SIEMENS

SIMATIC Ident
RFID systems
MDS D528

Compact Operating Instructions

Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

⚠ DANGER

indicates that death or severe personal injury **will** result if proper precautions are not taken.

⚠ WARNING

indicates that death or severe personal injury **may** result if proper precautions are not taken.

⚠ CAUTION

indicates that minor personal injury can result if proper precautions are not taken.

NOTICE

indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

⚠ WARNING

Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

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1 Characteristics

MDS D528	Characteristics	
	Area of application	Compact and rugged ISO transponder; suitable for screw mounting Use in assembly and production lines in the powertrain sector The rugged housing of the MDS D528 means that it can also be used in extreme environmental conditions without problems.
	Memory size	8192 bytes of FRAM user memory
	Write/read range	See section "Field data (Page 3)"
	Mounting on metal	Yes
	ISO standard	ISO 15693
	Degree of protection	IP68/IPx9K

2 Ordering data

Table 2-1 Ordering data for MDS D528

	Article number
MDS D528	6GT2600-5AK00

3 Application example

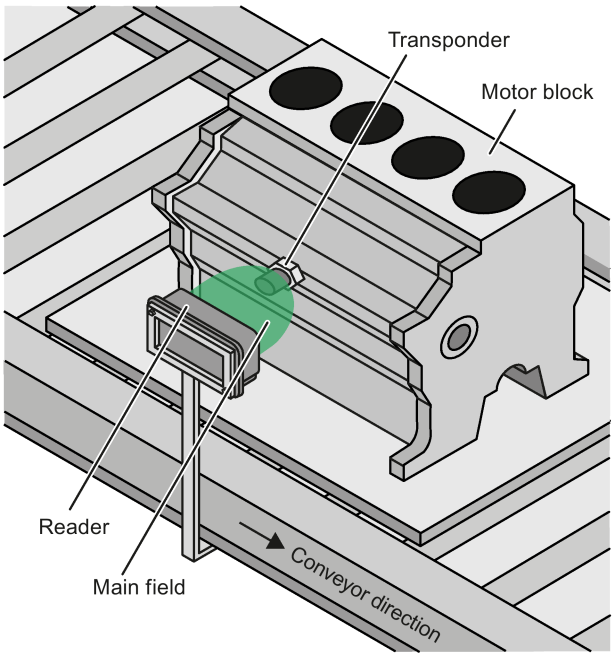

Figure 3-1 Application example

4 Field data

NOTICE
Requirements for using the MDS D528 with RF200 readers Note that it is possible to process the MDS 528 transponder with the RF290R reader as of firmware version 2.0.0. With the other RF200 readers (RF210R, RF220R, RF240R, RF250R) it is possible to work with the MDS D528 transponder with firmware versions >1.5.

Table 4-1 Field data of the MDS D528, flush mounting in metal (metallic installation surface 100 x 100 mm)

	Operating distance (S_a)	Limit distance (S_g)	Transmission window (L)	Minimum distance from MDS to MDS
RF210R	1 ... 10 mm	11 mm	20 mm	≥ 25 mm
RF220R	1 ... 18 mm	20 mm	22 mm	≥ 25 mm
RF240R	1 ... 30 mm	34 mm	50 mm	≥ 75 mm
RF250R with ANT3	1 ... 20 mm	32 mm	30 mm	≥ 80 mm
RF250R with ANT12	0 ... 8 mm	12 mm	10 mm	≥ 50 mm
RF250R with ANT18	1 ... 18 mm	25 mm	19 mm	≥ 60 mm
RF250R with ANT30	1 ... 20 mm	32 mm	30 mm	≥ 80 mm
RF260R	2 ... 35 mm	40 mm	50 mm	≥ 150 mm

5 Technical specifications

Table 5-1 Technical specifications for MDS D528

	6GT2600-5AK00
Product type designation	SIMATIC MDS D528
Memory	
Memory configuration	
• UID	• 8 bytes
• User memory	• 8192 bytes FRAM
Read cycles (at < 40 °C)	> 10^{12}
Write cycles (at < 40 °C)	> 10^{12}
Data retention time (at < 40 °C)	> 10 years
Write/read distance (S_g)	Dependent on the reader used, see section "Field data (Page 3)"
MTBF (Mean Time Between Failures)	2 x 10^6 hours
Mechanical specifications	
Housing	
• Material	• Plastic PA 6.6 GF
• Color	• Black
Recommended distance to metal	> 0 mm
Power supply	Inductive, without battery

	6GT2600-5AK00
Permitted ambient conditions	
Ambient temperature	
• During operation	• -25 to +85 °C
• During transportation and storage	• -40 to +125 °C
Degree of protection to EN 60529	• IP68 2 hours, 2 bar, +20 °C • IPx9K steam jet: 150 mm; 10 to 15 l/min; 100 bar; 75 °C
Shock-resistant to IEC 68-2-27	50 g [1]
Vibration-resistant to IEC 68-2-6	20 g [1]
Torsion and bending load	Not permitted
Design, dimensions and weight	
Dimensions (Ø x H)	24 x 20 mm (without set screw)
Weight	35 g
Type of mounting	1x transponder set screw M8 SW 22; ≤ 8 Nm

[1] The values for shock and vibration are maximum values and must not be applied continuously.

6 Dimension drawing

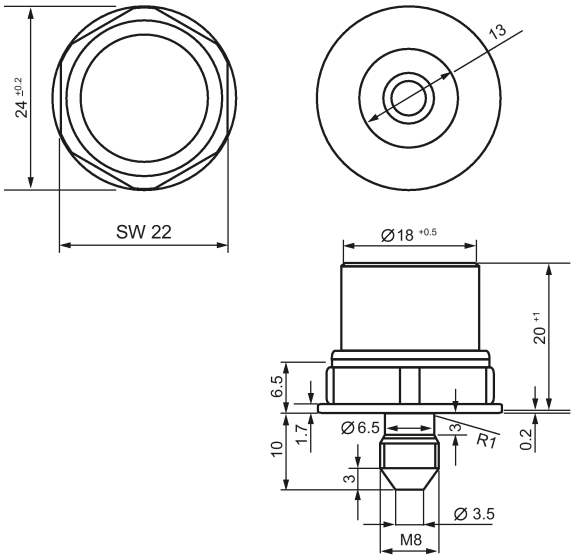

Figure 6-1 Dimensional drawing of MDS D528

All dimensions in mm

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