SIEMENS

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	
— up to 40 °C, max.	4 A

Subject to change without notice
© Copyright Siemens

— 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

last modified: 8/30/2023

Subject to change without notice
© Copyright Siemens