

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

PRODUCT BRAND

Siemens

PRODUCT MODEL

6ES7322-5HF00-0AB0

Siemens 6ES7322-5HF00-0AB0 is an isolated SIMATIC S7-300 SM 322 digital output module with eight relay outputs. It switches 24–120 V DC or 24–230 V AC loads up to 5 A through a 40-pin front connector.

OFFICIAL SOURCE

S7-300 Module Data Equipment Manual

A5E00105505-AK

[Open current Siemens source](#)

3.35 Relay output module SM 322; DO 8 x Rel. 230VAC/5A; (6ES7322-5HF00-0AB0)

Order number

6ES7322-5HF00-0AB0

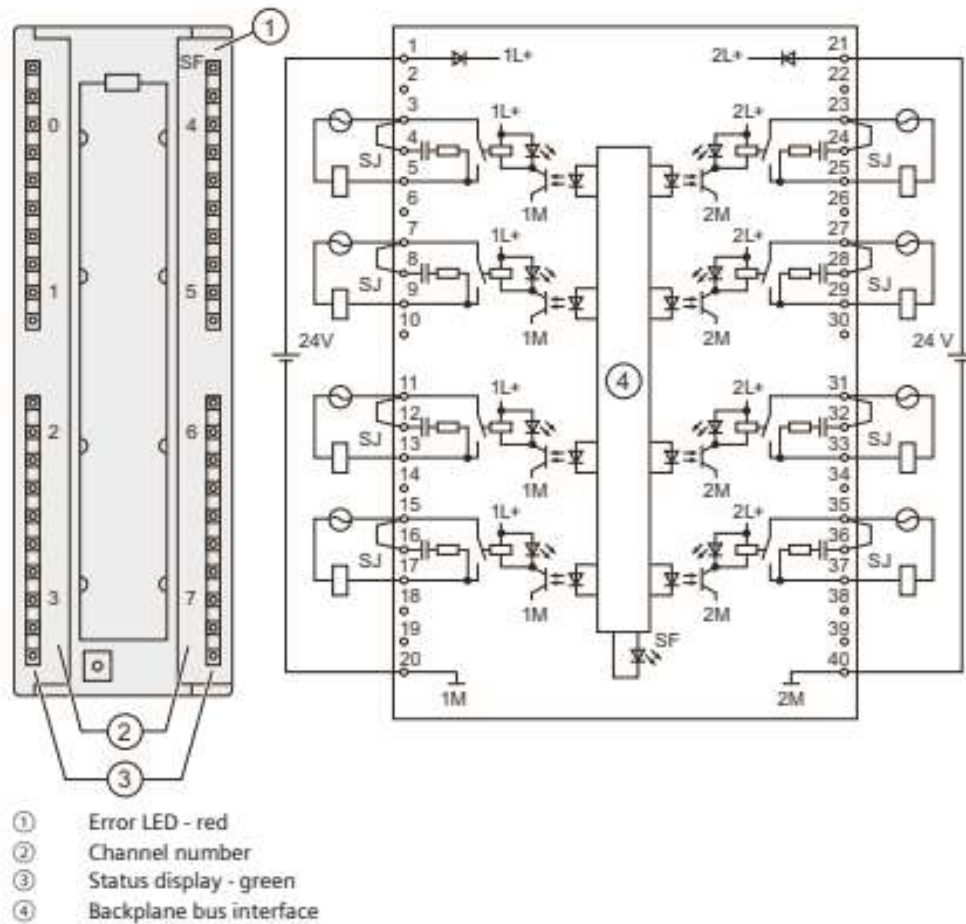
Properties

The relay output module SM 322; DO 8 x Rel. 230 V AC / 5A is characterized by the following properties:

- 8 outputs, electrically isolated
- Load voltage 24 to 120 V DC, 24 to 230 V AC
- Suitable for AC solenoid valves, contactors, motor starters, FHP motors and signal lamps
- You can protect the contacts with an RC quenching element by setting a jumper (SJ.)
- Group error display
- Channel-specific status displays
- Programmable diagnostic interrupt
- Programmable substitute value output
- Supports parameter reassignment in RUN

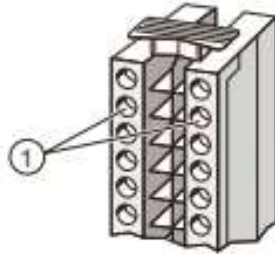
Overvoltage protection of contacts

You can protect the contacts against overvoltage by bridging (SJ) the module terminals 3 and 4, 7 and 8, 12 and 13 etc. (see the diagram below).

Wiring and block diagram of SM 322; DO 8 x Rel. 230 V AC / 5A**Operation on safety extra-low voltage (SELV)**

Make allowances for the special feature outlined below when operating the 6ES7322-5HF00-0AB0 relay output module on SELV:

The horizontally adjacent terminal of a terminal operated on SELV may not be operated at a rated voltage higher than 120 VUC. When operated at voltages higher than 120 VUC, the creepage distances and air gaps in the 40-pin front connector do not meet SIMATIC requirements of safe electrical separation.



- ① If one of two horizontally adjacent terminals is operated on SELV, the other terminal may not be operated at more than 120 VUC.

Technical specifications of the SM 322; DO 8 x Rel. 230 V AC / 5A

Technical specifications	
Dimensions and weight	
Dimensions W x H x D (mm)	40 x 125 x 117
Weight	ca. 320 g
Module-specific data	
Supports parameter reassignment in RUN	Yes
• Reaction of non-programmed outputs	Return the output value which was valid before the parameterization
Supports isochronous mode	no
Number of outputs	8
Cable length	
• unshielded	max. 600 m
• shielded	max. 1000 m
Voltages, currents, electrical potentials	
Rated electronics supply voltage L+	24 V DC
• Reverse polarity protection	yes
Total current of outputs (per group)	
• horizontal mounting position up to 60°	max. 5 A
• vertical mounting position up to 40°	max. 5 A
Electrical isolation	
• between channels and the backplane bus	yes
• between channels and the power supply to relays	yes
• between channels in groups of	yes 1
Maximum potential difference	
• Between M _{internal} and the power supply to relays and outputs	250 V AC
• Between outputs of different groups	500 V AC

Technical specifications		
24 V DC	5.0 A	0.1 million
24 V DC	2.5 A	0.25 million
24 V DC	1.0 A	0.5 million
24 V DC	0.2 A	1 million
24 V DC	0.1 A	1.2 million
120 V DC	0.1 A	1.2 million
230 V AC	5.0 A	0.1 million
230 V AC	2.5 A	0.25 million
230 V AC	1.0 A	0.5 million
230 V AC	0.2 A	1 million
230 V AC	0.1 A	1.2 million
An RC quenching element (jumper "SJ" inserted) or an external protection circuit extend the service life of contacts.		
Size of the motor starter	max. size 5 to NEMA	
	Power	No. of switching cycles (typical)
Lamp load (230 V AC)	1000 W 1500 W	25000 10000
Energy-saving lamps/fluorescent lamps with electronic ballast ¹⁾	10 x 58 W	25000
Fluorescent lamps, conventionally compensated	1 x 58 W	25000
Fluorescent lamps, non-compensated	10 x 58 W	25000
Contact protection	RC quenching element; 330 Ω, 0.1 μF	
Wiring two outputs in parallel		
• for redundant load control	supported (only outputs with the same load voltage)	
• for performance increase	not supported	
Control of a digital input	supported	
Switching frequency		
• Mechanical	max. 10 Hz	
• with resistive load	max. 2 Hz	
• with inductive load to IEC 947-5-1, DC13/AC15	max. 0.5 Hz	
• with lamp load	max. 2 Hz	
Wiring of the actuators	using a 40-pin front connector	

¹⁾ Without inserted jumper (SJ).

²⁾ With AC load voltage and inserted jumper (SJ). No residual current if the jumper (SJ) is not installed.

³⁾ The sum of all inrush currents on a ballast connected to an output must not exceed 5 A.

NOTE

The residual current of an RC quenching element connected to IEC Type 1 inputs may cause unwanted signal states. Remove the SJ jumper to rectify this fault.

Configuration in RUN

Special considerations must be given if you use the Configuration in RUN function.
SF LED is lit: