



LOGO! DM8 230R expansion module, PS/I/O: 230V/230V/relay, 2 MW, 4 DI/4 DO for LOGO! 8

Installation type/mounting	
Mounting	on 35 mm DIN rail, 2 spacing units wide
Supply voltage	
Rated value (DC)	
• 115 V DC	Yes
• 230 V DC	Yes
permissible range, lower limit (DC)	100 V
permissible range, upper limit (DC)	253 V
Rated value (AC)	
• 115 V AC	Yes
• 230 V AC	Yes
Line frequency	
• permissible range, lower limit	47 Hz
• permissible range, upper limit	63 Hz
Digital inputs	
Number of digital inputs	4
Input voltage	
• Type of input voltage	AC/DC
• for signal "0"	< 40 V AC, < 30 V DC
• for signal "1"	> 79 V AC, > 79 V DC
Input current	
• for signal "0", max. (permissible quiescent current)	0.06 mA; 0.05 mA with AC, 0.06 mA with DC
• for signal "1", typ.	0.13 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", max.	40 ms
— at "1" to "0", max.	75 ms
Digital outputs	
Number of digital outputs	4; Relays
Short-circuit protection	No
Controlling a digital input	Yes
Switching capacity of the outputs	
• on lamp load, max.	1 000 W; 500 W at 115V AC
Output current	
• for signal "1" rated value	5 A
• for signal "1" minimum load current	100 mA
Parallel switching of two outputs	
• for uprating	No
Switching frequency	

• with resistive load, max. • with inductive load, max. • mechanical, max.	2 Hz		
	0.5 Hz		
	10 Hz		
Relay outputs			
Switching capacity of contacts			
— with inductive load, max.	3 A		
— with resistive load, max.	5 A		
EMC			
Emission of radio interference acc. to EN 55 011			
• Limit class B, for use in residential areas	Yes		
Degree and class of protection			
IP degree of protection	IP20		
Standards, approvals, certificates			
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		
Ecological footprint			
• environmental product declaration	Yes		
Global warming potential			
— global warming potential, (total) [CO2 eq]	145 kg		
— global warming potential, (during production) [CO2 eq]	7.49 kg		
— global warming potential, (during operation) [CO2 eq]	138 kg		
— global warming potential, (after end of life cycle) [CO2 eq]	-0.491 kg		
Ambient conditions			
Ambient temperature during operation			
• min. • max.	-20 °C; No condensation		
	55 °C		
Dimensions			
Width	35.5 mm		
Height	90 mm		
Depth	58 mm		
Classifications			
		Version	Classification
	eClass	14	27-24-22-04
	eClass	12	27-24-22-04
	eClass	9.1	27-24-22-04
	eClass	9	27-24-22-04
	eClass	8	27-24-22-04
	eClass	7.1	27-24-22-04
	eClass	6	27-24-22-04
	ETIM	10	EC001419
	ETIM	9	EC001419
	ETIM	8	EC001419
	ETIM	7	EC001419
	IDEA	4	3566
	UNSPSC	15	32-15-17-05
Approvals / Certificates			
General Product Approval			

[Miscellaneous](#)

[Manufacturer Declaration](#)



[KC](#)

General Product Approval	For use in hazardous locations
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[Metrological Approval](#)



[KC](#)



[EM](#)



For use in hazardous locations	Maritime application
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[EM](#)



[NK / Nippon Kaiji Kyokai](#)

Maritime application	Environment
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[CCS \(China Classification Society\)](#)



last modified: 7/2/2025