

\*\*\* SPARE PART\*\*\* SIMATIC DP, ELECTRONIC MODULE  
DIGITAL, FOR ET 200B, W=160MM, 16DO 24V DC, (12X0.5A;  
4X2A), DEGR. OF PROTECT. IP20, STANDARD

### Supply voltage

Rated value (DC)	24 V; L1+, L2+, 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.	80 mA; from L3+; logic
I <sup>2</sup> t	0.05 A <sup>2</sup> ·s; with starting current inrush

### Power loss

Power loss, max.	5 W
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### Hardware configuration

Rack	
<ul style="list-style-type: none"> <li>required terminal block</li> </ul>	TB1/DC, TB1-4/DC, TB3/DC, TB3-4/DC

### Digital outputs

Number of digital outputs	16
Short-circuit protection	Yes; Electronic
Limitation of inductive shutdown voltage to	typ. (L1+, L2+) -55 V
Controlling a digital input	Yes

### Switching capacity of the outputs

<ul style="list-style-type: none"> <li>on lamp load, max.</li> </ul>	5 W; at I = 0.5 A; max. 10 W at I = 2 A
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### Output voltage

<ul style="list-style-type: none"> <li>Rated value (DC)</li> </ul>	24 V
<ul style="list-style-type: none"> <li>for signal "0", max.</li> </ul>	2 V; idling
<ul style="list-style-type: none"> <li>for signal "1", min.</li> </ul>	UE -3 V

### Output current

<ul style="list-style-type: none"> <li>for signal "1" permissible range, max.</li> </ul>	2 A; 2x 2 A and 6x 0.5 A
<ul style="list-style-type: none"> <li>for signal "0" residual current, max.</li> </ul>	1 mA

### Switching frequency

<ul style="list-style-type: none"> <li>with resistive load, max.</li> </ul>	100 Hz
<ul style="list-style-type: none"> <li>with inductive load, max.</li> </ul>	0.5 Hz
<ul style="list-style-type: none"> <li>on lamp load, max.</li> </ul>	8 Hz

### Total current of the outputs (per group)

all mounting positions	
— up to 60 °C, max.	4 A

<b>Cable length</b>	
• unshielded, max.	100 m
<b>Interfaces</b>	
<b>PROFIBUS DP</b>	
• Transmission rate, max.	12 Mbit/s
• SYNC capability	Yes
<b>Protocols</b>	
Bus protocol/transmission protocol	PROFIBUS DP
<b>Interrupts/diagnostics/status information</b>	
<b>Diagnostics indication LED</b>	
• RUN LED	Yes
• Bus fault BF (red)	Yes
• Status indicator digital output (green)	Yes
<b>Potential separation</b>	
between electronic block and PROFIBUS DP	Yes
<b>Potential separation digital outputs</b>	
• Potential separation digital outputs	No
• between the channels, in groups of	8
<b>Degree and class of protection</b>	
Degree of protection acc. to EN 60529	IP20
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
• horizontal installation, min.	0 °C
• horizontal installation, max.	60 °C; 40°C for other mountings
<b>Air pressure acc. to IEC 60068-2-13</b>	
• permissible range, lower limit	795 hPa
• permissible range, upper limit	1 080 hPa
<b>Relative humidity</b>	
• Operation, min.	15 %
• Operation, max.	95 %; RH class 2 in accordance with IEC 1131-2
<b>Vibrations</b>	
• 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)
<b>Shock test</b>	
• tested according to IEC 60068-2-27	Yes; IEC 68, Part 2-27; half-sine, 15 g, 11 ms
<b>Connection method</b>	
Design of electrical connection for the inputs and outputs	Screw-type and spring-loaded terminals, permanent wiring; 3 and 4-wire connection
<b>Dimensions</b>	

Width	160 mm; EB and TB
Height	130 mm; EB and TB
Depth	60 mm; EB and TB
<b>Weights</b>	
Weight, approx.	600 g; EB and TB
<b>last modified:</b>	03/07/2017