

LOGO! Logic Modules



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LOGO! Logic Modules

Introduction

LOGO! logic module

Overview



LOGO! logic module

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

SIPLUS LOGO!

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

Accessories:

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

For more information, please go to:

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

Technical specifications SIPLUS LOGO!

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

Ambient conditions

Extended range of environmental conditions

<ul style="list-style-type: none"> • with reference to ambient temperature, air pressure and altitude 	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // Tmin ... (Tmax - 10K) at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // Tmin ... (Tmax - 20K) at 658 hPa ... 540 hPa (+3500 m ... +5000 m)
<ul style="list-style-type: none"> • At cold restart, min. 	0° C
Relative humidity <ul style="list-style-type: none"> • with condensation, max. 	100 %; RH incl. bedewing/frost (no commissioning in bedewed state)
Resistance <ul style="list-style-type: none"> • to biologically active substances/ compliance with EN 60721-3-3 • to chemically active substances/ compliance with EN 60721-3-3 • to mechanically 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. 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. Yes; Class 3S4 incl. sand, dust; the supplied plug covers must remain in place on unused interfaces during operation.

Overview



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

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Technical specifications

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

LOGO! Logic Modules

LOGO! basic and expansion modules

LOGO! basic modules with display

Technical specifications (continued)

Article number	6ED1052-1CC08-0BA0	6ED1052-1MD08-0BA0	6ED1052-1HB08-0BA0	6ED1052-1FB08-0BA0
	LOGO! 24CE, 8DI(4AI)/4DQ, 400 Blocks	LOGO!12/24RCE, 8DI(4AI)/4DQ, 400 Blocks	LOGO! 24RCE, 8DI/4DQ, 400 Blocks	LOGO!230RCE, 8DI/4DQ, 400 Blocks
EMC				
Emission of radio interference acc. to EN 55 011				
<ul style="list-style-type: none"> Limit class B, for use in residential areas 	Yes; Radio interference suppression according to EN55011, Limit Value Class B	Yes	Yes	Yes
Degree and class of protection				
Degree of protection acc. to EN 60529				
<ul style="list-style-type: none"> IP20 	Yes	Yes	Yes	Yes
Standards, approvals, certificates				
CE mark	Yes	Yes	Yes	Yes
CSA approval	Yes	Yes	Yes	Yes
UL approval	Yes	Yes	Yes	Yes
FM approval	Yes	Yes	Yes	Yes
developed in accordance with IEC 61131	Yes	Yes	Yes	Yes
according to VDE 0631	Yes	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes	Yes
Ambient conditions				
Ambient temperature during operation				
<ul style="list-style-type: none"> min. max. 	-20 °C; No condensation 55 °C	-20 °C; No condensation 55 °C	-20 °C; No condensation 55 °C	-20 °C; No condensation 55 °C
Ambient temperature during storage/transportation				
<ul style="list-style-type: none"> min. max. 	-40 °C 70 °C	-40 °C 70 °C	-40 °C 70 °C	-40 °C 70 °C
Altitude during operation relating to sea level				
<ul style="list-style-type: none"> Ambient air temperature-barometric pressure-altitude 	Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)		Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)	Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)
Dimensions				
Width	71.5 mm	71.5 mm	71.5 mm	71.5 mm
Height	90 mm	90 mm	90 mm	90 mm
Depth	60 mm	60 mm	60 mm	60 mm

Ordering data

Article No.	Article No.
LOGO! 8 logic module	LOGO! 24RCE
LOGO! 24CE	6ED1052-1CC08-0BA0
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	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
LOGO! 12/24RCE	6ED1052-1MD08-0BA0
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	LOGO! 230RCE
	6ED1052-1HB08-0BA0
	Supply voltage 115...230 V AC/DC, 8 digital inputs 115...230 V AC/DC, 4 relay outputs 10 A, integrated time switch, Ethernet interface; 400 function blocks can be interlinked, modular expansion capability
	6ED1052-1FB08-0BA0

LOGO! Logic Modules

LOGO! basic and expansion modules

LOGO! basic modules with display

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

LOGO! Logic Modules

LOGO! basic and expansion modules

LOGO! basic modules without display

Overview



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

Technical specifications

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

Technical specifications (continued)

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

LOGO! Logic Modules

LOGO! basic and expansion modules

LOGO! basic modules without display

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Ordering data	Article No.	Ordering data	Article No.
LOGO! 8 logic module		Accessories	
LOGO! 24CEo logic module 24 V DC supply voltage, 8 digital inputs 24 V DC, of which 4 can be used in analog mode (0 to 10 V), 4 digital outputs 24 V DC, 0.3 A, integrated time switch, Ethernet interface; without display and keyboard; 400 function blocks can be interlinked, modular expansion capability	6ED1052-2CC08-0BA0	LOGO! TDE text display 6-line text display, can be connected to all LOGO! 8 variants with and without display, with 2 Ethernet interfaces; incl. installation accessories. Requires additional 12 V DC or 24 V AC/DC power supply	6ED1055-4MH08-0BA0
LOGO! 12/24RCEo logic module 12...24 V DC supply voltage, 8 digital inputs 12...24 V DC, of which 4 can be used in analog mode (0 to 10 V), 4 relay outputs 10 A, integrated time switch, Ethernet interface; without display or keyboard; 400 function blocks can be interlinked, modular expansion capability	6ED1052-2MD08-0BA0	LOGO!Soft Comfort V8 For programming on the PC in LAD/FBD; executes on Windows 8, 7, XP, Linux and Mac OSX; on DVD	6ED1058-0BA08-0YA1
LOGO! 24RCEo logic module 24 V AC/DC supply voltage, 8 digital inputs 24 V AC/DC, 4 relay outputs 10 A, integrated time switch, Ethernet interface; without display or keyboard; 400 function blocks can be interlinked, modular expansion capability	6ED1052-2HB08-0BA0	LOGO! Starter Kits In TANOS Box, with LOGO! Soft Comfort V8, WinCC Basic, Ethernet cable	
LOGO! 230RCEo logic module 115...230 V AC/DC supply voltage, 8 digital inputs 115...230 V AC/DC, 4 relay outputs 10 A, integrated time switch, Ethernet interface; without display or keyboard; 400 function blocks can be interlinked, modular expansion capability	6ED1052-2FB08-0BA0	LOGO! Starter Kit 12/24 RCE With LOGO! 12/24 RCE, power supply, screwdriver, in Systainer	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

Overview



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

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Technical specifications

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

LOGO! Logic Modules

LOGO! basic and expansion modules

LOGO! expansion modules

Technical specifications (continued)

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

Technical specifications (continued)

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

LOGO! Logic Modules

LOGO! basic and expansion modules

LOGO! expansion modules

Technical specifications (continued)

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

Technical specifications (continued)

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

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

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

LOGO! Logic Modules

LOGO! basic and expansion modules

LOGO! expansion modules

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

Overview



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

Note:

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

Technical specifications

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

LOGO! Logic Modules

LOGO! basic and expansion modules

SIPLUS LOGO! basic modules with display

Technical specifications (continued)

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

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

LOGO! Logic Modules

LOGO! basic and expansion modules

SIPLUS LOGO! basic modules without display

Overview

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

Note:

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

Technical specifications

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

Technical specifications (continued)

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

LOGO! Logic Modules

LOGO! basic and expansion modules

SIPLUS LOGO! basic modules without display

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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 environmental
substances

6AG1052-2CC08-7BA0**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 environmental
substances

6AG1052-2FB08-7BA0**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 environmental
substances

6AG1052-2HB08-7BA0**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 environmental
substances

6AG1052-2MD08-7BA0**Article No.****Accessories****SIPLUS LOGO! TDE**

(Extended temperature range
-10 ... +60 °C and exposure to
environmental substances)

6-line text display,
can be connected to all
LOGO! 8 variants with and without
display, with 2 Ethernet interfaces;
incl. installation accessories.
Requires additional 12 V DC or
24 V AC/DC power supply

6AG1055-4MH08-2BA0**Accessories for
SIPLUS LOGO! 6, 8****LOGO!Soft Comfort V8**

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

6ED1058-0BA08-0YA1**Front panel mounting set**

Width 8 U, with keys

6AG1057-1AA00-0AA2

Overview


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

Note:

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

Technical specifications

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

LOGO! Logic Modules

LOGO! basic and expansion modules

SIPLUS LOGO! expansion modules

Technical specifications (continued)

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

Technical specifications (continued)

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

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

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

LOGO! Logic Modules

LOGO! basic and expansion modules

SIPLUS LOGO! expansion modules

Technical specifications (continued)

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

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

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

LOGO! Logic Modules

LOGO! communication modules

Introduction

Overview

2



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

Note on compatibility:

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

Overview



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

Technical specifications

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

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

Ordering data

Article No.

LOGO! CMK2000 communication module **6BK1700-0BA20-0AA0**

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

LOGO! Logic Modules

LOGO! communication modules

LOGO! CSM unmanaged

Overview



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

The essential features of the LOGO! CSM are:

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

Technical specifications

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

Technical specifications (continued)

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

Ordering data

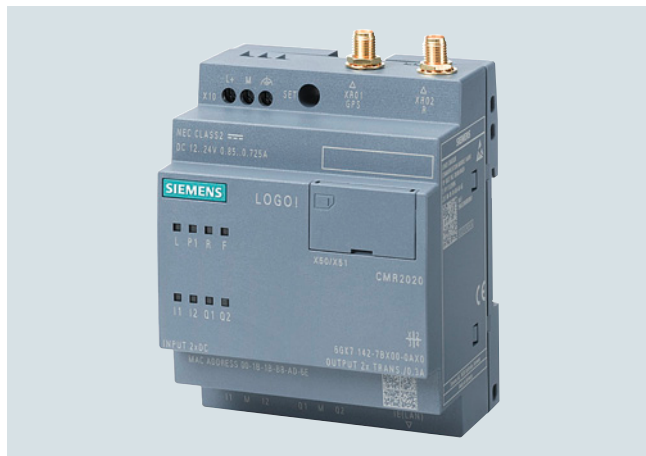
Article No.	Article No.
LOGO! CSM compact switch modules Unmanaged switch for connection of one LOGO! and up to three further nodes on Industrial Ethernet with 10/100 Mbps; 4 x RJ45 ports; LED diagnostics, LOGO! module LOGO! CSM12/24 external 12 V DC or 24 V DC power supply, for LOGO! ... 0BA7/... 0BA8 LOGO! CSM230 external 115 ... 240 V AC power supply, for LOGO! ... 0BA7	Accessories IE TP cord RJ45/RJ45 TP cable 4 x 2 with 2 RJ45 plugs • 0.5 m • 1 m • 2 m • 6 m • 10 m IE FC outlet RJ45 For connection of Industrial Ethernet FC cables and TP cords; graduated prices for 10 and 50 units or more
6GK7177-1MA20-0AA0 6GK7177-1FA10-0AA0	6XV1870-3QE50 6XV1870-3QH10 6XV1870-3QH20 6XV1870-3QH60 6XV1870-3QN10 6GK1901-1FC00-0AA0

LOGO! Logic Modules

LOGO! communication modules

LOGO! CMR (wireless communication)

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>

Technical specifications

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

Technical specifications (continued)

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

LOGO! Logic Modules

LOGO! communication modules

LOGO! CMR (wireless communication)**Technical specifications (continued)**

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

Technical specifications (continued)

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

LOGO! Logic Modules

LOGO! communication modules

LOGO! CMR (wireless communication)

2

Ordering data

Article No.

Article No.

LOGO! CMR Communication Module Radio

Communication modules for connection of LOGO! 0BA8 to GSM/GPRS or LTE network; 1x RJ45 port for Industrial Ethernet connection; 2x digital input; 2x digital output; read/write access to LOGO! tags; possible to send/receive text messages; GPS position detection; time-of-day synchronization/forwarding with real time clock; configuration and diagnostics per web interface; Note country approvals: <http://www.siemens.com/mobilenetwork-approvals>

LOGO! CMR2020

For connecting LOGO! 0BA8 to a GSM/GPRS network

LOGO! CMR2040

For connecting LOGO! 0BA8 to an LTE network

Accessories

Mobile radio antennas

ANT794-4MR

For indoor and outdoor use; 5 m connecting cable permanently connected to antenna; SMA connector; incl. installation bracket, screws, wall anchors

ANT896-4MA

Rod antenna for direct mounting on device; SMA male connector

ANT896-4ME

Cylinder-shaped antenna for remote installation, e.g. on a control cabinet; N-Connect female connector

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

Antenna adapter cable

N-Connect/SMA male/male Flexible Connection Cable, pre-assembled, connection cable; suitable for 0 ... 6 GHz, IP68

- 0.3 m
- 1 m
- 2 m
- 5 m

IWLAN RCoax/antenna N-Connect male/male flexible connection cable

Flexible connection cable for connecting an RCoax cable or antenna to a SCALANCE W-700 access point with N-Connect connectors; pre-assembled with two N-Connect male connectors; suitable from 0 ... 6 GHz, IP68

- 1 m
- 2 m
- 5 m
- 10 m

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

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

6GK5895-6ML00-0AA0

6XV1875-5LE30
6XV1875-5LH10
6XV1875-5LH20
6XV1875-5LH50

6XV1875-5AH10
6XV1875-5AH20
6XV1875-5AH50
6XV1875-5AN10

6GK5798-2PP00-2AA6

6GK5798-2LP00-2AA6

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

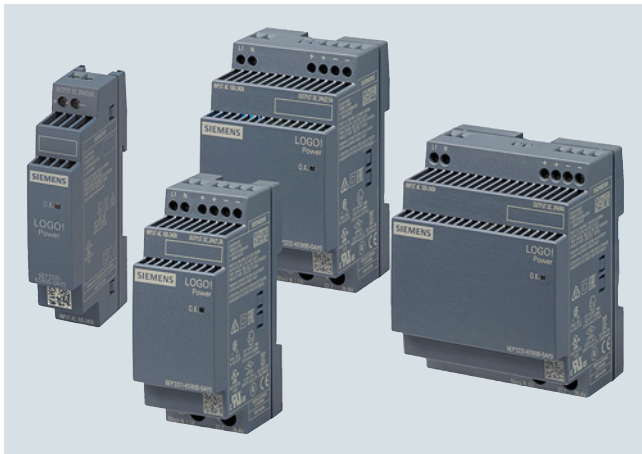
LOGO! Logic Modules

LOGO!Power

Introduction

Overview

2



The flat power supply unit for distribution boards

Small. Clever. LOGO!Power

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

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

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

Main product highlights

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

Baubreite	18 mm	36 mm	54 mm	72 mm
24 V	0,6 A	1,3 A	2,5 A	4,0 A
12 V	0,9 A	1,9 A	4,5 A	
5 V		3,0 A	6,3 A	
15 V		1,85 A	4,0 A	

Overview



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

Main product highlights

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

Technical specifications

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

LOGO! Logic Modules

LOGO!Power

1-phase, 5 V DC

Technical specifications (continued)

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

Technical specifications (continued)

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

Ordering data
Article No.
Article No.
**LOGO!Power 1-phase,
5 V DC/3 A**

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

6EP3310-6SB00-0AY0
**LOGO!Power 1-phase,
5 V DC/6.3 A**

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

6EP3311-6SB00-0AY0

LOGO! Logic Modules

LOGO!Power

1-phase, 12 V DC

Overview

2



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

Main product highlights

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

Technical specifications

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

Technical specifications (continued)

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

LOGO! Logic Modules

LOGO!Power

1-phase, 12 V DC

Technical specifications (continued)

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

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

LOGO!Power

1-phase, 15 V DC

Overview

2



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

Main product highlights

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

Technical specifications

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

Technical specifications (continued)

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

LOGO! Logic Modules

LOGO!Power

1-phase, 15 V DC

Technical specifications (continued)

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

Ordering data

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

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

Article No.

6EP3321-6SB10-0AY0

Article No.

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

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

6EP3322-6SB10-0AY0

Overview



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

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

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

Main product highlights

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

Technical specifications

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

LOGO! Logic Modules

LOGO!Power

1-phase, 24 V DC

Technical specifications (continued)

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

Technical specifications (continued)

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

LOGO! Logic Modules

LOGO!Power

1-phase, 24 V DC**Technical specifications** (continued)

Article number	6EP3330-6SB00-0AY0	6EP3331-6SB00-0AY0	6EP3332-6SB00-0AY0	6EP3333-6SB00-0AY0
Product	LOGO!Power	LOGO!Power	LOGO!Power	LOGO!Power
Power supply, type	24 V/0.6 A	24 V/1.3 A	24 V/2.5 A	24 V/4 A
Product feature of the enclosure housing for side-by-side mounting	Yes	Yes	Yes	Yes
Installation	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions	Snaps onto DIN rail EN 60715 35x7.5/15, direct mounting in different mounting positions
MTBF at 40 °C	4 415 040 h	3 094 996 h	2 864 520 h	2 391 480 h
Other information	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

Ordering data**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/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/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/4 A**

Stabilized power supply
Input: 100 ... 240 V AC
(110 ... 300 V DC)
Output: 24 V DC/4 A

6EP3333-6SB00-0AY0

Overview



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

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

Main product highlights

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

Technical specifications

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

Ordering data

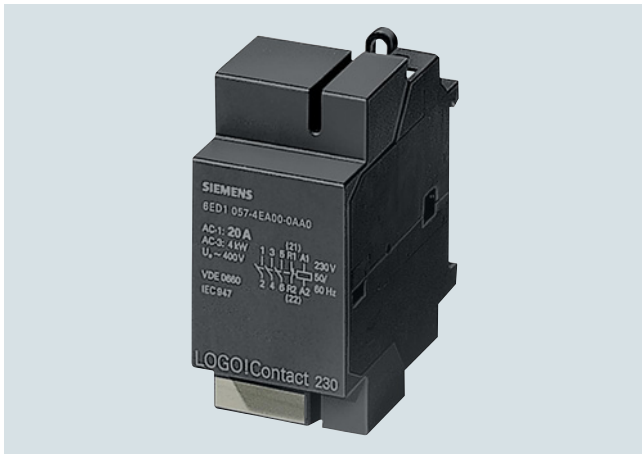
Ordering data	Article No.	Ordering data	Article No.
SIPLUS LOGO!Power 24 V 1.3 A Extended temperature range and exposure to environmental substances Input 100 ... 240 V AC Output 24 V DC, 1.3 A	6AG1331-6SB00-7AY0	SIPLUS LOGO!Power 24 V 4 A Extended temperature range and exposure to environmental substances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

LOGO! Logic Modules

LOGO! accessories

LOGO!Contact switching module**Overview**

2



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

Technical specifications

Article number	6ED1057-4CA00-0AA0	6ED1057-4EA00-0AA0
	LOGO! Contact Mod., 24 V DC, 3NO/1NC	LOGO! Contact Mod., 230 V AC, 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
Weights		
Weight, approx.	160 g	160 g

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

Switching voltage 230 V

6ED1057-4CA00-0AA0

6ED1057-4EA00-0AA0

Overview


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

Ordering data
Front panel mounting kit

Width 4 U, with keys

Width 8 U, with keys

Article No.
6AG1057-1AA00-0AA3
6AG1057-1AA00-0AA2

LOGO! Logic Modules

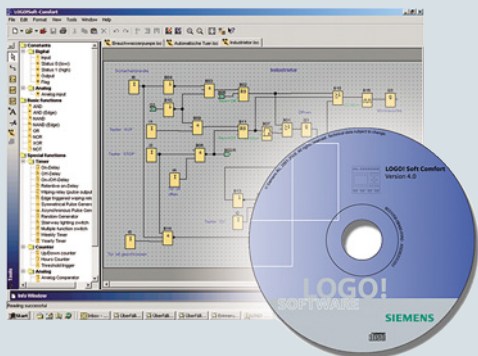
LOGO! software

LOGO! software

Overview

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

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

Minimum system requirements

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

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

Mac OS X

- Mac OS X 10.4

Linux

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