CANopen Coupler Module RM 201



Safety Instructions

ESD !	Connections	Maintenance / Repair	
 contains electro- statically sensitive components Original packing protects against electrostatic discharge (ESD) Transporting only in the original packing Wiring must be conform to local stan- dards (e.g. VDE 0100 in Germany) ! Input leads must be kept separate from signal and mains leads ! The protective earth must be con- nected to the relevant terminal (in the instrument carrier) ! The cable screening must be con- nected to the terminal for grounded 		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.	
 during mounting rules for protection against ESD must be followed 	 measurement ! Usage of twisted and screened input leads prevent stray electric interference ! Connections must be made accor- ding to the connecting diagrams ! 	 Fuse tripped: 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. 	

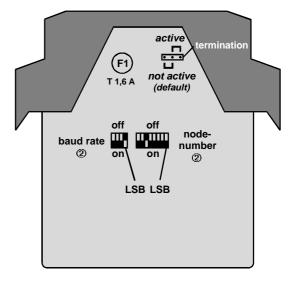
Pin Assignment

	Pin	Assignment			
1 2 3 NC NC NC CAN CAN CAN		NC			
		NC			
		NC			
CAN CAN CAN L GND L RM 201	1	CAN H			
Transmit Receive Power Alarm CAN-CPU (PNAA L L +24V IN	2	CAN GND	CAN-Bus		
	3	CAN L			
	4	GND			
	5	GND	Power		
	6	+24 V IN	supply		
	7				
1 1 1 4 5 6 1 1 1 7 8 9	8	لر _	Alarm relay		
	9				
	ArtNo.	9407-738-20101			

- The positions of the switches are shown in binary-code. The number at the right position corresponds to the LSB (DIP-switch-position 1), the number at the left position corresponds to the MSB (DIP-switch-position 4 or 8). To use the default-mapping of the modular fieldbussystem in full effect a node number ≤ 42 should be chosen.
- ② Factory settings

DIP switches / Jumper

4 Bit DIP switch		8 Bit DIP sw	vitch
DIP ①	Baud rate	DIP ①	Node-No.
0000	10 kBit	0000 0000	invalid
0001	20 kBit ②	0000 0001	1
0010	50 kBit	0000 0010	2
0011	100 kBit	0000 0011	3
0100	125 kBit		
0101	250 kBit	0010 0000	32 ②
0110	500 kBit		
0111	800 kBit	0111 1110	126
1000	1000 kBit	0111 1111	127
1001	Auto Scan		
4321	Switch-Pos.	8765 4321	Switch-Pos.



Technical Data RM 201

Application:	central unit of the modular fieldbus system		
Power supply:	+24 V DC (\pm 10 %), max. power consumption 1750 mW (only RM 201) The GND (\perp) of the 24 V DC supply has to be connected to the protective earth(PE). The module supplies all I/O modules with the required voltages; the max. current consumption is 1.5 A (depending on the I/O modules used).		
Microprocessor:	SAB-C505C with 20 MHz		
Memory:	 32 kByte static RAM 64 kByte EPROM 8 kByte EEPROM 		
CAN-Bus:	 Full-CAN-Controller according to CAN-specification V2.0 A (CAN-specification V2.0 B on request) physical connection according to ISO 11898 galvanic isolation via High-Speed-Opto-coupler Transmission data rate: 10, 20, 50, 100, 125, 250, 500, 800 and 1000 kBaud automatic baud rate scanning Range of node numbers: 0127 (142 in use of default mappings) switchable termination resistor Process-Data-Objects (PDOs): Receive ≤ 5 Transmit ≤ 10, max. 5 requestable per 'Remote Transmit Request' 		
CAN-Protocol:	The device operates according to the regulations DS301 and parts of DSP404 passed by the CiA as a CANopen slave.		
Protection:	The noise immunity of the CAN bus is considerably improved by a current-compensated choke. The power supply connection is protected against external interferences such as		
Alarm output:	voltage peaks by different EMC sources. The module has an alarm relay output to release for example an emergency stop in case of defined events. These events can be parameterized via CANopen. Alarm relay: max. working voltage for a safe protective insulation according to EN61010-1 with pollution degree 2 and overvoltage category II: 150 V change-over-contact rating: AC: Pmax = 750 W, 5 A DC: Pmax = 120 W, 120 V, 5 A		
LED displays:	 1x 'Transmit' (yellow): transmission of a message via CANopen 1x 'Receive' (yellow): receipt of a CANopen message 1x 'Power' (green): state of the supply voltage 1x 'Alarm' (red): state of the alarm relays 		
Galvanic isolation:	The power supply, CAN bus and logic areas are galvanic-isolated from each other (isolation voltage 500 V DC).		
Temperature range:	 Storage temperature: -20 +70 °C Ambient temperature: 0 +50 °C 		
Humidity:	≤ 75% rel. humidity, no condensation		
Shock sensitivity:	DIN 40046 IEC68-2-69		
EMC:	 DIN EN 50081 Part 2 DIN EN 50082 Part 2 DIN EN 61326 		
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:	100 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		