SIEMENS

Data sheet 6ES7422-1FH00-0AA0



Figure similar

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

Supply voltage	
Load voltage L1	
● Rated value (AC)	230 V; 120/230 V AC
● permissible range, lower limit (AC)	79 V
● permissible range, upper limit (AC)	264 V
● permissible frequency range, lower limit	47 Hz
● 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; Clocked electronically: Following a short-circuit, reclosing under a full load cannot be ensured. Countermeasures: change the signal at the output or interrupt the load voltage of the module. Briefly disconnect the load from the output.
● required current for fuse shutdown, min.	100 A
● 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	
● on lamp load, max.	50 W
Output voltage	
● for signal "1", min.	L1 (-18.1 V)
● for signal "1" (at max. current), min.	L1 (-1.3 Vrms)
● for signal "1" (at min. current), min.	L1 (-18.1 Vrms)
Output current	
● for signal "1" rated value	2 A
● for signal "1" permissible range, min.	10 mA
● for signal "1" permissible range, max.	2 A
● for signal "1" permissible surge current, max.	50 A; per cycle
● for signal "0" residual current, max.	2.6 mA
Output delay with resistive load	
● "0" to "1", max.	1 ms
● "1" to "0", max.	1 AC cycle

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Parallel switching of two outputs	
● 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, max.	0.5 Hz
● with inductive load (acc. to IEC 60947-5-1, AC15), max.	0.5 Hz
● 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	
● shielded, max.	1 000 m
● unshielded, max.	600 m
Interrupts/diagnostics/status information	
Diagnostics function	Not parameterizable
Diagnostics indication LED	
● internal fault INTF (red)	Yes; Fuse blown
● external fault EXTF (red)	Yes; Missing load voltage
Potential separation	
Potential separation digital outputs	
● between the channels	Yes
● between the channels, in groups of	4
● 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

Classifications

	Version	Classification
eClass	16	27-24-22-04
eClass	14	27-24-22-04
eClass	12	27-24-22-04
eClass	9.1	27-24-22-04
eClass	9	27-24-22-04
eClass	8	27-24-22-04
eClass	7.1	27-24-22-04
eClass	6	27-24-22-04
ETIM	10	EC001419
ETIM	9	EC001419
ETIM	8	EC001419
ETIM	7	EC001419
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

Miscellaneous

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General Product Approval			EMV		For use in hazardous locations
China RoHS	Miscellaneous	Manufacturer Declaration	RCM	RCM	FM

For use in hazardous locations	Maritime application				
UL	ABS	BUREAU VERITAS	DNV	LRS	NK / Nippon Kaiji Kyokai

Maritime application			
PRS	RINA	RMRS	CCS (China Classification Society)

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