



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"> Rated value (DC) 	24 V
<ul style="list-style-type: none"> permissible range, lower limit (DC) 	20.4 V
<ul style="list-style-type: none"> permissible range, upper limit (DC) 	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"> Response threshold, typ. 	2.8 to 6 A
Limitation of inductive shutdown voltage to	-30 V
Controlling a digital input	Yes; possible
Switching capacity of the outputs	
<ul style="list-style-type: none"> on lamp load, max. 	10 W
Load resistance range	
<ul style="list-style-type: none"> lower limit 	24 Ω
<ul style="list-style-type: none"> upper limit 	4 kΩ
Output voltage	
<ul style="list-style-type: none"> for signal "1", min. 	L+ (-0.5 V)
Output current	
<ul style="list-style-type: none"> for signal "1" rated value 	2 A
<ul style="list-style-type: none"> for signal "1" permissible range, min. 	5 mA
<ul style="list-style-type: none"> for signal "1" permissible range, max. 	2.4 A
<ul style="list-style-type: none"> for signal "0" residual current, max. 	0.5 mA
Output delay with resistive load	
<ul style="list-style-type: none"> "0" to "1", max. 	1 ms
<ul style="list-style-type: none"> "1" to "0", max. 	1 ms
Parallel switching of two outputs	
<ul style="list-style-type: none"> for uprating 	No; Not possible
<ul style="list-style-type: none"> for redundant control of a load 	Yes; possible (only outputs of the same group)
Switching frequency	
<ul style="list-style-type: none"> with resistive load, max. 	100 Hz

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