Overview

LOGO! logic modules

- 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
- 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 media (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

General 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	
• 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)
• At cold restart, min.	0° C
Relative humidity	
• with condensation, max.	100 %; RH incl. bedewing/frost (no commissioning in bedewed state)
Resistance	
• 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.
• 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.
• 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 MW)
- 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

Ordering data

	Article No.
LOGO! 8 logic module	
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	**6ED1052-1CC08-0BA1**
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	**6ED1052-1MD08-0BA1**
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	**6ED1052-1HB08-0BA1**
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	**6ED1052-1FB08-0BA1**

	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	**6ED1055-4MH08-0BA1**
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 130 RCE With LOGO! 230 RCE, power supply, screwdriver, in Systainer	**6ED1057-3BA03-0AA8**
LOGO! Starter Kit 12/24 V With LOGO! 12/24 RCEO, LOGO! TD, power supply, screwdriver, in Systainer	**6ED1057-3BA11-0AA8**
LOGO! 8 KP300 Basic Starter Kit With LOGO! 12/24RCE, LOGO! Power 24 V 1.3 A, KP300 Basic mono PN	**6AV2132-0HA00-0AA1**
LOGO! 8 KTP400 Basic Starter Kit With LOGO! 12/24RCE, LOGO! Power 24 V 1.3 A, KTP400 Basic	**6AV2132-0KA00-0AA1**
LOGO! 8 KTP700 Basic Starter Kit With LOGO! 12/24RCE, LOGO! Power 24 V 1.3 A, KTP700 Basic	**6AV2132-3GB00-0AA1**
Front panel mounting set	
Width 4 MW, with keys	**6AG1057-1AA00-0AA3**
Width 8 MW, with keys	**6AG1057-1AA00-0AA2**

Technical specifications

Article number	**6ED1052-1CC08-0BA1** LOGO! 24CE, 8DI(4AI)/4DO, 400 Blocks	**6ED1052-1MD08-0BA1** LOGO!12/24RCE, 8DI(4AI)/4DO, 400 Blocks	**6ED1052-1HB08-0BA1** LOGO! 24RCE, 8DI/4DO, 400 Blocks	**6ED1052-1FB08-0BA1** LOGO!230RCE, 8DI/4DO, 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; 240 V DC
Rated value (AC)				
• 24 V AC			Yes	
• 115 V AC				Yes
• 230 V AC				Yes; 240 V AC
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
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; Radio interference suppression according to EN55011, Limit Value Class B	Yes; Radio interference suppression according to EN55011, Limit Value Class B	Yes; Radio interference suppression according to EN55011, Limit Value Class B
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 acc. 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
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)	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

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 MW)
- 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

Ordering data

	Article No.
LOGO! 8 logic module	
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, integral time switch Ethernet interface; without display and keyboard; 400 function blocks can be interlinked, modular expansion capability	**6ED1052-2CC08-0BA1**
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 and keyboard; 400 function blocks can be interlinked, modular expansion capability	**6ED1052-2MD08-0BA1**
LOGO! 24RCEo logic module 24 V AC/DC supply voltage, 8 digital inputs 24 V AC/DC, 4 relay outputs 10 A, integral time switch; Ethernet interface; without display or keyboard; 400 function blocks can be interlinked, modular expansion capability	**6ED1052-2HB08-0BA1**
LOGO! 230RCEo logic module 115...230 V AC/DC supply voltage, 8 digital inputs 115...230 V AC/DC, 4 relay outputs 10 A, integral time switch; Ethernet interface; without display or keyboard; 400 function blocks can be interlinked, modular expansion capability	**6ED1052-2FB08-0BA1**

	Article No.
Accessories	
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	**6ED1055-4MH08-0BA1**
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 130 RCE With LOGO! 230 RCE, power supply, screwdriver, in Systainer	**6ED1057-3BA03-0AA8**
LOGO! Starter Kit 12/24 V With LOGO! 12/24 RCEO, LOGO! TD, power supply, screwdriver, in Systainer	**6ED1057-3BA11-0AA8**
LOGO! 8 KP300 Basic Starter Kit With LOGO! 12/24RCE, LOGO! Power 24 V 1.3 A, KP300 Basic mono PN	**6AV2132-0HA00-0AA1**
LOGO! 8 KTP400 Basic Starter Kit With LOGO! 12/24RCE, LOGO! Power 24 V 1.3 A, KTP400 Basic	**6AV2132-0KA00-0AA1**
LOGO! 8 KTP700 Basic Starter Kit With LOGO! 12/24RCE, LOGO! Power 24 V 1.3 A, KTP700 Basic	**6AV2132-3GB00-0AA1**

Technical specifications

Article number	**6ED1052-2CC08-0BA1** LOGO! 24CEo, 8DI(4AI)/4DO, 400 Blocks	**6ED1052-2MD08-0BA1** LOGO!12/24RCEO, 8DI(4AI)/4DO, 400 Blocks	**6ED1052-2HB08-0BA1** LOGO! 24RCEO, 8DI/4DO, 400 Blocks	**6ED1052-2FB08-0BA1** LOGO!230RCEo, 8DI/4DO, 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	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; 240 V DC
Rated value (AC)			Yes	
• 115 V AC				Yes
• 230 V AC				Yes; 240 V AC
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
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
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; Radio interference suppression according to EN55011, Limit Value Class B	Yes; Radio interference suppression according to EN55011, Limit Value Class B	Yes; Radio interference suppression according to EN55011, Limit Value Class B
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
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)	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

Overview

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

Ordering data

	Article No.
LOGO! 8 expansion modules	
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! 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**

	Article No.
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**
Accessories for LOGO! 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**

Technical specifications

Article number	6ED1055-1CB00-0BA2 LOGO! DM8 24 Exp. mod., 4DI/4DO	6ED1055-1HB00-0BA2 LOGO! DM8 24R Exp. mod. 2 MW, 4DI/4DO	6ED1055-1MB00-0BA2 LOGO! DM8 12/24R Exp. mod. 2 MW, 4DI/DO	6ED1055-1FB00-0BA2 LOGO! DM8 230R Exp. mod. 2 MW, 4DI/4DO
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
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
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

Technical specifications

Article number	**6ED1055-1CB00-0BA2**	**6ED1055-1HB00-0BA2**	**6ED1055-1MB00-0BA2**	**6ED1055-1FB00-0BA2**
	LOGO! DM8 24 Exp. mod., 4DI/4DO	LOGO! DM8 24R Exp. mod. 2 MW, 4DI/4DO	LOGO! DM8 12/24R Exp. mod. 2 MW, 4DI/DO	LOGO! DM8 230R Exp. mod. 2 MW, 4DI/4DO
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

Article number	**6ED1055-1CB10-0BA2**	**6ED1055-1NB10-0BA2**	**6ED1055-1FB10-0BA2**
	LOGO! DM16 24 Exp. mod., 4 MW, 8DI/8DO	LOGO! DM16 24R Exp. mod. 4 MW, 8DI/8DO	LOGO! DM16 230R Exp. mod. 4 MW, 8DI/8DO
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
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

Technical specifications

Article number	**6ED1055-1CB10-0BA2** LOGO! DM16 24 Exp. mod., 4 MW, 8DI/8DO	**6ED1055-1NB10-0BA2** LOGO! DM16 24R Exp. mod. 4 MW, 8DI/8DO	**6ED1055-1FB10-0BA2** LOGO! DM16 230R Exp. mod. 4 MW, 8DI/8DO
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
EMC			
Emission of radio interference acc. to EN 55 011			
• Limit class B, for use in residential areas	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

Technical specifications

Article number	**6ED1055-1MA00-0BA2** LOGO! AM2 Exp. mod., 12/24V, 2AI,	**6ED1055-1MD00-0BA2** LOGO! AM2 RTD, 2AI, -50..+200DECR/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
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

2

Technical specifications

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)	24 V
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

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

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! TD text display (can be connected to all LOGO! 0BA6 and 0BA7 basic variants); LOGO! TDE can be connected to LOGO! 8 or higher

New for LOGO! 8

- All basic units with integrated web server
- Same enclosure width as LOGO! 0BA6 (4 MW)
- All basic units with Ethernet interface for communication with LOGO!, SIMATIC Controllers, SIMATIC Panel and PC
- Use of standard micro CF cards

LOGO! 0BA7 versions:

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

Note:

SIPLUS LOGO! 6/7 versions are not compatible with SIPLUS LOGO! 8.

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

Ordering data

	Article No.
SIPLUS LOGO! 8 logic module	
SIPLUS LOGO! 24CE 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; 400 function blocks can be interlinked, modular expansion capability	
Extended temperature range and exposure to media	**6AG1052-1CC08-7BA1**
SIPLUS LOGO! 12/24RCE 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; 400 function blocks can be interlinked, modular expansion capability	
Extended temperature range and exposure to media	**6AG1052-1MD08-7BA1**
SIPLUS LOGO! 24RCE 24 V AC/DC supply voltage, 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 media	**6AG1052-1HB08-7BA1**
SIPLUS LOGO! 230RCE 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; 400 function blocks can be interlinked, modular expansion capability	
Extended temperature range and exposure to media	**6AG1052-1FB08-7BA1**
Accessories	
SIPLUS LOGO! TDE (Extended temperature range -25 ... +60 °C (start-up -20 °C) and exposure to media) 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	**6AG1055-4MH08-2BA1**
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 MW, with keys	**6AG1057-1AA00-0AA2**

Technical specifications

Article number	6AG1052-1CC08-7BA1	6AG1052-1MD08-7BA1	6AG1052-1FB08-7BA1	6AG1052-1HB08-7BA1
Based on	6ED1052-1CC08-0BA1	6ED1052-1MD08-70BA1	6ED1052-1HB08-0BA1	6ED1052-1FB08-0BA1
	SIPLUS LOGO! 24CE	SIPLUS LOGO! 12/24RCE	SIPLUS LOGO! 230RCE	SIPLUS LOGO! 24RCE
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.	60 °C; = Tmax	60 °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)	60 °C; Tmax; Tmax > +55 °C max. load 1 A per relay	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)
• 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)
Altitude during operation relating to sea level				
• Installation altitude above sea level, max.	5 000 m	5 000 m	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 - 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 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	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	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; *

Technical specifications

Article number	**6AG1052-1CC08-7BA1**	**6AG1052-1MD08-7BA1**	**6AG1052-1FB08-7BA1**	**6AG1052-1HB08-7BA1**
Based on	**6ED1052-1CC08-0BA1**	**6ED1052-1MD08-70BA1**	**6ED1052-1HB08-0BA1**	**6ED1052-1FB08-0BA1**
	SIPLUS LOGO! 24CE	SIPLUS LOGO! 12/24RCE	SIPLUS LOGO! 230RCE	SIPLUS LOGO! 24RCE
Usage in industrial process technology				
- Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)
- Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark				
- Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* 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 reliability	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability
• 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

SIPLUS LOGO! basic modules without display

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! TD text display (can be connected to all LOGO! 0BA6 basic variants)

New for SIPLUS LOGO! 8

- All basic units with integrated web server
- Same enclosure width as LOGO! 0BA6 (4 MW)
- All basic units with Ethernet interface for communication with LOGO!, SIMATIC Controllers, SIMATIC Panel and PC
- Use of standard micro CF cards

Note:

SIPLUS LOGO! 6 versions are not compatible with SIPLUS LOGO! 8.

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.

Ordering data

	Article No.
SIPLUS LOGO! 8 logic module	
SIPLUS LOGO! 24CEo 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	
Extended temperature range and exposure to media	**6AG1052-2CC08-7BA1**
SIPLUS LOGO! 230RCEo 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	
Extended temperature range and exposure to media	**6AG1052-2FB08-7BA1**
SIPLUS LOGO! 24RCEo 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	
Extended temperature range and exposure to media	**6AG1052-2HB08-7BA1**
SIPLUS LOGO! 12/24RCEo 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	
Extended temperature range and exposure to media	**6AG1052-2MD08-7BA1**
Accessories	
SIPLUS LOGO! TDE (Extended temperature range -25 ... +60 °C (start-up -20 °C) and exposure to media) 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	**6AG1055-4MH08-2BA1**
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 MW, with keys	**6AG1057-1AA00-0AA2**

Technical specifications

Article number	**6AG1052-1CC08-7BA1**	**6AG1052-1MD08-7BA1**	**6AG1052-1HB08-7BA1**	**6AG1052-1FB08-7BA1**
Based on	**6ED1052-2CC08-0BA1**	**6ED1052-2MD08-0BA1**	**6ED1052-2HB08-0BA1**	**6ED1052-2FB08-0BA1**
	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.	60 °C; = Tmax	60 °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)	60 °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)
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
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; *

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Technical specifications

Article number	6AG1052-1CC08-7BA1	6AG1052-1MD08-7BA1	6AG1052-1HB08-7BA1	6AG1052-1FB08-7BA1
Based on	6ED1052-2CC08-0BA1	6ED1052-2MD08-0BA1	6ED1052-2HB08-0BA1	6ED1052-2FB08-0BA1
	SIPLUS LOGO! 24CE	SIPLUS LOGO! 12/24RCE	SIPLUS LOGO! 24RCE	SIPLUS LOGO! 230RCE
Usage in industrial process technology				
- Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)
- Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark				
- Note regarding classificatio n of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* 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 reliability	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability
• 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

Overview

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

Note:

SIPLUS LOGO! 6 versions are not compatible with SIPLUS LOGO! 8.

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.

Ordering data

	Article No.
SIPLUS LOGO! 8 expansion modules	
SIPLUS LOGO! DM8 24	
24 V DC supply voltage, 4 digital inputs 24 V DC, 4 digital outputs 24 V DC, 0.3 A	
Extended temperature range and exposure to media	**6AG1055-1CB00-7BA2**
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 media	**6AG1055-1FB00-7BA2**
SIPLUS LOGO! DM8 24R	
24 V AC/DC supply voltage, 4 digital inputs 24 V AC/DC, 4 relay outputs 5 A	
Extended temperature range and exposure to media	**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 media	**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 media	**6AG1055-1MB00-7BA2**
LOGO! AM2 RTD	
12...24 V DC supply voltage, 2 analog inputs Pt100, temperature range -50 °C to 200 °C	
Extended temperature range and exposure to media	**6AG1055-1MD00-7BA2**
SIPLUS LOGO! AM2 AQ	
24 V DC supply voltage, 2 analog outputs 0 to 10 V, 0/4 to 20 mA	
Extended temperature range and exposure to media	**6AG1055-1MM00-7BA2**
SIPLUS LOGO! DM16 24R	
24 V DC supply voltage, 8 digital inputs 24 V DC, 8 relay outputs 5 A	
Extended temperature range and exposure to media	**6AG1055-1NB10-7BA2**
Accessories	
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	
Front panel mounting set	
Width 8 MW, with keys	**6AG1057-1AA00-0AA2**

Technical specifications

Article number	6AG1055-1CB00-7BA2	6AG1055-1HB00-7BA2	6AG1055-1MB00-7BA2
Based on	6ED1055-1CB00-0BA2	6ED1055-1HB00-0BA2	6ED1055-1MB00-0BA2
	SIPLUS LOGO! DM8 24 V8	SIPLUS LOGO! DM8 24R V8	SIPLUS LOGO! DM8 12/24R V8
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)
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, *
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; *
Usage in industrial process technology			
- Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)
- Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark			
- Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* 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!

Technical specifications

Article number	**6AG1055-1CB00-7BA2**	**6AG1055-1HB00-7BA2**	**6AG1055-1MB00-7BA2**
Based on	**6ED1055-1CB00-0BA2**	**6ED1055-1HB00-0BA2**	**6ED1055-1MB00-0BA2**
	SIPLUS LOGO! DM8 24 V8	SIPLUS LOGO! DM8 24R V8	SIPLUS LOGO! DM8 12/24R V8
Conformal coating			
• Coatings for printed circuit board assemblies acc. to EN 61086	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability
• 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

Article number	**6AG1055-1FB00-7BA2**	**6AG1055-1NB10-7BA2**
Based on	**6ED1055-1FB00-0BA2**	**6ED1055-1NB10-0BA2**
	SIPLUS LOGO! DM8 230R V8	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)
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
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; *
Usage in industrial process technology		
- Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)
- Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark		
- Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* 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!

Technical specifications

Article number	**6AG1055-1FB00-7BA2**	**6AG1055-1NB10-7BA2**
Based on	**6ED1055-1FB00-0BA2**	**6ED1055-1NB10-0BA2**
	SIPLUS LOGO! DM8 230R V8	SIPLUS LOGO! DM16 24R V8
Conformal coating		
• Coatings for printed circuit board assemblies acc. to EN 61086	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability
• 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**	**6AG1055-1MD00-7BA2**
Based on	**6ED1055-1MA00-0BA2**	**6ED1055-1MD00-0BA2**
	SIPLUS LOGO! AM2 V8	SIPLUS LOGO! AM2 RTD
Ambient conditions		
Ambient temperature during operation		
• min.	-40 °C; = Tmin; Startup @ -25 °C	-40 °C; = Tmin; Startup @ -25 °C
• max.	70 °C; = Tmax	70 °C; = Tmax
• 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)
Altitude during operation relating to sea level		
• Installation altitude above sea level, max.	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)
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
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; *
Usage in industrial process technology		
- Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)
- Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark		
- Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* 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!

Technical specifications

Article number	**6AG1055-1MA00-7BA2**	**6AG1055-1MD00-7BA2**
Based on	**6ED1055-1MA00-0BA2**	**6ED1055-1MD00-0BA2**
	SIPLUS LOGO! AM2 V8	SIPLUS LOGO! AM2 RTD
Conformal coating		
• Coatings for printed circuit board assemblies acc. to EN 61086	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability
• 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	**6AG1055-1MM00-7BA2**
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)
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
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; *

Article number	**6AG1055-1MM00-7BA2**
Based on	**6ED1055-1MM00-0BA2**
	SIPLUS LOGO! AM2 AQ V8
Usage in industrial process technology	
- Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)
- Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark	
- Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* 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 reliability
• 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

Introduction

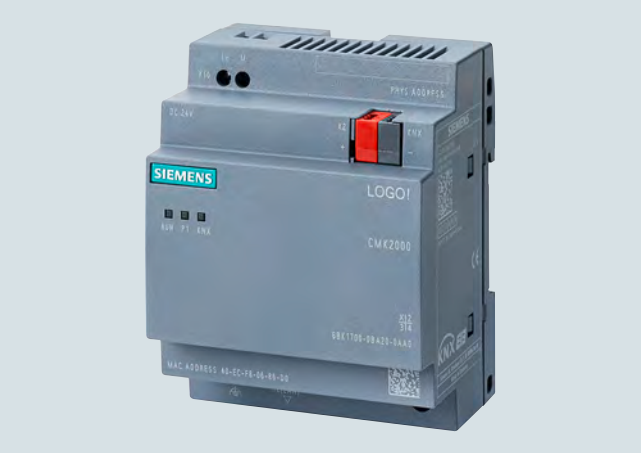
Overview

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

Note on compatibility:

Communications module	Can be used with:
LOGO! CMK2000 communications 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.

Ordering data

	Article No.
LOGO! CMK2000 communications module 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	**6BK1700-0BA20-0AA0**

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

Article number	**6BK1700-0BA20-0AA0** LOGO! CMK2000
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
Design of plug-in connection	KNX terminal 0.6 mm² - 1.0 mm²
Protocols	
EIB/KNX	Yes
Web server	
• supported	Yes
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
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
Relative humidity	
• Operation, max.	95 %
Connection method	
Design of electrical connection for supply voltage	2 screw-type terminals: L+, M 0.5 mm² - 2.5 mm² Screw-type terminal: FE 0.5 mm² ... 6.0 mm²
Dimensions	
Width	71.5 mm; 4TE
Height	90 mm
Depth	58.5 mm
Weights	
Weight, approx.	0.14 kg

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

Ordering data

Ordering data	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	**6XV1870-3QE50**
• 1 m	**6XV1870-3QH10**
• 2 m	**6XV1870-3QH20**
• 6 m	**6XV1870-3QH60**
• 10 m	**6XV1870-3QN10**
IE FC outlet RJ45 For connection of Industrial Ethernet FC cables and TP cords; graduated prices for 10 and 50 units or more	**6GK1901-1FC00-0AA0**

Technical specifications

Article number	**6GK7177-1FA10-0AA0**	**6GK7177-1MA20-0AA0**
product type designation	LOGO! CSM 230	LOGO! CSM 12/24
transfer 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 other		
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 1 of the supply voltage	DC	DC
• supply voltage 1 rated value	230 V	24 V
• power loss [W] 1 rated value		1.5 W
• supply voltage 1 rated value	100 ... 240 V	10.2 ... 30.2 V
• consumed current 1 maximum	0.02 A	0.15 A
• type of electrical connection 1 for power supply	3-pole terminal block	3-pole terminal block
• product component 1 fusing at power supply input	Yes	Yes
type of voltage 2 of the supply voltage		
• supply voltage 2 rated value	100 ... 240 V	
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
design, dimensions and weights		
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
fastening method		
• 35 mm top hat DIN rail mounting	Yes	Yes
• wall mounting	Yes	Yes
• S7-300 rail mounting	No	No
• S7-1500 rail mounting	No	No

Technical specifications

Article number	**6GK7177-1FA10-0AA0**	**6GK7177-1MA20-0AA0**
product type designation	LOGO! CSM 230	LOGO! CSM 12/24
product functions management, configuration, engineering		
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 safety from CSA and UL	UL60079-0, UL60079-15, CSA C22.2	UL 508, CSA C22.2 No. 142
standards, specifications, approvals CE		
certificate of suitability CE marking	Yes	Yes
standards, specifications, approvals hazardous environments		
standard 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
• 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
certificate of suitability		
• CCC for hazardous zone according to GB standard		Yes
standards, specifications, approvals other		
certificate of suitability		
• C-Tick	Yes	Yes
• KC approval	No	No
standards, specifications, approvals marine classification		
Marine classification association		
• American Bureau of Shipping Europe Ltd. (ABS)	No	No
• French marine classification society (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

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:

DE: http://www.siemens.de/mobilfunkzulassungen

EN: http://www.siemens.com/mobilenetwork-approvals

Ordering data

	Article No.
Communications Module Radio LOGO! CMR Communications modules for connection of LOGO! 8 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: www.siemens.com/mobilenetwork-approvals	
LOGO! CMR2020 For connecting LOGO! 8 to a GSM/GPRS network	**6GK7142-7BX00-0AX0**
LOGO! CMR2040 For connecting LOGO! 8 to an LTE network	**6GK7142-7EX00-0AX0**
Accessories	
Mobile wireless antennas	
ANT794-4MR For indoor and outdoor use; 5 m connecting cable permanently connected to antenna; SMA connector; incl. installation bracket, screws, wall anchors	**6NH9860-1AA00**
ANT896-4MA Rod antenna for direct mounting on device; SMA male connector	**6GK5896-4MA00-0AA3**
ANT896-4ME Cylinder-shaped antenna for remote installation, e.g. on a control cabinet; N-Connect female connector	**6GK5896-4ME00-0AA0**
GPS antenna	
ANT895-6ML GPS/Glonass antenna for remote installation indoor and outdoor, magnet or screw mounting, 30 cm cable with N-Connect female connector	**6GK5895-6ML00-0AA0**
Antenna adapter cable N-Connect/SMA male/male flexible connecting cable, pre-assembled, connecting cable; suitable for 0 ... 6 GHz, IP68	
• 0.3 m	**6XV1875-5LE30**
• 1 m	**6XV1875-5LH10**
• 2 m	**6XV1875-5LH20**
• 5 m	**6XV1875-5LH50**

LOGO! CMR (wireless communication)

Ordering data	Article No.
IWLAN RCoax/antenna N-Connect male/male flexible connecting cable	
Flexible connecting 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	
• 1 m	**6XV1875-5AH10**
• 2 m	**6XV1875-5AH20**
• 5 m	**6XV1875-5AH50**
• 10 m	**6XV1875-5AN10**
Cabinet feedthrough	
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	**6GK5798-2PP00-2AA6**
Lightning protector LP798-2N	
Lightning protector with N/N female/female connection for ANT 790 antennas, IP67 (-40 to +85 °C), frequency range: 0 … 6 GHz	**6GK5798-2LP00-2AA6**
Patch cable	
IE TP Cord RJ45/RJ45	
TP cable 4 x 2 with 2 RJ45 plugs	
• 0.5 m	**6XV1870-3QE50**
• 1 m	**6XV1870-3QH10**
• 2 m	**6XV1870-3QH20**
• 6 m	**6XV1870-3QH60**
• 10 m	**6XV1870-3QN10**
IE FC RJ45 outlet	**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 power supply	

	Article No.
Stainless steel enclosure in IP68 degree of protection	**6NH3112-3BA00-1XX1**
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 wireless antenna prepared; please order the needed quantity of cable glands and sealing plugs separately	
Aluminum enclosure in IP68 degree of protection	**6NH3112-3BA00-1XX3**
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 wireless antenna prepared; please order the needed quantity of cable glands and sealing plugs separately	
Cable gland PG16 F for IP68 enclosure	**6NH3112-3BA00-1XX4**
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	
Sealing plug M16 for IP68 enclosure	**6NH3112-3BA00-1XX5**
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	

Technical specifications

Article number	**6GK7142-7BX00-0AX0**	**6GK7142-7EX00-0AX0**
product type designation	LOGO! CMR2020	LOGO! CMR2040
transfer 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
type of electrical connection		
• 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 connection 1 connectable	GPS Antenna	GPS Antenna
• at connection 2 connectable	Mobile radio antenna (GPRS/GSM)	Mobile radio antenna (GPRS/GSM, UMTS, LTE)
wire length of antenna wire maximum	15 m	15 m
slot version		
• for SIM card	Standard	Standard
• of the memory card	microSD	microSD
storage capacity of the memory card maximum	32 Gibyte	32 Gibyte
performance class of the memory card minimum necessary	Class 6	Class 6
type of file system 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		
• with signal <0> at DC	0 ... 5 V	0 ... 5 V
• for signal <1> at DC	8.5 ... 24 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

Technical specifications

Article number	**6GK7142-7BX00-0AX0**	**6GK7142-7EX00-0AX0**
product type designation	LOGO! CMR2020	LOGO! CMR2040
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		
• for signal <1>	12 ... 24 V; Value of the actual supply voltage	12 ... 24 V; Value of the actual supply voltage
• for signal <0>	0 ... 5 V	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		
• is supported SMS	Yes	Yes
• is supported GPRS	Yes	Yes
• note	GPRS (Multislot Class 10, Mobile Station Class B)	LTE
type of wireless network is supported		
• GSM	Yes	Yes
• UMTS	No	Yes
• LTE	No	Yes
operating frequency for GSM transmission	operating frequency for GSM transmission 850 MHz, operating frequency for GSM transmission 900 MHz, operating frequency for GSM transmission 1800 MHz, operating frequency for GSM transmission 1900 MHz	operating frequency for GSM transmission 900 MHz, operating frequency for GSM transmission 1800 MHz
operating frequency with UMTS transmission		operating frequency with UMTS transmission 850 MHz, operating frequency with UMTS transmission 900 MHz, operating frequency with UMTS transmission 2100 MHz
operating frequency for LTE transmission		operating frequency for LTE transmission 800 MHz, operating frequency for LTE transmission 1800 MHz, operating frequency for LTE transmission 2600 MHz
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
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

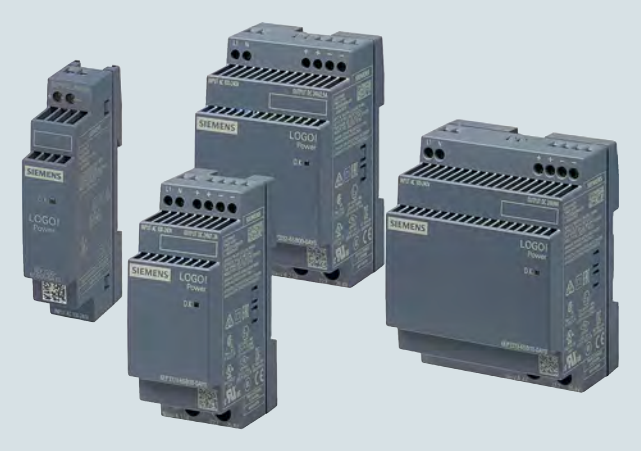
Technical specifications

Article number	**6GK7142-7BX00-0AX0**	**6GK7142-7EX00-0AX0**
product type designation	LOGO! CMR2020	LOGO! CMR2040
design, dimensions and weights		
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
fastening method		
• 35 mm top hat DIN rail mounting	Yes	Yes
• wall mounting	Yes	Yes
product features, product functions, product 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
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 email client maximum	1	1
number of free texts for emails and SMS maximum	20	20
number of characters per free text for emails or SMS maximum	160	160
performance data teleservice		
product function		
• remote firmware update	Yes	Yes
• remote configuration	Yes	Yes
product functions management, configuration, engineering		
configuration software		
• required	Web interface	Web interface
product functions diagnostics		
product function web-based diagnostics	Yes	Yes

Technical specifications

Article number	**6GK7142-7BX00-0AX0**	**6GK7142-7EX00-0AX0**
product type designation	LOGO! CMR2020	LOGO! CMR2040
product functions security		
operating mode Virtual Private Network (VPN)	Yes; Open VPN Server in PSK mode	Yes; 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	7.5 s	7.5 s
time synchronization		
• 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 detection		
product function		
• position detection with GPS	Yes	Yes
• pass on position data	Yes	Yes
standards, specifications, approvals hazardous environments		
certificate of suitability CCC for hazardous zone according to GB standard	Yes	Yes

Overview

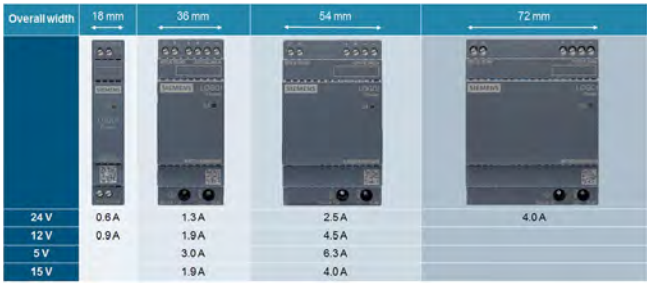


The flat power supply unit for distribution boards

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 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 ambient 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 supplies can be combined with the **buffer module BUF1200, DC UPS**, **redundancy** and **selectivity modules**.

This powerhouse can be used in any 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.



Product highlights of the product line

- 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 performance 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
- Supply
  of NEC Class 2 electric circuits with limited output current (100 VA)
- Load monitoring via current monitor
  using real-time measurement of the output current without disconnecting the cable, i.e. without interrupting the DC supply
- Flexible mounting
  with top hat DIN rail or wall mounting in different installation positions
- 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 during startup as well as constant current in the event of overload

1-phase, 5 V DC

Overview

Thanks to its stepped profile design, the LOGO!Power product line is ideally suited for installation in small distribution boards. The stabilized power supplies with wide-range input are available with an output voltage of 5 V in two performance classes.

Product highlights

- Single-phase, 5 V DC/ 3 A and 6.3 A
- Wide-range input, input voltage 100 … 240 V AC (85 … 264 V), 110 … 300 V DC
- Narrow unit with 36 mm or 54 mm width and overall depth of 53 mm in LOGO! design
- Up to 80% efficiency
- Integrated current monitor: Actual output current measurement directly at the power supply unit
- cULus, cURus, NEC class 2, ABS, DNV GL certifications

Ordering data

	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**

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 V_{in} = 187 V	at V_{in} = 187 V
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 $A^2 \cdot s$	3 $A^2 \cdot s$
Built-in incoming fuse	internal	internal
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 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

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
• output voltage at output 1 at DC rated value	5 V	5 V
Total tolerance, static ±	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 Iout 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 ±15 %), max.	0.2 %	0.2 %
Dynamic load smoothing (I_{out}: 10/90/10 %), U_{out} ± 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 =^ 3 A	50 mV =^ 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

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 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)
Degree of protection (EN 60529)	IP20	IP20
Approvals		
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
certificate of suitability NEC Class 2	Yes	No
FM approval	Class I, Div. 2, Group ABCD, T4	Class I, Div. 2, Group ABCD, T4
CB approval	Yes	Yes
certificate of suitability EAC approval	Yes	Yes
Marine approval	ABS, BV, DNV GL, LRS	ABS, BV, DNV GL, LRS
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
environmental conditions		
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, 5 … 95% no condensation	Climate class 3K3, 5 … 95% 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 can be lined up	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)

Overview

Thanks to its stepped profile design, the LOGO!Power product line is ideally suited for installation in small distribution boards. The stabilized power supplies with wide-range input are available with an output voltage of 12 V in three performance classes. The 12 V versions are ideal for supplying LOGO! PLCs with the corresponding voltage input.

Product highlights

- Single-phase, 12 V DC/ 0.9 A, 1.9 A and 4.5 A
- Wide-range input, input voltage 100 … 240 V AC (85 … 264 V), 110 … 300 V DC
- Narrow unit with width of 18 mm, 36 mm or 54 mm and overall depth of 53 mm in LOGO! design
- Up to 87.1% efficiency
- Integrated current monitor: Actual output current measurement directly at the power supply unit (for devices at least 36 mm wide)
- cULus, cURus, NEC class 2, ABS, DNV GL certifications

Ordering data

	Article No.
LOGO!Power 1-phase, 12 V DC/0.9 A Stabilized power supply Input: 100 … 240 V AC (110 ... 300 V DC) Output: 12 V DC/0.9 A	**6EP3320-6SB00-0AY0**
LOGO!Power 1-phase, 12 V DC/1.9 A Stabilized power supply Input: 100 … 240 V AC (110 ... 300 V DC) Output: 12 V DC/1.9 A	**6EP3321-6SB00-0AY0**
LOGO!Power 1-phase, 12 V DC/4.5 A Stabilized power supply Input: 100 … 240 V AC (110 ... 300 V DC) Output: 12 V DC/4.5 A	**6EP3322-6SB00-0AY0**
Add-on modules	
SITOP redundancy modules RED1200	For more information, visit: https://www.siemens.com/sitop-redundancy/mall

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 V_{in} = 187 V	at V_{in} = 187 V	at V_{in} = 187 V
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 $A^2 \cdot s$	0.8 $A^2 \cdot s$	3 $A^2 \cdot s$
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

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
• output voltage at output 1 at DC rated value	12 V	12 V	12 V
Total tolerance, static ±	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 ±15 %), max.	0.2 %	0.2 %	0.2 %
Dynamic load smoothing (I_{out}: 10/90/10 %), U_{out} ± 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 short-circuit proof	Yes	Yes	Yes
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		50 mV =^ 1.9 A	50 mV =^ 4.5 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

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
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)
Degree of protection (EN 60529)	IP20	IP20	IP20
Approvals			
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
certificate of suitability NEC Class 2	Yes	Yes	No
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
certificate of suitability EAC approval	Yes	Yes	Yes
Marine approval	ABS, BV, DNV GL, LRS	ABS, BV, DNV GL, LRS	ABS, BV, DNV GL, LRS
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
environmental conditions			
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, 5 … 95% no condensation	Climate class 3K3, 5 … 95% no condensation	Climate class 3K3, 5 … 95% 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 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	+, -: 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 can be lined up	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)

1-phase, 15 V DC

Overview

Thanks to its stepped profile design, the LOGO!Power product line is ideally suited for installation in small distribution boards. The stabilized power supplies with a wide-range input are available with an output voltage of 15 V in two performance classes.

Product highlights

- Single-phase, 15 V DC/ 1.9 A and 4.0 A
- Wide-range input, input voltage 100 … 240 V AC (85 … 264 V), 110 … 300 V DC
- Narrow unit with 36 mm or 54 mm width and overall depth of 53 mm in LOGO! design
- Up to 88.4% efficiency
- Integrated current monitor: Actual output current measurement directly at the power supply unit
- cULus, cURus, NEC class 2, ABS, BV, DNV GL, LRS certifications

Ordering data

	Article No.
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	**6EP3321-6SB10-0AY0**
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**

Add-on modules	
SITOP redundancy modules RED1200	For more information, visit: https://www.siemens.com/sitop-redundancy/mall

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 V_{in} = 187 V	at V_{in} = 187 V
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 $A^2 \cdot s$	3 $A^2 \cdot s$
Built-in incoming fuse	internal	internal
Protection in the mains power input (IEC 898)	Recommended miniature circuit breaker: from 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

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
• output voltage at output 1 at DC rated value	15 V	15 V
Total tolerance, static ±	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 ($V_{in\ rated}$ ±15 %), max.	0.2 %	0.2 %
Dynamic load smoothing (I_{out}: 10/90/10 %), U_{out} ± 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 =^ 1.9 A	45 mV =^ 4 A
overcurrent overload capability when switching on	150% $I_{out\ rated}$ typ. 200 ms	150% $I_{out\ rated}$ typ. 200 ms

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
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)
Degree of protection (EN 60529)	IP20	IP20
Approvals		
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
certificate of suitability NEC Class 2	Yes	Yes
FM approval	Class I, Div. 2, Group ABCD, T4	Class I, Div. 2, Group ABCD, T4
CB approval	Yes	Yes
certificate of suitability EAC approval	Yes	Yes
Marine approval	ABS, BV, DNV GL, LRS	ABS, BV, DNV GL, LRS
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
environmental conditions		
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, 5 … 95% no condensation	Climate class 3K3, 5 … 95% 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 can be lined up	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)

Overview

Thanks to its stepped profile design, the LOGO!Power product line is ideally suited for installation in small distribution boards. The stabilized power supplies with wide-range input are available with an output voltage of 24 V in four performance classes. The 24 V versions are ideal for supplying LOGO! PLCs with the corresponding voltage input.

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

Product highlights

- Single-phase, 24 V DC/ 0.6 A, 1.3 A, 2.5 A and 4.0 A
- Input voltage 100 … 240 V AC (85 … 264 V), 110 … 300 V DC
- Narrow unit with width of 18 mm, 36 mm, 54 mm or 72 mm and overall depth of 53 mm in LOGO! design
- Up to 90% efficiency
- Integrated current monitor: Actual output current measurement directly at the power supply unit (for devices at least 36 mm wide)
- cULus, cURus, NEC class 2, ABS, BV, DNV GL, LRS certifications

Ordering data

	Article No.
LOGO!Power 1-phase, 24 V DC/0.6 A Stabilized power supply Input: 100 … 240 V AC (110 ... 300 V DC) Output: 24 V DC/0.6 A	**6EP3330-6SB00-0AY0**
LOGO!Power 1-phase, 24 V DC/1.3 A Stabilized power supply Input: 100 … 240 V AC (110 ... 300 V DC) Output: 24 V DC/1.3 A	**6EP3331-6SB00-0AY0**
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/2.5 A	**6EP3332-6SB00-0AY0**
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/4 A	**6EP3333-6SB00-0AY0**
Add-on modules	
SITOP redundancy modules	For more information, visit: https://www.siemens.com/sitop-redundancy/mall
SITOP selectivity modules	For more information, visit: https://www.siemens.com/sitop-selectivity/mall
SITOP buffer module BUF1200	For more information, visit: https://www.siemens.com/sitop-buffering/mall
DC UPS modules	
SITOP DC UPS	For more information, visit: https://www.siemens.com/sitop-ups/mall

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 V_{in} = 187 V	at V_{in} = 187 V	at V_{in} = 187 V	at V_{in} = 187 V
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 $A^2 \cdot s$	0.8 $A^2 \cdot s$	3 $A^2 \cdot s$	2.5 $A^2 \cdot s$
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
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
• output voltage at output 1 at DC rated value	24 V	24 V	24 V	24 V
Total tolerance, static ±	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

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
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 ($V_{in\ rated}$ ±15 %), max.	0.2 %	0.2 %	0.2 %	0.2 %
Dynamic load smoothing (I_{out}: 10/90/10 %), U_{out} ± 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 =^ 1.3 A	50 mV =^ 2.5 A	50 mV =^ 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
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)
Degree of protection (EN 60529)	IP20	IP20	IP20	IP20
Approvals				
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
certificate of suitability NEC Class 2	Yes	Yes	Yes	No
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
certificate of suitability EAC 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
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

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
environmental conditions				
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, 5 … 95% no condensation	Climate class 3K3, 5 … 95% no condensation	Climate class 3K3, 5 … 95% no condensation	Climate class 3K3, 5 … 95% 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
product feature of the enclosure housing can be lined up	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)

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 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 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: top hat 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

Ordering data

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

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
environmental conditions			
ambient temperature in horizontal mounting position during operation minimum	-40; Startup @ -25 °C ... +70; with natural convection	-40; Startup @ -25 °C ... +70; with natural convection	-40; Startup @ -25 °C ... +70; with natural convection
ambient temperature in horizontal mounting position during operation maximum			
ambient temperature during storage and transport	-40 ... +85	-40 ... +85	-40 ... +85
installation altitude at height above sea level maximum	6 000 m	6 000 m	6 000 m
ambient condition relating to ambient temperature - air pressure - installation altitude	In case of operation at altitudes of 2000 - 6000 m above sea level: Output power derating of -7.5 %/1000 m or reduction of the ambient temperature by 5 K/1000 m	In case of operation at altitudes of 2000 - 6000 m above sea level: Output power derating of -7.5 %/1000 m or reduction of the ambient temperature by 5 K/1000 m	In case of operation at altitudes of 2000 - 6000 m above sea level: Output power derating of -7.5 %/1000 m or reduction of the ambient temperature by 5 K/1000 m
relative humidity with condensation acc. to IEC 60068-2-38 maximum	100 %; RH incl. condensation/frost (no commissioning if condensation is present), horizontal installation	100 %; RH incl. condensation/frost (no commissioning if condensation is present), horizontal installation	100 %; RH incl. condensation/frost (no commissioning if condensation is present), horizontal installation
chemical resistance to commercially available cooling 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
resistance to biologically active substances conformity acc. to EN 60721-3-3	Yes; Class 3B2 mold, fungal, sponge spores (except fauna); class 3B3 upon request	Yes; Class 3B2 mold, fungal, sponge spores (except fauna); class 3B3 upon request	Yes; Class 3B2 mold, fungal, sponge spores (except fauna); class 3B3 upon request
resistance to chemically active substances conformity acc. to EN 60721-3-3	Yes; Class 3C4 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3)	Yes; Class 3C4 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3)	Yes; Class 3C4 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3)
resistance to mechanically active substances conformity acc. to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust	Yes; Class 3S4 incl. sand, dust	Yes; Class 3S4 incl. sand, dust
resistance to biologically active substances conformity acc. to EN 60721-3-6	Yes; Class 6B2 mold, fungal, sponge spores (except fauna)	Yes; Class 6B2 mold, fungal, sponge spores (except fauna)	Yes; Class 6B2 mold, fungal, sponge spores (except fauna)
resistance to chemically active substances conformity acc. to EN 60721-3-6	Yes; Class 6C3 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3)	Yes; Class 6C3 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3)	Yes; Class 6C3 (RH < 75%) incl. salt spray acc. to EN 60068-2-52 (severity level 3)
resistance to mechanically active substances conformity acc. to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust	Yes; Class 6S3 incl. sand, dust	Yes; Class 6S3 incl. sand, dust
coating for equipped printed circuit board acc. to EN 61086	Yes; Class 2 for high availability	Yes; Class 2 for high availability	Yes; Class 2 for high availability
type of coating protection against pollution according to EN 60664-3	Yes; Type 1 protection	Yes; Type 1 protection	Yes; Type 1 protection
type of test of the coating acc. to MIL-I-46058C	Yes; Discoloration of the coating during service life possible	Yes; Discoloration of the coating during service life possible	Yes; Discoloration of the coating during service life possible
product conformity of the coating Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies acc. to IPC-CC-830A	Yes; Conformal Coating, Class A	Yes; Conformal Coating, Class A	Yes; Conformal Coating, Class A

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 with the help of various 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**

LOGO! Starter Kits

Overview

There are now six LOGO! 8 Starter Kits for price-conscious beginners – each individually configured for the specific requirements.

- LOGO! Starter Kit 12/24RCE;
  With LOGO! 12/24RCE, power supply, screwdriver, in Systainer
- LOGO! Starter Kit 130 RCE;
  With LOGO! 230RCE, power supply, screwdriver, in Systainer
- LOGO! Starter Kit 12/24 V;
  With LOGO! 12/24RCEO, 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

With these low-cost complete packages, users can familiarize themselves quickly and easily with the advantages and possibilities of the logic module. LOGO! has been used successfully for many years in industry and trade throughout the world. It solves switching and control tasks conveniently and cost-effectively.

Ordering data

	Article No.
LOGO! Starter Kits In TANOS Box, with LOGO! Soft Comfort V8, WinCC Basic, Ethernet cable	
LOGO! Starter Kit 12/24RCE With LOGO! 12/24RCE, power supply, screwdriver, in Systainer	**6ED1057-3BA01-0AA8**
LOGO! Starter Kit 130 RCE With LOGO! 230RCE, power supply, screwdriver, in Systainer	**6ED1057-3BA03-0AA8**
LOGO! Starter Kit 12/24 V With LOGO! 12/24RCEO, LOGO! TD, power supply, screwdriver, in Systainer	**6ED1057-3BA11-0AA8**
LOGO! 8 KP300 Basic Starter Kit With LOGO! 12/24RCE, LOGO! Power 24 V 1.3 A, KP300 Basic mono PN	**6AV2132-0HA00-0AA1**
LOGO! 8 KTP400 Basic Starter Kit With LOGO! 12/24RCE, LOGO! Power 24 V 1.3 A, KTP400 Basic	**6AV2132-0KA00-0AA1**
LOGO! 8 KTP700 Basic Starter Kit With LOGO! 12/24RCE, LOGO! Power 24 V 1.3 A, KTP700 Basic	**6AV2132-3GB00-0AA1**

Overview

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

Ordering data

	Article 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	**6ED1057-4CA00-0AA0**
Switching voltage 230 V	**6ED1057-4EA00-0AA0**

Technical specifications

Article number	**6ED1057-4CA00-0AA0** LOGO! Contact Mod., DC 24V, 3NO/1NC	**6ED1057-4EA00-0AA0** LOGO! Contact Mod., AC 230V,3NO/1NC
Standards, approvals, certificates		
CE mark	Yes	Yes
Ambient conditions		
Ambient temperature during operation		
• min.	-25 °C	-25 °C
• max.	55 °C	55 °C
Dimensions		
Width	36 mm	36 mm
Height	72 mm	72 mm
Depth	55 mm	55 mm
Weights		
Weight, approx.	160 g	160 g

LOGO! mounting kits

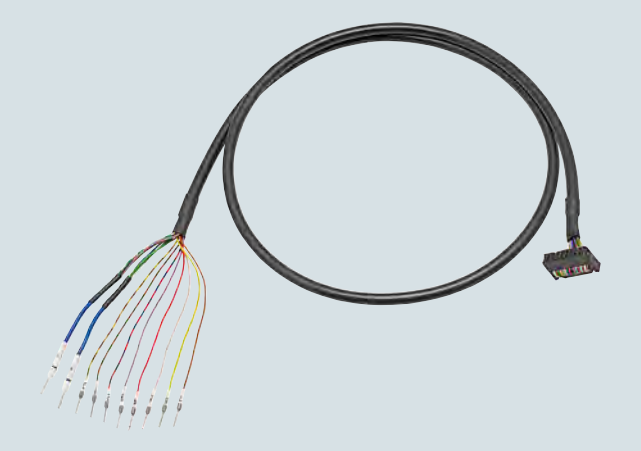
Overview

LOGO! and SIPLUS LOGO! are designed for quick and easy mounting on top hat 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 MW, with keys	**6AG1057-1AA00-0AA3**
Width 8 MW, with keys	**6AG1057-1AA00-0AA2**

Overview



SIMATIC TOP connect universal connecting cable

The wiring of the

- SIMATIC S7-1500 IO (25 mm)
- SIMATIC ET 200SP
- SIMATIC S7-1200
- LOGO!

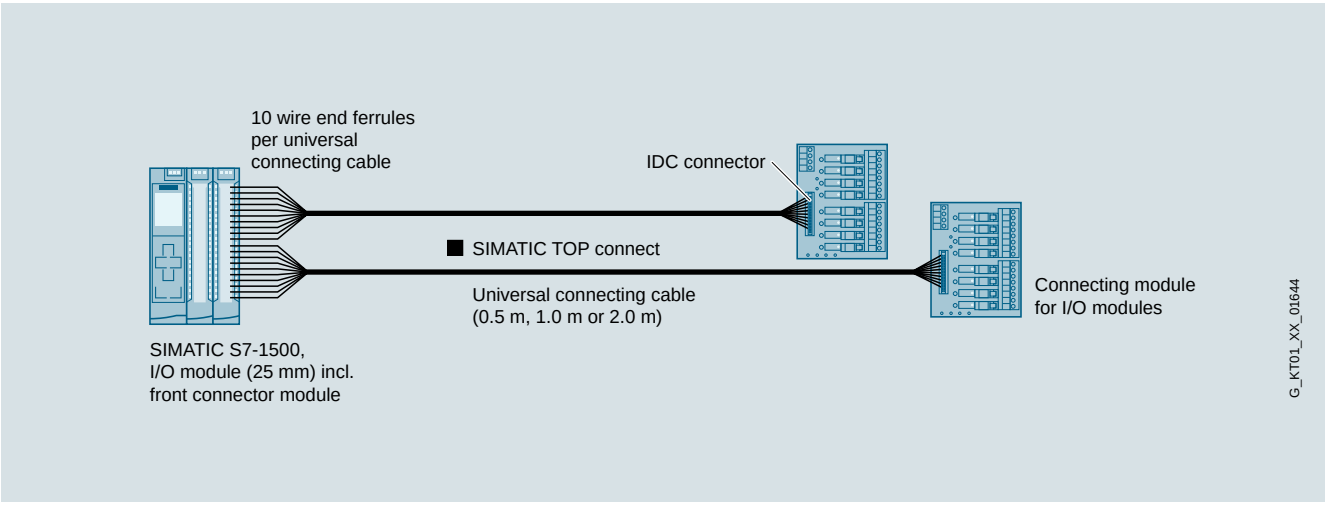
with the sensors/actuators is a significant factor with respect to time/cost overhead during configuration, control cabinet design, procurement and ease of servicing. The SIMATIC TOP connect system cabling makes connection easy, fast and secure.

Design

The unshielded universal connecting cable is offered for a wide range of control cabinet concepts.

It comprises:

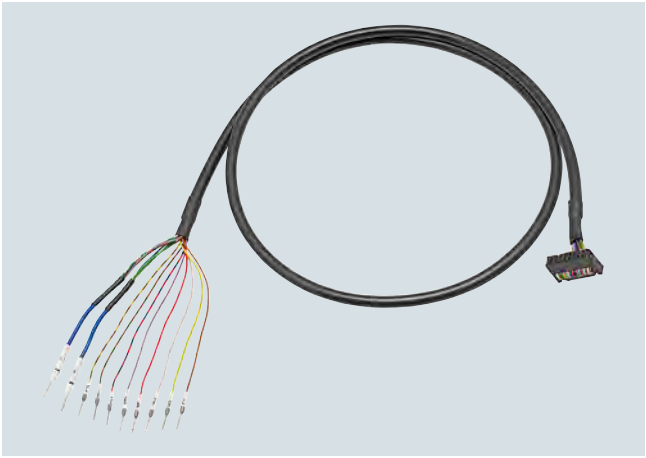
- 16-pin round cable with a core diameter of 0.14 mm^2, pre-assembled with wire end ferrules for connection to the controller:
  - labeled with "0" … "7" for the control inputs/outputs
  - labeled with "M" for mass
  - labeled with "L+" for 24 V DC potential
- 16-pin ID (insulation displacement) connector for connection to the SIMATIC TOP connect terminal modules for 8 I/Os:
  - 3-wire connection using the appropriate terminal module for quick, error-free wiring
  - Galvanic isolation and adaptation using a coupling relay for easy implementation of potential groups in the system
  - High output current (up to 4 A), even for higher switching frequencies, using an optocoupler module (overload and short-circuit proof)
  - Implementation of isolating terminals using switch modules enabling individual signals to be measured
  - Channel-wise protection of I/Os using a fuse module with a thermal fuse



SIMATIC TOP connect universal connecting cable

System cabling for SIMATIC S7-1500 IO (25 mm), ET 200SP, S7-1200 and LOGO!

Overview Universal connecting cable



SIMATIC TOP connect universal connecting cable

The universal connecting cable constitutes the link between the standard connection of the SIMATIC S7-1500 IO (25 mm), SIMATIC ET 200SP, SIMATIC S7-1200 or LOGO! and the SIMATIC TOP connect terminal module. It transmits 8 signals and the supply voltage. The connecting cable is available in lengths of 0.5 m / 1.0 m / 2.0 m. the maximum technically feasible length is 30 m.

Ordering data	Article No.
Universal connecting cable for SIMATIC S7-1500 IO (25 mm), SIMATIC ET 200SP, SIMATIC S7-1200 and LOGO!	
16 x 0.14 mm² unshielded	
• 0.5 m	**6ES7923-0BA50-0FB0**
• 1.0 m	**6ES7923-0BB00-0FB0**
• 2.0 m	**6ES7923-0BC00-0FB0**

Overview Terminal modules

The terminal modules are used instead of conventional terminal blocks and act as the interface between the controller and signals from the field. All digital modules with 8 I/Os can be used.

Ordering data	Article No.
Terminal module TP1	
For 1-wire connection, for 16-pin connecting cables	
• Push-in terminals without LEDs	**6ES7924-0AA20-0AC0**
• Screw-type terminals without LEDs	**6ES7924-0AA20-0AA0**
• Push-in terminals with LEDs	**6ES7924-0AA20-0BC0**
• Screw-type terminals with LEDs	**6ES7924-0AA20-0BA0**
Terminal module TP3	
For 3-wire connection, for 16-pin connecting cables	
• Push-in terminals without LEDs	**6ES7924-0CA20-0AC0**
• Screw-type terminals without LEDs	**6ES7924-0CA20-0AA0**
• Push-in terminals with LEDs	**6ES7924-0CA20-0BC0**
• Screw-type terminals with LEDs	**6ES7924-0CA20-0BA0**
• Push-in terminals with LEDs and one isolating terminal per channel	**6ES7924-0CH20-0BC0**
• Screw-type terminals with LEDs and one isolating terminal per channel	**6ES7924-0CH20-0BA0**
• Push-in terminals with LEDs and fuse per channel	**6ES7924-0CL20-0BC0**
• Screw-type terminals with LEDs and fuse per channel	**6ES7924-0CL20-0BA0**
Terminal module TPRo	
Relay module for 8 outputs, relay as normally open contact	
• Push-in terminals with LEDs	**6ES7924-0BD20-0BC0**
• Screw-type terminals with LEDs	**6ES7924-0BD20-0BA0**
Terminal module TPRi	
Relay module for 8 inputs (1230 V AC), relay as normally open contact	
• Push-in terminals with LEDs	**6ES7924-0BE20-0BC0**
• Screw-type terminals with LEDs	**6ES7924-0BE20-0BA0**
Terminal module TPRi	
Relay module for 8 inputs (110 V AC), relay as normally open contact	
• Push-in terminals with LEDs	**6ES7924-0BG20-0BC0**
• Screw-type terminals with LEDs	**6ES7924-0BG20-0BA0**
Terminal module TPOo	
Optocoupler module for 8 outputs (max. 24 V DC/4 A)	
• Push-in terminals with LEDs	**6ES7924-0BF20-0BC0**
• Screw-type terminals with LEDs	**6ES7924-0BF20-0BA0**