



SIMATIC S7-400, digital output SM 422, isolated 16 DO; 5..230 V AC, 5 A relay

Figure similar

Supply voltage	
Load voltage L+	
• Rated value (DC)	60 V
• permissible range, lower limit (DC)	1 V
• permissible range, upper limit (DC)	60 V
Load voltage L1	
• Rated value (AC)	230 V
• permissible range, lower limit (AC)	2 V
• permissible range, upper limit (AC)	264 V
Input current	
from backplane bus 5 V DC, max.	1 A
Power loss	
Power loss, typ.	4.5 W
Digital outputs	
Number of digital outputs	16; Relays
Short-circuit protection	No
Controlling a digital input	Yes; possible
Size of motor starters according to NEMA, max.	Size 5 according to NEMA
Switching capacity of the outputs	
• on lamp load, max.	60 W
Output current	
• for signal "1" rated value	5 A
• for signal "1" minimum load current	11 mA
Parallel switching of two outputs	
• for uprating	No; Not possible
• for redundant control of a load	Yes; Possible (only outputs with the same load voltage)
Switching frequency	
• with resistive load, max.	10 Hz
• With inductive load (to IEC 60947-5-1, DC13/AC15), max.	1 Hz
• on lamp load, max.	1 Hz
• mechanical, max.	20 Hz
Total current of the outputs (per group)	
all mounting positions	
— up to 40 °C, max.	10 A; 10 A with fan subassembly
— up to 60 °C, max.	5 A; 10 A with fan subassembly
Relay outputs	
• Number of operating cycles, max.	100 000; 100 000 (AC-15 / DC-13); 3 000 000 mechanical
Switching capacity of contacts	
— with inductive load, max.	5 A; 5 A (30 V DC), 5 A (230 V AC)

— with resistive load, max.	5 A; 5 A (30 V DC), 5 A (230 V AC), 1.2 A (60 V DC), 0.2 A (125 V DC)
— Thermal continuous current, max.	5 A
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Interrupts/diagnostics/status information	
Diagnostics function	No
Diagnostics indication LED	
• Status indicator digital output (green)	Yes; per channel
Potential separation	
Potential separation digital outputs	
• between the channels	Yes
• between the channels, in groups of	2
• between the channels and backplane bus	Yes
Isolation	
Isolation tested with	1 500 V AC
Dimensions	
Width	25 mm
Height	290 mm
Depth	210 mm
Weights	
Weight, approx.	700 g

last modified: 8/30/2023 