

*** SPARE PART*** SIMATIC DP, ELECTRONIC MODULE
DIGITAL, FOR ET 200B, W=160MM, 16DI 24V DC, STANDARD

General information

Usable terminal block	TB1/DC, TB1-4/DC, TB3/DC, TB3-4/DC
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Supply voltage

Rated value (DC)	24 V; L3+; value at t < 0.5 s: 35 V
permissible range, lower limit (DC)	18.5 V
permissible range, upper limit (DC)	30.2 V

Input current

Current consumption, typ.	70 mA; from L3+; logic
Current consumption, max.	500 mA; from L3+; sensor
I ² t	0.05 A ² -s; with starting current inrush

Power loss

Power loss, typ.	2.5 W
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Digital inputs

Number of digital inputs	16
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Input voltage

- | | |
|--|------------|
| <ul style="list-style-type: none"> Rated value (DC) | 24 V |
| <ul style="list-style-type: none"> for signal "0" | -30 to +5V |
| <ul style="list-style-type: none"> for signal "1" | 13 to 30V |

Input current

- | | |
|--|-------------------------|
| <ul style="list-style-type: none"> for signal "1", typ. | 4 mA; At 24 V min. 2 mA |
|--|-------------------------|

Input delay (for rated value of input voltage)

for standard inputs

- | | |
|-----------------------|--------|
| — at "0" to "1", min. | 2 ms |
| — at "0" to "1", max. | 3.5 ms |

Cable length

- | | |
|--|-------|
| <ul style="list-style-type: none"> unshielded, max. | 100 m |
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Encoder

Connectable encoders

- | | |
|---|--------|
| <ul style="list-style-type: none"> 2-wire sensor | Yes |
| <ul style="list-style-type: none"> — permissible quiescent current (2-wire sensor), max. | 1.5 mA |

Interfaces

PROFIBUS DP

• Transmission rate, max.	12 Mbit/s
Protocols	
Bus protocol/transmission protocol	PROFIBUS DP
PROFIBUS DP	
Services	
— FREEZE capability	Yes
Interrupts/diagnostics/status information	
Diagnostics indication LED	
• RUN LED	Yes
• Bus fault BF (red)	Yes
• Status indicator digital input (green)	Yes
Potential separation	
between electronic block and PROFIBUS DP	Yes
Potential separation digital inputs	
• Potential separation digital inputs	No
Degree and class of protection	
Degree of protection acc. to EN 60529	IP20
Ambient conditions	
Ambient temperature during operation	
• horizontal installation, min.	0 °C
• horizontal installation, max.	60 °C; 40°C for other mountings
Air pressure acc. to IEC 60068-2-13	
• permissible range, lower limit	795 hPa
• permissible range, upper limit	1 080 hPa
Relative humidity	
• Operation, min.	15 %
• Operation, max.	95 %; RH class 2 in accordance with IEC 1131-2
Vibrations	
• Operation, tested according to IEC 60068-2-6	Yes; IEC 68, Part 2-6; 10 to 57 Hz; (constant amplitude 0.075 mm); 57 to 150 Hz; (constant acceleration 1 g)
Shock testing	
• tested according to IEC 60068-2-27	Yes; IEC 68, Part 2-27; half-sine, 15 g, 11 ms
Connection method	
Design of electrical connection for the inputs and outputs	Screw-type and spring-loaded terminals, permanent wiring; 3 and 4-wire connection
Dimensions	
Width	160 mm; EB and TB
Height	130 mm; EB and TB
Depth	60 mm; EB and TB

Weights

Weight, approx.

600 g; EB and TB

last modified:

08/12/2019