

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

SIEMENS SIMATIC S7

6ES7131-1BL12-0XB0

ET 200S DIGITAL INPUT MODULE

Applicable product family: SIMATIC ET 200S distributed I/O

OFFICIAL SOURCE

6ES7131-1BL12-0XB0.pdf

The following pages are selected from the supplied manufacturer document and retain their original page content.

*** SPARE PART*** SIMATIC DP, ELECTRONIC BLOCK FOR ET 200L, DIGITAL, 32 DI, 24V DC, EXPANDABLE WITH MAX. 16 CHANNELS WITH TERMINAL BLOCK TB 16SC OF SMART CONNECT

General information	
Usable terminal block	TB 32L
Supply voltage	
Rated value (DC)	24 V
Reverse polarity protection	Yes
Mains buffering	
• Mains/voltage failure stored energy time	20 ms
Load voltage L+	
• Rated value (DC)	24 V
Input current	
from supply voltage L+, max.	180 mA
from load voltage L+ (without load), max.	50 mA; Per load group (L1+ or L2+ / L3+)
Power loss	
Power loss, typ.	4.8 W
Digital inputs	
Number of digital inputs	32; Expansion: digital and analog with SIMATIC SC
Input voltage	
• Rated value (DC)	24 V
• for signal "0"	-30 to +5V
• for signal "1"	13 to 30V
Input current	
• for signal "1", typ.	5 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", min.	2 ms
— at "0" to "1", max.	4.5 ms
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Encoder	
Connectable encoders	
• 2-wire sensor	Yes

— permissible quiescent current (2-wire sensor), max.

1.5 mA

Interfaces

PROFIBUS DP

- | | |
|---------------------------|------------|
| • Transmission rate, max. | 1.5 Mbit/s |
| • SYNC capability | Yes |
| • FREEZE capability | Yes |

Interrupts/diagnostics/status information

Alarms	No
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Diagnostics function	Yes
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Diagnostics indication LED

- | | |
|---|-----|
| • Bus fault BF (red) | Yes |
| • Status indicator digital input (green) | Yes |
| • Monitoring 24 V voltage supply ON (green) | Yes |

Potential separation

Potential separation digital inputs

- | | |
|--|-----|
| • between the channels | No |
| • between the channels and PROFIBUS DP | Yes |

Isolation

Isolation tested with	500 V DC
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last modified: 08/12/2019 