

Digital output module SM 322; DO 32 x DC 24 V/ 0.5 A; (6ES7322-1BL00-0AA0)

Order number

6ES7322-1BL00-0AA0

Properties

Properties of SM 322; DO 32 x DC 24 V/0.5 A:

- 32 outputs, electrically isolated in groups of 8
- Output current 0.5 A
- Rated load voltage 24 V DC
- Suitable for solenoid valves, DC contactors and signal lamps

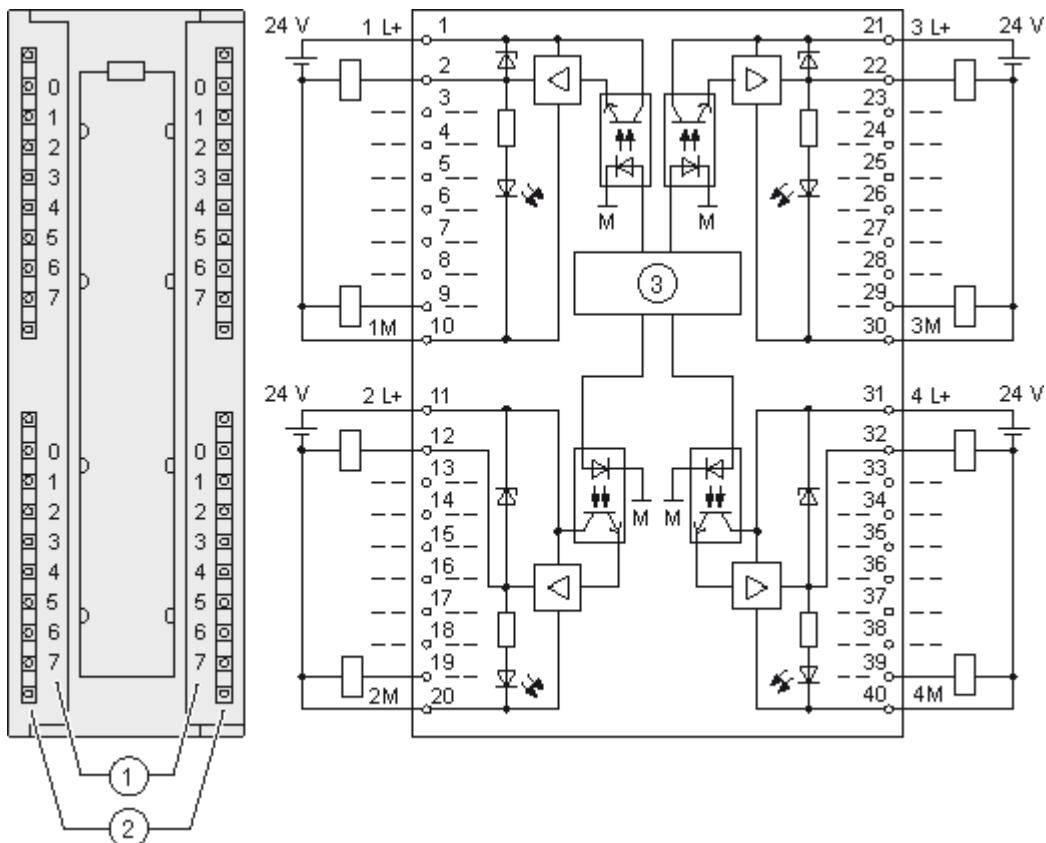
Use of the module with high-speed counters

Please note when using the module in combination with high-speed counters:

Note

When using a mechanical contact to switch on the 24-V power supply to SM 322; DO 32 x DC 24 V/0.5 A, its outputs will carry "1" signal for the duration of ca. 50 μ s due to the circuit structure.

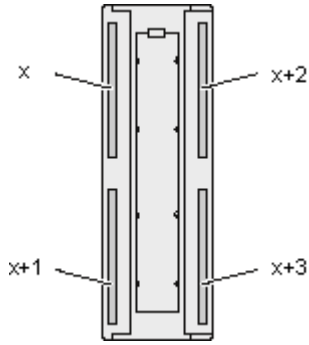
Wiring and block diagram of SM 322; DO 32 x DC 24 V/ 0.5 A



- ① Channel number
- ② Status display - green
- ③ Backplane bus interface

Terminal assignment

The figure below shows the channel addressing (output byte x to output byte x+3).



SM 322; DO 32 x DC 24 V/ 0.5 A - Technical specifications

Technical specifications	
Dimensions and weight	
Dimensions W x H x D (mm)	40 x 125 x 117
Weight	ca. 260 g
Module-specific data	
Supports isochronous mode	no
Number of outputs	32
Cable length <ul style="list-style-type: none"> • unshielded • shielded 	max. 600 m max. 1000 m
Voltages, currents, electrical potentials	
Rated load voltage L+	24 V DC
Total current of outputs (per group) <ul style="list-style-type: none"> • horizontal mounting position to 40 °C • horizontal mounting position to 60 °C • vertical mounting position to 40 °C 	max. 4 A max. 3 A max. 2 A
Electrical isolation <ul style="list-style-type: none"> • between channels and the backplane bus • between channels in groups of 	yes yes 8
Isolation test voltage	500 V DC
Current consumption <ul style="list-style-type: none"> • from the backplane bus • from load voltage L+ (no-load) 	max. 110 mA max. 160 mA
Power loss of the module	typ. 6.6 W
Status, interrupts, diagnostics	
Status display	green LED per channel
Interrupts	none
Diagnostic functions	none

Actuator selection data	
Output voltage • "1" signal	min. L + (- 0.8 V)
Output current	
• "1" signal Rated value Permitted range	0.5 A 5 mA to 0.6 A
• "0" signal (residual current)	max. 0.5 mA
Output delay (resistive load)	
• "0" to "1" transition	max. 100 μ s
• "1" to "0" transition	max. 500 μ s
Load resistance range	48 Ω to 4 k Ω
Lamp load	max. 5 W
Wiring two outputs in parallel	
• For redundant load control	supported (only outputs of the same group)
• For performance increase	Not supported
Control of a digital input	Supported
Switching frequency	
• with resistive load	max. 100 Hz
• with inductive load to IEC 947-5-1, DC 13	max. 0.5 Hz
• with lamp load	max. 10 Hz
Internal limiting of the inductive shutdown voltage to	typ. L + (-53 V)
Short-circuit protection of the output	yes, electronic
• Threshold	typ. 1 A
Wiring of the actuators	using a 40-pin front connector