

LOGO! logic module



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LOGO! logic module

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
- 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 ambient 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, conveyor technology, food industry, etc.

Accessories:

- The front panel mounting kit also allows simple and reliable installation of the logic modules in front panels; degree of protection IP65 is thus possible.
- In order to ensure dependable operation of 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!.

More information is available at:

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

General technical specifications SIPLUS LOGO!

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

Ambient conditions

Extended range of ambient conditions	
• With reference to ambient temperature, air pressure and installation altitude	Tmin ... Tmax at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // Tmin ... (Tmax - 10K) at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // Tmin ... (Tmax - 20K) at 658 hPa ... 540 hPa (+3500 m ... +5000 m) 0 °C
Relative humidity	
• At cold restart, min. • With condensation, max.	100%; RH incl. condensation/frost (no commissioning in bedewed state)
Resistance	
• 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.

LOGO! logic module

LOGO! basic and expansion modules

LOGO! basic modules with display

Overview



- The space-saving basic versions
- 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 SD cards

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Ordering data

Article No.

Article No.

LOGO! 8 logic module

LOGO! 24CE

Supply voltage 24 V DC,
8 digital inputs 24 V DC,
of which 4 can be used
in analog mode (0 to 10 V),
4 digital outputs 24 V DC, 0.3 A,
integrated time switch,
Ethernet interface;
400 function blocks can be
interlinked, modular
expansion capability

6ED1052-1CC08-0BA1

LOGO! 12/24RCE

Supply voltage
12...24 V DC,
8 digital inputs 12/24 V DC,
of which 4 can be used
in analog mode (0 to 10 V)
4 relay outputs 10 A,
integrated time switch,
Ethernet interface;
400 function blocks can be
interlinked, modular
expansion capability

6ED1052-1MD08-0BA1

LOGO! 24RCE

Supply voltage 24 V AC/DC,
8 digital inputs 24 V AC/DC,
4 relay outputs 10 A,
integrated time switch,
Ethernet interface;
400 function blocks can be
interlinked, modular
expansion capability

6ED1052-1HB08-0BA1

LOGO! 230RCE

Supply voltage
115...230 V AC/DC,
8 digital inputs
115...230 V AC/DC,
4 relay outputs 10 A,
integrated time switch,
Ethernet interface;
400 function blocks can be
interlinked, modular
expansion capability

6ED1052-1FB08-0BA1

Accessories

LOGO! 8 Text Display HMI

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

6ED1055-4MH08-0BA1

LOGO!Soft Comfort V8

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

6ED1058-0BA08-0YA1

LOGO! Starter Kits

In TANOS Box, with LOGO!
Soft Comfort V8, WinCC Basic,
Ethernet cable

LOGO! Starter Kit 12/24RCE

With LOGO! 12/24RCE,
power supply,
screwdriver, in Systainer

6ED1057-3BA01-0AA8

LOGO! Starter Kit 230RCE

With LOGO! 230RCE,
power supply,
screwdriver, in Systainer

6ED1057-3BA03-0AA8

LOGO! Starter Kit 12/24V

With LOGO! 12/24RCE, LOGO! TD,
power supply,
screwdriver, in Systainer

6ED1057-3BA11-0AA8

Front panel mounting kit

Width 4 U, with keys
Width 8 U, with keys

6AG1057-1AA00-0AA3
6AG1057-1AA00-0AA2

LOGO! logic module

LOGO! basic and expansion modules

LOGO! basic modules with display

Technical specifications

Article number	6ED1052-1CC08-0BA1 LOGO! 24CE, 8DI(4AI)/4DO, 400 Blocks	6ED1052-1MD08-0BA1 LOGO!12/24RCE, 8DI(4AI)/4DO, 400 Blocks	6ED1052-1HB08-0BA1 LOGO! 24RCE, 8DI/4DO, 400 Blocks	6ED1052-1FB08-0BA1 LOGO!230RCE, 8DI/4DO, 400 Blocks
Display				
with display	Yes	Yes	Yes	Yes
Installation type/mounting				
Mounting	on 35 mm DIN rail, 4 spacing units wide	on 35 mm DIN rail, 4 spacing units wide	on 35 mm DIN rail, 4 spacing units wide	on 35 mm DIN rail, 4 spacing units wide
Supply voltage				
Rated value (DC)				
• 12 V DC		Yes		
• 24 V DC	Yes	Yes	Yes	
• 115 V DC				Yes
• 230 V DC				Yes; 240 V DC
Rated value (AC)				
• 24 V AC			Yes	
• 115 V AC				Yes
• 230 V AC				Yes; 240 V AC
Time of day				
Time switching clocks				
• Number	400; Max. 400, function-specific	400; Max. 400, function-specific	400; Max. 400, function-specific	400; Max. 400, function-specific
• Power reserve	480 h	480 h	480 h	480 h
Digital inputs				
Number of digital inputs	8; Of which 4 can be used in analog mode (0 to 10 V)	8; Of which 4 can be used in analog mode (0 to 10 V)	8	8
Digital outputs				
Number of digital outputs	4; Transistor	4; Relays	4; Relays	4; Relays
Short-circuit protection	Yes; electrical (1 A)	No; external fusing necessary	No; external fusing necessary	No; external fusing necessary
Output current				
• for signal "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
EMC				
Emission of radio interference acc. to EN 55 011				
• Limit class B, for use in residential areas	Yes; Radio interference suppression according to EN55011, Limit Value Class B	Yes; Radio interference suppression according to EN55011, Limit Value Class B	Yes; Radio interference suppression according to EN55011, Limit Value Class B	Yes; Radio interference suppression according to EN55011, Limit Value Class B
Standards, approvals, certificates				
CE mark	Yes	Yes	Yes	Yes
CSA approval	Yes	Yes	Yes	Yes
UL approval	Yes	Yes	Yes	Yes
FM approval	Yes	Yes	Yes	Yes
developed in accordance with IEC 61131	Yes	Yes	Yes	Yes
according to VDE 0631	Yes	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes	Yes
Ambient conditions				
Ambient temperature during operation				
• min.	-20 °C; No condensation	-20 °C; No condensation	-20 °C; No condensation	-20 °C; No condensation
• max.	55 °C	55 °C	55 °C	55 °C
Altitude during operation relating to sea level				
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)	Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)	Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)	Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)
Dimensions				
Width	71.5 mm	71.5 mm	71.5 mm	71.5 mm
Height	90 mm	90 mm	90 mm	90 mm
Depth	60 mm	60 mm	60 mm	60 mm

LOGO! logic module

LOGO! basic and expansion modules

LOGO! basic modules without display

Overview



- Basic versions 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 SD cards

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Ordering data

Article No.

Article No.

LOGO! 8 logic module

LOGO! 24CEo logic module

24 V DC supply voltage,
8 digital inputs 24 V DC, of which
4 can be used in analog mode
(0 to 10 V),
4 digital outputs 24 V DC, 0.3 A,
integral time switch
Ethernet interface;
without display and keyboard;
400 function blocks can be
interlinked, modular
expansion capability

6ED1052-2CC08-0BA1

LOGO! 12/24RCEo logic module

12...24 V DC supply voltage,
8 digital inputs 12...24 V DC,
of which 4 can be used in analog
mode (0 to 10 V),
4 relay outputs 10 A,
integrated time switch,
Ethernet interface;
without display and keyboard;
400 function blocks can be
interlinked, modular
expansion capability

6ED1052-2MD08-0BA1

LOGO! 24RCEo logic module

24 V AC/DC supply voltage,
8 digital inputs 24 V AC/DC,
4 relay outputs 10 A,
integral time switch;
Ethernet interface;
without display or keyboard;
400 function blocks can be
interlinked, modular
expansion capability

6ED1052-2HB08-0BA1

LOGO! 230RCEo logic module

115...230 V AC/DC supply voltage,
8 digital inputs 115...230 V AC/DC,
4 relay outputs 10 A,
integral time switch;
Ethernet interface;
without display or keyboard;
400 function blocks can be
interlinked, modular
expansion capability

6ED1052-2FB08-0BA1

Accessories

LOGO! TDE Text Display

6-line text display, can be
connected to all LOGO!
8 variants with and without display,
with 2 Ethernet interfaces;
incl. installation accessories.

Requires additional
12 V DC or 24 V AC/DC
power supply

6ED1055-4MH08-0BA1

LOGO!Soft Comfort V8

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

6ED1058-0BA08-0YA1

LOGO! Starter Kits

In TANOS Box,
with LOGO! Soft Comfort V8,
WinCC Basic, Ethernet cable

LOGO! Starter Kit 12/24RCE

With LOGO! 12/24RCE,
power supply,
screwdriver, in Systainer

6ED1057-3BA01-0AA8

LOGO! Starter Kit 230RCE

With LOGO! 230RCE,
power supply,
screwdriver, in Systainer

6ED1057-3BA03-0AA8

LOGO! Starter Kit 12/24V

With LOGO! 12/24RCEo, LOGO! TD,
power supply,
screwdriver, in Systainer

6ED1057-3BA11-0AA8

LOGO! logic module

LOGO! basic and expansion modules

LOGO! basic modules without display**Technical specifications**

Article number	6ED1052-2CC08-0BA1 LOGO! 24CEo, 8DI(4AI)/4DO, 400 Blocks	6ED1052-2MD08-0BA1 LOGO!12/24RCEO, 8DI(4AI)/4DO,400 Blocks	6ED1052-2HB08-0BA1 LOGO! 24RCEO, 8DI/4DO, 400 Blocks	6ED1052-2FB08-0BA1 LOGO!230RCEO, 8DI/4DO,400 Blocks
Installation type/mounting				
Mounting	on 35 mm DIN rail, 4 spacing units wide	on 35 mm DIN rail, 4 spacing units wide	on 35 mm DIN rail, 4 spacing units wide	on 35 mm DIN rail, 4 spacing units wide
Supply voltage				
Rated value (DC)				
• 12 V DC	Yes	Yes	Yes	Yes
• 24 V DC		Yes		
• 115 V DC				
• 230 V DC				
Rated value (AC)				
• 24 V AC			Yes	Yes
• 115 V AC				
• 230 V AC				
Time of day				
Time switching clocks				
• Number	400; Max. 400, function-specific	400; Max. 400, function-specific	400; Max. 400, function-specific	400; Max. 400, function-specific
• Power reserve	480 h	480 h		480 h
Digital inputs				
Number of digital inputs	8; Of which 4 can be used in analog mode (0 to 10 V)	8; Of which 4 can be used in analog mode (0 to 10 V)	8	8
Digital outputs				
Number of digital outputs	4; Transistor	4; Relays	4; Relays	4; Relays
Short-circuit protection	Yes; electrical (1 A)	No; external fusing necessary	No; external fusing necessary	No; external fusing necessary
Output current				
• for signal "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
EMC				
Emission of radio interference acc. to EN 55 011				
• Limit class B, for use in residential areas	Yes; Radio interference suppression according to EN55011, Limit Value Class B	Yes; Radio interference suppression according to EN55011, Limit Value Class B	Yes; Radio interference suppression according to EN55011, Limit Value Class B	Yes; Radio interference suppression according to EN55011, Limit Value Class B
Standards, approvals, certificates				
CE mark	Yes	Yes	Yes	Yes
CSA approval	Yes	Yes	Yes	Yes
UL approval	Yes	Yes	Yes	Yes
FM approval	Yes	Yes	Yes	Yes
developed in accordance with IEC 61131	Yes	Yes	Yes	Yes
according to VDE 0631	Yes	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes	Yes
Ambient conditions				
Ambient temperature during operation				
• min.	-20 °C; No condensation	-20 °C; No condensation	-20 °C; No condensation	-20 °C; No condensation
• max.	55 °C	55 °C	55 °C	55 °C
Altitude during operation relating to sea level				
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)	Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)	Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)	Tmin ... Tmax at 1 080 hPa ... 795 hPa (-1 000 m ... +2 000 m)
Dimensions				
Width	71.5 mm	71.5 mm	71.5 mm	71.5 mm
Height	90 mm	90 mm	90 mm	90 mm
Depth	60 mm	60 mm	60 mm	60 mm

Overview


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

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Ordering data
Article No.
Article No.
LOGO! 8 expansion modules
LOGO! DM8 24

24 V DC supply voltage,
4 digital inputs 24 V DC,
4 digital outputs 24 V DC, 0.3 A

6ED1055-1CB00-0BA2
LOGO! DM16 24

24 V DC supply voltage,
8 digital inputs 24 V DC,
8 digital outputs 24 V DC, 0.3 A

6ED1055-1CB10-0BA2
LOGO! DM8 12/24R

12...24 V DC supply voltage,
4 digital inputs 12...24 V DC,
4 relay outputs 5 A

6ED1055-1MB00-0BA2
LOGO! DM8 24R

24 V AC/DC supply voltage,
4 digital inputs 24 V AC/DC,
4 relay outputs 5 A

6ED1055-1HB00-0BA2
LOGO! DM16 24R

24 V DC supply voltage,
8 digital inputs 24 V DC,
8 relay outputs 5 A

6ED1055-1NB10-0BA2
LOGO! DM8 230R

115...230 V AC/DC supply voltage,
4 digital inputs 115...230 V AC/DC,
4 relay outputs 5 A

6ED1055-1FB00-0BA2
LOGO! DM16 230R

115...230 V AC/DC supply voltage,
8 digital inputs 115...230 V AC/DC,
8 relay outputs 5 A

6ED1055-1FB10-0BA2
LOGO! AM2

12...24 V DC supply voltage,
2 analog inputs 0 to 10 V or
0 to 20 mA, resolution 10 bits

6ED1055-1MA00-0BA2
LOGO! AM2 PT 100

12...24 V DC supply voltage,
2 analog inputs Pt100,
temperature range
-50 °C to 200 °C

6ED1055-1MD00-0BA2
LOGO! AM2 AQ

24 V DC supply voltage,
2 analog outputs 0 to 10 V,
0/4 to 20 mA

6ED1055-1MM00-0BA2
Accessories for LOGO! 8
LOGO!Soft Comfort V8

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

6ED1058-0BA08-0YA1

LOGO! logic module

LOGO! basic and expansion modules

LOGO! expansion modules

Technical specifications

Article number	6ED1055-1CB00-0BA2 LOGO! DM8 24 Exp. mod., 4DI/4DO	6ED1055-1HB00-0BA2 LOGO! DM8 24R Exp. mod. 2 U, 4DI/4DO	6ED1055-1MB00-0BA2 LOGO! DM8 12/24R Exp. mod. 2 U, 4DI/DO	6ED1055-1FB00-0BA2 LOGO! DM8 230R Exp. mod. 2 U, 4DI/4DO
Installation type/mounting				
Mounting	on 35 mm DIN rail, 2 spacing units wide	on 35 mm DIN rail, 2 spacing units wide	on 35 mm DIN rail, 2 spacing units wide	on 35 mm DIN rail, 2 spacing units wide
Supply voltage				
Rated value (DC)				
• 12 V DC	Yes	Yes	Yes	
• 24 V DC				
• 115 V DC				
• 230 V DC				
Rated value (AC)				
• 24 V AC		Yes		Yes
• 115 V AC				
• 230 V AC				
Line frequency				
• permissible range, lower limit		47 Hz		47 Hz
• permissible range, upper limit		63 Hz		63 Hz
Digital inputs				
Number of digital inputs	4	4	4	4
Input voltage				
• Type of input voltage	DC	AC/DC	DC	AC/DC
• for signal "0"	< 5 V DC	< 5 V AC/DC	< 5 V DC	< 40 V AC, < 30 V DC
• for signal "1"	> 12 V DC	> 12 V AC/DC	> 8.5 V	> 79 V AC, > 79 V DC
Input current				
• for signal "0", max. (permissible quiescent current)	0.88 mA	1.1 mA	0.88 mA	0.06 mA; 0.05 mA with AC, 0.06 mA with DC
• for signal "1", typ.	2.1 mA	2.63 mA	1.5 mA	0.13 mA
Input delay (for rated value of input voltage)				
for standard inputs				
- at "0" to "1", max.	1.5 ms	1.5 ms	1.5 ms	40 ms
- at "1" to "0", max.	1.5 ms	15 ms	1.5 ms	75 ms
Digital outputs				
Number of digital outputs	4	4; Relays	4; Relays	4; Relays
Short-circuit protection	Yes	No	No	No
Controlling a digital input		Yes	Yes	Yes
Switching capacity of the outputs				
• on lamp load, max.		1 000 W	1 000 W	1 000 W; 500 W at 115V AC
Parallel switching of two outputs				
• for uprating	No	No	No	No
Switching frequency				
• with resistive load, max.	10 Hz	2 Hz	2 Hz	2 Hz
• with inductive load, max.	0.5 Hz	0.5 Hz	0.5 Hz	0.5 Hz
• mechanical, max.		10 Hz	10 Hz	10 Hz
Relay outputs				
Switching capacity of contacts				
- with inductive load, max.		3 A	3 A	3 A
- with resistive load, max.		5 A	5 A	5 A
EMC				
Emission of radio interference acc. to EN 55 011				
• Limit class B, for use in residential areas	Yes	Yes	Yes	Yes
Degree and class of protection				
IP degree of protection	IP20	IP20	IP20	IP20

LOGO! logic module

LOGO! basic and expansion modules

LOGO! expansion modules

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Technical specifications

Article number	6ED1055-1CB00-0BA2 LOGO! DM8 24 Exp. mod., 4DI/4DO	6ED1055-1HB00-0BA2 LOGO! DM8 24R Exp. mod. 2 U, 4DI/4DO	6ED1055-1MB00-0BA2 LOGO! DM8 12/24R Exp. mod. 2 U, 4DI/DO	6ED1055-1FB00-0BA2 LOGO! DM8 230R Exp. mod. 2 U, 4DI/4DO
Standards, approvals, certificates				
CE mark	Yes	Yes	Yes	Yes
CSA approval	Yes	Yes	Yes	Yes
UL approval	Yes	Yes	Yes	Yes
FM approval	Yes	Yes	Yes	Yes
developed in accordance with IEC 61131	Yes	Yes	Yes	Yes
according to VDE 0631	Yes	Yes		Yes
Marine approval	Yes	Yes	Yes	Yes
Ambient conditions				
Ambient temperature during operation				
• min.	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C
• max.	55 °C	55 °C	55 °C	55 °C
Dimensions				
Width	35.5 mm	35.5 mm	35.5 mm	35.5 mm
Height	90 mm	90 mm	90 mm	90 mm
Depth	58 mm	58 mm	58 mm	58 mm

Article number	6ED1055-1CB10-0BA2 LOGO! DM16 24 Exp. mod., 4 U, 8DI/8DO	6ED1055-1NB10-0BA2 LOGO! DM16 24R Exp. mod. 4 U, 8DI/8DO	6ED1055-1FB10-0BA2 LOGO! DM16 230R Exp. mod. 4 U, 8DI/8DO
Installation type/mounting			
Mounting	on 35 mm DIN rail, 4 spacing units wide	on 35 mm DIN rail, 4 spacing units wide	on 35 mm DIN rail, 4 spacing units wide
Supply voltage			
Rated value (DC)	Yes	Yes	Yes Yes
• 24 V DC			
• 115 V DC			
• 230 V DC	No		Yes Yes
Rated value (AC)			
• 24 V AC			
• 115 V AC			
• 230 V AC			
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

LOGO! logic module

LOGO! basic and expansion modules

LOGO! expansion modules**Technical specifications**

Article number	6ED1055-1CB10-0BA2 LOGO! DM16 24 Exp. mod., 4 U, 8DI/8DO	6ED1055-1NB10-0BA2 LOGO! DM16 24R Exp. mod. 4 U, 8DI/8DO	6ED1055-1FB10-0BA2 LOGO! DM16 230R Exp. mod. 4 U, 8DI/8DO
Digital outputs			
Number of digital outputs	8	8; Relays	8; Relays
Short-circuit protection	Yes	No	No
Controlling a digital input		Yes	Yes
Switching capacity of the outputs			
• on lamp load, max.		1 000 W	1 000 W; 500 W at 115V AC
Parallel switching of two outputs			
• for uprating	No	No	No
Switching frequency			
• with resistive load, max.	10 Hz	2 Hz	2 Hz
• with inductive load, max.	0.5 Hz	0.5 Hz	0.5 Hz
• mechanical, max.		10 Hz	10 Hz
Relay outputs			
Switching capacity of contacts			
- with inductive load, max.		3 A	3 A
- with resistive load, max.		5 A	5 A
EMC			
Emission of radio interference acc. to EN 55 011			
• Limit class B, for use in residential areas	Yes	Yes	Yes
Degree and class of protection			
IP degree of protection	IP20	IP20	IP20
Standards, approvals, certificates			
CE mark	Yes	Yes	Yes
CSA approval	Yes	Yes	Yes
UL approval	Yes	Yes	Yes
FM approval	Yes	Yes	Yes
developed in accordance with IEC 61131	Yes	Yes	Yes
according to VDE 0631	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes
Ambient conditions			
Ambient temperature during operation			
• min.	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C
• max.	55 °C	55 °C	55 °C
Dimensions			
Width	71.5 mm	71.5 mm	71.5 mm
Height	90 mm	90 mm	90 mm
Depth	58 mm	58 mm	58 mm

Technical specifications

Article number	6ED1055-1MA00-0BA2 LOGO! AM2 Exp. mod., 12/24V, 2AI	6ED1055-1MD00-0BA2 LOGO! AM2 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		
IP degree of protection	IP20	IP20
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

LOGO! logic module

LOGO! basic and expansion modules

LOGO! expansion modules**Technical specifications**

2

Article number	6ED1055-1MM00-0BA2 LOGO! AM2 AQ, 2AQ, 0-10V, 0/4-20mA
Installation type/mounting	
Mounting	on 35 mm DIN rail, 2 spacing units wide
Supply voltage	
Rated value (DC)	24 V
Analog outputs	
Number of analog outputs	2
Output ranges, voltage	
• 0 to 10 V	Yes
Output ranges, current	
• 0 to 20 mA	Yes
• 4 mA to 20 mA	Yes
EMC	
Emission of radio interference acc. to EN 55 011	
• Limit class B, for use in residential areas	Yes
Degree and class of protection	
IP degree of protection	IP20

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 module

LOGO! basic and expansion modules

SIPLUS LOGO! basic modules with display

Overview



- The space-saving basic versions
- Interface for connecting expansion modules, up to 24 digital inputs, 20 (16) digital outputs, 8 analog inputs and 8 (2) analog outputs can be addressed
- With connection option for LOGO! TD text display (can be connected to all LOGO! 0BA6 and 0BA7 basic variants); LOGO! TDE can be connected to LOGO! 8 or higher

New for LOGO! 8

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

LOGO! 0BA7 versions:

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

Note:

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

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

Ordering data

Article No.

SIPLUS LOGO! 8 logic module

SIPLUS LOGO! 24CE

24 V DC supply voltage,
8 digital inputs 24 V DC,
of which 4 can be used in
analog mode (0 to 10 V),
4 digital outputs 24 V DC, 0.3 A,
integrated time switch
Ethernet interface;
400 function blocks can be
interlinked, modular expansion
capability

Extended temperature range and
exposure to environmental
substances

6AG1052-1CC08-7BA1

SIPLUS LOGO! 12/24RCE

12...24 V DC supply voltage,
8 digital inputs 12/24 V DC,
of which 4 can be used in analog
mode (0 to 10 V),
4 relay outputs 10 A,
integrated time switch,
Ethernet interface;
400 function blocks can be
interlinked, modular expansion
capability

Extended temperature range and
exposure to environmental
substances

6AG1052-1MD08-7BA1

SIPLUS LOGO! 24RCE

24 V AC/DC supply voltage,
8 digital inputs 24 V AC/DC,
4 relay outputs 10 A,
integrated time switch,
Ethernet interface;
400 function blocks can be
interlinked, modular expansion
capability

Extended temperature range and
exposure to environmental
substances

6AG1052-1HB08-7BA1

SIPLUS LOGO! 230RCE

115...230 V AC/DC supply voltage,
8 digital inputs 115...230 V AC/DC,
4 relay outputs 10 A,
integrated time switch,
Ethernet interface;
400 function blocks can be
interlinked, modular expansion
capability

Extended temperature range and
exposure to environmental
substances

6AG1052-1FB08-7BA1

Accessories

SIPLUS LOGO! TDE

(Extended temperature range
-25 ... +60 °C (start-up -20 °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

6AG1055-4MH08-2BA1

LOGO!Soft Comfort V8

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

6ED1058-0BA08-0YA1

Front panel mounting kit

Width 8 U, with keys

6AG1057-1AA00-0AA2

LOGO! logic module

LOGO! basic and expansion modules

SIPLUS LOGO! basic modules with display

Technical specifications

Article number	6AG1052-1CC08-7BA1	6AG1052-1MD08-7BA1	6AG1052-1FB08-7BA1	6AG1052-1HB08-7BA1
Based on	6ED1052-1CC08-0BA1	6ED1052-1MD08-0BA1	6ED1052-1FB08-0BA1	6ED1052-1HB08-0BA1
	SIPLUS LOGO! 24CE	SIPLUS LOGO! 12/24RCE	SIPLUS LOGO! 230RCE	SIPLUS LOGO! 24RCE
Ambient conditions				
Ambient temperature during operation				
• min.	-25 °C; = Tmin; Startup @ -20 °C	-25 °C; = Tmin; Startup @ -20 °C	-25 °C; = Tmin; Startup @ -20 °C	-25 °C; = Tmin; Startup @ -20 °C
• max.	60 °C; = Tmax	60 °C; Tmax; Tmax > +55 °C max. load 1 A per relay or max. load 3 A per relay and half the number of DIs (no adjacent points)	60 °C; Tmax; Tmax > +55 °C max. load 1 A per relay	70 °C; Tmax; Tmax > +55 °C max. load 1 A per relay or max. load 3 A per relay and half the number of DIs (no adjacent points)
• At cold restart, min.	-20 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	-20 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	-20 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	-20 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)
Altitude during operation relating to sea level				
• Installation altitude above sea level, max.	5 000 m	5 000 m	2 000 m	5 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
Relative humidity				
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation
Resistance				
Coolants and lubricants				
- Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems				
- to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
- to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *	Yes; Class 3S4 incl. sand, dust, *	Yes; Class 3S4 incl. sand, dust, *	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea				
- to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
- to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *

LOGO! logic module

LOGO! basic and expansion modules

SIPLUS LOGO! basic modules with display

Technical specifications

Article number	6AG1052-1CC08-7BA1	6AG1052-1MD08-7BA1	6AG1052-1FB08-7BA1	6AG1052-1HB08-7BA1
Based on	6ED1052-1CC08-0BA1	6ED1052-1MD08-0BA1	6ED1052-1FB08-0BA1	6ED1052-1HB08-0BA1
	SIPLUS LOGO! 24CE	SIPLUS LOGO! 12/24RCE	SIPLUS LOGO! 230RCE	SIPLUS LOGO! 24RCE
Usage in industrial process technology				
- Against chemically active substances acc. to EN 60654-4 - Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)
	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark				
- Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating				
• Coatings for printed circuit board assemblies acc. to EN 61086 • Protection against fouling acc. to EN 60664-3 • Military testing according to MIL-I-46058C, Amendment 7 • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability
	Yes; Type 1 protection	Yes; Type 1 protection	Yes; Type 1 protection	Yes; Type 1 protection
	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
	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A

LOGO! logic module

LOGO! basic and expansion modules

SIPLUS LOGO! basic modules without display

Overview

2



- Basic versions optimized for costs
- Interface for connecting expansion modules, up to 24 digital inputs, 16 (20) digital outputs, 8 analog inputs and 2 (8) analog outputs can be addressed
- With connection option for LOGO! TD text display (can be connected to all LOGO! 0BA6 basic variants)

New for SIPLUS LOGO! 8

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

Note:

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

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

Ordering data

Article No.

SIPLUS LOGO! 8 logic module

SIPLUS LOGO! 24CEo

24 V DC supply voltage
8 digital inputs 24 V DC,
of which 4 can be used in
analog mode (0 to 10 V)
4 digital outputs 24 V DC, 0.3 A,
Integrated time switch
Ethernet interface;
without display and keyboard
400 function blocks can be
interlinked, modular expansion
capability

Extended temperature range and
exposure to environmental substances

6AG1052-2CC08-7BA1

SIPLUS LOGO! 230RCEo

115...230 V AC/DC supply voltage
8 digital inputs 115...230 V AC/DC
4 relay outputs 10 A
Integrated time switch
Ethernet interface;
without display or keyboard
400 function blocks can be
interlinked, modular expansion
capability

Extended temperature range and
exposure to environmental substances

6AG1052-2FB08-7BA1

SIPLUS LOGO! 24RCEo

24 V AC/DC supply voltage,
8 digital inputs 24 V AC/DC,
4 relay outputs 10 A,
integrated time switch,
Ethernet interface;
without display or keyboard;
400 function blocks can be
interlinked, modular expansion
capability

Extended temperature range and
exposure to environmental substances

6AG1052-2HB08-7BA1

SIPLUS LOGO! 12/24RCEo

12...24 V DC supply voltage
8 digital inputs 12...24 V DC,
of which 4 can be used in
analog mode (0 to 10 V)
4 relay outputs 10 A
Integrated time switch
Ethernet interface;
without display and keyboard
400 function blocks can be
interlinked, modular expansion
capability

Extended temperature range and
exposure to environmental substances

6AG1052-2MD08-7BA1

Accessories

SIPLUS LOGO! TDE

(Extended temperature range
-25 ... +60 °C (start-up -20 °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

6AG1055-4MH08-2BA1

LOGO!Soft Comfort V8

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

6ED1058-0BA08-0YA1

Front panel mounting kit

Width 8 U, with keys

6AG1057-1AA00-0AA2

Technical specifications

Article number	6AG1052-2CC08-7BA1	6AG1052-2MD08-7BA1	6AG1052-2HB08-7BA1	6AG1052-2FB08-7BA1
Based on	6ED1052-2CC08-0BA1 SIPLUS LOGO! 24CEO	6ED1052-2MD08-0BA1 SIPLUS LOGO! 12/24RCEO	6ED1052-2HB08-0BA1 SIPLUS LOGO! 24RCEO (AC)	6ED1052-2FB08-0BA1 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)
Altitude during operation relating to sea level				
• Installation altitude above sea level, max.	5 000 m	5 000 m	5 000 m	2 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)
Relative humidity				
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation
Resistance				
Coolants and lubricants				
- Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems				
- to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
- to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust; *	Yes; Class 3S4 incl. sand, dust; *	Yes; Class 3S4 incl. sand, dust; *	Yes; Class 3S4 incl. sand, dust; *
Use on ships/at sea				
- to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
- to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *

LOGO! logic module

LOGO! basic and expansion modules

SIPLUS LOGO! basic modules without display**Technical specifications**

Article number	6AG1052-2CC08-7BA1	6AG1052-2MD08-7BA1	6AG1052-2HB08-7BA1	6AG1052-2FB08-7BA1
Based on	6ED1052-2CC08-0BA1 SIPLUS LOGO! 24CEO	6ED1052-2MD08-0BA1 SIPLUS LOGO! 12/24RCEO	6ED1052-2HB08-0BA1 SIPLUS LOGO! 24RCEO (AC)	6ED1052-2FB08-0BA1 SIPLUS LOGO! 230RCEO
Usage in industrial process technology				
- Against chemically active substances acc. to EN 60654-4 - Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Class 3 (excluding trichlorethylene) Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Class 3 (excluding trichlorethylene) Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Class 3 (excluding trichlorethylene) Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Class 3 (excluding trichlorethylene) Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark				
- Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating				
• Coatings for printed circuit board assemblies acc. to EN 61086 • Protection against fouling acc. to EN 60664-3 • Military testing according to MIL-I-46058C, Amendment 7 • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Class 2 for high reliability Yes; Type 1 protection Yes; Discoloration of coating possible during service life Yes; Conformal coating, Class A	Yes; Class 2 for high reliability Yes; Type 1 protection Yes; Discoloration of coating possible during service life Yes; Conformal coating, Class A	Yes; Class 2 for high reliability Yes; Type 1 protection Yes; Discoloration of coating possible during service life Yes; Conformal coating, Class A	Yes; Class 2 for high reliability Yes; Type 1 protection Yes; Discoloration of coating possible during service life Yes; Conformal coating, Class A

LOGO! logic module

LOGO! basic and expansion modules

SIPLUS LOGO! expansion modules

Overview



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

Note:

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

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

Ordering data

Article No.

SIPLUS LOGO! 8 expansion modules

SIPLUS LOGO! DM8 24

24 V DC supply voltage,
4 digital inputs 24 V DC,
4 digital outputs 24 V DC, 0.3 A

Extended temperature range and
exposure to environmental
substances

6AG1055-1CB00-7BA2

SIPLUS LOGO! DM8 230R

115...230 V AC/DC supply voltage,
4 digital inputs 115...230 V AC/DC,
4 relay outputs 5 A

Extended temperature range and
exposure to environmental
substances

6AG1055-1FB00-7BA2

SIPLUS LOGO! DM8 24R

24 V AC/DC supply voltage,
4 digital inputs 24 V AC/DC,
4 relay outputs 5 A

Extended temperature range and
exposure to 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

LOGO! AM2 RTD

12...24 V DC supply voltage,
2 analog inputs Pt100,
temperature range -50 °C to 200 °C

Extended temperature range and
exposure to environmental
substances

6AG1055-1MD00-7BA2

SIPLUS LOGO! AM2 AQ

24 V DC supply voltage,
2 analog outputs 0 to 10 V,
0/4 to 20 mA

Extended temperature range and
exposure to environmental
substances

6AG1055-1MM00-7BA2

SIPLUS LOGO! DM16 24R

24 V DC supply voltage,
8 digital inputs 24 V DC,
8 relay outputs 5 A

Extended temperature range and
exposure to environmental
substances

6AG1055-1NB10-7BA2

Accessories

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 kit

Width 8 U, with keys

6AG1057-1AA00-0AA2

LOGO! logic module

LOGO! basic and expansion modules

SIPLUS LOGO! expansion modules**Technical specifications**

Article number	6AG1055-1CB00-7BA2	6AG1055-1HB00-7BA2	6AG1055-1MB00-7BA2
Based on	6ED1055-1CB00-0BA2	6ED1055-1HB00-0BA2	6ED1055-1MB00-0BA2
	SIPLUS LOGO! DM8 24 V8	SIPLUS LOGO! DM8 24R V8	SIPLUS LOGO! DM8 12/24R V8
Ambient conditions			
Ambient temperature during operation			
- min. - max.	-40 °C; = Tmin; Startup @ -25 °C 70 °C; Tmax; Tmax > +55 °C max. load 0.2 A per output	-40 °C; = Tmin; Startup @ -25 °C 70 °C; = Tmax; Tmax > +55 °C max. load 3 A per relay or max. total current 10 A	-40 °C; = Tmin; Startup @ -25 °C 70 °C; = Tmax; Tmax > +55 °C max. load 3 A per relay or max. total current 10 A
At cold restart, min.	-25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	-25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	-25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)
Altitude during operation relating to sea level			
- Installation altitude above sea level, max. - Ambient air temperature-barometric pressure-altitude	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)	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)	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 - to chemically active substances according to EN 60721-3-3 - to mechanically 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 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 3S4 incl. sand, dust, *	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 3S4 incl. sand, dust, *	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea			
- to biologically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to mechanically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6S3 incl. sand, dust, *	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6S3 incl. sand, dust, *	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6S3 incl. sand, dust, *
Usage in industrial process technology			
- Against chemically active substances acc. to EN 60654-4 - Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Class 3 (excluding trichlorethylene) Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Class 3 (excluding trichlorethylene) Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Class 3 (excluding trichlorethylene) Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark			
Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!

Technical specifications

Article number	6AG1055-1CB00-7BA2	6AG1055-1HB00-7BA2	6AG1055-1MB00-7BA2
Based on	6ED1055-1CB00-0BA2 SIPLUS LOGO! DM8 24 V8	6ED1055-1HB00-0BA2 SIPLUS LOGO! DM8 24R V8	6ED1055-1MB00-0BA2 SIPLUS LOGO! DM8 12/24R V8
Conformal coating			
• Coatings for printed circuit board assemblies acc. to EN 61086	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability
• Protection against fouling acc. to EN 60664-3	Yes; Type 1 protection	Yes; Type 1 protection	Yes; Type 1 protection
• Military testing according to MIL-I-46058C, Amendment 7	Yes; Discoloration of coating possible during service life	Yes; Discoloration of coating possible during service life	Yes; Discoloration of coating possible during service life
• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A
Article number	6AG1055-1FB00-7BA2	6AG1055-1NB10-7BA2	
Based on	6ED1055-1FB00-0BA2 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)	
Altitude during operation relating to sea level			
• Installation altitude above sea level, max.	2 000 m	5 000 m	
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	
Relative humidity			
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	
Resistance			
Coolants and lubricants			
- Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air	
Use in stationary industrial systems			
- to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	
- to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	
- to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *	Yes; Class 3S4 incl. sand, dust, *	
Use on ships/at sea			
- to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	
- to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	
- to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *	
Usage in industrial process technology			
- Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)	
- Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	
Remark			
- Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!	

LOGO! logic module

LOGO! basic and expansion modules

SIPLUS LOGO! expansion modules**Technical specifications**

2

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
Conformal coating		
- Coatings for printed circuit board assemblies acc. to EN 61086 - Protection against fouling acc. to EN 60664-3 - Military testing according to MIL-I-46058C, Amendment 7 - Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Class 2 for high reliability Yes; Type 1 protection Yes; Discoloration of coating possible during service life Yes; Conformal coating, Class A	Yes; Class 2 for high reliability Yes; Type 1 protection Yes; Discoloration of coating possible during service life Yes; Conformal coating, Class A
Article number	6AG1055-1MA00-7BA2	6AG1055-1MD00-7BA2
Based on	6ED1055-1MA00-0BA2 SIPLUS LOGO! AM2 V8	6ED1055-1MD00-0BA2 SIPLUS LOGO! AM2 RTD
Ambient conditions		
Ambient temperature during operation		
- min. - max. - At cold restart, min.	-40 °C; = Tmin; Startup @ -25 °C 70 °C; = Tmax -25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	-40 °C; = Tmin; Startup @ -25 °C 70 °C; = Tmax -25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)
Altitude during operation relating to sea level		
- Installation altitude above sea level, max. - Ambient air temperature-barometric pressure-altitude	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)	5 000 m Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
Relative humidity		
With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation
Resistance		
Coolants and lubricants		
Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems		
- to biologically active substances according to EN 60721-3-3 - to chemically active substances according to EN 60721-3-3 - to mechanically 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 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 3S4 incl. sand, dust, *	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea		
- to biologically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to mechanically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6S3 incl. sand, dust; *
Usage in industrial process technology		
- Against chemically active substances acc. to EN 60654-4 - Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Class 3 (excluding trichlorethylene) Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Class 3 (excluding trichlorethylene) Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark		
Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!

Technical specifications

Article number	6AG1055-1MA00-7BA2	6AG1055-1MD00-7BA2
Based on	6ED1055-1MA00-0BA2 SIPLUS LOGO! AM2 V8	6ED1055-1MD00-0BA2 SIPLUS LOGO! AM2 RTD
Conformal coating		
- Coatings for printed circuit board assemblies acc. to EN 61086 - Protection against fouling acc. to EN 60664-3 - Military testing according to MIL-I-46058C, Amendment 7 - Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Class 2 for high reliability Yes; Type 1 protection Yes; Discoloration of coating possible during service life Yes; Conformal coating, Class A	Yes; Class 2 for high reliability Yes; Type 1 protection Yes; Discoloration of coating possible during service life Yes; Conformal coating, Class A
Article number	6AG1055-1MM00-7BA2	6AG1055-1MM00-7BA2
Based on	6ED1055-1MM00-0BA2 SIPLUS LOGO! AM2 AQ V8	6ED1055-1MM00-0BA2 SIPLUS LOGO! AM2 AQ V8
Ambient conditions		
Ambient temperature during operation		
- min. - max. - At cold restart, min.	-40 °C; = Tmin; Startup @ -25 °C 70 °C; = Tmax -25 °C; incl. condensation / frost permitted (no commissioning under condensation conditions)	
Altitude during operation relating to sea level		
- Installation altitude above sea level, max. - Ambient air temperature-barometric pressure-altitude	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	
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 - to chemically active substances according to EN 60721-3-3 - to mechanically 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 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 3S4 incl. sand, dust, *	
Use on ships/at sea		
- to biologically active substances according to EN 60721-3-6 - to chemically active substances according to EN 60721-3-6 - to mechanically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 6S3 incl. sand, dust; *	
Article number	6AG1055-1MM00-7BA2	6AG1055-1MM00-7BA2
Based on	6ED1055-1MM00-0BA2 SIPLUS LOGO! AM2 AQ V8	6ED1055-1MM00-0BA2 SIPLUS LOGO! AM2 AQ V8
Usage in industrial process technology		
- Against chemically active substances acc. to EN 60654-4 - Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Class 3 (excluding trichlorethylene) Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	
Remark		
Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!	
Conformal coating		
- Coatings for printed circuit board assemblies acc. to EN 61086 - Protection against fouling acc. to EN 60664-3 - Military testing according to MIL-I-46058C, Amendment 7 - Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Class 2 for high reliability Yes; Type 1 protection Yes; Discoloration of coating possible during service life Yes; Conformal coating, Class A	
Dimensions		
Width	35.5 mm	
Height	90 mm	
Depth	58 mm	

LOGO! logic module
LOGO! communications modules

LOGO! communications modules

Overview

2



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

Note on compatibility:

Communications module	Can be used with:
LOGO! CMK2000 communications module	LOGO! 8
LOGO! CIM	LOGO! 8
LOGO! CSM 12/24	LOGO! 7/8
LOGO! CMR2020	LOGO! 8
LOGO! CMR2040	LOGO! 8

LOGO! logic module

LOGO! communications modules

LOGO! CMK2000 communications module

Overview



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

Ordering data

Article No.

LOGO! CMK2000 communications module

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

6BK1700-0BA20-0AA0

Technical specifications

Article number	6BK1700-0BA20-0AA0 LOGO! CMK2000
General information	
Firmware version	
• FW update possible	Yes
Installation type/mounting	
Mounting	on 35 mm DIN rail, 4 spacing units wide
Supply voltage	
Rated value (DC)	24 V
Input current	
Current consumption, max.	0.04 A
Power loss	
Power loss, max.	1.1 W
Memory	
Flash	Yes
Time of day	
Clock synchronization	
• supported	Yes

Article number	6BK1700-0BA20-0AA0 LOGO! CMK2000
Interfaces	
Number of industrial Ethernet interfaces	1; Ethernet, 1 port, RJ45
Number of other interfaces	1; EIB/KNX
Transmission rate, max.	100 Mbit/s over Ethernet, 9 600 bit/s over KNX
Design of plug-in connection	KNX terminal 0.6 mm ² - 1.0 mm ²
Protocols	
EIB/KNX	Yes
Web server	
• supported	Yes
communication functions / header	
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	
IP degree of protection	IP20
Standards, approvals, certificates	
CE mark	Yes
CSA approval	Yes
UL approval	Yes
cULus	Yes
FM approval	No
RCM (formerly C-TICK)	No
KC approval	Yes
EAC (formerly Gost-R)	Yes
according to VDE 0631	No
Marine approval	No
Ambient conditions	
Ambient temperature during operation	
• min.	0 °C
• max.	55 °C
Relative humidity	
• Operation, max.	95 %
connection method / header	
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
Dimensions	
Width	71.5 mm; 4U
Height	90 mm
Depth	58.5 mm
Weights	
Weight, approx.	0.14 kg

LOGO! logic module

LOGO! communications modules

LOGO! CIM (Communication Interface Module)**Overview**

2



- Expansion module for LOGO! 8 basic versions
- For transmitting and receiving SMS and transmission of data from LOGO! 8.3 basic units to the AWS Cloud
- The built-in ModbusRTU interface supports ModbusRTU participants with RS232, RS485 and RS422 interface
- With an integrated GNSS receiver for tracking and transmitting the position

Note

For wireless operation, the following additional components are required (not included in the scope of delivery of LOGO! CIM):

- Wireless engine
- Antennas
- Antenna connecting cable between wireless engine and antenna port (the corresponding products are recommended in the documentation)
- SIM card with activated data transmission

Ordering data**Article No.****Communications module
LOGO! CIM (Communication
Interface Module)****6ED1055-5MC08-0BA1**

For transmitting and receiving SMS and transmission of data to the AWS Cloud

Technical specifications

Article number	6ED1055-5MC08-0BA1 LOGO! CIM
General information	
Firmware version	V1.0.0
• 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, 12/24 V AC/DC
• 12 V DC	Yes
• 24 V DC	Yes
Rated value (AC)	
• 24 V AC	No
Input current	
Current consumption, max.	1 A

Article number	6ED1055-5MC08-0BA1 LOGO! CIM
Memory	
Flash	Yes; 2 MB NOR flash
Time of day	
Clock synchronization	
• supported	Yes
Interfaces	
Number of industrial Ethernet interfaces	4; 4 ports (switch)
Number of other interfaces	1; mini PCIe interface for 4G module
Protocols	
Web server	
• supported	Yes
communication functions / header	
S7 basic communication	
• supported	Yes
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
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes
cULus	Yes
FM approval	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
developed in accordance with IEC 61131	Yes
according to VDE 0631	No
Marine approval	No
Ambient conditions	
Ambient temperature during operation	
• min.	-20 °C
• max.	55 °C
Relative humidity	
• Operation, max.	95 %; no condensation
Dimensions	
Width	71.5 mm
Height	90 mm
Depth	58.5 mm; without antenna sockets
Weights	
Weight, approx.	200 g

Overview



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

The essential features of the LOGO! CSM are:

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

Ordering data

Article No.

LOGO! CSM compact switch module Unmanaged switch for connection of one LOGO! and up to three further stations on Industrial Ethernet with 10/100 Mbps; 4 x RJ45 ports; LED diagnostics, LOGO! module • LOGO! CSM12/24 external 12 V DC or 24 V DC power supply, for LOGO! ... 0BA7/... 0BA8	6GK7177-1MA20-0AA0
Accessories IE TP cord RJ45/RJ45 TP cable 4 x 2 with 2 RJ45 plugs • 0.5 m • 1 m • 2 m • 6 m • 10 m	6XV1870-3QE50 6XV1870-3QH10 6XV1870-3QH20 6XV1870-3QH60 6XV1870-3QN10
IE FC RJ45 outlet For connecting Industrial Ethernet FC cables and TP cords; graduated prices for 10 and 50 units or more	6GK1901-1FC00-0AA0

LOGO! logic module

LOGO! communications modules

LOGO! CSM unmanaged

Technical specifications

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Article number	6GK7177-1MA20-0AA0
Product type designation	LOGO! CSM 12/24
transfer rate	
transfer rate	10 Mbit/s, 100 Mbit/s
interfaces for communication maximum configuration for modular devices	
number of electrical ports maximum	4
interfaces for communication integrated	
number of electrical connections	
• for network components or terminal equipment	4
number of 100 Mbit/s SC ports	
• for multimode	0
number of 1000 Mbit/s LC ports	
• for multimode	0
• for single mode (LD)	0
interfaces other	
number of electrical connections	
• for power supply	1
type of electrical connection	
• for power supply	3-pole terminal block
supply voltage, current consumption, power loss	
type of voltage 1 of the supply voltage	DC
• supply voltage 1 rated value	24 V
• power loss [W] 1 rated value	1.5 W
• supply voltage 1 rated value	10.2 ... 30.2 V
• consumed current 1 maximum	0.15 A
• type of electrical connection 1 for power supply	3-pole terminal block
• product component 1 fusing at power supply input	Yes
ambient conditions	
ambient temperature	
• during operation	0 ... 55 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
relative humidity	
• at 25 °C without condensation during operation maximum	90 %
protection class IP	IP20
design, dimensions and weights	
design	LOGO! module
width	71.5 mm
height	90 mm
depth	58.2 mm
net weight	0.15 kg
fastening method	
• 35 mm top hat DIN rail mounting	Yes
• wall mounting	Yes
• S7-300 rail mounting	No
• S7-1500 rail mounting	No

Article number	6GK7177-1MA20-0AA0
Product type designation	LOGO! CSM 12/24
product functions management, configuration, engineering	
product function	
• multiport mirroring	No
product function switch-managed	No
standards, specifications, approvals	
standard	
• for safety from CSA and UL reference code	UL 508, CSA C22.2 No. 142
• according to IEC 81346-2	KF
• according to IEC 81346-2:2019	KFE
standards, specifications, approvals CE	
certificate of suitability CE marking	Yes
standards, specifications, approvals hazardous environments	
standard for hazardous zone	ATEX: EN 60079-0 : 2009, EN 60079-15 :2010 (Directive 94/9/EC), IECEx: IEC 60079-0 :2011, IEC 60079-15 :2010
• from CSA and UL	Haz-Loc ANSI/ISA 12.12.01: CL I, Div2, Group A,B,C,D T4, CL I, Zone 2, Group IIC, T4, Ta=55°C
certificate of suitability	
• CCC for hazardous zone according to GB standard	Yes
standards, specifications, approvals other	
certificate of suitability	
• C-Tick	Yes
• KC approval	No
standards, specifications, approvals marine classification	
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• French marine classification society (BV)	No
• Det Norske Veritas (DNV)	No
• Germanische Lloyd (GL)	No
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (NK)	No
• Polski Rejestr Statkow (PRS)	No

Overview


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

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

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

The LOGO! CMR offers convenient commissioning and diagnostics in web-based management via local and/or secure remote access.

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

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

Product version:

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

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

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

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

Ordering data
Article No.
LOGO! CMR communications module radio

Communications modules for connection of LOGO! 8 to GSM/GPRS or LTE network;
 1x RJ45 port for Industrial Ethernet connection;
 2x digital input;
 2x digital output;
 read/write access to LOGO! tags;
 possible to send/receive text messages;
 GPS position detection;
 time-of-day synchronization/forwarding with real-time clock;
 configuration and diagnostics via web interface;
 Please note country approvals under:
<http://www.siemens.com/mobilenetwork-approvals>

LOGO! CMR2020

For connecting LOGO! 8 to a GSM/GPRS network;

6GK7142-7BX00-0AX0
LOGO! CMR2040

For connecting LOGO! 8 to an LTE network;

6GK7142-7EX00-0AX0
Accessories
Mobile wireless antennas
ANT794-4MR

For indoor and outdoor use;
 5 m connecting cable permanently connected to antenna;
 SMA plug; incl. mounting bracket, screws, wall plugs

6NH9860-1AA00
ANT896-4M

Rod antenna for direct mounting on device; SMA male connector

6GK5896-4MA00-0AA3
ANT896-4ME

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

6GK5896-4ME00-0AA0
GPS antenna
ANT895-6ML

GPS/Glonass antenna for remote indoor and outdoor installation, magnet or screw mounting, 30 cm cable with N-Connect female connector

6GK5895-6ML00-0AA0
Antenna adapter cable

N-Connect/SMA male/male flexible connecting cable, pre-assembled, connecting cable;
 suitable for 0 ... 6 GHz, IP68

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

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

LOGO! logic module

LOGO! communications modules

LOGO! CMR (wireless communication)

2

Ordering data**Article No.****Article No.****IWLAN RCoax/
antenna N-Connect male/male
flexible connection cable**

Flexible connecting cable for connecting an RCoax cable or antenna to a SCALANCE W700 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

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

Cabinet bushing

IWLAN RCOAX N-Connect/
N-Connect female/female panel
feedthrough;
Control cabinet feedthrough
for wall thickness max. 4.5 mm;
2.4 GHz and 5 GHz,
suitable from 0 ... 6 GHz, IP67

6GK5798-2PP00-2AA6

LP798-2N lightning protector

Lightning protector with N/N
female/female connector for
ANT 790 antennas,
IP67 (-40 to +85 °C),
frequency range: 0 ... 6 GHz

6GK5798-2LP00-2AA6

Patch cable**IE TP cord RJ45/RJ45**

TP cable 4 x 2 with 2 RJ45 plugs

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

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

IE FC RJ45 outlet

For connection of Industrial
Ethernet FC cables and TP cords;
graded prices from 10 and 50 units

6GK1901-1FC00-0AA0

LOGO! CSM12/24

Compact switch module for
connecting a LOGO!
(...0BA7/...0BA8) and
up to 3 additional nodes to
Industrial Ethernet;
12/24 V DC power supply

6GK7177-1MA20-0AA0

**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 wireless antenna prepared;
please order the required quantity of
cable glands and blanking 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
wireless antenna prepared;
please order the required quantity of
cable glands and blanking 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

**Blanking plug M16 for IP68
enclosure**

Blanking 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

Technical specifications

Article number	6GK7142-7BX00-0AX0	6GK7142-7EX00-0AX0
Product type designation	CMR2020	CMR2040
transfer rate		
transfer rate		
• at the 1st interface	10 ... 100 Mbit/s	10 ... 100 Mbit/s
• for GPRS transmission		
- with downlink maximum	80 kbit/s	85.6 kbit/s
- with uplink maximum	40 kbit/s	85.6 kbit/s
• for LTE transmission		
- with downlink maximum		100 Mbit/s
- with uplink maximum		50 Mbit/s
interfaces		
number of interfaces according to Industrial Ethernet	1	1
number of electrical connections		
• at the 1st interface according 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 according to Industrial Ethernet	RJ45 port	RJ45 port
type of electrical connection		
• for external antenna(s)	SMA socket (50 ohms)	SMA socket (50 ohms)
• for power supply	3-pole terminal block	3-pole terminal block
type of antenna		
• at connection 1 connectable	GPS Antenna	GPS Antenna
• at connection 2 connectable	Mobile radio antenna (GPRS/GSM)	Mobile radio antenna (GPRS/GSM, UMTS, LTE)
wire length of antenna wire maximum	15 m	15 m
slot version		
• for SIM card	Standard	Standard
• of the memory card	microSD	microSD
storage capacity of the memory card maximum	32 Gbyte	32 Gbyte
performance class of the memory card minimum necessary	Class 6	Class 6
type of file system type of file system	FAT32	FAT32
signal inputs/outputs		
number of electrical connections for digital input signals	2	2
type of electrical connection for digital input signals	3 pole terminal block	3 pole terminal block
digital input version	not galvanically isolated, not debounced	not galvanically isolated, not debounced
input voltage at digital input		
• with signal <0> at DC	0 ... 5 V	0 ... 5 V
• for signal <1> at DC	8.5 ... 24 V	8.5 ... 24 V
input current at digital input for signal <1> maximum	5.5 mA	5.5 mA
number of electrical connections for digital output signals	2	2

LOGO! logic module

LOGO! communications modules

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

2

Article number	6GK7142-7BX00-0AX0	6GK7142-7EX00-0AX0
Product type designation	CMR2020	CMR2040
type of electrical connection for digital output signals	3 pole terminal block	3 pole terminal block
digital output version	transistor, not potential seperated	transistor, not potential seperated
output voltage at digital output		
• for signal <1>	12 ... 24 V; Value of the actual supply voltage	12 ... 24 V; Value of the actual supply voltage
• for signal <0>	0 ... 5 V	0 ... 5 V
output current at digital output for signal <1> maximum	0.3 A	0.3 A
wireless technology		
type of mobile wireless service		
• is supported SMS	Yes	Yes
• is supported GPRS	Yes	Yes
• note	GPRS (Multislot Class 10, Mobile Station Class B)	LTE
type of wireless network is supported		
• GSM	Yes	Yes
• UMTS	No	Yes
• LTE	No	Yes
operating frequency for GSM transmission	operating frequency for GSM transmission 850 MHz, operating frequency for GSM transmission 900 MHz, operating frequency for GSM transmission 1800 MHz, operating frequency for GSM transmission 1900 MHz	operating frequency for GSM transmission 900 MHz, operating frequency for GSM transmission 1800 MHz
operating frequency with UMTS transmission		operating frequency with UMTS transmission 850 MHz, operating frequency with UMTS transmission 900 MHz, operating frequency with UMTS transmission 2100 MHz
operating frequency for LTE transmission		operating frequency for LTE transmission 800 MHz, operating frequency for LTE transmission 1800 MHz, operating frequency for LTE transmission 2600 MHz
supply voltage, current consumption, power loss		
type of voltage of the supply voltage	DC	DC
supply voltage external	12 ... 24 V	12 ... 24 V
supply voltage external at DC	12 ... 24 V	12 ... 24 V
supply voltage for GPS antenna maximum	3.8 V; at 5 mA: 3,575 V / at 10 mA: 3,35 V / at 15 mA: 3,125 V	3.8 V; at 5 mA: 3,575 V / at 10 mA: 3,35 V / at 15 mA: 3,125 V
relative positive tolerance at DC at 24 V	20 %	20 %
relative negative tolerance at DC at 12 V	10 %	10 %
consumed current		
• from external supply voltage at DC at 12 V maximum	0.25 A	0.25 A
• from external supply voltage at DC at 24 V maximum	0.125 A	0.125 A
output current for GPS antenna maximum	15 mA	15 mA
power loss [W]	3 W	3 W
ambient conditions		
ambient temperature		
• during operation	-20 ... +70 °C	-20 ... +70 °C
• during storage	-40 ... +85 °C	-40 ... +85 °C
• during transport	-40 ... +85 °C	-40 ... +85 °C
relative humidity		
• at 25 °C without condensation during operation maximum	95 %	95 %
protection class IP	IP20	IP20

Technical specifications

Article number	6GK7142-7BX00-0AX0	6GK7142-7EX00-0AX0
Product type designation	CMR2020	CMR2040
design, dimensions and weights		
module format	Compact module, for rail mounting	Compact module, for rail mounting
width	71.5 mm	71.5 mm
height	90 mm	90 mm
depth	58.2 mm	58.2 mm
net weight	0.16 kg	0.16 kg
fastening method		
• 35 mm top hat DIN rail mounting	Yes	Yes
• wall mounting	Yes	Yes
product features, product functions, product components general		
product function		
• DynDNS client	Yes	Yes
• no-ip.com client	Yes	Yes
performance data		
number of possible connections to the LOGO! logic module	1	1
number of users/telephone numbers/email addresses definable maximum	20	20
number of user groups definable maximum	10	10
number of signals for monitoring or device control definable maximum	32	32
number of events for monitoring definable maximum	32	32
number of actions definable maximum	32	32
number of assignments definable maximum	32	32
number of alias SMS commands definable maximum	20	20
number of constants definable maximum	10	10
performance data IT functions		
number of possible connections		
• as server by means of HTTP maximum	2	2
• as server by means of HTTPS maximum	2; http and https can be combined (max. number of 2 connections cannot be exceeded). Max. one connection via https is possible on the mobile wireless interface.	2; http and https can be combined (max. number of 2 connections cannot be exceeded). Max. one connection via https is possible on the mobile wireless interface.
• as email client maximum	1	1
number of free texts for emails and SMS maximum	20	20
number of characters per free text for emails or SMS maximum	160	160
performance data teleservice		
product function		
• remote firmware update	Yes	Yes
• remote configuration	Yes	Yes
product functions management, configuration, engineering		
configuration software		
• required	Web interface	Web interface
product functions diagnostics		
product function web-based diagnostics	Yes	Yes

LOGO! logic module

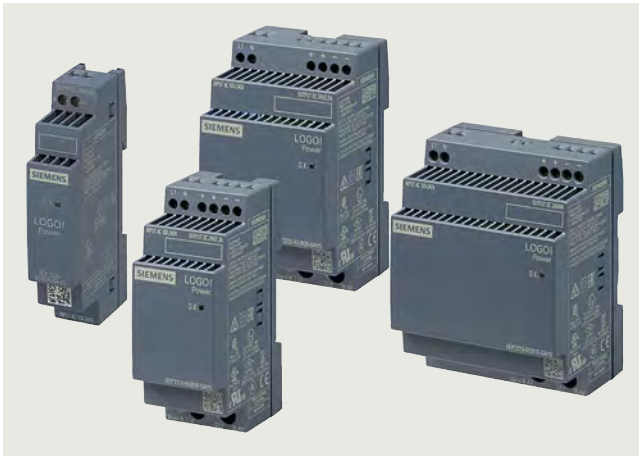
LOGO! communications modules

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

2

Article number	6GK7142-7BX00-0AX0	6GK7142-7EX00-0AX0
Product type designation	CMR2020	CMR2040
product functions security		
operating mode Virtual Private Network (VPN)	Yes; Open VPN Server in PSK mode	Yes; Open VPN Server in PSK mode
product function with VPN connection	OpenVPN PSK	OpenVPN PSK
type of encryption algorithms with VPN connection	AES-128 CBC	AES-128 CBC
type of authentication with Virtual Private Network PSK	Yes	Yes
type of hashing algorithms with VPN connection	SHA-256	SHA-256
number of possible connections with VPN connection	1	1
product function		
• password protection for Web applications	Yes	Yes
• password protection for VPN	Yes	Yes
• encrypted data transmission	Yes	Yes
• switch-off of non-required services	Yes	Yes
• log file for unauthorized access	Yes	Yes
product functions time		
product function pass on time synchronization	Yes	Yes
accuracy of the hardware real time clock per day maximum	7.5 s	7.5 s
time synchronization		
• from NTP-server	Yes	Yes
• from GPS-signal	Yes	Yes
• from mobile network provider	Yes	Yes
• PC	Yes	Yes
• manual setting	Yes	Yes
product functions position detection		
product function		
• position detection with GPS	Yes	Yes
• pass on position data	Yes	Yes
standards, specifications, approvals hazardous environments		
certificate of suitability CCC for hazardous zone according to GB standard	Yes	Yes

Overview



The flat power supply unit for distribution boards

Small. Clever. LOGO!Power: Thanks to its stepped profile design, the LOGO! 8 product line is ideally suited for installation in small distribution boards. The 12 V and 24 V versions are ideal for supplying LOGO! controllers with the corresponding voltage input. The high level of efficiency across the entire load range as well as the low no-load losses result in lower overall energy consumption. Greater convenience when commissioning and servicing thanks to the integrated current monitor. The extended ambient temperature range from -25 °C to +70 °C enables a host of additional applications.

To further increase 24 V availability, the 24 V LOGO!Power power supplies can be combined with the **buffer module BUF1200**, **DC UPS**, **redundancy** and **selectivity modules**.

This powerhouse can be used in any industry: e.g. in building technology applications for light and heating controllers or for access control systems. LOGO!Power is also well-suited for use in industrial automation, such as in packaging machine, machine tool, conveyor belt or sorting system applications.

Product highlights of the product line

- Low width
with minimum of 18 mm to maximum of 72 mm, thus requiring very little space in the control cabinet or distribution board
- High energy efficiency
with efficiency levels of up to 90% over the entire performance range and ERP-compliant no-load losses of < 0.3 W
- Global use
due to operating temperature range from -25 °C to +70 °C and international certificates
- Supply
of NEC Class 2 electric circuits with limited output current (100 VA)
- Load monitoring via current monitor
using real-time measurement of the output current without disconnecting the cable, i.e. without interrupting the DC supply
- Flexible mounting
with top hat DIN rail or wall mounting in different installation positions
- Flexible operation
in all standard 1-phase supply networks thanks to wide-range input of 100 ... 240 V AC without switchover and operation on DC networks with 110 ... 300 V DC
- Reliability
due to problem-free connection of loads with high inrush currents thanks to power reserve during startup as well as constant current in the event of overload

Overall width	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		1.9 A	4.0 A	

LOGO! logic module**LOGO!Power****1-phase, 5 V DC****Overview**

2



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

Product highlights

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

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

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

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

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

6EP3311-6SB00-0AY0**Technical specifications**

Article number	6EP3310-6SB00-0AY0	6EP3311-6SB00-0AY0
Product	LOGO!Power	LOGO!Power
Power supply, type	5 V/3 A	5 V/6.3 A
Input		
type of the power supply network	1-phase AC or DC	1-phase AC or DC
supply voltage at AC		
• minimum rated value	100 V	100 V
• maximum rated value	240 V	240 V
• initial value	85 V	85 V
• full-scale value	264 V	264 V
input voltage		
• at DC	110 ... 300 V	110 ... 300 V
design of input wide range input	Yes	Yes
overvoltage overload capability	300 V AC for 1 s	300 V AC for 1 s
operating condition of the mains buffering	at $V_{in} = 187$ V	at $V_{in} = 187$ V
buffering time for rated value of the output current in the event of power failure minimum	40 ms	40 ms
operating condition of the mains buffering	at $V_{in} = 187$ V	at $V_{in} = 187$ V
line frequency		
• 1 rated value	50 Hz	50 Hz
• 2 rated value	60 Hz	60 Hz
line frequency	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
current limitation of inrush current at 25 °C maximum	26 A	50 A
I ² t value maximum	0.8 A ² ·s	3 A ² ·s
fuse protection type	internal	internal
• in the feeder	Recommended miniature circuit breaker: from 6 A characteristic B or from 2 A characteristic C	Recommended miniature circuit breaker: from 10 A characteristic B or from 6 A characteristic C

Technical specifications

Article number	6EP3310-6SB00-0AY0	6EP3311-6SB00-0AY0
Product	LOGO!Power	LOGO!Power
Power supply, type	5 V/3 A	5 V/6.3 A
Output		
voltage curve at output	Controlled, isolated DC voltage	Controlled, isolated DC voltage
output voltage at DC rated value	5 V	5 V
output voltage		
• at output 1 at DC rated value	5 V	5 V
relative overall tolerance of the voltage	3 %	3 %
relative control precision of the output voltage		
• on slow fluctuation of input voltage	0.1 %	0.1 %
• on slow fluctuation of ohm loading	0.1 %	0.1 %
residual ripple		
• maximum	100 mV	100 mV
• typical	30 mV	30 mV
voltage peak		
• maximum	100 mV	100 mV
• typical	50 mV	50 mV
adjustable output voltage	4.6 ... 5.4 V	4.6 ... 5.4 V
product function output voltage adjustable	Yes	Yes
type of output voltage setting	via potentiometer	via potentiometer
display version for normal operation	Green LED for output voltage OK	Green LED for output voltage OK
behavior of the output voltage when switching on	No overshoot of V_{out} (soft start)	No overshoot of V_{out} (soft start)
response delay maximum	0.5 s	0.5 s
voltage increase time of the output voltage		
• typical	100 ms	100 ms
output current		
• rated value	3 A	6.3 A
• rated range	0 ... 3 A; +55 ... +70 °C: Derating 2%/K	0 ... 6.3 A; +55 ... +70 °C: Derating 2%/K
supplied active power typical	15 W	31.5 W
product feature		
• bridging of equipment	Yes	Yes
number of parallel-switched equipment resources for increasing the power	2	2
Efficiency		
efficiency in percent	76 %	80 %
power loss [W]		
• at rated output voltage for rated value of the output current typical	5 W	8 W
• during no-load operation maximum	0.3 W	0.3 W
Closed-loop control		
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.2 %	0.2 %
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	5 %	7 %
setting time		
• load step 10 to 90% typical	1 ms	1 ms
• load step 90 to 10% typical	1 ms	1 ms

LOGO! logic module

LOGO!Power

1-phase, 5 V DC

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
Protection and monitoring		
design of the overvoltage protection	Yes, according to EN 60950-1	Yes, according to EN 60950-1
response value current limitation typical	3.8 A	8.2 A
property of the output short-circuit proof	Yes	Yes
design of 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
display version for overload and short circuit	-	-
measuring point for output current	50 mV $\approx$ 3 A	50 mV $\approx$ 6.3 A
overcurrent overload capability when switching on	150% $I_{out rated}$ typ. 200 ms	150% $I_{out rated}$ typ. 200 ms
Safety		
galvanic isolation between input and output	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
operating resource protection class	Class II (without protective conductor)	Class II (without protective conductor)
protection class IP	IP20	IP20
Approvals		
certificate of suitability		
• CE marking	Yes	Yes
• UL approval	Yes; 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)	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273
• CSA approval	Yes; 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)	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273
• cCSAus, Class 1, Division 2	No	No
• ATEX	No	No
certificate of suitability		
• IECEX	No	No
• NEC Class 2	Yes	No
• ULhazloc approval	No	No
• FM registration	No	No
type of certification CB-certificate	Yes	Yes
certificate of suitability		
• EAC approval	Yes	Yes
certificate of suitability shipbuilding approval	Yes	Yes
shipbuilding approval	ABS, BV, DNV GL, LRS	ABS, BV, DNV GL, LRS
Marine classification association		
• American Bureau of Shipping Europe Ltd. (ABS)	Yes	Yes
• French marine classification society (BV)	Yes	Yes
• DNV GL	Yes	Yes
• Lloyds Register of Shipping (LRS)	Yes	Yes
• Nippon Kaiji Kyokai (NK)	No	No
EMC		
standard		
• for emitted interference	EN 55022 Class B	EN 55022 Class B
• for mains harmonics limitation	not applicable	not applicable
• for interference immunity	EN 61000-6-2	EN 61000-6-2

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
environmental conditions		
ambient temperature		
• during operation	-25 ... +70 °C; with natural convection	-25 ... +70 °C; with natural convection
• during transport	-40 ... +85 °C	-40 ... +85 °C
• during storage	-40 ... +85 °C	-40 ... +85 °C
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation	Climate class 3K3, 5 ... 95% no condensation
Mechanics		
type of electrical connection	screw-type terminals	screw-type terminals
• at 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
• at output	+, -: 1 screw terminal each for 0.5 ... 2.5 mm ²	+, -: 1 screw terminal each for 0.5 ... 2.5 mm ²
• for auxiliary contacts	-	-
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
net weight	0.12 kg	0.2 kg
product feature of the enclosure housing can be lined up	Yes	Yes
fastening method	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)

LOGO! logic module**LOGO!Power****1-phase, 12 V DC****Overview**

2



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

Product highlights

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

Ordering data**Article No.****Article No.****LOGO!Power 1-phase, 12 V DC/0.9 A**

Stabilized power supply
Input: 100 ... 240 V AC
(110 ... 300 V DC)
Output: 12 V DC/0.9 A

6EP3320-6SB00-0AY0**LOGO!Power 1-phase, 12 V DC/1.9 A**

Stabilized power supply
Input: 100 ... 240 V AC
(110 ... 300 V DC)
Output: 12 V DC/1.9 A

6EP3321-6SB00-0AY0**LOGO!Power 1-phase, 12 V DC/4.5 A**

Stabilized power supply
Input: 100 ... 240 V AC
(110 ... 300 V DC)
Output: 12 V DC/4.5 A

6EP3322-6SB00-0AY0**Add-on modules****SITOP redundancy modules RED1200**

For more information, visit:
<http://www.siemens.com/sitop-redundancy/mall>

Technical specifications

Article number	6EP3320-6SB00-0AY0	6EP3321-6SB00-0AY0	6EP3322-6SB00-0AY0
Product	LOGO!Power	LOGO!Power	LOGO!Power
Power supply, type	12 V/0.9 A	12 V/1.9 A	12 V/4.5 A
Input			
type of the power supply network	1-phase AC or DC	1-phase AC or DC	1-phase AC or DC
supply voltage at AC			
• minimum rated value	100 V	100 V	100 V
• maximum rated value	240 V	240 V	240 V
• initial value	85 V	85 V	85 V
• full-scale value	264 V	264 V	264 V
input voltage			
• at DC	110 ... 300 V	110 ... 300 V	110 ... 300 V
design of input wide range input	Yes	Yes	Yes
overvoltage overload capability	300 V AC for 1 s	300 V AC for 1 s	300 V AC for 1 s
operating condition of the mains buffering	at $V_{in} = 187$ V	at $V_{in} = 187$ V	at $V_{in} = 187$ V
buffering time for rated value of the output current in the event of power failure minimum	40 ms	40 ms	40 ms
operating condition of the mains buffering	at $V_{in} = 187$ V	at $V_{in} = 187$ V	at $V_{in} = 187$ V
line frequency			
• 1 rated value	50 Hz	50 Hz	50 Hz
• 2 rated value	60 Hz	60 Hz	60 Hz
line frequency	47 ... 63 Hz	47 ... 63 Hz	47 ... 63 Hz
input current			

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
- at rated input voltage 120 V - at rated input voltage 230 V	0.3 A	0.53 A	1.13 A
current limitation of inrush current at 25 °C maximum	0.2 A	0.3 A	0.61 A
	20 A	25 A	50 A
I ² t value maximum	0.8 A ² ·s	0.8 A ² ·s	3 A ² ·s
fuse protection type	internal	internal	internal
in the feeder	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
Output			
voltage curve at output	Controlled, isolated DC voltage	Controlled, isolated DC voltage	Controlled, isolated DC voltage
output voltage at DC rated value	12 V	12 V	12 V
output voltage			
at output 1 at DC rated value	12 V	12 V	12 V
relative overall tolerance of the voltage	3 %	3 %	3 %
relative control precision of the output voltage			
on slow fluctuation of input voltage	0.1 %	0.1 %	0.1 %
on slow fluctuation of ohm loading	0.1 %	0.1 %	0.1 %
residual ripple			
maximum	200 mV	200 mV	200 mV
typical	30 mV	30 mV	30 mV
voltage peak			
maximum	300 mV	300 mV	300 mV
typical	50 mV	50 mV	50 mV
adjustable output voltage		10.5 ... 16.1 V	10.5 ... 16.1 V
product function output voltage adjustable	No	Yes	Yes
type of output voltage setting		via potentiometer	via potentiometer
display version for normal operation	Green LED for output voltage OK	Green LED for output voltage OK	Green LED for output voltage OK
behavior of the output voltage when switching on	No overshoot of V _{out} (soft start)	No overshoot of V _{out} (soft start)	No overshoot of V _{out} (soft start)
response delay maximum	0.5 s	0.5 s	0.5 s
voltage increase time of the output voltage			
typical	100 ms	100 ms	100 ms
output current			
rated value	0.9 A	1.9 A	4.5 A
rated range	0 ... 0.9 A; +55 ... +70 °C: Derating 2%/K	0 ... 1.9 A; +55 ... +70 °C: Derating 2%/K	0 ... 4.5 A; +55 ... +70 °C: Derating 2%/K
supplied active power typical	10.8 W	22.8 W	54 W
product feature			
bridging of equipment	No	Yes	Yes
number of parallel-switched equipment resources for increasing the power		2	2
Efficiency			
efficiency in percent	78 %	81 %	87.1 %
power loss [W]			
at rated output voltage for rated value of the output current typical	3 W	5 W	8 W
during no-load operation maximum	0.3 W	0.3 W	0.3 W
Closed-loop control			
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.2 %	0.2 %	0.2 %

LOGO! logic module

LOGO!Power

1-phase, 12 V DC

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
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	3 %	2 %	4 %
setting time			
• load step 10 to 90% typical	1 ms	1 ms	1 ms
• load step 90 to 10% typical	1 ms	1 ms	1 ms
Protection and monitoring			
design of the overvoltage protection	Yes, according to EN 60950-1	Yes, according to EN 60950-1	Yes, according to EN 60950-1
response value current limitation typical	1.3 A	2.5 A	5 A
property of the output short-circuit proof	Yes	Yes	Yes
design of 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
display version for overload and short circuit	-	-	-
measuring point for output current		50 mV $\approx$ 1.9 A	50 mV $\approx$ 4.5 A
overcurrent overload capability when switching on	150% $I_{out rated}$ typ. 200 ms	150% $I_{out rated}$ typ. 200 ms	150% $I_{out rated}$ typ. 200 ms
Safety			
galvanic isolation between input and output	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
operating resource protection class	Class II (without protective conductor)	Class II (without protective conductor)	Class II (without protective conductor)
protection class IP	IP20	IP20	IP20
Approvals			
certificate of suitability			
• CE marking	Yes	Yes	Yes
• UL approval	Yes; 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)	Yes; 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)	Yes; 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)
• CSA approval	Yes; 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)	Yes; 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)	Yes; 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)
• cCSAus, Class 1, Division 2	No	No	No
• ATEX	No	No	No
certificate of suitability			
• IECEX	No	No	No
• NEC Class 2	Yes	Yes	No
• ULhazloc approval	No	No	No
• FM registration	No	No	No
type of certification CB-certificate	Yes	Yes	Yes
certificate of suitability			
• EAC approval	Yes	Yes	Yes
certificate of suitability shipbuilding approval	Yes	Yes	Yes
shipbuilding approval	ABS, BV, DNV GL, LRS	ABS, BV, DNV GL, LRS	ABS, BV, DNV GL, LRS
Marine classification association			
• American Bureau of Shipping Europe Ltd. (ABS)	Yes	Yes	Yes
• French marine classification society (BV)	Yes	Yes	Yes
• DNV GL	Yes	Yes	Yes
• Lloyds Register of Shipping (LRS)	Yes	Yes	Yes
• Nippon Kaiji Kyokai (NK)	No	No	No

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
EMC			
standard			
• for emitted interference	EN 55022 Class B	EN 55022 Class B	EN 55022 Class B
• for mains harmonics limitation	not applicable	not applicable	not applicable
• for interference immunity	EN 61000-6-2	EN 61000-6-2	EN 61000-6-2
environmental conditions			
ambient temperature			
• during operation	-25 ... +70 °C; with natural convection	-25 ... +70 °C; with natural convection	-25 ... +70 °C; 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
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation	Climate class 3K3, 5 ... 95% no condensation	Climate class 3K3, 5 ... 95% no condensation
Mechanics			
type of electrical connection	screw-type terminals	screw-type terminals	screw-type terminals
• at 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
• at 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
• for auxiliary contacts	-	-	-
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
net weight	0.07 kg	0.12 kg	0.2 kg
product feature of the enclosure housing can be lined up	Yes	Yes	Yes
fastening method	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)

LOGO! logic module**LOGO!Power****1-phase, 15 V DC****Overview**

2



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

Product highlights

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

Ordering data**Article No.****LOGO!Power 1-phase,
15 V DC/1.9 A**

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

6EP3321-6SB10-0AY0**LOGO!Power 1-phase,
15 V DC/4 A**

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

6EP3322-6SB10-0AY0**Article No.****Add-on modules****SITOP redundancy modules
RED1200**

For more information, visit:
<http://www.siemens.com/sitop-redundancy/mall>

Technical specifications

Article number	6EP3321-6SB10-0AY0	6EP3322-6SB10-0AY0
Product	LOGO!Power	LOGO!Power
Power supply, type	15 V/1.9 A	15 V/4 A
Input		
type of the power supply network	1-phase AC or DC	1-phase AC or DC
supply voltage at AC		
• minimum rated value	100 V	100 V
• maximum rated value	240 V	240 V
• initial value	85 V	85 V
• full-scale value	264 V	264 V
input voltage		
• at DC	110 ... 300 V	110 ... 300 V
design of input wide range input	Yes	Yes
overvoltage overload capability	300 V AC for 1 s	300 V AC for 1 s
operating condition of the mains buffering	at $V_{in} = 187$ V	at $V_{in} = 187$ V
buffering time for rated value of the output current in the event of power failure minimum	40 ms	40 ms
operating condition of the mains buffering	at $V_{in} = 187$ V	at $V_{in} = 187$ V
line frequency		
• 1 rated value	50 Hz	50 Hz
• 2 rated value	60 Hz	60 Hz
line frequency	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

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
current limitation of inrush current at 25 °C maximum	25 A	55 A
I ² t value maximum	0.8 A ² ·s	3 A ² ·s
fuse protection type	internal	internal
• in the feeder	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
Output		
voltage curve at output	Controlled, isolated DC voltage	Controlled, isolated DC voltage
output voltage at DC rated value	15 V	15 V
output voltage		
• at output 1 at DC rated value	15 V	15 V
relative overall tolerance of the voltage	3 %	3 %
relative control precision of the output voltage		
• on slow fluctuation of input voltage	0.1 %	0.1 %
• on slow fluctuation of ohm loading	0.1 %	0.1 %
residual ripple		
• maximum	200 mV	200 mV
• typical	30 mV	30 mV
voltage peak		
• maximum	300 mV	300 mV
• typical	50 mV	50 mV
adjustable output voltage	10.5 ... 16.1 V	10.5 ... 16.1 V
product function output voltage adjustable	Yes	Yes
type of output voltage setting	via potentiometer	via potentiometer
display version for normal operation	Green LED for output voltage OK	Green LED for output voltage OK
behavior of the output voltage when switching on	No overshoot of V_{out} (soft start)	No overshoot of V_{out} (soft start)
response delay maximum	0.5 s	0.5 s
voltage increase time of the output voltage		
• typical	100 ms	100 ms
output current		
• rated value	1.9 A	4 A
• rated range	0 ... 1.9 A; +55 ... +70 °C: Derating 2%/K	0 ... 4 A; +55 ... +70 °C: Derating 2%/K
supplied active power typical	28.5 W	60 W
product feature		
• bridging of equipment	Yes	Yes
number of parallel-switched equipment resources for increasing the power	2	2
Efficiency		
efficiency in percent	83 %	88.4 %
power loss [W]		
• at rated output voltage for rated value of the output current typical	6 W	8 W
• during no-load operation maximum	0.3 W	0.3 W
Closed-loop control		
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.2 %	0.2 %
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	2 %	3 %
setting time		

LOGO! logic module

LOGO!Power

1-phase, 15 V DC

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
- load step 10 to 90% typical - load step 90 to 10% typical	1 ms 1 ms	1 ms 1 ms
Protection and monitoring		
design of the overvoltage protection	Yes, according to EN 60950-1	Yes, according to EN 60950-1
response value current limitation typical	2.5 A	5 A
property of the output short-circuit proof	Yes	Yes
design of 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
display version for overload and short circuit	-	-
measuring point for output current	50 mV $\approx$ 1.9 A	45 mV $\approx$ 4 A
overcurrent overload capability when switching on	150% $I_{out rated}$ typ. 200 ms	150% $I_{out rated}$ typ. 200 ms
Safety		
galvanic isolation between input and output	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
operating resource protection class	Class II (without protective conductor)	Class II (without protective conductor)
protection class IP	IP20	IP20
Approvals		
certificate of suitability		
- CE marking - UL approval	Yes	Yes
CSA approval	Yes; 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)	Yes; 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)
- cCSAus, Class 1, Division 2 - ATEX	No No	No No
certificate of suitability		
- IECEX - NEC Class 2 - ULhazloc approval - FM registration	No Yes No No	No Yes No No
type of certification CB-certificate	Yes	Yes
certificate of suitability		
EAC approval	Yes	Yes
certificate of suitability shipbuilding approval	Yes	Yes
shipbuilding approval	ABS, BV, DNV GL, LRS	ABS, BV, DNV GL, LRS
Marine classification association		
- American Bureau of Shipping Europe Ltd. (ABS) - French marine classification society (BV) - DNV GL - Lloyds Register of Shipping (LRS) - Nippon Kaiji Kyokai (NK)	Yes Yes Yes Yes No	Yes Yes Yes Yes No
EMC		
standard		
- for emitted interference - for mains harmonics limitation - for interference immunity	EN 55022 Class B not applicable EN 61000-6-2	EN 55022 Class B not applicable EN 61000-6-2

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
environmental conditions		
ambient temperature		
• during operation	-25 ... +70 °C; with natural convection	-25 ... +70 °C; with natural convection
• during transport	-40 ... +85 °C	-40 ... +85 °C
• during storage	-40 ... +85 °C	-40 ... +85 °C
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation	Climate class 3K3, 5 ... 95% no condensation
Mechanics		
type of electrical connection	screw-type terminals	screw-type terminals
• at 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
• at output	+, -: 1 screw terminal each for 0.5 ... 2.5 mm ²	+, -: 1 screw terminal each for 0.5 ... 2.5 mm ²
• for auxiliary contacts	-	-
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
net weight	0.12 kg	0.2 kg
product feature of the enclosure housing can be lined up	Yes	Yes
fastening method	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)

LOGO! logic module

LOGO!Power

1-phase, 24 V DC**Overview**

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

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

Product highlights

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

Ordering data**Article No.****LOGO!Power 1-phase, 24 V DC/0.6 A**

Stabilized power supply
Input: 100 ... 240 V AC
(110 ... 300 V DC)
Output: 24 V DC/0.6 A

6EP3330-6SB00-0AY0**LOGO!Power 1-phase, 24 V DC/1.3 A**

Stabilized power supply
Input: 100 ... 240 V AC
(110 ... 300 V DC)
Output: 24 V DC/1.3 A

6EP3331-6SB00-0AY0**LOGO!Power 1-phase, 24 V DC/2.5 A**

Stabilized power supply
Input: 100 ... 240 V AC
(110 ... 300 V DC)
Output: 24 V DC/2.5 A

6EP3332-6SB00-0AY0**LOGO!Power 1-phase, 24 V DC/4 A**

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

6EP3333-6SB00-0AY0**LOGO!Power Ex 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

6EP3333-6SC00-0AY0**Add-on modules****SITOP redundancy modules**

For more information, visit:
<https://www.siemens.com/sitop-redundancy/mall>

SITOP selectivity modules

For more information, visit:
<https://www.siemens.com/sitop-selectivity/mall>

SITOP buffer module BUF1200

For more information, visit:
<https://www.siemens.com/sitop-buffering/mall>

DC UPS modules**SITOP DC UPS**

For more information, visit:
<https://www.siemens.com/sitop-ups/mall>

Technical specifications

Article number	6EP3330-6SB00-0AY0	6EP3331-6SB00-0AY0	6EP3332-6SB00-0AY0	6EP3333-6SB00-0AY0	6EP3333-6SC00-0AY0
Product	LOGO!Power	LOGO!Power	LOGO!Power	LOGO!Power	LOGO!Power EX
Power supply, type	24 V/0.6 A	24 V/1.3 A	24 V/2.5 A	24 V/4 A	24 V/4 A
Input					
type of the power supply network	1-phase AC or DC	1-phase AC or DC	1-phase AC or DC	1-phase AC or DC	1-phase AC or DC
supply voltage at AC					
• minimum rated value	100 V	100 V	100 V	100 V	100 V
• maximum rated value	240 V	240 V	240 V	240 V	240 V
• initial value	85 V	85 V	85 V	85 V	85 V
• full-scale value	264 V	264 V	264 V	264 V	264 V
input voltage					
• at DC	110 ... 300 V	110 ... 300 V	110 ... 300 V	110 ... 300 V	110 ... 300 V
design of input wide range input	Yes	Yes	Yes	Yes	Yes
overvoltage overload capability	300 V AC for 1 s	300 V AC for 1 s	300 V AC for 1 s	300 V AC for 1 s	300 V AC for 1 s
operating condition of the mains buffering	at $V_{in} = 187$ V	at $V_{in} = 187$ V	at $V_{in} = 187$ V	at $V_{in} = 187$ V	at $V_{in} = 187$ V
buffering time for rated value of the output current in the event of power failure minimum	40 ms	40 ms	40 ms	40 ms	40 ms
operating condition of the mains buffering	at $V_{in} = 187$ V	at $V_{in} = 187$ V	at $V_{in} = 187$ V	at $V_{in} = 187$ V	at $V_{in} = 187$ V
line frequency					
• 1 rated value	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
• 2 rated value	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz
line frequency	47 ... 63 Hz	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	1.95 A
• at rated input voltage 230 V	0.2 A	0.35 A	0.66 A	0.97 A	0.97 A
current limitation of inrush current at 25 °C maximum	20 A	25 A	52 A	31 A	31 A
I ² t value maximum	0.8 A ² ·s	0.8 A ² ·s	3 A ² ·s	2.5 A ² ·s	2.5 A ² ·s
fuse protection type	internal	internal	internal	internal	internal
• in the feeder	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	Recommended miniature circuit breaker: from 10 A characteristic B or from 6 A characteristic C
Output					
voltage curve at output	Controlled, isolated DC voltage	Controlled, isolated DC voltage	Controlled, isolated DC voltage	Controlled, isolated DC voltage	Controlled, isolated DC voltage
output voltage at DC rated value	24 V	24 V	24 V	24 V	24 V
output voltage					
• at output 1 at DC rated value	24 V	24 V	24 V	24 V	24 V
relative overall tolerance of the voltage	3 %	3 %	3 %	3 %	3 %
relative control precision of the output voltage					
• on slow fluctuation of input voltage	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
• on slow fluctuation of ohm loading	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
residual ripple					
• maximum	200 mV	200 mV	200 mV	200 mV	200 mV
• typical	30 mV	30 mV	30 mV	30 mV	30 mV
voltage peak					
• maximum	300 mV	300 mV	300 mV	300 mV	300 mV
• typical	50 mV	50 mV	50 mV	50 mV	50 mV
adjustable output voltage		22.2 ... 26.4 V	22.2 ... 26.4 V	22.2 ... 26.4 V	22.2 ... 26.4 V
product function output voltage adjustable	No	Yes	Yes	Yes	Yes
type of output voltage setting		via potentiometer	via potentiometer	via potentiometer	via potentiometer
display version for normal operation	Green LED for output voltage OK	Green LED for output voltage OK	Green LED for output voltage OK	Green LED for output voltage OK	Green LED for output voltage OK

LOGO! logic module

LOGO!Power

1-phase, 24 V DC

Technical specifications

2

Article number	6EP3330-6SB00-0AY0	6EP3331-6SB00-0AY0	6EP3332-6SB00-0AY0	6EP3333-6SB00-0AY0	6EP3333-6SC00-0AY0
Product	LOGO!Power	LOGO!Power	LOGO!Power	LOGO!Power	LOGO!Power EX
Power supply, type	24 V/0.6 A	24 V/1.3 A	24 V/2.5 A	24 V/4 A	24 V/4 A
behavior of the output voltage when switching on	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)	No overshoot of V_{out} (soft start)
response delay maximum	0.5 s	0.5 s	0.5 s	0.5 s	0.5 s
voltage increase time of the output voltage					
• typical	100 ms	100 ms	100 ms	100 ms	100 ms
output current					
• rated value	0.6 A	1.3 A	2.5 A	4 A	4 A
• rated range	0 ... 0.6 A; +55 ... +70 °C: Derating 2%/K	0 ... 1.3 A; +55 ... +70 °C: Derating 2%/K	0 ... 2.5 A; +55 ... +70 °C: Derating 2%/K	0 ... 4 A; +55 ... +70 °C: Derating 2%/K	0 ... 4 A; +55 ... +70 °C: Derating 2%/K
supplied active power typical	14.4 W	31.2 W	60 W	96 W	96 W
product feature					
• bridging of equipment	No	Yes	Yes	Yes	
number of parallel-switched equipment resources for increasing the power		2	2	2	
Efficiency					
efficiency in percent	81 %	86 %	90 %	89 %	89 %
power loss [W]					
• at rated output voltage for rated value of the output current typical	3 W	5 W	7 W	12 W	12 W
• during no-load operation maximum	0.3 W	0.3 W	0.3 W	0.3 W	0.3 W
Closed-loop control					
relative control precision of the output voltage with rapid fluctuation of the input voltage by +/- 15% typical	0.2 %	0.2 %	0.2 %	0.2 %	0.2 %
relative control precision of the output voltage at load step of resistive load 10/90/10 % typical	2 %	1 %	2 %	2 %	2 %
setting time					
• load step 10 to 90% typical	1 ms	1 ms	1 ms	1 ms	1 ms
• load step 90 to 10% typical	1 ms	1 ms	1 ms	1 ms	1 ms
Protection and monitoring					
design of the 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	Yes, according to EN 60950-1
response value current limitation typical	0.8 A	1.7 A	3.2 A	5 A	5 A
property of the output short-circuit proof	Yes	Yes	Yes	Yes	Yes
design of short-circuit protection	Constant current characteristic	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	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 capability 150% $I_{out rated}$ typ. 200 ms
display version for overload and short circuit	-	-	-	-	-
measuring point for output current		50 mV = ^ 1.3 A	50 mV = ^ 2.5 A	50 mV = ^ 4 A	50 mV = ^ 4 A
overcurrent overload capability when switching on	150% $I_{out rated}$ typ. 200 ms	150% $I_{out rated}$ typ. 200 ms	150% $I_{out rated}$ typ. 200 ms	150% $I_{out rated}$ typ. 200 ms	150% $I_{out rated}$ typ. 200 ms
Safety					
galvanic isolation between input and output	Yes	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	Safety extra-low output voltage $U_{out acc.}$ to EN 60950-1 and EN 50178
operating resource protection class	Class II (without protective conductor)	Class II (without protective conductor)	Class II (without protective conductor)	Class II (without protective conductor)	Class II (without protective conductor)
protection class IP	IP20	IP20	IP20	IP20	IP20

Technical specifications

Article number	6EP3330-6SB00-0AY0	6EP3331-6SB00-0AY0	6EP3332-6SB00-0AY0	6EP3333-6SB00-0AY0	6EP3333-6SC00-0AY0
Product	LOGO!Power	LOGO!Power	LOGO!Power	LOGO!Power	LOGO!Power EX
Power supply, type	24 V/0.6 A	24 V/1.3 A	24 V/2.5 A	24 V/4 A	24 V/4 A
Approvals					
certificate of suitability					
• CE marking	Yes	Yes	Yes	Yes	Yes
• UL approval	Yes; 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)	Yes; 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)	Yes; 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)	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273	No
• CSA approval	Yes; 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)	Yes; 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)	Yes; 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)	Yes; cULus-Listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273	No
• cCSAus, Class 1, Division 2	No	No	No	No	No
• ATEX	No	No	No	No	Yes
certificate of suitability					
• IECEx	No	No	No	No	Yes
• NEC Class 2	Yes	Yes	Yes	No	No
• ULhazloc approval	No	No	No	No	No
• FM registration	No	No	No	No	Yes
type of certification CB-certificate	Yes	Yes	Yes	Yes	
certificate of suitability					
• EAC approval	Yes	Yes	Yes	Yes	
certificate of suitability shipbuilding approval	Yes	Yes	Yes	Yes	No
shipbuilding approval	ABS, BV, DNV GL, LRS	ABS, BV, DNV GL, LRS	ABS, BV, DNV GL, LRS	ABS, BV, DNV GL, LRS	available soon
Marine classification association					
• American Bureau of Shipping Europe Ltd. (ABS)	Yes	Yes	Yes	Yes	No
• French marine classification society (BV)	Yes	Yes	Yes	Yes	No
• DNV GL	Yes	Yes	Yes	Yes	No
• Lloyds Register of Shipping (LRS)	Yes	Yes	Yes	Yes	No
• Nippon Kaiji Kyokai (NK)	No	No	No	No	No
EMC					
standard					
• for emitted interference	EN 55022 Class B	EN 55022 Class B	EN 55022 Class B	EN 55022 Class B	EN 55022 Class B
• for mains harmonics limitation	not applicable	not applicable	not applicable	EN 61000-3-2	EN 61000-3-2
• for interference immunity	EN 61000-6-2	EN 61000-6-2	EN 61000-6-2	EN 61000-6-2	EN 61000-6-2
environmental conditions					
ambient temperature					
• during operation	-25 ... +70 °C; with natural convection	-25 ... +70 °C; with natural convection	-25 ... +70 °C; with natural convection	-25 ... +70 °C; with natural convection	-25 ... +70 °C; with natural convection
• during transport	-40 ... +85 °C	-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	-40 ... +85 °C
environmental category according to IEC 60721	Climate class 3K3, 5 ... 95% no condensation	Climate class 3K3, 5 ... 95% no condensation	Climate class 3K3, 5 ... 95% no condensation	Climate class 3K3, 5 ... 95% no condensation	Climate class 3K3, 5 ... 95% no condensation

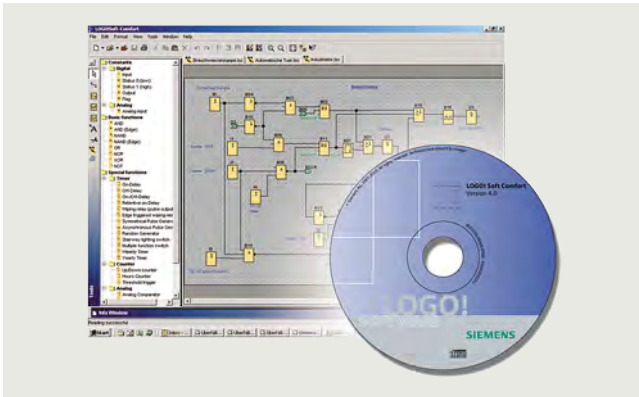
LOGO! logic module

LOGO!Power

1-phase, 24 V DC**Technical specifications**

Article number	6EP3330-6SB00-0AY0	6EP3331-6SB00-0AY0	6EP3332-6SB00-0AY0	6EP3333-6SB00-0AY0	6EP3333-6SC00-0AY0
Product	LOGO!Power	LOGO!Power	LOGO!Power	LOGO!Power	LOGO!Power EX
Power supply, type	24 V/0.6 A	24 V/1.3 A	24 V/2.5 A	24 V/4 A	24 V/4 A
Mechanics					
type of electrical connection	screw-type terminals	screw-type terminals	screw-type terminals	screw-type terminals	screw-type terminals
• at 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	L, N: 1 screw terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded
• at 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	+, -: 1 screw terminal each for 0.5 ... 2.5 mm ²
• for auxiliary contacts	-	-	-	-	-
width of the enclosure	18 mm	36 mm	54 mm	72 mm	72 mm
height of the enclosure	90 mm	90 mm	90 mm	90 mm	90 mm
depth of the enclosure	53 mm	53 mm	53 mm	53 mm	53 mm
required spacing					
• top	20 mm	20 mm	20 mm	20 mm	20 mm
• bottom	20 mm	20 mm	20 mm	20 mm	20 mm
• left	0 mm	0 mm	0 mm	0 mm	0 mm
• right	0 mm	0 mm	0 mm	0 mm	0 mm
net weight	0.07 kg	0.12 kg	0.2 kg	0.29 kg	0.29 kg
product feature of the enclosure housing can be lined up	Yes	Yes	Yes	Yes	Yes
fastening method	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	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	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)	Specifications at rated input voltage and ambient temperature +25 °C (unless otherwise specified)

Overview



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

Minimum system requirements

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

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

Mac OS X

- Mac OS X 10.4

Linux

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

Ordering data

LOGO!Soft Comfort V8

For programming on the PC in LAD/FBD; runs on Windows 10, 8, 7, XP, Linux and Mac OSX; on DVD

Article No.

6ED1058-0BA08-0YA1

Overview



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

Ordering data

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

Article No.

6ED1057-4CA00-0AA0
6ED1057-4EA00-0AA0

Technical specifications

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

LOGO! logic module

LOGO! Accessories

LOGO! mounting kit**Overview****Ordering data****Article No.****Front panel mounting kit**

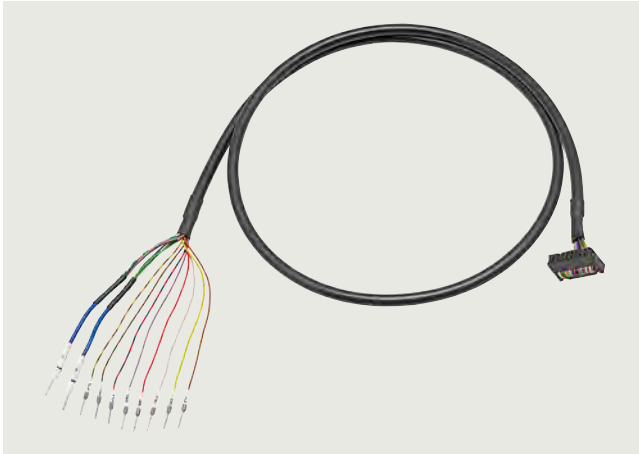
Width 4 U, with keys

6AG1057-1AA00-0AA3

Width 8 U, with keys

6AG1057-1AA00-0AA2

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

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


SIMATIC TOP connect universal connecting cable

The wiring of the

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

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

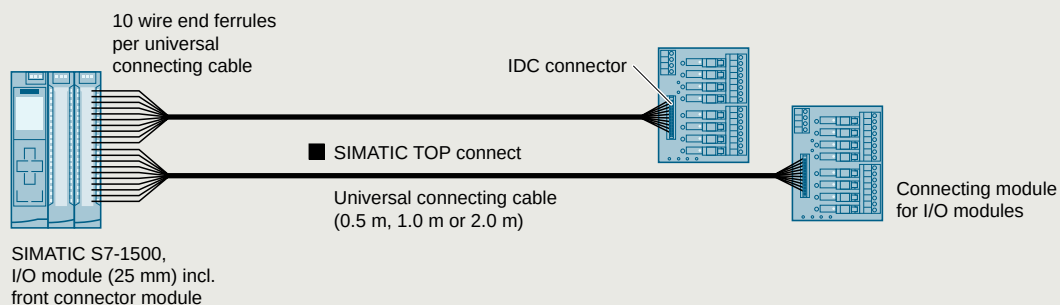
Design

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

It comprises:

- 16-pin round cable with a core cross-section of 0.14 mm², pre-assembled with wire end ferrules for connection to the controller:
 - Labeled with "0" ... "7" for the control inputs/outputs
 - Labeled with "M" for mass
 - Labeled with "L+" for 24 V DC potential

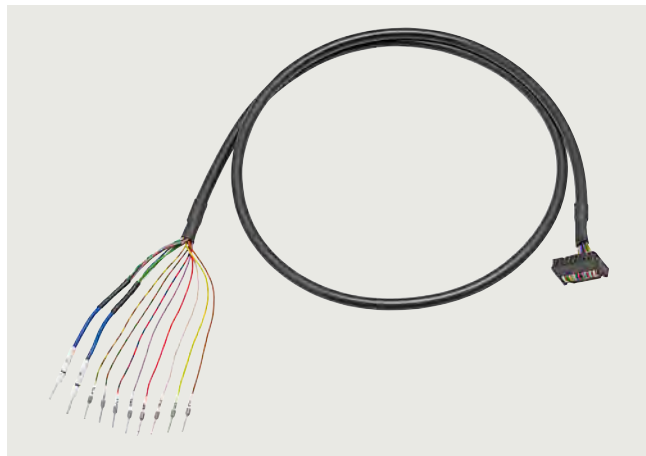
- 16-pin ID (insulation displacement) connector for connection to the SIMATIC TOP connect connection modules for 8 I/Os:
 - 3-wire connection using the appropriate connection module for quick, error-free wiring
 - Galvanic isolation and adaptation using a coupling relay for easy implementation of potential groups in the system
 - High output current (up to 4 A), even for higher switching frequencies, using an optocoupler module (overload and short-circuit proof)
 - Implementation of isolating terminals using switch modules enabling individual signals to be measured
 - Channel-wise protection of I/Os using a fuse module with a thermal fuse



SIMATIC TOP connect universal connection cable

LOGO! logic module

LOGO! Accessories

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

SIMATIC TOP connect universal connecting cable

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

Ordering data**Article No.**

**Universal connecting cables for
SIMATIC S7-1500 IO (25 mm),
SIMATIC ET 200SP,
SIMATIC S7-1200 and LOGO!**

16 x 0.14 mm² unshielded

- 0.5 m
- 1.0 m
- 2.0 m

**6ES7923-0BA50-0FB0
6ES7923-0BB00-0FB0
6ES7923-0BC00-0FB0**

Overview Connection modules

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

Ordering data**Article No.****TP1 connection module**

For 1-conductor connection,
for 16-pin connecting cables

- Push-in terminals without LEDs
- Screw-type terminals without LEDs
- Push-in terminals with LEDs
- Screw-type terminals with LEDs

**6ES7924-0AA20-0AC0
6ES7924-0AA20-0AA0
6ES7924-0AA20-0BC0
6ES7924-0AA20-0BA0**

TP3 connection module

For 3-conductor connection,
for 16-pin connecting cables

- Push-in terminals without LEDs
- Screw-type terminals without LEDs
- Push-in terminals with LEDs
- Screw-type terminals with LEDs
- Push-in terminals with LEDs and one isolating terminal per channel
- Screw-type terminals with LEDs and one isolating terminal per channel
- Push-in terminals with LEDs and fuse per channel
- Screw-type terminals with LEDs and fuse per channel

**6ES7924-0CA20-0AC0
6ES7924-0CA20-0AA0

6ES7924-0CA20-0BC0
6ES7924-0CA20-0BA0
6ES7924-0CH20-0BC0
6ES7924-0CH20-0BA0

6ES7924-0CL20-0BC0
6ES7924-0CL20-0BA0**

TPRo connection module

Relay module for 8 outputs, relay as
normally open contact

- Push-in terminals with LEDs
- Screw-type terminals with LEDs

**6ES7924-0BD20-0BC0
6ES7924-0BD20-0BA0**

TPRi connection module

Relay module for 8 inputs
(230 V AC), relay as normally open
contact

- Push-in terminals with LEDs
- Screw-type terminals with LEDs

**6ES7924-0BE20-0BC0
6ES7924-0BE20-0BA0**

TPRi connection module

Relay module for 8 inputs
(110 V AC), relay as normally open
contact

- Push-in terminals with LEDs
- Screw-type terminals with LEDs

**6ES7924-0BG20-0BC0
6ES7924-0BG20-0BA0**

TPOo connection module

Optocoupler module for 8 outputs
(max. 24 V DC/4 A)

- Push-in terminals with LEDs
- Screw-type terminals with LEDs

**6ES7924-0BF20-0BC0
6ES7924-0BF20-0BA0**