

Technical data sheet

Modular connection unit

Part no.: 50114154

MA 235i CANopen Gateway

Contents

- Technical data
- Electrical connection
- Operation and display
- Accessories



For illustration purposes only



Technical data

Basic data

Series	MA 2xxi
Suitable for	BCL 2x series bar code readers
	BCL 8 series bar code readers
	BPS 8 series bar code positioning system
	DCR 200i series stationary 2D-code readers
	FIS series mobile 2D-code readers
	HFxx series mobile RFID read/write systems
	HS 65x8
	IT 1900g series mobile 2D-code readers
	IT 1902g series mobile 2D-code readers
	IT 1910 series mobile 2D-code readers
	IT 1911i series mobile 2D-code readers
	LSIS 222 series stationary 2D-code readers
	RFI
	RFM

Electrical data

Performance data	
Supply voltage U_B	18 ... 30 V, DC
Current consumption, max.	300 mA

Interface

Type	RS 232, CANopen
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Connection

Number of connections	6 Piece(s)
Connection 1	
Function	Connection to device
Type of connection	Plug connector
Connection 2	
Function	BUS OUT
Type of connection	Connector
Thread size	M12
Type	Female
Material	Plastic
No. of pins	4 -pin
Encoding	D-coded
Connection 3	
Function	BUS IN
Type of connection	Connector
Thread size	M12
Type	Female
Material	Metal
No. of pins	4 -pin
Encoding	D-coded

Connection 4

Function	Voltage supply
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

Connection 5

Function	Voltage supply
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

Connection 6

Function	Service interface
Type of connection	Sub-D
No. of pins	9 -pin

Mechanical data

Design	Cubic
Dimension (W x H x L)	107 mm x 40 mm x 180 mm
Housing material	Metal
Net weight	700 g
Housing color	Red, RAL 3000
Type of fastening	Through-hole mounting

Operation and display

Type of display	LED
Number of LEDs	2 Piece(s)

Environmental data

Ambient temperature, operation	0 ... 55 °C
Ambient temperature, storage	-20 ... 60 °C
Relative humidity (non-condensing)	5 ... 90 %

Certifications

Degree of protection	IP 65
Approvals	c UL US

Technical data

Customs tariff number	85176200
ECLASS 5.1.4	27379201
ECLASS 8.0	27379201
ECLASS 9.0	27069190
ECLASS 10.0	27069190
ECLASS 11.0	27069090
ECLASS 12.0	27069090
ECLASS 13.0	27069090
ECLASS 14.0	27069090
ECLASS 15.0	27069090
ECLASS 16.0	27069090
ETIM 5.0	EC001855
ETIM 6.0	EC001855
ETIM 7.0	EC001855
ETIM 8.0	EC001855
ETIM 9.0	EC001855
ETIM 10.0	EC001855

Electrical connection

Connection 1

Leuze device

Function	Connection to device
Type of connection	Plug connector
No. of pins	10 pins -pin
	12 pins -pin
	6 pins -pin

Connection 2

BUS OUT

Function	BUS OUT
Type of connection	Connector
Thread size	M12
Type	Female
Material	Plastic
No. of pins	4 -pin
Encoding	D-coded

Pin Pin assignment

1	TD+
2	RD+
3	TD-
4	RD-

Connection 3

BUS IN

Function	BUS IN
Type of connection	Connector
Thread size	M12
Type	Female
Material	Metal
No. of pins	4 -pin
Encoding	D-coded

Electrical connection

Pin	Pin assignment
1	TD+
2	RD+
3	TD-
4	RD-

Connection 4	PWR
Function	Voltage supply
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

Pin	Pin assignment
1	VCC
2	SWIO 2
3	GND
4	SWIO 1
5	FE

Connection 5	PWR
Function	Voltage supply
Type of connection	Connector
Thread size	M12
Type	Male
Material	Metal
No. of pins	5 -pin
Encoding	A-coded

Pin	Pin assignment
1	V_IN
2	SWIO 2
3	GND
4	SWIO 1
5	FE

Connection 6	SERVICE
Function	Service interface
Type of connection	Sub-D
No. of pins	9 -pin
Type	Male

Electrical connection

Pin	Pin assignment
1	n.c.
2	RxD Service
3	TXD service
4	n.c.
5	GND
6	n.c.
7	n.c.
8	n.c.
9	n.c.

Operation and display

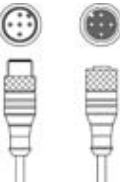
LED	Display	Meaning
1	Green, continuous light	BUS OK
	Red, continuous light	Bus error
2	Green, continuous light	Operational readiness
	Red, continuous light	Device error
3	Off	None.
	Off	None.
4	Off	None.
	Off	None.

Accessories

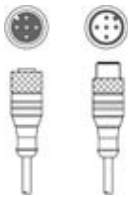
Connection technology - Connection cables

	Part no.	Designation	Article	Description
	50114696	KB DN/CAN-5000 BA	Connection cable	Application: Oil and lubricant resistant Suitable for interface: DeviceNet, CANopen Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connector, LED: No Connection 2: Open end Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR
	50132079	KD U-M12-5A-V1-050	Connection cable	Application: Chemical resistant Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connector, LED: No Connection 2: Open end Shielded: No Cable length: 5,000 mm Sheathing material: PVC

Connection technology - Interconnection cables

	Part no.	Designation	Article	Description
	50114698	KB DN/CAN-5000 SBA	Interconnection cable	Application: Chemical resistant Suitable for interface: DeviceNet, CANopen Connection 1: Connector, M12, Axial, Male, A-coded, 5 -pin Connection 2: Connector, M12, Axial, Female, A-coded, 5 -pin Shielded: Yes Cable length: 5,000 mm Sheathing material: PUR

Accessories

	Part no.	Designation	Article	Description
	50133298	KDS U-M12-5A-M12-5A-V1-050	Interconnection cable	Application: Chemical resistant Connection 1: Connector, M12, Axial, Female, A-coded, 5 -pin Connection 2: Connector, M12, Axial, Male, A-coded, 5 -pin Shielded: No Cable length: 5,000 mm Sheathing material: PVC

Connection technology - Terminating resistors

	Part no.	Designation	Article	Description
	50040099	TS 01-5-SA	Terminator plug	Suitable for: DeviceNet, CANopen Function: Bus termination Connection 1: Connector, M12, Axial, Male, A-coded, 5 -pin

Note	
	A list with all available accessories can be found on the Leuze website in the Download tab of the article detailed page.