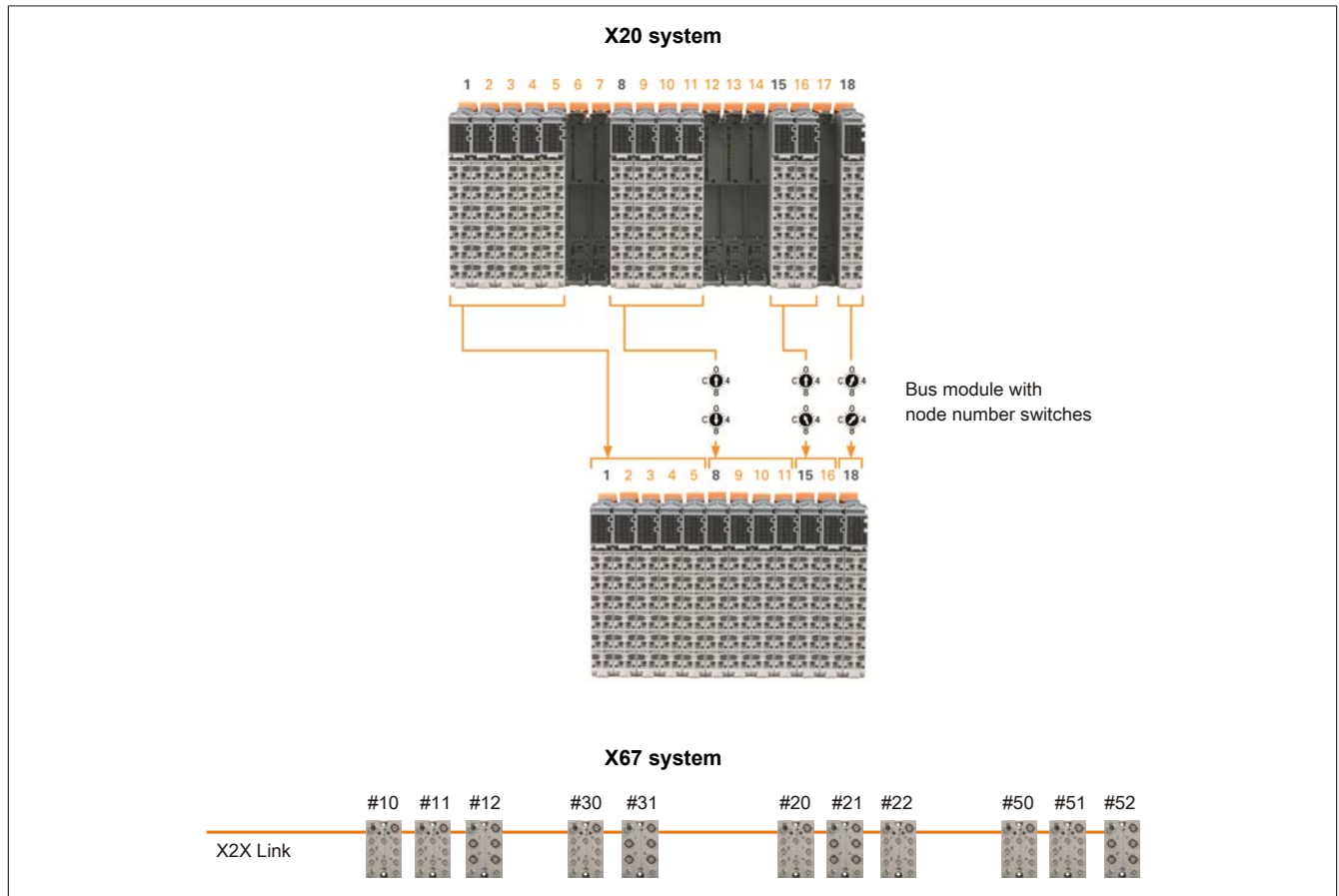


Configurable X2X Link address

The remote X2X Link backplane, which connects the individual I/O modules with each other, is set up to be self-addressing. Because of this, it is not necessary to set the node numbers. The module address is assigned according to its position in the X2X Link line.

In certain cases, e.g. when configurations of modular machines change, it is necessary to define specific module groups at a fixed address, regardless of the preceding modules in the line.

For this purpose, there are modules in both the X20 system and the X67 system with node number switches that allow the X2X Link address to be set. All subsequent modules refer to this offset and use it automatically for addressing purposes.



4 Module overviews

4.1 Standard modules

4.1.1 Module overview: Alphabetical

Order number	Module type	Description	Special functions
X67AI1223	Analog input module	• 4 inputs, ±10 V, 12-bit converter resolution	• Configurable input filter • Open-circuit detection
X67AI1233	Analog input module	• 4 inputs, ±10 V, 16-bit converter resolution	• Configurable input filter • Open-circuit detection
X67AI1323	Analog input module	• 4 inputs, 0 to 20 mA or 4 to 20 mA, 12-bit converter resolution	• Configurable input filter
X67AI1333	Analog input module	• 4 inputs, 0 to 20 mA or 4 to 20 mA, 16-bit converter resolution	• Configurable input filter
X67AI2744	Analog input module	• 2 full-bridge strain gauge inputs, 10 V, 24-bit converter resolution	
X67AI4850	Analog input module	• 4 potentiometer displacement gauges, 14-bit converter resolution	
X67AM1223	Analog mixed module	• 2 analog inputs • 2 analog outputs, ±10 V, 12-bit converter resolution	• Configurable input filter • Open-circuit detection on the inputs
X67AM1323	Analog mixed module	• 2 analog inputs • 2 analog outputs, 0 to 20 mA, 12-bit converter resolution	• Configurable input filter
X67AO1223	Analog output module	• 4 outputs, ±10 V, 12-bit converter resolution	
X67AO1323	Analog output module	• 4 outputs, 0 to 20 mA, 12-bit converter resolution	
X67AT1311	Temperature input module	• 4 resistance measurement inputs, Pt100, resolution 0.01K	• 2- or 4-wire measurement
X67AT1322	Temperature input module	• Resistance measurement inputs, Pt100, Pt1000, KTY10, KTY84, resolution 0.1 K	• 2- or 4-wire measurement
X67AT1402	Temperature input module	• 4 thermocouple inputs, type J, K, N, R, S, resolution 0.1 K	
X67BC4321-10	Bus controller	• 1 CANopen interface • X2X Link power supply 3 W • M8 connectors	• Integrated digital mixed module X67DM1321 • CAN bus galvanically isolated
X67BC4321.L08-10	Bus controller	• 1 CANopen interface • X2X Link power supply 15 W • M8 connectors	• Integrated digital mixed module X67DM1321.L08 • CAN bus galvanically isolated • High-density module
X67BC4321.L12-10	Bus controller	• 1 CANopen interface • X2X Link power supply 15 W • M12 connectors	• Integrated digital mixed module X67DM1321.L12 • CAN bus galvanically isolated • High-density module
X67BC5321	Bus controller	• 1 DeviceNet interface • X2X Link power supply 3 W • M8 connectors	• Integrated digital mixed module X67DM1321
X67BC6321	Bus controller	• 1 PROFIBUS DP interface • X2X Link power supply 3 W • M8 connectors	• Integrated digital mixed module X67DM1321
X67BC6321.L08	Bus controller	• 1 PROFIBUS DP interface • X2X Link power supply 15 W • M8 connectors	• Integrated digital mixed module X67DM1321.L08 • High-density module
X67BC6321.L12	Bus controller	• 1 PROFIBUS DP interface • X2X Link power supply 15 W • M12 connectors	• Integrated digital mixed module X67DM1321.L12 • High-density module
X67BC7321-1	Bus controller	• 1 CAN I/O interface • X2X Link power supply 3 W • M8 connectors	• Integrated digital mixed module X67DM1321 • Extended CAN I/O functionality

Order number	Module type	Description	Special functions
X67BC81RT.L12	Bus controller reACTION Technology module	<ul style="list-style-type: none"> • 2 POWERLINK interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • 2 digital inputs, 24 VDC, <1 µs, • 3 digital inputs/outputs, 5 VDC, <1 µs • 2 digital inputs/outputs, 24 VDC, 0.4 A, <1 µs • 2 analog inputs ±10 V, 5 µs 200 kHz sampling frequency, 13-bit converter resolution, configurable input filter • 1 analog output ±10 V, 2.5 µs, 13-bit converter resolution • High-density module
X67BC8321-1	Bus controller	<ul style="list-style-type: none"> • 1 POWERLINK interface • X2X Link power supply 3 W • M8 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321
X67BC8321.L12	Bus controller	<ul style="list-style-type: none"> • 1 POWERLINK interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321.L12 • High-density module
X67BC8331	Bus controller	<ul style="list-style-type: none"> • 1 POWERLINK interface • X2X Link power supply 3 W • M8 connectors 	<ul style="list-style-type: none"> • 8 digital inputs/outputs, 24 VDC, 2 A, configurable input filter
X67BC8513.L12	Bus controller	<ul style="list-style-type: none"> • POWERLINK interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • 12 digital inputs/outputs, 24 VDC, 0.5 A, configurable input filter, 1 event counter 50 kHz • 1 analog input, 0 to 20 mA, 12-bit converter resolution • High-density module
X67BC8513.L12-1	Bus controller	<ul style="list-style-type: none"> • 1 POWERLINK interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • 6 digital input channels • 6 digital output channels, 24 VDC, 0.5 A, propagation delay measurement • 1 analog input, 0 to 20 mA, 12-bit converter resolution, configurable analog input filter • High-density module
X67BC8780.L12	Bus controller	<ul style="list-style-type: none"> • POWERLINK interface • 1x CAN interface • M12 connectors 	<ul style="list-style-type: none"> • CAN interface with active wiring aid for 8x connections (star wiring) • High-density module
X67BCD321.L12	Bus controller	<ul style="list-style-type: none"> • EtherNet/IP interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321.L12 • High-density module
X67BCD321.L12-1	Bus controller	<ul style="list-style-type: none"> • 1 EtherNet/IP interface • X2X Link power supply 15 W • M12 connectors - pinning variant 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321.L12 • High-density module
X67BCE321.L12	Bus controller	<ul style="list-style-type: none"> • 1 PROFINET interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321.L12 • High-density module
X67BCG321.L12	Bus controller	<ul style="list-style-type: none"> • 1 EtherCAT interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321.L12 • High-density module
X67BCJ321.L12	Bus controller	<ul style="list-style-type: none"> • 1 Modbus TCP/UDP interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321.L12 • High-density module
X67DC1198	Digital counter module	<ul style="list-style-type: none"> • 2x 3 inputs 5 V for SSI 1 Mbit/s or ABR 250 kHz, • 8 digital inputs/outputs 24 VDC, 0.1 A • Optionally configurable: <ul style="list-style-type: none"> – 8 inputs/outputs – 4 AB counters, 100 kHz – 4 comparator outputs – 2 PWM outputs 	<ul style="list-style-type: none"> • Local time measurement functions
X67DC2322	Resolver module	<ul style="list-style-type: none"> • 2x 14-bit resolver input BRX/BRT • 2 digital inputs, 24 VDC, sink • 2 digital outputs, 0.5 A, source 	
X67DI1371	Digital input module	<ul style="list-style-type: none"> • 8 inputs, 24 VDC, sink 	<ul style="list-style-type: none"> • Input filter 1 ms
X67DI1371.L08	Digital input module	<ul style="list-style-type: none"> • 16 inputs, 24 VDC, sink • M8 connectors 	<ul style="list-style-type: none"> • Input filter 1 ms • High-density module
X67DI1371.L12	Digital input module	<ul style="list-style-type: none"> • 16 inputs, 24 VDC, sink • M12 connectors 	<ul style="list-style-type: none"> • Input filter 1 ms • High-density module
X67DI1372	Digital input module	<ul style="list-style-type: none"> • 8 inputs, 24 VDC, source 	<ul style="list-style-type: none"> • Input filter 1 ms
X67DM1321	Digital mixed module	<ul style="list-style-type: none"> • 8 digital inputs/outputs, 24 VDC, 0.5 A 	<ul style="list-style-type: none"> • Configurable input filter • 2 event counters, 50 kHz
X67DM1321.L08	Digital mixed module	<ul style="list-style-type: none"> • 16 digital inputs/outputs, 24 VDC, 0.5 A • M8 connectors 	<ul style="list-style-type: none"> • Configurable input filter • 2 event counters, 50 kHz • High-density module
X67DM1321.L12	Digital mixed module	<ul style="list-style-type: none"> • 16 digital inputs/outputs, 24 VDC, 0.5 A • M12 connectors 	<ul style="list-style-type: none"> • Configurable input filter • 2 event counters, 50 kHz • High-density module

Module overviews

Order number	Module type	Description	Special functions
X67DM1321.L12-1	Digital mixed module	<ul style="list-style-type: none"> • 16 digital inputs/outputs, 24 VDC, 0.5 A • M12 connectors - pinning variant 	<ul style="list-style-type: none"> • Configurable input filter • 2 event counters, 50 kHz • High-density module
X67DM9321	Digital mixed module	<ul style="list-style-type: none"> • 8 digital inputs/outputs, 24 VDC, 0.5 A • X2X Link address switch 	<ul style="list-style-type: none"> • Configurable input filter • 2 event counters, 50 kHz
X67DM9321.L12	Digital mixed module	<ul style="list-style-type: none"> • 16 digital inputs/outputs, 24 VDC, 0.5 A • M12 connectors, • X2X Link address switch 	<ul style="list-style-type: none"> • Configurable input filter • 2 event counters, 50 kHz • High-density module
X67DM9331.L12	Digital mixed module	<ul style="list-style-type: none"> • 8 digital inputs/outputs, 24 VDC, 2 A • M12 connectors • X2X Link address switch 	<ul style="list-style-type: none"> • Configurable input filter • Single-channel sensor/actuator power supply monitoring • High-density module
X67DO1332	Digital output module	<ul style="list-style-type: none"> • 8 digital outputs, 24 VDC, 2 A 	<ul style="list-style-type: none"> • Readable output status
X67DO9332.L12	Digital output module	<ul style="list-style-type: none"> • 8 outputs, 24 VDC, 2 A • M12 connectors • X2X Link address switch 	<ul style="list-style-type: none"> • Single-channel actuator power supply monitoring • High-density module
X67DS438A	Digital signal module	<ul style="list-style-type: none"> • 4x IO-Link master V1.1, also usable as digital inputs/outputs 	<ul style="list-style-type: none"> • 3-wire connections • NetTime function
X67DV1311.L08	Digital valve control module	<ul style="list-style-type: none"> • 16 digital outputs, 24 VDC, 0.1 A, 1 M16 connector • 16 digital inputs, 24 VDC, sink • M8 connectors 	<ul style="list-style-type: none"> • Configurable input filter • High-density module
X67DV1311.L12	Digital valve control module	<ul style="list-style-type: none"> • 16 digital outputs, 24 VDC, 0.1 A, 1 M16 connector • 16 digital inputs, 24 VDC, sink • M12 connectors 	<ul style="list-style-type: none"> • Configurable input filter • High-density module
X67HB8880.L12	Hub module	<ul style="list-style-type: none"> • 8-port industrial hub (layer 2), 8 to 32 VDC • M12 connectors 	
X67IF1121-1	Interface module	<ul style="list-style-type: none"> • 1 RS232 interface • 1 RS422/485 interface • 2 digital inputs/outputs, 24 VDC, 0.5 A • 2 digital inputs, 24 VDC, sink 	<ul style="list-style-type: none"> • Configurable input filter
X67MM2436	PWM motor module	<ul style="list-style-type: none"> • I/O power supply 24 to 38.5 VDC $\pm 25\%$ • 2 PWM motor bridges, 3 A continuous current, 5 A peak current • 2x 3 digital inputs 24 VDC, sink, configurable as incremental encoder 	
X67PS1300	System supply module	<ul style="list-style-type: none"> • 24 VDC • X2X Link power supply 15 W 	<ul style="list-style-type: none"> • Reverse polarity protection, short-circuit proof, overload-proof, parallel connection possible, redundancy operation possible
X67SM2436	Stepper motor module	<ul style="list-style-type: none"> • I/O power supply 24 to 38.5 VDC $\pm 25\%$ • 2 motor connections, 3 A continuous current, 5 A peak current • 2x 3 digital inputs 24 VDC, sink, configurable as incremental encoder 	<ul style="list-style-type: none"> • NetTime function
X67SM2446-1	Stepper motor module	<ul style="list-style-type: none"> • Module power supply 24 to 48 VDC $\pm 25\%$ • 2 motor connections, 4 A continuous current, 8 A peak current • 6 digital inputs 24 VDC, sink, configurable as incremental encoder 	<ul style="list-style-type: none"> • Current reduction function • NetTime function
X67SM4320	Stepper motor module	<ul style="list-style-type: none"> • I/O power supply 24 VDC $\pm 25\%$ • 4 motor connections, 1 A continuous current, 1.5 A peak current 	<ul style="list-style-type: none"> • NetTime function
X67UM1352	Universal mixed module	<ul style="list-style-type: none"> • 1 input for evaluation of full-bridge strain gauge, 24-bit converter resolution • 4 digital inputs 24 VDC, sink • 1 digital output, 0.5 A, source • 1 digital output, 1 A, source 	

4.1.2 Module overview: Grouped

4.1.2.1 Analog outputs

Order number	Module type	Description	Special functions
X67AM1223	Analog mixed module	<ul style="list-style-type: none"> • 2 analog inputs • 2 analog outputs, ± 10 V, 12-bit converter resolution 	<ul style="list-style-type: none"> • Configurable input filter • Open-circuit detection on the inputs
X67AM1323	Analog mixed module	<ul style="list-style-type: none"> • 2 analog inputs • 2 analog outputs, 0 to 20 mA, 12-bit converter resolution 	<ul style="list-style-type: none"> • Configurable input filter
X67AO1223	Analog output module	<ul style="list-style-type: none"> • 4 outputs, ± 10 V, 12-bit converter resolution 	
X67AO1323	Analog output module	<ul style="list-style-type: none"> • 4 outputs, 0 to 20 mA, 12-bit converter resolution 	

4.1.2.2 Analog inputs

Order number	Module type	Description	Special functions
X67AI1223	Analog input module	<ul style="list-style-type: none"> • 4 inputs, ± 10 V, 12-bit converter resolution 	<ul style="list-style-type: none"> • Configurable input filter • Open-circuit detection
X67AI1233	Analog input module	<ul style="list-style-type: none"> • 4 inputs, ± 10 V, 16-bit converter resolution 	<ul style="list-style-type: none"> • Configurable input filter • Open-circuit detection
X67AI1323	Analog input module	<ul style="list-style-type: none"> • 4 inputs, 0 to 20 mA or 4 to 20 mA, 12-bit converter resolution 	<ul style="list-style-type: none"> • Configurable input filter
X67AI1333	Analog input module	<ul style="list-style-type: none"> • 4 inputs, 0 to 20 mA or 4 to 20 mA, 16-bit converter resolution 	<ul style="list-style-type: none"> • Configurable input filter
X67AI2744	Analog input module	<ul style="list-style-type: none"> • 2 full-bridge strain gauge inputs, 10 V, 24-bit converter resolution 	
X67AI4850	Analog input module	<ul style="list-style-type: none"> • 4 potentiometer displacement gauges, 14-bit converter resolution 	
X67AM1223	Analog mixed module	<ul style="list-style-type: none"> • 2 analog inputs • 2 analog outputs, ± 10 V, 12-bit converter resolution 	<ul style="list-style-type: none"> • Configurable input filter • Open-circuit detection on the inputs
X67AM1323	Analog mixed module	<ul style="list-style-type: none"> • 2 analog inputs • 2 analog outputs, 0 to 20 mA, 12-bit converter resolution 	<ul style="list-style-type: none"> • Configurable input filter
X67UM1352	Universal mixed module	<ul style="list-style-type: none"> • 1 input for evaluation of full-bridge strain gauge, 24-bit converter resolution • 4 digital inputs 24 VDC, sink • 1 digital output, 0.5 A, source • 1 digital output, 1 A, source 	

4.1.2.3 Analog mixed modules

Order number	Module type	Description	Special functions
X67AM1223	Analog mixed module	<ul style="list-style-type: none"> • 2 analog inputs • 2 analog outputs, ± 10 V, 12-bit converter resolution 	<ul style="list-style-type: none"> • Configurable input filter • Open-circuit detection on the inputs
X67AM1323	Analog mixed module	<ul style="list-style-type: none"> • 2 analog inputs • 2 analog outputs, 0 to 20 mA, 12-bit converter resolution 	<ul style="list-style-type: none"> • Configurable input filter

4.1.2.4 Bus controller

Order number	Module type	Description	Special functions
X67BC4321-10	Bus controller	<ul style="list-style-type: none"> • 1 CANopen interface • X2X Link power supply 3 W • M8 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321 • CAN bus galvanically isolated
X67BC4321.L08-10	Bus controller	<ul style="list-style-type: none"> • 1 CANopen interface • X2X Link power supply 15 W • M8 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321.L08 • CAN bus galvanically isolated • High-density module
X67BC4321.L12-10	Bus controller	<ul style="list-style-type: none"> • 1 CANopen interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321.L12 • CAN bus galvanically isolated • High-density module
X67BC5321	Bus controller	<ul style="list-style-type: none"> • 1 DeviceNet interface • X2X Link power supply 3 W • M8 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321

Module overviews

Order number	Module type	Description	Special functions
X67BC6321	Bus controller	<ul style="list-style-type: none"> • 1 PROFIBUS DP interface • X2X Link power supply 3 W • M8 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321
X67BC6321.L08	Bus controller	<ul style="list-style-type: none"> • 1 PROFIBUS DP interface • X2X Link power supply 15 W • M8 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321.L08 • High-density module
X67BC6321.L12	Bus controller	<ul style="list-style-type: none"> • 1 PROFIBUS DP interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321.L12 • High-density module
X67BC7321-1	Bus controller	<ul style="list-style-type: none"> • 1 CAN I/O interface • X2X Link power supply 3 W • M8 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321 • Extended CAN I/O functionality
X67BC81RT.L12	Bus controller reACTION Technology module	<ul style="list-style-type: none"> • 2 POWERLINK interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • 2 digital inputs, 24 VDC, <1 µs, • 3 digital inputs/outputs, 5 VDC, <1 µs • 2 digital inputs/outputs, 24 VDC, 0.4 A, <1 µs • 2 analog inputs ±10 V, 5 µs 200 kHz sampling frequency, 13-bit converter resolution, configurable input filter • 1 analog output ±10 V, 2.5 µs, 13-bit converter resolution • High-density module
X67BC8321-1	Bus controller	<ul style="list-style-type: none"> • 1 POWERLINK interface • X2X Link power supply 3 W • M8 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321
X67BC8321.L12	Bus controller	<ul style="list-style-type: none"> • 1 POWERLINK interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321.L12 • High-density module
X67BC8331	Bus controller	<ul style="list-style-type: none"> • 1 POWERLINK interface • X2X Link power supply 3 W • M8 connectors 	<ul style="list-style-type: none"> • 8 digital inputs/outputs, 24 VDC, 2 A, configurable input filter
X67BC8513.L12	Bus controller	<ul style="list-style-type: none"> • POWERLINK interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • 12 digital inputs/outputs, 24 VDC, 0.5 A, configurable input filter, 1 event counter 50 kHz • 1 analog input, 0 to 20 mA, 12-bit converter resolution • High-density module
X67BC8513.L12-1	Bus controller	<ul style="list-style-type: none"> • 1 POWERLINK interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • 6 digital input channels • 6 digital output channels, 24 VDC, 0.5 A, propagation delay measurement • 1 analog input, 0 to 20 mA, 12-bit converter resolution, configurable analog input filter • High-density module
X67BC8780.L12	Bus controller	<ul style="list-style-type: none"> • POWERLINK interface • 1x CAN interface • M12 connectors 	<ul style="list-style-type: none"> • CAN interface with active wiring aid for 8x connections (star wiring) • High-density module
X67BCD321.L12	Bus controller	<ul style="list-style-type: none"> • EtherNet/IP interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321.L12 • High-density module
X67BCD321.L12-1	Bus controller	<ul style="list-style-type: none"> • 1 EtherNet/IP interface • X2X Link power supply 15 W • M12 connectors - pinning variant 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321.L12 • High-density module
X67BCE321.L12	Bus controller	<ul style="list-style-type: none"> • 1 PROFINET interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321.L12 • High-density module
X67BCG321.L12	Bus controller	<ul style="list-style-type: none"> • 1 EtherCAT interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321.L12 • High-density module
X67BCJ321.L12	Bus controller	<ul style="list-style-type: none"> • 1 Modbus TCP/UDP interface • X2X Link power supply 15 W • M12 connectors 	<ul style="list-style-type: none"> • Integrated digital mixed module X67DM1321.L12 • High-density module
X67HB8880.L12	Hub module	<ul style="list-style-type: none"> • 8-port industrial hub (layer 2), 8 to 32 VDC • M12 connectors 	