SIEMENS

Data sheet 6ES7422-1BH11-0AA0



Figure similar

SIMATIC S7-400, digital output SM 422, isolated 16 DO; 24 V DC, 2 A

Supply voltage	
Load voltage L+	
● Rated value (DC)	24 V
● permissible range, lower limit (DC)	20.4 V
● 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
● 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	
● on lamp load, max.	10 W
Load resistance range	
● lower limit	24 Ω
● upper limit	4 kΩ
Output voltage	
● for signal "1", min.	L+ (-0.5 V)
Output current	
● for signal "1" rated value	2 A
● for signal "1" permissible range, min.	5 mA
● for signal "1" permissible range, max.	2.4 A
● for signal "0" residual current, max.	0.5 mA
Output delay with resistive load	
● "0" to "1", max.	1 ms
● "1" to "0", max.	1 ms
Parallel switching of two outputs	
● for uprating	No; Not possible
● for redundant control of a load	Yes; possible (only outputs of the same group)
Switching frequency	
● with resistive load, max.	100 Hz
● with inductive load, max.	0.1 Hz
● 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

Subject to change without notice
© Copyright Siemens

● 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	
● shielded, max.	1 000 m
● unshielded, max.	600 m
Interrupts/diagnostics/status information	
Diagnostics function	No
Potential separation	
Potential separation digital outputs	
● between the channels	Yes
● between the channels, in groups of	8
● 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

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









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

For use in hazardous locations

Subject to change without notice
© Copyright Siemens



FM





Type Examination Certificate



Maritime application









NK / Nippon Kaiji Kyokai



Maritime application





CCS (China Classification Society)

last modified: 6/7/2025

Subject to change without notice
© Copyright Siemens