

LOGO! logic module



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Brochures

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

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

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 click of a button or by means of PC software; up to 130 times over
- Functions are easily changed at the press of a key. No more time-consuming rewiring

SIPLUS LOGO!

- The PLC for use under extremely harsh environmental conditions
- With enhanced temperature range from -25 °C to +70 °C or -40 °C to +70 °C for selected types
- Use in environments with pollutant gases (corrosive gas atmospheres)
- Occasional short-term condensation and enhanced mechanical stress permissible
- With the proven PLC technology of LOGO!
- Easy handling, programming, maintenance and service
- Ideal for use in automobile construction, environmental technology, mining, chemical plants, conveying technology, food & beverages industry etc.

Accessories:

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

For more information, go to:

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

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

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

Technical specifications SIPLUS LOGO!

Climatic environmental conditions

Temperature	Horizontal installation: -25 °C to +70 °C Vertical installation: -25 °C to +50 °C or Horizontal installation: -40 °C to +70 °C Vertical installation: -40 °C to +50 °C
Relative humidity	5 to 95 %; short-term condensation permissible, corresponds to relative humidity (RH) load 2 according to IEC 1131-2 and IEC 721 3-3 Cl. 3K5
Short-term ice formation	-40/-25 °C to 0 °C IEC 721 3-3 Cl. 3K5
Air pressure	1080 to 795 hPa corresponds to an altitude of -1000 to 2000 m
Contaminant concentration	According to: ISA-S71.04 severity level G1; G2; G3 (with exception of NH ₃ , only level G2 in this case) EN 60068-2-60 Ke4 CS ₂ : max. 30 mg/m ³ H ₂ S: max. 15 mg/m ³ H ₂ SO ₄ : traces of aerosols

Mechanical environmental conditions

Vibrations	Type of vibration: Frequency sweeps with a rate of change of 1 octave/minute. 2 Hz ≤ f ≤ 9 Hz, constant Amplitude 3.0 mm, 9 Hz ≤ f ≤ 150 Hz, constant acceleration 1 g, duration of oscillation: 10 frequency cycles per axis in each of the three mutually perpendicular axes Vibration tests according to IEC 68 Part 2-6 (sine wave) and IEC 721 3-3, Class 3M4
Shock	Type of shock: Half-sine, intensity of shock: 15 g peak value, 11 ms duration, direction: 3 shocks each in +/- direction in each of the 3 perpendicular axes Shock testing in accordance with IEC 68 Part 2-27

Overview



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

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Technical specifications

	6ED1 052-1CC00-0BA6	6ED1 052-1MD00-0BA6	6ED1 052-1HB00-0BA6	6ED1 052-1FB00-0BA6
Supply voltages				
Rated value				
• DC 12 V		Yes		
• DC 24 V	Yes	Yes	Yes	
• DC 115 V				Yes
• DC 230 V				Yes
• permissible range, lower limit (DC)	20.4 V	10.8 V	20.4 V	100 V
• permissible range, upper limit (DC)	28.8 V	28.8 V	28.8 V	253 V
• AC 24 V			Yes	
• AC 115 V				Yes
• AC 230 V				Yes
• permissible range, lower limit (AC)			20.4 V	85 V
• permissible range, upper limit (AC)			26.4 V	265 V
Time				
Time switching clocks				
• Power reserve		80 Hours	80 Hours	80 Hours
Digital inputs				
Number of digital inputs	8; of which 4 can be used as analog (0...10V)	8; of which 4 can be used as analog (0...10V)	8	8
Digital outputs				
Number of digital outputs	4; Transistor	4; Relay	4; Relay	4; Relay
Short-circuit protection of the output	Yes; electrical (1 A)	No; external fusing necessary	No; external fusing necessary	No; external fusing necessary
Relay outputs				
Switching capacity of the contacts				
• with inductive load, max.		3 A	3 A	3 A
• with resistive load, max.	0.3 A	10 A	10 A	10 A

LOGO! logic module

LOGO! modular

LOGO! modular basic versions

Technical specifications (continued)

	6ED1 052-1CC00-0BA6	6ED1 052-1MD00-0BA6	6ED1 052-1HB00-0BA6	6ED1 052-1FB00-0BA6
EMC				
• Emission of radio interference to EN 55 011 (limit class B)	Yes	Yes	Yes	Yes
Environmental requirements				
Operating temperature				
• min.	0 °C	0 °C	0 °C	0 °C
• max.	55 °C	55 °C	55 °C	55 °C
Degree of protection				
IP 20	Yes	Yes	Yes	Yes
Standards, approvals, certificates				
CSA approval	Yes	Yes	Yes	Yes
developed to IEC1131	Yes	Yes	Yes	Yes
FM approval	Yes	Yes	Yes	Yes
to VDE 0631	Yes	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes	Yes
UL Approval	Yes	Yes	Yes	Yes
Dimensions				
Dimensions				
• 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
• Width	72 mm	72 mm	72 mm	72 mm
• Height	90 mm	90 mm	90 mm	90 mm
• Depth	55 mm	55 mm	55 mm	55 mm

Ordering Data	Order No.	Order No.
LOGO! logic module 24 24 V DC power supply, 8x 24 V DC digital inputs, of which 4 can be used in analog mode (0 to 10 V), 4x 24 V DC digital outputs, 0.3 A; 200 function blocks can be inter- linked, modular expansion capability	6ED1 052-1CC00-0BA6	LOGO! PROM B7 6AG1 057-1AA01-0BA6 Programming device used to simultaneously reproduce program module contents on up to 8 program modules
LOGO! logic module 12/24RC 12/24 V DC power supply, 8x 12/24 V DC digital inputs, of which 4 can be used in analog mode (0 to 10 V), 4x 10 A relay outputs, integral time switch; 200 function blocks can be inter- linked, modular expansion capability	6ED1 052-1MD00-0BA6	LOGO!Soft Comfort V6.0 B8 6ED1 058-0BA02-0YA0 For programming on the PC in LAD/FBD; executes on Windows 98 SE and higher, Linux, MAC OSX; on CD-ROM
LOGO! logic module 24RC 24 V AC/DC power supply, 8x 24 V AC/DC digital inputs, 4x 10 A relay outputs, integral time switch; 200 function blocks can be inter- linked, modular expansion capability	6ED1 052-1HB00-0BA6	LOGO!Soft Comfort V6.0 upgrade 6ED1 058-0CA02-0YE0 Upgrade from V1.0 to V6.0
LOGO! logic module 230RC 115/230 V AC/DC power supply, 8x 115/230 V AC/DC digital inputs, 4x 10 A relay outputs, integral time switch; 200 function blocks can be inter- linked, modular expansion capability	6ED1 052-1FB00-0BA6	LOGO! PC cable 6ED1 057-1AA00-0BA0 For program transfer between LOGO! and the PC
Accessories		LOGO! USB PC cable B9 6ED1 057-1AA01-0BA0 For transferring the program between LOGO! and PC, including driver on CD-ROM
LOGO! TD text display 4-line text display, can be connected to all LOGO! 0BA6 Basic and Pure versions, including connecting cable	6ED1 055-4MH00-0BA0	LOGO! modem cable 6ED1 057-1CA00-0BA0 Adapter cable for analog modem communication
LOGO! manual German English French Spanish Italian Chinese	6ED1 050-1AA00-0AE7 6ED1 050-1AA00-0BE7 6ED1 050-1AA00-0CE7 6ED1 050-1AA00-0DE7 6ED1 050-1AA00-0EE7 6ED1 050-1AA00-0KE7	Front panel mounting set Width 4 width units 6AG1 057-1AA00-0AA0 Width 4 width units, with keys 6AG1 057-1AA00-0AA3 Width 8 width units 6AG1 057-1AA00-0AA1 Width 8 width units, with keys 6AG1 057-1AA00-0AA2
LOGO! Memory Card Program module for copying, with know-how protection	6ED1 056-1DA00-0BA0	LOGO! News Box, 12/24 V Contains LOGO! 12/24RC, LOGO! USB PC cable, LOGO!Soft Comfort V6.0, manual, screwdriver, information material German B9 6ED1 057-3BA00-0AA5 English B9 6ED1 057-3BA00-0BA5
LOGO! battery card Battery module for backing up the integral real-time clock (not LOGO! 24)	6ED1 056-6XA00-0BA0	LOGO! News Box, 230 V Contains LOGO! 230RC, LOGO! USB PC cable, LOGO!Soft Comfort V6.0, manual, screwdriver, information material German B9 6ED1 057-3AA02-0AA0 English B9 6ED1 057-3AA02-0BA0
LOGO! memory/battery card Combined program and battery module, with know-how protection and for backing up the integral real-time clock (not LOGO! 24)	6ED1 056-7DA00-0BA0	LOGO! TD News Box, 12/24 V Contains LOGO! 12/24RCo, LOGO! TD, LOGO! USB PC cable, LOGO! Soft Comfort V6.0, manual, screwdriver, information material German B9 6ED1 057-3BA10-0AA0 English B9 6ED1 057-3BA10-0BA0

B7: Subject to export regulations: AL: N and ECCN: EAR99H

B8: Subject to export regulations: AL: N and ECCN: EAR99S

B9: Subject to export regulations: AL: N and ECCN: EAR99T

LOGO! logic module

LOGO! modular

SIPLUS LOGO! modular basic versions

Overview

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- The space-saving basic variants
- Interface for the connection of expansion modules, up to 24 digital inputs, 16 digital outputs, 8 analog inputs and 2 analog outputs can be addressed.

	SIPLUS LOGO! 24	SIPLUS LOGO! 12/24RC	SIPLUS LOGO! 24RC	SIPLUS LOGO! 230RC
Order No.	6AG1 052-1CC00-2BA5	6AG1 052-1MD00-2BA5	6AG1 052-1HB00-2BA5	6AG1 052-1FB00-2BA5
Order No. based on	6ED1 052-1CC00-0BA5	6ED1 052-1MD00-0BA5	6ED1 052-1HB00-0BA5	6ED1 052-1FB00-0BA5
Ambient temperature range	- 25 ... + 70 °C - 25 ... +55 °C (for applications with cUL approval), condensation permissible			
Environmental conditions	Suited for exceptional medial exposure (e.g. by chlorine sulfur atmosphere)			
Approvals	CE, cUL			
Technical data	The technical data are identical with those of the based-on modules.			

Technical specifications

	6AG1 052-1CC00-2BA5	6AG1 052-1MD00-2BA5	6AG1 052-1HB00-2BA5	6AG1 052-1FB00-2BA5
Supply voltages				
Rated value				
• DC 12 V		Yes		
• DC 24 V	Yes	Yes	Yes	
• DC 115 V				Yes
• DC 230 V				Yes
• permissible range, lower limit (DC)	20.4 V	10.8 V	20.4 V	100 V
• permissible range, upper limit (DC)	28.8 V	28.8 V	28.8 V	253 V
• AC 24 V			Yes	
• AC 115 V				Yes
• AC 230 V				Yes
• permissible range, lower limit (AC)			20.4 V	85 V
• permissible range, upper limit (AC)			26.4 V	265 V
Time				
Time switching clocks				
• Power reserve		80 Hours	80 Hours	80 Hours
Digital inputs				
Number of digital inputs	8; of which 2 can be used as analog (0...10V)	8; of which 2 can be used as analog (0...10V)	8	8

Technical specifications (continued)

	6AG1 052-1CC00-2BA5	6AG1 052-1MD00-2BA5	6AG1 052-1HB00-2BA5	6AG1 052-1FB00-2BA5
Digital outputs				
Number of digital outputs	4; Transistor	4; Relay	4; Relay	4; Relay
Short-circuit protection of the output	Yes; electrical (1 A)	No; external fusing necessary	No; external fusing necessary	No; external fusing necessary
Relay outputs				
Switching capacity of the contacts				
• with inductive load, max.		3 A	3 A	3 A
• with resistive load, max.	0.3 A	10 A	10 A	10 A
EMC				
• Emission of radio interference to EN 55 011 (limit class B)	Yes	Yes	Yes	Yes
Environmental requirements				
Operating temperature				
• min.	0 °C	0 °C	0 °C	0 °C
• max.	55 °C	55 °C	55 °C	55 °C
Degree of protection				
IP 20	Yes	Yes	Yes	Yes
Standards, approvals, certificates				
CSA approval	Yes	Yes	Yes	Yes
developed to IEC 1131	Yes	Yes	Yes	Yes
FM approval	Yes	Yes	Yes	Yes
to VDE 0631	Yes	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes	Yes
UL Approval	Yes	Yes	Yes	Yes
Dimensions				
Dimensions				
• 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
• Width	72 mm	72 mm	72 mm	72 mm
• Height	90 mm	90 mm	90 mm	90 mm
• Depth	55 mm	55 mm	55 mm	55 mm

LOGO! logic module

LOGO! modular

SIPLUS LOGO! modular basic versions

2

Ordering Data	Order No.	Order No.
SIPLUS LOGO! 24 (extended temperature range and medial exposure) 24 V DC power supply, eight 24 V DC digital inputs, of which two can be used in analog mode (0 to 10 V), four 24 V DC digital outputs, 0.3 A; 130 function blocks can be inter-linked, modular expansion capability	6AG1 052-1CC00-2BA5	Accessories LOGO! Manual German 6ED1 050-1AA00-0AE6 English 6ED1 050-1AA00-0BE6 French 6ED1 050-1AA00-0CE6 Spanish 6ED1 050-1AA00-0DE6 Italian 6ED1 050-1AA00-0EE6 LOGO! Memory Card 6ED1 056-5CA00-0BA0 For copying, with know-how protection LOGO!Soft Comfort V5.0 6ED1 058-0BA01-0YA0 For programming on the PC in LAD/FBD; executes on Windows 95 and higher, Linux, MAC OSX; on CD-ROM LOGO!Soft Comfort Upgrade B8 6ED1 058-0CA01-0YE0 From V1.0 or higher to V4.0 LOGO! PC cable 6ED1 057-1AA00-0BA0 For program transfer between LOGO! and the PC LOGO! PROM B7 6AG1 057-1AA01-0BA5 Programming device for modules LOGO! Mounting set For use in a front panel with plexiglass pane and gasket <ul style="list-style-type: none"> • Mounting set 4 WM 6AG1 057-1AA00-0AA0 • Mounting set 4 WM with keys 6AG1 057-1AA00-0AA3 • Mounting set 8 WM 6AG1 057-1AA00-0AA1 • Mounting set 8 WM with keys 6AG1 057-1AA00-0AA2 SIPLUS upmiter power supply unit 6AG1 053-1AA00-2AA0 for dependable operation of SIPLUS devices supplied by the battery of internal combustion engines
SIPLUS LOGO! 12/24RC (extended temperature range and medial exposure) 12/24 V DC power supply, eight 12/24 V DC digital inputs, of which two can be used in analog mode (0 to 10 V), four relay outputs 10 A, integral time switch; 130 function blocks can be inter-linked, modular expansion capability	6AG1 052-1MD00-2BA5	
SIPLUS LOGO! 24RC (extended temperature range and medial exposure) 24 V AC/DC power supply, eight 24 V AC/DC digital inputs, four relay outputs 10 A, integral time switch; 130 function blocks can be inter-linked, modular expansion capability	6AG1 052-1HB00-2BA5	
SIPLUS LOGO! 230RC (extended temperature range and medial exposure) 115/230 V AC/DC power supply, eight 115/230 V AC/DC digital inputs, four relay outputs 10 A, integral time switch; 130 function blocks can be inter-linked, modular expansion capability	6AG1 052-1FB00-2BA5	

B7: Subject to export regulations: AL: N and ECCN: EAR99H

B8: Subject to export regulations: AL: N and ECCN: EAR99S

Overview



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

2

Technical specifications

	6ED1 052-2CC00-0BA6	6ED1 052-2MD00-0BA6	6ED1 052-2HB00-0BA6	6ED1 052-2FB00-0BA6
Supply voltages				
Rated value				
• DC 12 V		Yes		
• DC 24 V	Yes	Yes	Yes	
• DC 115 V				Yes
• DC 230 V				Yes
• permissible range, lower limit (DC)	20.4 V	10.8 V	20.4 V	100 V
• permissible range, upper limit (DC)	28.8 V	28.8 V	28.8 V	253 V
• AC 24 V			Yes	
• AC 115 V				Yes
• AC 230 V				Yes
• permissible range, lower limit (AC)			20.4 V	85 V
• permissible range, upper limit (AC)			26.4 V	265 V
Time				
Time switching clocks				
• Number		8	8	8
• Power reserve		80 Hours	80 Hours	80 Hours
Digital inputs				
Number of digital inputs	8; of which 4 can be used as analog (0...10V)	8; of which 4 can be used as analog (0...10V)	8	8
Digital outputs				
Number of digital outputs	4; Transistor	4; Relay	4; Relay	4; Relay
Short-circuit protection of the output	Yes; electrical (1 A)	No; external fusing necessary	No; external fusing necessary	No; external fusing necessary
Relay outputs				
Switching capacity of the contacts				
• with inductive load, max.		3 A	3 A	3 A
• with resistive load, max.	0.3 A	10 A	10 A	10 A

LOGO! logic module

LOGO! modular

LOGO! modular pure versions

Technical specifications (continued)

	6ED1 052-2CC00-0BA6	6ED1 052-2MD00-0BA6	6ED1 052-2HB00-0BA6	6ED1 052-2FB00-0BA6
EMC				
• Emission of radio interference to EN 55 011 (limit class B)		Yes	Yes	Yes
Environmental requirements				
Operating temperature				
• min.	0 °C	0 °C	0 °C	0 °C
• max.	55 °C	55 °C	55 °C	55 °C
Degree of protection				
IP 20	Yes	Yes	Yes	Yes
Standards, approvals, certificates				
CSA approval	Yes	Yes	Yes	Yes
developed to IEC1131	Yes	Yes	Yes	Yes
FM approval	Yes	Yes	Yes	Yes
to VDE 0631	Yes	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes	Yes
UL Approval	Yes	Yes	Yes	Yes
Dimensions				
Dimensions				
• 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
• Width	72 mm	72 mm	72 mm	72 mm
• Height	90 mm	90 mm	90 mm	90 mm
• Depth	55 mm	55 mm	55 mm	55 mm

2

Ordering Data	Order No.	Order No.
LOGO! logic module 24o 24 V DC power supply, 8 digital inputs 24 V DC, of which 4 can be used in analog mode (0 to 10 V), 4 digital outputs 24 V DC, 0.3 A; without display and keyboard; 200 function blocks can be inter- linked, modular expansion capability	6ED1 052-2CC00-0BA6	LOGO! Memory Card Program module for copying, with know-how protection
LOGO! logic module 12/24RCo 12/24 V DC power supply, 8 digital inputs 12/24 V DC, of which 4 can be used in analog mode (0 to 10 V), 4 relay outputs 10 A, integral time switch; without display and keyboard; 200 function blocks can be inter- linked, modular expansion capability	6ED1 052-2MD00-0BA6	LOGO! battery card Battery module for backing up the integral real-time clock (not LOGO! 24o)
LOGO! logic module 24RCo 24 V AC/DC power supply, 8 digital inputs 24 V AC/DC, 4 relay outputs 10 A, integral time switch; without display and keyboard; 200 function blocks can be inter- linked, modular expansion capability	6ED1 052-2HB00-0BA6	LOGO! memory/battery card Combined program and battery module, with know-how protection and for backing up the integral real-time clock (not LOGO! 24o)
LOGO! logic module 230RCo 115/230 V AC/DC power supply, 8 digital inputs 115/230 V AC/DC, 4 relay outputs 10 A, integral time clock; without display and keyboard; 200 function blocks can be inter- linked, modular expansion capability	6ED1 052-2FB00-0BA6	LOGO! PROM B7 6AG1 057-1AA01-0BA6 Programming device used to simultaneously reproduce program module contents on up to 8 program modules
Accessories		LOGO!Soft Comfort V6.0 B8 6ED1 058-0BA02-0YA0 For programming on the PC in LAD/FBD; executes on Windows 98 SE and higher, Linux, MAC OSX; on CD-ROM
LOGO! TD text display 4-line text display, can be connected to all LOGO! 0BA6 Basic and Pure versions, including connecting cable	6ED1 055-4MH00-0BA0	LOGO!Soft Comfort V6.0 upgrade Upgrade from V1.0 to V6.0
LOGO! manual German English French Spanish Italian Chinese	6ED1 050-1AA00-0AE7 6ED1 050-1AA00-0BE7 6ED1 050-1AA00-0CE7 6ED1 050-1AA00-0DE7 6ED1 050-1AA00-0EE7 6ED1 050-1AA00-0KE7	LOGO! PC cable For program transfer between LOGO! and the PC
		LOGO! USB PC cable B9 6ED1 057-1AA01-0BA0 For transferring the program between LOGO! and PC, including driver on CD-ROM
		LOGO! modem cable Adapter cable for analog modem communication

B7: Subject to export regulations: AL: N and ECCN: EAR99H

B8: Subject to export regulations: AL: N and ECCN: EAR99S

B9: Subject to export regulations: AL: N and ECCN: EAR99T

LOGO! logic module

LOGO! modular

SIPLUS LOGO! modular pure versions

Overview

2



- Basic variants optimized for costs
- Interface for the connection of expansion modules, up to 24 digital inputs, 16 digital outputs, 8 analog inputs and 2 analog outputs can be addressed.
- Ambient temperature range -40 °C to +70 °C with 3 types

	SIPLUS LOGO! 24o	SIPLUS LOGO! 12/24RCo	SIPLUS LOGO! 24RCo	SIPLUS LOGO! 230RCo
Order No.	6AG1 052-2CC00-2BA5	6AG1 052-2MD00-2BA5	6AG1 052-2HB00-2BA5	6AG1 052-2FB00-2BA5
Order No. based on	6ED1 052-2CC00-0BA5	6ED1 052-2MD00-0BA5	6ED1 052-2HB00-0BA5	6ED1 052-2FB00-0BA5
Ambient temperature range	-25 ... +70 °C -25 ... +55 °C (for applications with cUL approval), condensation permissible			
Environmental conditions	Suited for exceptional medial exposure (e.g. by chlorine sulfur atmosphere)			
Approvals	CE, cUL			
Technical data	The technical data are identical with those of the based-on modules.			

	SIPLUS LOGO! 24o	SIPLUS LOGO! 24RCo	SIPLUS LOGO! 230RCo
Order No.	6AG1 052-2CC00-2BY5	6AG1 052-2HB00-2BY5	6AG1 052-2FB00-2BY5
Order No. based on	6ED1 052-2CC00-0BA5	6ED1 052-2HB00-0BA5	6ED1 052-2FB00-0BA5
Ambient temperature range	-40 ... +70 °C -25 ... +55 °C (for applications with cUL approval), condensation permissible		
Environmental conditions	Suited for exceptional medial exposure (e.g. by chlorine sulfur atmosphere)		
Approvals	CE, cUL (available soon)		
Technical data	The technical data are identical with those of the based-on modules.		

Technical specifications

	6AG1 052-2CC00-2BA5 6AG1 052-2CC00-2BY5	6AG1 052-2MD00-2BA5	6AG1 052-2HB00-2BA5 6AG1 052-2HB00-2BY5	6AG1 052-2FB00-2BA5 6AG1 052-2FB00-2BY5
Supply voltages				
Rated value				
• DC 12 V		Yes		
• DC 24 V	Yes	Yes	Yes	
• DC 115 V				Yes
• DC 230 V				Yes
• permissible range, lower limit (DC)	20.4 V	10.8 V	20.4 V	100 V
• permissible range, upper limit (DC)	28.8 V	28.8 V	28.8 V	253 V
• AC 24 V			Yes	
• AC 115 V				Yes
• AC 230 V				Yes
• permissible range, lower limit (AC)			20.4 V	85 V
• permissible range, upper limit (AC)			26.4 V	265 V

Technical specifications (continued)

	6AG1 052-2CC00-2BA5 6AG1 052-2CC00-2BY5	6AG1 052-2MD00-2BA5	6AG1 052-2HB00-2BA5 6AG1 052-2HB00-2BY5	6AG1 052-2FB00-2BA5 6AG1 052-2FB00-2BY5
Time				
Time switching clocks				
• Number		8	8	8
• Power reserve		80 Hours	80 Hours	80 Hours
Digital inputs				
Number of digital inputs	8; of which 2 can be used as analog (0...10V)	8; of which 2 can be used as analog (0...10V)	8	8
Digital outputs				
Number of digital outputs	4; Transistor	4; Relay	4; Relay	4; Relay
Short-circuit protection of the output	Yes; electrical (1 A)	No; external fusing necessary	No; external fusing necessary	No; external fusing necessary
Relay outputs				
Switching capacity of the contacts				
• with inductive load, max.		3 A	3 A	3 A
• with resistive load, max.	0.3 A	10 A	10 A	10 A
EMC				
• Emission of radio interference to EN 55 011 (limit class B)		Yes	Yes	Yes
Environmental requirements				
Operating temperature				
• min.	0 °C	0 °C	0 °C	0 °C
• max.	55 °C	55 °C	55 °C	55 °C
Degree of protection				
IP 20	Yes	Yes	Yes	Yes
Standards, approvals, certificates				
CSA approval	Yes	Yes	Yes	Yes
developed to IEC1131	Yes	Yes	Yes	Yes
FM approval	Yes	Yes	Yes	Yes
to VDE 0631	Yes	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes	Yes
UL Approval	Yes	Yes	Yes	Yes
Dimensions				
Dimensions				
• 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
• Width	72 mm	72 mm	72 mm	72 mm
• Height	90 mm	90 mm	90 mm	90 mm
• Depth	55 mm	55 mm	55 mm	55 mm

LOGO! logic module

LOGO! modular

SIPLUS LOGO! modular pure versions

2

Ordering Data

Order No.

SIPLUS LOGO! 24o

(extended temperature range and medial exposure)

24 V DC power supply,
8 digital inputs 24 V DC, of which
2 can be used in analog mode
(0 to 10 V),
4 digital outputs 24 V DC, 0.3 A;
without display and keyboard;
130 function blocks can be inter-
linked, modular expansion
capability

Temperature range -25 ... +70 °C

6AG1 052-2CC00-2BA5

Temperature range -40 ... +70 °C

6AG1 052-2CC00-2BY5

SIPLUS LOGO! 12/24RCo

(extended temperature range and medial exposure)

12/24 V DC power supply,
8 digital inputs 12/24 V DC, of
which 2 can be used in analog
mode (0 to 10 V),
4 relay outputs 10 A,
integral time switch;
without display and keyboard;
130 function blocks can be inter-
linked, modular expansion
capability

6AG1 052-2MD00-2BA5

SIPLUS LOGO! 24RCo

(extended temperature range and medial exposure)

24 V AC/DC power supply,
8 digital inputs 24 V AC/DC,
4 relay outputs 10 A,
integral time switch;
without display and keyboard;
130 function blocks can be inter-
linked, modular expansion
capability

Temperature range -25 ... +70 °C

6AG1 052-2HB00-2BA5

Temperature range -40 ... +70 °C

6AG1 052-2HB00-2BY5

SIPLUS LOGO! 230RCo

(extended temperature range and medial exposure)

115/230 V AC/DC power supply,
8 digital inputs 115/230 V AC/DC,
4 relay outputs 10 A,
integral time clock;
without display and keyboard;
130 function blocks can be inter-
linked, modular expansion
capability

Temperature range -25 ... +70 °C

6AG1 052-2FB00-2BA5

Temperature range -40 ... +70 °C

6AG1 052-2FB00-2BY5

Accessories

LOGO! Manual

German

6ED1 050-1AA00-0AE5

English

6ED1 050-1AA00-0BE5

French

6ED1 050-1AA00-0CE5

Spanish

6ED1 050-1AA00-0DE5

Italian

6ED1 050-1AA00-0EE5

LOGO! Memory card

6ED1 056-5CA00-0BA0

For copying, with know-how
protection

LOGO!Soft Comfort V5.0

6ED1 058-0BA01-0YA0

For programming on the PC in
LAD/FBD; executes on
Windows 95 and higher, Linux,
MAC OSX; on CD-ROM

LOGO!Soft Comfort Upgrade

B8

6ED1 058-0CA01-0YE0

From V1.0 or higher to V4.0

LOGO! PC cable

6ED1 057-1AA00-0BA0

For program transfer between
LOGO! and the PC

SIPLUS LOGO! PROM

B7

6AG1 057-1AA01-0BA5

Programming device for modules

SIPLUS upmiter power supply unit

6AG1 053-1AA00-2AA0

for dependable operation of
SIPLUS devices supplied by the
battery of internal combustion
engines

B7: Subject to export regulations: AL: N and ECCN: EAR99H

B8: Subject to export regulations: AL: N and ECCN: EAR99S

Overview



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

2

Technical specifications

	6ED1 055-1CB00-0BA0	6ED1 055-1HB00-0BA0	6ED1 055-1MB00-0BA1	6ED1 055-1FB00-0BA1
Supply voltages				
Rated value				
• DC 12 V			Yes	
• DC 24 V	Yes	Yes	Yes	
• DC 115 V				Yes
• DC 230 V				Yes
• permissible range, lower limit (DC)	20.4 V	20.4 V	10.8 V	100 V
• permissible range, upper limit (DC)	28.8 V	28.8 V	28.8 V	253 V
• AC 24 V		Yes		
• AC 115 V				Yes
• AC 230 V				Yes
• permissible range, lower limit (AC)		20.4 V		85 V
• permissible range, upper limit (AC)		26.4 V		265 V
Digital inputs				
Number of digital inputs	4	4	4	4
Digital outputs				
Number of digital outputs	4	4; Relay	4; Relay	4; Relay
Short-circuit protection of the output	Yes; electrical (1 A)	No; external fusing necessary	No; external fusing necessary	No; external fusing necessary
Relay outputs				
Switching capacity of the contacts				
• with inductive load, max.		3 A	3 A	3 A
• with resistive load, max.		5 A	5 A	5 A
• Thermal continuous current, max.	0.3 A			
EMC				
• Emission of radio interference to EN 55 011 (limit class B)	Yes	Yes	Yes	Yes

LOGO! logic module

LOGO! modular

LOGO! modular expansion modules

Technical specifications (continued)

	6ED1 055-1CB00-0BA0	6ED1 055-1HB00-0BA0	6ED1 055-1MB00-0BA1	6ED1 055-1FB00-0BA1
Environmental requirements				
Operating temperature				
• min.	0 °C	0 °C	0 °C	0 °C
• max.	55 °C	55 °C	55 °C	55 °C
Degree of protection				
IP 20	Yes	Yes	Yes	Yes
Standards, approvals, certificates				
CSA approval	Yes	Yes	Yes	Yes
developed to IEC1131	Yes	Yes	Yes	Yes
FM approval	Yes	Yes	Yes	Yes
to VDE 0631	Yes	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes	Yes
UL Approval	Yes	Yes	Yes	Yes
Dimensions				
Dimensions				
• 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
• Width	36 mm; 2 TE	36 mm; 2 TE	36 mm; 2 TE	36 mm; 2 TE
• Height	90 mm	90 mm	90 mm	90 mm
• Depth	55 mm	55 mm	55 mm	55 mm

	6ED1 055-1CB10-0BA0	6ED1 055-1NB10-0BA0	6ED1 055-1FB10-0BA0
Supply voltages			
Rated value			
• DC 24 V	Yes	Yes	
• DC 115 V			Yes
• DC 230 V			Yes
• permissible range, lower limit (DC)	20.4 V	20.4 V	100 V
• permissible range, upper limit (DC)	28.8 V	28.8 V	253 V
• AC 115 V			Yes
• AC 230 V			Yes
• permissible range, lower limit (AC)			85 V
• permissible range, upper limit (AC)			265 V
• permissible frequency range, lower limit			47 Hz
• permissible frequency range, upper limit			63 Hz

	6ED1 055-1CB10-0BA0	6ED1 055-1NB10-0BA0	6ED1 055-1FB10-0BA0
Digital inputs			
Number of digital inputs	8	8	8
Input voltage			
• for signal "0"	< 5 V DC	< 5 V DC	< 40 V AC; < 30 V DC
• for signal "1"	> 12 V DC	> 12 V DC	> 79 V AC; > 79 V DC
Input current			
• for signal "0", max. (permissible quiescent current)	1 mA	1 mA	0.03 mA
• for signal "1", typ.	2 mA	2 mA	0.08 mA
Input delay (for rated value of input voltage)			
• for standard inputs			
- at "0" to "1", max.	1.5 ms	1.5 ms	50 ms
- at "1" to "0", max.	1.5 ms	1.5 ms	50 ms

Technical specifications (continued)

	6ED1 055-1CB10-0BA0	6ED1 055-1NB10-0BA0	6ED1 055-1FB10-0BA0
Digital outputs			
Number of digital outputs	8	8; Relay	8; Relay
Short-circuit protection of the output	Yes; electrical (1 A)	No; external fusing necessary	external fusing necessary
Lamp load, max.		1 000 W; 500 W at 115 V AC	1 000 W; 500 W at 115 V AC
Controlling a digital input	Yes	Yes	Yes
Parallel switching of 2 outputs			
• for increased power	No	No	No
Switching frequency			
• with resistive load, max.	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 the contacts			
• with inductive load, max.		3 A	3 A
• with resistive load, max.		5 A	5 A
• Thermal continuous current, max.	0.3 A		

	6ED1 055-1MA00-0BA0	6ED1 055-1MD00-0BA0
Supply voltages		
Rated value		
• DC 12 V	Yes	Yes
• DC 24 V	Yes	Yes
Analog inputs		
Number of analog inputs	2	2
• Voltage	Yes	
• Current	Yes	
• Resistance thermometer		Yes

	6ED1 055-1CB10-0BA0	6ED1 055-1NB10-0BA0	6ED1 055-1FB10-0BA0
EMC			
• Emission of radio interference to EN 55 011 (limit class B)	Yes	Yes	Yes
Environmental requirements			
Operating temperature			
• min.	0 °C	0 °C	0 °C
• max.	55 °C	55 °C	55 °C
Degree of protection			
IP 20	Yes	Yes	Yes
Standards, approvals, certificates			
CSA approval	Yes	Yes	Yes
developed to IEC1131	Yes	Yes	Yes
FM approval	Yes	Yes	Yes
to VDE 0631	Yes	Yes	Yes
Marine approval	Yes	Yes	Yes
UL Approval	Yes	Yes	Yes
Dimensions			
Dimensions			
• 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
• Width	72 mm; 4 TE	72 mm; 4 TE	72 mm; 4 TE
• Height	90 mm	90 mm	90 mm
• Depth	53 mm	53 mm	53 mm

	6ED1 055-1MA00-0BA0	6ED1 055-1MD00-0BA0
Input ranges (rated values), voltages		
• 0 to +10 V	Yes	
Input ranges (rated values), currents		
• 0 to 20 mA	Yes	
Input ranges (rated values), resistance thermometers		
• Pt 100		Yes

LOGO! logic module

LOGO! modular

LOGO! modular expansion modules

Technical specifications (continued)

	6ED1 055-1MA00-0BA0	6ED1 055-1MD00-0BA0
EMC		
• Emission of radio interference to EN 55 011 (limit class B)	Yes	Yes
Environmental requirements		
Operating temperature		
• min.	0 °C	0 °C
• max.	55 °C	55 °C
Degree of protection		
IP 20	Yes	Yes
Standards, approvals, certificates		
CSA approval	Yes	Yes
developed to IEC1131	Yes	Yes
FM approval	Yes	Yes
to VDE 0631	Yes	Yes
Marine approval	Yes	Yes
UL Approval	Yes	Yes
Dimensions		
Dimensions		
• Mounting	on 35 mm DIN rail, 2 spacing units wide	on 35 mm DIN rail, 2 spacing units wide
• Width	36 mm	36 mm
• Height	90 mm	90 mm
• Depth	55 mm	55 mm

	6ED1 055-1MM00-0BA0
Supply voltages	
Rated value	
• DC 12 V	No
• DC 24 V	Yes
Analog outputs	
Number of analog outputs	2
Output ranges, voltage	
• 0 to 10 V	Yes
EMC	
• Emission of radio interference to EN 55 011 (limit class B)	Yes
Environmental requirements	
Operating temperature	
• min.	0 °C
• max.	55 °C
Degree of protection	
IP 20	Yes
Standards, approvals, certificates	
CSA approval	Yes
developed to IEC1131	Yes
FM approval	Yes
to VDE 0631	Yes
Marine approval	Yes
UL Approval	Yes
Dimensions	
Dimensions	
• Mounting	on 35 mm DIN rail, 2 spacing units wide
• Width	36 mm
• Height	90 mm
• Depth	55 mm

2

Ordering Data	Order No.	Order No.
LOGO! DM8 24 24 V DC supply voltage, 4 digital inputs 24 V DC, 4 digital outputs 24 V DC, 0.3 A	6ED1 055-1CB00-0BA0	
LOGO! DM16 24 24 V DC supply voltage, 8 digital inputs 24 V DC, 8 digital outputs 24 V DC, 0.3 A	6ED1 055-1CB10-0BA0	
LOGO! DM8 12/24R 12/24 V DC supply voltage, 4 digital inputs 12/24 V DC, 4 relay outputs 5 A	6ED1 055-1MB00-0BA1	
LOGO! DM8 24R 24 V AC/DC supply voltage, 4 digital inputs 24 V AC/DC, 4 relay outputs 5 A	6ED1 055-1HB00-0BA0	
LOGO! DM16 24R 24 V DC supply voltage, 8 digital inputs 24 V DC, 8 relay outputs 5 A	6ED1 055-1NB10-0BA0	
LOGO! DM8 230R 115/230 V AC/DC supply voltage, 4 digital inputs 115/230 V AC/DC, 4 relay outputs 5 A	6ED1 055-1FB00-0BA1	
LOGO! DM16 230R 115/230 V AC/DC supply voltage, 8 digital inputs 115/230 V AC/DC, 8 relay outputs 5 A	6ED1 055-1FB10-0BA0	
LOGO! AM2 12/24 V DC supply voltage, 2 analog inputs 0 to 10 V or 0 to 20 mA, 10-bit resolution	6ED1 055-1MA00-0BA0	
LOGO! AM2 PT 100 12/24 V DC supply voltage, 2 Pt100 analog inputs, temper- ature range -50 °C to 200 °C	6ED1 055-1MD00-0BA0	
LOGO! AM2 AQ 24 V DC supply voltage, 2 analog outputs 0 to 10 V	6ED1 055-1MM00-0BA0	
Accessories		
LOGO! manual		
German		6ED1 050-1AA00-0AE7
English		6ED1 050-1AA00-0BE7
French		6ED1 050-1AA00-0CE7
Spanish		6ED1 050-1AA00-0DE7
Italian		6ED1 050-1AA00-0EE7
Chinese		6ED1 050-1AA00-0KE7
LOGO! memory card		6ED1 056-1DA00-0BA0
For copying, with know-how protection		
LOGO!Soft Comfort V6.0	B8	6ED1 058-0BA02-0YA0
For programming on the PC in LAD/FBD; executes on Windows 98 SE and higher, Linux, MAC OSX; on CD-ROM		
LOGO!Soft Comfort V6.0 upgrade		6ED1 058-0CA02-0YE0
Upgrade from V1.0 to V6.0		
LOGO! PC cable		6ED1 057-1AA00-0BA0
For transferring programs between LOGO! and the PC		
LOGO! USB PC cable	B9	6ED1 057-1AA01-0BA0
For transferring the program between LOGO! and PC, including driver on CD-ROM		
LOGO! News Box, 12/24 V		
Contains LOGO! 12/24RC, LOGO! USB PC cable, LOGO!Soft Comfort V6.0, manual, screwdriver, information material		
German	B9	6ED1 057-3BA00-0AA5
English	B9	6ED1 057-3BA00-0BA5
LOGO! News Box, 230 V		
Contains LOGO! 230RC, LOGO! USB PC cable, LOGO!Soft Comfort V6.0, manual, screwdriver, information material		
German	B9	6ED1 057-3AA02-0AA0
English	B9	6ED1 057-3AA02-0BA0
LOGO! TD News Box, 12/24 V		
Contains LOGO! 12/24RCo, LOGO! TD, LOGO! USB PC cable, LOGO! Soft Comfort V6.0, manual, screwdriver, information material		
German	B9	6ED1 057-3BA10-0AA0
English	B9	6ED1 057-3BA10-0BA0

B8: Subject to export regulations: AL: N and ECCN: EAR99S

B9: Subject to export regulations: AL: N and ECCN: EAR99T

LOGO! logic module

LOGO! modular

SIPLUS LOGO! modular expansion modules

Overview

2



- Expansion modules for connection to LOGO! Modular
- With digital inputs and outputs, analog inputs, or analog outputs
- Ambient temperature range -40 °C to +70 °C with 5 types

	SIPLUS LOGO! DM8 24	SIPLUS LOGO! DM8 12/24	SIPLUS LOGO! DM8 24R	SIPLUS LOGO! DM8 12/24R	SIPLUS LOGO! DM8 230R
Order No.	6AG1 055-1CB00-2XB0	6AG1 055-1PB00-2XB0 12/24 V DC power supply	6AG1 055-1HB00-2XB0	6AG1 055-1MB00-2XB1	6AG1 055-1FB00-2XB1
Order No. based on	6ED1 055-1CB00-0BA0	6ED1 055-1CB00-0BA0	6ED1 055-1HB00-0BA0	6ED1 055-1MB00-0BA1	6ED1 055-1FB00-0BA1
Ambient temperature range	-25 ... +70 °C -25 ... +55 °C (for applications with cUL approval), condensation permissible				
Environmental conditions	Suited for exceptional medial exposure (e.g. by chlorine sulfur atmosphere)				
Approvals	CE, cUL				
Technical data	The technical data are identical with those of the based-on modules.				

	SIPLUS LOGO! DM8 24	SIPLUS LOGO! DM8 24R	SIPLUS LOGO! DM8 12/24R	SIPLUS LOGO! DM8 230R	SIPLUS LOGO! AM2 230R
Order No.	6AG1 055-1CB00-2BY0	6AG1 055-1HB00-2BY0	6AG1 055-1MB00-2BY1	6AG1 055-1FB00-2BY1	6AG1 055-1MA00-2BY0
Order No. based on	6ED1 055-1CB00-0BA0	6ED1 055-1HB00-0BA0	6ED1 055-1MB00-0BA1	6ED1 055-1FB00-0BA1	6ED1 055-1MA00-0BA0
Ambient temperature range	-40 ... +70 °C -40 ... +55 °C (for applications with cUL approval), condensation permissible				
Environmental conditions	Suited for exceptional medial exposure (e.g. by chlorine sulfur atmosphere)				
Approvals	CE, cUL (available soon)				
Technical data	The technical data are identical with those of the based-on modules.				

Ordering Data	Order No.	Ordering Data	Order No.
SIPLUS LOGO! DM8 24 (extended temperature range and medial exposure) 24 V DC power supply, four 24 V DC digital inputs, four 24 V DC digital outputs, 0.3 A Temperature range -25 ... +70 °C B7 Temperature range -40 ... +70 °C	6AG1 055-1CB00-2XB0 6AG1 055-1CB00-2BY0	SIPLUS LOGO! DM8 12/24R (extended temperature range and medial exposure) 12/24 V DC power supply, four 12/24 V DC digital inputs, four 5 A relay outputs Temperature range -25 ... +70 °C B7 Temperature range -40 ... +70 °C	6AG1 055-1MB00-2XB1 6AG1 055-1MB00-2BY1
SIPLUS LOGO! DM8 12/24 (extended temperature range and medial exposure) 12/24 V DC power supply, four 12/24 V DC digital inputs, four 24 V DC digital outputs, 0.3 A	6AG1 055-1PB00-2XB0	SIPLUS LOGO! DM8 230R (extended temperature range and medial exposure) 115/230 V AC/DC power supply, four 115/230 V AC/DC digital inputs, four 5 A relay outputs Temperature range -25 ... +70 °C A5 Temperature range -40 ... +70 °C	6AG1 055-1FB00-2XB1 6AG1 055-1FB00-2BY1
SIPLUS LOGO! DM8 24R (extended temperature range and medial exposure) 24 V AC/DC power supply, four 24 V AC/DC digital inputs, four 5 A relay outputs Temperature range -25 ... +70 °C A5 Temperature range -40 ... +70 °C	6AG1 055-1HB00-2XB0 6AG1 055-1HB00-2BY0	SIPLUS LOGO! AM2 (extended temperature range and medial exposure) 12/24 V DC power supply, two analog inputs 0 ... 10 V or 0 ... 20 mA, 10 bit resolution Temperature range -25 ... +70 °C B7 Temperature range -40 ... +70 °C	6AG1 055-1MA00-2XB0 6AG1 055-1MA00-2BY0
		Accessories	see LOGO! modular expansion modules, page 2/19

A5: Subject to export regulations: AL: N and ECCN: 4A994X
 B7: Subject to export regulations: AL: N and ECCN: EAR99H

LOGO! logic module

LOGO! modular

LOGO! CM EIB/KNX communication module

Overview



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

Technical specifications

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

Ordering Data

Order No.

Communications module LOGO! CM EIB KNX	B7	6BK1 700-0BA00-0AA1
For connecting to <i>EIB</i> , 24 V DC supply voltage		
Accessories		
LOGO! manual		
German		6ED1 050-1AA00-0AE7
English		6ED1 050-1AA00-0BE7
French		6ED1 050-1AA00-0CE7
Spanish		6ED1 050-1AA00-0DE7
Italian		6ED1 050-1AA00-0EE7
Chinese		6ED1 050-1AA00-0KE7

B7: Subject to export regulations: AL: N and ECCN: EAR99H

AS-Interface connection for LOGO!

Overview

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



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

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

Technical specifications

Supply voltage in V	24 V DC	
Inputs/outputs	4 / 4 (virtual inputs / outputs)	
Bus connection	AS-Interface according to specification	
Ambient temperature in °C	0 ... +55	
Degree of protection	IP20	
Mounting	Onto standard mounting rail	
Dimensions (W x H x D)	36 x 90 x 58	
Indications of the LEDs	LED	Status
	Green	OK
	Red	No data traffic
	Flashes red/yellow	Zero address

Ordering Data

Order No.

AS-Interface connection for LOGO! B6 **3RK1 400-0CE10-0AA2**

B6: Subject to export regulations: AL: N and ECCN: EAR99

LOGO! logic module

LOGO!Power

LOGO!Power

Application



The power supplies of the LOGO!Power range are primary switched-mode devices that are optimally matched to the LOGO! logic modules in their functionality and design.

Depending on the power rating required, the LOGO!Power units are available in two sizes and the new generation is now even more compact despite increased functionality. The width of the small version is only 54 mm instead of 72 mm and the large size has shrunk from 126 mm to 72 mm. An extremely compact 4 A power supply with a width of only 90 mm now supplements the

24 V range. A LED indicates whether the output voltage is o.k., and in the event of an overload or short-circuit, the primary switched-mode regulators supply a constant current, that is, without restart attempts.

LOGO!Power naturally supplies the small LOGO! control modules. But these power supplies can also be used elsewhere. As well as being system power supplies, the LOGO!Power modules are also suitable for supplying other loads in the low-end performance range. With the wide-range input 85 V to 264 V AC and radio interference level B, they can be used universally in the most diverse application areas in the low-end performance range. Because the benefits of the primary switched-mode regulators convince all along the line.

For example:

- Improved protection of connected loads through the regulated output voltage
- Low power losses in the control cabinet thanks to high efficiency
- Compact design and low weight.

And LOGO!Power is also predestined for networking devices in standard low-voltage distribution boards

- Can be installed on 35-mm mounting rail
- Low installation depth and stepped profile of the design.

The power supplies naturally comply with the relevant European and American regulations.

Technical specifications LOGO!Power 12 V

	12 V/1.9 A	12 V/4.5 A
Order No.	6EP1 321-1SH02	6EP1 322-1SH02
Input	Single-phase AC	Single-phase AC
Rated voltage $V_{in \text{ rated}}$	100-240 V AC wide-range input	100-240 V AC wide-range input
Voltage range	85 ... 264 V AC	85 ... 264 V AC
Oversvoltage resistance	$2.3 \times V_{in \text{ rated}}/1.3 \text{ ms}$	$2.3 \times V_{in \text{ rated}}/1.3 \text{ ms}$
Mains buffering at $I_{out \text{ rated}}$	> 40 ms at $V_{in} = 187 \text{ V}$	> 40 ms at $V_{in} = 187 \text{ V}$
Rated line frequency, rated line-frequency range	50/60 Hz; 47 ... 63 Hz	50/60 Hz; 47 ... 63 Hz
Rated current $I_{in \text{ rated}}$	0.53 ... 0.3 A	1.13 ... 0.61 A
Switch-on current limit (+25 °C)	< 15 A	< 30 A
$I^2 t$	< 0.8 A ² s	< 3 A ² s
Integrated line-side fuse	Internal	Internal
Recommended circuit breaker (IEC 898) in mains supply line	From 16 A Characteristic B or from 10 A Characteristic C	From 16 A Characteristic B or from 10 A Characteristic C
Output	Controlled, isolated DC voltage	Controlled, isolated DC voltage
Rated voltage $V_{out \text{ rated}}$	12 V DC	12 V DC
Total tolerance, static	±3 %	±3 %
• Static mains compensation	Approx. 0.2 %	Approx. 0.1 %
• Static load smoothing	Approx. 1.5 %	Approx. 1.5 %
Residual ripple	< 200 m V_{pp} (typ. 10 m V_{pp})	< 200 m V_{pp} (typ. 10 m V_{pp})
Spikes (bandwidth approx. 20 MHz)	< 300 m V_{pp} (typ. 30 m V_{pp})	< 300 m V_{pp} (typ. 40 m V_{pp})
Adjustment range	10.5 ... 16.1 V	10.5 ... 16.1 V
Status display	Green LED for output voltage OK	Green LED for output voltage OK
Response on activation/deactivation	No overshoot of V_{out} (soft start)	No overshoot of V_{out} (soft start)
Starting delay/voltage rise	< 0.5 s/typ. 15 ms	< 0.5 s/typ. 10 ms

Technical specifications LOGO!Power 12 V (continued)

	12 V/1.9 A	12 V/4.5 A
Order No.	6EP1 321-1SH02	6EP1 322-1SH02
Rated current I_{outrated}	1.9 A	4.5 A
Current range to +55 °C	0 ... 1.9 A	0 ... 4.5 A
Parallel switching for enhanced performance	Yes	Yes
Efficiency		
Efficiency at $V_{\text{outrated}}, I_{\text{out rated}}$	Typ. 80 %	Typ. 85 %
Power loss at $V_{\text{outrated}}, I_{\text{out rated}}$	Typ. 5 W	Typ. 10 W
Closed-loop control		
Dyn. mains compensation ($V_{\text{out rated}} \pm 15\%$)	< 0.2 % V_{out}	< 0.2 % V_{out}
Dyn. load smoothing ($I_{\text{out}}: 10/90/10\%$)	Typ. $\pm 3\%$ V_{out}	Typ. $\pm 4.2\%$ V_{out}
Load step settling time		
• 10 to 90 %	Typ. 20 ms	Typ. 20 ms
• 90 to 10 %	Typ. 20 ms	Typ. 20 ms
Protection and monitoring		
Current limit	Typ. 2.5 A	Typ. 5.9 A
Short-circuit protection	Constant current characteristic	Constant current characteristic
Sustained short-circuit current rms value	< 4 A	< 8 A
Overload/short-circuit indicator	-	-
Safety		
Primary/secondary electrical isolation	Yes, safety extra-low output voltage V_{out} to EN 60950 and EN 50178	Yes, safety extra-low output voltage V_{out} to EN 60950 and EN 50178
Protection class	Class II (without PE conductor)	Class II (without PE conductor)
CE marking	Yes	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 14), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273	cULus-Listed (UL 508, CSA C22.2 No. 14), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273
FM approval	Class I Div. 2, Group A, B, C, D T4	Class I Div. 2, Group A, B, C, D T4
Marine approval	GL, ABS	GL, ABS
Degree of protection (EN 60529)	IP20	IP20
EMC		
Emitted interference	EN 55022 Class B	EN 55022 Class B
Supply-harmonics limitation	Not applicable	Not applicable
Noise immunity	EN 61000-6-2	EN 61000-6-2
Operating data		
Ambient temperature range	-20 ... +55 °C with natural convection	-20 ... +55 °C with natural convection
Transport/storage temperature range	-40 ... +70 °C	-40 ... +70 °C
Humidity class	Climatic class 3K3 to EN 60721, no condensation	Climatic class 3K3 to EN 60721, no condensation
Mechanics		
Connections		
• Supply input L1, N	One screw-type terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded	One screw-type terminal each for 0.5 ... 2.5 mm ² single-core/finely stranded
• Output +		
• Output -	2 screw-type terminals each for 0.5 ... 2.5 mm ²	2 screw-type terminals each for 0.5 ... 2.5 mm ²
Dimensions (W x H x D) in mm	54 x 90 x 55	72 x 90 x 55
Weight, approx.	Approx. 0.17 kg	Approx. 0.25 kg
Installation	Snaps onto DIN rail EN 60715 35x7,5/15	Snaps onto DIN rail EN 60715 35x7,5/15

LOGO! logic module

LOGO!Power

LOGO!Power

2

Technical specifications LOGO!Power 24 V

	24 V/1.3 A	24 V/2.5 A	24 V/4 A
Order No.	6EP1 331-1SH02	6EP1 332-1SH42	6EP1 332-1SH51
Input	Single-phase AC	Single-phase AC	Single-phase AC
Rated voltage $V_{in rated}$	100-240 V AC wide-range input	100-240 V AC wide-range input	100-240 V AC wide-range input
Voltage range	85 ... 264 V AC	85 ... 264 V AC	85 V to 264 V AC
Overvoltage resistance	$2.3 \times V_{in rated} / 1.3$ ms	$2.3 \times V_{in rated} / 1.3$ ms	$2.3 \times V_{in rated} / 1.3$ ms
Mains buffering at $I_{out rated}$	> 40 ms at $V_{in} = 187$ V	> 40 ms at $V_{in} = 187$ V	> 40 ms at $V_{in} = 187$ V
Rated line frequency, rated line-frequency range	50/60 Hz; 47 ... 63 Hz	50/60 Hz; 47 ... 63 Hz	50/60 Hz; 47 ... 63 Hz
Rated current $I_{in rated}$	0.7-0.35 A	1.22-0.66 A	1.95-0.97 A
Switch-on current limit (+25 °C)	< 15 A	< 30 A	< 30 A
$I^2 t$	< 0.8 A ² s	< 3 A ² s	< 2.5 A ² s
Built-in line-side fuse	Internal	Internal	Internal
Recommended miniature circuit breaker (IEC 898) in the mains power input	From 16 A, Characteristic B or from 10 A, Characteristic C	From 16 A, Characteristic B or from 10 A, Characteristic C	From 16 A, Characteristic B or from 10 A, Characteristic C
Output	Controlled, isolated DC voltage	Controlled, isolated DC voltage	Controlled, isolated DC voltage
Rated voltage $V_{out rated}$	24 V DC	24 V DC	24 V DC
Total tolerance, static	±3 %	±3 %	±3 %
• Static mains compensation	Approx. 0.1 %	Approx. 0.1 %	Approx. 0.1 %
• Static load smoothing	Approx. 1.5 %	Approx. 1.5 %	Approx. 1.5 %
Residual ripple	< 200 mV _{pp} (typ. 10 mV _{pp})	< 200 mV _{pp} (typ. 10 mV _{pp})	< 200 mV _{pp} (typ. 10 mV _{pp})
Spikes (bandwidth approx. 20 MHz)	< 300 mV _{pp} (typ. 20 mV _{pp})	< 300 mV _{pp} (typ. 40 mV _{pp})	< 300 mV _{pp} (typ. 80 mV _{pp})
Adjustment range	22.2 V to 26.4 V	22.2 V to 26.4 V	22.2 V to 26.4 V
Status display	Green LED for output voltage OK	Green LED for output voltage OK	Green LED for output voltage OK
Response on activation/deactivation	No overshoot of V_{out} (soft start)	No overshoot of V_{out} (soft start)	No overshoot of V_{out} (soft start)
Startup delay/voltage rise	< 0.5 s/typ. 15 ms	< 0.5 s/typ. 10 ms	< 0.5 s/typ. 35 ms
Rated current $I_{out rated}$	1.3 A	2.5 A	4 A
Current range to +55 °C	0 ... 1.3 A	0 ... 2.5 A	0 ... 4 A
Parallel switching for enhanced performance	Yes	Yes	Yes
Efficiency			
Efficiency at $V_{out rated}$, $I_{out rated}$	Typ. 82 %	Typ. 87 %	Typ. 89 %
Power loss at $V_{out rated}$, $I_{out rated}$	Typ. 7 W	Typ. 9 W	Typ. 12 W
Closed-loop control			
Dynamic line smoothing ($V_{in rated} \pm 15$ %)	< 0.2 % V_{out}	< 0.2 % V_{out}	< 0.2 % V_{out}
Dynamic load smoothing (I_{out} : 10/90/10 %)	±1.5 % V_{out}	±1.5 % V_{out}	±1.5 % V_{out}
Load-step settling time			
• 10 at 90 %	Typ. 20 ms	Typ. 20 ms	Typ. 20 ms
• 90 at 10 %	Typ. 20 ms	Typ. 20 ms	Typ. 20 ms
Protection and monitoring			
Current limit	Typically 2 A	Typically 3.4 A	Typically 4.7 A
Short-circuit protection	Constant-current characteristic	Constant-current characteristic	Constant-current characteristic
Sustained short-circuit current rms value	< 4 A	< 8 A	< 10 A
Overload/short-circuit indicator	-	-	-

Technical specifications LOGO!Power 24 V (continued)

	24 V/1.3 A	24 V/2.5 A	24 V/4 A
Power supply, type	6EP1 331-1SH02	6EP1 332-1SH42	6EP1 332-1SH51
Input	Single-phase AC	Single-phase AC	Single-phase AC
Safety			
Primary/secondary electrical isolation	Yes, safety extra-low output voltage V_{out} to EN 60950 and EN 50178	Yes, safety extra-low output voltage V_{out} to EN 60950 and EN 50178	Yes, safety extra-low output voltage V_{out} to EN 60950 and EN 50178
Protection class	Class II (without protective conductor)	Class II (without protective conductor)	Class II (without protective conductor)
German Technical Inspectorate approval	Yes; CB scheme	Yes; CB scheme	Yes; CB scheme
CE marking	Yes	Yes	Yes
UL/cUL (CSA) approval	cULus-Listed (UL 508, CSA C22.2 No. 14), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273	cULus-Listed (UL 508, CSA C22.2 No. 14), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273	cULus-Listed (UL 508, CSA C22.2 No. 14), File E197259; cURus-Recognized (UL 60950, CSA C22.2 No. 60950), File E151273
FM approval	Class I Div. 2, Group A, B, C, D T4	Class I Div. 2, Group A, B, C, D T4	Class I Div. 2, Group A, B, C, D T4
Marine approval	GL, ABS	GL, ABS	GL, ABS
Degree of protection (EN 60529)	IP20	IP20	IP20
EMC			
Emitted interference	EN 55022 Class B	EN 55022 Class B	EN 55022 Class B
Supply-harmonics limitation	Not applicable	Not applicable	EN 61000-3-2
Noise immunity	EN 61000-6-2	EN 61000-6-2	EN 61000-6-2
Operating data			
Ambient temperature range	-20 ... +55 °C with natural convection	-20 ... +55 °C with natural convection	-20 ... +55 °C with natural convection
Transport/storage temperature range	-40 ... +70 °C	-40 ... +70 °C	-40 ... +70 °C
Humidity class	Climate class 3K3 to EN 60721, no condensation	Climate class 3K3 to EN 60721, no condensation	Climate class 3K3 to EN 60721, no condensation
Mechanics			
Supply input connections L1, N	Solid/finely-stranded per screw-type terminal for 0.5 mm ... 2.5 mm ²	Solid/finely-stranded per screw-type terminal for 0.5 mm ... 2.5 mm ²	Solid/finely-stranded per screw-type terminal for 0.5 mm ... 2.5 mm ²
Connections			
• Output +	Per 2 screw-type terminals for 0.5 mm ... 2.5 mm ²	Per 2 screw-type terminals for 0.5 mm ... 2.5 mm ²	Per 2 screw-type terminals for 0.5 mm ... 2.5 mm ²
• Output -			
Dimensions (W x H x D) in mm	54 x 90 x 55	72 x 90 x 55	90 x 90 x 55
Weight, approx	Approx. 0.17 kg	Approx. 0.25 kg	Approx. 0.34 kg
Installation	Snaps onto DIN rail 60715 35x7,5/15	Snaps onto DIN rail EN 60715 35x7,5/15	Snaps onto DIN rail EN 60715 35x7,5/15

Ordering Data

	Order No.		Order No.
LOGO!Power 12 V 1.9 A	6EP1 321-1SH02	LOGO!Power 24 V 1.3 A	6EP1 331-1SH02
Input 100 - 240 V AC Output 12 V DC, 1.9 A		Input 100 - 240 V AC Output 24 V DC, 1.3 A	
LOGO!Power 12 V 4.5 A	6EP1 322-1SH02	LOGO!Power 24 V 2.5 A	6EP1 332-1SH42
Input 100 - 240 V AC Output 12 V DC, 4.5 A		Input 100 - 240 V AC Output 24 V DC, 2.5 A	
		LOGO!Power 24 V 4 A	6EP1 332-1SH51
		Input 100 - 240 V AC Output 24 V DC, 4 A	

LOGO! logic module

LOGO!Contact, LOGO! Software

LOGO!Contact

Overview



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

Technical specifications

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

Ordering Data

LOGO!Contact

Module for direct switching of resistive consumers up to 20 A and motors up to 4 kW

Switching voltage 24 V

Switching voltage 230 V

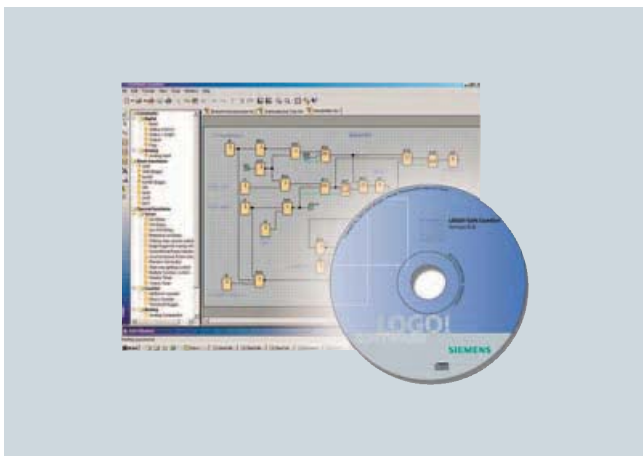
Order No.

6ED1 057-4CA00-0AA0

6ED1 057-4EA00-0AA0

LOGO! Software

Overview



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

The connection between LOGO! and the PC is made using the LOGO! PC cable (serial interface) or the LOGO! USB PC cable (USB interface).

Minimum system requirements

Windows 98 SE, NT 4.0, ME, 2000, XP or Vista (not 64-bit)

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

Mac OS X

- PowerMac G3, G4, G4 Cube, iMac, PowerBook G3, G4 or iBook.

Linux (tested with Caldera OpenLinux 2.4)

- Runs on all Linux distributions on which the Java 2 SDK Version 1.3.1 runs.
- Please refer to your relevant Linux distribution for the necessary hardware requirements.

Ordering Data

		Order No.
LOGO!Soft Comfort V6.0	B8	6ED1 058-0BA02-0YA0
For programming on the PC in LAD/FBD; executes under Windows 98 SE and higher, Linux, MAC OSX; on CD-ROM		
LOGO!Soft Comfort V6.0 upgrade		6ED1 058-0CA02-0YE0
Upgrade from V1.0 to V6.0		

B8: Subject to export regulations: AL: N and ECCN: EAR99S