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Data sheet 6ES7131-1BL01-0XB0

Spare part SIMATIC DP, electronic module for ET 200L 32 DI, 24 V DC



Figure similar

General information	
Usable terminal block	TB 32L
Supply voltage	
Rated value (DC)	24 V
Reverse polarity protection	Yes
Mains buffering	
● Mains/voltage failure stored energy time	20 ms
Load voltage L+	
● Rated value (DC)	24 V; 1L+, 2L+, 3L+
Input current	
from supply voltage L+, max.	70 mA
from load voltage L+ (without load), max.	100 mA
Power loss	
Power loss, typ.	3.2 W
Digital inputs	
Number of digital inputs	32
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Number of simultaneously controllable inputs	
● Number of simultaneously controllable inputs	32
Input voltage	
● Rated value (DC)	24 V
● for signal "0"	-30 to +5 V
● for signal "1"	13 to 30V
Input current	
● for signal "0", max. (permissible quiescent current)	1.5 mA
● for signal "1", typ.	5 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", min.	2 ms
— at "0" to "1", max.	4.5 ms
— at "1" to "0", min.	2 ms
— at "1" to "0", max.	4.5 ms
Cable length	
● shielded, max.	1 000 m
● unshielded, max.	600 m
Encoder	
Connectable encoders	

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● 2-wire sensor	Yes
Interfaces	
Transmission rate, max.	1.5 Mbit/s
Protocols	
Bus protocol/transmission protocol	PROFIBUS DP
PROFIBUS DP	
Services	
— FREEZE 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)
Interrupts/diagnostics/status information	
Alarms	No
Diagnostics function	Yes
Diagnostics indication LED	
● Bus fault BF (red)	Yes
● Status indicator digital input (green)	Yes
● Monitoring 24 V voltage supply ON (green)	Yes
Potential separation	
between PROFIBUS DP and all other circuit components	Yes
Potential separation digital inputs	
● between the channels	No
● between the channels and PROFIBUS DP	Yes
Isolation	
Isolation tested with	500 V DC
Degree and class of protection	
IP degree of protection	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.	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 testing	
● tested according to IEC 60068-2-27	Yes; IEC 68, Part 2-27; half-sine, 15 g, 11 ms
connection method / header	
Design of electrical connection for the inputs and outputs	Screw-type and spring-loaded terminals, permanent wiring; standard: 2-wire connection, optional: 3 and 4-wire connection
Dimensions	
Width	145 mm
Height	60 mm
Depth	60.5 mm
Weights	
Weight, approx.	150 g

last modified: 1/16/2021

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