

\*\*\*Spare part\*\*\* SIMATIC DP, electronic module for ET 200L 16 DI, 24 V DC



Figure similar

General information	
Usable terminal block	TB 16L
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; L4+ / L5+
from load voltage L+ (without load), max.	50 mA; Per load group (L1+ or L2+ / L3+)
Power loss	
Power loss, typ.	2.2 W
Digital inputs	
Number of digital inputs	16

Input characteristic curve in accordance with IEC 61131, type 1	Yes
<b>Input voltage</b>	
• Rated value (DC)	24 V
• for signal "0"	-30 to +5V
• for signal "1"	13 to 30V
<b>Input current</b>	
• for signal "0", max. (permissible quiescent current)	1.5 mA
• for signal "1", typ.	5 mA
<b>Input delay (for rated value of input voltage)</b>	
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
<b>Cable length</b>	
• shielded, max.	1 000 m
• unshielded, max.	600 m
<b>Encoder</b>	
<b>Connectable encoders</b>	
• 2-wire sensor	Yes
<b>Interfaces</b>	
<b>PROFIBUS DP</b>	
• Transmission rate, max.	1.5 Mbit/s
• 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)
<b>Protocols</b>	
Bus protocol/transmission protocol	PROFIBUS DP
<b>Interrupts/diagnostics/status information</b>	
Alarms	No
Diagnostics function	Yes
<b>Diagnostics indication LED</b>	
• Bus fault BF (red)	Yes
• Status indicator digital input (green)	Yes
• Monitoring 24 V voltage supply ON (green)	Yes
<b>Potential separation</b>	
between PROFIBUS DP and all other circuit components	Yes
<b>Potential separation digital inputs</b>	

- between the channels
- between the channels and PROFIBUS DP

No

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

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. 130 g

**last modified:** 08/30/2019