

*** SPARE PART*** SIMATIC DP, ELECTRONIC MODULE
DIGITAL, FOR ET 200B, W=160MM, 16DO 24V DC, (12X0.5A;
4X2A), DEGR. OF PROTECT. IP20,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; 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 ² t	0.05 A ² -s; with starting current inrush

Power loss

Power loss, max.	5 W
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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

Protocols

Bus protocol/transmission protocol PROFIBUS DP

PROFIBUS DP

Services

- SYNC capability Yes

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 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
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last modified: 11/05/2018