

LOGO! logic module



2/2	Introduction
2/2	LOGO! logic module
2/3	LOGO! modular
2/3	LOGO! modular basic versions
2/6	SIPLUS LOGO! modular basic versions
2/8	LOGO! modular pure versions
2/11	SIPLUS LOGO! modular pure versions
2/13	LOGO! modular expansion modules
2/18	SIPLUS LOGO! modular expansion modules
2/21	LOGO! CM EIB/KNX communication module
2/22	AS-Interface connection for LOGO!
2/23	LOGO!Power
2/23	LOGO!Power
2/33	SIPLUS LOGO!Power
2/35	LOGO!Contact
2/36	LOGO! software

LOGO! logic module

on

module



module

, easy-to-use and low-cost solution for simple

easy to operate, universally applicable without

integrated display and operator panel

functions can be connected at the click of a button
of PC software; up to 130 times over

be easily changed at the press of a key. No more
rewiring

for use in the toughest ambient conditions
and temperature range from -40/-25 °C to +70 °C

medial exposure (harmful gas atmosphere)
on permissible

when PLC technology of LOGO!

le, program, maintain, and service

in automotive engineering, environmental
mining, chemical plants, conveying technology,
, etc.

the mounting set also allows simple and reliable
the logic modules in front plates; IP65 protection
ole.

ensure dependable operation of SIPLUS devices
the battery in conjunction with combustion
necessary to put in a SIPLUS upmiter upstream
between the battery and the SIPLUS LOGO!.

information, please go to:

www.siemens.com/siplus-extreme

General technical data of the SIPLUS LOGO

Ambient temperature range	-40/-25 ... +70 °C
Conformal coating	Coating of the printed circuit boards and the electronic components
Technical data	The technical data of the standard product applies except for the ambient conditions.
Ambient conditions	
Relative humidity	5 ... 100%, condensation allowed
Biologically active substances	Conformity with EN 60721-3-3, Class 3B2 mold and fungal spores (except fauna)
Chemically active substances	Conformity with EN 60721-3-3, Class 3C4 incl. salt mist and ISA-S71.04 severity level G1; G2; G3; GX ¹⁾²⁾
Mechanically active substances	Conformity with EN 60721-3-3, Class 3S4 including conductive sand, dust ²⁾
Air pressure (depending on the highest positive temperature range specified)	1080 ... 795 hPa (-1000 ... +2000 m) see ambient temperature range 795 ... 658 hPa (+2000 ... 3500 m) derating 10 K 658 ... 540 hPa (+3500 ... +5000 m) derating 20 K

1) ISA-S71.04 severity level GX:

Long-term load:

SO₂ < 4.8 ppm; H₂S < 9.9 ppm; Cl < 0.2 ppm; HCl < 0.66 ppm;

HF < 0.12 ppm; NH < 49 ppm; O₃ < 0.1 ppm; NOX < 5.2 ppm

Limit value (max. 30 min/d):

SO₂ < 17.8 ppm; H₂S < 49.7 ppm; Cl < 1.0 ppm; HCl < 3.3 ppm;

HF < 2.4 ppm; NH < 247 ppm; O₃ < 1.0 ppm; NOX < 10.4 ppm

2) The supplied plug covers must remain in place over the unused interface when operated in atmospheres containing corrosive gases!

LOGO! logic module LOGO! modular

LOGO! modular basic versions

2



- 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)

Specifications

	6ED1 052-1CC01-0BA6	6ED1 052-1MD00-0BA6	6ED1 052-1HB00-0BA6	6ED1 052-1FB00-0BA6
Power supply	Yes	Yes	Yes	Yes
Voltage, lower	20.4 V	10.8 V	20.4 V	100 V
Voltage, upper	28.8 V	28.8 V	28.8 V	253 V
Voltage, lower			20.4 V	85 V
Voltage, upper			26.4 V	265 V
Life expectancy	80 h	80 h	80 h	80 h
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	4; Transistor	4; Relay	4; Relay	4; Relay
Short-circuit protection	Yes; electrical (1 A)	No; external fusing necessary	No; external fusing necessary	No; external fusing necessary
Maximum permissible current at 55 °C, max.	0.3 A			

LOGO! logic module modular

Modular basic versions

Specifications (continued)

	6ED1 052-1CC01-0BA6	6ED1 052-1MD00-0BA6	6ED1 052-1HB00-0BA6	6ED1 052-1FB00-0BA6
Temperature	0 °C 55 °C	0 °C 55 °C	0 °C 55 °C	0 °C 55 °C
Protection	Yes	Yes	Yes	Yes
Dimensions, weight	Yes	Yes	Yes	Yes
Mounting to	Yes	Yes	Yes	Yes
Terminal block	Yes	Yes	Yes	Yes
Terminal block E 0631	Yes	Yes	Yes	Yes
Terminal block	Yes	Yes	Yes	Yes
Terminal block	Yes	Yes	Yes	Yes
Weight	on 35 mm DIN rail, 4 spacing units wide 72 mm 90 mm 55 mm	on 35 mm DIN rail, 4 spacing units wide 72 mm 90 mm 55 mm	on 35 mm DIN rail, 4 spacing units wide 72 mm 90 mm 55 mm	on 35 mm DIN rail, 4 spacing units wide 72 mm 90 mm 55 mm

	Order No.		Order No.
Module 24C Power supply, digital inputs, of used in analog outputs, switch; modules can be on capability	6ED1 052-1CC01-0BA6	Accessories	
Module 12/24RC Power supply, digital inputs, of used in analog outputs, switch; modules can be on capability	6ED1 052-1MD00-0BA6	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
Module 24RC Power supply, digital inputs, outputs, switch; modules can be on capability	6ED1 052-1HB00-0BA6	SIPLUS LOGO! TD text display (extended temperature range -10 ... +60 °C and medial exposure)	6AG1 055-4MH00-2BA0
		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! logic module

LOGO! modular

LOGO! modular basic versions

	Order No.		Order No.
Card for copying, with tion	6ED1 056-1DA00-0BA0	LOGO! modem cable Adapter cable for analog modem communication	6ED1 057-1CA00-0BA0
Card for backing up the clock (not	6ED1 056-6XA00-0BA0	Front plate mounting set Width 4 modular spacings Width 4 modular spacings, with keys Width 8 modular spacings Width 8 modular spacings, with keys	6AG1 057-1AA00-0AA0 6AG1 057-1AA00-0AA3 6AG1 057-1AA00-0AA1 6AG1 057-1AA00-0AA2
battery card am and battery v-how protection up the integral ot LOGO! 24)	6ED1 056-7DA00-0BA0	LOGO! News Box, 12/24 V Contains LOGO! 12/24RC, LOGO! USB PC cable, LOGO!Soft Comfort V6.0, manual, screwdriver, information material German J English J	6ED1 057-3BA00-0AA5 6ED1 057-3BA00-0BA5
L vice used to produce contents on up dules	6AG1 057-1AA01-0BA6	LOGO! News Box, 230 V Contains LOGO! 230RC, LOGO! USB PC cable, LOGO!Soft Comfort V6.0, manual, screw- driver, information material German J English J	6ED1 057-3AA02-0AA0 6ED1 057-3AA02-0BA0
port V6.0 on the PC in es on Windows , Linux, MAC 1	J 6ED1 058-0BA02-0YA0	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 J English J	6ED1 057-3BA10-0AA0 6ED1 057-3BA10-0BA0
port V6.0 .0 to V6.0	J 6ED1 058-0CA02-0YE0		
fer between C	6ED1 057-1AA00-0BA0		
cable e program and PC, n CD-ROM	J 6ED1 057-1AA01-0BA0		

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

L: Subject to export regulations AL: 91999 and ECCN: N

LOGO! logic module modular

LOGO! modular basic versions



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

Note:

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

	SIPLUS LOGO! 24	SIPLUS LOGO! 12/24RC	SIPLUS LOGO! 24RC	SIPLUS LOGO! 230RC
	6AG1 052-1CC01-2BA6	6AG1 052-1FB00-2BA6	6AG1 052-1HB00-2BA6	6AG1 052-1MD00-2BA6
on	6ED1 052-1CC01-0BA6	6ED1 052-1FB00-0BA6	6ED1 052-1HB00-0BA6	6ED1 052-1MD00-0BA6
ature range	-25°C to +70 °C			
g	Coating of the printed circuit boards and the electronic components			
	The technical data of the standard product applies except for the ambient conditions.			
ons				
	5 ... 100 % Condensation permissible			
e	Conformity with EN 60721-3-3, Class 3B2 mold and fungal spores (except fauna)			
e	Conformity with EN 60721-3-3, Class 3C4 incl. salt mist and ISA-S71.04 severity level G1; G2; G3; GX ^{1) 2)}			
ve	Conformity with EN 60721-3-3, Class 3S4 including conductive sand, dust ²⁾			
ending on ve temper- ified)	1080 ... 795 hPa (-1000 ... +2000 m) see ambient temperature range 795 ... 658 hPa (+2000 ... +3500 m) derating 10 K 658 ... 540 hPa (+3500 ... +5000 m) derating 20 K			

Severity level GX: Long-term load:
 n; H₂S < 9.9 ppm; Cl < 0.2 ppm; HCl < 0.66 ppm; HF < 0.12 ppm; NH < 49 ppm; O₃ < 0.1 ppm; NOX < 5.2 ppm
 ax. 30 min/d):
 m; H₂S < 49.7 ppm; Cl < 1.0 ppm; HCl < 3.3 ppm; HF < 2.4 ppm; NH < 247 ppm; O₃ < 1.0 ppm; NOX < 10.4 ppm
 plug covers must remain in place over the unused interface when operated in atmospheres containing corrosive gases!

Documentation on SIPLUS can be found here:

www.siemens.com/siplus-extreme

LOGO! logic module LOGO! modular

SIPLUS LOGO! modular basic versions

	Order No.		Order No.
<p>24 I</p> <p>temperature range and</p> <p>power supply, digital inputs, of 12 bits used in analog</p> <p>12 digital outputs, 0.3 A; 12 relays; 12 relays can be used</p> <p>12 relays capability</p>	6AG1 052-1CC01-2BA6	<p>Accessories</p> <p>SIPLUS Upmimer upstream device L</p> <p>for reliable operation at the battery of combustion engines</p> <p>Additional accessories</p>	<p>6AG1 053-1AA00-2AA0</p> <p>See LOGO! modular basic versions</p>
<p>24RC L</p> <p>temperature range and</p> <p>power supply, digital inputs, of 12 bits used in analog</p> <p>12 digital outputs, 0.3 A; 12 relays; 12 relays can be used</p> <p>12 relays capability</p>	6AG1 052-1MD00-2BA6		
<p>24RC</p> <p>temperature range and</p> <p>power supply, digital inputs, of 12 bits used in analog</p> <p>12 digital outputs, 0.3 A; 12 relays; 12 relays can be used</p> <p>12 relays capability</p>	6AG1 052-1HB00-2BA6		
<p>230RC</p> <p>temperature range and</p> <p>power supply, digital inputs, of 12 bits used in analog</p> <p>12 digital outputs, 0.3 A; 12 relays; 12 relays can be used</p> <p>12 relays capability</p>	6AG1 052-1FB00-2BA6		

2

I: Subject to export regulations AL: N and ECCN: EAR99H
L: Subject to export regulations AL: 91999 and ECCN: N

LOGO! logic module modular

modular pure versions



- 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)

Specifications

	6ED1 052-2CC01-0BA6	6ED1 052-2MD00-0BA6	6ED1 052-2HB00-0BA6	6ED1 052-2FB00-0BA6
Power supply	Yes	Yes	Yes	Yes
Voltage, lower	20.4 V	10.8 V	20.4 V	100 V
Voltage, upper	28.8 V	28.8 V	28.8 V	253 V
Voltage, lower			20.4 V	85 V
Voltage, upper			26.4 V	265 V
Relays	190 80 h	8 80 h	8 80 h	8 80 h
Analog 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	4; Transistor	4; Relay	4; Relay	4; Relay
Fusing	Yes; electrical (1 A)	No; external fusing necessary	No; external fusing necessary	No; external fusing necessary
Permissible current at 50°C max	0.3 A			

LOGO! logic module

LOGO! modular

LOGO! modular pure versions

2

Specifications (continued)

	6ED1 052-2CC01-0BA6	6ED1 052-2MD00-0BA6	6ED1 052-2HB00-0BA6	6ED1 052-2FB00-0BA6
Radio interference (EN 55 011 class B)	Yes; Radio interference suppression according to EN55011, limit value class B	Yes	Yes	Yes
Temperature	0 °C 55 °C	0 °C 55 °C	0 °C 55 °C	0 °C 55 °C
Protection	Yes	Yes	Yes	Yes
Dimensions, weight	Yes	Yes	Yes	Yes
Compliance with CE marking	Yes	Yes	Yes	Yes
EMC 0631	Yes	Yes	Yes	Yes
Expansion capability	Yes	Yes	Yes	Yes
Weight	on 35 mm DIN rail, 4 spacing units wide 72 mm 90 mm 55 mm	on 35 mm DIN rail, 4 spacing units wide 72 mm 90 mm 55 mm	on 35 mm DIN rail, 4 spacing units wide 72 mm 90 mm 55 mm	on 35 mm DIN rail, 4 spacing units wide 72 mm 90 mm 55 mm

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

LOGO! logic module

modular

modular pure versions

	Order No.		Order No.
Display can be LOGO! 0BA6 versions, connecting cable	6ED1 055-4MH00-0BA0	LOGO! memory/battery card Combined program and battery module, with know-how protection and for backing up the integral real-time clock (not LOGO! 24o)	6ED1 056-7DA00-0BA0
FD text display temperature range and media	6AG1 055-4MH00-2BA0	LOGO! PROM L Programming device used to simultaneously reproduce program module contents on up to 8 program modules	6AG1 057-1AA01-0BA6
can be LOGO! 0BA6 versions, connecting cable		LOGO!Soft Comfort V6.0 J For programming on the PC in LAD/FBD; executes on Windows 98 SE and higher, Linux, MAC OSX; on CD-ROM	6ED1 058-0BA02-0YA0
	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!Soft Comfort V6.0 upgrade J Upgrade from V1.0 to V6.0	6ED1 058-0CA02-0YE0
		LOGO! PC cable For program transfer between LOGO! and the PC	6ED1 057-1AA00-0BA0
Card for copying, with tion	6ED1 056-1DA00-0BA0	LOGO! USB PC cable J For transferring the program between LOGO! and PC, including driver on CD-ROM	6ED1 057-1AA01-0BA0
Card for backing up the clock (not	6ED1 056-6XA00-0BA0	LOGO! modem cable Adapter cable for analog modem communication	6ED1 057-1CA00-0BA0

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

L: Subject to export regulations AL: 91999 and ECCN: N

LOGO! logic module LOGO! modular

SIPLUS LOGO! modular pure versions

2



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

Note:

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

	SIPLUS LOGO! 24o	SIPLUS LOGO! 12/24RCo	SIPLUS LOGO! 24RCo	SIPLUS LOGO! 230RCo
Model	6AG1 052-2CC01-2BA6	6AG1 052-2MD00-2BA6	6AG1 052-2HB00-2BA6	6AG1 052-2FB00-2BA6
Model	6ED1 052-2CC01-0BA6	6ED1 052-2MD00-0BA6	6ED1 052-2HB00-0BA6	6ED1 052-2FB00-0BA6
Temperature range	-40 °C to +70 °C			
Coating	Coating of the printed circuit boards and the electronic components			
Technical data	The technical data of the standard product applies except for the ambient conditions.			
Humidity	5 ... 100 % Condensation permissible			
Conformity	Conformity with EN 60721-3-3, Class 3B2 mold and fungal spores (except fauna)			
Conformity	Conformity with EN 60721-3-3, Class 3C4 incl. salt mist and ISA-S71.04 severity level G1; G2; G3; GX ^{1) 2)}			
Conformity	Conformity with EN 60721-3-3, Class 3S4 including conductive sand, dust ²⁾			
Operating temperature (non-derated)	1080 ... 795 hPa (-1000 ... +2000 m) see ambient temperature range			
Operating temperature (derated)	795 ... 658 hPa (+2000 ... +3500 m) derating 10 K			
Operating temperature (derated)	658 ... 540 hPa (+3500 ... +5000 m) derating 20 K			

Severity level GX: Long-term load:

SO₂ < 9.9 ppm; H₂S < 9.9 ppm; Cl < 0.2 ppm; HCl < 0.66 ppm; HF < 0.12 ppm; NH < 49 ppm; O₃ < 0.1 ppm; NOX < 5.2 ppm

max. 30 min/d):

SO₂ < 49.7 ppm; Cl < 1.0 ppm; HCl < 3.3 ppm; HF < 2.4 ppm; NH < 247 ppm; O₃ < 1.0 ppm; NOX < 10.4 ppm

Plug covers must remain in place over the unused interface when operated in atmospheres containing corrosive gases!

Documentation on SIPLUS can be found here:

www.siemens.com/siplus-extreme

LOGO! logic module modular

LOGO! modular pure versions

	Order No.		Order No.
<p>240</p> <p>temperature range and</p> <p>power supply, 24 V DC, of which 16 V DC in analog mode</p> <p>0.24 V DC, 0.3 A, 2-position selector switch; 4 input keys and keyboard; 4 output keys can be configured</p> <p>on capability</p>	6AG1 052-2CC01-2BA6	<p>Accessories</p> <p>SIPLUS Upmiter upstream device L</p> <p>for reliable operation at the battery of combustion engines</p> <p>Additional accessories</p>	<p>6AG1 053-1AA00-2AA0</p> <p>See LOGO! modular pure versions, page 2/10</p>
<p>24RCo</p> <p>temperature range and</p> <p>power supply, 24 V DC, of which 16 V DC, of which 8 V DC in analog mode</p> <p>0.24 V DC, 0.3 A, 2-position selector switch; 4 input keys and keyboard; 4 output keys can be configured</p> <p>on capability</p>	6AG1 052-2MD00-2BA6		
<p>24RCo</p> <p>temperature range and</p> <p>power supply, 24 V AC/DC, of which 16 V DC, of which 8 V DC in analog mode</p> <p>0.24 V DC, 0.3 A, 2-position selector switch; 4 input keys and keyboard; 4 output keys can be configured</p> <p>on capability</p>	6AG1 052-2HB00-2BA6		
<p>230RCo</p> <p>temperature range and</p> <p>power supply, 230 V AC/DC, of which 16 V DC, of which 8 V DC in analog mode</p> <p>0.23 V DC, 0.3 A, 2-position selector switch; 4 input keys and keyboard; 4 output keys can be configured</p> <p>on capability</p>	6AG1 052-2FB00-2BA6		

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

S: Subject to export regulations AL: 91999 and ECCN: N

LOGO! logic module LOGO! modular

LOGO! modular expansion modules



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

2

Specifications

	6ED1 055-1CB00-0BA0	6ED1 055-1HB00-0BA0	6ED1 055-1MB00-0BA1	6ED1 055-1FB00-0BA1
Supply voltage, max.	20.4 V	20.4 V	10.8 V	100 V
Supply voltage, min.	28.8 V	28.8 V	28.8 V	253 V
Supply voltage, max. (with 24 V DC supply)		Yes		Yes
Supply voltage, max. (with 24 V AC supply)		20.4 V		Yes
Supply voltage, max. (with 24 V AC supply, 50/60 Hz)		26.4 V		85 V
Supply voltage, max. (with 24 V AC supply, 50/60 Hz, 100 V)				265 V
Digital inputs	4	4	4	4
Analog outputs	4	4; Relay	4; Relay	4; Relay
External fusing	Yes; electrical (1 A)	No; external fusing necessary	No; external fusing necessary	No; external fusing necessary
Rated load current, max.	0.3 A	3 A	3 A	3 A
Rated load current, max. (continuous current)	0.3 A	5 A	5 A	5 A

IO! logic module

modular

modular expansion modules

Specifications (continued)

	6ED1 055-1CB00-0BA0	6ED1 055-1HB00-0BA0	6ED1 055-1MB00-0BA1	6ED1 055-1FB00-0BA1
Temperature	0 °C 55 °C	0 °C 55 °C	0 °C 55 °C	0 °C 55 °C
Protection	Yes	Yes	Yes	Yes
Dimensions, weight	Yes	Yes	Yes	Yes
Mounting to	Yes	Yes	Yes	Yes
Terminal block	Yes	Yes	Yes	Yes
Terminal block E 0631	Yes	Yes	Yes	Yes
Terminal block	Yes	Yes	Yes	Yes
Terminal block	Yes	Yes	Yes	Yes
Weight	on 35 mm DIN rail, 2 spacing units wide 36 mm; 2 DU 90 mm 55 mm	on 35 mm DIN rail, 2 spacing units wide 36 mm; 2 DU 90 mm 55 mm	on 35 mm DIN rail, 2 spacing units wide 36 mm; 2 DU 90 mm 55 mm	on 35 mm DIN rail, 2 spacing units wide 36 mm; 2 DU 90 mm 55 mm

	6ED1 055-1CB10-0BA0	6ED1 055-1NB10-0BA0	6ED1 055-1FB10-0BA0
Power supply	Yes	Yes	Yes
Voltage, lower limit (DC)	20.4 V	20.4 V	100 V
Voltage, upper limit (DC)	28.8 V	28.8 V	253 V
Voltage, lower limit (AC)			Yes
Voltage, upper limit (AC)			85 V
Frequency range,			265 V
Frequency range,			47 Hz
Frequency range,			63 Hz
Inputs	8	8	8
Voltage	< 5 V DC > 12 V DC	< 5 V DC > 12 V DC	< 40 V AC; < 30 V DC > 79 V AC; > 79 V DC
Max. current (permissible)	1 mA	1 mA	0.03 mA

LOGO! logic module

LOGO! modular

LOGO! modular expansion modules

2

Specifications (continued)

	6ED1 055-1CB10-0BA0	6ED1 055-1NB10-0BA0	6ED1 055-1FB10-0BA0
Number of outputs	8	8; Relay	8; Relay
Protection	Yes; electrical (1 A)	No; external fusing necessary	external fusing necessary
Power		1 000 W; 500 W at 115 V AC	1 000 W; 500 W at 115 V AC
External input	Yes	Yes	Yes
Power of 2 outputs	No	No	No
Frequency			
Load, max.	10 Hz	2 Hz	2 Hz
Load, max.	0.5 Hz	0.5 Hz	0.5 Hz
Load, max.		10 Hz	10 Hz
Number of contacts			
Load, max.		3 A	3 A
Load, max.		5 A	5 A
Continuous current, max.	0.3 A		
Immunity to interference acc. to			
Radio interference acc. to (limit value class B)	Yes	Yes	Yes
Requirements			
Temperature	0 °C 55 °C	0 °C 55 °C	0 °C 55 °C
Protection	Yes	Yes	Yes
Approvals, certificates	Yes	Yes	Yes
Compliance with IEC1131	Yes	Yes	Yes
Compliance with IEC 6031	Yes	Yes	Yes
Compliance with IEC 6031	Yes	Yes	Yes
Compliance with IEC 6031	Yes	Yes	Yes
Weight			
	on 35 mm DIN rail, 4 spacing units wide 72 mm; 4 DU 90 mm 53 mm	on 35 mm DIN rail, 4 spacing units wide 72 mm; 4 DU 90 mm 53 mm	on DIN rail 25 mm, 4 module spaces wide 72 mm; 4 DU 90 mm 53 mm

	6ED1 055-1MA00-0BA0	6ED1 055-1MD00-0BA1
Designation		LOGO! AM2 RTD

IO! logic module

modular

ular expansion modules

Specifications (continued)

	6ED1 055-1MA00-0BA0	6ED1 055-1MD00-0BA1
g inputs	2	2; 2 or 3 wire connection
mmometer	Yes Yes	Yes; for PT100/PT1000 sensors
ed values), voltages	Yes	
ed values), currents	Yes	
interference acc. to		
io interference acc. mit value class B)	Yes	Yes; Radio interference suppression according to EN55011, limit value class B
Requirements		
perature	0 °C 55 °C	0 °C 55 °C
ction	Yes	Yes
ovals, certificates	Yes	Yes; C22.2 Number 142
ding to IEC1131	Yes	Yes; EN 61131-2 (IEC 1131-2)
	Yes	Yes; FM-Standards No. 3611, 3600, 3810 Class I, Division 2, Group A, B, C, D
E 0631	Yes	Yes; ABS, BV, DNV, GL, LRS, Class NK
	Yes	Yes; UL 508
weight	on 35 mm DIN rail, 2 spacing units wide 36 mm 90 mm 55 mm	36 mm 90 mm 53 mm

	6ED1 055-1MM00-0BA1
	No Yes
g outputs	2
oltage	Yes

	6ED1 055-1MM00-0BA1
Degree of protection	
IP20	Yes
Standards, approvals, certificates	
CSA approval	Yes
Developed according to IEC1131	Yes
FM approval	Yes
According to VDE 0631	Yes
Marine approval	Yes

LOGO! logic module

LOGO! modular

LOGO! modular expansion modules

2

Order No.	Order No.
<p>4 V DC, 1 V DC, 24 V DC, 0.3 A</p>	<p>Accessories</p>
<p>6ED1 055-1CB00-0BA0</p>	<p>LOGO! Manual</p>
<p>4 V DC, 1 V DC, 24 V DC, 0.3 A</p>	<p>German 6ED1 050-1AA00-0AE7</p>
<p>6ED1 055-1CB10-0BA0</p>	<p>English 6ED1 050-1AA00-0BE7</p>
<p>4 V DC, 1 V DC, 24 V DC, 0.3 A</p>	<p>French 6ED1 050-1AA00-0CE7</p>
<p>6ED1 055-1MB00-0BA1</p>	<p>Spanish 6ED1 050-1AA00-0DE7</p>
<p>4 V DC, 1 V DC, 24 V DC, 0.3 A</p>	<p>Italian 6ED1 050-1AA00-0EE7</p>
<p>6ED1 055-1HB00-0BA0</p>	<p>Chinese 6ED1 050-1AA00-0KE7</p>
<p>4 V DC, 1 V DC, 24 V DC, 0.3 A</p>	<p>LOGO! memory card for copying, with know-how protection</p>
<p>6ED1 055-1NB10-0BA0</p>	<p>LOGO!Soft Comfort V6.0 J 6ED1 058-0BA02-0YA0</p>
<p>4 V DC, 1 V DC, 24 V DC, 0.3 A</p>	<p>For programming on the PC in LAD/FBD; executes on Windows 98 SE and higher, Linux, MAC OS X; on CD-ROM</p>
<p>6ED1 055-1FB00-0BA1</p>	<p>LOGO!Soft Comfort V6.0 J 6ED1 058-0CA02-0YE0</p>
<p>4 V DC, 1 V DC, 24 V DC, 0.3 A</p>	<p>Upgrade from V1.0 to V6.0</p>
<p>6ED1 055-1FB10-0BA0</p>	<p>LOGO! PC cable For program transfer between LOGO! and PC</p>
<p>5/230 V AC/DC, 5/230 V AC/DC, A</p>	<p>6ED1 057-1AA00-0BA0</p>
<p>6ED1 055-1MA00-0BA0</p>	
<p>2/24 V DC, two 10 V or 1 V resolution</p>	
<p>6ED1 055-1MD00-0BA1</p>	
<p>2/24 V DC, 100, temper- ature ... 200 °C</p>	
<p>6ED1 055-1MM00-0BA1</p>	
<p>4 V DC, 2 analog 0/4 to 20 mA</p>	

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

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

LOGO! logic module modular

LOGO! modular expansion modules

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

Note:

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



DM8 24	6AG1 055-1CB00-2BY0	6AG1 055-1CB00-2XB0
on	6ED1 055-1CB00-0BA0	
ture range	-40 ... +70 °C	-25 ... +70 °C
g	Coating of the printed circuit boards and the electronic components	
	The technical data of the standard product applies except for the ambient conditions.	

DM8 24	6AG1 055-1PB00-2BY0	6AG1 055-1PB00-2XB0
on	6ED1 055-1CB00-0BA0	
ture range	-40 ... +70 °C	-25 ... +70 °C
g	Coating of the printed circuit boards and the electronic components	
	The technical data of the standard product applies except for the ambient conditions.	

DM8 24 R	6AG1 055-1HB00-2BY0	6AG1 055-1HB00-2XB0
on	6ED1 055-1HB00-0BA0	
ture range	-40 ... +70 °C	-25 ... +70 °C
g	Coating of the printed circuit boards and the electronic components	
	The technical data of the standard product applies except for the ambient conditions.	

DM8 12/24R	6AG1 055-1MB00-2BY1	6AG1 055-1MB00-2XB1
on	6ED1 055-1MB00-0BA1	
ture range	-40 ... +70 °C	-25 ... +70 °C

LOGO! logic module

LOGO! modular

SIPLUS LOGO! modular expansion modules

2

(continued)

DM8 230R	
Part number	6AG1 055-1FB00-2BY1 6AG1 055-1FB00-2XB1
Part number	6ED1 055-1FB00-0BA1
Temperature range	-40 ... +70 °C -25 ... +70 °C
Coating	Coating of the printed circuit boards and the electronic components
	The technical data of the standard product applies except for the ambient conditions.

AM2	
Part number	6AG1 055-1MA00-2BY0 6AG1055-1MA00-2XB0
Part number	6ED1 055-1MA00-0BA0
Temperature range	-40 ... +70 °C -25 ... +70 °C
Coating	Coating of the printed circuit boards and the electronic components
	The technical data of the standard product applies except for the ambient conditions.

SIPLUS LOGO! AM2 AQ		SIPLUS LOGO! DM16 24R	
Part number	6AG1 055-1MM00-2BY1	6AG1 055-1NB10-2BA0	
Part number	6ED1 055-1MM00-0BA1	6ED1 055-1CB10-0BA0	
Temperature range	-40 ... +70 °C	-25 ... +70 °C	
Coating	Coating of the printed circuit boards and the electronic components		
	The technical data of the standard product applies except for the ambient conditions.		

Ambient conditions	
Humidity	5 ... 100 % Condensation permissible
Corrosive substances	Conformity with EN 60721-3-3, Class 3B2 mold and fungal spores (except fauna)
Other substances	Conformity with EN 60721-3-3, Class 3C4 incl. salt mist and ISA- S71.04 severity level G1; G2; G3; GX ¹⁾²⁾
Other substances	Conformity with EN 60721-3-3, Class 3S4 including conductive sand, dust ²⁾

Ambient conditions	
Air pressure (depending on the highest positive temperature range specified)	1080 ... 795 hPa (-1000 ... +2000 m) see ambient temperature range 795 ... 658 hPa (+2000 ... +3500 m) derating 10 K 658 ... 540 hPa (+3500 ... +5000 m) derating 20 K

- ISA-S71.04 severity level GX: Long-term load: SO₂ < 4.8 ppm; H₂S < 9.9 ppm; Cl < 0.2 ppm; HCl < 0.66 ppm; HF < 0.12 ppm; NH < 49 ppm; O₃ < 0.1 ppm; NOX < 5.2 ppm
Limit value (max. 30 min/d): SO₂ < 17.8 ppm; H₂S < 49.7 ppm; Cl < 1.0 ppm; HCl < 3.3 ppm; HF < 2.4 ppm; NH < 247 ppm; O₃ < 1.0 ppm; NOX < 10.4 ppm
- The supplied plug covers must remain in place over the unused interface when operated in atmospheres containing corrosive gases!

The technical documentation on SIPLUS can be found here:
www.siemens.com/siplus-extreme

LOGO! logic module modular

LOGO! modular expansion modules

Order No.	Order No.
<p>DM8 24</p> <p>Temperature range and</p> <p>power supply, digital inputs, digital outputs, 0.3 A</p> <p>Temperature range -25 ... +70 °C H</p> <p>Temperature range -40 ... +70 °C L</p> <p>6AG1 055-1CB00-2XB0</p> <p>6AG1 055-1CB00-2BY0</p>	<p>SIPLUS LOGO! AM2</p> <p>(extended temperature range and medial exposure)</p> <p>12/24 V DC power supply, two analog inputs 0 ... 10 V or 0 ... 20 mA, 10 bit resolution</p> <p>Temperature range -25 ... +70 °C H</p> <p>Temperature range -40 ... +70 °C L</p> <p>6AG1 055-1MA00-2XB0</p> <p>6AG1 055-1MA00-2BY0</p>
<p>DM8 12/24</p> <p>Temperature range and</p> <p>power supply, digital inputs, digital outputs, 0.3 A</p> <p>Temperature range -25 ... +70 °C L</p> <p>Temperature range -40 ... +70 °C L</p> <p>6AG1 055-1PB00-2XB0</p> <p>6AG1 055-1PB00-2BY0</p>	<p>SIPLUS LOGO! AM2 AQ</p> <p>(extended temperature range and medial exposure)</p> <p>24 V DC power supply, 2x analog inputs 0 ... 10 V, 0/4 ... 20 mA, 10-bit resolution</p> <p>Temperature range -40 ... +70 °C L</p> <p>6AG1 055-1MM00-2BY1</p>
<p>DM8 24R</p> <p>Temperature range and</p> <p>power supply, digital inputs, digital outputs</p> <p>Temperature range -25 ... +70 °C A</p> <p>Temperature range -40 ... +70 °C L</p> <p>6AG1 055-1HB00-2XB0</p> <p>6AG1 055-1HB00-2BY0</p>	<p>SIPLUS LOGO! DM16 24R</p> <p>(extended temperature range and medial exposure)</p> <p>Supply voltage 24 V DC, 8x digital outputs 24 V DC, 8x relay outputs 5 A</p> <p>Temperature range -25 ... +70 °C L</p> <p>6AG1 055-1NB10-2BA0</p>
<p>DM8 12/24R</p> <p>Temperature range and</p> <p>power supply, digital inputs, digital outputs</p> <p>Temperature range -25 ... +70 °C H</p> <p>Temperature range -40 ... +70 °C L</p> <p>6AG1 055-1MB00-2XB1</p> <p>6AG1 055-1MB00-2BY1</p>	<p>Accessories</p> <p>SIPLUS Upmiter upstream device</p> <p>for reliable operation at the battery of combustion engines</p> <p>Additional accessories</p> <p>See LOGO! modular pure versions, page 2/17</p>
<p>DM8 230R</p> <p>Temperature range and</p> <p>power supply, AC/DC digital relay outputs</p> <p>Temperature range -25 ... +70 °C A</p> <p>Temperature range -40 ... +70 °C L</p> <p>6AG1 055-1FB00-2XB1</p> <p>6AG1 055-1FB00-2BY1</p>	

A: Subject to export regulations AL: 91999 and ECCN: 4A994X
H: Subject to export regulations AL: 91999 and ECCN: EAR99H
L: Subject to export regulations AL: 91999 and ECCN: N

LOGO! logic module

LOGO! modular

LOGO! CM EIB/KNX communication module

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 value class B)
Degree of protection	IP20
Certification	to VDE 0631, IEC61131-2, cULus, FM
Mounting	On DIN rail 35 mm, 2 module widths wide
Dimensions (W x H x D) in mm	36 (2 MW) x 90 x 55

2



Module for LOGO! basic versions
 for connection between the LOGO! master and external
 devices through EIB

Ordering data

Order No.

LOGO! CM EIB KNX communication module | **6BK1 700-0BA00-0AA1**

for connection to *EIB*, supply
 voltage 24 V DC

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

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

LOGO! logic module modular

Connection for LOGO!

can now be connected to the AS-Interface



can be integrated into the AS-Interface
AS-Interface for LOGO!. The modular interface
different basic units to be integrated into the system
the required functionality. In addition, the function
quickly and simply adapted to changed require-
ments of the basic unit.

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

Technical specifications

Supply voltage	24 V DC
Inputs/outputs	4 / 4 (virtual inputs / outputs)
Bus connection	AS-Interface according to specification
Ambient temperature	0 ... +55 °C
Degree of protection	IP20
Mounting	Onto standard mounting rail
Dimensions (x x x)	36 x 90 x 58 mm
Indications of the LEDs	
<ul style="list-style-type: none"> Green Red Flashes red/yellow 	<ul style="list-style-type: none"> Status No data traffic Zero address

Ordering data

Order No.

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

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

LOGO! logic module

LOGO!Power

LOGO!Power



over miniature power supply units from Siemens solution for many applications – their flat, step- makes them perfectly suited for distribution mple. Even more fields of application in the lower

performance range are made possible by: wide-range input, radio interference class B, the extensive temperature range as well as numerous certificates.

Main product features:

- 2 performance classes with 5 V, 12 V, and 15 V each
- 3 performance classes with 24 V
- Flat LOGO! design with an installation depth of only 55 mm
- High efficiency across the entire load range
- Low no-load loss
- Wide-range input from 85 V to 264 V AC
- Operation on DC voltage of 110 V to 300 V
- Constant current for connection of loads with high inrush current
- Adjustable output voltage
- Green LED for "Output voltage OK"
- Temperature range from -20 °C to +70 °C
- Numerous certificates, such as CE, cULus, FM, GL and ATEX

2

Specifications LOGO!Power 5 V

Type	5 V/3 A 6EP1 311-1SH03	5 V/6.3 A 6EP1 311-1SH13
Input rated	1-phase AC or DC 100-240 V AC Wide-range input 85 ... 264 V AC 110 ... 300 V DC	1-phase AC or DC 100-240 V AC Wide-range input 85 ... 264 V AC 110 ... 300 V DC
Inrush current length	$2.3 \times U_{in \text{ rated}}$, 1.3 ms	$2.3 \times U_{in \text{ rated}}$, 1.3 ms
Output current / $I_{out \text{ rated}}$	> 40 ms at $U_{in} = 187 \text{ V}$	> 40 ms at $U_{in} = 187 \text{ V}$
Frequency, rated line frequency range	50/60 Hz; 47 ... 63 Hz	50/60 Hz; 47 ... 63 Hz
Output current rated	0.36-0.22 A	0.71-0.37 A
Temperature limitation (+25 °C)	< 26 A < 0.8 A ² s	< 50 A < 3 A ² s
Internal fuse	Internal	Internal
Miniature circuit breaker mains power input	16 A or higher, Characteristic B or 10 A or higher, Characteristic C	16 A or higher, Characteristic B or 10 A or higher, Characteristic C
Output voltage	Controlled, isolated DC voltage 5 V DC	Controlled, isolated DC voltage 5 V DC
Output voltage static	±3 %	±3 %
Output voltage compensation	Approx. 0.2%	Approx. 0.1%
Output voltage compensation	Approx. 1.5%	Approx. 2%
Output voltage ripple	< 100 mV _{pp} (typ. 10 mV _{pp})	< 100 mV _{pp} (typ. 15 mV _{pp})
Output voltage ripple (approx. 20 MHz)	< 100 mV _{pp} (typ. 20 mV _{pp})	< 100 mV _{pp} (typ. 70 mV _{pp})

LOGO! logic module

Power

Specifications LOGO!Power 5 V (continued)

Parameter	5 V/3 A 6EP1 311-1SH03	5 V/6.3 A 6EP1 311-1SH13
Rated output current, $I_{out\ rated}$	Approx. 77%	Approx. 83%
Rated output power, $P_{out\ rated}$	Approx. 4 W	Approx. 6 W
Control		
Load regulation	< 0.2 % U_{out}	< 0.2 % U_{out}
Line compensation	Typ. $\pm 3\%$ U_{out}	Typ. $\pm 3\%$ U_{out}
Response time	Typ. 2 ms Typ. 2 ms	Typ. 2 ms Typ. 2 ms
Monitoring		
Overcurrent protection	Typ. 3.8 A Constant current characteristic	Typ. 8.2 A Constant current characteristic
Maximum circuit current rms value	< 5 A	< 10 A
Electromagnetic compatibility	Yes, safety extra low output voltage U_{out} according to EN 60950 and EN 50178 Class II (without protective conductor) Yes; CB scheme Yes	Yes, safety extra low output voltage U_{out} according to EN 60950 and EN 50178 Class II (without protective conductor) Yes; CB scheme Yes
UL approval	cULus-listed (UL 508, CSA C22.2 No. 107.1), cURus-recognized (UL 60950, CSA C22.2 No. 60950)	cULus-listed (UL 508, CSA C22.2 No. 107.1), cURus-recognized (UL 60950, CSA C22.2 No. 60950)
Explosion protection	ATEX (available soon) Class I Div. 2, Group A, B, C, D T4 GL (available soon)	ATEX (available soon) Class I Div. 2, Group A, B, C, D T4 GL (available soon)
Ingress protection (EN 60529)	IP20	IP20
EMC compliance	EN 55022 Class B Not applicable EN 61000-6-2	EN 55022 Class B Not applicable EN 61000-6-2
Operating temperature range	-20 ... +70 °C with natural convection -40 ... +85 °C Climate class 3K3 according to EN 60721, no condensation	-20 ... +70 °C with natural convection -40 ... +85 °C Climate class 3K3 according to EN 60721, no condensation
Terminal connections L1, N	Solid/finely-stranded per screw-type terminal for 0.5 mm ... 2.5 mm ² 2 screw terminals each for 0.5 ... 2.5 mm ²	Solid/finely-stranded per screw-type terminal for 0.5 mm ... 2.5 mm ² 2 screw terminals each for 0.5 ... 2.5 mm ²

Specifications LOGO!Power 12 V

Parameter	12 V/1.9 A 6EP1 321-1SH03	12 V/4.5 A 6EP1 322-1SH03
Input voltage U_{in} rated	1-phase AC or DC 100-240 V AC Wide-range input 85 ... 264 V AC 110 ... 300 V DC	1-phase AC or DC 100-240 V AC Wide-range input 85 ... 264 V AC 110 ... 300 V DC
Inrush current I_{in} at U_{in} rated	$2.3 \times U_{in \text{ rated}}, 1.3 \text{ ms}$	$2.3 \times U_{in \text{ rated}}, 1.3 \text{ ms}$
Output voltage U_{out} at I_{out} rated	> 40 ms at $U_{in} = 187 \text{ V}$	> 40 ms at $U_{in} = 187 \text{ V}$
Frequency range, rated line-frequency range	50/60 Hz; 47 ... 63 Hz	50/60 Hz; 47 ... 63 Hz
Rated input current I_{in} at U_{in} rated	0.53-0.3 A	1.13-0.61 A
Temperature limitation (+25 °C)	< 26 A < 0.8 A ² s	< 54 A < 3 A ² s
Fuse	Internal	Internal
Miniature circuit breaker (IEC 898) per input	16 A or higher, Characteristic B or 10 A or higher, Characteristic C	16 A or higher, Characteristic B or 10 A or higher, Characteristic C
Output voltage U_{out} rated	Controlled, isolated DC voltage 12 V DC	Controlled, isolated DC voltage 12 V DC
Regulation	±3 %	±3 %
Temperature compensation	Approx. 0.2 %	Approx. 0.1 %
Linearity	Approx. 1.5 %	Approx. 1.5 %
Output ripple voltage	< 200 mV _{pp} (typ. 10 mV _{pp}) < 300 mV _{pp} (typ. 20 mV _{pp})	< 200 mV _{pp} (typ. 10 mV _{pp}) < 300 mV _{pp} (typ. 70 mV _{pp})
Bandwidth (approx. 20 MHz)	10.5 ... 16.1 V	10.5 ... 16.1 V
Output voltage U_{out} at I_{out} rated	Green LED for 12 V OK No overshoot of U_{out} (soft start) < 0.5 s/typ. 15 ms	Green LED for 12 V OK No overshoot of U_{out} (soft start) < 0.5 s/typ. 15 ms
Rated output current I_{out} at +55 °C	1.9 A 0 ... 1.9 A 0 ... 1.3 A (up to +70 °C)	4.5 A 0 ... 4.5 A 0 ... 3.1 A (up to +70 °C)
Output current I_{out} for enhanced performance	Yes, 2 units	Yes, 2 units
Efficiency at I_{out} rated	Typ. 80 %	Typ. 85 %
Power at I_{out} rated	Typ. 5 W	Typ. 10 W
Control		
Temperature compensation	< 0.2 % U_{out}	< 0.2 % U_{out}
Linearity (at I_{out} : 10/90/10%)	Typ. ±3 % U_{out}	Typ. ±4 % U_{out}
Response time	Approx. 1 ms Approx. 1 ms	Approx. 1 ms Approx. 1 ms
Monitoring		

LOGO! power module

Specifications LOGO!Power 12 V (continued)

Property	12 V/1.9 A 6EP1 321-1SH03	12 V/4.5 A 6EP1 322-1SH03
Approval	cULus-listed (UL 508, CSA C22.2 No. 107.1); cURus-recognized (UL 60950, CSA C22.2 No. 60950)	cULus-listed (UL 508, CSA C22.2 No. 107.1); cURus-recognized (UL 60950, CSA C22.2 No. 60950)
Classification	ATEX (available soon) Class I Div. 2, Group A, B, C, D T4 GL, ABS (available soon)	ATEX (available soon) Class I Div. 2, Group A, B, C, D T4 GL, ABS (available soon)
Ingress protection (EN 60529)	IP20	IP20
EMC compliance	EN 55022 Class B	EN 55022 Class B
Harmonic current limitation	Not applicable EN 61000-6-2	Not applicable EN 61000-6-2
Operating temperature range	-20 ... +70 °C with natural convection	-20 ... +70 °C with natural convection
Storage temperature range	-40 ... +85 °C Climate class 3K3 according to EN 60721, no condensation	-40 ... +85 °C Climate class 3K3 according to EN 60721, no condensation
Connections L1, N	1 screw terminal each for 0.5 mm ... 2.5 mm ² single-core/finely stranded 2 screw terminals each for 0.5 ... 2.5 mm ²	1 screw terminal each for 0.5 mm ... 2.5 mm ² single-core/finely stranded 2 screw terminals each for 0.5 ... 2.5 mm ²
Dimensions (H x D) in mm	54 x 90 x 55 Approx. 0.17 kg Snaps onto standard mounting rail EN 60715 35x7.5/15	72 x 90 x 55 Approx. 0.25 kg Snaps onto standard mounting rail EN 60715 35x7.5/15

Specifications LOGO!Power 15 V

Property	15 V/1.9 A 6EP1 351-1SH03	15 V/4 A 6EP1 352-1SH03
Input voltage $U_{in \text{ rated}}$	1-phase AC or DC 100-240 V AC Wide-range input 85 ... 264 V AC 110 ... 300 V DC	1-phase AC or DC 100-240 V AC Wide-range input 85 ... 264 V AC 110 ... 300 V DC
Response time	$2.3 \times U_{in \text{ rated}}$, 1.3 ms	$2.3 \times U_{in \text{ rated}}$, 1.3 ms
Output current $I_{out \text{ rated}}$	> 40 ms at $U_{in} = 187 \text{ V}$	> 40 ms at $U_{in} = 187 \text{ V}$
Frequency, rated line-frequency range	50/60 Hz; 47 ... 63 Hz	50/60 Hz; 47 ... 63 Hz
Input current $I_{in \text{ rated}}$	0.63-0.33 A	1.24-0.68 A
Overcurrent limit (+25 °C)	< 26 A < 0.8 A ² s	< 54 A < 3 A ² s
Fuse	Internal	Internal

Specifications LOGO!Power 15 V (continued)

Specification	15 V/1.9 A 6EP1 351-1SH03	15 V/4 A 6EP1 352-1SH03
Switching frequency (approx. 20 MHz)	< 300 mV _{pp} (typ. 30 mV _{pp}) 10.5 ... 16.1 V Green LED for 15 V OK No overshoot of U_{out} (soft start) < 0.5 s/typ. 15 ms	< 300 mV _{pp} (typ. 70 mV _{pp}) 10.5 ... 16.1 V Green LED for 15 V OK No overshoot of U_{out} (soft start) < 0.5 s/typ. 15 ms
Rated input current I_{in} rated to +55 °C	1.9 A 0 ... 1.9 A 0 ... 1.3 A (up to +70 °C)	4 A 0 ... 4 A 0 ... 2.8 A (up to +70 °C)
Units for enhanced performance	Yes, 2 units	Yes, 2 units
Rated output current I_{out} rated	Approx. 81 %	Approx. 85 %
Rated output power P_{out} rated	Approx. 7 W	Approx. 11 W
Control		
Load regulation	< 0.2 % U_{out}	< 0.2 % U_{out}
Line regulation	Typ. ±2.8 % U_{out}	Typ. ±3 % U_{out}
Response time	Typ. 1 ms Typ. 1 ms	Typ. 1 ms Typ. 1 ms
Monitoring		
Overcurrent protection	Typ. 2.7 A Constant current characteristic	Typ. 5.7 A Constant current characteristic
Circuit current rms value	< 4 A	< 8 A
Electromagnetic compatibility (EMC) isolation	Yes, safety extra low output voltage U_{out} according to EN 60950 and EN 50178 Class II (without protective conductor) Yes; CB scheme Yes	Yes, safety extra low output voltage U_{out} according to EN 60950 and EN 50178 Class II (without protective conductor) Yes; CB scheme Yes
UL approval	cULus-listed (UL 508, CSA C22.2 No. 107.1); cURus-recognized (UL 60950, CSA C22.2 No. 60950)	cULus-listed (UL 508, CSA C22.2 No. 107.1); cURus-recognized (UL 60950, CSA C22.2 No. 60950)
ATEX certification	ATEX (available soon) Class I Div. 2, Group A, B, C, D T4 GL (available soon)	ATEX (available soon) Class I Div. 2, Group A, B, C, D T4 GL (available soon)
Ingress protection (EN 60529)	IP20	IP20
EMC compliance	EN 55022 Class B	EN 55022 Class B
Harmonic current limitation	Not applicable	Not applicable

LOGO! module

Power

Specifications LOGO!Power 15 V (continued)

Parameter	15 V/1.9 A 6EP1 351-1SH03	15 V/4 A 6EP1 352-1SH03
Connections L1, N	1 screw terminal each for 0.5 mm ... 2.5 mm ² single-core/finely stranded 2 screw terminals each for 0.5 ... 2.5 mm ²	1 screw terminal each for 0.5 mm ... 2.5 mm ² single-core/finely stranded 2 screw terminals each for 0.5 ... 2.5 mm ²
Dimensions (H x D) in mm	54 x 90 x 55 Approx. 0.17 kg Snaps onto standard mounting rail EN 60715 35x7.5/15	72 x 90 x 55 Approx. 0.25 kg Snaps onto standard mounting rail EN 60715 35x7.5/15

Specifications LOGO!Power 24 V/1.3 A

Parameter	24 V/1.3 A 6EP1 331-1SH03	Power supply, type Order No.	24 V/1.3 A 6EP1 331-1SH03
Rated	1-phase AC or DC 100-240 V AC Wide-range input	Closed-loop control	
Length	85 ... 264 V AC 110 ... 300 V DC	Dyn. mains compensation ($U_{in\ rated} \pm 15\%$)	$< 0,2\% U_{out}$
Rated output current $I_{out\ rated}$	$2.3 \times U_{in\ rated}$, 1.3 ms > 40 ms at $U_{in} = 187\text{ V}$	Dynamic load smoothing (I_{out} : 50/100/50 %)	Typ. $\pm 1\% U_{out}$ (I_{out} : 10/90/10 %)
Frequency, rated line-frequency	50/60 Hz; 47 ... 63 Hz	Load step settling time	Typ. 1 ms (10 to 90%) Typ. 1 ms (90 to 10%)
Rated current limitation (+25 °C)	0.7-0.35 A < 30 A < 0.8 A ² s	Protection and monitoring	
Fuse	Internal	Output overvoltage protection	Yes, according to EN 60950
Miniature circuit breaker main power input	16 A or higher, Characteristic B or 10 A or higher, Characteristic C	Current limitation	Typ. 1.7 A
Output rated	Controlled, isolated DC voltage 24 V DC	Short-circuit protection	Constant current characteristic
Compensation ripple	$\pm 3\%$ Approx. 0.1% Approx. 1.5%	Sustained short-circuit current rms value	< 4 A
Switching frequency approx. 20 MHz	< 200 mV _{pp} (typ. 10 mV _{pp}) < 300 mV _{pp} (typ. 20 mV _{pp}) 22.2 ... 26.4 V	Overload/short-circuit indicator	-
LED	24 V OK = green LED No overshoot of U_{out} (soft start) < 0.5 s/typ. 15 ms	Safety	
		Primary/secondary isolation	Yes, safety extra low output voltage U_{out} according to EN 60950-1 and EN 50178
		Safety class	Class II (without protective conductor)
		Leakage current	-
		Safety test	Yes; CB scheme
		CE marking	Yes
		UL/cUL (CSA) approval	cULus-listed (UL 508, CSA C22.2 No. 107.1), cURus- recognized (UL 60950, CSA C22.2 No. 60950)
		Protection against explosion	ATEX EX II 3G Ex nA IIC T3

LOGO! logic module

LOGO!Power

LOGO!Power

2

Specifications LOGO!Power 24 V/1.3 A (continued)

Parameter	24 V/1.3 A 6EP1 331-1SH03	Power supply, type Order No.	24 V/1.3 A 6EP1 331-1SH03
Temperature range	-20 ... +70 °C with natural convection	Dimensions (W x H x D) in mm	54 x 90 x 55
Average temperature range	-40 ... +85 °C Climate class 3K3 according to EN 60721, no condensation	Weight, approx.	Approx. 0.17 kg
Terminal type	Solid/finely-stranded per screw-type terminal (L, N) for 0.5 mm ... 2.5 mm ² 2 screw-type terminals for 0.5 ... 2.5 mm ² 2 screw-type terminals for 0.5 ... 2.5 mm ²	Mounting	Can be snapped onto standard mounting rail EN 60715 35x7.5/15
		Accessories	-

Specifications LOGO!Power 24 V/2.5 A

Parameter	24 V/2.5 A 6EP1 332-1SH43	Power supply, type Order No.	24 V/2.5 A 6EP1 332-1SH43
Input type	1-phase AC or DC 100-240 V AC Wide-range input 85 ... 264 V AC 110 ... 300 V DC	Efficiency	Efficiency at $U_{out\ rated}$, $I_{out\ rated}$: Approx. 88% Power loss at $U_{out\ rated}$, $I_{out\ rated}$: Approx. 8 W
Input length	$2.3 \times U_{in\ rated}$, 1.3 ms	Closed-loop control	Dyn. mains compensation ($U_{in\ rated} \pm 15\%$): < 0,2 % U_{out}
Response time $t_{out\ rated}$	> 40 ms at $U_{in} = 187$ V	Dynamic load smoothing (I_{out} : 50/100/50 %)	Typ. $\pm 2\%$ U_{out} (I_{out} : 10/90/10 %)
Frequency, rated line-frequency	50/60 Hz; 47 ... 63 Hz	Load step settling time	Typ. 1 ms (10 to 90%) Typ. 1 ms (90 to 10%)
Rated current	1.22-0.66 A	Protection and monitoring	Output overvoltage protection: Yes, according to EN 60950
Temperature limitation (+25 °C)	< 46 A < 3 A ² s	Current limitation	Typ. 3.3 A
Fuse	Internal	Short-circuit protection	Constant current characteristic
Miniature circuit breaker mains power input	16 A or higher, Characteristic B or 10 A or higher, Characteristic C	Sustained short-circuit current rms value	Approx. 3.5 A
Output type	Controlled, isolated DC voltage 24 V DC	Safety	Primary/secondary isolation: Yes, safety extra low output voltage U_{out} according to EN 60950-1 and EN 50178
Output voltage	$\pm 3\%$	Safety class	Class II (without protective conductor)
Output current	Approx. 0.1%		
Output ripple	Approx. 1.5%		
Output voltage ripple	< 200 mV _{pp} (typ. 10 mV _{pp})		
Output current ripple	< 200 mA _{pp} (typ. 50 mA _{pp})		

LOGO! power module

Specifications LOGO!Power 24 V/2.5 A (continued)

Power supply, type Order No.	24 V/2.5 A 6EP1 332-1SH43	24 V/2.5 A 6EP1 332-1SH43
Mechanics		
Connections	EN 55022 Class B Not applicable EN 61000-6-2	Solid/finely-stranded per screw-type terminal (L_1, N) for 0.5 mm ... 2.5 mm ² 2 screw-type terminals for 0.5 ... 2.5 mm ² 2 screw-type terminals for 0.5 ... 2.5 mm ²
• Supply input L, N, PE DC input: L+1, M1, PE		
• Output +		
• Output -		
Dimensions (W x H x D) in mm	-20 ... +55 °C with natural convection -40 ... +70 °C Climate class 3K3 according to EN 60721, no condensation	72 x 90 x 55
Weight, approx.		Approx. 0.25 kg
Mounting		Can be snapped onto standard mounting rail EN 60715 35x7.5/15
Accessories		-

Specifications LOGO!Power 24 V/4 A

Power supply, type Order No.	24 V/4 A 6EP1 332-1SH52	24 V/4 A 6EP1 332-1SH52
Rated current $I_{out\ rated}$	1-phase AC or DC 100-240 V AC Wide-range input 85 ... 264 V AC 110 ... 300 V DC	4 A
Current range	$2.3 \times U_{in\ rated}, 1.3\ ms$ > 40 ms at $U_{in} = 187\ V$	0 ... 4 A (up to +55°C) 0 ... 2.8 A (up to +70°C)
• Current range up to +60 °C • Derating	50/60 Hz; 47 ... 63 Hz	Yes, 2 units
Parallel switching for enhanced performance	1.95 to 0.97 A < 30 A < 2.5 A ² s	
Efficiency	Internal 16 A or higher, Characteristic B or 10 A or higher, Characteristic C	
Efficiency at $U_{out\ rated}, I_{out\ rated}$	Controlled, isolated DC voltage 24 V DC ±3 % Approx. 0.1% Approx. 1.5%	Approx. 89%
Power loss at $U_{out\ rated}, I_{out\ rated}$	< 200 mV _{pp} (typ. 30 mV _{pp}) < 300 mV _{pp} (typ. 60 mV _{pp})	Approx. 12 W
Closed-loop control		
Dyn. mains compensation ($U_{in\ rated} \pm 15\%$)		< 0,2 % U_{out}
Dynamic load smoothing ($I_{out}: 50/100/50\%$)		Typ. ±1.5% U_{out} ($I_{out}: 10/90/10\%$)
Load step settling time		Typ. 1 ms (10 to 90%) Typ. 1 ms (90 to 10%)
• 50 to 100% • 100 to 50%		
Protection and monitoring		
Output overvoltage protection		Yes, according to EN 60950
Current limitation		Typ. 5.2 A
Short-circuit protection		Constant current characteristic
Sustained short-circuit current rms value		< 10 A
Overload/short circuit indicator		

LOGO! logic module

LOGO!Power

LOGO!Power

Specifications LOGO!Power 24 V/4 A (continued)

Specification	24 V/4 A 6EP1 332-1SH52	Power supply, type Order No.	24 V/4 A 6EP1 332-1SH52
Approval	- Yes; CB scheme Yes cULus-listed (UL 508, CSA C22.2 No. 107.1), cURus-recognized (UL 60950, CSA C22.2 No. 60950)	Operating data	
Explosion protection (EN 60529)	ATEX EX II 3G Ex nA IIC T3 Class I Div. 2, Group A, B, C, D T4 GL, ABS IP20	Ambient temperature range	-20 ... +70 °C with natural convection
Temperature limitation	EN 55022 Class B EN 61000-3-2 EN 61000-6-2	Transport and storage temperature range	-40 ... +85 °C
		Humidity class	Climate class 3K3 according to EN 60721, no condensation
		Mechanics	
		Connections	
		• Supply input L, N, PE DC input: L+1, M1, PE	Solid/finely-stranded per screw-type terminal (L, N) for 0.5 mm ... 2.5 mm ²
		• Output +	2 screw terminals each for 0.5 ... 2.5 mm ²
		• Output -	2 screw terminals each for 0.5 ... 2.5 mm ²
		Dimensions (W x H x D) in mm	90 x 90 x 55
		Weight, approx.	Approx. 0.34 kg
		Mounting	Can be snapped onto standard mounting rail EN 60715 35x7.5/15
		Accessories	-

LOGO! logic module

Power



	Order No.		Order No.
supply; 1.3 A 110 V AC; operating temperature -40°C to +70°C	6EP1 311-1SH03	LOGO!Power 24 V/1.3 A Stabilized power supply; Output: 24 V DC/1.3 A • Input: 110 ... 300 V AC; extended operating temperature range: up to +70°C	6EP1 331-1SH03
supply; 2.3 A 110 V AC; operating temperature -40°C to +70°C	6EP1 311-1SH13	LOGO!Power 24 V/2.5 A Stabilized power supply; Output: 24 V DC/2.5 A • Input: 110 ... 300 V AC; extended operating temperature range: up to +70°C	6EP1 332-1SH43
1.9 A supply; 1.9 A 110 V AC; operating temperature -40°C to +70°C	6EP1 321-1SH03	LOGO!Power 24 V/4 A Stabilized power supply; Output: 24 V DC/4 A • Input: 110 ... 300 V AC; extended operating temperature range: up to +70°C	6EP1 332-1SH52
supply; 4.5 A 110 V AC; operating temperature -40°C to +70°C	6EP1 322-1SH03		
1.9 A supply; 1.9 A 110 V AC; operating temperature -40°C to +70°C	6EP1 351-1SH03		
supply; 4 A 110 V AC; operating temperature -40°C to +70°C	6EP1 352-1SH03		

on

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

- module for setting up a redundant power supply
- 24 V power supplies with batteries or maintenance-free capacitors for continued operation in the event of a power outage
- modules for electronic protection of 24 V branches against over-current and short-circuit

For more information in Catalog KT 10.1 and in the

LOGO! logic module

LOGO!Power

SIPLUS LOGO!Power
2

These products are based on Siemens Industry products. The contents listed here were taken from the standard products. SIPLUS extreme-specific information is not included.

Power 1.3 A	6AG1 931-1SH02-2AA0
Order number	6EP1 331-1SH02
Temperature range	-25 °C to +70 °C
Coating	Coating of the printed circuit boards and the electronic components
Technical data	The technical data of the standard product applies except for the ambient conditions.

Humidity	5 ... 100 % Condensation permissible
Corrosive substances	Conformity with EN 60721-3-3, Class 3B2 mold and fungal spores (except fauna)
Other substances	Conformity with EN 60721-3-3, Class 3C4 incl. salt mist and ISA-S71.04 severity level G1; G2; G3; GX ^{1) 2)}
Conductive substances	Conformity with EN 60721-3-3, Class 3S4 including conductive sand, dust ²⁾
Operating range depending on the temperature range	1080 ... 795 hPa (-1000 ... +2000 m) see ambient temperature range 795 ... 658 hPa (+2000 ... +3500 m) derating 10 K 658 ... 540 hPa (+3500 ... +5000 m) derating 20 K

Severity level GX: Long-term load: SO₂ < 4.8 ppm; HCl < 0.2 ppm; HCl < 0.66 ppm; HF < 0.12 ppm; O₃ < 0.1 ppm; NOX < 5.2 ppm

Limit value (max. 30 min/d): SO₂ < 17.8 ppm; HCl < 1.0 ppm; HCl < 3.3 ppm; HF < 2.4 ppm; O₃ < 1.0 ppm; NOX < 10.4 ppm

Plug covers must remain in place over the unused terminals. The module must not be operated in atmospheres containing corrosive gases!

For more information on SIPLUS, please refer to the documentation on SIPLUS can be found here:

www.siemens.com/siplus-extreme

Technical specifications

Power supply, type	24 V/1.3 A
Order number	6EP1 331-1SH02
Input	1-phase AC
Rated voltage $U_{in \text{ rated}}$	100 ... 240 V AC Wide-range input
Voltage range	85 ... 264 V AC
Overvoltage strength	2.3 x $U_{in \text{ rated}}$, 1.3 ms
Mains buffering at $I_{out \text{ rated}}$	> 40 ms at $U_{in} = 187 \text{ V}$
Rated line frequency, rated line frequency range	50/60 Hz; 47 ... 63 Hz
Rated current $I_{in \text{ rated}}$	0.7-0.35 A
Switch-on current limitation (+25 °C)	< 35 A
$\int I^2 dt$	< 0.8 A ² s
Built-in incoming fuse	Internal
Recommended miniature circuit breaker (IEC 898) in the mains power input	16 A or higher, Characteristic B or 10 A or higher, Characteristic C
Output	Controlled, isolated DC voltage
Rated voltage $U_{out \text{ rated}}$	24 V DC
Total tolerance	±3 %
• Static mains compensation	Approx. 0.1%
• Static load smoothing	Approx. 1.5%
Residual ripple	< 200 mV _{pp} (typ. 10 mV _{pp})
Spikes (bandwidth approx. 20 MHz)	< 300 mV _{pp} (typ. 20 mV _{pp})
Setting range	22.2 ... 26.4 V
Status indicator	24 V OK = green LED
On/Off behavior	No overshoot of U_{out} (soft start)
Startup delay / voltage rise	< 0.5 s/typ. 15 ms
Rated current $I_{out \text{ rated}}$	1.3 A
Current range	0 ... 1.3 A (up to 55 °C)
• Current range up to +60 °C	-
• Derating	-
Parallel switching for enhanced performance	Yes, 2 units
Efficiency	
Efficiency at $U_{out \text{ rated}}$, $I_{out \text{ rated}}$	Approx. 82%
Heat loss at $U_{out \text{ rated}}$, $I_{out \text{ rated}}$	Approx. 7 W
Closed-loop control	
Dyn. mains compensation ($U_{in \text{ rated}} \pm 15\%$)	< 0,2 % U_{out}
Dynamic load smoothing (I_{out} : 50/100/50 %)	Typ. ±1.5 % U_{out} (I_{out} : 10/90/10 %)
Load step settling time	
• 50 to 100%	Typ. 20 ms (10 to 90%)

LOGO! module

Power

LOGO!Power

Specifications (continued)

Specification	24 V/1.3 A
Isolation	Yes, safety extra low output voltage U_{out} according to EN 60950 and EN 50178 Class II (without protective conductor) -
Approval	Yes; CB scheme Yes cULus-listed (UL 508, CSA C22.2 No. 107.1), File E197259; cURus-recognized (UL 60950, CSA C22.2 No. 60950), File E151273
Protection	ATEX EX II 3G Ex nA IIC T3 Class I Div. 2, Group A, B, C, D T4 GL, ABS
Ingress protection (EN 60529)	IP20
EMC	EN 55022 Class B
Surge limitation	Not applicable EN 61000-6-2
Operating temperature	-20 ... +55 °C with natural convection
Storage temperature	-40 ... +70 °C Climate class 3K3 according to EN 60721, no condensation
Wiring (L, PE, N, PE, M1, PE)	One solid/finely-stranded screw-type terminal each (L, N) for 0.5 mm ... 2.5 mm ² 2 screw-type terminals for 0.5 ... 2.5 mm ² 2 screw-type terminals for 0.5 ... 2.5 mm ²
Dimensions (H x D) in mm	54 x 90 x 55 Approx. 0.17 kg Can be snapped onto standard mounting rail EN 60715 35x7.5/15 -

Ordering data

Order No.

SIPLUS LOGO!Power 24 V 1.3 A L 6AG1 931-1SH02-2AA0

(extended temperature range and medial exposure)

Input 100 ... 240 V AC
Output 24 V DC, 1.3 A

L: Subject to export regulations AL: 91999 and ECCN: N

LOGO! logic module LOGO!Contact

LOGO!Contact

Technical specifications

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

2

Ordering data

Order No.

LOGO!Contact

Switching module for direct switching of resistive loads up to 20 A and motors up to 4 kW

Switching voltage 24 V

Switching voltage 230 V

6ED1 057-4CA00-0AA0

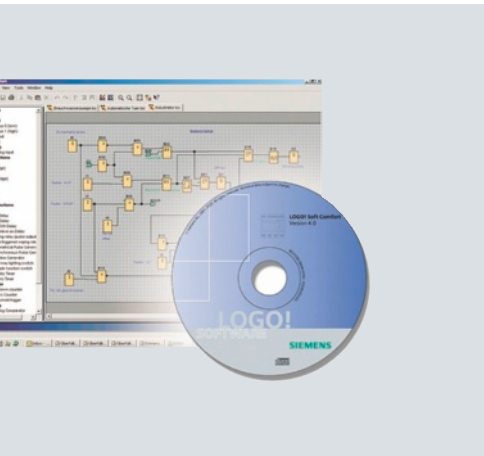
6ED1 057-4EA00-0AA0



odule for the direct switching of resistive loads

LOGO! logic module software

ware



ndly software for creating control programs on a
control programs in Function Block Diagram (FBD)
rogram (LAD)
simulation, online testing and archiving of control
documentation via numerous comment and print
between LOGO! and the PC is made using the
le (serial interface) or the LOGO! USB PC cable

System requirements

, NT 4.0, ME, 2000, XP or Vista (not 64 bit)

isk capacity.

cs card with minimum resolution 800x600

3, G4, G4 Cube, iMac, PowerBook G3, G4 or

with Caldera OpenLinux 2.4)

linux distributions on which the Java 2 SDK
runs.

o your relevant Linux distribution for the
hardware requirements.

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

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

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [siemens](#) manufacturer:

Other Similar products are found below :

[5SJ4101-7HG40](#) [5SL6225-7](#) [5ST2144](#) [5ST2167](#) [5SX2125-7](#) [5SX2132-7](#) [5SX2320-7](#) [5SX2340-7](#) [5SX9200](#) [5SY4106-8](#) [5SY6220-7](#)
[6EP1321-5BA00](#) [6EP3333-8SB00-0AY0](#) [6ES5451-7LA11](#) [6ES7322-1BF01-0AA0](#) [D11CEU1](#) [PD63F160](#) [FXD63B175](#) [8WA1011-2SF25](#)
[8WA1721](#) [8WA1815](#) [8WA8848-0AC](#) [8WA8-848-0AM](#) [8WA8-848-0AN](#) [8WA8-848-0AT](#) [8WA8-848-0AX](#) [8WA8-848-0BD](#) [8WA8-848-](#)
[0BF](#) [8WA8-848-0BL](#) [8WA8-848-0BP](#) [8WA8-848-0BQ](#) [14DP32AC81](#) [ED21B100](#) [B32523-.47@400V-J](#) [B65541-T25-A48](#) [B65549-E4-X23](#)
[B65812-B1512-T1](#) [B66317-G0000-X127](#) [B66337-G0500-X127](#) [B66417-G-X167](#) [B82724-J](#) [8WA1201](#) [8WA1854](#) [8WA1870](#) [8WA8-848-](#)
[0AK](#) [8WA8-848-0AV](#) [8WA8-848-0BC](#) [8WA8-848-0BG](#) [8WA8-848-0BJ](#) [8WA8-848-0BK](#)