; = Tmax; 55 °C @ UL/cUL use
Extended ambient conditions				

• Relative to ambient temperature-atmospheric pressure-installation 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)
		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)
			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)
				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)

• Relative humidity				
- with condensation	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)	100 %; Relative humidity, incl. condensation / frost permitted (no commissioning under condensation conditions)
• Resistance				
- to biologically active substances	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!
- to chemically active substances	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!
- to mechanically active substances	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!

	6AG1 055-1FB00-2XB1	**6AG1 055-1FB00-2BY1**	**6AG1 055-1NB10-2BA0**
Bades on	**6ED1 055-1FB00-0BA1**	**6ED1 055-1FB00-0BA1**	**6ED1 055-1NB10-0BA0**
Ambient conditions			
Operating temperature			
• Min.	-25 °C; = Tmin	-40 °C; = Tmin	-25 °C; = Tmin
• max.	70 °C; = Tmax; 55 °C @ UL/cUL use	70 °C; = Tmax; 55 °C @ UL/cUL use	70 °C; = Tmax; 55 °C @ UL/cUL use
Extended ambient conditions			

• Relative to ambient temperature-atmospheric pressure-installation altitude	Tmin ... Tmax
	at 1080 hPa ... 795 hPa
	(-1000 m ... +2000 m)
		Tmin ... Tmax
		at 1080 hPa ... 795 hPa
		(-1000 m ... +2000 m)
			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)

• Relative humidity			
- with condensation	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	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!
- to chemically active substances	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!
- to mechanically active substances	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!

Technical specifications (continued)

Based on	6AG1 055-1MA00-2XB0 6ED1 055-1MA00-0BA0	6AG1 055-1MA00-2BY0 6ED1 055-1MA00-0BA0	6AG1 055-1MM00-2BY1 6ED1 055-1MM00-0BA1
Ambient conditions			
Operating temperature			
• Min.	-25 °C; = Tmin	-40 °C; = Tmin	-40 °C; = Tmin
• max.	70 °C; = Tmax; 55 °C @ UL/cUL use	70 °C; = Tmax; 55 °C @ UL/cUL use	70 °C; = Tmax; 55 °C @ UL/cUL use
Extended ambient conditions			
• Relative to ambient temperature-atmospheric pressure-installation 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)	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)	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)
• Relative humidity			
- with condensation	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	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!
- to chemically active substances	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3C4 incl. salt spray. The supplied connector covers must remain on the unused interfaces during operation!
- to mechanically active substances	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!

SIPLUS LOGO! modular expansion modules

Ordering data	Order No.
SIPLUS LOGO! DM8 24	
(extended temperature range and medial exposure)	
24 V DC supply voltage, 4 digital inputs 24 V DC, 4 digital outputs 24 V DC, 0.3 A	
Temperature range -25 ... +70 °C	**6AG1 055-1CB00-2XB0**
Temperature range -40 ... +70 °C	**6AG1 055-1CB00-2BY0**
SIPLUS LOGO! DM8 12/24	
(extended temperature range and medial exposure)	
12/24 V DC supply voltage, 4 digital inputs 12/24 V DC, 4 digital outputs 24 V DC, 0.3 A	
Temperature range -25 ... +70 °C	**6AG1 055-1PB00-2XB0**
Temperature range -40 ... +70 °C	**6AG1 055-1PB00-2BY0**
SIPLUS LOGO! DM8 24R	
(extended temperature range and medial exposure)	
24 V AC/DC supply voltage, 4 digital inputs 24 V AC/DC, 4 relay outputs 5 A	
Temperature range -25 ... +70 °C	**6AG1 055-1HB00-2XB0**
Temperature range -40 ... +70 °C	**6AG1 055-1HB00-2BY0**
SIPLUS LOGO! DM8 12/24R	
(extended temperature range and medial exposure)	
12/24 V DC supply voltage, 4 digital inputs 12/24 V DC, 4 relay outputs 5 A	
Temperature range -25 ... +70 °C	**6AG1 055-1MB00-2XB1**
Temperature range -40 ... +70 °C	**6AG1 055-1MB00-2BY1**
SIPLUS LOGO! DM8 230R	
(extended temperature range and medial exposure)	
115/230 V AC/DC supply voltage, 4 digital inputs 115/230 V AC/DC, 4 relay outputs 5 A	
Temperature range -25 ... +70 °C	**6AG1 055-1FB00-2XB1**
Temperature range -40 ... +70 °C	**6AG1 055-1FB00-2BY1**

	Order No.
SIPLUS LOGO! AM2	
(extended temperature range and medial exposure)	
12/24 V DC supply voltage, 2 analog inputs 0 ... 10 V or 0 ... 20 mA, 10-bit resolution	
Temperature range -25 ... +70 °C	**6AG1 055-1MA00-2XB0**
Temperature range -40 ... +70 °C	**6AG1 055-1MA00-2BY0**
SIPLUS LOGO! AM2 AQ	
(extended temperature range and medial exposure)	
24 V DC supply voltage, 2 analog inputs 0 ... 10 V, 0/4 ... 20 mA, 10-bit resolution	
Temperature range -40 ... +70 °C	**6AG1 055-1MM00-2BY1**
SIPLUS LOGO! DM16 24R	
(extended temperature range and medial exposure)	
24 V DC supply voltage, 8 digital outputs 24 V DC, 8 relay outputs 5 A	
Temperature range -25 ... +70 °C	**6AG1 055-1NB10-2BA0**
Accessories	
SIPLUS Upmiter upstream device	**6AG1 053-1AA00-2AA0**
for reliable operation at the battery of combustion engines	
Additional accessories	See LOGO! modular pure variants, page 2/18

Overview

- Expansion module for LOGO! basic versions
- For communication between the LOGO! master and external *EIB* components through *EIB*

Technical specifications

CM EIB/KNX	
Supply voltage	24 V AC/DC
Inputs, max.	16 DI/12 DO/8 AI/2 AO
Outputs, max.	16 digital
Continuous current	25 mA
Short-circuit protection	External fuse protection is required
Integrated time switches/power reserve	-
Ambient temperature	0 … +55°C
RI specification	To EN 55 011 (limit class B)
Degree of protection	IP20
Certification	to VDE 0631, IEC61131-2, cULus, FM
Mounting	On DIN rail 35 mm, 2 module widths wide
Dimensions (W x H x D) in mm	36 (2 MW) × 90 × 55

Ordering data	Order No.
LOGO! communication module CM EIB KNX for connection to *EIB*, supply voltage 24 V DC	**6BK1 700-0BA00-0AA2**
Accessories	
LOGO! Manual	
German	**6ED1 050-1AA00-0AE8**
English	**6ED1 050-1AA00-0BE8**
French	**6ED1 050-1AA00-0CE8**
Spanish	**6ED1 050-1AA00-0DE8**
Italian	**6ED1 050-1AA00-0EE8**
Chinese	**6ED1 050-1AA00-0KE8**

LOGO! CSM unmanaged

Overview

The module is used to connect a LOGO! and up to three other nodes to an Industrial Ethernet network with 10/100 Mbit/s 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

Order No.	6GK7 177-1FA10-0AA0	6GK7 177-1MA10-0AA0
Product-type designation	**LOGO! CSM 230**	**LOGO! CSM 12/24**
Transmission rate		
Transfer rate 1	10 Mbit/s	10 Mbit/s
Transfer rate 2	100 Mbit/s	100 Mbit/s
Interfaces		
Number of electrical/optical connections for network components or terminal equipment maximum	4	4
Number of electrical connections		
• for network components and terminal equipment	4	4
• for power supply	1	1
Design of electrical connection		
• for network components and terminal equipment	RJ45 port / 1 connection on front of module	RJ45 port / 1 connection on front of module
• for power supply	3-pole terminal block	3-pole terminal block
Supply voltage, current consumption, power loss		
Type of voltage of supply voltage	AC/DC 115...240 V	DC 12/24 V
Supply voltage external	230 V	24 V
• minimum	100 V	10.2 V
• maximum	240 V	30.2 V
Product component fusing at power supply input	Yes	Yes
Consumed current maximum	0.02 A	0.15 A
Active power loss at 24 V for DC	-	1.5 W
Permitted ambient conditions		
Ambient temperature		
• during operating	0 … 55 °C	0 … 55 °C
• during storage	-40 °C 70 °C	-40 °C 70 °C
• during transport	-40 °C	-40 °C

Order No.	6GK7 177-1FA10-0AA0	6GK7 177-1MA10-0AA0
Product-type designation	**LOGO! CSM 230**	**LOGO! CSM 12/24**
Relative humidity at 25 °C without condensation during operating maximum	90 %	90 %
Protection class IP	IP20	IP20
Design, dimensions and weight		
Design	LOGO! module	LOGO! module
Width	72 mm	72 mm
Height	90 mm	90 mm
Depth	55 mm	55 mm
Net weight	0.155 kg	0.14 kg
Type of mounting		
• 35 mm DIN rail mounting	Yes	Yes
• wall mounting	Yes	Yes
• S7-300 rail mounting	No	No
Product functions Management, configuration		
Product function switch-managed	No	No
Standards, specifications, approvals		
Standard		
• for EMC from FM	avail. soon	avail. soon
• for safety of CSA and UL	avail. soon	avail. soon
• CE mark	Yes	Yes
• C-Tick	Yes	Yes
• KC approval	No	No

Ordering data

	Order No.
LOGO! CSM Compact Switch Modules	
Unmanaged switch for connecting a LOGO! (...0BA7) and up to three further nodes on Industrial Ethernet with 10/100 Mbit/s; 4 x RJ45 ports; LED diagnostics, LOGO! module	
• **LOGO! CSM 12/24** external 12 V DC or 24 V DC power supply,	**6GK7 177-1MA10-0AA0**
• **LOGO! CSM 230** external 115 ... 240 V AC power supply	**6GK7 177-1FA10-0AA0**

	Order No.
Accessories	
IE TP Cord RJ45/RJ45	
TP cable 4 x 2 with 2 RJ45 connectors	
• 0.5 m	**6XV1 870-3QE50**
• 1 m	**6XV1 870-3QH10**
• 2 m	**6XV1 870-3QH20**
• 6 m	**6XV1 870-3QH60**
• 10 m	**6XV1 870-3QN10**
IE FC Outlet RJ45	**6GK1 901-1FC00-0AA0**
For connecting Industrial Ethernet FC cables and TP cords; graduated prices for 10 and 50 units or more	

AS-Interface connection for LOGO!

Overview

Each LOGO! can now be connected to the AS-Interface system

An intelligent slave can be integrated into the AS-Interface system with the AS-Interface for LOGO! The modular interface allows the different basic units to be integrated into the system depending on the required functionality. In addition, the functionality can be quickly and simply adapted to changed requirements by replacing the basic unit.

The interface provides four inputs and four outputs for the system. These I/Os, however, are not implemented in hardware, but are only virtually available via the interface.

Ordering data

Ordering data	Order No.
AS-Interface connection for LOGO!	**3RK1 400-0CE10-0AA2**

Overview

The flat power supply unit for distribution boards

The new miniature power supply units now offer even greater performance in the smallest space: The efficiency has been improved across the entire load range, and the power loss in no-load operation has been cut in half. The wide-range input now also allows operation with direct voltage, the switch-on behavior has been optimized for capacitive loads, and the operating temperature range has been extended to +70 °C. The power supplies with logic module design can be used extremely flexibly in numerous applications – thanks to their flat, stepped profile in distribution boards, for example.

Essential product features

- 2 performance classes, each with 5 V, 12 V, and 15 V
- 3 performance classes with 24 V
- Flat LOGO! design
- Wide-range input for 85 V to 264 V AC or 110 V to 300 V DC
- Constant current for connection of loads with high inrush current
- Power reserve on starting up through 1.5 times the rated current for capacitive loads
- Adjustable output voltage
- Green LED for "Output voltage OK"
- Temperature range from –20 °C to +70 °C
- Comprehensive certification, e.g. ATEX and GL

Technical specifications

Order No.	**6EP1 311-1SH03**	**6EP1 311-1SH13**
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 Vin rated	100 … 240 V	100 … 240 V
Voltage range	85 … 264 V	85 … 264 V
Input voltage at DC	110 … 300 V	110 … 300 V
Overvoltage resistance	2.3 × Vin rated, 1.3 ms	2.3 × Vin rated, 1.3 ms
Mains buffering at Iout rated, min.	0.04 s	0.04 s
Mains buffering	at Vin = 187 V	at Vin = 187 V
Rated line frequency		
• 1	50 Hz	50 Hz
• 2	60 Hz	60 Hz
Rated line range	47 … 63 Hz	47 … 63 Hz
Input current		
• at nominal level of the input voltage 120 V nominal value	0.36 A	0.71 A
• at nominal level of the input voltage 230 V nominal value	0.22 A	0.37 A
Switch-on current limiting (+25 °C), max.	26 A	50 A
I^2t, max.	0.8 $A^2 \cdot s$	3 $A^2 \cdot s$
Built-in incoming fuse	internal	internal
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 16 A, characteristic B or from 10 A, characteristic C	Recommended miniature circuit breaker: from 16 A, characteristic B or from 10 A, characteristic C

Technical specifications (continued)

Order No.	6EP1 311-1SH03	6EP1 311-1SH13
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 Vout DC	5 V	5 V
Total tolerance, static ±	3 %	3 %
Static mains compensation, approx.	0.2 %	0.1 %
Static load balancing, approx.	1.5 %	2 %
Residual ripple peak-peak, max.	100 mV	100 mV
Residual ripple peak-peak, typ.	10 mV	15 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	100 mV	100 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	20 mV	70 mV
Adjustment range	4.6 … 5.4 V	4.6 … 5.4 V
Product feature 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 Vout (soft start)	No overshoot of Vout (soft start)
Startup delay, max.	0.5 s	0.5 s
Voltage rise, typ.	20 ms	10 ms
Rated current value Iout rated	3 A	6.3 A
Current range	0 … 3 A	0 … 6.3 A
Note	3 A up to +55 °C, 2.1 A up to +70 °C	6.3 A up to +55 °C, 4.4 A up to +70 °C
delivered active power typ.	15 W	30 W
Parallel switching for enhanced performance	Yes	Yes
Numbers of parallel switchable units for enhanced performance	2	2
Efficiency		
Efficiency at Vout rated, Iout rated, approx.	77 %	83 %
Power loss at Vout rated, Iout rated, approx.	4 W	6 W
Closed-loop control		
Dynamic mains compensation (Vin rated ±15 %), max.	0.2 %	0.2 %
Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ.	3 %	3 %
Load step setting time 10 to 90%, typ.	2 ms	2 ms
Load step setting time 90 to 10%, typ.	2 ms	2 ms
Protection and monitoring		
Output overvoltage protection	Yes, according to EN 60950	Yes, according to EN 60950
Current limitation, typ.	3.8 A	8.2 A
Characteristic feature of the output short-circuit protected	Yes	Yes
Short-circuit protection	Constant current characteristic	Constant current characteristic
Enduring short circuit current Effective level maximum	5 A	10 A
Overload/short-circuit indicator	-	-

Technical specifications (continued)

Order No.	6EP1 311-1SH03	6EP1 311-1SH13
Product	**LOGO!Power**	**LOGO!Power**
Power supply, type	**5 V/3 A**	**5 V/6.3 A**
Safety		
Primary/secondary isolation	Yes	Yes
Potential separation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178	Safety extra-low output voltage Uout 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/CSA approval	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	cULus-listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-recognize d (UL 60950, CSA C22.2 No. 60950), File E151273
Explosion protection	ATEX (EX) II 3G Ex nA IIC T3; cCSAus (CSA E60079, UL 60079), Class I, Div. 2, Group ABCD, T4	ATEX (EX) II 3G Ex nA IIC T3; cCSAus (CSA E60079, UL 60079), Class I, Div. 2, Group ABCD, T4
FM approval	Yes	Yes
FM approval	Class I, Div. 2, Group ABCD, T4	Class I, Div. 2, Group ABCD, T4
CB approval	Yes	Yes
Marine approval	GL, ABS	GL, ABS
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		
• in operation	-20 … +70 °C	-20 … +70 °C
- Note	with natural convection	with natural convection
• on transport	-40 … +85 °C	-40 … +85 °C
• in 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 mm2 single-core/finely stranded	L, N: 1 screw terminal each for 0.5 ... 2.5 mm2 single-core/finely stranded
• Output	+, -: 2 screw terminals each for 0.5 ... 2.5 mm^2	+, -: 2 screw terminals each for 0.5 ... 2.5 mm^2
• Auxiliary	-	-
Width of the housing	54 mm	0.072 m
Height of the housing	90 mm	90 mm
Depth of the housing	55 mm	55 mm
Installation width	54 mm	72 mm
Installation height	130 mm	130 mm
Weight, approx.	0.17 kg	0.25 kg
Product feature of the housing housing for side-by-side mounting	Yes	Yes
Type of mounting wall mounting	No	No
Type of fixing cap rail mounting	Yes	Yes
Type of mounting S7-300 rail mounting	No	No
Installation	Snaps onto DIN rail EN 60715 35x7.5/15	Snaps onto DIN rail EN 60715 35x7.5/15

Technical specifications (continued)

Order No.	6EP1 321-1SH03	6EP1 322-1SH03
Product	**LOGO!Power**	**LOGO!Power**
Power supply, type	**12 V/1.9 A**	**12 V/4.5 A**
Input		
Input	1-phase AC or DC	1-phase AC or DC
Rated voltage value Vin rated	100 … 240 V	100 … 240 V
Voltage range	85 … 264 V	85 … 264 V
Input voltage at DC	110 … 300 V	110 … 300 V
Overvoltage resistance	2.3 × Vin rated, 1.3 ms	2.3 × Vin rated, 1.3 ms
Mains buffering at Iout rated, min.	40 ms	40 ms
Mains buffering	at Vin = 187 V	at Vin = 187 V
Rated line frequency		
• 1	50 Hz	50 Hz
• 2	60 Hz	60 Hz
Rated line range	47 … 63 Hz	47 … 63 Hz
Input current		
• at nominal level of the input voltage 120 V nominal value	0.53 A	1.13 A
• at nominal level of the input voltage 230 V nominal value	0.3 A	0.61 A
Switch-on current limiting (+25 °C), max.	25 A	55 A
I^2t, max.	0.8 $A^2 \cdot s$	3 $A^2 \cdot s$
Built-in incoming fuse	internal	internal
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 16 A, characteristic B or from 10 A, characteristic C	Recommended miniature circuit breaker: from 16 A, characteristic B or from 10 A, characteristic C
Output		
Output	Controlled, isolated DC voltage	Controlled, isolated DC voltage
Rated voltage Vout DC	12 V	12 V
Total tolerance, static ±	3 %	3 %
Static mains compensation, approx.	0.1 %	0.1 %
Static load balancing, approx.	1.5 %	1.5 %
Residual ripple peak-peak, max.	200 mV	200 mV
Residual ripple peak-peak, typ.	10 mV	10 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	300 mV	300 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	20 mV	70 mV
Adjustment range	10.5 … 16.1 V	10.5 … 16.1 V
Product feature 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 Vout (soft start)	No overshoot of Vout (soft start)
Startup delay, max.	0.5 s	0.5 s
Voltage rise, typ.	10 ms	10 ms
Rated current value Iout rated	1.9 A	4.5 A
Current range	0 … 1.9 A	0 … 4.5 A
Note	1.9 A up to +55 °C, 1.3 A up to +70 °C	4.5 A up to +55 °C, 3.1 A up to +70 °C
delivered active power typ.	23 W	50 W
Parallel switching for enhanced performance	Yes	Yes
Numbers of parallel switchable units for enhanced performance	2	2
Efficiency		
Efficiency at Vout rated, Iout rated, approx.	80 %	85 %
Power loss at Vout rated, Iout rated, approx.	5 W	10 W

Technical specifications (continued)

Order No.	6EP1 321-1SH03	6EP1 322-1SH03
Product	**LOGO!Power**	**LOGO!Power**
Power supply, type	**12 V/1.9 A**	**12 V/4.5 A**
Closed-loop control		
Dynamic mains compensation (Vin rated ±15 %), max.	0.2 %	0.2 %
Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ.	3 %	4 %
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	Yes, according to EN 60950
Current limitation, typ.	2.8 A	5.8 A
Characteristic feature of the output short-circuit protected	Yes	Yes
Short-circuit protection	Constant current characteristic	Constant current characteristic
Enduring short circuit current Effective level maximum	3.6 A	7 A
Overload/short-circuit indicator	-	-
Safety		
Primary/secondary isolation	Yes	Yes
Potential separation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178	Safety extra-low output voltage Uout 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/CSA approval	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	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; cCSAus (CSA E60079, UL 60079), Class I, Div. 2, Group ABCD, T4	ATEX (EX) II 3G Ex nA IIC T3; cCSAus (CSA E60079, UL 60079), Class I, Div. 2, Group ABCD, T4
FM approval	Yes	Yes
FM approval	Class I, Div. 2, Group ABCD, T4	Class I, Div. 2, Group ABCD, T4
CB approval	Yes	Yes
Marine approval	GL, ABS	GL, ABS
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		
• in operation	-20 … +70 °C	-20 … +70 °C
- Note	with natural convection	with natural convection
• on transport	-40 … +85 °C	-40 … +85 °C
• in storage	-40 … +85 °C	-40 … +85 °C
Humidity class according to EN 60721	Climate class 3K3, no condensation	Climate class 3K3, no condensation

Technical specifications (continued)

Order No.	6EP1 321-1SH03	6EP1 322-1SH03
Product	**LOGO!Power**	**LOGO!Power**
Power supply, type	**12 V/1.9 A**	**12 V/4.5 A**
Mechanics		
Connection technology	screw-type terminals	screw-type terminals
Connections		
• Supply input	L, N: 1 screw terminal each for 0.5 ... 2.5 mm2 single-core/finely stranded	L, N: 1 screw terminal each for 0.5 ... 2.5 mm2 single-core/finely stranded
• Output	+, -: 2 screw terminals each for 0.5 ... 2.5 mm^2	+, -: 2 screw terminals each for 0.5 ... 2.5 mm^2
• Auxiliary	-	-
Width of the housing	54 mm	72 mm
Height of the housing	90 mm	90 mm
Depth of the housing	55 mm	55 mm
Installation width	54 mm	72 mm
Installation height	130 mm	130 mm
Weight, approx.	0.17 kg	0.25 kg
Product feature of the housing housing for side-by-side mounting	Yes	Yes
Type of mounting wall mounting	No	No
Type of fixing cap rail mounting	Yes	Yes
Type of mounting S7-300 rail mounting	No	No
Installation	Snaps onto DIN rail EN 60715 35x7.5/15	Snaps onto DIN rail EN 60715 35x7.5/15

Order No.	6EP1 351-1SH03	6EP1 352-1SH03
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 Vin rated	100 … 240 V	100 … 240 V
Voltage range	85 … 264 V	85 … 264 V
Input voltage at DC	110 … 300 V	110 … 300 V
Overvoltage resistance	2.3 × Vin rated, 1.3 ms	2.3 × Vin rated, 1.3 ms
Mains buffering at Iout rated, min.	40 ms	40 ms
Mains buffering	at Vin = 187 V	at Vin = 187 V
Rated line frequency		
• 1	50 Hz	50 Hz
• 2	60 Hz	60 Hz
Rated line range	47 … 63 Hz	47 … 63 Hz
Input current		
• at nominal level of the input voltage 120 V nominal value	0.63 A	1.24 A
• at nominal level of the input voltage 230 V nominal value	0.33 A	0.68 A
Switch-on current limiting (+25 °C), max.	25 A	55 A
I^2t, max.	0.8 $A^2 \cdot s$	3 $A^2 \cdot s$
Built-in incoming fuse	internal	internal
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 16 A, characteristic B or from 10 A, characteristic C	Recommended miniature circuit breaker: from 16 A, characteristic B or from 10 A, characteristic C

Technical specifications (continued)

Order No.	6EP1 351-1SH03	6EP1 352-1SH03
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 Vout DC	15 V	15 V
Total tolerance, static ±	3 %	3 %
Static mains compensation, approx.	0.1 %	0.1 %
Static load balancing, approx.	1.5 %	1.5 %
Residual ripple peak-peak, max.	200 mV	200 mV
Residual ripple peak-peak, typ.	10 mV	10 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	300 mV	300 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	30 mV	70 mV
Adjustment range	10.5 … 16.1 V	10.5 … 16.1 V
Product feature 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 Vout (soft start)	No overshoot of Vout (soft start)
Startup delay, max.	0.5 s	0.5 s
Voltage rise, typ.	15 ms	15 ms
Rated current value Iout rated	1.9 A	4 A
Current range	0 … 1.9 A	0 … 4 A
Note	1.9 A up to +55 °C, 1.3 A up to +70 °C	4 A up to +55 °C, 2.8 A up to +70 °C
delivered active power typ.	23 W	50 W
Parallel switching for enhanced performance	Yes	Yes
Numbers of parallel switchable units for enhanced performance	2	2
Efficiency		
Efficiency at Vout rated, Iout rated, approx.	81 %	85 %
Power loss at Vout rated, Iout rated, approx.	7 W	11 W
Closed-loop control		
Dynamic mains compensation (Vin rated ±15 %), max.	0.2 %	0.2 %
Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ.	2.8 %	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	Yes, according to EN 60950
Current limitation, typ.	2.7 A	5.7 A
Characteristic feature of the output short-circuit protected	Yes	Yes
Short-circuit protection	Constant current characteristic	Constant current characteristic
Enduring short circuit current Effective level maximum	3.6 A	7 A
Overload/short-circuit indicator	-	-

Technical specifications (continued)

Order No.	6EP1 351-1SH03	6EP1 352-1SH03
Product	**LOGO!Power**	**LOGO!Power**
Power supply, type	**15 V/1.9 A**	**15 V/4 A**
Safety		
Primary/secondary isolation	Yes	Yes
Potential separation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178	Safety extra-low output voltage Uout 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/CSA approval	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	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; cCSAus (CSA E60079, UL 60079), Class I, Div. 2, Group ABCD, T4	ATEX (EX) II 3G Ex nA IIC T3; cCSAus (CSA E60079, UL 60079), Class I, Div. 2, Group ABCD, T4
FM approval	Yes	Yes
FM approval	Class I, Div. 2, Group ABCD, T4	Class I, Div. 2, Group ABCD, T4
CB approval	Yes	Yes
Marine approval	GL, ABS	GL, ABS
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		
• in operation	-20 … +70 °C	-20 … +70 °C
- Note	with natural convection	with natural convection
• on transport	-40 … +85 °C	-40 … +85 °C
• in 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 mm2 single-core/finely stranded	L, N: 1 screw terminal each for 0.5 ... 2.5 mm2 single-core/finely stranded
• Output	+, -: 2 screw terminals each for 0.5 ... 2.5 mm^2	+, -: 2 screw terminals each for 0.5 ... 2.5 mm^2
• Auxiliary	-	-
Width of the housing	54 mm	72 mm
Height of the housing	90 mm	90 mm
Depth of the housing	55 mm	55 mm
Installation width	54 mm	72 mm
Installation height	130 mm	130 mm
Weight, approx.	0.17 kg	0.25 kg
Product feature of the housing housing for side-by-side mounting	Yes	Yes
Type of mounting wall mounting	No	No
Type of fixing cap rail mounting	Yes	Yes
Type of mounting S7-300 rail mounting	No	No
Installation	Snaps onto DIN rail EN 60715 35x7.5/15	Snaps onto DIN rail EN 60715 35x7.5/15

Technical specifications (continued)

Order No.	6EP1 331-1SH03	6EP1 332-1SH43	6EP1 332-1SH52
Product	**LOGO!Power**	**LOGO!Power**	**LOGO!Power**
Power supply, type	**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
Rated voltage value Vin rated	100 … 240 V	100 … 240 V	100 … 240 V
Voltage range	85 … 264 V	85 … 264 V	85 … 264 V
Input voltage at DC	110 … 300 V	110 … 300 V	110 … 300 V
Overvoltage resistance	2.3 × Vin rated, 1.3 ms	2.3 × Vin rated, 1.3 ms	2.3 × Vin rated, 1.3 ms
Mains buffering at Iout rated, min.	0.04 s	40 ms	40 ms
Mains buffering	at Vin = 187 V	at Vin = 187 V	at Vin = 187 V
Rated line frequency • 1 • 2	 50 Hz 60 Hz	 50 Hz 60 Hz	 50 Hz 60 Hz
Rated line range	47 … 63 Hz	47 … 63 Hz	47 … 63 Hz
Input current • at nominal level of the input voltage 120 V nominal value • at nominal level of the input voltage 230 V nominal value	 0.7 A 0.35 A	 1.22 A 0.66 A	 1.95 A 0.97 A
Switch-on current limiting (+25 °C), max.	25 A	46 A	30 A
I^2t, max.	0.8 $A^2 \cdot s$	3 $A^2 \cdot s$	2.5 $A^2 \cdot s$
Built-in incoming fuse	internal	internal	internal
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 16 A, characteristic B or from 10 A, characteristic C	Recommended miniature circuit breaker: from 16 A, characteristic B or from 10 A, characteristic C	Recommended miniature circuit breaker: from 16 A, characteristic B or from 10 A, characteristic C
Output			
Output	Controlled, isolated DC voltage	Controlled, isolated DC voltage	Controlled, isolated DC voltage
Rated voltage Vout DC	24 V	24 V	24 V
Total tolerance, static ±	3 %	3 %	3 %
Static mains compensation, approx.	0.1 %	0.1 %	0.1 %
Static load balancing, approx.	1.5 %	1.5 %	1.5 %
Residual ripple peak-peak, max.	0.2 V	200 mV	200 mV
Residual ripple peak-peak, typ.	0.01 V	10 mV	30 mV
Spikes peak-peak, max. (bandwidth: 20 MHz)	0.3 V	300 mV	300 mV
Spikes peak-peak, typ. (bandwidth: 20 MHz)	0.02 V	50 mV	60 mV
Adjustment range	22.2 … 26.4 V	22.2 … 26.4 V	22.2 … 26.4 V
Product feature output voltage adjustable	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
On/off behavior	No overshoot of Vout (soft start)	No overshoot of Vout (soft start)	No overshoot of Vout (soft start)
Startup delay, max.	0.5 s	500 ms	0.5 s
Voltage rise, typ.	0.015 s	10 ms	15 ms
Rated current value Iout rated	1.3 A	2.5 A	4 A
Current range	0 … 1.3 A	0 … 2.5 A	0 … 4 A
Note	1.3 A up to +55 °C, 0.9 A up to +70 °C	2.5 A up to +55 °C, 1.7 A up to +70 °C	4 A up to +55 °C, 2.8 A up to +70 °C
delivered active power typ.	30 W	60 W	96 W
Parallel switching for enhanced performance	Yes	Yes	Yes
Numbers of parallel switchable units for enhanced performance	2	2	2

Technical specifications (continued)

Order No.	6EP1 331-1SH03	6EP1 332-1SH43	6EP1 332-1SH52
Product	**LOGO!Power**	**LOGO!Power**	**LOGO!Power**
Power supply, type	**24 V/1.3 A**	**24 V/2.5 A**	**24 V/4 A**
Efficiency			
Efficiency at Vout rated, Iout rated, approx.	85 %	88 %	89 %
Power loss at Vout rated, Iout rated, approx.	6 W	8 W	12 W
Closed-loop control			
Dynamic mains compensation (Vin rated ±15 %), max.	0.2 %	0.2 %	0.2 %
Dynamic load smoothing (Iout: 10/90/10 %), Uout ± typ.	1 %	2 %	1.5 %
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	Yes, according to EN 60950	Yes, according to EN 60950
Current limitation, typ.	1.7 A	3.3 A	5.2 A
Characteristic feature of the output short-circuit protected	Yes	Yes	Yes
Short-circuit protection	Constant current characteristic	Constant current characteristic	Constant current characteristic
Enduring short circuit current Effective level maximum	2.4 A	4.8 A	7.9 A
Overload/short-circuit indicator	-	-	-
Safety			
Primary/secondary isolation	Yes	Yes	Yes
Potential separation	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178	Safety extra-low output voltage Uout acc. to EN 60950-1 and EN 50178	Safety extra-low output voltage Uout 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/CSA approval	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	cULus-listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-recognized (UL 60950, CSA C22.2 No. 60950), File E151273	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; cCSAus (CSA E60079, UL 60079), Class I, Div. 2, Group ABCD, T4	ATEX (EX) II 3G Ex nA IIC T3; cCSAus (CSA E60079, UL 60079), Class I, Div. 2, Group ABCD, T4	ATEX (EX) II 3G Ex nA IIC T3; cCSAus (CSA E60079, UL 60079), Class I, Div. 2, Group ABCD, T4
FM approval	Yes	Yes	Yes
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	GL, ABS, DNV, LRS (BV in process)	GL, ABS, DNV, LRS (BV in process)	GL, ABS, DNV, LRS (BV in process)
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	EN 61000-3-2
Noise immunity	EN 61000-6-2	EN 61000-6-2	EN 61000-6-2
Operating data			
Ambient temparature			
• in operation	-20 … +70 °C	-20 … +70 °C	-20 … +70 °C
- Note	with natural convection	with natural convection	with natural convection
• on transport	-40 … +85 °C	-40 … +85 °C	-40 … +85 °C
• in 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

Technical specifications (continued)

Order No.	6EP1 331-1SH03	6EP1 332-1SH43	6EP1 332-1SH52
Product	**LOGO!Power**	**LOGO!Power**	**LOGO!Power**
Power supply, type	**24 V/1.3 A**	**24 V/2.5 A**	**24 V/4 A**
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 mm2 single-core/finely stranded	L, N: 1 screw terminal each for 0.5 ... 2.5 mm2 single-core/finely stranded	L, N: 1 screw terminal each for 0.5 ... 2.5 mm2 single-core/finely stranded
• Output	+, -: 2 screw terminals each for 0.5 ... 2.5 mm^2	+, -: 2 screw terminals each for 0.5 ... 2.5 mm^2	+, -: 2 screw terminals each for 0.5 ... 2.5 mm^2
• Auxiliary	-	-	-
Width of the housing	54 mm	72 mm	90 mm
Height of the housing	90 mm	90 mm	90 mm
Depth of the housing	55 mm	55 mm	55 mm
Installation width	54 mm	72 mm	90 mm
Installation height	130 mm	130 mm	130 mm
Weight, approx.	0.17 kg	0.25 kg	0.34 kg
Product feature of the housing housing for side-by-side mounting	Yes	Yes	Yes
Type of mounting wall mounting	No	No	No
Type of fixing cap rail mounting	Yes	Yes	Yes
Type of mounting S7-300 rail mounting	No	No	No
Installation	Snaps onto DIN rail EN 60715 35x7.5/15	Snaps onto DIN rail EN 60715 35x7.5/15	Snaps onto DIN rail EN 60715 35x7.5/15

Ordering data

	Order No.		Order No.
LOGO!Power 5 V		**LOGO!Power 15 V**	
Stabilized power supply; output: 5 V DC/3 A • Input rated value: 100 … 240 V AC; extended operating temperature range: up to +70 °C	**6EP1 311-1SH03**	Stabilized power supply; output: 15 V DC/1.9 A • Input rated value: 100 … 240 V AC; extended operating temperature range: up to +70 °C	**6EP1 351-1SH03**
Stabilized power supply; output: 5 V DC/6.3 A • Input rated value: 100 … 240 V AC; extended operating temperature range: up to +70 °C	**6EP1 311-1SH13**	Stabilized power supply; output: 15 V DC/4 A • Input rated value: 100 … 240 V AC; extended operating temperature range: up to +70 °C	**6EP1 352-1SH03**
LOGO!Power 12 V		**LOGO!Power 24 V**	
Stabilized power supply; output: 12 V DC/1.9 A • Input rated value: 100 … 240 V AC; extended operating temperature range: up to +70 °C	**6EP1 321-1SH03**	Stabilized power supply; output: 24 V DC/1.3 A • Input rated value: 100 … 240 V AC; extended operating temperature range: up to +70 °C	**6EP1 331-1SH03**
Stabilized power supply; output: 12 V DC/4.5 A • Input rated value: 100 … 240 V AC; extended operating temperature range: up to +70 °C	**6EP1 322-1SH03**	Stabilized power supply; output: 24 V DC/2.5 A • Input rated value: 100 … 240 V AC; extended operating temperature range: up to +70 °C	**6EP1 332-1SH43**
		Stabilized power supply; output: 24 V DC/4 A • Input rated value: 100 … 240 V AC; extended operating temperature range: up to +70 °C	**6EP1 332-1SH52**

More information

In addition to various power supply product lines, the perfectly coordinated complete SITOP range offers a unique range of add-on modules with which the 24 V power supply can be additionally protected against interference on the primary and secondary side – right up to all-round protection:

- Redundancy module for setting up a redundant power supply
- Uninterruptible 24 V power supplies with batteries or maintenace-free capacitors for continued operation in the event of power failure
- Selectivity modules for electronic protection of 24 V branches from overload and short-circuit

You can find more information in Catalog KT 10.1 and in the Internet at
www.siemens.com/sitop

Select the appropriate power supply quickly and easily with the SITOP Selection Tool:
www.siemens.com/sitop-selection-tool

Overview

Note:

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

SIPLUS LOGO!Power 1.3 A	
Order number	**6AG1 331-1SH03-7AA0**
Order number based on	**6EP1 331-1SH03**
Ambient temperature range	-25 °C to +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	
Relative humidity	100%, condensation/frost permissible. No commissioning if condensation present.
Biologically active substances, compliance with EN 60721-3-3	Class 3B2 mold spores, 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. 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 technical documentation on SIPLUS, see:

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

Ordering data

	Order No.
SIPLUS LOGO!Power 24 V 1.3 A (extended temperature range and medial exposure) Input 100 ... 240 V AC Output 24 V DC, 1.3 A	**6AG1 331-1SH03-7AA0**

LOGO!Contact

Overview

- Switching module for the direct switching of resistive loads and motors

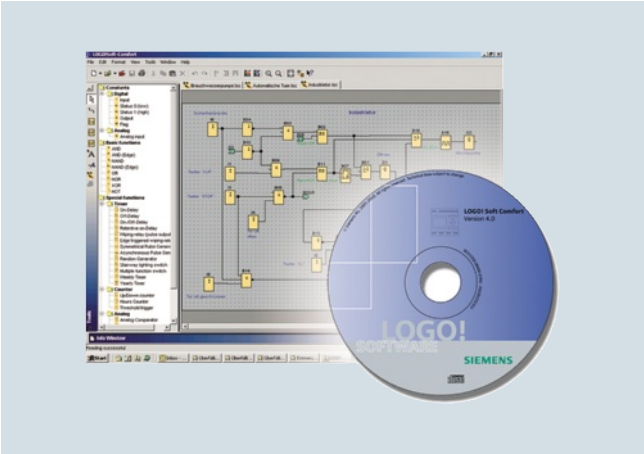
Technical specifications

	6ED1 057-4CA00-0AA0	6ED1 057-4EA00-0AA0
Weight		
Weight, approx.	160 g	160 g

Ordering data

	Order No.
LOGO!Contact	
Switching module for direct switching of resistive loads up to 20 A and motors up to 4 kW	
Switching voltage 24 V	**6ED1 057-4CA00-0AA0**
Switching voltage 230 V	**6ED1 057-4EA00-0AA0**

Overview



- The user-friendly software for creating control programs on a PC
- Creation of control programs in Function Block Diagram (FBD) or Ladder Diagram (LAD)
- Plus testing, simulation, online testing and archiving of control programs
- Professional documentation via numerous comment and print functions

Minimum system requirements

Windows 98 SE, NT 4.0, ME, 2000, XP (32 bit), Vista or 7 (32/64 bit)

- PC Pentium.
- 90 MB free disk capacity.
- 64 MB RAM.
- SVGA graphics card with minimum resolution 800x600 (256 colors).

Mac OS X

- Mac OS X 10.4 with J2SE 1.5.0
- Mac OS X 10.5 with J2SE 1.6.0
- PowerMac G3, G4, G4 Cube, IMac, PowerBook G3, G4 or iBook.

Linux

- Tested with SUSE Linux 10 SP2, kernel 2.6.16
- Runs on all Linux distributions on which the Java 2 SDK Version 1.3.1 runs.
- Please refer to your relevant Linux distribution for the necessary hardware requirements.

Ordering data

	Order No.
LOGO!Soft Comfort V7.0 For programming on the PC in LAD/FBD; executes on Windows 7 (32/64 bit), VISTA, XP, NT4.0, 2000, 98SE, Linux and MAC OSX; on CD-ROM	**6ED1 058-0BA02-0YA1**
LOGO!Soft Comfort V7.0 upgrade Upgrade from V1.0 to V7.0	**6ED1 058-0CA02-0YE1**

Notes