

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

PRODUCT BRAND

Siemens

PRODUCT MODEL

6ES7143-3BH00-0XA0

Siemens 6ES7143-3BH00-0XA0 is an ET 200eco BM 143 module with eight digital inputs and eight 2 A digital outputs. It communicates over PROFIBUS DP and uses separately ordered connection-block hardware.

OFFICIAL SOURCE

ET 200eco Distributed I/O Device Operating Instructions

A5E00158716-AD

[Open current Siemens source](#)

Block diagram

The block diagram below shows the I/O module 8 DI / 8 DO 2A.

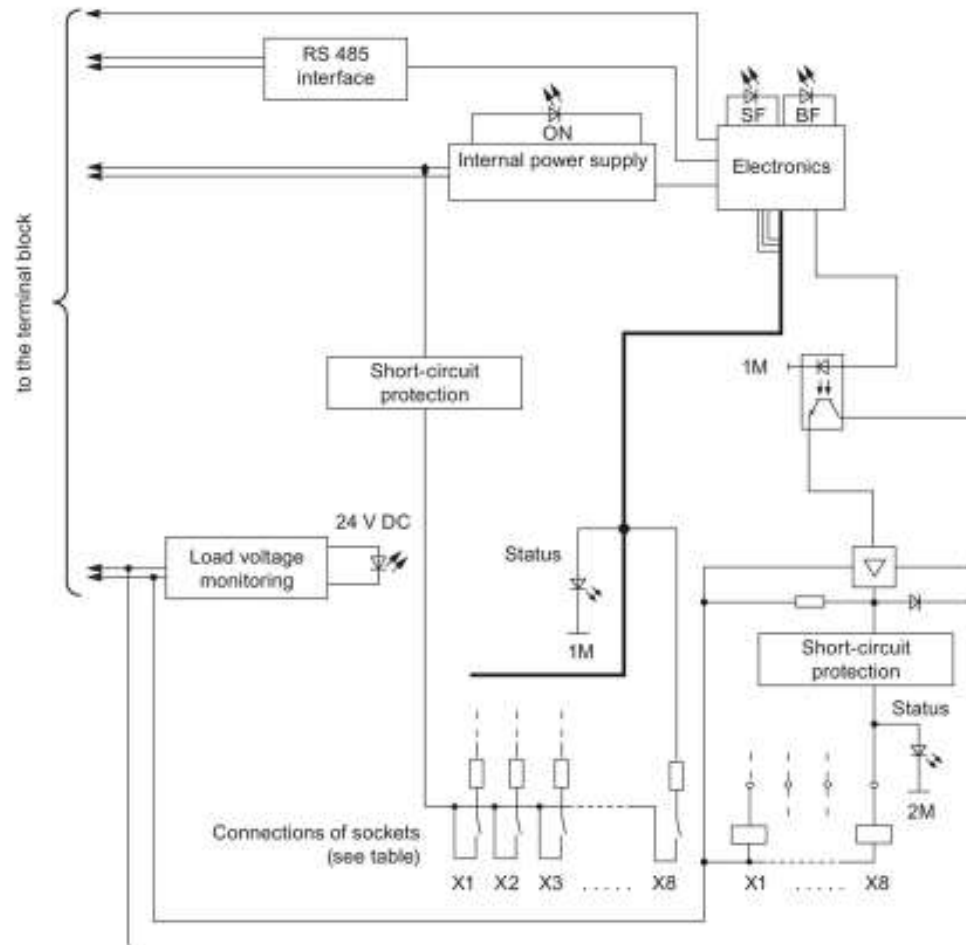


Figure 8-7 Block diagram of I/O module 8 DI / 8 DO 2A

Technical specifications of the I/O module 8 DI / 8 DO 2A

Technical specifications	
Dimensions and weight	
Dimensions W × H × D (mm)	60 × 210 × 28
Weight	Approx. 210 g
Module-specific data	
Transmission rates	9.6/19.2/45.45/93.75/187.5/500 kBaud 1.5/3/6/12 MBaud
Bus protocol	PROFIBUS DP
Number of channels	8 digital inputs and 8 digital outputs
Cable length	
• unshielded	Max. 30 m
Manufacturer ID	80DC _H
Voltages, currents, potentials	
Rated electronics / sensor supply voltage 1L+	24 V DC
• Reverse polarity protection	No
2L+ rated load voltage	24 V DC
• Reverse polarity protection	No
Number of simultaneously controllable inputs	8
• All mounting positions	up to 55 °C
Total current of the outputs	
• All mounting positions	4 A each ^{1) 2)} up to 55 °C
Electrical isolation	
• Between channels	No
• between PROFIBUS DP and all other circuitry	Yes
Permitted potential difference	
• Between different electric circuits	75 V DC, 60 V AC
Isolation test voltage	500 V DC
Current consumption	
• From supply voltage 1L+	Typ. 70 mA
• from 2L+ rated load voltage	Typ. 60 mA
Power loss of the module	Typ. 5 W
Status, interrupts, diagnostics	
Status display	green LED per channel
Alarms	No
Diagnostic functions	
• Group error display	red LED (SF)
• Channel error display	No
• Diagnostic information can be read	Supported

Technical specifications	
Sensor supply outputs	
Number of outputs	8
Output current	Up to 55 °C max. 0.75 A (total current)
Short-circuit protection	Yes, electronic
Sensor selection data	
Input voltage	
• Rated value	24 V DC
• for "1" signal	13 to 30 V
• for "0" signal	-3 to 5 V
Input current	
• at "1" signal	Typ. 7 mA
• at "0" signal	
Input delay	
• At "0" to "1" transition	Typ. 3 ms
• At "1" to "0" transition	Typ. 3 ms
Input characteristics	According to IEC 61131-2, Type 1
Connection of 2-wire BEROs	Supported
• Permitted quiescent current	Max. 1.5 mA
Actuator selection data	
Output voltage at "1" signal	Min. 2L+ (-0.8 V)
Output current	
• at "1" signal	2 A
• at "0" signal (residual current)	Max. 0.5 mA
Load resistance range	18.5 Ω to 4 kΩ
Lamp load	Max. 10 W
Wiring 2 outputs in parallel	
• for redundant load control	Supported
• 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, DC13	Max. 0.5 Hz
• with lamp load	Max. 1 Hz
Internal limiting of the inductive shutdown voltage to	Typ. 2L+ (-44 V)
Short-circuit protection of output	Yes, electronic
• Response threshold	Typ. 4 A per channel
¹ 4 A total current for sockets X1, X3, X5, X7 and 4 A total current for sockets X2, X4, X6 and X8.	
² Observe the current carrying capacity of the cable	