

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

ET 200B

6ES7133-0BN01-0XB0

DIGITAL I/O MODULE

Used with the applicable ET 200B configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens official manufacturer documentation



PROFIBUS-DP Distributed I/O

ET 200B (continued)

Technical specifications

Electronics blocks (digital inputs)	6ES7 131-0BH00-0XB0	6ES7 131-0BL00-0XB0	6ES7 131-0BL10-0XB0	6ES7 131-0HF00-0XB0
Number of inputs	16	32	32	16
Isolation	No	No	No	Yes
Input voltage U _E				
• Rated value	24 V DC	24 V DC	24 V DC	120/230 V AC
• For signal "0"	-30 to +5 V	-30 to +5 V	-30 to +5 V	0 to 40 V
• For signal "1"	+13 to 30 V	+13 to 30 V	+13 to 30 V	+85 to 264 V
Input current with signal "1"	4 mA	4 mA	4 mA	3 to 16 mA
Delay of inputs	2 to 3.5 ms	3 ms	0.2 ms	0 to 25 ms
Data transfer rate	12 Mbit/s	12 Mbit/S	12 Mbit/S	12 Mbit/s
Cable length	max. 100 m	100 m	100 m	600 m
Sensor supply				
• Voltage	18.5 to 30 V	18.5 to 30V	18.5 to 30 V	—
• Current	0.5 A	1 A	1 A	—
Terminal block	TB1/DC, TB1-4/DC, TB3/DC, TB3-4/DC	TB2/DC, TB2-4/DC, TB4/DC, TB4-4/DC	TB2/DC, TB2-4/DC, TB4/DC, TB4-4/DC	TB6/AC
Electronics blocks (digital outputs)	6ES7 132-0BH01-0XB0	6ES7 132-0BH11-0XB0	6ES7 132-0BL01-0XB0	6ES7 132-0HF00-0XB0
Number of outputs	16	16	32	16
Isolation	No	Yes	Yes	Yes
Output voltage U _A				
• Rated value	24 V DC	24 V DC	24 V DC	120/230 V AC
• With signal "0"	2 V (no load)	2 V (no load)	2 V (no load)	—
• With signal "1"	U _E -3V	U _E -3V	U _E -3V	—
Output Current	2 x 2 A and 6 x 0.5 A per group	2 A; in groups of 4	0.5 A; in groups of 8	0.5 A in groups of 4
Total current per group	max. 4 A	4 A	2 A	—
Short-circuit protection	Electronic	Electronic	Electronic	Electronic
Data transfer rate	max. 12 Mbit/s	12 Mbit/s	12 Mbit/s	12 Mbit/s
Cable length	max. 100 m	100 m	100 m	600 m
Switching frequency				
• With resistive load	max. 100 Hz	100 Hz	100 Hz	10 Hz
• With inductive load	max. 0.5 Hz	0.5 Hz	0.5 Hz	0.5 Hz
• With lamp load	max. 8 Hz	8 Hz	8 Hz	1 Hz
Terminal block	TB1/DC, TB1-4/DC, TB3/DC, TB3-4/DC	TB2/DC, TB2-4/DC, TB4/DC, TB4-4/DC	TB2/DC, TB2-4/DC, TB4/DC, TB4-4/DC	TB6/AC
Electronics blocks (mixed module)	6ES7 133-0BN01-0XB0	6ES7 133-0BN11-0XB0	6ES7 133-0BH01-0XB0	6ES7 133-0HH00-0XB0 ¹⁾
Number of inputs	24	24	8	8
Isolation	No	No	No	Yes
Input voltage U _E				
• Rated value	24 V DC	24 V DC	24 V DC	120/230 V AC
• For signal "0"	-30 to +5 V	-30 to +5 V	-30 to +5 V	0 to 40 V
• For signal "1"	+13 to 30 V	+13 to 30 V	+13 to 30 V	+85 to 264 V
Input current with signal "1"	4 mA	4 mA	4 mA	3 to 16 mA
Delay of inputs	3 ms	0.2 ms	2 to 3.5 ms	0 to 25 ms
Cable length	max. 100 m	100 m	100 m	600 m
Data transfer rate	max. 12 Mbit/s	12 Mbit/S	12 Mbit/S	12 Mbit/s
Number of outputs	8	8	8	8 (relay; 2 high-current and 6 low-current)
Isolation	Yes	Yes	No	Yes
Output voltage U _A				
• Rated value	24 V DC	24 V DC	24 V DC	120 V AC
• With signal "0"	2 V (no load)	2 V (no load)	2 V (no load)	24 to 150 V DC
• With signal "1"	U _E -3V	U _E -3V	U _E -3V	—
Output Current	0.5 A; in one group	0.5 A; in one group	0.5 A; in one group	4 A (2 connections) 2 A (6connections)
• Total current per group	max. 2 A	2 A	2 A	—
• Total switching current	max. —	—	—	16 A
Short-circuit protection	max. Electronic	Electronic	Electronic	No
Switching Frequency				
• With resistive load	max. 100 Hz	100 Hz	100 Hz	10 Hz
• With inductive load	max. 0.5 Hz	0.5 Hz	0.5 Hz	2 Hz
• With lamp load	max. 8 Hz	8 Hz	8 Hz	—
Cable length	max. 100 m	100 m	100 m	100 m
Terminal block	TB2/DC, TB2-4/DC, TB4/DC, TB4-4/DC	TB2/DC, TB2-4/DC, TB4/DC, TB4-4/DC	TB1/DC, TB1-4/DC, TB3/DC, TB3-4/DC	TB6/AC

¹⁾ 230 V AC (24 V to 150 V DC) available soon