

Siemens Series Service Manual

6ES7422-1BL00-0AA0

1. Description

6ES7422-1BL00-0AA0

3. Product Information

6ES7422-1BL00-0AA0

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 k Ω

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
- 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