



SIMATIC S7-400, digital output SM 422, isolated 16 DO; 120/230 V AC, 2 A

Figure similar

Supply voltage	
Load voltage L1	
<ul style="list-style-type: none"> Rated value (AC) 	230 V; 120/230 V AC
<ul style="list-style-type: none"> permissible range, lower limit (AC) 	79 V
<ul style="list-style-type: none"> permissible range, upper limit (AC) 	264 V
<ul style="list-style-type: none"> permissible frequency range, lower limit 	47 Hz
<ul style="list-style-type: none"> permissible frequency range, upper limit 	63 Hz
Input current	
from load voltage L+ (without load), max.	1.5 mA
from backplane bus 5 V DC, max.	400 mA
Power loss	
Power loss, typ.	16 W
Digital outputs	
Number of digital outputs	16
Short-circuit protection	Yes; Fuse 8 A, 250 V; per group
<ul style="list-style-type: none"> required current for fuse shutdown, min. 	100 A
<ul style="list-style-type: none"> Response time, max. 	100 ms
Controlling a digital input	Yes; possible
Size of motor starters according to NEMA, max.	Size 5 according to NEMA
Spare fuses	Fuse 8 A, 250 V, quick response
Zero-crossing switch	No
Switching capacity of the outputs	
<ul style="list-style-type: none"> on lamp load, max. 	50 W
Output voltage	
<ul style="list-style-type: none"> for signal "1", min. 	L1 (-18.1 V)
<ul style="list-style-type: none"> for signal "1" (at max. current), min. 	L1 (-1.3 Vrms)
<ul style="list-style-type: none"> for signal "1" (at min. current), min. 	L1 (-18.1 Vrms)
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. 	10 mA
<ul style="list-style-type: none"> for signal "1" permissible range, max. 	2 A
<ul style="list-style-type: none"> for signal "1" permissible surge current, max. 	50 A; per cycle
<ul style="list-style-type: none"> for signal "0" residual current, max. 	2.6 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 AC cycle
Parallel switching of two outputs	
<ul style="list-style-type: none"> for redundant control of a load 	Yes; Possible (only outputs with the same load voltage)
Switching frequency	
<ul style="list-style-type: none"> with resistive load, max. 	10 Hz

<ul style="list-style-type: none"> • with inductive load, max. 	0.5 Hz
<ul style="list-style-type: none"> • with inductive load (acc. to IEC 60947-5-1, AC15), max. 	0.5 Hz
<ul style="list-style-type: none"> • on lamp load, max. 	1 Hz
Total current of the outputs (per group)	
all mounting positions	
— up to 40 °C, max.	4 A; 6 A with fan assembly
— up to 60 °C, max.	2 A; 5 A with fan subassembly; per 4 adjacent outputs
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	Not parameterizable
Diagnostics indication LED	
<ul style="list-style-type: none"> • internal fault INTF (red) 	Yes; Fuse blown
<ul style="list-style-type: none"> • external fault EXTF (red) 	Yes; Missing load voltage
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 	4
<ul style="list-style-type: none"> • 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.	800 g
last modified:	1/16/2021 