





I/O system for connectivity in automation

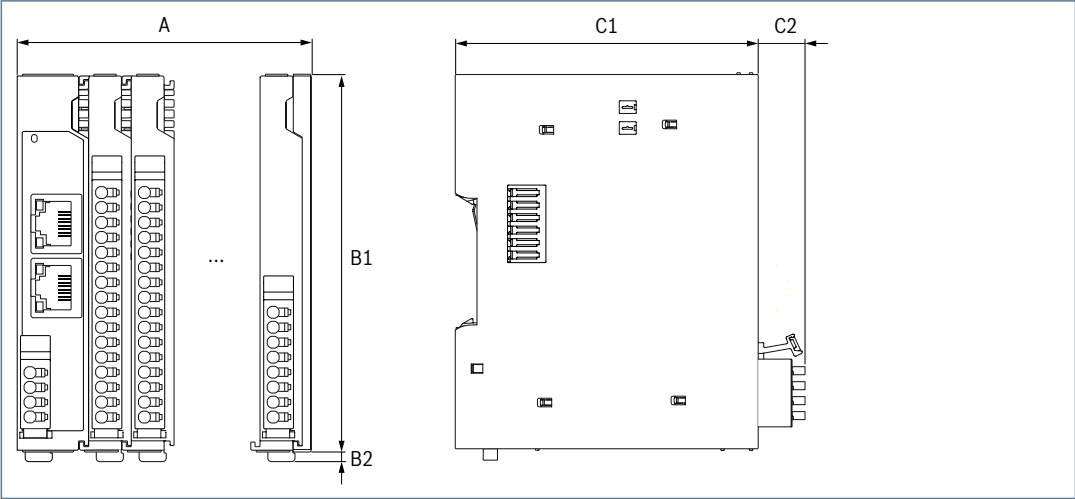


Connectivity is the foundation for a successful digital factory. Smooth communication between machines, systems and operators via an I/O system enables the full potential of automation to be exploited. Networking is essential for smart processes and new business models. The ctrlX I/O portfolio expands ctrlX AUTOMATION with additional interfaces to the field and control levels. The ctrlX I/O portfolio is based on EtherCAT, interface diversity and safety technology. This means that users are ideally equipped for the future and can benefit from efficiency and flexibility.

You can find more information at: www.ctrlx-automation.com/ctrlx-io

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Dimensions



Design	Unit	Bus modules XB	Digital Inputs X11	Digital Outputs X12	Analog Inputs X13	Analog Outputs X14	System modules X18
Width A	mm	XB-EC-12: 23.3 XB-EC-31, XB-ET-31: 20	12	12	12	12	12, 20
Hight B1/B2	mm	105					
Depth C1	mm	99					



Bus modules XB

Type	XB-EC-12	XB-EC-31	XB-ET-31
Part number	R911406090	R911406092	R911419351
Short description	EtherCAT Bus coupler	1 port EtherCAT extension	1 port Ethernet switchport
Number of outputs	2	1	1
Connection method	Push-in	RJ45	RJ45
Voltage supply	24 V DC	–	–
Power consumption Up	8 A	–	–
Power consumption UL	3 A	–	–

Digital Inputs XI1

Type	XI110116	XI120116	XI112108	XI110208	XI110204
Part number	R911406097	R912009221	R912009441	R911406096	R911417202
Number of inputs	16 DI	16 DI / NPN	8 DI / 8 DO	8 DI	4 DI
Connection technique	1-wire technology	1-wire technology	1-wire technology	2-wire technology	2-wire technology
Nominal voltage	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC
Max. current up per terminal point [A]	1 A	1 A	1 A	1 A	1 A
Max. net current Up module [A]	2 A	2 A	2 A	2 A	2 A
Input filter	3 ms	3 ms	3 ms	3 ms	3 ms

Digital Outputs XI2

Type	XI211116	XI221116	XI211208	XI211204
Part number	R911406102	R912009223	R911406101	R911417208
Number of outputs	16 DO	16 DO / NPN	8 DO	4 DO
Connection technique	1-wire technology	1-wire technology	2-wire technology	2-wire technology
Nominal voltage	24 V DC	24 V DC	24 V DC	24 V DC
Max. current up per terminal point	0.5 A	0.5 A	0.5 A	0.5 A
Net current module outputs	4 A	4 A	4 A	4 A

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Digital Outputs XI2

Type	XI213204	XI231302	XI232302	XI241202
Part number	R911417209	R911406103	R911420202	R911421644
Number of outputs	4 DO / 2 A	2 DOR / CO / 1 A	2 DOR / CO / 2 A	2 DO PWM
Connection technique	2-wire technology	3-wire technology	3-wire technology	2-wire technology
Nominal voltage	24 V DC	12 to 250 V AC 12 to 300 V DC	12 to 250 V AC 12 to 300 V DC	24 V DC
Max. current up per terminal point	2 A	1 A	2 A	0.5 A
Net current module outputs	8 A	2 A	4 A	1 A

Analog Inputs XI3

Type	XI312204	XI322204	XI332204
Part number	R911406105	R911406104	R911406106
Number of inputs	4	4	4
Connection technique	0–10 V	-10–10 V	0–20 mA
Connection technique	2-wire technology, shielded, twisted in pairs	2-wire technology, shielded, twisted in pairs	2-wire technology, shielded, twisted in pairs
Resolution A/D	16 bits incl. sign	16 bits incl. sign	16 bits incl. sign
A/D Conversion time	100 µs	100 µs	100 µs

Analog Inputs XI3

Type	XI342204	XI361002	XI351002
Part number	R911406107	R911406108	R911406109
Number of inputs	4	2	2
Connection technique	4-20 mA	B, E, J, K, L, N, R, S, T, U	PT100, PT200, PT500, PT1000 (characteristic curve PT385 for all platinum sensors), NI100, NI120, NI500, NI1000 (characteristic curve TK6180 for all nickel sensors), NI1000 (characteristic curve TK5000), KTY81-110, KTY 81-210, KTY 84, resistance measurement
Connection technique	2-wire technology, shielded, twisted in pairs	2-wire technology, shielded, twisted in pairs	2-, 3-wire technology, shielded, twisted
Resolution A/D	16 bits incl. sign	24 bits	24 bits
A/D Conversion time	100 µs	–	–

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Analog Outputs XI4

Type	XI412202	XI412204	XI422202	XI422204
Part number	R911406110	R911406116	R911406113	R911406117
Number of outputs	2	4	2	4
Output signal	0–10 V	0–10 V	-10–10 V	-10–10 V
Connection technique	2-wire technology bipolar, shielded, twisted in pairs	2-wire technology bipolar, shielded, twisted in pairs	2-wire technology bipolar, shielded, twisted in pairs	2-wire technology bipolar, shielded, twisted in pairs
Resolution D/A	16 Bit	16 Bit	16 Bit	16 Bit
Process data update	250 µs	250 µs	250 µs	250 µs

Analog Outputs XI4

Type	XI432202	XI432204	XI442202	XI442204
Part number	R911406111	R911406115	R911406112	R911406114
Number of outputs	2	4	2	4
Output signal	0–0 mA	0–20 mA	4–20 mA	4–20 mA
Connection technique	2-wire technology bipolar, shielded, twisted in pairs	2-wire technology bipolar, shielded, twisted in pairs	2-wire technology bipolar, shielded, twisted in pairs	2-wire technology bipolar, shielded, twisted in pairs
Resolution D/A	16 Bit	16 Bit	16 Bit	16 Bit
Process data update	250 µs	250 µs	250 µs	250 µs

System moduls XI8

Type	XI811101	XI812101	XI813101	XI821116
Part number	R911406093	R911406094	R912009610	R911406125
Short description	passive power feeder for periphery circuit (UP) DC 24 V / 8A	active power feeder for periphery circuit (UP) DC 24 V / 8A	active power feeder for periphery circuit (UP) DC 24 V / 8A and logic circuit (UL) 3A	Potential distribution, 16x GND
Number of outputs	–	–	–	16
Nominal voltage	24 V DC	24 V DC	24 V DC	–
Power consumption Up	8 A	8 A	8 A	–
Power consumption UL	–	–	3 A	–
Max. current per channel	–	–	–	1 A
Max. net current Up module	–	–	–	4 A
Width A	20 mm	20 mm	20 mm	12 mm

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System moduls XI8

Type	XI822116	XI824116	XI841000	XI842000
Part number	R911406123	R911406122	R911406126	R911406128
Short description	Potential distribution, 16x 24 VDC	Potential distribution, 8x 24 VDC, 8x GND	Blank housing 12 mm	Blank housing 20 mm
Number of outputs	16	16	–	–
Nominal voltage	–	–	–	–
Power consumption Up	–	–	–	–
Power consumption UL	–	–	–	–
Max. current per channel	1 A	1 A	–	–
Max. net current Up module	4 A	4 A	–	–
Width A	12 mm	12 mm	12 mm	20 mm

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