

LOGO! modular – the technical details

Basic units	LOGO! 12/24RC ¹⁾ , LOGO! 12/24RCo ²⁾	LOGO! 24C, LOGO! 24Co	LOGO! 24RC ¹⁾ , LOGO! 24RCo ²⁾
Inputs	8	8	8
of which can be used in analog mode	4 (0 to 10 V)	4 (0 to 10 V)	–
Input/supply voltage	12/24 V DC	24 V DC	24 V AC/DC
Permissible range with signal "0" with signal "1"	10.8 V ... 28.8 V DC max. 5 V DC min. 8.5 V DC	20.4 V ... 28.8 V DC max. 5 V DC min. 12 V DC	20.4 ... 28.8 V DC 20.4 ... 26.4 V AC max. 5 V AC/DC
Input current	1.5 mA (I3 ... I6), 0.1 mA (I1, I2, I7, I8)	2 mA (I3 ... I6), 0.1 mA (I1, I2, I7, I8)	min. 12 V AC/DC, 2.5 mA
Outputs	4 relays	4 transistors	4 relays
Continuous current	10 A with resistive load; 3 A with inductive load	0.3 A	10 A with resistive load; 3 A with inductive load
Short-circuit protection	External fuse required	Electronic (approx. 1 A)	External fuse required
Switching frequency	2 Hz with resistive load; 0.5 Hz with inductive load	10 Hz	2 Hz with resistive load; 0.5 Hz with inductive load
Cycle time	< 0.1 ms/function	< 0.1 ms/function	< 0.1 ms/function
Integrated time switches/ power reserve	Yes / typ. 80 h (2 years with battery module)	Yes / typ. 80 h (2 years with battery module)	Yes / typ. 80 h (2 years with battery module)
Connection cables	2 x 1.5 mm ² or 1 x 2.5 mm ²		
Ambient temperature	0 to +55 °C		
Storage temperature	–40 °C to +70 °C		
Emitted interference	In accordance with EN 55011 (limit class B)		
Degree of protection	IP20		
Certification	In accordance with VDE 0631, IEC 1131, FM Class 1, Div 2, cULus, C-Tick, marine approvals		
Mounting	On 35 mm standard mounting rail, 4 MW, or wall-mounting		
Dimensions	72 (4 MW) x 90 x 55 mm (W x H x D)		
Programming cable	LOGO! PC cable, (RS232 or USB)	LOGO! PC cable, (RS232 or USB)	LOGO! PC cable, (RS232 or USB)
Optional backup battery	Yes	Yes	Yes
LOGO! <=> LOGO! communication (Ethernet)	No	No	No
LOGO! <=> network (Ethernet)	No	No	No
Maximum program memory	200 blocks	200 blocks	200 blocks
External memory module	LOGO! memory card	LOGO! memory card	LOGO! memory card
Data logging	No	No	No
Online status chart	No	No	No
Macro function	No	No	No

Digital modules	LOGO! DM8 12/24R	LOGO! DM8 24 DM16 24
Inputs	4	4/8
Input/supply voltage	12/24 V DC	24 V DC
Permitted range with signal "0" with signal "1"	10.8 ... 28.8 V DC max. 5 V DC min. 8.5 V DC	20.4 ... 28.8 V DC max. 5 V DC min. 12 V DC
Input current	1.5 mA	2 mA
Outputs	4 relays	4/8 transistors
Continuous current I _{th} (per terminal)	5 A with resistive load; 3 A with inductive load	0.3 A
Short-circuit protection	External fuse required	Electronic (approx. 1 A)
Switching frequency	2 Hz with resistive load; 0.5 Hz with inductive load	10 Hz
Power loss	0.3 ... 1.7 W at 12 V DC 0.4 ... 1.8 W at 24 V DC	0.8 ... 1.1 W* 0.8 ... 1.7 W**
Dimensions (W x H x D)	36 (2 MW) x 90 x 53 mm	36 (2 MW) x 90 x 53 mm 72 (4 MW) x 90 x 53 mm

LOGO! 230RC ¹⁾ , LOGO! 230RC _o ²⁾	LOGO! 12/24 RCE	LOGO! 230 RCE
8	8	8
–	4 (0 to 10 V)	–
115/240 V AC/DC	12/24 V DC	115/240 V AC/DC
85 ... 265 V AC 100 ... 253 V DC max. 40 V AC/30 V DC min. 79 V AC/79 V DC, 0.08 mA	10.8 V ... 28.8 V DC max. 5 V DC min. 8.5 V DC 1.5 mA (I3 ... I6) 0.1 mA (I1, I2, I7, I8)	85 ... 265 V AC 100 ... 253 V DC max. 40 V AC/30 V DC min. 79 V AC/79 V DC, 0.08 mA
4 relays	4 relays	4 relays
10 A with resistive load; 3 A with inductive load	10 A with resistive load; 3 A with inductive load	10 A with resistive load; 3 A with inductive load
External fuse required	External fuse required	External fuse required
2 Hz with resistive load; 0.5 Hz with inductive load	2 Hz with resistive load; 0.5 Hz with inductive load	2 Hz with resistive load; 0.5 Hz with inductive load
< 0.1 ms/function	< 0.1 ms/function	< 0.1 ms/function
Yes / typ. 80 h (2 years with battery module)	Yes / typ. 480 h; no battery	Yes / typ. 480 h; no battery

	On 35 mm standard mounting rail, 6 MW, or wall-mounting	
	108 (6 MW) x 90 x 55 mm (W x H x D)	108 (6 MW) x 90 x 55 mm (W x H x D)
LOGO! PC cable, (RS232 or USB)	Ethernet	Ethernet
Yes	No	No
No	Yes, max. 8 LOGO!s + 1PC/PG	Yes, max. 8 LOGO!s + 1PC/PG
No	Yes, max. 8 TN (LOGO!, SIMATIC CPU, 1x SIMATIC HMI, PC)	Yes, max. 8 TN (LOGO!, SIMATIC CPU, 1x SIMATIC HMI, PC)
200 blocks	400 blocks	400 blocks
LOGO! memory card	SIMATIC memory card or standard SD card max. 2 G	SIMATIC memory card or standard SD card max. 2 G
No	Internal memory/SD card	Internal memory/SD card
No	Yes, with saving on the PC	Yes, with saving on the PC
No	Yes	Yes

LOGO! DM8 24R DM16 24R	LOGO! DM8 230R DM16 230R
4/8	4/8
24 V AC/DC* 24 V DC**	115/240 V AC/DC
20.4 ... 28.8 V DC, 20.4 ... 26.4 V AC*	85 ... 265 V AC, 100 ... 253 V DC
max. 5 V AC/DC min. 12 V AC/DC*	max. 40 V AC min. 79 V AC
2.5 mA*, 2.0 mA**	0.08 mA
4/8 relays	4/8 relays
5 A with resistive load; 3 A with inductive load	5 A with resistive load; 3 A with inductive load
External fuse required	External fuse required
2 Hz with resistive load; 0.5 Hz with inductive load	2 Hz with resistive load; 0.5 Hz with inductive load
0.4 ... 1.8 W at 24 VDC* 0.9 ... 2.7 W at 24 VAC* 0.7 ... 2.5 W at 24 VDC**	1.1 ... 3.5 W (115 V AC) ... 4.5** 2.4 ... 4.8 W (240 V AC) ... 5.5** 0.5 ... 1.8 W (115 V DC) ... 2.9** 1.2 ... 2.4 W (240 V DC) ... 4.8**
36 (2 MW) x 90 x 53 mm 72 (4 MW) x 90 x 53 mm	36 (2 MW) x 90 x 53 mm 72 (4 MW) x 90 x 53 mm

R: Relay outputs, C: Clock/time switch,
o: without display

E: Ethernet interface

* for DM8 module, ** for DM16 module

1) As SIPLUS component also for extended temperature range – 25 ... +70 °C and corrosive atmosphere/condensation (www.siemens.com/siplus)

2) As SIPLUS component also for extended temperature range – 40 ... +70 °C and corrosive atmosphere/condensation (www.siemens.com/siplus)