



SIMATIC S7-400, digital output SM 422, isolated 16 DO; 24 V DC, 2 A

Figure similar

Supply voltage	
Load voltage L+	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> </ul>	24 V
<ul style="list-style-type: none"> <li>permissible range, lower limit (DC)</li> </ul>	20.4 V
<ul style="list-style-type: none"> <li>permissible range, upper limit (DC)</li> </ul>	28.8 V
Input current	
from load voltage L+ (without load), max.	30 mA
from backplane bus 5 V DC, max.	160 mA
Power loss	
Power loss, typ.	5 W
Digital outputs	
Number of digital outputs	16
Short-circuit protection	Yes; Clocked electronically
<ul style="list-style-type: none"> <li>Response threshold, typ.</li> </ul>	2.8 to 6 A
Controlling a digital input	Yes; possible
Switching capacity of the outputs	
<ul style="list-style-type: none"> <li>on lamp load, max.</li> </ul>	10 W
Load resistance range	
<ul style="list-style-type: none"> <li>lower limit</li> </ul>	24 Ω
<ul style="list-style-type: none"> <li>upper limit</li> </ul>	4 kΩ
Output voltage	
<ul style="list-style-type: none"> <li>for signal "1", min.</li> </ul>	L+ (-0.5 V)
Output current	
<ul style="list-style-type: none"> <li>for signal "1" rated value</li> </ul>	2 A
<ul style="list-style-type: none"> <li>for signal "1" permissible range, min.</li> </ul>	5 mA
<ul style="list-style-type: none"> <li>for signal "1" permissible range, max.</li> </ul>	2.4 A
<ul style="list-style-type: none"> <li>for signal "0" residual current, max.</li> </ul>	0.5 mA
Output delay with resistive load	
<ul style="list-style-type: none"> <li>"0" to "1", max.</li> </ul>	1 ms
<ul style="list-style-type: none"> <li>"1" to "0", max.</li> </ul>	1 ms
Parallel switching of two outputs	
<ul style="list-style-type: none"> <li>for uprating</li> </ul>	No; Not possible
<ul style="list-style-type: none"> <li>for redundant control of a load</li> </ul>	Yes; possible (only outputs of the same group)
Switching frequency	
<ul style="list-style-type: none"> <li>with resistive load, max.</li> </ul>	100 Hz
<ul style="list-style-type: none"> <li>with inductive load, max.</li> </ul>	0.1 Hz

<ul style="list-style-type: none"> <li>• with inductive load (acc. to IEC 60947-5-1, DC13), max.</li> </ul>	0.2 Hz; 0.2 Hz at 1 A; 0.1 Hz at 2 A
<ul style="list-style-type: none"> <li>• on lamp load, max.</li> </ul>	10 Hz
<b>Total current of the outputs (per group)</b>	
all mounting positions	
— up to 40 °C, max.	3 A
— up to 60 °C, max.	2 A; 2 adjacent outputs each
<b>Cable length</b>	
<ul style="list-style-type: none"> <li>• shielded, max.</li> </ul>	1 000 m
<ul style="list-style-type: none"> <li>• unshielded, max.</li> </ul>	600 m
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	No
<b>Potential separation</b>	
Potential separation digital outputs	
<ul style="list-style-type: none"> <li>• between the channels</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• between the channels, in groups of</li> </ul>	8
<ul style="list-style-type: none"> <li>• between the channels and backplane bus</li> </ul>	Yes
<b>Isolation</b>	
Isolation tested with	500 V DC
<b>Dimensions</b>	
Width	25 mm
Height	290 mm
Depth	210 mm
<b>Weights</b>	
Weight, approx.	600 g
<b>last modified:</b>	1/16/2021 