ELCO
INDUSTRIAL AUTOMATION

LogicX1/X3 Series of Compact Controller

Logic Series of PLC

The LogicX1 serias medium-sized PLC meets various needs of user's for small and medium-sized automation equipment.

The LogicX3 medium-sized motion controller is positioned as a mid to high end product in the ELCO Logic series product line, integrating medium to large-scale program volume and multi axis complex motion control functions. This product further improves ELCO's automation product system, adapts to more diverse automatic control application scenarios, and provides customers with more choices.

This series of products meets various needs of users for medium-sized automation equipment:

- Fieldbus communication
- Motion Control
- Back-plane and Fieldbus method I/O modules extension
- Information technology functions
- Follows a modular design, integrates with the FX20 series IO modules.

Based on CODESYS platform with CODESYS realtime Runtime

According to IEC 61131-3(ST/LD/FBD/SFC/CFC/IL)

By CodeSys V3.5 SP19 and later version

Type Code

Logic X1 - 0 08 N 0 0 1

ELCO Logic Series

Series Code
X1: X1 series
X3: X3 series

Number of pulse drive axes on body
0: None
4:4 axes by pusle drive

EtherCAT Axes
08: 8 axes
16: 16 axes
24: 24 axes
32: 32 axes

Digital Output Type
N: NPN
P: PNP

Additional protocol
0: None
1: RS485
2: RS232
3: RS485+RS232
4: CANopen+RS485

High Speed DI support
0: None
1: 4 Channel 200 kHz Hight Speed

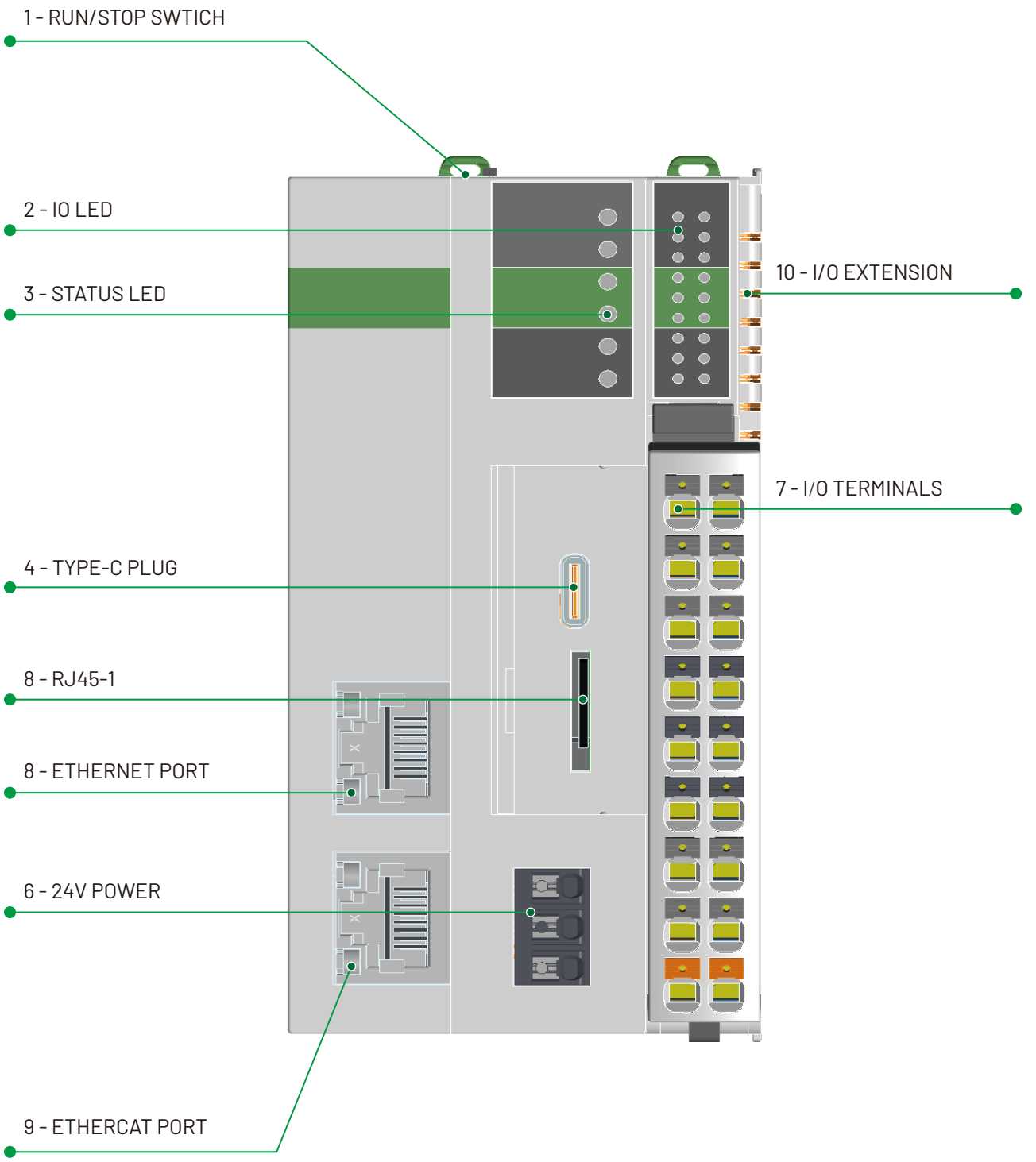
EtherCAT Port number
1: 1 EtherCAT Port
2: 2 EtherCAT Port

Recommended model for use

Oder Number	Basic function	DI	DO	DO	Counter	PTO	Serial port	EtherNet
		NPN/ PNP	NPN	PNP	200kHz	200kHz	RS485+RS232 ModbusRTU/ASCII	RJ45-1
Logic X1-008N001	8DI+8DO	8	8	/	/	/	/	ModbusTCP+OPCUA
Logic X1-008N311	8DI+8DO	8	8	/	4	/	1	ModbusTCP+OPCUA
Logic X1-008P311	8DI+8DO	8	/	8	4	/	1	ModbusTCP+OPCUA
Logic X1-408N311	8DI+8DO (4FDI+4FDO)	8	8	/	4	4	1	ModbusTCP+OPCUA
Logic X1-016N311	8DI+8DO	8	8	/	/	/	1	ModbusTCP+OPCUA
Logic X1-016P311	8DI+8DO	8	/	8	4	/	1	ModbusTCP+OPCUA
Logic X1-416N311	8DI+8DO (4FDI+4FDO)	8	8	/	4	4	1	ModbusTCP+OPCUA
Logic X3-424N311	8DI+8DO (4FDI+4FDO)	8	8	/	4	4	1	ModbusTCP+OPCUA
Logic X3-432N311	8DI+8DO (4FDI+4FDO)	8	8	/	4	4	1	ModbusTCP+OPCUA
Logic X3-024P301	8DI+8DO	8	/	8	/	/	1	ModbusTCP+OPCUA
Logic X3-032P301	8DI+8DO	8	/	8	/	/	1	ModbusTCP+OPCUA

LogicX1 PLC

Product structure

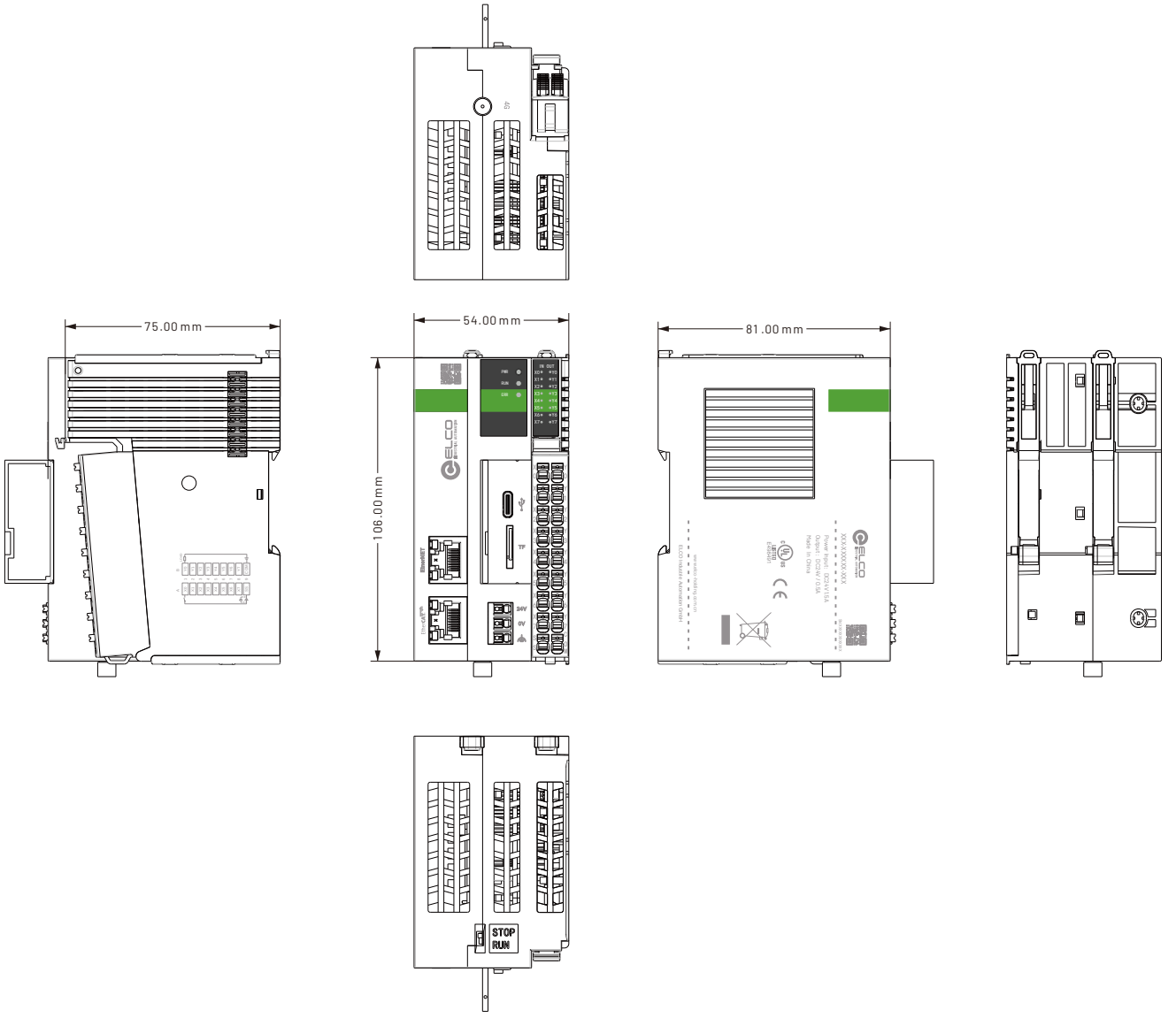


Item	Port Type	Identification	Define	Indicator color	Instruction
1	Swtich	RUN/STOP	Switch system run/stop		
2	I/O LED	IN/OUT	IO status indicator	Green	ON: Input signal 1 OFF: Input signal 0
3	Status LED	PWR	24 V Power supply OK	Green	ON: 24VDC OK OFF: Without 24VDC
		RUN	RUN WITH ERROR	Green	ON: System run OFF: System stop
		ERR	ERROR OR ALARM	Red	Flash: Error occured
		REV*3	Reserved	-	
4	Type-C plug		Used for firmware upgrade or Debugging		-
5	TF card slot	TF	Frmware upgrade or PLC code import	-	
6	24V Power	+24 V	24 V DC+	-	-
		0 V	0 V	-	-
			PE	-	-
7	IO Terminals	-	Digital I/O 16 point , SS and COM	-	-
8	EtherNet RJ45 port	EtherNet	EtherNet RJ45	-	-
9	EtherCAT RJ45 port	EtherCAT	EtherCAT RJ45	-	-
10	I/O Extension pin		Backeplane I/O extension		-

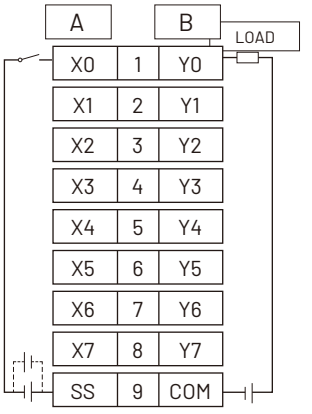
LogicX1 PLC

	
Hardware	
CPU	4-core ARM Cortex-A7 processor, up to 1.2 GHz per core
Storage capacity	16 MB program space with 2 MB variable tag space, 2 MB persistent tag space
Computing	C = NOT(A&B) 20000 times cycle : BOOL: 180 us BYTE: 195 us INT: 201 us DINT: 200 us REAL: (A = A*2+1) 264 us
EtherNet	Support Socket custom communication, program download and debugging; Modbus TCP master-slave station
EtherCAT	up to 72 EtherCAT slaves
Motion Axises(EtherCAT)	8-axis (bus cycle 1ms)/16 axis (bus cycle 4 ms)
Local digital input	max. 8
Local digital output	max. 8
Extention Modules	Supports up to 16 local back-plane expansion modules
TF Card	Firmware upgradable, user program import
Programming platform	CODESYS V3.5 SP19
Programming standard	IEC61131-3
Programming language	IEC 61131-3(ST/LD/FBD/SFC/CFC/IL)
Motion function	Part 1 , 2, functions in PLC-open specification: single axis, single axis motion, electronic cam, electronic Gearing
Type-c	System debugging, diagnosis, and upgrade
Power parameters	
Rated voltage	24 V DC±10% (21.6 V DC~26.4 V DC)
Rated current	1 A (under 24 V DC, max.)
Protection	Short circuit and reverse connection protection
Hot swappable	No
General parameters	
Usage environment	situations where there is no corrosive or flammable gas, and conductive dust (dust)
Altitude	up to 2000 m (80 kPa)
Pollution degree	Level 2
Immunity	IEC 61000-6-2
EMC anti-interference leve	Zone B, IEC61131-2
Overcurrent protection	2.5 A fuse
Storage	Storage temperature: -20 °C ... 70 °C Relative humidity: <90% RH, no condensation
Transportation	Transportation temperature: -40 °C ... 70 °C Relative humidity: <90% RH, no condensation
Working	Working temperature: -20 °C ... 55 °C Relative humidity: <90% RH, no condensation
	Attention: When the working temperature is higher than the maximum temperature, it is necessary to install a forced fan or air conditioner in the direction of the heat dissipation hole.

Product Dimension

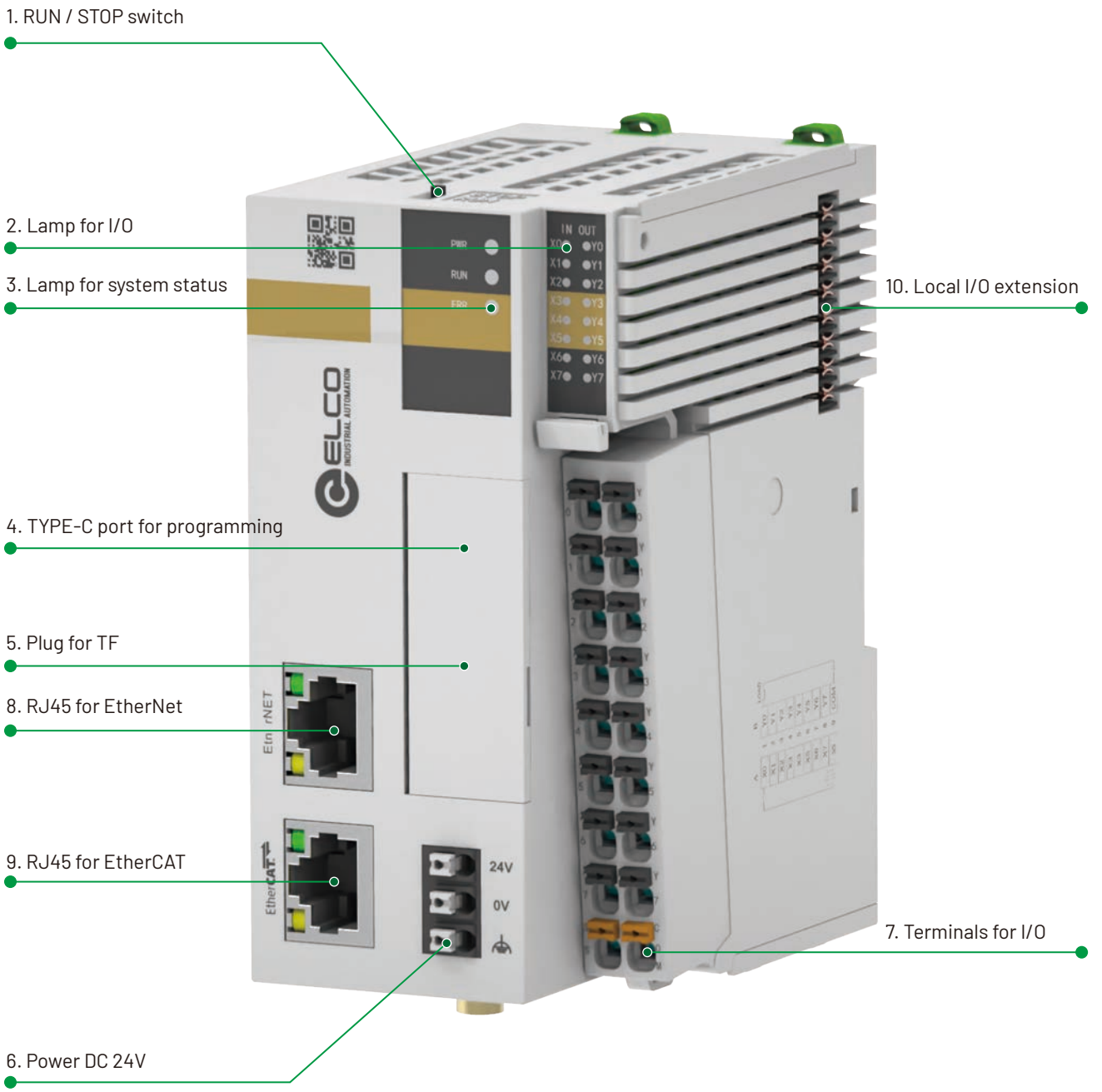


Wiring diagram



LogicX3 compact motion controller

Product structure

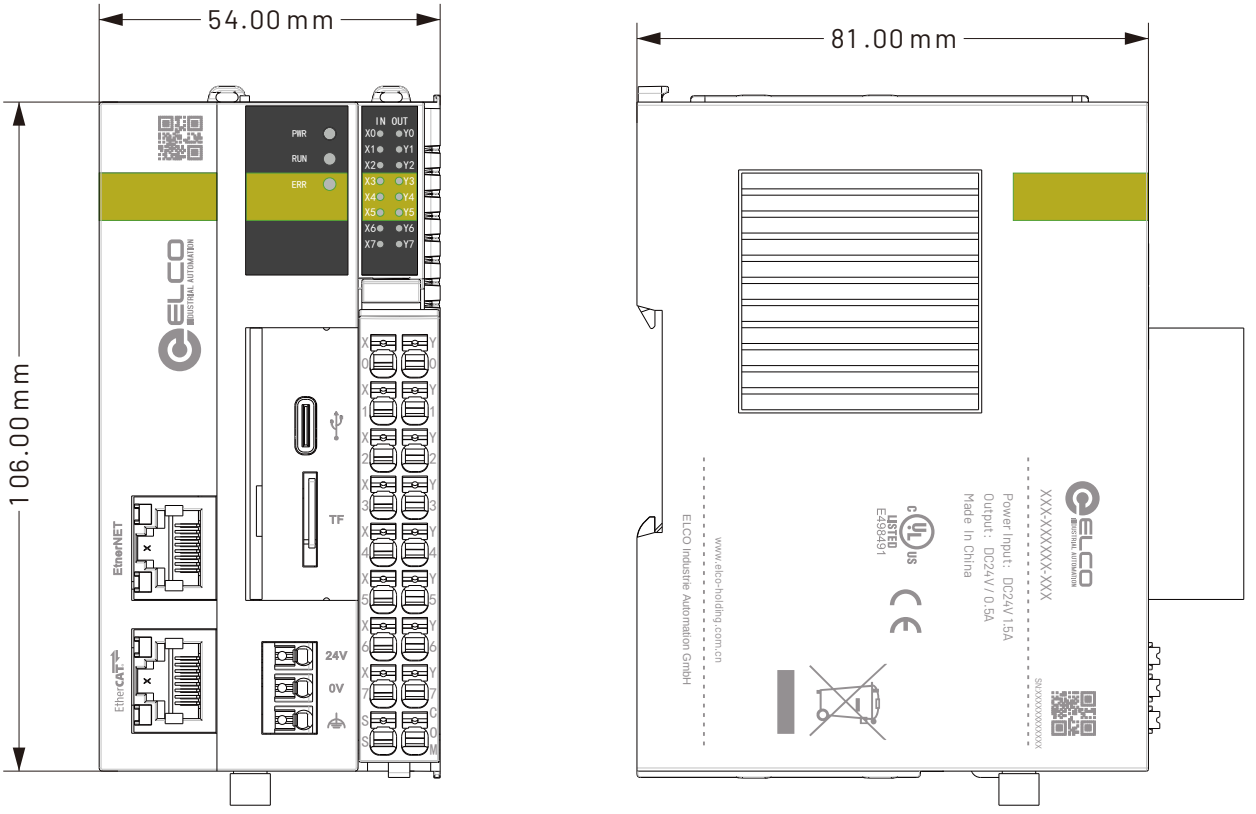


Item No	Port Type	Interface Identification	Define	Indicator Color	Instruction
1	RUN / STOP switch	RUN/STOP	Operation mode switching		
2	Lamp for I/O	IN/OUT	IO Status Display	Green	● ON: Indicates that the input or output is valid. ● OFF: Indicates invalid inputs or outputs.
3	Lamp for system status	PWR	The power supply is normal	Green	● ON: indicates normal power supply. ● OFF: Indicates abnormal power supply.
		RUN	running normally	Green	● ON: Indicates that the user program is running. ● OFF: Indicates that the user program is stopped.
		ERR	Run-time error (in computing)	Red	● OFF: Indicates no serious error. ● Flashing: Indicates a serious error has occurred.
		BUS	Bus state	Green	● OFF: EC bus is running. ● Flashing: EC bus is stopped.
4	Type-C Port		Communication with PC	-	-
5	Plug for TF	TF	Firmware Upgrade	-	-
6	Power DC 24 V	+24V	DC 24V Power Positive	-	-
		0V	DC 24V Power Supply Negative	-	-
			PE	-	-
7	Terminals for I/O	-	8 inputs, 8 outputs	-	-
8	RJ45 for EtherNet	EtherNet	Ethernet communication RJ45 interface	-	-
9	RJ45 for EtherCAT	EtherCAT	For EtherCAT communication	-	-
10	Local I/O extension		Expansion Card Slot for Expanded Functionality	-	-

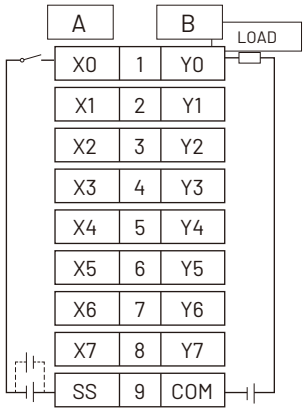
LogicX3 compact motion controller

	
Hardware parameters	
CPU	4-core ARM Cortex-A55 64 bit processor, up to 1.8 GHz
Memory	64 MB program space with 8 MB variable tag space, 4 MB persistent tag space
Program operating speed	C = NOT (A&B) 20000 cycles: BOOL: 89 µs BYTE: 100 µs INT: 101 µs DINT: 104 µs REAL: (A = A*2+1) 167 µs
EtherNet	Support socket custom communication, program on the download and debugging
EtherCAT communication	Supports 1 EtherCAT master, up to 72 EtherCAT slaves
Number of axes available (EtherCAT port)	16 axis (1 ms) / 32 axis (4 ms)
Local ordinary input	8 points
Local ordinary output	8 points
Expansion module	Supports up to 16 local expansion modules
TF card	Supports up to 1 TF card, firmware upgradeable
Programming platform	CODESYS V3.5 SP19
Programming standards	IEC61131-3
Programming language	ST (Structured Text), LD (Ladder Logic Diagram), CFC (Continuous Function Chart), FBD (Function Block Diagram), SFC (Sequential Function Chart)
Motion control library	Part 1, 2, 4 functions in PLC-open specification CNC / Robot/ Interpolation functions (linear arc helical..)
Type-C	System commissioning, diagnostics, upgrades
Power supply specifications	
Terminal input power supply rated voltage	24 V DC ± 10% (21.6 V DC~26.4 V DC)
Terminal input power supply rated current	1 A (max. at 24 V DC)
24 V input power protection	Support short circuit protection, support reverse connection protection
Module hot swap function	unsupported
General data	
Use environment	No corrosive, combustible gas, conductive dust (dust) is not serious occasions
Altitude	Up to 2000 m (80 kPa)
Pollution level	Level 2
Anti-interference degree	IEC 61000-6-2
EMC anti-interference level	Zone B, IEC61131-2
Overcurrent protection device	2.5 A fuse
Storage temperature and humidity	Storage temperature: -20 °C ... 70 °C Relative humidity: < 90%RH, no condensation
Transport temperature and humidity	Transport temperature: -40 °C ... 70 °C Relative humidity: < 90%RH, no condensation
Operating temperature and humidity	Operating temperature: -20 °C ... 55 °C Relative humidity: < 90%RH, no condensation
	Note: When the operating temperature is higher than the maximum temperature, install a forced fan or air conditioner in the direction of the heat dissipation hole.

Product Dimension



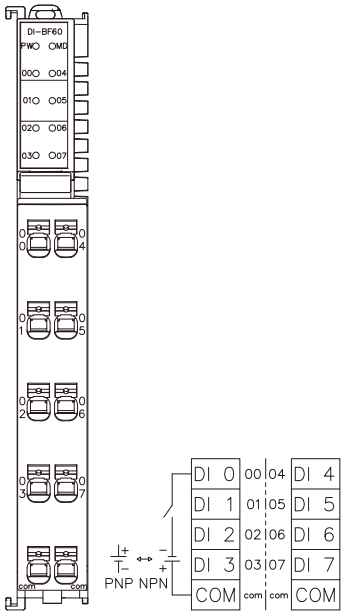
Wiring diagram



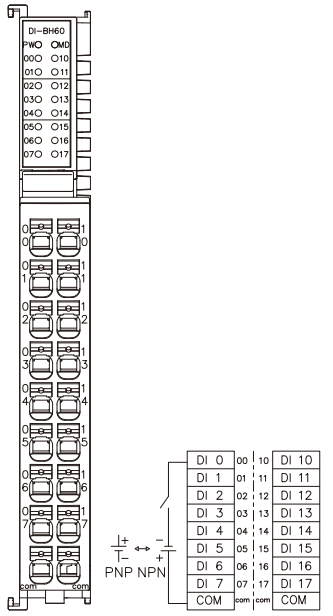
IP20 Modular I/O system - digital input module

			
Ordering data			
Product model	FX20-DI-BF60	FX20-DI-BH60	FX20-DI-BL60
Description	8-channel input PNP/NPN universal module	16-channel input PNP/NPN universal module	32-channel input PNP/NPN universal module
Electrical parameters			
Input channel	8	16	32
Input type	Universal for PNP/NPN	Universal for PNP/NPN	Universal for PNP/NPN
Input signal '0'	DC 0 ... 5 V	DC 0 ... 5 V	DC 0 ... 5 V
Input signal '1'	DC 18 ... 30 V	DC 18 ... 30 V	DC 18 ... 30 V
Input current	typ. 4 mA	typ. 4 mA	typ. 4 mA
Input filtering delay	0 ms, 1 ms, 3 ms, 10 ms	0 ms, 1 ms, 3 ms, 10 ms	0 ms, 1 ms, 3 ms, 10 ms
Current consumption (5 V)	60 mA	60 mA	60 mA
Process data length	1 byte	2 bytes	4 bytes
General data			
Protection grade	IP20		
Installation	Standard 35 mm DIN rail installation, for indoor use only		
Temperature range	Working temperature: -5 ... +60 °C, storage temperature: -25 ... +70 °C		
Working altitude	0 ... 2000 m		
Relative humidity	15%-95%, non condensation		
Module weight	63 g	63 g	128 g
Module size (H × W × D)	79 mm × 15 mm × 110 mm	79 mm × 15 mm × 110 mm	79 mm × 28 mm × 110 mm
Wiring diagram			

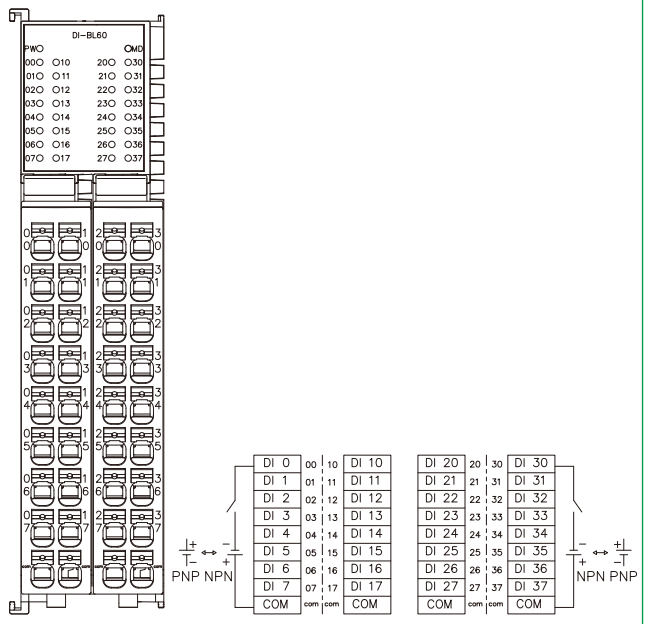
FX20-DI-BF60



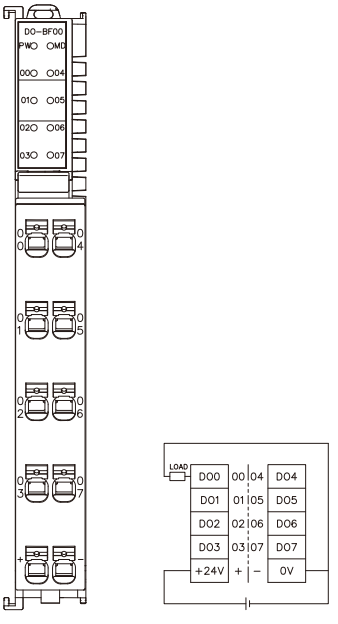
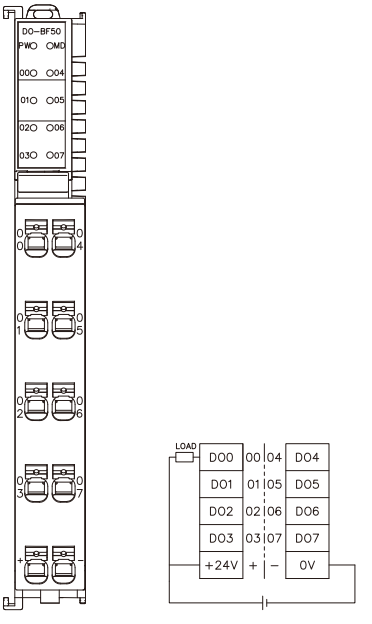
FX20-DI-BH60



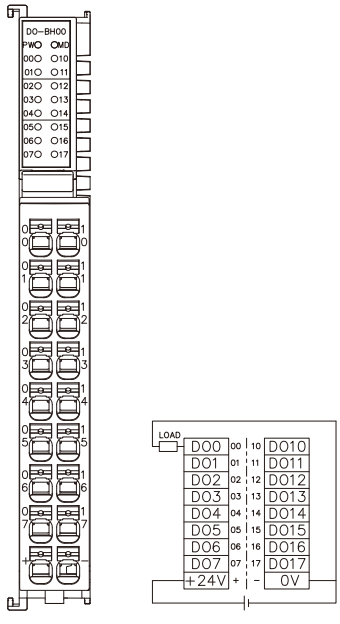
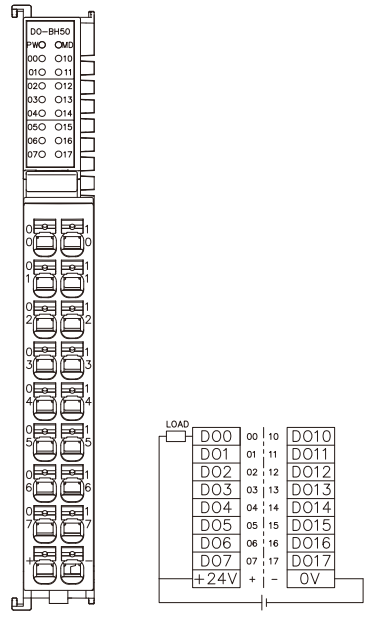
FX20-DI-BL60



IP20 Modular I/O system - digital output module

		
Ordering data		
Product model	FX20-DO-BF00	FX20-DO-BF50
Description	8-channel output module for PNP	8-channel output module for NPN
Electrical parameters		
Output channel	8	8
Output type	PNP	NPN
Output current	Max. 0.5 A per channel, total 4 A	Max. 0.5 A per channel, total 4 A
Load type	Resistive load/inductive load/lamp load	Resistive load/inductive load/lamp load
Switching frequency	Max 1 KHz/Max 1 Hz/Max 10 Hz	Max 1 KHz/Max 1 Hz/Max 10 Hz
Current consumption (5 V)	60 mA	60 mA
Process data length	1 byte	1 byte
General data		
Protection grade	IP20	
Installation	Standard 35 mm DIN rail installation, for indoor use only	
Temperature range	Working temperature: -5 ... +60 °C, storage temperature: -25 ... +70 °C	
Working altitude	0 ... 2000 m	
Relative humidity	15%-95%, non condensation	
Module weight	66 g	
Module size (H × W × D)	79 mm × 15 mm × 110 mm	
Wiring diagram		
		

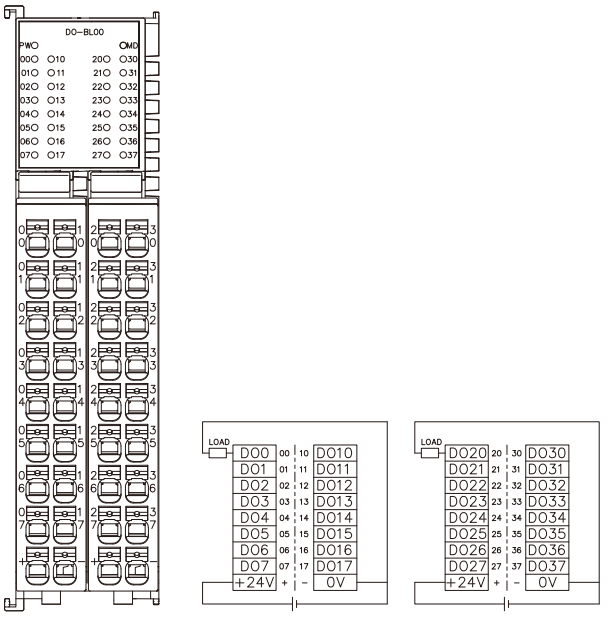
IP20 Modular I/O system - digital output module

		
Ordering data		
Product model	FX20-DO-BH00	FX20-DO-BH50
Description	16-channel output module for PNP	16-channel output module for NPN
Electrical parameters		
Output channel	16	16
Output type	PNP	NPN
Output current	Max. 0.5 A per channel, total 4 A	Max. 0.5 A per channel, total 4 A
Load type	Resistive load/inductive load/lamp load	Resistive load/inductive load/lamp load
Switching frequency	Max 1 KHz/Max 1 Hz/Max 10 Hz	Max 1 KHz/Max1 Hz/Max 10 Hz
Current consumption (5 V)	65 mA	65 mA
Process data length	2 bytes	2 bytes
General data		
Protection grade	IP20	
Installation	Standard 35 mm DIN rail installation, for indoor use only	
Temperature range	Working temperature: -5 ... +60 °C, storage temperature: -25 ... +70 °C	
Working altitude	0 ... 2000 m	
Relative humidity	15%-95%, non condensation	
Module weight	66 g	
Module size (H × W × D)	79 mm × 15 mm × 110 mm	
Wiring diagram		
		

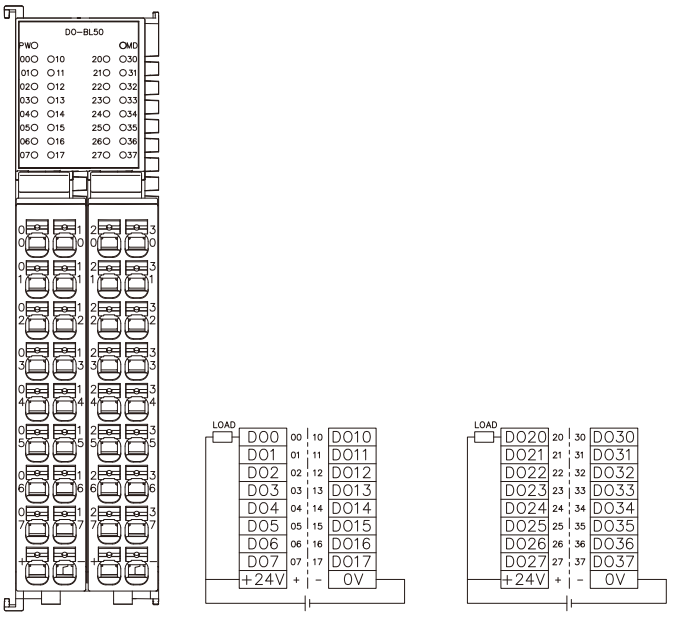
IP20 Modular I/O system - digital output module

		
Ordering data		
Product model	FX20-DO-BL00	FX20-DO-BL50
Description	32-channel output module for PNP	32-channel output module for NPN
Electrical parameters		
Output channel	32	32
Output type	PNP	NPN
Output current per channel	Max. 0.5 A per channel, total 4 A	Max. 0.5 A per channel, total 4 A
Load type	Resistive load/inductive load/lamp load	Resistive load/inductive load/lamp load
Switching frequency	Max 1 KHz/Max 1 Hz/Max 10 Hz	Max 1 KHz/Max 1 Hz/Max 10 Hz
Current consumption (5 V)	65 mA	65 mA
Process data length	4 bytes	4 bytes
General data		
Protection grade	IP20	
Installation	Standard 35 mm DIN rail installation, for indoor use only	
Temperature range	Working temperature: -5 ... +60 °C, storage temperature: -25 ... +70 °C	
Working altitude	0 ... 2000 m	
Relative humidity	15%-95%, non condensation	
Module weight	128 g	
Module size (H × W × D)	79 mm × 28 mm × 110 mm	
Wiring diagram		

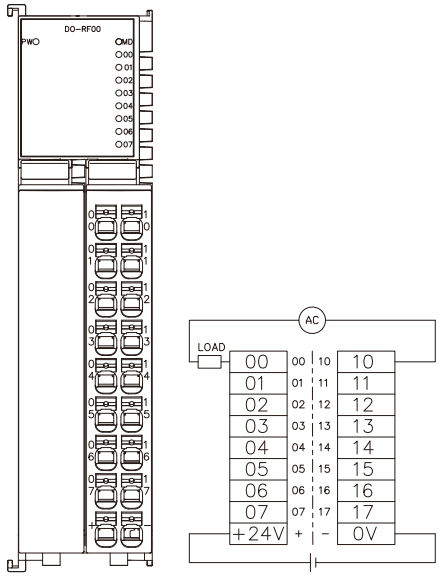
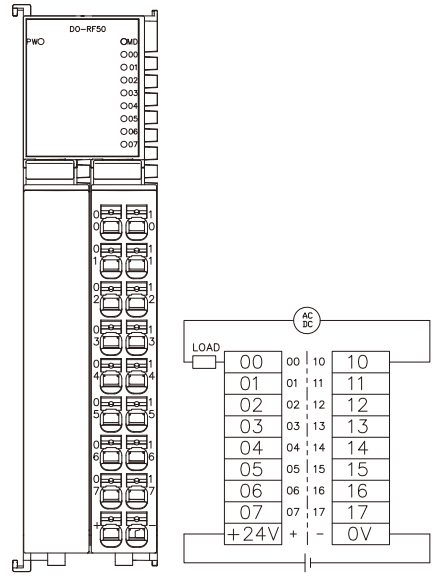
PNP



NPN



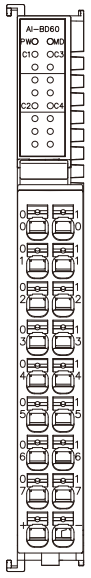
IP20 Modular I/O system - relay output module

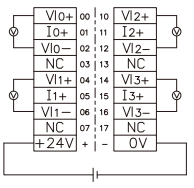
		
Ordering data		
Product model	FX20-DO-RF00	FX20-DO-RF50
Description	8DO, SSR, floating ground, AC 230 V, 0.5 A	8DO, Relay, floating ground, AC 250 V/DC 30 V, 2 A
Electrical parameters		
Output channel	8	8
Output Type	AC solid state relay	Mechanical relay
Output voltage	220 V AC	250 V AC/30 V DC
Output load (Resistive load)	500 mA/point, 4 A/model	2 A/point, 8 A/model
Output load (Inductive load)	——	1 A/point, 4 A/model
Output load (Lamp load)	250 mA/point, 2 A/model	30 W/point, 120 W/model
Relay response time	3 ... 10 ms	about 15 ms
Switching frequency	Max. 0.5 Hz (Resistive load)	≤6 times/minute
Electrical life	20 million times	100,000 times
Current consumption (5 V)	80 mA	65 mA
Process data length	1 byte	1 byte
General data		
Protection grade	IP20	
Installation	Standard 35 mm DIN rail installation, for indoor use only	
Temperature range	Working temperature: -5 ... +60 °C, storage temperature: -25 ... +70 °C	
Working altitude	0 ... 2000 m	
Relative humidity	15%-95%, non condensation	
Module weight	128 g	
Module size (H × W × D)	79 × 28 × 110 mm	
Wiring diagram		
		

IP20 Modular I/O system - analog input/output module

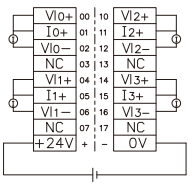
		
Ordering data		
Product model	FX20-AI-BD60	FX20-AI-BF60
Description	4-channel input module for voltage and current types	8-channel input module for voltage and current types
Electrical parameters		
Input channel	4	8
Input Type	0 ... 10 V, +/-10 V, 1 ... 5 V, 0/4 ... 20 mA, +/-20 mA	0 ... 10 V, +/-10 V, 1 ... 5 V, 0/4 ... 20 mA, +/-20 mA
Input impedance	Current type: 250 Ω; Voltage type: 1 MΩ	Current type: 250 Ω; Voltage type: 1 MΩ
Input resolution	16 Bits	16 Bits
Conversion time	3 ms	3 ms
Measurement accuracy	± 0.2%	± 0.2%
Output channel	/	/
Output type	/	/
Output resolution	/	/
Conversion time	/	/
Output accuracy	/	/
Process data length	8 bytes	16 bytes
General data		
Protection grade	IP20	
Installation	Standard 35 mm DIN rail installation	
Temperature range	Working temperature: -5 ... +60 °C, storage temperature: -25 ... +70 °C	
Working altitude	0-2000 m	
Relative humidity	15%-95%, non condensation	
Module weight	70 g	130 g
Module size (H × W × D)	79 mm × 15 mm × 110 mm	79 mm × 28 mm × 110 mm
Wiring diagram		

FX20-AI-BD60



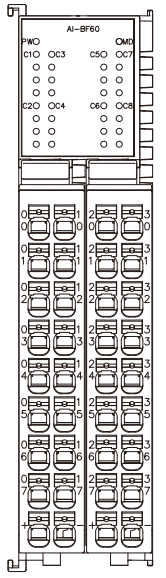


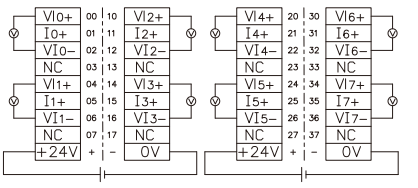
Voltage signal input



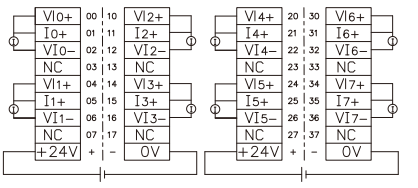
Current signal input

FX20-AI-BF60





Voltage signal input

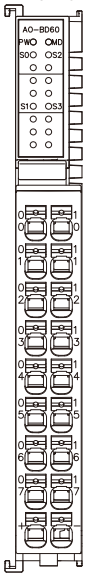


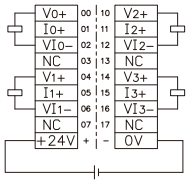
Current signal input

IP20 Modular I/O system - analog input/output module

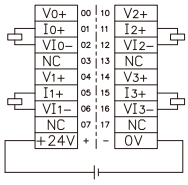
		
Ordering data		
Product model	FX20-AO-BD60	FX20-AO-BF60
Description	4-channel output module for voltage and current types	8-channel output module for voltage and current types
Electrical parameters		
Input channel	/	/
Input Type	/	/
Input impedance	/	/
Input resolution	/	/
Conversion time	/	/
Measurement accuracy	/	/
Output channel	4	8
Output type	1 ... 5 V, 0 ... 10 V, ±10 V, 0/4 ... 20 mA	1 ... 5 V, 0 ... 10 V, ±10 V, 0/4 ... 20 mA
Output resolution	16 Bits	16 Bits
Conversion time	2 ms	2 ms
Output accuracy	± 0.2%	± 0.2%
Process data length	8 bytes	16 bytes
General data		
Protection grade	IP20	
Installation	Standard 35 mm DIN rail installation	
Temperature range	Working temperature: -5 ... +60 °C, storage temperature: -25 ... +70 °C	
Working altitude	0-2000 m	
Relative humidity	15%-95%, non condensation	
Module weight	70 g	130 g
Module size (H × W × D)	79 mm × 15 mm × 110 mm	79 mm × 28 mm × 110 mm
Wiring diagram		

FX20-AO-BD60



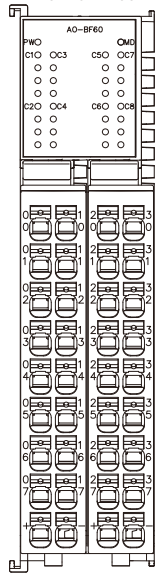


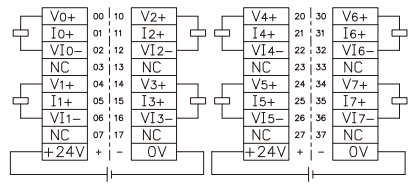
Voltage signal output



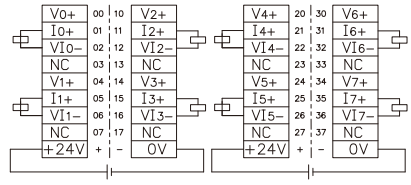
Current signal output

FX20-AO-BF60

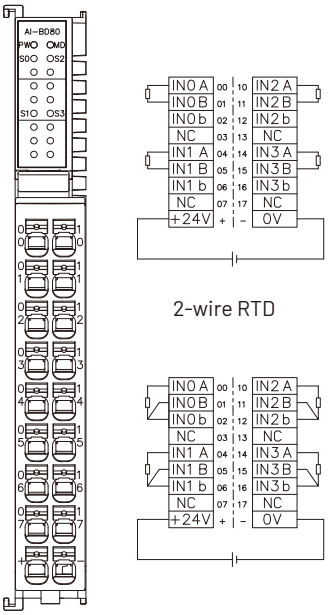
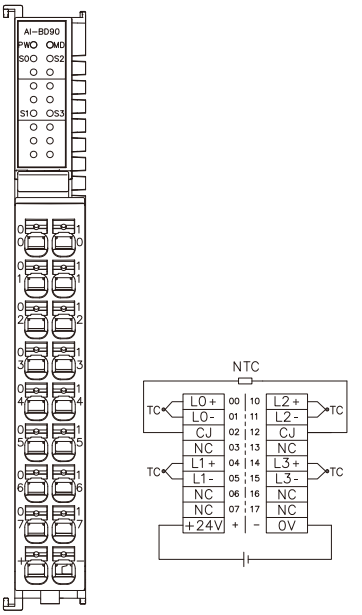




Voltage signal output

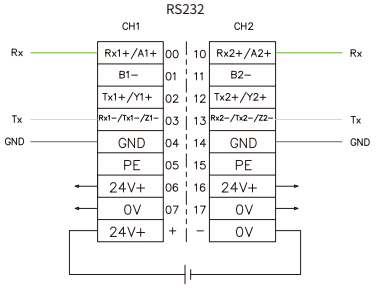


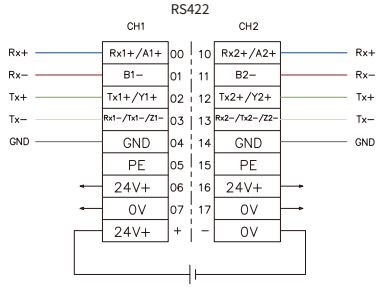
Current signal output

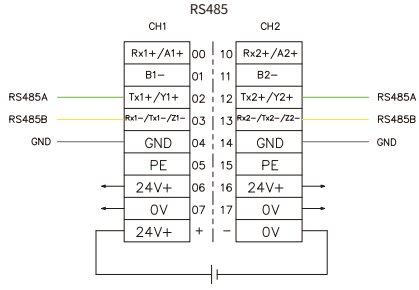
		
Ordering data		
Product model	FX20-AI-BD80	FX20-AI-BD90
Description	4-channel, RTD measurement module	4-channel, TC measurement module
Electrical parameters		
Input channel	4	4
Input type	Thermal resistance, (2-wire, 3-wire)	Thermocouple: J, K, T, N, E type
Resolution	16 Bits	16 Bits
Sensitivity	0.1 °C	0.1 °C
Measurement accuracy	Within 2 °C	Within 2 °C
Process data length	8 bytes	8 bytes
General data		
Protection grade	IP20	
Installation	Standard 35 mm DIN rail installation, for indoor use only	
Temperature range	Working temperature: -5 ... +60 °C, storage temperature: -25 ... +70 °C	
Working altitude	0 ... 2000 m	
Relative humidity	15%-95%, non condensation	
Module weight	70 g	
Module size (H × W × D)	79 mm × 15 mm × 110 mm	
Wiring diagram		
	 2-wire RTD 3-wire RTD	 TC

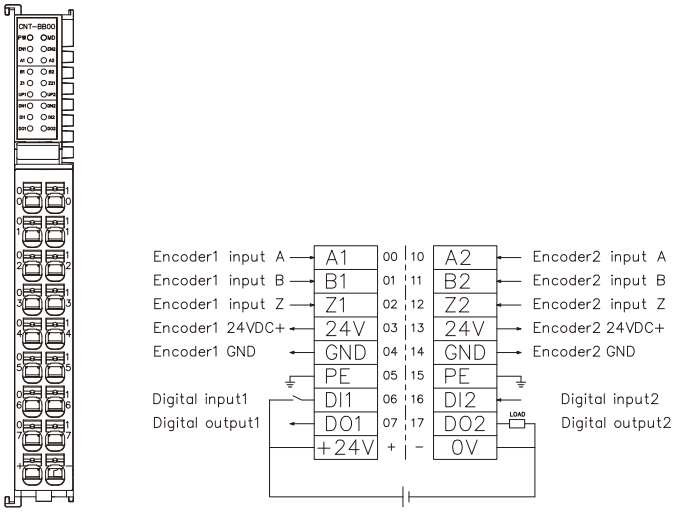
IP20 Modular I/O system - serial communication module

	
Ordering data	
Product model	FX20-SCM-BB00
Description	Dual channel, compatible with RS485 / RS422 / RS232
Electrical parameters	
Input channel	2
Interface type	Terminal type
Communication methods	RS485: 2-wire, half duplex;
	RS422: 4-wire, full duplex;
	RS232: 2-wire, half duplex;
Working mode	MODBUS master station, slave station, free transparent transmission
Communication protocol	MODBUS RTU, MODBUS ASCII, free port
Baud rate	Default 115200 bps, 300 bps-921600 bps can be set
Data bits	7-bit or 8-bit
Stop bit	1 or 2 stop bits can be set
Check bit	No checksum, odd or even checksum can be set
Timeout time	Default 100ms, 2-65535 ms can be set
Slave station number	1-247
Communication distance	RS485/RS422: max. 30 m; RS232: max. 10 m
Process data length	Received data: 21 bytes, sent data: 15 bytes
General data	
Protection level	IP20
Installation method	Standard 35 mm DIN rail installation, for indoor use only
Temperature range	Working temperature: -5 ... +60 °C, storage temperature: -25 ... +70 °C
Working altitude	0 ... 2000 m
Relative humidity	15%-95%, non condensation
Module weight	70 g
Module size (H x W x D)	79 mm x 15 mm x 110 mm
Wiring diagram	



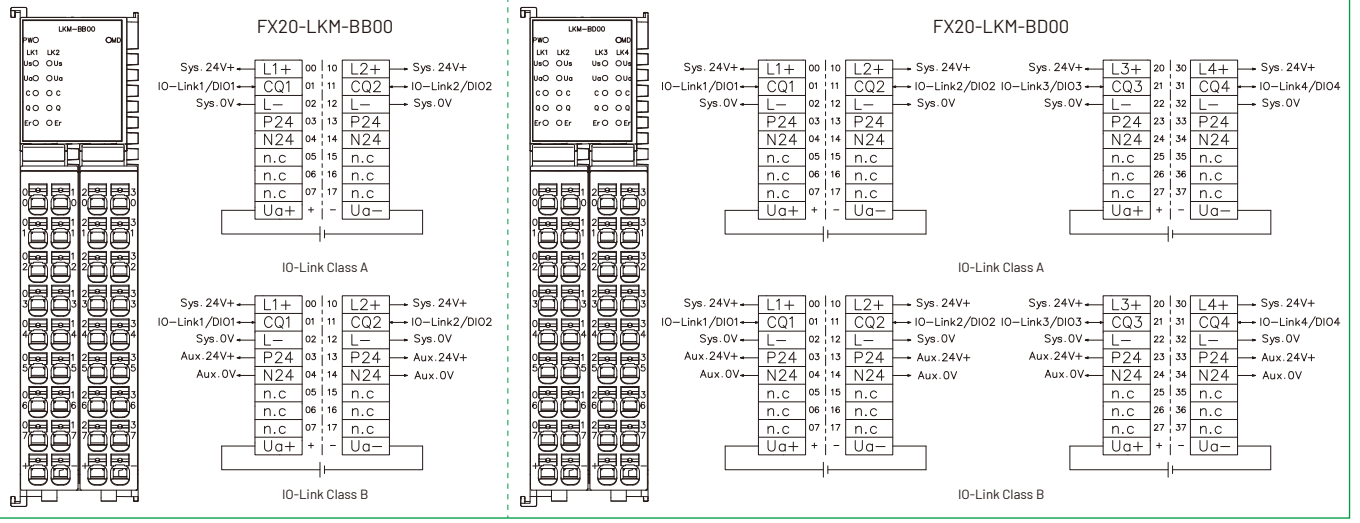




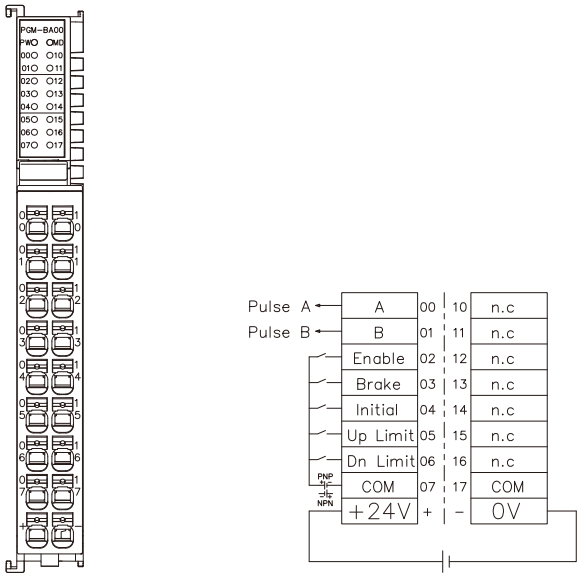
	
Ordering data	
Product model	FX20-CNT-BB00
Description	Dual channel ABZ three-phase high-speed counting module, 24 V
Electrical parameters	
Input channel	2
Interface type	Terminal type
Encoder power supply terminal	2 x 24 VDC
Encoder input	ABZ three-phase, 24 V
Input type	Source type, leakage type, and push-pull type can be set
Counting mode	B pulse mode, B pulse+A direction mode, A+B mode, A+B+Z mode
Counting frequency	Max. 500 kHz
Encoder frequency doubling mode	x1/x2/x4
Count data length	32 bits
Counting range	-2147483648 ... 2147483647
Count comparison function	Support
Forward and reverse counting	Support
Counting alarm function	Support
Filtering function	0-10ms can be set
IO channel	Input: 2 PNP/NPN, output: 2 PNP
General data	
Protection level	IP20
Installation method	Standard 35 mm DIN rail installation, for indoor use only
Temperature range	Working temperature: -5 ... +60 °C, storage temperature: -25 ... +70 °C
Working altitude	0 ... 2000 m
Relative humidity	15%-95%, non condensation
Module weight	70 g
Module size (H x W x D)	79 mm x 15 mm x 110 mm
Wiring diagram	
	

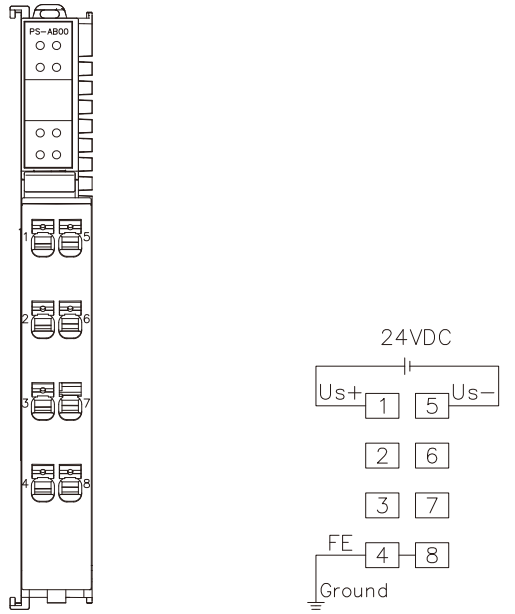
IP20 Modular I/O system - IO Link master station module

		
Ordering data		
Product model	FX20-LKM-BB00	FX20-LKM-BD00
Description	2-channel IO-Link master, ClassA/ClassB, 2*32 bytes	4-channel IO-Link master, ClassA/ClassB, 4*8 bytes
Electrical parameters		
Working voltage	24 V DC	
System power supply Us current	4 A	
Auxiliary power supply Ua current	4 A	
IO Link Channel Count	2	4
IO Link type	IO-Link master ClassA/ClassB	
IO Link version	IO-Link V 1.1.2	
IO Link communication speed	COM1 (4.8 kbps), COM2 (38.4 kbps), COM3 (230.4 kbps)	
Process data length	32 bytes per channel	8 bytes per channel
Input channel	Max. 2	Max. 4
Input power supply current	Pin1: 200 mA per channel	
Input signal type	PPNP type sensors, travel switches, dry contacts, etc. (SIO mode)	
Input filtering delay	1.6 ms	
Number of output channels	Max. 2	Max. 4
Output current	Pin2: max. 2 A; Pin4: max. 100 mA	
Type of output	Indicator lights, micro solenoid valves, etc. (SIO mode)	
General data		
Protection level	IP20	
Installation method	Standard 35 mm DIN rail installation, for indoor use only	
Temperature range	Working temperature: -5 ... +60 °C, storage temperature: -25 ... +70 °C	
Working altitude	0 ... 2000 m	
Relative humidity	15%-95%, non condensation	
Module weight	128 g	
Module size (H x W x D)	79 × 28 × 110 mm	
Wiring diagram		

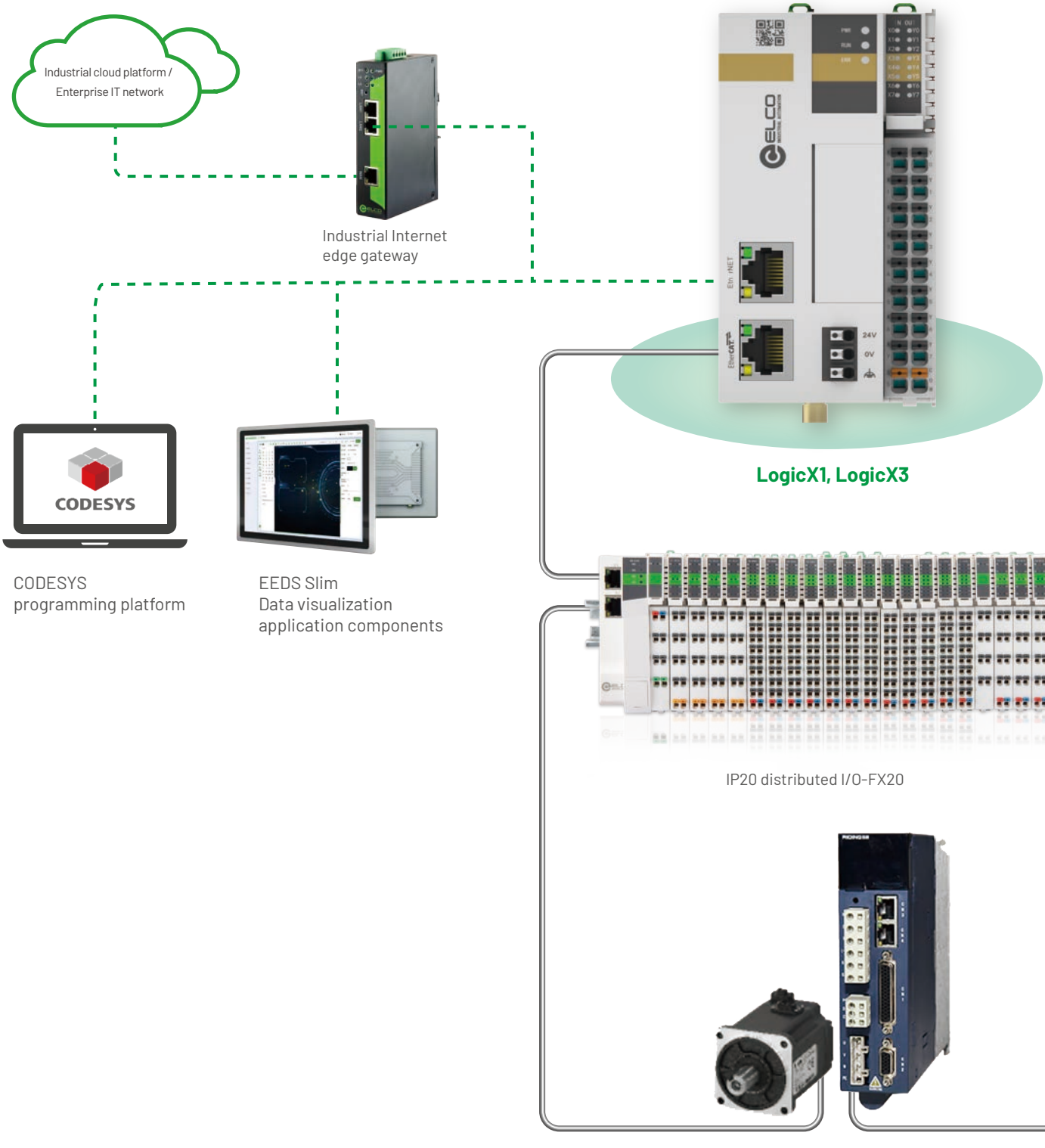


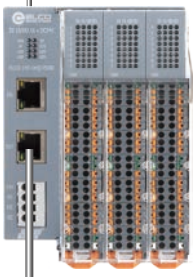
IP20 Modular I/O system - pulse output module

	
Ordering data	
Product model	FX20-PGM-BA00
Description	Single channel pulse output module, 24 V
Electrical parameters	
Supply voltage	24 V DC (±20%)
Output channel	1
Interface type	Termianl
Supply terminal	1 × 24 V DC
Output frequency range	1 ... 200 kHz
Pulse mode	Single pulse (pulse + direction), double pulse (CW/CCW)
Input channel	4-channel, PNP/NPN
Input channel function	Brake, origin switch, upper limit, lower limit
Process data length	Input: 12 bytes; output: 12 bytes
Configure channel-level parameters	Support
Return-to-zero mode	Support
Force on the brakes	Support
General data	
Protection grade	IP20
Installation	Standard 35 mm DIN rail installation, for indoor use only
Temperature range	Working temperature: -5 ... +60 °C, storage temperature: -25 ... +70 °C
Working altitude	0 ... 2000 m
Relative humidity	15%-95%, non condensation
Module weight	70 g
Module size (H × W × D)	79 × 15 × 110 mm
Wiring diagram	
	

	
Ordering data	
Product model	FX20-PS-AB00
Description	Power auxiliary module, 5 V
Electrical parameters	
Input voltage	24 V DC
Input voltage range	DC 20.4 V-DC 28.8 V
Output voltage	5 V
Output current	Max 3 A
Power protection	Over current and reverse polarity protection
Efficiency	95 %
General data	
Protection grade	IP20
Installation	Standard 35 mm DIN rail installation, for indoor use only
Temperature range	Working temperature: -5 ... +60 °C, storage temperature: -25 ... +70 °C
Working altitude	0 ... 2000 m
Relative humidity	15%-95%, non condensation
Module weight	66 g
Module size (H × W × D)	79 mm × 15 mm × 110 mm
Wiring diagram	
	

Integrated control system solutions EtherCAT



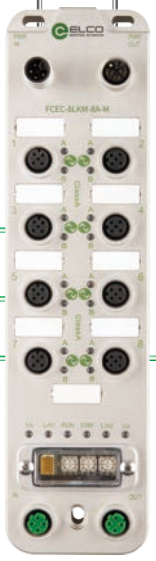


IP20 Integrated I/O
BLOCK20

Slim67
Analog module

Slim67
Digital module

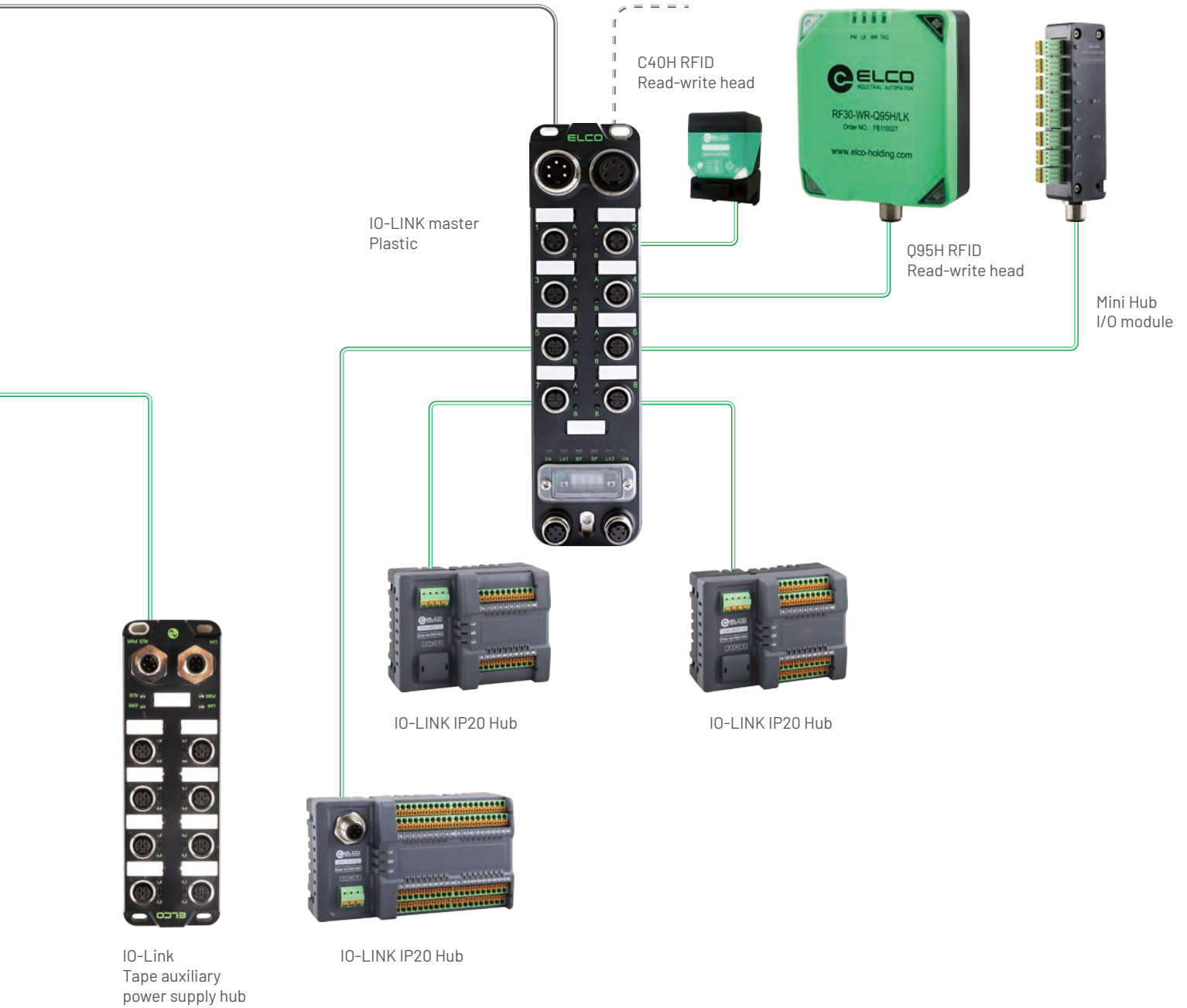
IO-LINK master
Metal



IO-LINK
IP67 hub

IO-LINK
IP67 hub

IO-LINK
IP67 hub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ELCO Industrie Automation GmbH
Benzstrasse 7
71720 Oberstenfeld
Deutschland
E-Mail: info@elco-automation.de
www.elco-automation.de

Elco Automation LLC
1097 Highway 101 South, Suite D-3
Greer, South Carolina 29651 – USA
Office Phone: +1 864-581-7431
E-Mail: infousa@elcoautomation.com
www.elcoautomation.com

TIANJIN ELCO AUTOMATION CO., LTD
No.12, 4th XEDA Branch Road
Xiqing Economic-Technological Development Area
Tianjin 300385, P. R. China
E-Mail: info@elco.cn
www.elco-holding.com.cn