

*** 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^2t	0.05 A ² -s; with starting current inrush
Power loss	
Power loss, max.	5 W
Hardware configuration	
Rack	
• required terminal block	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	
• on lamp load, max.	5 W; at $I = 0.5$ A; max. 10 W at $I = 2$ A
Output voltage	
• Rated value (DC)	24 V
• for signal "0", max.	2 V; idling
• for signal "1", min.	UE -3 V
Output current	
• for signal "1" permissible range, max.	2 A; 2x 2 A and 6x 0.5 A
• for signal "0" residual current, max.	1 mA
Switching frequency	
• with resistive load, max.	100 Hz
• with inductive load, max.	0.5 Hz
• on lamp load, max.	8 Hz
Total current of the outputs (per group)	
all mounting positions	
— up to 60 °C, max.	4 A

Cable length	
• unshielded, max.	100 m
Interfaces	
PROFIBUS DP	
• Transmission rate, max.	12 Mbit/s
• SYNC capability	Yes
Protocols	
Bus protocol/transmission protocol	PROFIBUS DP
Interrupts/diagnostics/status information	
Diagnostics indication LED	
• RUN LED	Yes
• Bus fault BF (red)	Yes
• Status indicator digital output (green)	Yes
Potential separation	
between electronic block and PROFIBUS DP	Yes
Potential separation digital outputs	
• Potential separation digital outputs	No
• between the channels, in groups of	8
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 test	
• 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
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last modified: 08/12/2017