



Figure similar

Spare part SIMATIC S7-200, Digital I/O EM 223, only for S7-22X CPU, 16 DI 24 V DC, Sink/Source, 16DO 24 V DC; 0.75 A/channel,source

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 backplane bus 5 V DC, max.	160 mA
Power loss	
Power loss, typ.	6 W
Digital inputs	
Number of digital inputs	16
Input voltage	
• Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	0 to 5 V
• for signal "1"	15 V DC to 30 V DC
Input current	
• for signal "1", typ.	4 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", max.	4.5 ms
Digital outputs	
Number of digital outputs	16
Short-circuit protection	No
Limitation of inductive shutdown voltage to	L+ (-48 V)
Output voltage	
• for signal "0", max.	0.1 V
• for signal "1", min.	20 V
Output current	
• for signal "1" rated value	750 mA
Total current of the outputs (per group)	
all mounting positions	
— Current per conductor/group, max.	3 A; 3 / 3 / 6
Relay outputs	
Switching capacity of contacts	
— with inductive load, max.	0.75 A; each output
— on lamp load, max.	5 W
— with resistive load, max.	0.75 A; each output
Cable length	

• shielded, max.	500 m																																							
• unshielded, max.	150 m																																							
Encoder																																								
Connectable encoders																																								
• 2-wire sensor	Yes																																							
— permissible quiescent current (2-wire sensor), max.	1 mA																																							
Potential separation																																								
Potential separation digital inputs																																								
• Potential separation digital inputs	Yes; Optocoupler																																							
• between the channels, in groups of	4																																							
Potential separation digital outputs																																								
• Potential separation digital outputs	Yes; Optocoupler																																							
• between the channels, in groups of	4; 4 / 4 / 8																																							
Isolation																																								
Isolation tested with	500 V AC																																							
connection method																																								
Plug-in I/O terminals	Yes																																							
Dimensions																																								
Width	137.5 mm																																							
Height	80 mm																																							
Depth	62 mm																																							
Weights																																								
Weight, approx.	360 g																																							
Classifications																																								
	<table><tr><td></td><td>Version</td><td>Classification</td></tr><tr><td>eClass</td><td>14</td><td>27-24-22-04</td></tr><tr><td>eClass</td><td>12</td><td>27-24-22-04</td></tr><tr><td>eClass</td><td>9.1</td><td>27-24-22-04</td></tr><tr><td>eClass</td><td>9</td><td>27-24-22-04</td></tr><tr><td>eClass</td><td>8</td><td>27-24-22-04</td></tr><tr><td>eClass</td><td>7.1</td><td>27-24-22-04</td></tr><tr><td>eClass</td><td>6</td><td>27-24-22-04</td></tr><tr><td>ETIM</td><td>9</td><td>EC001419</td></tr><tr><td>ETIM</td><td>8</td><td>EC001419</td></tr><tr><td>ETIM</td><td>7</td><td>EC001419</td></tr><tr><td>IDEA</td><td>4</td><td>3566</td></tr><tr><td>UNSPSC</td><td>15</td><td>32-15-17-05</td></tr></table>		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
	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	For use in hazardous locations	Maritime application																																						
Manufacturer Declaration	Miscellaneous	FM																																						
 EG-Konf.	 ATEX	 ABS																																						
Maritime application																																								
 BUREAU VERITAS	 DNV	 GL																																						
	 LRS	 RMRS																																						
		CCS (China Classification Society)																																						

last modified:

5/22/2024 