



Figure similar

SIMATIC S7-300, Digital module SM 323, isolated, 16 DI and 16 DO, 24 V DC, 0.5 A, Total current 4A, 1x 40-pole

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• permissible range, lower limit (DC)	20.4 V
• permissible range, upper limit (DC)	28.8 V
Input current	
from load voltage L+ (without load), max.	80 mA
from backplane bus 5 V DC, max.	80 mA
Power loss	
Power loss, typ.	6.5 W
Digital inputs	
Number of digital inputs	16
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Number of simultaneously controllable inputs	
horizontal installation	
— up to 40 °C, max.	16
— up to 60 °C, max.	8
vertical installation	
— up to 40 °C, max.	16
Input voltage	
• Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	-30 to +5 V
• for signal "1"	13 to 30V
Input current	
• for signal "1", typ.	7 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", min.	1.2 ms
— at "0" to "1", max.	4.8 ms
— at "1" to "0", min.	1.2 ms
— at "1" to "0", max.	4.8 ms
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Digital outputs	
Number of digital outputs	16
Short-circuit protection	Yes
• Response threshold, typ.	1 A

Limitation of inductive shutdown voltage to	L+ (-48 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
• on lamp load, max.	5 W
Load resistance range	
• lower limit	48 Ω
• upper limit	4 k Ω
Output voltage	
• for signal "1", min.	L+ (-0.8 V)
Output current	
• for signal "1" rated value	0.5 A
• for signal "1" permissible range, min.	5 mA
• for signal "1" permissible range, max.	0.6 A
• for signal "1" minimum load current	5 mA
• for signal "0" residual current, max.	0.5 mA
Output delay with resistive load	
• "0" to "1", max.	100 μ s
• "1" to "0", max.	500 μ s
Parallel switching of two outputs	
• for uprating	No
• for redundant control of a load	Yes; only outputs of the same group
Switching frequency	
• with resistive load, max.	100 Hz
• with inductive load, max.	0.5 Hz
• on lamp load, max.	100 Hz
Total current of the outputs (per group)	
horizontal installation	
— up to 40 °C, max.	4 A
— up to 60 °C, max.	3 A
vertical installation	
— up to 40 °C, max.	2 A
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1.5 mA
Interrupts/diagnostics/status information	
Alarms	No
Diagnostics function	No
Diagnostics indication LED	
• Status indicator digital input (green)	Yes
• Status indicator digital output (green)	Yes
Potential separation	
Potential separation digital inputs	
• between the channels	Yes
• between the channels, in groups of	16
• between the channels and backplane bus	Yes; Optocoupler
Potential separation digital outputs	
• between the channels	Yes
• between the channels, in groups of	8
• between the channels and backplane bus	Yes; Optocoupler
Isolation	
Isolation tested with	500 V DC
connection method	
required front connector	40-pin
Dimensions	
Width	40 mm
Height	125 mm

Depth	120 mm				
Weights					
Weight, approx.	260 g				
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	9	EC001419		
	ETIM	8	EC001419		
	ETIM	7	EC001419		
	IDEA	4	3566		
	UNSPSC	15	32-15-17-05		
Approvals / Certificates					
General Product Approval					
Manufacturer Declaration	 EG-Konf.		Miscellaneous	 UL	 RCM
EMV		For use in hazardous locations			
 EG-Konf.		 RCM	 ATEX	FM	 UL
For use in hazardous locations				Marine / Shipping	
 IECEX	 ATEX	Miscellaneous	CCC-Ex	 ABS	 DNV
Marine / Shipping					
 LRS	NK / Nippon Kaiji Kyokai	 PRS	 RINA	CCS (China Classification Society)	