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Data sheet 6ES7422-7BL00-0AB0



Figure similar

SIMATIC S7-400, digital output SM 422, isolated 32 DO; 24 V DC, 0.5 A with 0.15 ms output delay, diagnostics

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.	120 mA
from backplane bus 5 V DC, max.	200 mA
Power loss	
Power loss, typ.	8 W
Digital outputs	
Number of digital outputs	32
Short-circuit protection	Yes; Clocked electronically
● Response threshold, typ.	0.75 to 1.5 A
Limitation of inductive shutdown voltage to	L+ (-45 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+ (-0.8 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.	600 A
● for signal "0" residual current, max.	0.5 mA
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.	2 Hz
● with inductive load (acc. to IEC 60947-5-1, DC13), max.	2 Hz
● on lamp load, max.	2 Hz
Total current of the outputs (per group)	
all mounting positions	

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— up to 40 °C, max.	4 A
— up to 60 °C, max.	2 A
Cable length	
● shielded, max.	1 000 m
● unshielded, max.	600 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes; Parameterizable
Alarms	
● Diagnostic alarm	Yes; Parameterizable
● Hardware interrupt	Yes; Parameterizable
Diagnoses	
● Diagnostic information readable	Yes
● Wire break	Yes; <0.15 mA
● Short-circuit	Yes; > 1 A (typ.)
Diagnostics indication LED	
● internal fault INTF (red)	Yes
● external fault EXTF (red)	Yes
● Status indicator digital output (green)	Yes
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 hazard-

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					ous locations
China RoHS	Miscellaneous	Manufacturer Declaration	RCM	RCM	ATEX

For use in hazardous locations					Maritime application
FM	CCC	IECEx	Type Examination Certificate	ATEX	ABS

Maritime application					
BUREAU VERITAS	DNV	LRS	NK / Nippon Kaiji Kyokai	PRS	RINA

Maritime application	
RMRS	CCS (China Classification Society)

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