

SIMATIC S7-200 SMART, Digital output EM DT16 16 DO, 24 VDC,
Transistor 0.75A



General information

Product type designation	SM DT16, DQ 16x24 V DC/0.75 A
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Supply voltage

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, typ.	135 mA
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Digital inputs

Number of digital inputs	0
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Digital outputs

Number of digital outputs	16
• in groups of	4
Current-sinking	No
Current-sourcing	Yes
Short-circuit protection	No
Controlling a digital input	Yes

Switching capacity of the outputs	
• with resistive load, max.	0.75 A
• on lamp load, max.	5 W
Output voltage	
• Rated value (DC)	24 V
• for signal "0", max.	0.1 V
• for signal "1", min.	20 V DC
Output current	
• for signal "1" rated value	0.75 A
• for signal "1" permissible range, max.	0.75 A
• for signal "1" permissible range for 0 to 40 °C, max.	750 mA
• for signal "0" residual current, max.	10 µA
Output delay with resistive load	
• "0" to "1", max.	50 µs
• "1" to "0", max.	200 µs
Cable length	
• shielded, max.	500 m
• unshielded, max.	150 m
Interrupts/diagnostics/status information	
Diagnostics indication LED	
• for status of the outputs	Yes
Potential separation	
Potential separation digital outputs	
• between the channels	Yes; Optocoupler
Isolation	
Isolation tested with	500V AC for 1 minute
EMC	
Interference immunity against conducted variable disturbance induced by high-frequency fields	
• Interference immunity against high frequency current feed acc. to IEC 61000-4-6	Yes; 10 V, 150 kHz to 80 MHz (to IEC 61000-4-6)
• Interference immunity against high-frequency radiation acc. to IEC 61000-4-6	Yes; 10 V/m, with 80% amplitude modulation at 1 kHz
— Test voltage at 80% amplitude modulation with 1kHz in the range 9 kHz to 80 MHz	10 V
Emission of radio interference acc. to EN 55 011	
• Emission of radio interference	Interference emission to EN 50081-2, testing to EN 55011, Class A, Group 1
• Limit class A, for use in industrial areas	Yes; EN 61000-6-4, interference emission: Intended for use in industrial areas.
Standards, approvals, certificates	

CE mark	Yes; CE marking / EC Declaration of Conformity			
Ambient conditions				
Free fall				
• Fall height, max.	0.3 m			
Ambient temperature during operation				
• min.	0 °C			
• max.	55 °C			
• horizontal installation, min.	0 °C			
• horizontal installation, max.	55 °C			
• vertical installation, min.	0 °C			
• vertical installation, max.	45 °C			
Ambient temperature during storage/transportation				
• min.	-40 °C			
• max.	70 °C			
Relative humidity				
• Operation at 25 °C without condensation, max.	95 %			
Dimensions				
Width	45 mm			
Height	100 mm			
Depth	81 mm			
Weights				
Weight, approx.	186 g			
last modified:	07/01/2020			