

Catalog

**SIEMENS**

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## LOGO! expansion modules

### Overview

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

### Design

- Relay outputs with max. 5 A output current.
- Different modules:
  - 4 digital inputs, 4 digital outputs or
  - 4 digital inputs, 4 relay outputs or
  - 2 analog inputs or
  - 2 analog outputs.
- Interface for connection to LOGO! modular logic modules.

### Note on compatibility:

Expansion modules for LOGO! 8 can only be used on LOGO! 8 basic devices!

Expansion modules for LOGO! 6 and 7 cannot be used with LOGO! 8 basic devices.

### Technical specifications

Article number	6ED1055-1CB00-0BA2	6ED1055-1HB00-0BA2	6ED1055-1MB00-0BA2	6ED1055-1FB00-0BA2
	LOGO! DM8 24 Exp. mod., 4DI/4DO	LOGO! DM8 24R Exp. mod. 2 MW, 4DI/4DO	LOGO! DM8 12/24R Exp. mod. 2 MW, 4DI/DO	LOGO! DM8 230R Exp. mod. 2 MW, 4DI/4DO
Installation type/mounting				
Mounting	on 35 mm DIN rail, 2 spacing units wide	on 35 mm DIN rail, 2 spacing units wide	on 35 mm DIN rail, 2 spacing units wide	on 35 mm DIN rail, 2 spacing units wide
Supply voltage				
Rated value (DC)				
• 12 V DC			Yes	
• 24 V DC	Yes	Yes	Yes	
• 115 V DC				Yes
• 230 V DC				Yes
permissible range, lower limit (DC)	20.4 V	20.4 V	10.8 V	100 V
permissible range, upper limit (DC)	28.8 V	28.8 V	28.8 V	253 V
Rated value (AC)				
• 24 V AC		Yes		
• 115 V AC				Yes

	• 230 V AC			
	Yes			
Article number	6ED1055-1CB00-0BA2	6ED1055-1HB00-0BA2	6ED1055-1MB00-0BA2	6ED1055-1FB00-0BA2
	LOGO! DM8 24 Exp. mod., 4DI/4DO	LOGO! DM8 24R Exp. mod. 2 MW, 4DI/4DO	LOGO! DM8 12/24R Exp. mod. 2 MW, 4DI/DO	LOGO! DM8 230R Exp. mod. 2 MW, 4DI/4DO
<b>Line frequency</b>				
• permissible range, lower limit		47 Hz		47 Hz
• permissible range, upper limit		63 Hz		63 Hz
<b>Digital inputs</b>				
Number of digital inputs	4	4	4	4
<b>Input voltage</b>				
• Type of input voltage	DC	AC/DC	DC	AC/DC
• for signal "0"	< 5 V DC	< 5 V AC/DC	< 5 V DC	< 40 V AC, < 30 V DC
• for signal "1"	> 12 V DC	> 12 V AC/DC	> 8.5 V	> 79 V AC, > 79 V DC
<b>Input current</b>				
• for signal "0", max. (permissible quiescent current)	0.88 mA	1.1 mA	0.88 mA	0.06 mA; 0.05 mA with AC, 0.06 mA with DC
• for signal "1", typ.	2.1 mA	2.63 mA	1.5 mA	0.13 mA
<b>Input delay (for rated value of input voltage) for standard inputs</b>				
— at "0" to "1", max.	1.5 ms	1.5 ms	1.5 ms	40 ms
— at "1" to "0", max.	1.5 ms	15 ms	1.5 ms	75 ms
<b>Digital outputs</b>				
Number of digital outputs	4	4; Relays	4; Relays	4; Relays
Short-circuit protection	Yes	No	No	No
Controlling a digital input		Yes	Yes	Yes
<b>Switching capacity of the outputs</b>				
• on lamp load, max.		1 000 W	1 000 W	1 000 W; 500 W at 115V AC
<b>Output current</b>				
• for signal "1" rated value	0.3 A	5 A	5 A	5 A
• for signal "1" minimum load current		100 mA	100 mA	100 mA
<b>Parallel switching of two outputs</b>				
• for uprating	No	No	No	No
<b>Switching frequency</b>				
• with resistive load, max.	10 Hz	2 Hz	2 Hz	2 Hz
• with inductive load, max.	0.5 Hz	0.5 Hz	0.5 Hz	0.5 Hz
• mechanical, max.		10 Hz	10 Hz	10 Hz
<b>Relay outputs</b>				
<b>Switching capacity of contacts</b>				
— with inductive load, max.		3 A	3 A	3 A

— with resistive load, max.	5 A	5 A	5 A	
<b>EMC</b>				
<b>Article number</b>	<b>6ED1055-1CB00-0BA2</b> LOGO! DM8 24 Exp. mod., 4DI/4DO	<b>6ED1055-1HB00-0BA2</b> LOGO! DM8 24R Exp. mod. 2 MW, 4DI/4DO	<b>6ED1055-1MB00-0BA2</b> LOGO! DM8 12/24R Exp. mod. 2 MW, 4DI/DO	<b>6ED1055-1FB00-0BA2</b> LOGO! DM8 230R Exp. mod. 2 MW, 4DI/4DO
<b>Emission of radio interference acc. to EN 55 011</b>				
• Limit class B, for use in residential areas	Yes	Yes	Yes	Yes
<b>Degree and class of protection</b>				
IP degree of protection	IP20	IP20	IP20	IP20
<b>Standards, approvals, certificates</b>				
CE mark	Yes	Yes	Yes	Yes
CSA approval	Yes	Yes	Yes	Yes
UL approval	Yes	Yes	Yes	Yes
FM approval	Yes	Yes	Yes	Yes
developed in accordance with IEC 61131	Yes	Yes	Yes	Yes
according to VDE 0631	Yes	Yes		Yes
Marine approval	Yes	Yes	Yes	Yes
<b>Ambient conditions</b>				
<b>Ambient temperature during operation</b>				
• min.	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C
• max.	55 °C	55 °C	55 °C	55 °C
<b>Dimensions</b>				
Width	35.5 mm	35.5 mm	35.5 mm	35.5 mm
Height	90 mm	90 mm	90 mm	90 mm
Depth	58 mm	58 mm	58 mm	58 mm
<b>Article number</b>				
	<b>6ED1055-1CB10-0BA2</b> LOGO! DM16 24 Exp. mod., 4 MW, 8DI/8DO	<b>6ED1055-1NB10-0BA2</b> LOGO! DM16 24R Exp. mod. 4 MW, 8DI/8DO	<b>6ED1055-1FB10-0BA2</b> LOGO! DM16 230R Exp. mod. 4 MW, 8DI/8DO	
<b>Installation type/mounting</b>				
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	
<b>Supply voltage</b>				
Rated value (DC)				
• 24 V DC	Yes	Yes		
• 115 V DC			Yes	
• 230 V DC			Yes	
permissible range, lower limit (DC)	20.4 V	20.4 V	100 V	
permissible range, upper limit (DC)	28.8 V	28.8 V	253 V	
Rated value (AC)				
• 24 V AC		No		
• 115 V AC			Yes	
• 230 V AC			Yes	
<b>Line frequency</b>				
• permissible range, lower limit			47 Hz	
• permissible range, upper limit			63 Hz	

<b>Digital inputs</b>			
Number of digital inputs	8	8	8
<b>Article number</b>			
	<b>6ED1055-1CB10-0BA2</b>	<b>6ED1055-1NB10-0BA2</b>	<b>6ED1055-1FB10-0BA2</b>
	LOGO! DM16 24 Exp. mod., 4 MW, 8DI/8DO	LOGO! DM16 24R Exp. mod. 4 MW, 8DI/8DO	LOGO! DM16 230R Exp. mod. 4 MW, 8DI/8DO
<b>Input voltage</b>			
• Type of input voltage	DC	DC	AC/DC
• for signal "0"	< 5 V DC	< 5 V DC	< 40 V AC, < 30 V DC
• for signal "1"	> 12 V DC	> 12 V DC	> 79 V AC, > 79 V DC
<b>Input current</b>			
• for signal "0", max. (permissible quiescent current)	0.85 mA	0.85 mA	0.06 mA; 0.05 mA with AC, 0.06 mA with DC
• for signal "1", typ.	2 mA	2 mA	0.13 mA
<b>Input delay (for rated value of input voltage)</b>			
<b>for standard inputs</b>			
— at "0" to "1", max.	1.5 ms	1.5 ms	40 ms
— at "1" to "0", max.	1.5 ms	1.5 ms	75 ms
<b>Digital outputs</b>			
Number of digital outputs	8	8; Relays	8; Relays
Short-circuit protection	Yes	No	No
Controlling a digital input		Yes	Yes
<b>Switching capacity of the outputs</b>			
• on lamp load, max.		1 000 W	1 000 W; 500 W at 115V AC
<b>Output current</b>			
• for signal "1" rated value	0.3 A	5 A	5 A
• for signal "1" minimum load current		100 mA	100 mA
<b>Parallel switching of two outputs</b>			
• for uprating	No	No	No
<b>Switching frequency</b>			
• 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
<b>Relay outputs</b>			
<b>Switching capacity of contacts</b>			
— with inductive load, max.		3 A	3 A
— with resistive load, max.		5 A	5 A
<b>EMC</b>			
<b>Emission of radio interference acc. to EN 55 011</b>			
• Limit class B, for use in residential areas	Yes	Yes	Yes
<b>Degree and class of protection</b>			
IP degree of protection	IP20	IP20	IP20
<b>Standards, approvals, certificates</b>			
CE mark	Yes	Yes	Yes
CSA approval	Yes	Yes	Yes
UL approval	Yes	Yes	Yes
FM approval	Yes	Yes	Yes

developed in accordance with IEC 61131 according to VDE 0631	Yes Yes	Yes Yes	Yes Yes
<b>Article number</b>	<b>6ED1055-1CB10-0BA2</b> LOGO! DM16 24 Exp. mod., 4 MW, 8DI/8DO	<b>6ED1055-1NB10-0BA2</b> LOGO! DM16 24R Exp. mod. 4 MW, 8DI/8DO	<b>6ED1055-1FB10-0BA2</b> LOGO! DM16 230R Exp. mod. 4 MW, 8DI/8DO
Marine approval	Yes	Yes	Yes
<b>Ambient conditions</b>			
<b>Ambient temperature during operation</b>			
• min.	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C
• max.	55 °C	55 °C	55 °C
<b>Dimensions</b>			
Width	71.5 mm	71.5 mm	71.5 mm
Height	90 mm	90 mm	90 mm
Depth	58 mm	58 mm	58 mm
<b>Article number</b>	<b>6ED1055-1MA00-0BA2</b> LOGO! AM2 Exp. mod., 12/24V, 2AI,	<b>6ED1055-1MD00-0BA2</b> LOGO! AM2 RDT, 2AI, -50..+200DECR/C	
<b>Installation type/mounting</b>			
Mounting	on 35 mm DIN rail, 2 spacing units wide		on 35 mm DIN rail, 2 spacing units wide
<b>Supply voltage</b>			
Rated value (DC)			
• 12 V DC	Yes; 10.8 V DC to 28.8 V DC	Yes; 10.8 V DC to 28.8 V DC	Yes; 10.8 V DC to 28.8 V DC
• 24 V DC	Yes; 10.8 V DC to 28.8 V DC	Yes; 10.8 V DC to 28.8 V DC	Yes; 10.8 V DC to 28.8 V DC
<b>Input current</b>			
Current consumption, typ.	30 mA	30 mA	
<b>Analog inputs</b>			
Number of analog inputs	2	2; 2 or 3 wire connection	
<b>Input ranges</b>			
• Voltage	Yes	No	
• Current	Yes	No	
• Resistance thermometer	No	Yes; For PT100/PT1000 sensors	
<b>Input ranges (rated values), voltages</b>			
• 0 to +10 V	Yes	No	
<b>Input ranges (rated values), currents</b>			
• 0 to 20 mA	Yes; 0 mA or 4 mA to 20 mA	No	
<b>Input ranges (rated values), resistance thermometer</b>			
• Pt 100	No	Yes	
<b>EMC</b>			
<b>Emission of radio interference acc. to EN 55 011</b>			
• Limit class B, for use in residential areas	Yes	Yes	
<b>Degree and class of protection</b>			
IP degree of protection	IP20	IP20	
<b>Standards, approvals, certificates</b>			
CE mark	Yes	Yes	
CSA approval	Yes	Yes	
UL approval	Yes	Yes	
FM approval	Yes	Yes	
developed in accordance with IEC 61131 according to VDE 0631	Yes Yes	Yes	Yes

according to VDE 0631	res	
Marine approval	Yes	Yes
<b>Article number</b>	<b>6ED1055-1MA00-0BA2</b>	<b>6ED1055-1MD00-0BA2</b>
	LOGO! AM2 Exp. mod., 12/24V, 2AI,	LOGO! AM2 RDT, 2AI, -50...+200DECR/C
<b>Ambient conditions</b>		
<b>Ambient temperature during operation</b>		
• min.	0 °C; ES03 and higher: -20 °C	0 °C; ES03 and higher: -20 °C
• max.	55 °C	55 °C
<b>Dimensions</b>		
Width	35.5 mm	35.5 mm
Height	90 mm	90 mm
Depth	58 mm	58 mm
<b>Article number</b>	<b>6ED1055-1MM00-0BA2</b>	
	LOGO! AM2 AQ, 2AQ, 0-10V, 0/4-20mA	
<b>Installation type/mounting</b>		
Mounting	on 35 mm DIN rail, 2 spacing units wide	
<b>Supply voltage</b>		
Rated value (DC)	24 V	
<b>Analog outputs</b>		
Number of analog outputs	2	
<b>Output ranges, voltage</b>		
• 0 to 10 V	Yes	
<b>Output ranges, current</b>		
• 0 to 20 mA	Yes	
• 4 mA to 20 mA	Yes	
<b>EMC</b>		
<b>Emission of radio interference acc. to EN 55 011</b>		
• Limit class B, for use in residential areas	Yes	
<b>Degree and class of protection</b>		
IP degree of protection	IP20	
<b>Standards, approvals, certificates</b>		
CE mark	Yes	
CSA approval	Yes	
UL approval	Yes	
FM approval	Yes	
developed in accordance with IEC 61131	Yes	
according to VDE 0631	Yes	
Marine approval	Yes	
<b>Ambient conditions</b>		
<b>Ambient temperature during operation</b>		
• min.	0 °C; ES03 and higher: -20 °C	
• max.	55 °C	
<b>Dimensions</b>		
Width	35.5 mm	
Height	90 mm	
Depth	58 mm	