## Digital Input Module RM 242

## **Safety Instructions**

ESD !	Connections	Maintenance / Repair
<ul> <li>contains electro- statically sensitive components</li> <li>Original packing protects against electrostatic discharge (ESD)</li> <li>Transporting only in the original packing</li> </ul>	<ul> <li>Wiring must be conform to local standards (e.g. VDE 0100 in Germany) !</li> <li>Input leads must be kept separate from signal and mains leads !</li> <li>The protective earth must be connected to the relevant terminal (in the instrument carrier) !</li> <li>The cable screening must be connected to the terminal for grounded</li> </ul>	Instrument needs no particular maintenance. When opening the instrument live parts or terminals can be exposed. Before carrying out the instrument must be disconnected from all voltage sources. The instrument contains electrostatically sensitive components. The following work may be carried out only by trained, authorized persons.
<ul> <li>during mounting rules for protection against ESD must be followed</li> </ul>	<ul> <li>measurement !</li> <li>Usage of twisted and screened input leads prevent stray electric interference !</li> <li>Connections must be made accor- ding to the connecting diagrams !</li> </ul>	<ul> <li>Fuse tripped:</li> <li>Cause must be determined and removed !</li> <li>Only fuses of the same type and current rating as the original fuse must be used.</li> <li>Using repaired fuses or short-circuiting the fuse socket is inadmissible !</li> </ul>

## **Pin Assignment**

	Pin	Ass	signment
	1	IN 1	Input 1
	2	IN 2	Input 2
IN 1 IN 2 <b>L</b>	3	GND	Signal ground A
IN 3 IN 4 <b>L</b> RM 242	4	IN 3	Input 3
	5	IN 4	Input 4
1 O 2 3 O 4	6	GND	Signal ground B
5 O 6 7 O 8	7	IN 5	Input 5
	8	IN 6	Input 6
	9	GND	Signal ground C
IN 7 IN 8 上	10	IN 7	Input 7
220	11	IN 8	Input 8
7 8 9	12	GND	Signal ground D
10_11_12	ArtNo.	9407-7	/38-24201

## Technical Data RM 242

Application:	digital 8-channel input module for 24 V DC-signals	
Power supply:	The module is supplied with the necessary voltages via the bus board.	
Power consumption:	max. 600 mW (all channels on)	
Input impedance:	The input impedance per channel is 6.8 k $\Omega$ .	
Input filter:	Low-pass, cutoff frequency = 1 kHz	
Switching thresholds:	Level for High / Low according to IEC 1131: • Low = -3 5 V • High = 15 30 V	
Cycle times:	Every channel is scanned with at least 100 Hz.	
Protection:	The inputs are protected from overvoltages by 2 varistors (60 V DC / 250 mW).	
LED displays:	Each of the 8 inputs has a yellow LED for the display of the input status.	
Galvanic isolation:	The logic part is galvanic isolated from the input area of the module. Additional there is a galvanic isolation between the 4 input groups with each 2 inputs. (Testing voltage 2 kV DC, isolation voltage 500 V DC)	
Temperature range:	<ul> <li>Storage temperature: -20 +70 °C</li> <li>Ambient temperature: 0 +50 °C</li> </ul>	
Humidity:	$\leq$ 75% rel. humidity, no condensation	
Shock sensitivity:	DIN 40046 IEC68-2-69	
EMC:	<ul> <li>DIN EN 50081 Part 1</li> <li>DIN EN 50082 Part 2</li> </ul>	
Electrical connections:	screw-/plug-in-terminals, line cross-section max. 2.5 mm <sup>2</sup>	
Class of protection:	IP 20	
Dimensions:	99 x 17.5 x 114.5 mm (h x w x d)	
Weight:	82 g	
Housing:	Polyamid PA 6.6, combustibility class V0 according to UL 94	
Assembly:	plugged-in and locked in front of base module	
Usage position:	vertical	