The data was determined with the following devices:

- Siemens fluorescent tubes 58 W VVG 5LZ 583 3-1 uncompensated.
- Siemens fluorescent tubes 58 W VVG 5LZ 583 3-1 parallel compensated with 7 µF.
- Siemens fluorescent tubes 58 W VVG 5LZ 501 1-1N with ballast.

A.8 Technical data: LOGO! 12/24... LOGO! DM8 12/24R

	LOGO! 12/24RCEo **LOGO! 12/24RCE**	**LOGO! DM8 12/24R**
Power supply		
Input voltage	12/24 VDC	12/24 VDC
Permissible range	10.8 VDC to 28.8 VDC	10.8 VDC to 28.8 VDC
Reverse polarity protection	Yes	Yes
Power consumption • 12 VDC • 24 VDC	 • 50 mA to 165 mA • 25 mA to 90 mA	 • 20 mA to 90 mA • 15 mA to 50 mA
Voltage failure buffering • 12 VDC • 24 VDC	 • Typ. 2 ms • Typ. 5 ms	 • Typ. 2 ms • Typ. 5 ms
Power loss • 12 VDC • 24 VDC	 • 0.6 W to 2.0 W • 0.6 W to 2.2 W	 • 0.2 W to 1.1 W • 0.4 W to 1.2 W
Backup of the real-time clock at 25 °C	Typ. 20 days	- -
Accuracy of the real-time clock	Typ. ± 2 s/day	- -
Electrical isolation	No	No
Digital inputs		
Number	8	4
Electrical isolation	No	No
Number of high speed inputs	4 (I3, I4, I5, I6)	0
Input frequency • Normal input • High speed input	 • Max. 4 Hz • Max. 5 kHz	 • Max. 4 Hz • - -
Max. continuous permissible voltage	28.8 VDC	28.8 VDC
Input voltage L+ • Signal 0 • Signal 1	 • < 5 VDC • > 8.5 VDC	 • < 5 VDC • > 8.5 VDC

	LOGO! 12/24RCEo **LOGO! 12/24RCE**	**LOGO! DM8 12/24R**
Input current at • Signal 0 • Signal 1	 < 0.88 mA (I3 to I6) < 0.07 mA (I1, I2, I7, I8) > 1.5 mA (I3 to I6) > 0.12 mA (I1, I2, I7, I8)	 < 0.88 mA > 1.5 mA
Delay time at • 0 to 1 • 1 to 0	 • Typ. 1.5 ms <1.0 ms (I3 to I6) • Typ. 1.5 ms <1.0 ms (I3 to I6)	 • Typ. 1.5 ms • Typ. 1.5 ms
Line length (unshielded)	Max. 100 m	Max. 100 m
Analog inputs		
Number	4 (I1=AI3, I2=AI4, I7=AI1, I8=AI2)	- -
Range	0 VDC to 10 VDC Input impedance 80 kΩ	- -
Cycle time for analog value generation	300 ms	- -
Line length (shielded and twisted)	Max. 10 m	- -
Error limit	± 1.5% at FS	- -
Digital outputs		
Number	4	4
Output type	Relay outputs	Relay outputs
Electrical isolation	Yes	Yes
In groups of	1	1
Control of a digital input	Yes	Yes
Continuous current $I_{th\ (per\ terminal)}$	Recommended range of application ≥ 100 mA at 12 VAC/VDC Max. 10 A per relay	Recommended range of application ≥ 100 mA at 12 VAC/VDC Max. 5 A per relay
Relay rated voltage	240 VAC/VDC	240 VAC/VDC
Surge current	Max. 30 A	Max. 30 A
Incandescent lamp load (25000 switching cycles) at	1000 W	1000 W
Fluorescent tubes with ballast (25000 switching cycles)	10 x 58 W	10 x 58 W
Fluorescent tubes, conventionally compensated (25000 switching cycles)	1 x 58 W	1 x 58 W
Fluorescent tubes, uncompensated (25000 switching cycles)	10 x 58 W	10 x 58 W
Derating	None; across the entire temperature range	None; across the entire temperature range
Short circuit-proof cos 1	Power protection B16, 600 A	Power protection B16, 600 A
Short circuit-proof cos 0.5 to 0.7	Power protection B16, 900 A	Power protection B16, 900 A
Parallel output circuits for power increase	Not permitted	Not permitted

	LOGO! 12/24RCEo **LOGO! 12/24RCE**	**LOGO! DM8 12/24R**
Protection of output relay (if desired)	Max. 16 A, characteristic B16	Max. 16 A, characteristic B16
Line length (unshielded)	Max. 100 m	Max. 100 m
Switching rate		
Mechanical	10 Hz	10 Hz
Ohmic load/lamp load	2 Hz	2 Hz
Inductive load	0.5 Hz	0.5 Hz

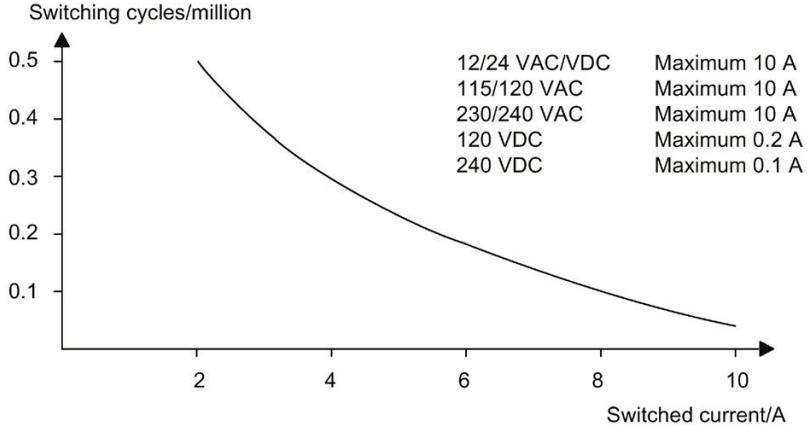
Notice: For fluorescent lamps with capacitors, you must consider the technical data of fluorescent lamp ballasts. If the current exceeds the maximum allowed surge current, appropriate contactor relays must switch the flourescent lamps.

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- Siemens fluorescent tubes 58 W VVG 5LZ 583 3-1 parallel compensated with 7 µF.
- Siemens fluorescent tubes 58 W VVG 5LZ 501 1-1N with ballast.

A.9 Switching capacity/service life of the relay outputs

Switching capacity and service life of the contacts with ohmic loading (heating):



Order numbers

E

Modules

Variant	Designation	Order number
LOGO! Basic (Base Module with display)	LOGO! 12/24RCE *	6ED1052-1MD08-0BA1
	LOGO! 24CE *	6ED1052-1CC08-0BA1
	LOGO! 24RCE (AC/DC)	6ED1052-1HB08-0BA1
	LOGO! 230RCE (AC/DC)	6ED1052-1FB08-0BA1
LOGO! Pure (Base Module without display)	LOGO! 12/24RCEo *	6ED1052-2MD08-0BA1
	LOGO! 24CEo *	6ED1052-2CC08-0BA1
	LOGO! 24RCEo (AC/DC)	6ED1052-2HB08-0BA1
	LOGO! 230RCEo (AC/DC)	6ED1052-2FB08-0BA1
Digital modules	LOGO! DM8 12/24R	6ED1055-1MB00-0BA2
	LOGO! DM8 24	6ED1055-1CB00-0BA2
	LOGO! DM8 24R	6ED1055-1HB00-0BA2
	LOGO! DM8 230R	6ED1055-1FB00-0BA2
	LOGO! DM16 24	6ED1055-1CB10-0BA2
	LOGO! DM16 24R	6ED1055-1NB10-0BA2
	LOGO! DM16 230R	6ED1055-1FB10-0BA2
Analog modules	LOGO! AM2	6ED1055-1MA00-0BA2
	LOGO! AM2 RTD	6ED1055-1MD00-0BA2
	LOGO! AM2 AQ (0...10V, 0/4...20mA)	6ED1055-1MM00-0BA2
Text Display module with Ethernet interfaces	LOGO! TDE	6ED1055-4MH08-0BA1

*: Also with analog inputs

Accessories

Accessories	Designation	Order number
LOGO!Soft Comfort DVD	LOGO!Soft Comfort V8.3	6ED1058-0BA08-0YA1
Switching modules	LOGO! Contact 24 V	6ED1057-4CA00-0AA0
	LOGO! Contact 230 V	6ED1057-4EA00-0AA0
Power modules	LOGO! Power 12V/1.9A	6EP1321-1SH02
	LOGO! Power 12V/4.5A	6EP1322-1SH02
	LOGO! Power 24V/1.3A	6EP1331-1SH02
	LOGO! Power 24V/2.5A	6EP1332-1SH42
	LOGO! Power 24V/4A	6EP1332-1SH51
	LOGO! Power 5V/3A	6EP1311-1SH02
	LOGO! Power 5V/6.3A	6EP1311-1SH12
	LOGO! Power 15V/1.9A	6EP1351-1SH02
	LOGO! Power 15V/4A	6EP1352-1SH02