

SIEMENS

Product Information

SIMATIC S7-300

Digital Output Module SM 322; DO 32 X AC 120V/230V/1.0A Release $\frac{X|2}{3|4}$

New Digital Output Module Available

The S7-300 Digital Output Module SM 322; DO 32 X AC 120V/230V/1.0A has been added to the S7-300 family. The order number for this module is 6ES7 322-1FL00-0AA0.

This product information includes details about the characteristics and technical specifications of the SM 322; DO 32 X AC 120V/230V/1.0A Module. Refer to the *S7-300 Installation and Hardware Manual* for more information about the S7-300 product family.

Additional Assistance

For assistance in answering technical questions, for training on this product, or for ordering, contact your Siemens distributor or sales office.

Digital Output Module SM 322; DO 32 X AC 120V/230V/1.0A

Order Number

6ES7 322-1FL00-0AA0

Characteristics

The SM 322; DO 32 Φ AC 120V/230V/1.0 A features the following characteristics:

- 32 outputs, fused and isolated in groups of 8
- 1.0 A output current
- 120 VAC / 230 VAC rated load voltage
- Blown fuse indicator for each group
- Suitable for AC solenoids, contactors, starters, fractional horsepower motors and indicator lights
- Group error display

Terminal Assignment and Block Diagram of the SM 322; DO 32 X AC 120V/230V/1.0A

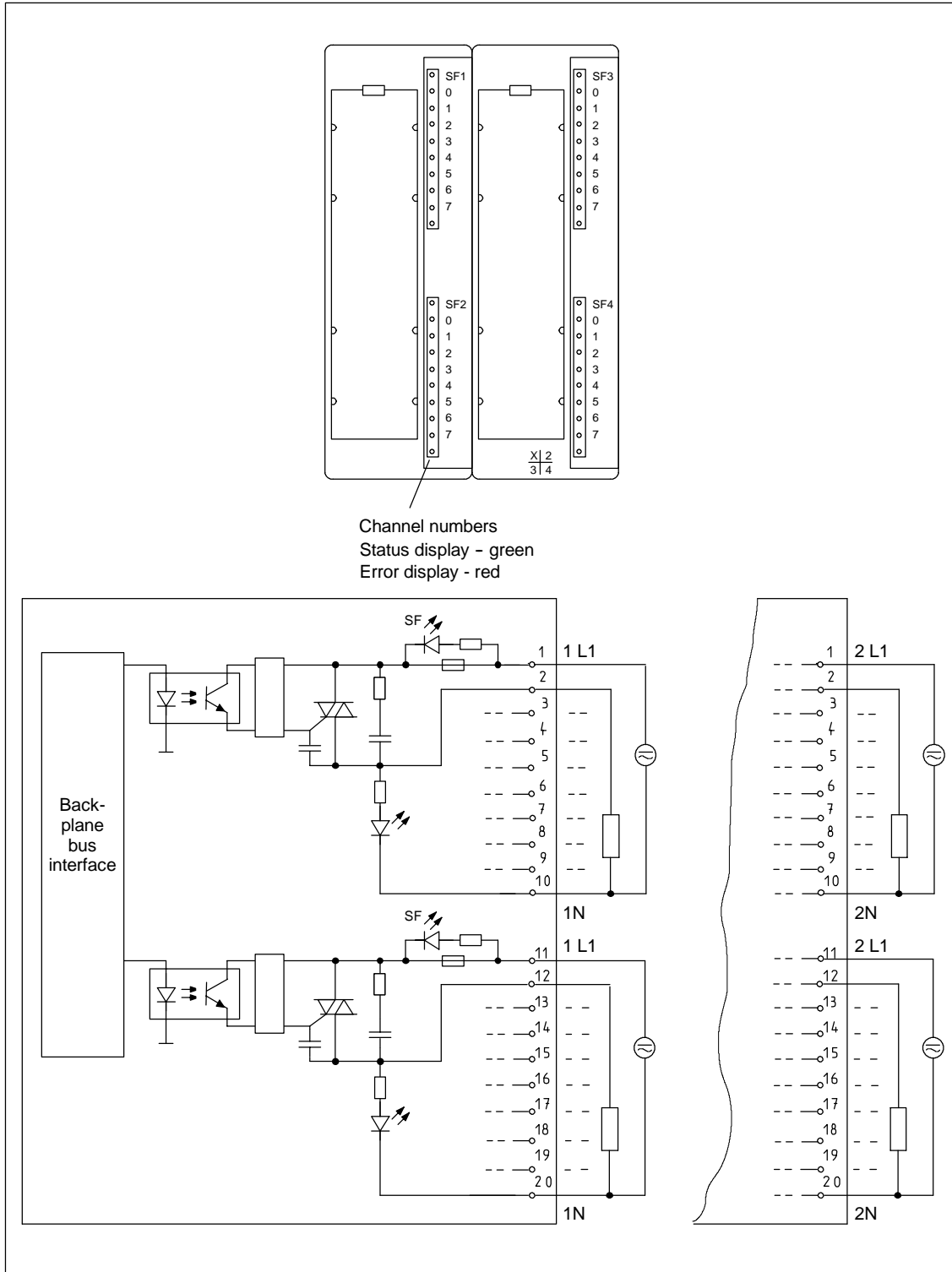


Figure 1 Module View and Block Diagram of the SM 322; DO 32 X AC 120V/230V/1.0 A

Terminal Assignment

The following figure shows the assignment of the channels to the addresses.

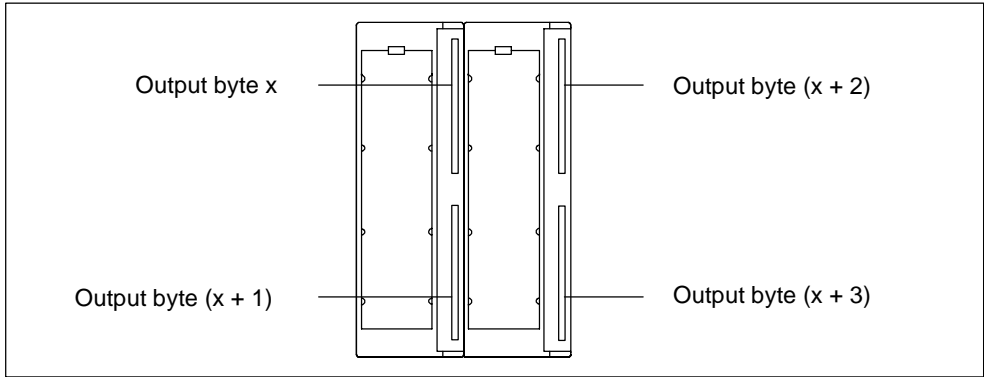


Figure 2 Terminal Assignment of the SM 322; DO 32 x AC 120V/230V/1.0A

Technical Specification of the SM 322; DO 32 × AC 120V/230V/1.0 A

| Dimensions and Weight | | Status, Interrupts, Diagnostics | |
|--|----------------|---|--|
| Dimensions W × H × D (in millimeters) | 80ϕ 125ϕ 117 | Status display | Green LED per channel |
| Weight | Approx. 500 g | Interrupts | No |
| Data for Specific Module | | Diagnostic functions | Yes |
| Supports clocked operation | No | • Group error display | Red LED (SF) |
| Number of outputs | 32 | Data for Selecting an Actuator | |
| Length of cable | | Output voltage | |
| • Unshielded | max. 600 m | • At signal "1" | min. L1 (-0.8 V) |
| • Shielded | max. 1000 m | Output current | |
| Voltages, Currents, Potentials | | • At "1" signal | |
| Rated load voltage L1 | AC 120V/230V | Rated value | 1 A |
| • Permitted frequency range | 47 Hz to 63 Hz | Permitted range | 10 mA to 1 A |
| Total current of the outputs (per group) | | Permitted current surge (per group) | 10 A (for 2 AC scan cycles) |
| • Horizontal configuration | | • At "0" signal | max. 2 mA |
| Up to 60°C | max. 3 A | Leakage current | |
| Up to 40°C | max. 4 A | Output delay (for resistive load) | |
| • Vertical configuration | max. 4 A | • At "0" to "1" | 1 AC scan cycle |
| Up to 40°C | | • At "1" to "0" | 1 AC scan cycle |
| Isolation | | Zero cross inhibit voltage | max. 60 V |
| • Between channels and backplane bus | Yes | Size of the motor starter | max. size 4 to NEMA |
| • Between the channels | Yes | Lamp load | max. 50 W |
| In groups of | 8 | Parallel connection of 2 outputs | |
| Permitted potential difference | | • For redundant actuation of a load | Possible (only outputs of the same group) |
| • Between M _{internal} and the outputs | 250 VAC | • To increase performance | Not possible |
| • Between the outputs of the different groups | 250 VAC | Triggering a digital input | Possible |
| Insulation tested with | 4000 VDC | Switch rate | |
| Current consumption | | • For resistive load | max. 10 Hz |
| • From the backplane bus | max. 190 mA | • Inductive loads, according to IEC 947-5-1, AC 15 | max. 0.5 Hz |
| • From load voltage L1 (without load) | max. 10 mA | • For lamp load | 1 Hz |
| Power dissipation of the module | typ. max. 25 W | Short-circuit protection of the output | No |