Data sheet
SM 151 (151-6PL00)

Technical data

Order no.	151-6PL00
Type	SM 151

General information

Note	-
Features	PROFIBUS-DP slave 32 inputs

Technical data power supply

Power supply (rated value)	DC 24 V
Power supply (permitted range)	DC 20.4...28.8 V
Reverse polarity protection	yes
Current consumption (no-load operation)	-
Current consumption (rated value)	55 mA
Inrush current	40 A
I^2t	0.15 A^2s

Technical data digital inputs

Number of inputs	32
Cable length, shielded	1000 m
Cable length, unshielded	600 m
Rated load voltage	DC 24 V
Reverse polarity protection of rated load voltage	-
Current consumption from load voltage L+ (without load)	-
Rated value	DC 24 V
Input voltage for signal "0"	DC 0...5 V
Input voltage for signal "1"	DC 15...28.8 V
Input voltage hysteresis	-
Frequency range	-
Input resistance	-
Input current for signal "1"	7 mA
Connection of Two-Wire-BEROs possible	yes
Max. permissible BERO quiescent current	1.5 mA
Input delay of "0" to "1"	3 ms
Input delay of "1" to "0"	3 ms
Number of simultaneously utilizable inputs horizontal configuration	32
Number of simultaneously utilizable inputs vertical configuration	32
Input characteristic curve	IEC 61131-2, type 1
Initial data size	4 Byte

Status information, alarms, diagnostics

Status display	green LED per channel
Interrupts	no

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Process alarm	no
Diagnostic interrupt	no
Diagnostic functions	no
Diagnostics information read-out	possible
Supply voltage display	yes
Group error display	red SF LED
Channel error display	none

Isolation

Between channels	-
Between channels of groups to	-
Between channels and backplane bus	-
Between channels and power supply	-
Max. potential difference between circuits	-
Max. potential difference between inputs (Ucm)	-
Max. potential difference between Mana and Mintern (Uiso)	-
Max. potential difference between inputs and Mana (Ucm)	-
Max. potential difference between inputs and Mintern (Uiso)	-
Max. potential difference between Mintern and outputs	-
Insulation tested with	DC 500 V

Hardware configuration

Racks, max.	-
Modules per rack, max.	-
Number of digital modules, max.	-
Number of analog modules, max.	-

Communication

Fieldbus	PROFIBUS-DP to EN 50170
Type of interface	RS485
Connector	Sub-D, 9-pin, female
Topology	Linear bus with bus termination at both ends
Electrically isolated	yes
Number of participants, max.	125
Node addresses	1 - 99
Transmission speed, min.	9.6 kbit/s
Transmission speed, max.	12 Mbit/s
Address range inputs, max.	4 Byte
Address range outputs, max.	0 Byte
Number of TxPDOs, max.	-
Number of RxPDOs, max.	-

Datasizes

Input bytes	4
Output bytes	0
Parameter bytes	7 + 5
Diagnostic bytes	0

Housing

Material	PPE / PA 6.6

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Mounting	Profile rail 35 mm

Mechanical data

Dimensions (WxHxD)	152.4 mm x 76 mm x 48 mm
Weight	260 g

Environmental conditions

Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C

Certifications

UL certification	yes
KC certification	-

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