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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
Parallel switching of two outputs	

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● 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	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 | China RoHS | KC

General Product Approval	EMV	For use in hazardous locations	Maritime application

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RCM RCM RCM FM UL ABS

Maritime application

BUREAU VERITAS DNV LRS NK / Nippon Kaiji Kyokai PRS RINA

Maritime application

RMRS CCS (China Classification Society)

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