

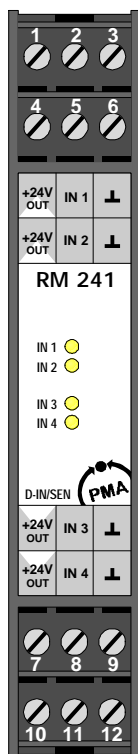


Digital Input Module RM 241

Safety Instructions

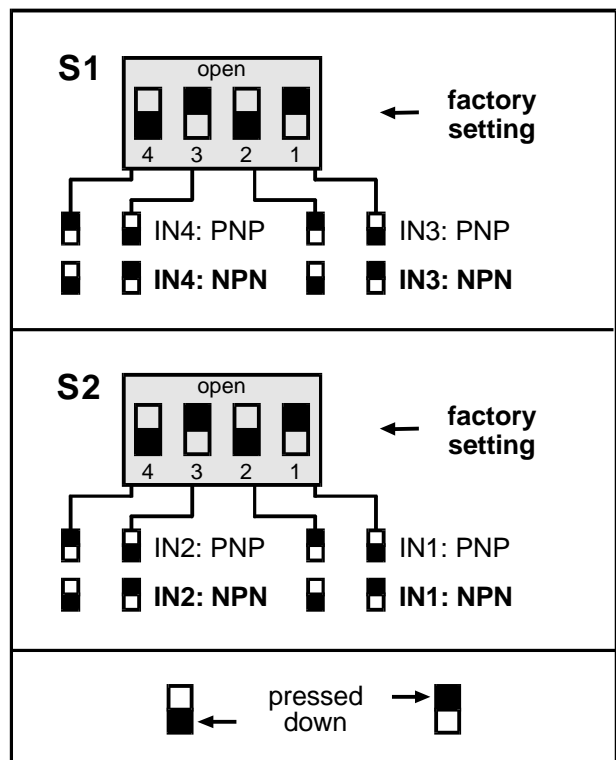
<p>ESD !</p> <ul style="list-style-type: none"> contains electrostatically sensitive components Original packing protects against electrostatic discharge (ESD) Transporting only in the original packing during mounting rules for protection against ESD must be followed 	<p>Connections</p> <ul style="list-style-type: none"> Wiring must be conform to local standards (e.g. VDE 0100 in Germany) ! Input leads must be kept separate from signal and mains leads ! The protective earth must be connected to the relevant terminal (in the instrument carrier) ! The cable screening must be connected to the terminal for grounded measurement ! Usage of twisted and screened input leads prevent stray electric interference ! Connections must be made according to the connecting diagrams ! 	<p>Maintenance / Repair</p> <p>Instrument needs no particular maintenance.</p> <p>! 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.</p> <p>Fuse tripped:</p> <ul style="list-style-type: none"> Cause must be determined and removed ! Only fuses of the same type and current rating as the original fuse must be used. Using repaired fuses or short-circuiting the fuse socket is inadmissible !
--	--	--

Pin Assignment



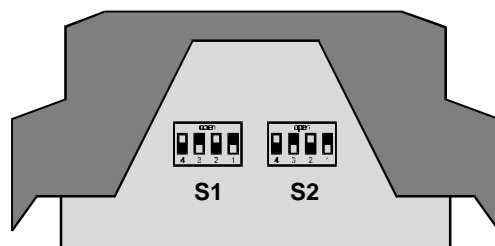
Pin	Assignment	
1	+24 V OUT	Input 1
2	IN 1	
3	GND	
4	+24 V OUT	Input 2
5	IN 2	
6	GND	
7	+24 V OUT	Input 3
8	IN 3	
9	GND	
10	+24 V OUT	Input 4
11	IN 4	
12	GND	
Art.-No.	9407-738-24101	

DIP switches S1 and S2




The **NPN-input** is suitable for direct connection of switches with NPN-output. The collector is be connected with the respective transducer supply, the emitter with the respective input (**factory setting**)

The **PNP-input** is suitable for direct connection of switches with NPN-output transistors. The collector is be connected with the respective ground, the emitter with the respective input.



Technical Data RM 241

Application:	4-channel input module for 3-wire-sensors or floating / unfloating contacts
Configuration:	<ul style="list-style-type: none">● suitable for PNP and NPN output stages● configuration selectable for each channel via DIP switch● connection of simple switches between input and +24 V or GND is possible
Power supply:	The module is supplied with the necessary voltages via the bus board.
Power consumption:	max. 384 mW (all channels on)
Transducer supply:	A transducer supply of 24 V DC ($\pm 10\%$) for each channel with a maximum of 25 mA is available. All four channels of a module are jointly protected against short-circuit via a 200 mA multi-fuse.
Input impedance:	The input impedance per channel is 6.8 k Ω .
Analog-filter:	Low-pass, cutoff frequency = 1 kHz
Switching thresholds:	Level for High / Low according to IEC 1131: <ul style="list-style-type: none">● Low = -3..5 V● High = 15..30 V
Cycle times:	Every channel is scanned with at least 100 Hz.
Protection:	<ul style="list-style-type: none">● Every input is protected from overvoltages by 2 varistors (60 V DC / 250 mW).● Possible RF interferences are damped for every channel by a choke.● The sensor supply is protected against short-circuit.
LED displays:	Each of the 4 inputs has an yellow LED for the display of the input status.
Galvanic isolation:	The logic part is galvanic isolated from the input area of the module (isolation voltage 500 V DC).
Temperature range:	<ul style="list-style-type: none">● Storage temperature: -20 ... +70 °C● Ambient temperature: 0 ... +50 °C
Humidity:	$\leq 75\%$ rel. humidity, no condensation
Shock sensitivity:	DIN 40046 IEC68-2-69
EMC:	<ul style="list-style-type: none">● DIN EN 50081 Part 2● DIN EN 50082 Part 2 
Electrical connections:	screw-/plug-in-terminals, line cross-section max. 2.5 mm ²
Class of protection:	IP 20
Dimensions:	99 x 17.5 x 114.5 mm (h x w x d)
Weight:	80 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

Subject to technical alterations !