



8170B01

TX-I/O™

TX-I/O Assortment overview TX..1...

For DESIGO V2.37 and V4

TX-I/O modules can be connected to all automation stations equipped with P-Bus by means of a TXB1.PBUS interface module, if the automation station supports the I/O functions used in the modules.

Related information can be found in the function descriptions and the tools of the building automation and control systems.

Compatibility

Direct island bus integration

Integration via P-Bus BIM

The TX-I/O module system is compatible with the following systems:

- DESIGO V4 or higher
- DESIGO V2.37 or higher
- UNIGYR V3 or higher
- VISONIK BPS V12 or higher (PRV1 V6 or higher)

Modules and functions

The following functions are available in the TX-IO modules:

Signal type	Description			Number of I/O points per function	Max. number of functions per module										
		IB	BIM		TXM1.8D	TXM1.16D	TXM1.8U	TXM1.8U-ML	TXM1.8X	TXM1.8X-ML	TXM1.8P	TXM1.6R	TXM1.6R-M		
	IB Direct island bus integration BIM Integration via P-Bus BIM														
Digital inputs															
D20 / BIM D20R	Status indication, volt-free maintained contact, N/O (BIM also N/C)	X	X	1	8	16	8	8	8	8					
D20S	Status indication, volt-free pulsed contact, N/O	X	X	1	8	16	8	8	8	8					
C	Count, volt-free pulse contact, mechanic or electronic, normally open, max. 10 Hz, with debouncing max. 25 Hz, with debouncing IB electronic max. 100 Hz	X	X	1	8	8									
		X	X	1			8	8	8	8					
		X		1			8	8	8	8					
Analog inputs															
Pt100_4	Temperature Pt100 Ω (4-wire)	X		1										8	
P100 (4-wire)	Resistance 250 Ω and temp. Pt 100	(X)	X	1										8	
R250 (2-wire)	Resistance 250 Ω	X		1										8	
Pt1K 375	Temperature Pt 1000	X		1			8	8	8	8	8				
Pt1K 385	Temperature Pt 1000	X		1			8	8	8	8	8				
Ni1K	Temperature LG-Ni 1000	X		1			8	8	8	8	8				
R2K5	Resistance 2500 Ω	X		1			8	8	8	8	8				
R1K	Temperature LG-Ni 1000	X	X	1			8	8	8	8	8				
P1K	Resistance 2500 Ω and temp. Pt 1000	X	X	1			8	8	8	8	8				
NTC10 K	Temperature NTC 10 K	X		1			8	8	8	8					
NTC100 K	Temperature NTC 100 K	X		1			8	8	8	8					
T1	Temperature T1 (PTC)	X	X	1			8	8	8	8					
U10	Voltage DC 0 .. 10V	X	X	1			8	8	8	8					
I420	Current DC 4 .. 20 mA	X	X	1					8	8					
I25	Current DC 0...20 mA (25 mA see CM10563)	X	X	1					8	8					
Digital outputs															
Q250	Maintained contact, changeover switch	X	X	1										6	6
Q250A-P / Q250-P	On/off pulse (N/O and N/C contact)	X	X	2										3	3
Q-M3	Maintained contact, three-stage	X	X	3										2	2
Q-M1...M4	Maintained contact, 1...4-stage	X		1...4									
Q250-P3	Pulse, three-stage	X	X	4										1	1
Q250-P1...P5	Pulse, 1...5-stage	X		2...6									
Y250T	Pulse, control signal, three-position output, internal stroke algorithm	X	X	2										3	3
Analog outputs															
Y10S	Proportional control signal DC 0..10 V	X	X	1			8	8	8	8					
Y420	Proportional control signal DC 4 ... 20 mA	X	X	1					4	4					
Indication and local override															
	Local override							X		X					X
	LCD display							X		X					
	Green I/O status LEDs				X	X	X	X	X	X	X	X	X		
	3-color I/O status LEDs (if supported by signal type)	X													X

Example of a Read operation

The Y250T function (control signal, three-position output) uses 2 I/O points. One TXM1.6R relay module can accommodate 3 devices.

Type summary, documentation

	Type (ASN No.)	Description	Document
I/O modules	TXM1.8D	Digital input module, 8 I/O points	CM2N8172
	TXM1.16D	Digital input module, 16 I/O points	CM2N8172
	TXM1.8U	Universal module	CM2N8173
	TXM1.8U-ML	Universal module with local override facility and LCD	CM2N8173
	TXM1.8X	Super universal module	CM2N8174
	TXM1.8X-ML	Super universal module with local override facility and LCD	CM2N8174
	TXM1.6R	Relay module	CM2N8175
	TXM1.6R-M	Relay module with local override facility	CM2N8175
	TXM1.8P	Resistance measuring module	CM2N8176
I/O OPEN	TXI1.OPEN	TX OPEN RS232/485 module	CM2N8185
Power supply	TXS1.12F10	Power supply module 1.2 A, fuse 10A	CM2N8183
	TXS1.EF10	Bus connection module, fuse 10A	CM2N8183
Bus interface	TXB1.P-BUS	P-Bus Interface module with power supply 1.2A, fuse 10A	CM2N8180
Island bus expansion	TXA1.IBE	Island bus expansion module	CM2N8184
Address keys	TXA1.K12	Address keys 1 ... 12 + reset key	CM110562
	TXA1.K24	Address keys 1 ... 24 + 2 reset keys	
	TXA1.K-48	Address keys 25 ... 48 + 2 reset keys	
	TXA1.K-72	Address keys 49 ... 72 + 2 reset keys	
	TXA1.K-96	Address keys 73 ... 96 + 2 reset keys	
	TXA1.K-120	Address keys 97 ... 120 + 2 reset keys	
	TXA1.5K120	Address keys 5, 10, 15 ... 120 + 2 reset keys	
Address labels	TXA1.LA4	Address label sheets A4 (100 pcs. per box)	CM110562
	TXA1.LLT	Address label sheets Letter (100 pcs. per box)	CM110562
	TXA1.LH	Spare transparent label holders (10 pcs. per box)	
Engineering		TX-I/O™ Functions and operation	CM110561
		TX-I/O™ Planning and installation manual	CM110562
		Replacement of legacy I/O modules	CM110563
		Engineering documents V2.37	CM110641 ff
		Engineering documents V4	CM111001 ff
Dimensions L x W x H		I/O modules	64 x 98 x 70 mm
		Power supply module, I/O OPEN module	96 x 98 x 70 mm
		Bus connection module, Island bus expansion module	32 x 98 x 70 mm
		P-Bus Interface module	128 x 98 x 70 mm