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Data sheet 6ES7422-1BL00-0AA0



Figure similar

SIMATIC S7-400, digital output SM 422, isolated 32 DO; 24 V DC, 0.5 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.	200 mA
Power loss	
Power loss, typ.	4 W
Digital outputs	
Number of digital outputs	32
Short-circuit protection	Yes; Clocked electronically
● Response threshold, typ.	0.7 to 1.5 A
Limitation of inductive shutdown voltage to	-27 V
Controlling a digital input	Yes; possible
Switching capacity of the outputs	
● on lamp load, max.	5 W
Load resistance range	
● lower limit	48 Ω
● upper limit	4 kΩ
Output voltage	
● for signal "1", min.	L+ (-0.3 V)
Output current	
● for signal "1" rated value	0.5 A
● for signal "1" permissible range, min.	5 mA
● for signal "1" permissible range, max.	0.6 A
● for signal "0" residual current, max.	0.3 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	Yes; possible (only outputs of the same group)
● 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.	0.5 Hz
● with inductive load (acc. to IEC 60947-5-1, DC13), max.	2 Hz; 2 Hz at 0.3 A; 0.5 Hz at 0.5 A

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● on lamp load, max.	10 Hz
Total current of the outputs (per group)	
all mounting positions	
— up to 40 °C, max.	4 A
— up to 60 °C, max.	2 A; 8 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	No
● between the channels, in groups of	32
● between the channels and backplane bus	Yes
Isolation	
Isolation tested with	500 V AC/707 V DC, type test
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

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ATEX	FM	CCC	UL	IECEx	Type Examination Certificate

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

Maritime application			
PRS	RINA	RMRS	CCS (China Classification Society)

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