MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Amikon cover with selected official Siemens pages

SIMATIC ET 200S

6ES7132-4BB30-0AA0

DIGITAL OUTPUT MODULE

OFFICIAL SOURCES

Siemens official product documentation. Selected pages retain their original content, color and aspect ratio.

11.14 2DO 24 VDC/2 A ST digital electronic module (6ES7 132-4BB30-0AA0)

Order number

6ES7 132-4BB30-0AA0

Properties

- Digital electronic module with two outputs
- Output current 2 A per output
- 24 VDC rated load voltage
- Suitable for solenoids, DC current protection and warning lights

Special feature

When the rated load voltage of 24 VDC is connected at the power module via a mechanical contact, the digital outputs carry a ”1” signal for approx. 50 µs because of the circuit type. This must be considered when the module is connected to fast counters.

Connection assignment

The following table shows the terminal assignment of the 2DO 24 VDC/2 A Standard for the various terminal modules:

Table 11-22 Terminal assignment of the 2DO 24 VDC/2 A Standard

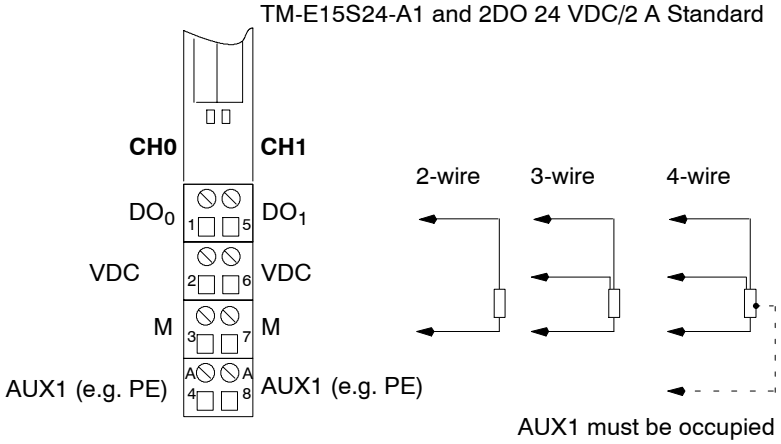
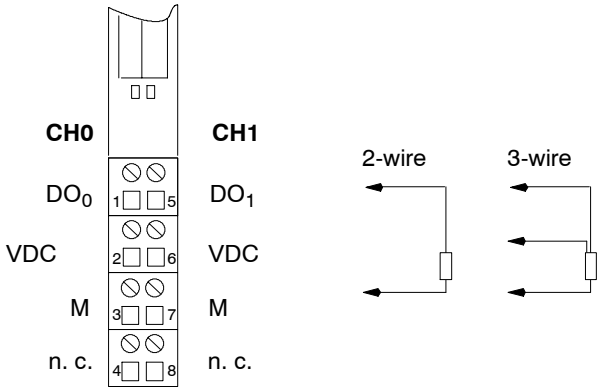
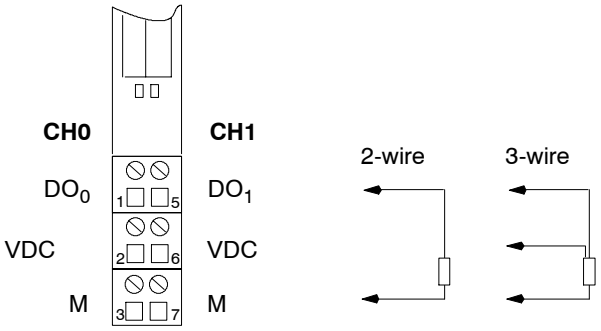
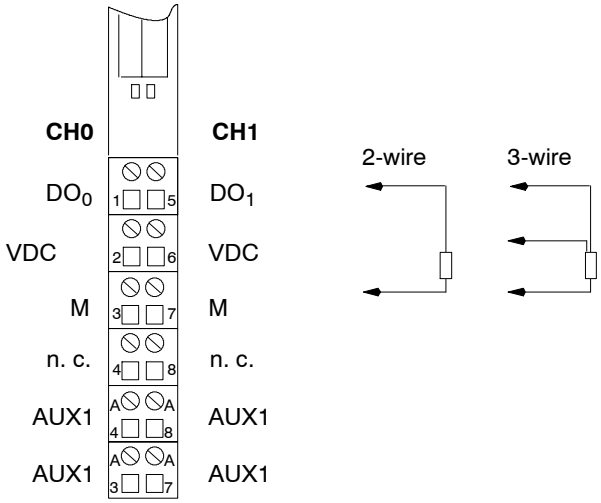
View	Terminal assignment	Remarks
TM-E15S24-A1 and 2DO 24 VDC/2 A Standard  AUX1 must be occupied with 4 wires at PE.		Channel 0: Terminals 1 to A4 Channel 1: Terminals 5 to A8 DO: Output signal (max. 2 A per channel) 24 VDC: Sensor supply M : Load power supply ground

Table 11-22 Terminal assignment of the 2DO 24 VDC/2 A Standard, continued

View	Terminal assignment	Remarks
TM-E15S24-01 and 2DO 24 VDC/2 A Standard 		Channel 0: Terminals 1 to 4 Channel 1: Terminals 5 to 8 DO: Output signal (max. 2 A per channel) 24 VDC: Sensor supply M : Load power supply ground Terminals 4 and 8 can be used for connection of cables that are not required u to 30 VDC.
TM-E15S23-01 and 2DO 24 VDC/2 A Standard 		Channel 0: Terminals 1 to 3 Channel 1: Terminals 5 to 7 DO: Output signal (max. 2 A per channel) 24 VDC: Sensor supply M : Load power supply ground
TM-E15S26-A1 and 2DO 24 VDC/2 A Standard 		Channel 0: Terminals 1 to A3 Channel 1: Terminals 5 to A7 DO: Output signal (max. 2 A per channel) 24 VDC: Sensor supply M : Load power supply ground Terminals 4 and 8 can be used for connection of cables that are not required u to 30 VDC.

Block diagram

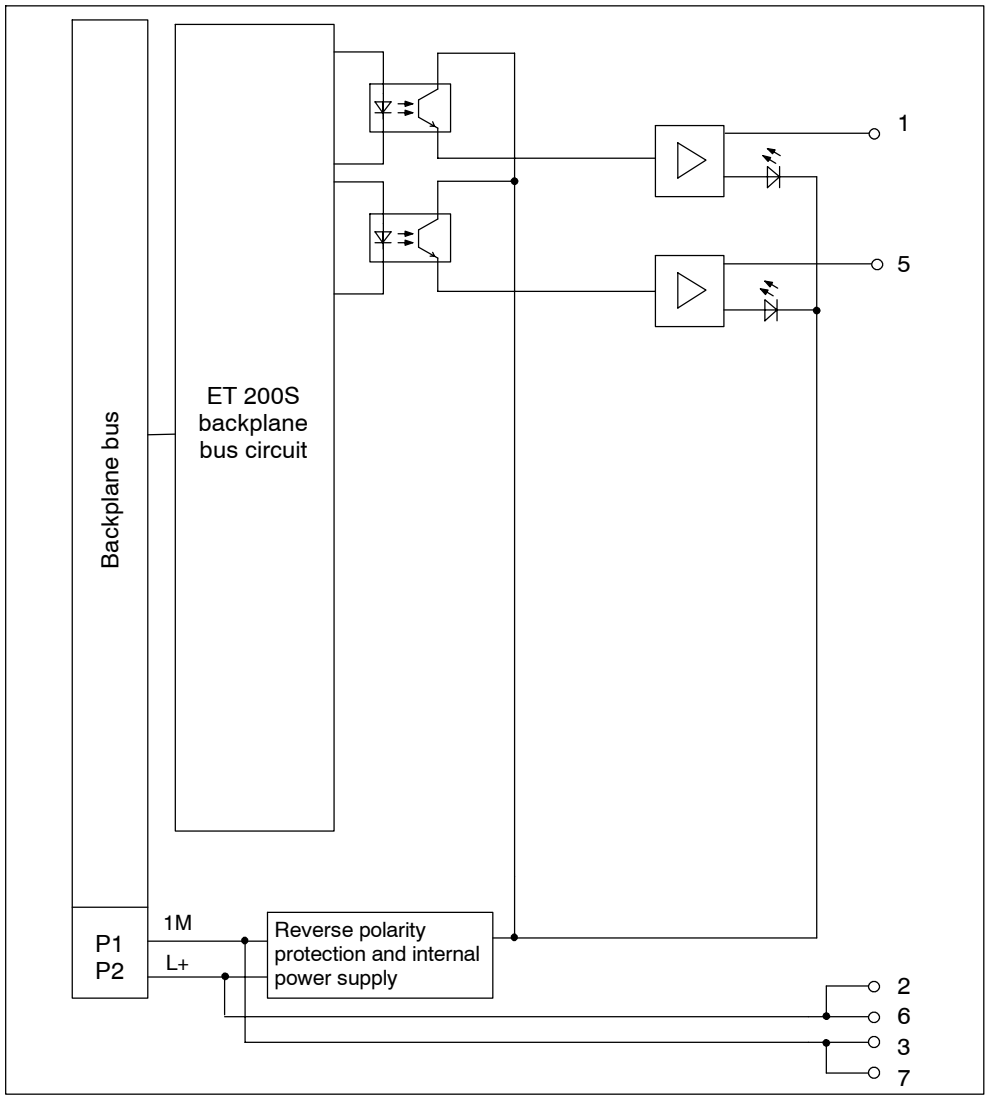


Figure 11-16 Block diagram of the 2DO 24 VDC/2 A Standard

Technical data

Dimensions and weight	
Dimensions W x H x D (mm)	15 x 81 x 52
Weight	Approx. 40 g
Module-specific data	
Supports clock synchronized mode	No
Number of outputs	2
Cable length	
• Unshielded	max. 600 m (164 ft)
• shielded	max. 1,000 m (164 ft)
Voltages, currents, electrical potentials	
Rated load voltage L+ (from power module)	24 VDC
• Polarity reversal	Yes[1)]
Total current of outputs (per module)	4 A
Electrical isolation	
• Between the channels	No
• Between channels and backplane bus	Yes
Permissible potential difference	
• Between different circuits	75 VDC / 60 VAC
Isolation tested	500 VDC
Current consumption	
• From rated load voltage L+ (without load)	max. 5 mA per channel
Power loss of the module	Typical 1.4 W
Status, interrupts, diagnostics	
Status display	Green LED pro Channel
Diagnostic functions	No

Data for selection of an actuator	
Output voltage	
• For signal ”1”	min. L+ (–1 V)
Output current	
• For signal ”1”	
– Rated value	2 A
– Permitted range	7 mA to 2.4 A
• For signal ”0” (residual current)	max. 0.5mA (164 ft)
Output delay (with ohmic load)	
• ”0” to ”1” transition	max. 200µs
• ”1” to ”0” transition	Max. 1.3 ms
Load resistor range	12 Ω up to 3.4 kΩ
Lamp load	max. 10 W
Connecting 2 outputs in parallel	
• For redundant triggering of a load	Yes (per module)
• To increase performance	No
Actuation of a digital input	Yes
Switching frequency	
• with ohmic load	100 Hz
• with inductive load	2 Hz (0.5 H)
• With lamp load	10 Hz
Limitation (internal) of the inductive disconnection voltage	Typically L+ (–55 to –60 V)
Reverse voltage protection	Yes, when using the same load voltage as at the power module
Short-circuit protection of the output	Yes[2)]
• Response threshold	Typically 2.8 to 7.2 A

1) Polarity reversal can cause interconnection of the digital outputs

2) Per channel