

CERTIFICATE OF CONFORMITY



1. HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS

2. Certificate No: FM20US0111X
3. Equipment:
(Type Reference and Name) I/O Terminal Type BK, KL, KS, EL, EK, ES, EP, CX, CPX and EPX
4. Name of Listing Company: Beckhoff Automation GmbH & Co KG
5. Address of Listing Company: Huelshorstweg 20, Verl 33415, Germany
6. The examination and test results are recorded in confidential report number:

PR458127 dated 2nd November 2020

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM 3600:2022, FM 3610:2021, FM 3611:2021, FM 3810:2021, ANSI/UL 60079-0:2020 (R2024),
ANSI/UL 60079-7:2021, ANSI/UL 60079-11:2018, ANSI/UL 60079-31:2015, ANSI/UL 61010-1:2019,
ANSI/UL 121201:2025

8. If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

10. Equipment Ratings:

Type BK, BC, KL, KS, EL, EK, EKM, ES, CX

Nonincendive for Class I, Division 2, Groups A, B, C and D; T*
Increased safety protection for Class I, Zone 2, Group IIC; T*
T* Ta* (see below)

Type CPX2*** and CPX3***

Nonincendive for Class I, II, III Division 2, Groups A, B, C, D, F and G; T*
Increased safety protection for Class I, Zone 2, Group IIC; T*
Dust-ignition Protection by enclosure for Zone 22, Group IIIB

Certificate issued by:

J.E. Marquedant
VP, Manager - Electrical Systems

07/29/2026

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

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T* Ta* (see below)

Type EP

Nonincendive for Class I, II, III Division 2, Groups A, B, C, D, F and G; T*

Increased safety protection for Class I, Zone 2, Group IIC; T*

Dust-ignition Protection by enclosure for Zone 22, Group IIIC

T* Ta* (see below)

Type EPX**_****_******

Nonincendive for Class I, II, III Division 2, Groups A, B, C, D, F and G; T*; with Intrinsically Safe connections to Division 1

Increased safety protection for Class I, Zone 2, Group IIC; T*; with Intrinsically Safe Outputs for Zone 0

Dust-ignition Protection by enclosure for Zone 22, Group IIIC with Intrinsically Safe Outputs for Zone 20

T* Ta* (see below)

11. The marking of the equipment shall include:

Type BK, BC, KL, KS, EL, EK, EKM, ES, CX

Class I, Division 2, Groups A, B, C, D, T4

Class I, Zone 2, AEx ec IIC T* Gc T4

T* Ta* (see below)

Type CPX2* and CPX3*****

Class I, II, III, Division 2, Groups A, B, C, D, F and G T4

Class I, Zone 2, AEx ec IIC T4 Gc

Zone 22, AEx tc IIIB T135°C Dc (CPX2*** only)

Zone 22, AEx tc IIIB T100°C Dc (CPX3*** only)

T* Ta* (see below)

Type EP

Class I, II, III, Division 2, Groups A, B, C, D, F and G T4

Class I, Zone 2, AEx ec IIC T4 Gc

Zone 22, AEx tc IIIC T135°C Dc

T* Ta* (see below)

Type EPX**_****_******

Class I, II, III, Division 2, Groups A, B, C, D, F and G T4

Class I, Zone 2, AEx ec [ia Ga] IIC T4 Gc

Zone 22, AEx tc [ia Da] IIIC T135°C Dc

T* Ta* (see below)

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12. Description of Equipment:

Module Type	Description
BKxxxx BCxxxx KLxxxx KSxxxx EKxxxx EKMxxxx ELxxxx ESxxxx EPxxxx	The modular fieldbus components Type BK ..., Type BC..., Type KL ..., Type KS ..., Type EK ..., EKM ..., EL ..., EP... and type ES ... have been developed for use in I/O and fieldbus systems.
CX51**-****	The DIN-rail-mountable, fanless Embedded PCs from the CX5100 series equipped with Intel Atom® multi-core processors
CX53**-****	The DIN-rail-mountable, fanless Embedded PCs from the CX5300 series equipped with Intel Atom® multi-core processors
CX56**-****	The DIN-rail-mountable, fanless Embedded PCs from the CX5600 series equipped with AMD Ryzen™ multi-core processors
CX8000	The CX8000 Embedded PC series contains a 32-bit controller with 400 MHz ARM9 CPU and integrated fieldbus slave for universal PLC applications.
CX9020	The CX9020 is a compact, DIN rail-mountable Ethernet control system with 1 GHz ARM Cortex™-A8 CPU.
CPX27**-****	The built-in Panel PC type CPX27**-**** as well as the Panel type CPX29**-**** are developed for the use in hazardous areas. The fanless multitouch panels are designed for installation in the front of a control cabinet. All connections to the panel are realized by plugs and sockets installed within this cabinet.
CPX29**-****	
CPX37**-****	Multi-touch Panel PC Series CPX37**-**** and Multi-touch Control Panel Series CPX39**-**** are fanless panel PC's designed for industrial application intended for mounting in a 100x100 mm mounting interface.
CPX39**-****	
EPX****-****-****	The EtherCat Box type EPX****-****-**** is an I/O Module with input connectors rated in type of protection 'ec' (supply connectors). Their intrinsically safe output circuits, type of protection AEx ia, can be led into areas which require EPL Ga or EPL Da. The fully encapsulated electronics are built into a plastic housing with an ingress protection rating of IP67.

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Modules and Ratings:

Module	Description	Temp. code	Ambient Range	Technical Data	Supply Volt.
BC2000	Bus Terminal Controller with integrated IEC 61131-3 PLC, 32 kbytes program memory, Lightbus interface	T4	-25°C to +60°C	----	24Vdc
BC3100	Bus Terminal Controller with integrated IEC 61131-3 PLC, 32 kbytes program memory, PROFIBUS DP interface, 12 Mbaud	T4	-25°C to +60°C	----	24Vdc
BC3150	“Compact” Bus Terminal Controller with integrated IEC 61131-3 PLC, 48 kbytes program memory, PROFIBUS DP interface, 12 Mbaud	T4	-25°C to +60°C	----	24Vdc
BC4000	Bus Terminal Controller with integrated IEC 61131-3 PLC, 32 kbytes program memory, Interbus interface	T4	-25°C to +60°C	----	24Vdc
BC5150	“Compact” Bus Terminal Controller with integrated IEC 61131-3 PLC, 48 kbytes program memory, CANopen interface, 1 Mbaud	T4	-25°C to +60°C	----	24Vdc
BC5250	“Compact” Bus Terminal Controller with integrated IEC 61131-3 PLC, 48 kbytes program memory, DeviceNet interface, 500 kbaud	T4	-25°C to +60°C	----	24Vdc
BC7300	Bus Terminal Controller with integrated IEC 61131-3 PLC, 32 kbytes program memory, Modbus interface	T4	-25°C to +60°C	----	24Vdc
BC8000	Bus Terminal Controller with integrated IEC 61131-3 PLC, 32 kbytes program memory, RS485 interface	T4	-25°C to +60°C	----	24Vdc
BC8050	Bus Terminal Controller with integrated IEC 61131-3 PLC, 32 kbytes program memory, RS485 interface	T4	-25°C to +60°C	----	24Vdc
BC8100	Bus Terminal Controller with integrated IEC 61131-3 PLC, 32 kbytes program memory, RS232C interface	T4	-25°C to +60°C	----	24Vdc
BC8150	Bus Terminal Controller with integrated IEC 61131-3 PLC, 32 kbytes program memory, RS232C interface	T4	-25°C to +60°C	----	24Vdc

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BC9000	Bus Terminal Controller with integrated IEC 61131-3 PLC, 64 kbytes program memory, Ethernet TCP/IP interface; Ethernet protocols TwinCAT ADS, Modbus TCP	T4	-25°C to +60°C	----	24Vdc
BC9050	“Compact” Bus Terminal Controller with integrated IEC 61131-3 PLC, 48 kbytes program memory, Ethernet TCP/IP interface; Ethernet protocols TwinCAT ADS, Modbus TCP	T4	-25°C to +60°C	----	24Vdc
BC9020	“Economy plus” Bus Terminal Controller with integrated IEC 61131-3 PLC, 128 kbytes program memory, Ethernet TCP/IP interface; Ethernet protocols TwinCAT ADS, Modbus TCP	T4	-25°C to +60°C	----	24Vdc
BC9100	Bus Terminal Controller with integrated IEC 61131-3 PLC, 64 kbytes program memory, Ethernet TCP/IP interface and integrated 2-channel switch; Ethernet protocols TwinCAT ADS, Modbus TCP	T4	-25°C to +60°C	----	24Vdc
BC9120	“Economy plus” Bus Terminal Controller with integrated IEC 61131-3 PLC, 128 kbytes program memory, Ethernet TCP/IP interface and integrated 2-channel switch; Ethernet protocols TwinCAT ADS, Modbus TCP	T4	-25°C to +60°C	----	24Vdc
BK2000	Lightbus Bus Coupler for up to 64 Bus Terminals	T4	-25°C to +60°C	----	24Vdc
BK2010	Lightbus Bus Coupler for up to 64 digital Bus Terminals	T4	-25°C to +60°C	----	24Vdc
BK2020	Lightbus “Economy plus” Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension)	T4	-25°C to +60°C	----	24Vdc
BK3000		T4	-25°C to +60°C	----	24Vdc
BK3010	PROFIBUS DP Bus Coupler for up to 64 digital Bus Terminals, 1.5 Mbaud	T4	-25°C to +60°C	----	24Vdc
BK3100	PROFIBUS DP/FMS Bus Coupler for up to 64 Bus Terminals, 12 Mbaud	T4	-25°C to +60°C	----	24Vdc
BK3110	PROFIBUS DP Bus Coupler for up to 64 digital Bus Terminals, 12 Mbaud	T4	-25°C to +60°C	----	24Vdc

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BK3120	PROFIBUS "Economy plus" Bus Coupler	T4	-25°C to +60°C	----	24Vdc
BK3150	PROFIBUS DP "Compact" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension), 12 Mbaud	T4	-25°C to +60°C	----	24Vdc
BK3500	PROFIBUS DP Bus Coupler with fibre optic connection for up to 64 Bus Terminals, 1.5 Mbaud	T4	-25°C to +60°C	----	24Vdc
BK3520	PROFIBUS DP "Economy plus" Bus Coupler with fibre optic connection for up to 64 Bus Terminals(255 with K-bus extension), 12 Mbaud	T4	-25°C to +60°C	----	24Vdc
BK4000	Interbus Bus Coupler for up to 64 Bus Terminals	T4	-25°C to +60°C	----	24Vdc
BK4010	Interbus Bus Coupler for up to 64 digital Bus Terminals	T4	-25°C to +60°C	----	24Vdc
BK4020	Interbus "Economy plus" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension)	T4	-25°C to +60°C	----	24Vdc
BK4500	Interbus Bus Coupler with fibre optic connection for up to 64 Bus Terminals	T4	-25°C to +60°C	----	24Vdc
BK5110	CANopen Bus Coupler for up to 64 digital Bus Terminals	T4	-25°C to +60°C	----	24Vdc
BK5120	CANopen "Economy plus" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension)	T4	-25°C to +60°C	----	24Vdc
BK5150	CANopen "Compact" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension)	T4	-25°C to +60°C	----	24Vdc
BK5151	CANopen "Compact" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension), Bus connection: D-sub plug, 9-pin instead of open style connector	T4	-25°C to +60°C	----	24Vdc
BK5200	DeviceNet Bus Coupler for up to 64 Bus Terminals	T4	-25°C to +60°C	----	24Vdc
BK5210	DeviceNet Bus Coupler for up to 64 digital Bus Terminals	T4	-25°C to +60°C	----	24Vdc
BK5220	DeviceNet "Economy plus" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension)	T4	-25°C to +60°C	----	24Vdc

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BK5250	DeviceNet "Compact" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension)	T4	-25°C to +60°C	----	24Vdc
BK7000	ControlNet Bus Coupler for up to 64 Bus Terminals	T4	-25°C to +60°C	----	24Vdc
BK7150	CC-Link "Compact" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension)	T4	-25°C to +60°C	----	24Vdc
BK7300	Modbus Bus Coupler for up to 64 Bus Terminals	T4	-25°C to +60°C	----	24Vdc
BK7350	Modbus "Compact" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension)	T4	-25°C to +60°C	----	24Vdc
BK7420	Fipio "Economy plus" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension)	T4	-25°C to +60°C	----	24Vdc
BK7500	SERCOS interface Bus Coupler for up to 64 Bus Terminals, 2.4 Mbaud	T4	-25°C to +60°C	----	24Vdc
BK7520	SERCOS interface "Economy plus" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension) 2, 4, 8, 16 Mbaud	T4	-25°C to +60°C	----	24Vdc
BK8000	RS485 Bus Coupler for up to 64 Bus Terminals	T4	-25°C to +60°C	----	24Vdc
BK8100	RS232 Bus Coupler for up to 64 Bus Terminals	T4	-25°C to +60°C	----	24Vdc
BK9000	Ethernet TCP/IP Bus Coupler for up to 64 Bus Terminals; Ethernet protocols TwinCAT ADS, Modbus TCP, Beckhoff real-time Ethernet	T4	-25°C to +60°C	----	24Vdc
BK9050	Ethernet TCP/IP "Compact" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension)	T4	-25°C to +60°C	----	24Vdc
BK9053	PROFINET "Compact" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension)	T4	-25°C to +60°C	----	24Vdc
BK9055	EtherNet/IP "Compact" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension)	T4	-25°C to +60°C	----	24Vdc
BK9100	Ethernet TCP/IP Bus Coupler for up to 64 Bus Terminals (with integrated 2-channel switch); Ethernet protocols TwinCAT ADS, Modbus TCP, Beckhoff real-time Ethernet	T4	-25°C to +60°C	----	24Vdc

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BK9103	PROFINET Bus Coupler for up to 64 Bus Terminals (with integrated 2-channel switch)	T4	-25°C to +60°C	----	24Vdc
BK9105	EtherNet/IP Bus Coupler for up to 64 Bus Terminals (with integrated 2-channel switch)	T4	-25°C to +60°C	----	24Vdc
BK9500	USB Bus Coupler for up to 64 Bus Terminals	T4	-25°C to +60°C	----	24Vdc
CPX2715-****	Fanless multi-touch built-in Panel PC	T4 T135°C	0°C to +55°C	25 W	24Vdc
CPX2719-****	Fanless multi-touch built-in Panel PC	T4 T135°C	0°C to +55°C	32 W	24Vdc
CPX2721-****	Fanless multi-touch built-in Panel PC	T4 T135°C	0°C to +55°C	40 W	24Vdc
CPX2915-****	Multi-touch built-in Control Panel with DVI/USB Extended interface	T4 T135°C	0°C to +55°C	20 W	24Vdc
CPX2919-****	Multi-touch built-in Control Panel with DVI/USB Extended interface	T4 T135°C	0°C to +55°C	25 W	24Vdc
CPX2921-****	Multi-touch built-in Control Panel with DVI/USB Extended interface	T4 T135°C	0°C to +55°C	35 W	24Vdc
CPX3715-****	Multi-touch Panel PC	T5 T100°C	0°C to +45°C	max 1.7 A	24Vdc
CPX3719-****	Multi-touch Panel PC	T5 T100°C	0°C to +45°C	max 1.7 A	24Vdc
CPX3721-****	Multi-touch Panel PC	T5 T100°C	0°C to +45°C	max 1.7 A	24Vdc
CPX3915-****	Multi-touch Control Panel with CP- Link 4 – The One Cable Display Link	T5 T100°C	0°C to +50°C	max 1.7 A	24Vdc
CPX3919-****	Multi-touch Control Panel with CP- Link 4 – The One Cable Display Link	T5 T100°C	0°C to +50°C	max 1.7 A	24Vdc
CPX3921-****	Multi-touch Control Panel with CP- Link 4 – The One Cable Display Link	T5 T100°C	0°C to +50°C	max 1.7 A	24Vdc
CX5120-xxxx	CX5120-xxxx Embedded PC with Intel® Atom™ processor	T4	-25°C to +60°C	----	24Vdc

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CX5130-xxxx	CX5130-xxxx Embedded PC with Intel® Atom™ processor	T4	-25°C to +60°C	----	24Vdc
CX5140-xxxx	CX5140-xxxx Embedded PC with Intel® Atom™ processor	T4	-25°C to +60°C	----	24Vdc
CX5330-xxxx	CX5330-xxxx Embedded PC with Intel Atom® x6214RE	T4	-25°C to +60°C	----	24Vdc
CX5340-xxxx	CX5340-xxxx Embedded PC with Intel Atom® x6425RE	T4	-25°C to +60°C	----	24Vdc
CX5620-xxxx	CX5620-xxxx Embedded PC with AMD Ryzen™ R1102G	T4	-25°C to +60°C	----	24Vdc
CX5630-xxxx	CX5630-xxxx Embedded PC with AMD Ryzen™ R1505G	T4	-25°C to +60°C	----	24Vdc
CX8010	Embedded PC for EtherCAT (Slave)	T4	0°C to +55°C	----	24Vdc
CX8030	Embedded PC with PROFIBUS master	T4	0°C to +55°C	----	24Vdc
CX8031	Embedded PC with PROFIBUS slave	T4	0°C to +55°C	----	24Vdc
CX8050	Embedded PC with CANopen master	T4	0°C to +55°C	----	24Vdc
CX8051	Embedded PC with CANopen slave	T4	0°C to +55°C	----	24Vdc
CX8080	Embedded PC with RS232/RS485	T4	0°C to +55°C	----	24Vdc
CX8090	Embedded PC with Ethernet	T4	0°C to +55°C	----	24Vdc
CX8091	Embedded PC with BACnet/IP and OPC UA	T4	0°C to +55°C	----	24Vdc
CX8093	Embedded PC with PROFINET device	T4	0°C to +55°C	----	24Vdc
CX8095	Embedded PC with EtherNet/IP adapter	T4	0°C to +55°C	----	24Vdc
CX9020	CX9020 Basic PC module	T4	-25°C to +60°C	----	24Vdc

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EK1100	EtherCAT Coupler	T4	-25°C to +60°C	----	24Vdc
EK1101	EtherCAT Coupler with ID switch for Ebus terminals	T4	-25°C to +60°C	----	24Vdc
EK1122	2-port EtherCAT junction	T4	-25°C to +60°C	----	----
EK1122-0008	2-port EtherCAT junction with M8 connection	T4	-25°C to +60°C	----	----
EK9300	PROFINET RT Bus Coupler	T4	-25°C to +60°C	----	24Vdc
EKM1101	EtherCAT Coupler with ID switch and diagnostics	T4	-25°C to +60°C	24Vdc	----
EL/ES1004	4-channel digital input terminal 24Vdc, filter 3.0 ms, 1-wire system	T4	-25°C to +60°C	24Vdc	----
EL/ES1008	8-channel digital input terminal 24Vdc, filter 3.0 ms, 1-wire system	T4	-25°C to +60°C	24Vdc	----
EL/ES1052	2-channel digital input terminal NAMUR	T4	-25°C to +60°C	8.2Vdc	----
EL/ES1054	4-channel digital input terminal NAMUR	T4	-25°C to +60°C	8.2Vdc	----
EL/ES1262	2-channel digital input terminal with oversampling	T4	-25°C to +60°C	24Vdc	----
EL1918	8-channel digital input terminal, TwinSAFE, 24 V DC, TwinSAFE Logic	T4	-25°C to +60°C	----	----
EL/ES2008	8-channel digital output terminal 24 V DC, 0.5 A	T4	-25°C to +60°C	24Vdc/0.5A	----
EL2014	4-channel digital output terminal 24 V DC, 0.5 A, with diagnostics	T4	-25°C to +60°C	24Vdc/0.5A	----
EL/ES2022	2-channel digital output terminal 24 V DC, 2 A	T4	-25°C to +60°C	24Vdc/2A	----
EL/ES2535-0002	2-channel pulse width current terminals 24 V DC	T4	-25°C to +60°C	24Vdc/±2A	----

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EL2535-0005	2-channel pulse width current terminals 24 V DC, 5A	T4	-25°C to +60°C	24Vdc/±5A	----
EL2794	4-channel digital output terminal 30 V AC/DC, 2 A, solid state	T4	-25°C to +60°C	30Vac/dc, 2A	----
EL2809	HD EtherCAT Terminal, 16- channel digital output 24 V DC, 0.5 A	T4	-25°C to +60°C	24Vdc/0.5A	----
EL2904	4-channel digital output terminal, TwinSAFE, 24 V DC, 0.5 A	T4	0°C to +55°C	24Vdc/0.5A	----
EL/ES3044	4-channel analog input terminal 0...20 mA, single-ended, 12 bit	T4	-25°C to +60°C	0 ... 20mA	----
EL/ES3104	4-channel analog input terminal - 10 V...+10 V, differential input, 16 bit	T4	-25°C to +60°C	-10 ... +10V	----
EL/ES3124	4-channel analog input terminal 4...20 mA, differential input, 16 bit	T4	-25°C to +60°C	4 ... 20mA	----
EL/ES3151	1-channel analog supply terminal 4...20 mA, single-ended, 16 bit	T4	-25°C to +60°C	4 ... 20mA	----
EL/ES3152	2-channel analog supply terminal 4...20 mA, single-ended, 16 bit	T4	-25°C to +60°C	4 ... 20mA	----
EL/ES3154	4-channel analog input terminal 4...20 mA, single-ended, 16 bit, 4 x 2-wire system	T4	-25°C to +60°C	4 ... 20mA	----
EL3174	4-channel analog input, - 10/0...+10 V, - 20/0/+4...+20 mA, 16 bit	T4	-25°C to +60°C	-10/0 ... +10V, -20/0/+4 ... +20mA	----
EL3174-0002	4-channel analog input, - 10/0...+10 V, -20/0/+4...+20 mA, electrically isolated, 16 bit	T4	-25°C to +60°C	-3...+3V, -20/0/+4 ... +20mA	----
EL3174-0032	4-channel analog input terminal, - 3...+3 V, -20/0/+4...+20 mA, electrically isolated, 16 bit	T4	-25°C to +60°C	4 ... 20mA	----
EL/ES3182	2-channel analog input terminal 4...20 mA, single-ended, 16 bit, 4 x 2-wire system	T4	-25°C to +60°C	4 ... 20mA	----
EL/ES3204	4-channel input terminal PT100 (RTD) for resistance sensors, 16 bit, 2-wire system	T4	-25°C to +60°C	----	----

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EL3314	4-channel thermocouple input terminal with open-circuit recognition	T4	-25°C to +60°C	----	----
EL3318	HD EtherCAT Terminal, 8-channel thermocouple input with open- circuit recognition	T4	-25°C to +60°C	----	----
EL3356-0010	1-channel precise load cell analysis (resistor bridge), 24 bit	T4	-25°C to +60°C	----	----
EL/ES3702	2-channel analog input terminal - 10...+10 V with oversampling	T4	-25°C to +60°C	-10 ... +10V	----
EL/ES4014	4-channel analog output terminal 0...20 mA, 12 bit	T4	-25°C to +60°C	0 ... 20mA	----
EL/ES4022	2-channel analog output terminal 4...20 mA, 12 bit	T4	-25°C to +60°C	4 ... 20mA	----
EL/ES4732	2-channel analog output terminal - 10...+10 V with oversampling	T4	-25°C to +60°C	-10 ... +10V	----
EL/ES5152	2-channel incremental encoder interface, 32 bit	T4	-25°C to +60°C	----	----
EL6021-1001	Serial Communication terminal, 1 channel, RS485, timestamp receive	T4	-25°C to +60°C	12Vdc	24Vdc
EL6070	License key terminal for TwinCAT 3.1	T4	-25°C to +60°C	----	----
EL6601	Ethernet switch port terminal	T4	-25°C to +60°C	----	----
EL/ES9550	System terminal, surge filter system and field supply	T4	-25°C to +60°C	24Vdc	24Vdc
EP1008_0001	EtherCAT Box, 8 digital inputs, 24 V DC, filter 3.0 ms, M8; connector: M8, screw-type	T4 T135°	0°C to +55°C	24Vdc	24Vdc
EP1008_0002	EtherCAT Box, 8 digital inputs, 24 V DC, filter 3.0 ms, M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	24Vdc	24Vdc
EP1018_0001	EtherCAT Box, 8 digital inputs, 24 V DC, filter 10 µs, M8; connector: M8, screw-type	T4 T135°	0°C to +55°C	24Vdc	24Vdc
EP1018_0002	EtherCAT Box, 8 digital inputs, 24 V DC, filter 10 µs, M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	24Vdc	24Vdc
EP1122-0001	2-port EtherCAT junction	T4 T135°	0°C to +55°C	----	24Vdc

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EP1258-0001	EtherCAT Box, 8 digital inputs, 24 V DC, filter 10 μ s, with 2 time stamps, M8; connector: M8, screw-type	T4 T135°	0°C to +55°C	24Vdc	24Vdc
EP1258-0002	EtherCAT Box, 8 digital inputs, 24 V DC, filter 10 μ s, with 2 time stamps, M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	24Vdc	24Vdc
EP2008-0001	EtherCAT Box, 8 digital outputs 24 V DC, IMAX = 0.5 A, M8; connector: M8, screw-type	T4 T135°	0°C to +55°C	24Vdc / 0.5A	24Vdc
EP2008-0002	EtherCAT Box, 8 digital outputs 24 V DC, IMAX = 0.5 A, M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	24Vdc / 0.5A	24Vdc
EP2028-0002	EtherCAT Box, 8 digital outputs 24 V DC, IMAX = 2 A (Σ 4 A), M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	24Vdc / 2A	24Vdc
EP2308-0001	EtherCAT Box, 4 digital inputs 24 V DC, 3 ms, 4 digital outputs 24 V DC, IMAX = 0.5 A, M8; connector: M8, screw-type	T4 T135°	0°C to +55°C	24Vdc / 0.5A	24Vdc
EP2308-0002	EtherCAT Box, 4 digital inputs 24 V DC, 3 ms, 4 digital outputs 24 V DC, IMAX = 0.5 A, M12; connector: M12	T4 T135°	0°C to +55°C	24Vdc / 0.5A	24Vdc
EP2318-0001	EtherCAT Box, 4 digital inputs 24 V DC, 10 μ s, 4 digital outputs 24 V DC, IMAX = 0.5 A, M8; connector: M8, screw-type	T4 T135°	0°C to +55°C	24Vdc / 0.5A	24Vdc
EP2318-0002	EtherCAT Box, 4 digital inputs 24 V DC, 10 μ s, 4 digital outputs 24 V DC, IMAX = 0.5 A, M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	24Vdc / 0.5A	24Vdc
EP2338-0001	EtherCAT Box, 8-channel digital input 24 V DC, 10 μ s, or output 24 V DC, IMAX = 0.5 A, freely configurable, M8; connector: M8, screw-type	T4 T135°	0°C to +55°C	24Vdc / 0.5A	24Vdc
EP2338-0002	EtherCAT Box, 8-channel digital input 24 V DC, 10 μ s, or output 24 V DC, IMAX = 0.5 A, freely configurable, M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	24Vdc / 0.5A	24Vdc
EP2624-0002	EtherCAT Box, 4-channel relay output 25 V AC/30 V DC, M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	24Vdc / 0.5A 30Vdc / 2A	24Vdc

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EP3162-0002	EtherCAT Box, 2-channel analog input, multi-function, ± 10 V, ± 20 mA, 16 bit, single-ended, electrically isolated, M12	T4 T135°	0°C to +55°C	+10V, +/- 20mA	24Vdc
EP3174-0002	EtherCAT Box, 4-channel analog input ± 10 V or 0/4...20 mA, parameterisable, 16 bit, M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	-10 to +10Vdc 0...20mA	24Vdc
EP3184-0002	EtherCAT Box, 4-channel analog input ± 10 V or 0/4...20 mA, parameterisable, single-ended, 16 bit, M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	-10 to +10Vdc 0...20mA	24Vdc
EP3204-0002	EtherCAT Box, 4 analog inputs for resistance sensors (RTD), PT100...1000, Ni100, 16 bit, M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	----	24Vdc
EP3314-0002	EtherCAT Box, 4 analog inputs for thermocouples, type J,K,L...U, 16 bit, M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	----	24Vdc
EP4174-0002	EtherCAT Box, 4-channel analog output -10 V... +10 V or 0/4...20 mA, parameterisable, 16 bit, M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	-10 to +10Vdc 0...20mA	24Vdc
EP6002-0002	EtherCAT 2-channel serial interface, RS232, RS422/RS485, M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	----	24Vdc
EP7041-0002	EtherCAT Box, Stepper Motor module 50 V DC, 5 A, 2 phases, with incremental encoder, 2 digital inputs 24 V DC, 1 digital output 24 V DC, M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	24Vdc / 0.5A	24Vdc
EP7041-1002	EtherCAT Box, Stepper Motor module 50 V DC, 1.5 A, 2 phases, with incremental encoder, 2 digital inputs 24 V DC, 1 digital output 24 V DC, M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	24Vdc / 0.5A	24Vdc
EP1111-0000	EtherCAT Box with ID switch	T4 T135°	0°C to +55°C	----	24Vdc
EP1518-0002	8-channel digital multi-function input 24 V DC, diagnostics, counter (2 x 32 bit, 1 kHz), M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	24Vdc	24Vdc
EP2028-0001	8-channel digital output 24 V DC, I _{MAX} = 2 A (Σ 4 A), M8; connector: M8, screw-type	T4 T135°	0°C to +55°C	24Vdc / 2A	24Vdc

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EP2328-0001	4 x digital input and 4 x digital output 24 V DC, IMAX = 2 A (Σ 4 A), M8; connector: M8, screw-type	T4 T135°	0°C to +55°C	24Vdc / 2A	24Vdc
EP2328-0002	4 x digital input and 4 x digital output 24 V DC, IMAX = 2 A (Σ 4 A), M12; connector: M12, screw-type	T4 T135°	0°C to +55°C	24Vdc / 2A	24Vdc
EP4374-0002	2-channel analog input + 2-channel analog output $\pm$ 10 V or 0/4...20 mA, parameters, 16 bit	T4 T135°	0°C to +55°C	-10 to +10Vdc 0...20mA	24Vdc
EP5101-0002	Incremental encoder interface	T4 T135°	0°C to +55°C	----	24Vdc
EP5101-1002	Incremental encoder interface	T4 T135°	0°C to +55°C	----	
EP7041-2002	Stepper Motor module 50 V DC, 5 A, with incremental encoder, 2 digital inputs, 1 digital output	T4 T135°	0°C to +55°C	24Vdc / 0.5A	24Vdc
EP7041-3002	Stepper Motor module 50 V DC, 5 A, with incremental encoder, for resonance-critical applications	T4 T135°	0°C to +55°C	24Vdc / 0.5A	24Vdc
EP7342-0002	2-channel DC motor output stage 50 V DC, 3-5 A	T4 T135°	0°C to +55°C	----	24Vdc
KL/KS1002	2-channel digital input terminal 24 V DC, filter 3.0 ms, 4-wire system	T4	-25°C to +60°C	24Vdc	----
KL/KS1012	2-channel digital input terminal 24 V DC, filter 0.2 ms, 4-wire system	T4	-25°C to +60°C	24Vdc	----
KL/KS1032	2-channel digital input terminal 48 V DC, filter 3.0 ms, 4-wire system	T4	-25°C to +60°C	48Vdc	----
KL/KS1052	2-channel digital input terminal 24 V DC, positive/negative switching, filter 3.0 ms, 4-wire system	T4	-25°C to +60°C	24Vdc	----
KL/KS1104	4-channel digital input terminal 24 V DC, filter 3.0 ms	T4	-25°C to +60°C	24Vdc	----

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KL/KS1114	4-channel digital input terminal 24 V DC, filter 0.2 ms, 2 inputs 3-wire system, 2 inputs 1-wire system	T4	-25°C to +60°C	24Vdc	----
KL/KS1124	4-channel digital input terminal 5 V DC, filter 0.2 ms	T4	-25°C to +60°C	5Vdc	----
KL/KS1154	4-channel digital input terminal 24 V DC, positive/negative switching, filter 3.0 ms, 2 inputs 3-wire system, 2 inputs 1-wire system	T4	-25°C to +60°C	24Vdc	----
KL/KS1164	4-channel digital input terminal 24 V DC, positive/negative switching, filter 0.2 ms, 2 inputs 3-wire system, 2 inputs 1-wire system	T4	-25°C to +60°C	24Vdc	----
KL/KS1184	4-channel digital input terminal 24 V DC, negative switching, filter 3.0 ms, 2 inputs 3-wire system, 2 inputs 1-wire system	T4	-25°C to +60°C	24Vdc	----
KL/KS1194	4-channel digital input terminal 24 V DC, negative switching, filter 0.2 ms, 2 inputs 3-wire system, 2 inputs 1-wire system	T4	-25°C to +60°C	24Vdc	----
KL/KS1212	2-channel digital input terminal 24 V DC, with short-circuit proof sensor supply and diagnostics, filter 3.0 ms, 2 inputs 3-wire system, 4 bit input and 2 bit output	T4	-25°C to +60°C	24Vdc	----
KL/KS1232	2-channel digital input terminal 24 V DC, filter 0.2 ms, 4-wire system with edge triggered puls expansion 100ms	T4	-25°C to +60°C	24Vdc	----
KL/KS1302	2-channel digital input terminal 24 V DC for 2-wire sensors type 2, EN 61131-2, filter 3.0 ms 2 inputs 2-wire system, 2 bit inputs	T4	-25°C to +60°C	24Vdc	----
KL/KS1304	4-channel digital input terminal 24 V DC for 2-wire sensors type 2, EN 61131-2, filter 3.0 ms	T4	-25°C to +60°C	24Vdc	----

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KL/KS1312	2-channel digital input terminal 24 V DC for 2-wire sensors type 2, EN 61131-2, filter 0.2 ms 2 inputs 2-wire system, 2 bit inputs	T4	-25°C to +60°C	24Vdc	----
KL/KS1314	4-channel digital input terminal 24 V DC for 2-wire sensors type 2, EN 61131-2, filter 0.2 ms 4 inputs 2-wire system, 4 bit inputs	T4	-25°C to +60°C	24Vdc	----
KL/KS1352	2-channel digital input terminal 24 V DC for Namur sensors	T4	-25°C to +60°C	24Vdc	----
KL/KS1362	2-channel digital input terminal for break-in alarm, filter 3.0 ms	T4	-25°C to +60°C	24Vdc	----
KL/KS1382	2-channel digital input terminal thermistor, filter 30 ms	T4	-25°C to +60°C	24Vdc	----
KL/KS1402	2-channel digital input terminal 24 V DC for 2-wire sensors type 3, EN 61131-2, filter 3.0 ms	T4	-25°C to +60°C	24Vdc	----
KL/KS1404	4-channel digital input terminal 24 V DC for 2-wire sensors type 3, IEC 61131-2, filter 3.0 ms	T4	-25°C to +60°C	24Vdc	----
KL/KS1408	8-channel digital input terminal 24 V DC, IEC 61131-2, type 3, filter 3.0 ms, 1wire-system	T4	-25°C to +60°C	24Vdc	----
KL/KS1412	2-channel digital input terminal 24 V DC for 2-wire sensors type 3, EN 61131-2, filter 0.2 ms	T4	-25°C to +60°C	24Vdc	----
KL/KS1414	4-channel digital input terminal 24 V DC for 2-wire sensors type 3, IEC 61131-2, filter 0.2 ms	T4	-25°C to +60°C	24Vdc	----
KL/KS1418	8-channel digital input terminal 24 V DC, IEC 61131-2, type 3, filter 0.2 ms	T4	-25°C to +60°C	24Vdc	----
KL/KS1434	4-channel digital input terminal 24 V DC for 2-wire sensors type 2, EN 61131-2, filter 0.2 ms, 6 mA, 2-wire system	T4	-25°C to +60°C	24Vdc	----

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KL/KS1488	8-channel digital input terminal 24 V DC, filter 3.0 ms, 1-wire system, negative switching	T4	-25°C to +60°C	24Vdc	----
KL/KS1498	8-channel digital input terminal 24 V DC, filter 0.2 ms, 1-wire system, negative switching	T4	-25°C to +60°C	24Vdc	----
KL/KS1501	Up/down counter 24 V DC, 100 kHz	T4	-25°C to +60°C	24Vdc	----
KL/KS1512	2-channel, up/down counter, 24 V DC, 1 kHz, 16 bit counter	T4	-25°C to +60°C	24Vdc	----
KL/KS1702	2-channel digital input terminal 120 V AC to 230 V AC, 4-wire system	T4	-25°C to +60°C	120-230Vac	----
KL/KS1712	2-channel digital input terminal 120 V AC/DC, 4-wire system	T4	-25°C to +60°C	120-230Vac	----
KL/KS1722	2-channel digital input terminal 120 V AC to 230 V AC, without power contacts, 4-wire system	T4	-25°C to +60°C	120-230Vac	----
KL1804	HD Bus Terminals, 4-channel digital input 24 V DC, 3-wire connection, filter 3.0 ms	T4	-25°C to +60°C	24Vdc	----
KL1808	HD Bus Terminal, 8-channel digital input 24 V DC, 2-wire connection	T4	-25°C to +60°C	24Vdc	----
KL1809	HD Bus Terminals, 16-channel digital input 24 V DC, filter 3.0 ms	T4	-25°C to +60°C	24Vdc	----
KL1814	HD Bus Terminals, 4-channel digital input 24 V DC, 3-wire connection, filter 0.2 ms	T4	-25°C to +60°C	24Vdc	----
KL1819	HD Bus Terminals, 16-channel digital input 24 V DC, filter 0.2 ms	T4	-25°C to +60°C	24Vdc	----

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KL1859	HD Bus Terminal, 8-channel digital input + 8-channel digital output 24 V DC	T4	-25°C to +60°C	24Vdc	----
KL1862	16-channel digital input terminals 24 V DC, type 3, flat-ribbon cable connection, filter 3.0 ms	T4	-25°C to +60°C	24Vdc	----
KL1862-0010	16-channel digital input 24 V DC, 3.0 ms, flat-ribbon cable connection, switching to ground potential	T4	-25°C to +60°C	24Vdc	----
KL1872	16-channel digital input terminals 24 V DC, type 3, flat-ribbon cable connection, filter 0.2 ms	T4	-25°C to +60°C	24Vdc	----
KL1889	HD Bus Terminal, 16-channel digital input 24 V DC, 0 V (ground) switching	T4	-25°C to +60°C	24Vdc	----
KL1904	4-channel digital input terminal, TwinSAFE, 24 V DC	T4	-25°C to +60°C	24Vdc	----
KL/KS2012	2-channel digital output terminal 24 V DC, 0.5 A, 4-wire system	T4	-25°C to +60°C	24Vdc/0.5A	----
KL/KS2022	2-channel digital output terminal 24 V DC, 2.0 A, 4-wire system	T4	-25°C to +60°C	24Vdc/2A	----
KL/KS2032	2-channel digital output terminal 24 V DC, 0.5 A with polarity protection, 4-wire system	T4	-25°C to +60°C	24Vdc/0.5A	----
KL/KS2114	4-channel digital output terminal 24 V DC, 0.5 A,	T4	-25°C to +60°C	24Vdc/0.5A	----
KL/KS2124	4-channel digital output terminal 5 V DC, 0.02 A,	T4	-25°C to +60°C	5Vdc	----
KL/KS2134	4-channel digital output terminal 24 V DC, 0.5 A with polarity protection	T4	-25°C to +60°C	24Vdc/0.5A	----
KL/KS2184	4-channel digital output terminal 24 V DC, negative switching, 0.5 A	T4	-25°C to +60°C	24Vdc/0.5A	----

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KL/KS2212	2-channel digital output terminal 24 V DC, 0.5 A, 4-wire system	T4	-25°C to +60°C	24Vdc/0.5A	----
KL/KS2404	4-channel digital output terminal 24 V DC, 0.5 A with polarity protection, 2-wire system	T4	-25°C to +60°C	24Vdc/0.5A	----
KL/KS2408	8-channel digital output terminal 24 V DC	T4	-25°C to +60°C	24Vdc/0.5A	----
KL/KS2424	4-channel digital output terminal 24 V DC, 2 A with polarity protection, 2-wire system	T4	-25°C to +60°C	24Vdc/2A	----
KL/KS2488	8-channel digital output terminal 24 V DC, 0.5 A, total current 3 A, 1-wire system, negative switching	T4	-25°C to +60°C	24Vdc/0.5A	----
KL/KS2502	2-channel pulse width output terminal 24 V DC, 0.1 A, 4-wire system	T4	-25°C to +60°C	24Vdc/0.1A	----
KL/KS2512	2-channel pulse width output terminal 24 V DC, 1 A, 4-wire system, switching to negative potential	T4	-25°C to +60°C	24Vdc/0.5A	----
KL/KS2521	1-channel pulse train output terminal, 2 RS422 outputs (5 V level)	T4	-25°C to +60°C	5Vdc	----
KL/KS2702	2-channel solid state load relay up to 230 V AC/DC, 0,3 A	T4	-25°C to +60°C	230Vac/0.3A	----
KL/KS2712	2-channel triac output terminal 12...230V AC, 0,5A	T4	-25°C to +60°C	230Vac/0.5A	----
KL/KS2722	2-channel triac output terminal 12...230 V AC, 1 A with mutually locked outputs	T4	-25°C to +60°C	230Vac/1A	----
KL/KS2784	4-channel digital output terminal 24 V AC/DC, 1 A, short-circuit-proof	T4	-25°C to +60°C	30Vac, 48Vdc / 1A	----
KL/KS2794	4-channel digital output terminal 24 V AC/DC, 1 A, potential-free, short-circuit-proof	T4	-25°C to +60°C	30Vac, 48Vdc / 1A	----

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KL2808	HD EtherCAT Terminal, 8-channel digital output 24 V DC, 0.5 A	T4	-25°C to +60°C	24Vdc/0.5A	----
KL2809	HD EtherCAT Terminal, 16-channel digital output 24 V DC, 0.5 A	T4	-25°C to +60°C	24Vdc/0.5A	----
KL2872	16-channel digital output terminal 24 V DC, 0.5 A, flat-ribbon cable connection	T4	-25°C to +60°C	24Vdc/0.5A	----
KL2872-0010	16-channel digital output terminal 24 V DC, 0.5 A, flat-ribbon cable connection, switching to ground potential	T4	-25°C to +60°C	24Vdc/0.5A	----
KL2889	HD EtherCAT Terminal, 16-channel digital output 24 V DC, 0.5 A, 0 V (ground) switching	T4	-25°C to +60°C	24Vdc/0.5A	----
KL2904	4-channel digital output terminal, TwinSAFE, 24 V DC, 0.5 A	T4	-25°C to +60°C	24Vdc/0.5A	----
KL/KS3001	1-channel analog input terminal -10 V...+10 V, differential input, 12 bit	T4	-25°C to +60°C	-10V to +10V	----
KL/KS3002	2-channel analog input terminal -10 V...+10 V, differential input, 12 bit	T4	-25°C to +60°C	-10V to +10V	----
KL/KS3011	1-channel analog input terminal 0...20 mA, differential input, 12 bit	T4	-25°C to +60°C	0...20mA	----
KL/KS3012	2-channel analog input terminal 0...20 mA, differential input, 12 bit	T4	-25°C to +60°C	0 ... 20mA	----
KL/KS3021	1-channel analog input terminal 4...20 mA, differential input, 12 bit	T4	-25°C to +60°C	4 ... 20mA	----
KL/KS3022	2-channel analog input terminal 4...20 mA, differential input, 12 bit	T4	-25°C to +60°C	4 ... 20mA	----
KL/KS3041	1-channel loop-powered input terminal 0...20 mA, with power supply for transducers via power contacts, 12 bit	T4	-25°C to +60°C	0 ... 20mA	----

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KL/KS3042	2-channel loop-powered input terminal 0...20 mA, with power supply for transducers via power contacts, 12 bit	T4	-25°C to +60°C	0 ... 20mA	----
KL/KS3044	4-channel analog input terminal 0...20 mA, 12 bit	T4	-25°C to +60°C	0 ... 20mA	----
KL/KS3051	1-channel loop-powered input terminal 4...20 mA, with power supply for transducers via power contacts, 12 bit	T4	-25°C to +60°C	4 ... 20mA	----
KL/KS3052	2-channel loop-powered input terminal 4...20 mA, with power supply for transducers via power contacts, 12 bit	T4	-25°C to +60°C	4 ... 20mA	----
KL/KS3054	4-channel analog input terminal 4...20 mA	T4	-25°C to +60°C	4 ... 20mA	----
KL/KS3061	1-channel analog input terminal 0...10 V, single-ended, 12 bit	T4	-25°C to +60°C	0 To +10V	----
KL/KS3062	2-channel analog input terminal 0...10 V, single-ended, 12 bit	T4	-25°C to +60°C	0 To +10V	----
KL/KS3064	4-channel analog input terminal 0...10 V, single-ended, 12 bit	T4	-25°C to +60°C	0 To +10V	----
KL/KS3102	2-channel analog input terminal -10 V...+10 V, differential input, 16 bit	T4	-25°C to +60°C	-10V to +10V	----
KL/KS3112	2-channel analog input terminal 0...20 mA, differential input, 16 bit	T4	-25°C to +60°C	0...20mA	----
KL/KS3122	2-channel analog input terminal 4...20 mA, differential input, 16 bit	T4	-25°C to +60°C	4...20mA	----
KL/KS3132	2-channel analog input terminal -10 V...+10 V, differential input, 16 bit, ±0,05 % accuracy	T4	-25°C to +60°C	-10V to +10V	----

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KL/KS3142	2-channel analog input terminal 0...20 mA, differential input, 16 bit, $\pm 0,05$ % accuracy	T4	-25°C to +60°C	0...20mA	----
KL/KS3152	2-channel analog input terminal 4...20 mA, differential input, 16 bit, $\pm 0,05$ % accuracy	T4	-25°C to +60°C	4...20mA	----
KL/KS3162	2-channel analog input terminal 0...10 V, differential input, 16 bit, $\pm 0,05$ % accuracy	T4	-25°C to +60°C	0 to +10V	----
KL/KS3172	2-channel analog input terminal 0...2 V, differential input, 16 bit, $\pm 0,05$ % accuracy	T4	-25°C to +60°C	0 to +2V	----
KL/KS3182	2-channel analog input terminal -2 V...2 V, differential input, 16 bit, $\pm 0,05$ % accuracy	T4	-25°C to +60°C	-2V to +2V	----
KL/KS3201	1-channel input terminal PT100 (RTD) for resistance sensors, 16 bit, 3-wire system	T4	-25°C to +60°C	PT100 (RTD)	----
KL/KS3202	2-channel input terminal PT100 (RTD) for resistance sensors, 16 bit, 3-wire system	T4	-25°C to +60°C	PT100 (RTD)	----
KL/KS3204	4-channel input terminal PT100 (RTD) for resistance sensors, 16 bit, 2-wire system	T4	-25°C to +60°C	PT100 (RTD)	----
KL/KS3208-0010	HD Bus Terminal, 8-channel input terminal PT1000, Ni1000 (RTD)	T4	-25°C to +60°C	PT1000, Ni1000 (RTD)	----
KL/KS3222	2-channel input terminal PT100 (RTD) for 4-wire connection, high-precision	T4	-25°C to +60°C	PT100 (RTD)	----
KL/KS3228	8-channel input terminal PT1000, Ni1000 (RTD) for resistance sensors, resolution 0.1 °C, 1-wire system	T4	-25°C to +60°C	PT1000, Ni1000 (RTD)	----
KL3311	1-channel thermocouple input terminal, preset to type K, with wire breakage detection, 16 bit	T4	-25°C to +60°C	Thermocouple	----

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KL3312	2-channel thermocouple input terminal, preset to type K, with wire breakage detection, 16 bit	T4	-25°C to +60°C	Thermocouple	----
KL3314	4-channel thermocouple input terminal, preset to type K, with wire breakage detection, 16 bit	T4	-25°C to +60°C	Thermocouple	----
KL/KS3351	1-channel resistor bridge input terminal (strain gauge), 16 bit	T4	-25°C to +60°C	Resistor Bridge	----
KL/KS3356	1-channel accurate resistance bridge evaluation, with self-calibration, 16 bit	T4	-25°C to +60°C	Resistor Bridge	----
KL/KS3361	1-channel oscilloscope terminal, -20 mV...20 mV, 100 µs sampling time, decentralised analog value processing	T4	-25°C to +60°C	-20mV to +20mV	----
KL/KS3362	2-channel oscilloscope terminal, -10 V...+10 V, 100 µs sampling time, decentralised analog value processing	T4	-25...+60°C	-10V...+10V	---
KL/KS3404	4-channel analog input terminal -10 V...+10 V, 12 bit, 4 x 2-wire system	T4	-25...+60°C	-10V...+10V	---
KL/KS3408	8-channel analog input terminal -10 V...+10 V, 12 bit, 1-wire system	T4	-25...+60°C	-10V...+10V	---
KL/KS3444	4-channel analog input terminal 0...20 mA, 12 bit, 4 x 2-wire system	T4	-25...+60°C	0...20mA	---
KL/KS3448	8-channel analog input terminal 0...20 mA, 12 bit, 1-wire system	T4	-25...+60°C	0...20mA	---
KL/KS3454	4-channel analog input terminal 4...20 mA, 12 bit, 4 x 2-wire system	T4	-25...+60°C	4...20mA	---
KL/KS3458	8-channel analog input terminal 4...20 mA, 12 bit, 1-wire system	T4	-25...+60°C	4...20mA	---
KL/KS3464	4-channel analog input terminal 0...10 V, 12 bit, 4 x 2-wire system	T4	-25...+60°C	0...10V	---
KL/KS3468	8-channel analog input terminal 0...10 V, 12 bit, 1-wire system	T4	-25...+60°C	0...10V	---
KL/KS4001	1-channel analog output terminal 0...10 V, 12 bit	T4	-25...+60°C	0...10V	---

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KL/KS4002	2-channel analog output terminal 0...10 V, 12 bit	T4	-25...+60°C	0...10V	---
KL/KS4004	4-channel analog output terminal 0...10 V, 12 bit	T4	-25...+60°C	0...10V	---
KL/KS4011	1-channel analog output terminal 0...20 mA, 12 bit	T4	-25...+60°C	0...20mA	---
KL/KS4012	2-channel analog output terminal 0...20 mA, 12 bit	T4	-25...+60°C	0...20mA	---
KL/KS4021	1-channel analog output terminal 4...20 mA, 12 bit	T4	-25...+60°C	4...20mA	---
KL/KS4022	2-channel analog output terminal 4...20 mA, 12 bit	T4	-25...+60°C	4...20mA	---
KL/KS4031	1-channel analog output terminal -10 V...+10 V, 12 bit	T4	-25...+60°C	-10V...+10V	---
KL/KS4032	2-channel analog output terminal -10 V...+10 V, 12 bit	T4	-25...+60°C	-10V...+10V	---
KL/KS4034	4-channel analog output terminal -10 V...+10 V, 12 bit	T4	-25...+60°C	-10V...+10V	---
KL/KS4112	2-channel analog output terminal 0...20 mA, 16 bit	T4	-25...+60°C	0...20mA	---
KL/KS4132	2-channel analog output terminal -10 V...+10 V, 16 bit	T4	-25...+60°C	-10V...+10V	---
KL/KS4404	4-channel analog output terminal 0...10 V, 12 bit, 4 x 2-wire system	T4	-25...+60°C	0...10V	---
KL/KS4408	8-channel analog output terminal 0...10 V, 12 bit, 1-wire system	T4	-25...+60°C	0...10V	---
KL/KS4414	4-channel analog output terminal 0...20 mA, 12 bit, 4 x 2-wire system	T4	-25...+60°C	0...20mA	---
KL/KS4418	8-channel analog output terminal 0...20 mA, 12 bit, 1-wire system	T4	-25...+60°C	0...20mA	---
KL/KS4424	4-channel analog output terminal 4...20 mA, 12 bit, 4 x 2-wire system	T4	-25...+60°C	4...20mA	---
KL/KS4428	8-channel analog output terminal 4...20 mA, 12 bit, 1-wire system	T4	-25...+60°C	4...20mA	---

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KL/KS4434	4-channel analog output terminal -10 V...+10 V, 12 bit, 4 x 2-wire system	T4	-25...+60°C	-10V...+10V	---
KL/KS4438	8-channel analog output terminal -10 V...+10 V, 12 bit, 1-wire system	T4	-25...+60°C	-10V...+10V	---
KL/KS4494	2-channel analog input, 2-channel analog output terminal -10 V...+10 V, 12 bit	T4	-25...+60°C	-10V...+10V	---
KL/KS5001	SSI sensor interface	T4	-25...+60°C	---	---
KL/KS5051	SSI sensor interface bidirectional for digifas® drives	T4	-25...+60°C	---	---
KL/KS5101	Incremental encoder interface with complementary inputs	T4	-25...+60°C	---	---
KL/KS5111	Incremental encoder interface with single inputs	T4	-25...+60°C	---	---
KL/KS5121	Incremental encoder interface with programmable outputs	T4	-25...+60°C	---	---
KL/KS5151	1-channel incremental encoder interface, 32 bit	T4	-25...+60°C	---	---
KL/KS5152	2-Kanal-Inkremental-Encoder-Interface, 32 Bit	T4	-25...+60°C	---	---
KL/KS6001	Serial interface RS232, 9.6 kbaud	T4	-25...+60°C	---	---
KL/KS6011	Serial interface TTY, 20 mA current loop	T4	-25...+60°C	20mA	---
KL/KS6021	Serial interface RS422/RS485, 9.6 kbaud	T4	-25...+60°C	---	---
KL/KS6031	Serial interface RS232, 115.2 kbaud	T4	-25...+60°C	---	---
KL/KS6041	Serial interface RS422/RS485, 115.2 kbaud	T4	-25...+60°C	---	---
KL/KS6051	Data exchange terminal with serial interface, 32 bit	T4	-25...+60°C	---	---
KL/KS6201	AS-Interface master terminal	T4	-25...+60°C	---	---
KL/KS6301	EIB Bus Terminal	T4	-25...+60°C	---	---
KL/KS6401	LON Bus Terminal	T4	-25...+60°C	---	---
KL/KS6771	MP-Bus master terminal	T4	-25...+60°C	---	---
KL/KS6811	DSI/DALI master and power supply terminal	T4	-25...+60°C	---	---

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KL6904	TwinSAFE Logic Bus Terminal with 4 digital outputs 24 V DC, 0.5 A	T4	-25...+60°C	24Vdc/0,5A	---
KL9010	Bus end terminal	T4	-25...+60°C	---	---
KL9020	Terminal bus extension, end terminal at KL9050	T4	-25...+60°C	---	---
KL9050	Terminal bus extension, coupler terminal from KL9020 or KL9050	T4	-25...+60°C	---	---
KL/KS9070	Shield terminal, 8 x shield	T4	-25...+60°C	---	---
KL9080	Isolation terminal	T4	-25...+60°C	---	---
KL/KS9100	Power supply terminal, 24 V DC	T4	-25...+60°C	24Vdc	---
KL/KS9110	Power supply terminal with diagnostics, 24 V DC	T4	-25...+60°C	24Vdc	---
KL/KS9180	Potential distribution terminal with 2 clamps per power contact	T4	-25...+60°C	24Vdc	---
KL9184	HD Bus Terminal, 16-channel potential distribution, 8x 24V contact, 8x 0V contact	T4	-25...+60°C	24Vdc	---
KL/KS9185	Potential distribution terminal with 4 clamps per power contact	T4	-25...+60°C	---	---
KL/KS9186	Potential distribution terminal, 8 x 24 V DC	T4	-25...+60°C	24Vdc	---
KL/KS9187	Potential distribution terminal, 8 x 0 V	T4	-25...+60°C	---	---
KL9188	HD Bus Terminal, 16-channel potential distribution, 16x 24V contact	T4	-25...+60°C	24Vdc	---
KL9189	HD Bus Terminal, 16-channel potential distribution, 16x 0v contact	T4	-25...+60°C	---	---
KL/KS9190	Power supply terminal for any voltage up to 230 V, without LED	T4	-25...+60°C	Up to 230V	---
KL/KS9195	Shield terminal, potential distribution terminal with connection to earth	T4	-25...+60°C	---	---
KL9200	Power supply terminal with fuse, 24 V DC	T4	-25...+60°C	24Vdc	---
KL9210	Power supply terminal with fuse and diagnostics, 24 V DC	T4	-25...+60°C	24Vdc	---

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KL9250	Power supply terminal with fuse, 125 V AC...230 V AC	T4	-25...+60°C	125Vac...230Vac	---
KL9260	Power supply terminal with fuse and diagnostics, 230 V AC	T4	-25...+60°C	230Vac	---
KL9290	Power supply terminal, up to 400 V AC	T4	-25...+60°C	Up to 400Vac	---
KL/KS9300	Diode array terminal, 4 potential-free diodes, 1 A, to 1000 V AC/DC	T4	-25...+60°C	---	---
KL/KS9301	Diode array terminal, 7 diodes (common cathode), 1 A, to 1000 V AC/DC	T4	-25...+60°C	---	---
KL/KS9302	Diode array terminal, 7 diodes (common anode), 1 A, to 1000 V AC/DC	T4	-25...+60°C	---	---
KL/KS9400	Power supply unit terminal for the K-bus, 24 V DC, 2 A	T4	-25...+60°C	24Vdc/2A	---
KL/KS9505	Power supply unit terminal 24 V DC, output 5 V DC, 0,5 A	T4	-25...+60°C	24Vdc, output, 5Vdc/0,5A	---
KL/KS9508	Power supply unit terminal 24 V DC, output 8 V DC, 0.5 A	T4	-25...+60°C	24Vdc, output, 8Vdc/0,5A	---
KL/KS9510	Power supply unit terminal 24 V DC, output 10 V DC, 0.5 A	T4	-25...+60°C	24Vdc, output, 10Vdc/0,5A	---
KL/KS9512	Power supply unit terminal 24 V DC, output 12 V DC, 0.5 A	T4	-25...+60°C	24Vdc, output, 12Vdc/0,5A	---
KL/KS9515	Power supply unit terminal 24 V DC, output 15 V DC, 0.5 A	T4	-25...+60°C	24Vdc, output, 15Vdc/0,5A	---
KL/KS9540	Surge filter field supply	T4	-25...+60°C	---	---
KL/KS9550	Surge filter system and field supply	T4	-25...+60°C	---	---
KL/KS9560	Power supply unit terminal 24V DC, 0.1A	T4	-25...+60°C	24Vdc/0,1A	---
KL/KS9570	Buffer capacitor terminal	T4	-25...+60°C	---	---
BK1120	EtherCAT "Economy plus" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension)	T4	-25...+60°C	---	24Vdc
BK1150	EtherCAT "Economy plus" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension)/td>	T4	-25...+60°C	---	24Vdc

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BK1250	EtherCAT “Compact” Coupler between EtherCAT Terminals (E-bus) and Bus Terminals (K-bus), adapter terminal	T4	-25...+60°C	---	24Vdc
EK1110	EtherCAT extension for EK1000 or EK1100	T4	-25...+60°C	---	24Vdc
EK1501	EtherCAT Coupler with ID switch, multimode fibre optic for E-bus terminals (ELxxxx)	T4	-25...+60°C	---	24Vdc
EK1501-0010	EtherCAT Coupler with ID switch, media converter (multimode fibre optic IN, RJ45 OUT), for E-bus terminals (ELxxxx)	T4	-25...+60°C	---	24Vdc
EK1501-0100	EtherCAT Coupler with ID switch, media converter (multimode fibre optic IN, RJ45 OUT), for E-bus terminals (ELxxxx)	T4	-25...+60°C	---	24Vdc
EK1521	1-port EtherCAT multi-mode fibre optic junction	T4	-25...+60°C	---	24Vdc
EK3100	PROFIBUS Bus Coupler	T4	-25...+60°C	---	24Vdc
EK5100	CANopen Bus Coupler	T4	-25...+60°C	---	24Vdc
EK5200	DeviceNet Bus Coupler	T4	-25...+60°C	---	24Vdc
EK9000	Ethernet Bus Coupler	T4	-25...+60°C	---	24Vdc
EK9310	PROFINET IRT Bus Coupler	T4	-25...+60°C	---	24Vdc
EK9500	EtherNet/IP Bus Coupler	T4	-25...+60°C	---	24Vdc
EK9700	SERCOS III Bus Coupler	T4	-25...+60°C	---	24Vdc
EL/ES1002	2-channel digital input terminal 24 V DC, 3 ms	T4	-25...+60°C	24Vdc	---
EL/ES1012	2-channel digital input terminal 24 V DC, filter 10 µs, 3-wire system	T4	-25...+60°C	24Vdc	---
EL/ES1014	4-channel digital input terminal 24 V DC, filter 10 µs, 2-wire system	T4	-25...+60°C	24Vdc	---
EL/ES1018	8-channel digital input terminal 24 V DC, filter 10 µs, 1-wire system	T4	-25...+60°C	24Vdc	---
EL/ES1024	4-channel digital input terminal 24 V DC for type 2 sensors, IEC 61131-2, filter 3.0 ms, 2-wire system	T4	-25...+60°C	24Vdc	---

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EL/ES1034	4-channel digital input terminal 24 V DC for type 1 sensors, IEC 61131-2, potential-free inputs, filter 10 µs	T4	-25...+60°C	24Vdc	---
EL/ES1084	4-channel digital input terminal 24 V DC, negative switching, filter 3.0 ms, 2-wire system	T4	-25...+60°C	24Vdc	---
EL/ES1088	8-channel digital input terminal 24 V DC, negative switching, filter 3.0 ms, 1-wire system	T4	-25...+60°C	24Vdc	---
EL/ES1094	4-channel digital input terminal 24 V DC, negative switching, filter 10 µs, 2-wire system	T4	-25...+60°C	24Vdc	---
EL/ES1098	8-channel digital input terminal 24 V DC, negative switching, filter 10 µs, 1-wire system	T4	-25...+60°C	24Vdc	---
EL/ES1104	4-channel digital input terminal 24 V DC, filter 3.0 ms, 2 inputs 3-wire system, 2 inputs 1-wire system	T4	-25...+60°C	24Vdc	---
EL/ES1114	4-channel digital input terminal 24 V DC, filter 10 µs, 2 inputs 3-wire system, 2 inputs 1-wire system	T4	-25...+60°C	24Vdc	---
EL/ES1124	4-channel digital input terminal 24 V DC, filter 10 µs, 2 inputs 3-wire system, 2 inputs 1-wire system	T4	-25...+60°C	5Vdc	---
EL/ES1134	4-channel digital input terminal 48 V DC, filter 10 µs, 2 inputs 3-wire system, 2 inputs 1-wire system	T4	-25...+60°C	48Vdc	---
EL/ES1144	4-channel digital input terminal 12 V DC, filter 10 µs, 2 inputs 3-wire system, 2 inputs 1-wire system	T4	-25...+60°C	12Vdc	---
EL/ES1202	2-channel digital input terminal 24 V DC, TON/TOFF 1 µs	T4	-25...+60°C	24Vdc	---
EL/ES1252	2-channel digital input terminal 24 V DC, filter 1 µs, with time stamp	T4	-25...+60°C	24Vdc	---
EL/ES1502	Up/down counter 24 V DC, 100 kHz, 32 bit counter depth	T4	-25...+60°C	24Vdc	---
EL/ES1512	2-channel, up/down counter, 24 V DC, 1 kHz, 16 bit counter	T4	-25...+60°C	24Vdc	---
EL1804	HD EtherCAT Terminals, 4-channel digital input 24 V DC, 3-wire connection, filter 3.0 ms	T4	-25...+60°C	24Vdc	---

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EL1808	HD EtherCAT Terminal, 8-channel digital input 24 V DC, 2-wire connection	T4	-25...+60°C	24Vdc	---
EL1809	HD EtherCAT Terminals, 16-channel digital input 24 V DC, filter 3.0 ms	T4	-25...+60°C	24Vdc	---
EL1814	HD EtherCAT Terminals, 4-channel digital input 24 V DC, 3-wire connection, filter 10 µs	T4	-25...+60°C	24Vdc	---
EL1819	HD EtherCAT Terminals, 16-channel digital input 24 V DC, filter 10 µs	T4	-25...+60°C	24Vdc	---
EL1859	HD EtherCAT Terminal, 8-channel digital input + 8-channel digital output 24 V DC	T4	-25...+60°C	24Vdc	---
EL1862	EtherCAT Terminal, 16-channel digital input, 24 V DC, 3 ms, flat-ribbon cable	T4	-25...+60°C	24Vdc	---
EL1862-0010	EtherCAT Terminal, 16-channel digital input, 24 V DC, 3 ms, ground switching, flat-ribbon cable	T4	-25...+60°C	24Vdc	---
EL1872	EtherCAT Terminal, 16-channel digital input, 24 V DC, 10 µs, flat-ribbon cable	T4	-25...+60°C	24Vdc	---
EL1889	HD EtherCAT Terminal, 16-channel digital input 24 V DC, 0 V (ground) switching	T4	-25...+60°C	24Vdc	---
EL1904	4-channel digital input terminal, TwinSAFE, 24 V DC	T4	-25...+60°C	24Vdc	---
EL/ES2002	2-channel digital output terminal 24 V DC, 0.5 A, 3-wire system	T4	-25...+60°C	24Vdc/0, 5A	---
EL/ES2004	4-channel digital output terminal 24 V DC, 0.5 A, 2-wire system	T4	-25...+60°C	24Vdc/0, 5A	
EL/ES2024	4-channel digital output terminal 24 V DC, 2 A, 2-wire system	T4	-25...+60°C	24Vdc/2A	---
EL2024-0010	4-channel digital output terminal 12 V DC, 2 A, 2-wire system	T4	-25...+60°C	12Vdc/2A	---
EL/ES2032	2-channel digital output terminal 24 V DC, 2 A, with diagnostics, 3-wire system	T4	-25...+60°C	24Vdc/2A	---
EL/ES2034	4-channel digital output terminal 24 V DC, 2 A, with diagnostics, 2-wire system	T4	-25...+60°C	24Vdc/2A	---
EL/ES2084	4-channel digital output terminal 24 V DC, negative switching, 0.5 A, 2-wire system	T4	-25...+60°C	24Vdc/0, 5A	---

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EL/ES2088	8-channel digital output terminal 24 V DC, 0.5 A, total current 3 A, negative switching, 1-wire system	T4	-25...+60°C	24Vdc/0, 5A	---
EL/ES2124	4-channel digital output terminal 5V DC	T4	-25...+60°C	5Vdc	---
EL/ES2202	2-channel digital output terminal 24 V DC, TON/TOFF 1 µs, push-pull outputs	T4	-25...+60°C	24Vdc/0, 5A	---
EL/ES2252	2-channel digital output terminal 24 V DC, 0.5 A, 4-wire system, high-speed outputs with time stamp	T4	-25...+60°C	24Vdc/0,5A	---
EL/ES2262	2-channel digital output terminal 24 V DC, 0.5 A, 4-wiresystem, high-speed outputs with oversampling	T4	-25...+60°C	24Vdc/0,5A	---
EL/ES2502	2-channel pulse width output terminal 24 V DC, 1 A, 4-wire system	T4	-25...+60°C	24Vdc/1A	---
EL/ES2521	1-channel pulse train output terminal, 2 RS422 outputs (5 V level)	T4	-25...+60°C	24Vdc	---
EL/ES2521-0024	1-channel pulse train output terminal, 2 outputs 24 V DC (supplied from an external source)	T4	-25...+60°C	24Vdc	---
EL2535-0050	2-channel pulse width current terminal 24 V DC, 50 mA	T4	-25...+60°C	24Vdc/±50mA	---
EL2535-0103	EtherCAT Terminal, 2-channel PWM output, 12...48 V DC, 3 A, current-controlled	T4	-25...+60°C	12Vdc...48Vdc/3A	---
EL2808	HD EtherCAT Terminal, 8-channel digital output 24 V DC, 0.5 A	T4	-25...+60°C	24Vdc/0, 5A	---
EL2889	HD EtherCAT Terminal, 16-channel digital output 24 V DC, 0.5 A, 0 V (ground) switching	T4	-25...+60°C	24Vdc/0,5A	---
EL2872	EtherCAT Terminal, 16-channel digital output, 24 V DC, 0.5 A, flat-ribbon cable	T4	-25...+60°C	24Vdc/0,5A	---
EL2872-0010	EtherCAT Terminal, 16-channel digital output, 24 V DC, 0.5 A, ground switching, flat-ribbon cable	T4	-25...+60°C	24Vdc/0,5A	---
EL/ES3001	1-channel analog input terminal -10 V...+10 V, single-ended, 12 bit	T4	-25...+60°C	-10V...+10V	---

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EL/ES3002	2-channel analog input terminal -10 V...+10 V, single-ended, 12 bit	T4	-25...+60°C	-10V...+10V	---
EL/ES3004	4-channel analog input terminal -10 V...+10 V, single-ended, 12 bit, 4 x 2-wire system	T4	-25...+60°C	-10V...+10V	---
EL/ES3008	8-channel analog input terminal -10 V...+10 V, single-ended, 12 bit, 1-wire system	T4	-25...+60°C	-10V...+10V	---
EL/ES3011	1-channel analog input terminal 0...20 mA, differential input, 12 bit	T4	-25...+60°C	0...20mA	---
EL/ES3012	2-channel analog input terminal 0...20 mA, differential input, 12 bit	T4	-25...+60°C	0...20mA	---
EL/ES3014	4-channel analog input terminal 0...20 mA, differential input, 12 bit	T4	-25...+60°C	0...20mA	---
EL/ES3021	1-channel analog input terminal 4...20 mA, differential input, 12 bit	T4	-25...+60°C	4...20mA	---
EL/ES3022	2-channel analog input terminal 4...20 mA, differential input, 12 bit	T4	-25...+60°C	4...20mA	---
EL/ES3024	4-channel analog input terminal 4...20 mA, differential input, 12 bit	T4	-25...+60°C	4...20mA	---
EL/ES3041	1-channel analog supply terminal 0...20 mA, single-ended, 12 bit	T4	-25...+60°C	0...20mA	---
EL/ES3042	2-channel analog supply terminal 0...20 mA, single-ended, 12 bit	T4	-25...+60°C	0...20mA	---
EL/ES3048	8-channel analog input terminal 0...20 mA, single-ended, 12 bit, 1-wire system	T4	-25...+60°C	0...20mA	---
EL/ES3051	1-channel analog supply terminal 4...20 mA, single-ended, 12 bit	T4	-25...+60°C	4...20mA	---
EL/ES3052	2-channel analog supply terminal 4...20 mA, single-ended, 12 bit	T4	-25...+60°C	4...20mA	---
EL/ES3054	4-channel analog input terminal 4...20 mA, single-ended, 12 bit, 4 x 2-wire system	T4	-25...+60°C	4...20mA	---
EL/ES3058	8-channel analog input terminal 4...20 mA, single-ended, 12 bit, 1-wire system	T4	-25...+60°C	4...20mA	---
EL/ES3061	1-channel analog input terminal 0...10 V, single-ended, 12 bit	T4	-25...+60°C	0...10V	---

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EL/ES3062	2-channel analog input terminal 0...10 V, single-ended, 12 bit	T4	-25...+60°C	0...10V	---
EL3062-0030	2-channel analog input terminal 0...30 V, single-ended, 12 bit	T4	-25...+60°C	0...30V	---
EL/ES3064	4-channel analog input terminal 0...10 V, single-ended, 12 bit, 4 x 2-wire system	T4	-25...+60°C	0...10V	---
EL/ES3068	8-channel analog input terminal 0...10 V, single-ended, 12 bit, 1-wire system	T4	-25...+60°C	0...10V	---
EL/ES3101	1-channel analog input terminal -10 V...+10 V, differential input, 16 bit	T4	-25...+60°C	-10V...+10V	---
EL/ES3102	2-channel analog input terminal -10 V...+10 V, differential input, 16 bit	T4	-25...+60°C	-10V...+10V	---
EL/ES3111	1-channel analog input terminal 0...20 mA, differential input, 16 bit	T4	-25...+60°C	0...20mA	---
EL/ES3112	2-channel analog input terminal 0...20 mA, differential input, 16 bit	T4	-25...+60°C	0...20mA	---
EL/ES3114	4-channel analog input terminal 0...20 mA, differential input, 16 bit	T4	-25...+60°C	0...20mA	---
EL/ES3121	1-channel analog input terminal 4...20 mA, differential input, 16 bit	T4	-25...+60°C	4...20mA	---
EL/ES3122	2-channel analog input terminal 4...20 mA, differential input, 16 bit	T4	-25...+60°C	4...20mA	---
EL/ES3141	1-channel analog supply terminal 0...20 mA, single-ended, 16 bit	T4	-25...+60°C	0...20mA	---
EL/ES3142	2-channel analog supply terminal 0...20 mA, single-ended, 16 bit	T4	-25...+60°C	0...20mA	---
EL/ES3144	4-channel analog input terminal 0...20 mA, single-ended, 16 bit, 4 x 2-wire system	T4	-25...+60°C	0...20mA	---
EL/ES3161	1-channel analog input terminal 0...10 V, single-ended, 16 bit	T4	-25...+60°C	0...10V	---
EL/ES3162	2-channel analog input terminal 0...10 V, single-ended, 16 bit	T4	-25...+60°C	0...10V	---
EL/ES3164	4-channel analog input terminal 0...10 V, single-ended, 16 bit, 4 x 2-wire system	T4	-25...+60°C	0...10V	---

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EL/ES3201	1-channel input terminal PT100 (RTD) for resistance sensors, 16 bit, 4-wire system	T4	-25...+60°C	PT100 (RTD)	---
EL3201-0010	1-channel input terminals PT100 (RTD) for 2-, 3- or 4-wire connection, high-precision	T4	-25...+60°C	PT100 (RTD)	---
EL/ES3202	2-channel input terminal PT100 (RTD) for resistance sensors, 16 bit, 2-, 3-wire system	T4	-25...+60°C	PT100 (RTD)	---
EL3202-0010	2-channel input terminal PT100 (RTD) for 4-wire connection, high-precision	T4	-25...+60°C	PT100 (RTD)	---
EL3255	HD EtherCAT Terminal, 5-channel input, potentiometer measurement with sensor supply	T4	-25...+60°C	0...10V	---
EL3311	1-channel thermocouple input terminal, preset to type K, with wire breakage detection, 16 bit	T4	-25...+60°C	Thermocouple	---
EL3312	2-channel thermocouple input terminal, preset to type K, with wire breakage detection, 16 bit	T4	-25...+60°C	Thermocouple	---
EL/ES3351	1-channel resistor bridge input terminal (strain gauge), 16 bit	T4	-25...+60°C	Resistor bridge	---
EL/ES3356	1-channel input terminal, accurate resistance bridge evaluation, with self-calibration, 16 bit	T4	-25...+60°C	Resistor bridge	---
EL/ES3602	2-channel analog input terminal -10...+10V, differential inputs, 24 bit	T4	-25...+60°C	-10V...+10V	---
EL3602-0010	2-channel analog input terminal -75...+75 mV, differential input, 24 bit	T4	-25...+60°C	-75mV...+75mV	---
EL/ES3612	2-channel analog input terminal 0...20 mA, differential input, 24 bit	T4	-25...+60°C	0...20mA	---
EL3632	2-channel analog input terminal, ±5 V, for Condition Monitoring (IEPE)	T4	-25...+60°C		---
EL3692	2-channel resistance measurement terminal 10 mΩ...10 MΩ, high-precision	T4	-25...+60°C	Resistance measurement	---
EL/ES3742	2-channel analog input terminal 0...20 mA, differential inputs, 16 bit, oversampling	T4	-25...+60°C	0...20mA	---

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EL3751	1-channel analog input terminal, 24 bit, oversampling, parameterisable: ±30/10/5/2.5/1.25 V, ±640/320/160/80/40/20/10/5 mV, 0...5/10 V, ±20 mA, 0/4...20 mA, NAMUR NE43, 0...5 kΩ, RTD PT100/PT1000, Ni, KTY, ¼ bridge (350 Ω + 120 Ω), ½ bridge (±16 mV/V), full bridge (±32 mV/V), potentiometer ≥ 1 kΩ	T4	-25...+60°C	Various signal level inputs	---
EL/ES4001	1-channel analog output terminal 0...10 V, 12 bit	T4	-25...+60°C	0...10V	---
EL/ES4002	2-channel analog output terminal 0...10 V, 12 bit	T4	-25...+60°C	0...10V	---
EL/ES4004	4-channel analog output terminal 0...10 V, 12 bit	T4	-25...+60°C	0...10V	---
EL/ES4008	8-channel analog output terminal 0...10 V, 12 bit	T4	-25...+60°C	0...10V	---
EL/ES4011	1-channel analog output terminal 0...20 mA, 12 bit	T4	-25...+60°C	0...20mA	---
EL/ES4012	2-channel analog output terminal 0...20 mA, 12 bit	T4	-25...+60°C	0...20mA	---
EL/ES4018	8-channel analog output terminal 0...20 mA, 12 bit, 1- wire system	T4	-25...+60°C	0...20mA	---
EL/ES4021	1-channel analog output terminal 4...20 mA, 12 bit	T4	-25...+60°C	4...20mA	---
EL/ES4024	4-channel analog output terminal 4...20 mA, 12 bit, 4 x 2-wire system	T4	-25...+60°C	4...20mA	---
EL/ES4028	8-channel analog output terminal 4...20 mA, 12 bit, 1- wire system	T4	-25...+60°C	4...20mA	---
EL/ES4031	1-channel analog output terminal -10 V...+10 V, 12 bit	T4	-25...+60°C	-10V...+10V	---
EL/ES4032	2-channel analog output terminal -10 V...+10 V, 12 bit	T4	-25...+60°C	-10V...+10V	---
EL/ES4034	4-channel analog output terminal -10 V...+10 V, 12 bit, 4 x 2-wire system	T4	-25...+60°C	-10V...+10V	---
EL/ES4038	8-channel analog output terminal -10 V...+10 V, 12 bit, 1-wire system	T4	-25...+60°C	-10V...+10V	---

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EL/ES4102	2-channel analog output terminal 0...10 V, 16 bit	T4	-25...+60°C	0...10V	---
EL/ES4104	4-channel analog output terminal 0...10 V, 16 bit	T4	-25...+60°C	---	---
EL/ES4112	2-channel analog output terminal 0...20 mA, 16 bit	T4	-25...+60°C	0...20mA	---
EL/ES4112-0010	2-channel analog output terminal -10...+10 mA, 16 bit	T4	-25...+60°C	-10mA...+10mA	---
EL/ES4114	4-channel analog output terminal 0...20 mA, 16 bit	T4	-25...+60°C	0...20mA	---
EL/ES4122	2-channel analog output terminal 4...20 mA, 16 bit	T4	-25...+60°C	4...20mA	---
EL/ES4124	4-channel analog output terminal 4...20 mA, 16 bit	T4	-25...+60°C	4...20mA	---
EL/ES4132	2-channel analog output terminal -10 V...+10 V, 16 bit	T4	-25...+60°C	-10V...+10V	---
EL/ES4134	4-channel analog output terminal -10 V...+10 V, 16 bit	T4	-25...+60°C	-10V...+10V	---
EL/ES4712	2-channel analog output terminal 0...20 mA with oversampling	T4	-25...+60°C	0...20mA	---
EL/ES5001	SSI encoder interface	T4	-25...+60°C	---	---
EL5001-0011	1-channel SSI monitor terminal	T4	-25...+60°C	---	---
EL/ES5002	2-channel SSI encoder interface	T4	-25...+60°C	---	---
EL/ES5021	1-channel SinCos encoder interface, 1 VSS	T4	-25...+60°C	---	---
EL/ES5101	Incremental encoder interface with differential input, 16 bit	T4	-25...+60°C	---	---
EL/ES5151	1-channel incremental encoder interface, 32 bit	T4	-25...+60°C	---	---
EL/ES6001	Serial interface RS232	T4	-25...+60°C	---	---
EL6002	2-channel serial interfaces RS232, D-sub connection	T4	-25...+60°C	---	---
EL/ES6021	Serial interface RS422/RS485	T4	-25...+60°C	---	---

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EL6022	2-channel serial interfaces RS422/RS485, D-sub connection	T4	-25...+60°C	---	---
EL6080	EtherCAT memory terminal 128 kbyte	T4	-25...+60°C	---	---
EL/ES6224	IO-Link terminal	T4	-25...+60°C	---	---
EL/ES6201	EtherCAT Terminal, 1-channel communication interface, ASi, master	T4	-25...+60°C	---	---
EL6614	4-port Ethernet Switch terminal	T4	-25...+60°C	---	---
EL6631	PROFINET IO controller terminal	T4	-25...+60°C	---	---
EL6631-0010	ROFINET IO device terminal	T4	-25...+60°C	---	---
EL6632	PROFINET IRT controller	T4	-25...+60°C	---	---
EL6688	IEEE 1588 external synchronisation interface	T4	-25...+60°C	---	---
EL6692	EtherCAT bridge terminal	T4	-25...+60°C	24Vdc	---
EL6720	Lightbus master terminal	T4	-25...+60°C	---	---
EL6731	PROFIBUS master terminal	T4	-25...+60°C	---	---
EL6731-0010	PROFIBUS slave terminal	T4	-25...+60°C	---	---
EL6740	Interbus slave terminal	T4	-25...+60°C	---	---
EL6751	CANopen master terminal	T4	-25...+60°C	---	---
EL6751-0010	CANopen slave terminal	T4	-25...+60°C	---	---
EL6752	DeviceNet master terminal	T4	-25...+60°C	---	---
EL6752-0010	DeviceNet slave terminal	T4	-25...+60°C	---	---
EL/ES6851	DMX master terminal	T4	-25...+60°C	---	---
EL6900	TwinSAFE Logic Terminal	T4	-25...+60°C	---	---
EL6910	EtherCAT Terminal communication interface, TwinSAFE Logic	T4	-25...+60°C	---	---
EL9010	E-bus end terminal	T4	-25...+60°C	---	---
EL9011	Bus end cap	T4	-25...+60°C	---	---
EL9080	Isolation terminal	T4	-25...+60°C	---	---

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EL/ES9100	Passive potential feed terminal, 24 V DC	T4	-25...+60°C	24Vdc/10A	---
EL/ES9110	Power supply terminal with diagnostics, 24 V DC	T4	-25...+60°C	24Vdc	---
KL/KS9150	Power supply terminal, 230 V AC	T4	-25...+60°C	230Vac	---
KL/KS9160	Power supply terminal with diagnostics, 230 V AC	T4	-25...+60°C	230Vac	---
EL/ES9180	Potential distribution terminal with 2 clamps per power contact	T4	-25...+60°C	---	---
EL9181	Potential distribution terminal, 8 x 2 potentials	T4	-25...+60°C	---	---
EL9184	HD Bus Terminal, 16-channel potential distribution, 8x 24V contact, 8x 0V contact	T4	-25...+60°C	24Vdc	---
EL/ES9185	Potential distribution terminal with 4 clamps per power contact	T4	-25...+60°C	---	---
EL/ES9186	Potential distribution terminal, 8 x 24 V DC	T4	-25...+60°C	24Vdc	---
EL/ES9187	Potential distribution terminal, 8 x 0 V	T4	-25...+60°C	24Vdc	---
EL9188	HD Bus Terminal, 16-channel potential distribution, 16x 24V contact	T4	-25...+60°C	24Vdc	---
EL9189	HD Bus Terminal, 16-channel potential distribution, 16x 0v contact	T4	-25...+60°C	---	---
EL/ES9195	shield terminal	T4	-25...+60°C	---	---
EL9200	Power supply terminal with fuse, 24 V DC	T4	-25...+60°C	24Vdc	---
EL9210	Power supply terminal with fuse and diagnostics, 24 V DC	T4	-25...+60°C	24Vdc	---
EL9227-5500	Overcurrent protection terminal, 24 V DC, 2-channel, max. Σ 10 A, adjustable, extended functionalities	T4	-25...+60°C	24Vdc/10A	---
EL/ES9400	Power supply terminal for E-bus, 24 V DC, 2 A	T4	-25...+60°C	24Vdc/2A	---
EL/ES9410	Power supply terminal for E-bus, 24 V DC, 2 A with diagnostics	T4	-25...+60°C	24Vdc/2A	---
EL/ES9505	Power supply unit terminal 24 V DC, output 5 V DC, 0.5 A	T4	-25...+60°C	24Vdc, output 5Vdc/0,5A	---

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EL/ES9508	Power supply unit terminal 24 V DC, output 8 V DC, 0.5 A	T4	-25...+60°C	24Vdc, output 8Vdc/0,5A	---
EL/ES9510	Power supply unit terminal 24 V DC, output 10 V DC, 0.5 A	T4	-25...+60°C	24Vdc, output 10Vdc/0,5A	---
EL/ES9512	Power supply unit terminal 24 V DC, output 12 V DC, 0.5 A	T4	-25...+60°C	24Vdc, output 12Vdc/0,5A	---
EL/ES9515	Power supply unit terminal 24 V DC, output 15 V DC, 0.5 A	T4	-25...+60°C	24Vdc, output 15Vdc/0,5A	---
EL9520	AS-Interface potential feed terminal with filter	T4	-25...+60°C	---	---
EL/ES9540	Surge filter field supply	T4	-25...+60°C	---	---
EL/ES9540-0010	System terminal, surge filter and field supply	T4	-25...+60°C	---	---
EL/ES9570	Buffer capacitor terminal	T4	-25...+60°C	---	---

EtherCat Box type EPX**_****_******

Non-Intrinsically safe circuit in level of protection 'ec' or 'tc':

- Power supply circuits:
 - Power supply connector, M8 plug, 4 pin (IN)
 - Power supply connector, M8 socket, 4 pin (OUT)
- EtherCAT circuits
 - EtherCAT connector M8 socket, 4 pin, green (IN)
 - EtherCAT connector M8 socket, 4 pin, green (OUT)

Rated nominal input voltage

- Control voltage $U_{\text{supply}} = 24 \text{ (-15% / +20%) Vdc}$
- Peripheral $U_{\text{peripheral}} = 24 \text{ (-15% / +20%) Vdc}$

Rated maximum input current

- Control current $I_{\text{supply}} = \text{DC } 4\text{A}$
- Peripheral $I_{\text{peripheral}} = \text{DC } 4\text{A}$

Maximum voltage $U_m = 60\text{Vdc}$

Ambient temperature range = -25°C to +70°C

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SCHEDULE

US Certificate of Conformity No: FM20US0111X

EPX1058

8-channel digital box
NAMUR

Channel 1: M12 socket, 5 pin, X01 Pin 1 (Uv1); Pin 4 (Input1)
Channel 2: M12 socket, 5 pin, X02 Pin 11 (Uv2), Pin 14 (Input2)
Channel 3: M12 socket, 5 pin, X03 Pin 21 (Uv3), Pin 24 (Input3)
Channel 4: M12 socket, 5 pin, X04 Pin 31 (Uv4), Pin 34 (Input4)
Channel 5: M12 socket, 5 pin, X05 Pin 6 (Uv5), Pin 9 (Input5)
Channel 6: M12 socket, 5 pin, X06 Pin 16 (Uv6), Pin 19 (Input6)
Channel 7: M12 socket, 5 pin, X07 Pin 26 (Uv7), Pin 29 (Input7)
Channel 8: M12 socket, 5 pin, X08 Pin 36 (Uv8), Pin 39 (Input8)
(the remaining pins are not used)

Each channel

Maximum output voltage	U_o	10.72	V
Maximum output current	I_o	10.4	mA
Linear output characteristics			
Maximum output power	P_o	28	mW

Maximum external capacitance C_o or maximum external inductance L_o :

	I	IIA	IIB / IIIC	IIC
C_o [μF]	58	66	15	2.14
L_o [mH]	100	100	100	100

The cable capacitance C_c = 200 pF/m and the cable inductance L_c = 1 μH/m depending on the cable length have not yet been taken into account.

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SCHEDULE

US Certificate of Conformity No: FM20US0111X

EPX2004

4-channel digital output box

Channel 1: M12 socket, 5-pin, X01 Pin 4 (OUT1), 3 (GND_ISO)
Channel 2: M12 socket, 5-pin, X02 Pin 14 (OUT2), 13 (GND_ISO)
Channel 3: M12 socket, 5-pin, X03 Pin 9 (OUT3), 8 (GND_ISO)
Channel 4: M12 socket, 5-pin, X04 Pin 19 (OUT4), 18 (GND_ISO)

Each channel

Maximum output voltage	U_o	27	V
Maximum output current	I_o	119	mA
Linear output characteristics			
Maximum output power	P_o	804	mW

Maximum external capacitance C_o or maximum external inductance L_o :

	I	IIA	IIB / IIIC	IIC
C_o [μ F]	3.75	2.33	0.705	0.090
L_o [mH]	17	12	6.4	0.043

The cable capacitance $C_c = 200$ pF/m and the cable inductance $L_c = 1$ μ H/m depending on the cable length have not yet been taken into account.

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SCHEDULE

US Certificate of Conformity No: FM20US0111X

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EPX3158	8-channel analog input box 4...20mA	Channel 1: M12 socket, 5-pin, X01 Pin 1 (UV1), Pin 2 (Input1), Pin 3 (Ground1) Channel 2: M12 socket, 5-pin, X02 Pin 11 (UV2), Pin 12 (Input2), Pin 13 (Ground2) Channel 3: M12 socket, 5-pin, X03 Pin 21 (UV3), Pin 22 (Input3), Pin 23 (Ground3) Channel 4: M12 socket, 5-pin, X04 Pin 31 (UV4), Pin 32 (Input4), Pin 33 (Ground4) Channel 5: M12 socket, 5-pin, X05 Pin 6 (UV5), Pin 7 (Input5), Pin 8 (Ground5) Channel 6: M12 socket, 5-pin, X06 Pin 16 (UV6), Pin 17 (Input6), Pin 18 (Ground6) Channel 7: M12 socket, 5-pin, X07 Pin 26 (UV7), Pin 27 (Input7), Pin 28 (Ground7) Channel 8: M12 socket, 5-pin, X08 Pin 36 (UV8), Pin 37 (Input8), Pin 38 (Ground8) (the remaining pins are not used) Each channel <table><tr><td>Maximum output voltage</td><td>U_o</td><td>27</td><td>V</td></tr><tr><td>Maximum output current</td><td>I_o</td><td>80</td><td>mA</td></tr><tr><td colspan="4">Linear output characteristics</td></tr><tr><td>Maximum output power</td><td>P_o</td><td>540</td><td>mW</td></tr></table> Maximum external capacitance C_o or maximum external inductance L_o: <table><tr><td></td><td>I</td><td>IIA</td><td>IIB / IIIC</td><td>IIC</td></tr><tr><td>C_o [μF]</td><td>3.75</td><td>2.33</td><td>0.705</td><td>0.09</td></tr><tr><td>L_o [mH]</td><td>49</td><td>35</td><td>21</td><td>2.8</td></tr></table> The cable capacitance $C_c = 200$ pF/m and the cable inductance $L_c = 1$ μH/m depending on the cable length have not yet been taken into account.	Maximum output voltage	U_o	27	V	Maximum output current	I_o	80	mA	Linear output characteristics				Maximum output power	P_o	540	mW		I	IIA	IIB / IIIC	IIC	C_o [μF]	3.75	2.33	0.705	0.09	L_o [mH]	49	35	21	2.8
Maximum output voltage	U_o	27	V																														
Maximum output current	I_o	80	mA																														
Linear output characteristics																																	
Maximum output power	P_o	540	mW																														
	I	IIA	IIB / IIIC	IIC																													
C_o [μF]	3.75	2.33	0.705	0.09																													
L_o [mH]	49	35	21	2.8																													

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SCHEDULE

US Certificate of Conformity No: FM20US0111X

FM Approvals

EPX3184

4-channel analog input box

4...20mA, HART

Channel 1: M12 socket, 5 pin, X01 Pin 1 (Uv1); Pin 2 (I_CH1)

Channel 2: M12 socket, 5 pin, X02 Pin 11 (Uv2), Pin 12 (I_CH2)

Channel 3: M12 socket, 5 pin, X03 Pin 6 (Uv3), Pin 7 (I_CH3)

Channel 4: M12 socket, 5 pin, X04 Pin 16 (Uv4), Pin 17 (I_CH4)

Each channel

Maximum output voltage	U_o	27	V
Maximum output current	I_o	79	mA
Linear output characteristics			
Maximum output power	P_o	534	mW

Maximum external capacitance C_o or maximum external inductance L_o :

	I	IIA	IIB / IIIC	IIC
C_o [μF]	3.75	2.33	0.705	0.09
L_o [mH]	49	35	21	2.8

The cable capacitance $C_c = 200$ pF/m and the cable inductance $L_c = 1$ μH/m depending on the cable length have not yet been taken into account.

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SCHEDULE

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EPX3204

4-channel analog input box RTD

Channel 1: M12 socket, 5 pin, X01 Pin 1 (RL+), Pin 2 (R+), Pin 3 (RL-), Pin 4 (R-)

Channel 2: M12 socket, 5 pin, X02 Pin 1 (RL+), Pin 2 (R+), Pin 3 (RL-), Pin 4 (R-)

Channel 3: M12 socket, 5 pin, X03 Pin 1 (RL+), Pin 2 (R+), Pin 3 (RL-), Pin 4 (R-)

Channel 4: M12 socket, 5 pin, X04 Pin 1 (RL+), Pin 2 (R+), Pin 3 (RL-), Pin 4 (R-)

Each channel

Maximum output voltage	U_o	5.36	V
Maximum output current	I_o	13	mA
Linear output characteristics			
Maximum output power	P_o	18	mW

Maximum external capacitance C_o or maximum external inductance L_o :

	I, IIA, IIB, IIIC	IIC
C_o [μF]	1000	65
L_o [mH]	100	100

The cable capacitance $C_c = 200$ pF/m and the cable inductance $L_c = 1$ μH/m depending on the cable length have not yet been taken into account.

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SCHEDULE

US Certificate of Conformity No: FM20US0111X

FM Approvals

EPX3314

4-channel analog input box RTD

Channel 1: M12 socket, 5 pin, X01 Pin 1 (Comp. A), Pin 2 (TC +), Pin 3 (GND A), Pin 4 (TC -)

Channel 2: M12 socket, 5 pin, X02 Pin 1 (Comp. A), Pin 2 (TC +), Pin 3 (GND A), Pin 4 (TC -)

Channel 3: M12 socket, 5 pin, X03 Pin 1 (Comp. A), Pin 2 (TC +), Pin 3 (GND A), Pin 4 (TC -)

Channel 4: M12 socket, 5 pin, X04 Pin 1 (Comp. A), Pin 2 (TC +), Pin 3 (GND A), Pin 4 (TC -)

Each channel

Maximum output voltage	U_o	5.36	V
Maximum output current	I_o	13	mA
Linear output characteristics			
Maximum output power	P_o	18	mW

Maximum external capacitance C_o or maximum external inductance L_o :

	I, IIA, IIB, IIIC	IIC
C_o [μF]	1000	65
L_o [mH]	100	100

The cable capacitance $C_c = 200$ pF/m and the cable inductance $L_c = 1$ μH/m depending on the cable length have not yet been taken into account.

13. Specific Conditions of Use:

Applicable to Type BK, BC, KL, KS, EL, EK, EKM, ES, CX

1. The equipment shall be installed within an enclosure that provides a minimum ingress protection of IP54 in accordance with ANSI/UL 60079-0.
2. The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1
3. Transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage value at the supply terminals to the equipment
4. The circuits shall be limited to overvoltage Category II as defined in IEC 60664-1
5. The Fieldbus Components may only be removed or inserted when the system supply and the field supply are switched off, or when the location is known to be non-hazardous.
6. The Fieldbus Components may only be disconnected or connected when the system supply is switched off, or when the location is known to be non-hazardous.

Applicable to Type CPX2***

1. The panel shall be built in the wall of a control cabinet fulfilling all relevant clauses of ANSI/UL 60079-0 and ANSI/UL 60079-7. The panel itself fulfills all mechanical requirements according to ANSI/UL 60079-0 and the degrees of protection IP54 resp. IP6X according to ANSI/IEC 60529 if mounted according to the User's Manual

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2. The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60991-1
3. Transient protection shall be provided that is set at a level not exceeding 119V
4. The panel shall not be exposed to direct sunlight
5. The panel shall only be mounted vertically in landscape format

Applicable to Type CPX3***

1. The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1
2. Transient protection shall be provided that is set at a level not exceeding 119V

Applicable to Type EP

1. To avoid an electrostatic charge, wipe the enclosure with a damp cloth only
2. The equipment shall only be used in an environment where it is protected against exposure to UV light
3. The equipment shall be installed in a suitable protective housing that meets the requirements of the impact resistance test according to ANSI/UL 60079-0
4. When used in an area requiring the use of equipment with EPL Gc, the following conditions apply:
 - The equipment shall only be used in an area of not more than pollution degree 2, as defined in IEC 60664-1.
 - Provisions shall be made to prevent the rated voltages from being exceeded by transient disturbances of more than 140%

Applicable to Type EPX*_***_*****

1. The EtherCat Box must be protected from the risk of electrostatic charge in EPL Gc. All cabling for Intrinsically Safe Output to EPL Ga must be protected from electrostatic charge under normal conditions.
2. The equipment shall only be used in an environment where it is protected against exposure to UV light.
3. For EPL Gc: The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.
4. For EPL Gc: Transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage value at the supply terminals to the equipment.
5. The equipment may only be connected to SELV/PELV supply voltage.
6. The equipment must be installed in such a way that it is protected from mechanical hazards, for example by installation of the protective housing BG2000-0020

14. Test and Assessment Procedure and Conditions:

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. Schedule Drawings

A copy of the technical documentation has been kept by FM Approvals.

16. Certificate History

Details of the supplements to this certificate are described below:

Date	Description
2 November 2020	Original Issue.

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Date	Description
6 April 2021	<u>Supplement 1:</u> Report Reference: PR459744 dated 6th April 2021. Description of the Change: 1. Class II and Class III, Division 2 ratings added for CPX2*** and CPX3*** terminals 2. Zone 22 ratings added for CPX2*** and CPX3*** terminals 3. ANSI/UL 60079-31 added to standards list
29 July 2026	<u>Supplement 2:</u> Report Reference: PR474912 dated 29 July 2026. Description of the Change(s): 1. Addition of module type BC**** Bus Terminal Controllers 2. Addition of module type EKM1101 EtherCat Coupler with ID switch and diagnostics 3. Addition of module type EP EtherCat Box modules 4. Addition of module type EtherCat Box EPX*****_*****_***** 5. Additional modules of type EL/ES added 6. Additional modules of type KL/KS added 7. FM3600 updated to latest edition (2022) 8. FM3611 and FM3810 updated to latest edition (2021) 9. ANSI/UL 121201:2019 updated to ANSI/UL 121201:2025 10. ANSI/ISA 61010-1:2012 updated to ANSI/UL 61010-1:2019 11. ANSI/UL 60079-0:2020 updated to ANSI/UL 60079-0:2020(R2024) 12. ANSI/UL 60079-7:2017 updated to ANSI/UL 60079-7:2021 13. FM3610:2021 added to Standards List 14. ANSI/UL 60079-11:2018 added to Standards List 15. Certificate updated to latest format

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