

SIMATIC DP, ELECTRONIC BLOCK FOR ET 200L, 32 DO, 24V DC/0.5A



Figure similar

General information

Vendor identification (VendorID)	0011h
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Supply voltage

Rated value (DC)	24 V
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Reverse polarity protection	Yes
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Mains buffering

<ul style="list-style-type: none"> Mains/voltage failure stored energy time 	20 ms
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Load voltage L+

<ul style="list-style-type: none"> Rated value (DC) 	24 V; 1L+, 2L+, 3L+
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Input current

from supply voltage L+, max.	70 mA; L4+ / L5+
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from load voltage L+ (without load), max.	100 mA; Per load group (L1+ or L2+ / L3+)
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Power loss

Power loss, typ.	7 W
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Hardware configuration

Rack

<ul style="list-style-type: none"> required terminal block 	TB 32L
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Digital outputs

Number of digital outputs	32
Short-circuit protection	Yes
• Response threshold, typ.	0,7 A
Limitation of inductive shutdown voltage to	Typ. (L1+ or L2+ / L3+) -55 V
Controlling a digital input	Yes
Switching capacity of the outputs	
• on lamp load, max.	5 W
Load resistance range	
• lower limit	41 Ω
• upper limit	28 000 Ω
Output voltage	
• Rated value (DC)	24 V
• for signal "1", min.	U _a - 3 V
Output current	
• for signal "1" permissible range, min.	1 mA
• for signal "1" permissible range, max.	0.5 A
• for signal "0" residual current, max.	1 mA
Output delay with resistive load	
• "0" to "1", max.	50 μ s
• "1" to "0", max.	200 μ s
Parallel switching of 2 outputs	
• for uprating	No
• for redundant control of a load	Yes; only outputs of the same group
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)	
horizontal installation	
— up to 30 °C, max.	4 000 mA
— up to 40 °C, max.	3 000 mA
— up to 60 °C, max.	2 000 mA
all other mounting positions	
— up to 40 °C, max.	2 A
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Interfaces	
PROFIBUS DP	
• Transmission rate, max.	1.5 Mbit/s

• SYNC capability	Yes
• Direct data exchange (slave-to-slave communication)	Yes; Transmitter (for digital outputs and hybrid modules ET 200L: not for L-SC or IM-SC)

Protocols

Bus protocol/transmission protocol	PROFIBUS DP
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Interrupts/diagnostics/status information

Alarms	
• Alarms	No
Diagnostic messages	
• Diagnostic functions	Yes
Diagnostics indication LED	
• Bus fault BF (red)	Yes
• Status indicator digital output (green)	Yes
• Monitoring 24 V voltage supply ON (green)	Yes

Potential separation

between PROFIBUS DP and all other circuit components	Yes
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Potential separation digital outputs	
• between the channels	No
• between the channels and PROFIBUS DP	Yes

Isolation

Isolation tested with	500 V DC
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Degree and class of protection

Degree of protection acc. to EN 60529	IP20
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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.	5 %
• 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

Inputs/outputs	Screw-type and spring-loaded terminals, permanent wiring; standard: 2-wire connection, optional: 3 and 4-wire connection
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Dimensions

Width	145 mm
Height	60 mm
Depth	60.5 mm

Weights

Weight, approx.	150 g
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last modified: 15.08.2015