

Documentation | EN

Control Drawing I/O, CX, CPX

Connection diagrams and Ex markings

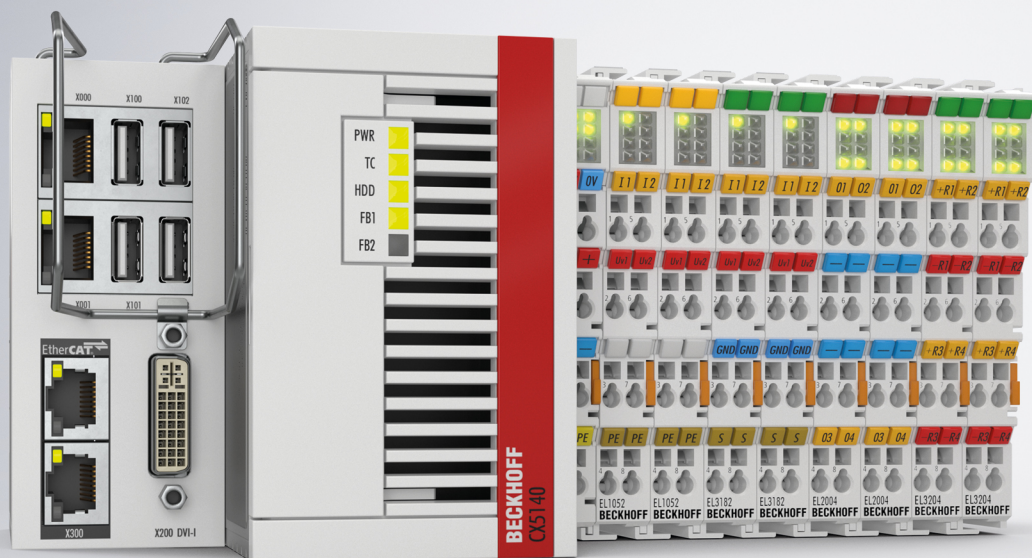


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1 Foreword

1.1 Notes on the documentation

Intended audience

This description is only intended for the use of trained specialists in control and automation engineering who are familiar with the applicable national standards.

It is essential that the documentation and the following notes and explanations are followed when installing and commissioning these components.

It is the duty of the technical personnel to use the documentation published at the respective time of each installation and commissioning.

The responsible staff must ensure that the application or use of the products described satisfy all the requirements for safety, including all the relevant laws, regulations, guidelines and standards.

Disclaimer

The documentation has been prepared with care. The products described are, however, constantly under development.

We reserve the right to revise and change the documentation at any time and without prior announcement.

No claims for the modification of products that have already been supplied may be made on the basis of the data, diagrams and descriptions in this documentation.

Trademarks

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Patent Pending

The EtherCAT Technology is covered, including but not limited to the following patent applications and patents: EP1590927, EP1789857, EP1456722, EP2137893, DE102015105702 with corresponding applications or registrations in various other countries.



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1.2 Safety instructions

Safety regulations

Please note the following safety instructions and explanations!

Product-specific safety instructions can be found on following pages or in the areas mounting, wiring, commissioning etc.

Exclusion of liability

All the components are supplied in particular hardware and software configurations appropriate for the application. Modifications to hardware or software configurations other than those described in the documentation are not permitted, and nullify the liability of Beckhoff Automation GmbH & Co. KG.

Personnel qualification

This description is only intended for trained specialists in control, automation and drive engineering who are familiar with the applicable national standards.

Description of instructions

In this documentation the following instructions are used.

These instructions must be read carefully and followed without fail!

DANGER

Serious risk of injury!

Failure to follow this safety instruction directly endangers the life and health of persons.

WARNING

Risk of injury!

Failure to follow this safety instruction endangers the life and health of persons.

CAUTION

Personal injuries!

Failure to follow this safety instruction can lead to injuries to persons.

NOTE

Damage to environment/equipment or data loss

Failure to follow this instruction can lead to environmental damage, equipment damage or data loss.



Tip or pointer

This symbol indicates information that contributes to better understanding.

1.3 Documentation issue status

Version	Comment
1.1.0	• Connection diagrams of CPX27xx, CPX29xx, CPX37xx and CPX39xx extended for dust • Ex markings for Control Panels and Panel PCs added
1.0.0	• First release (Content identical with version 0.3)
0.3	• Connection diagrams of EL2794, EL6021-0000 and EL6021-1001 extended • Control Panels and Panel PCs added • Ex markings added
0.2	• Further EtherCAT Coupler and EtherCAT Terminals added • Bus Coupler and Bus Terminals added • Embedded PCs added
0.1	• First draft for EtherCAT Coupler and EtherCAT Terminals

2 Connection diagrams

2.1 EtherCAT Coupler

2.1.1 EK1100

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

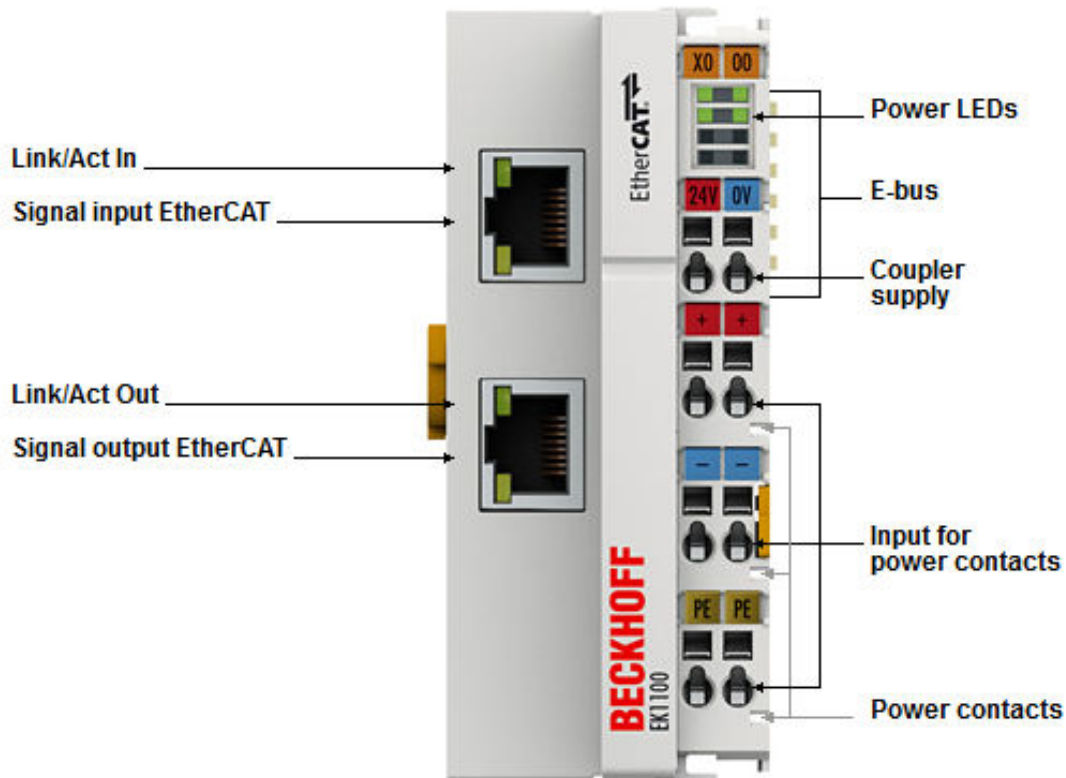


Fig. 1: EK1100 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.1.2 EK1101

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

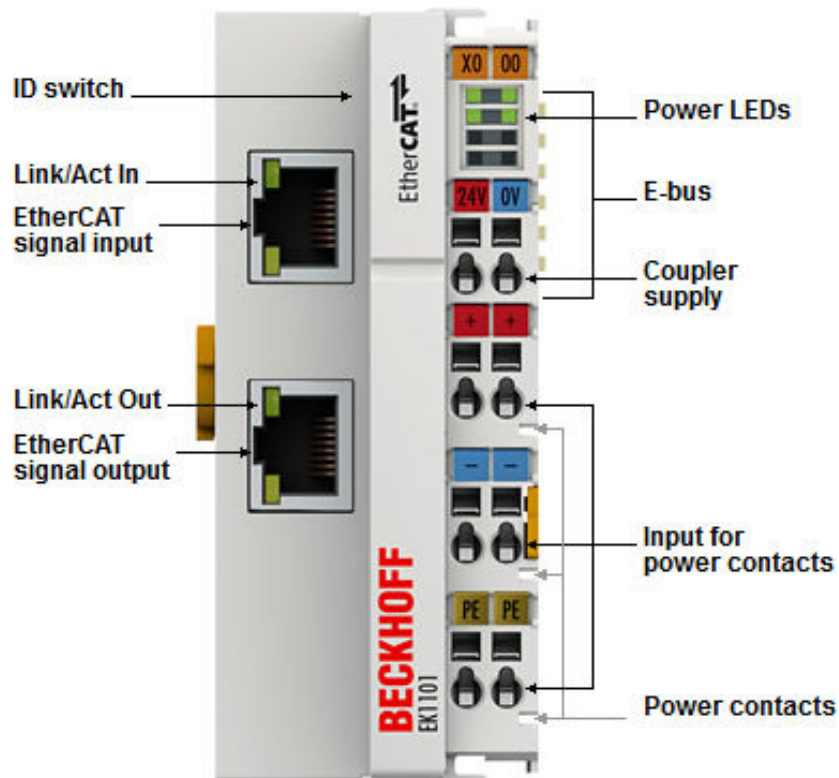


Fig. 2: EK1101 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.1.3 EK1122-0000

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

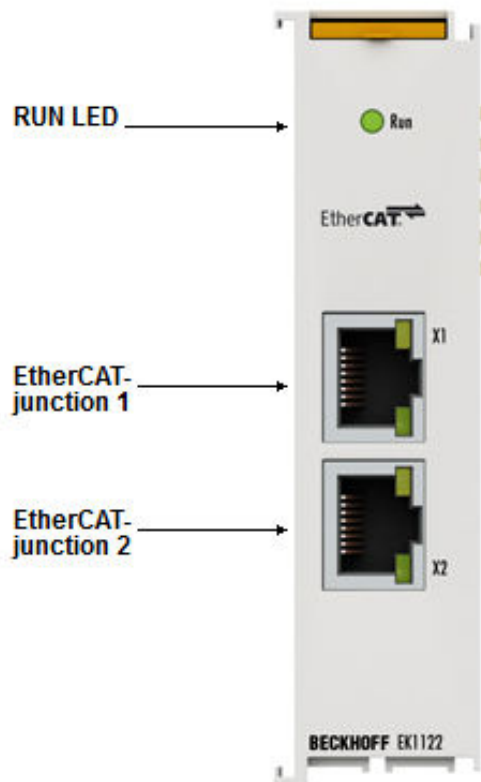


Fig. 3: EK1122-0000 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.1.4 EK1122-0008

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

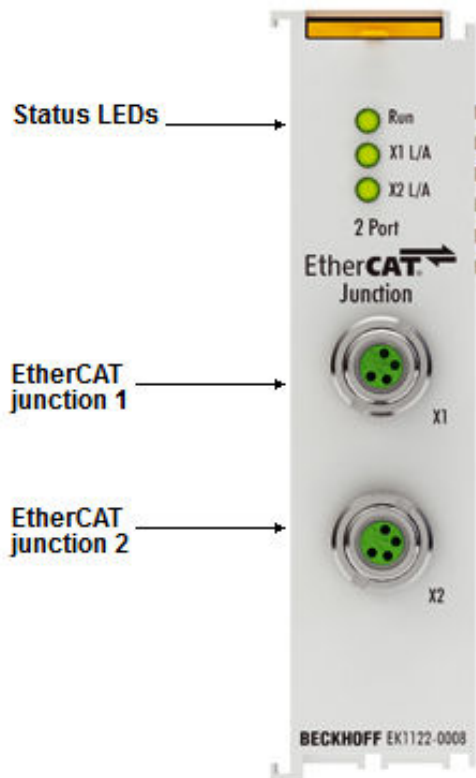


Fig. 4: EK1122-0008 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.1.5 EK9300

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

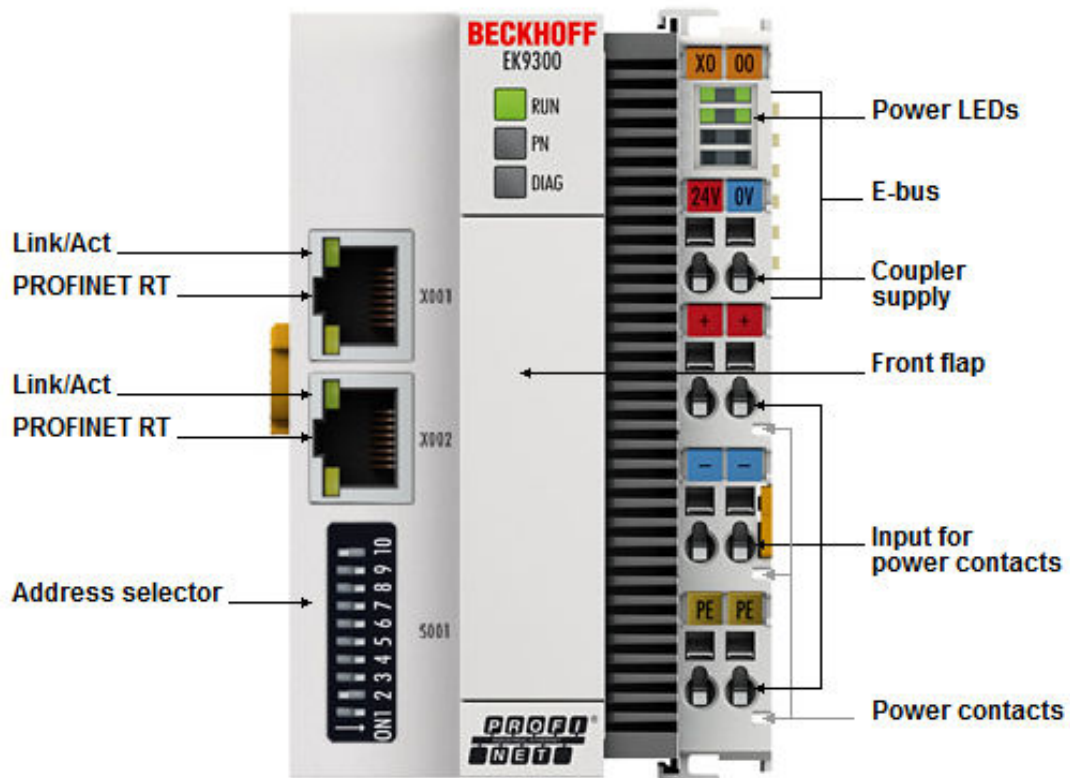


Fig. 5: EK9300 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.1.6 EKM1101

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC



Fig. 6: EKM1101 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.2 EtherCAT Terminals with digital inputs

2.2.1 EL1002/ES1002

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

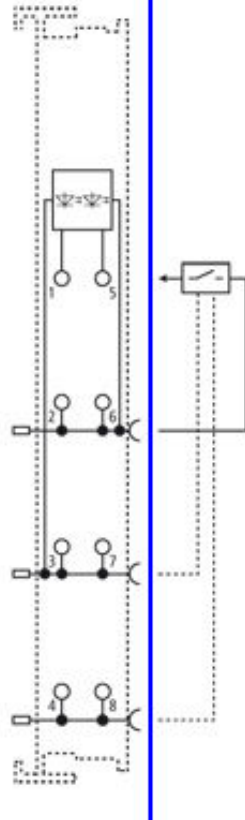


Fig. 7: EL1002/ES1002 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.2.2 EL1004/ES1004

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

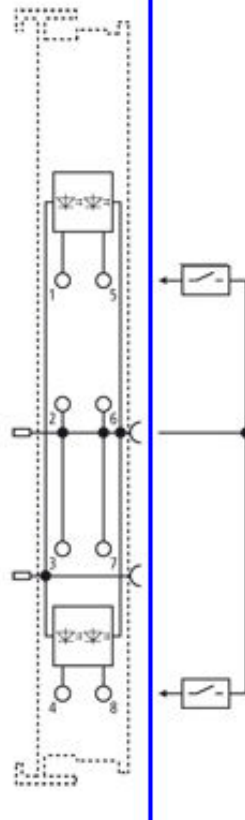


Fig. 8: EL1004/ES1004 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.2.3 EL1008/ES1008

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

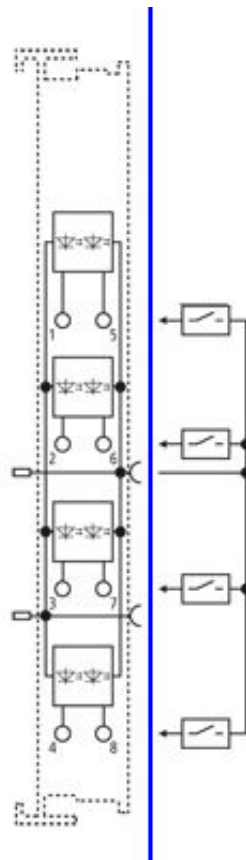


Fig. 9: EL1008/ES1008 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.2.4 EL1052/ES1052

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

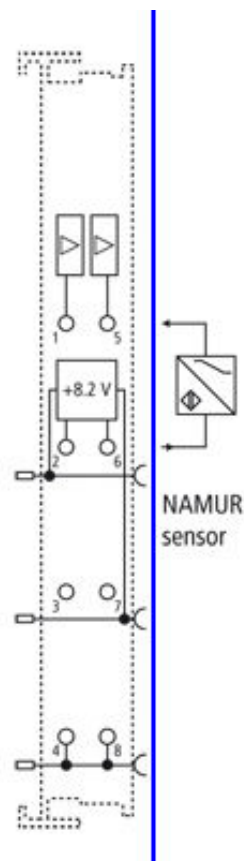


Fig. 10: EL1052/ES1052 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.2.5 EL1054/ES1054

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

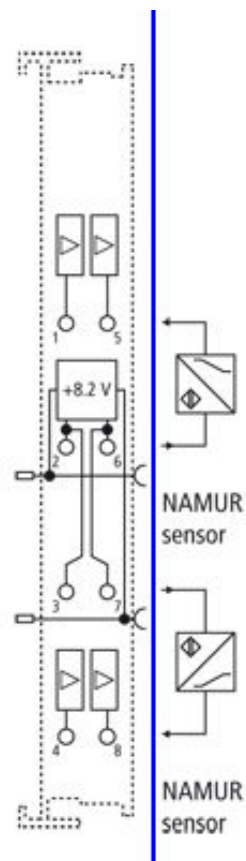


Fig. 11: EL1054/ES1054 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.2.6 EL1262/ES1262

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

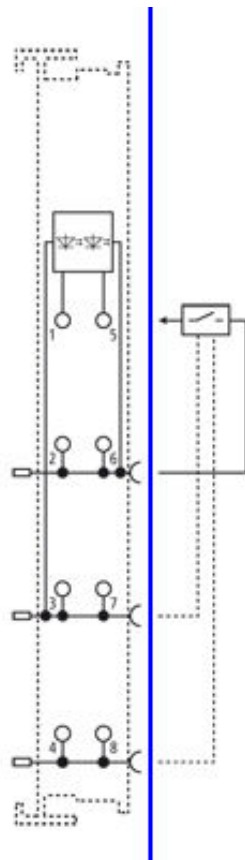


Fig. 12: EL1262/ES1262 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.2.7 EL1918

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

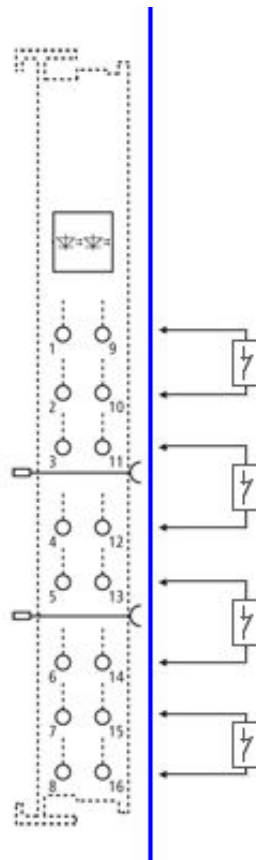


Fig. 13: EL1918 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.3 EtherCAT Terminals with digital outputs

2.3.1 EL2008/ES2008

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

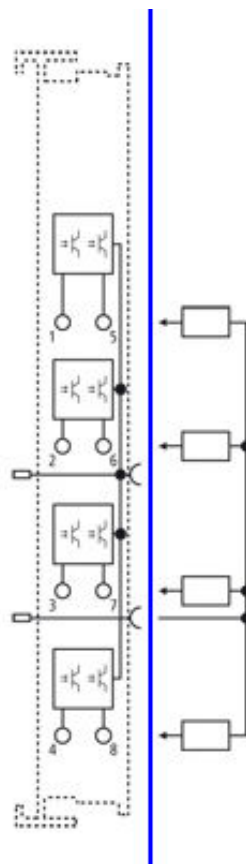


Fig. 14: EL2008/EL2008 - Actuator connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.3.2 EL2014

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

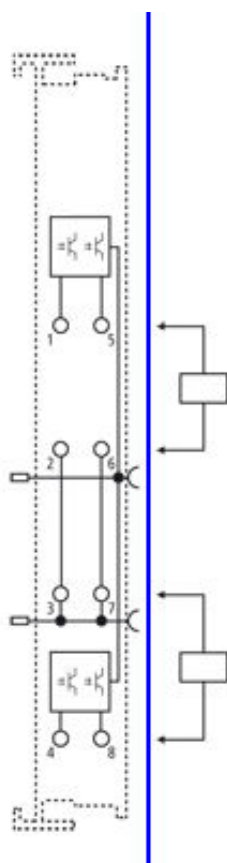


Fig. 15: EL2014 - Actuator connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.3.3 EL2022/ES2022

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

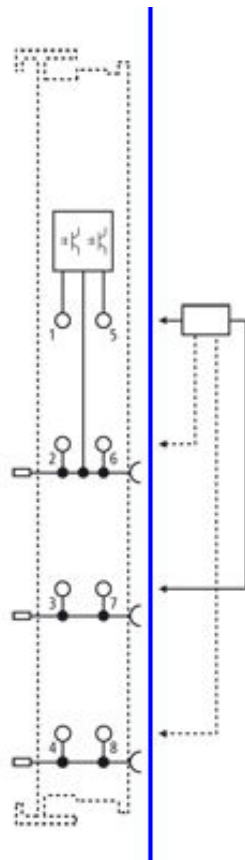


Fig. 16: EL2022/EL2022 - Actuator connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.3.4 EL2535-0002/ES2535-0002

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

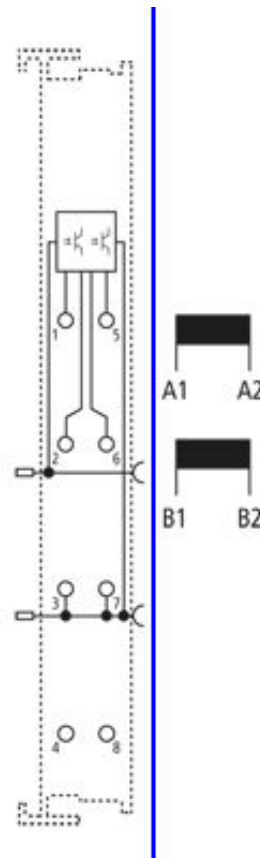


Fig. 17: EL2535-0002/2535-0002 - Actuator connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.3.5 EL2535-0005

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

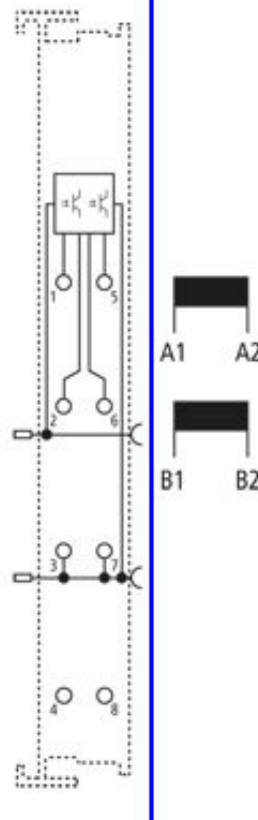


Fig. 18: EL2535-0005 - Actuator connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.3.6 EL2794

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

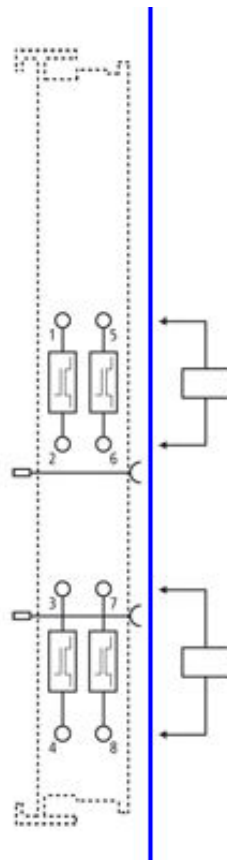


Fig. 19: EL2794 - Actuator connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.3.7 EL2809

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

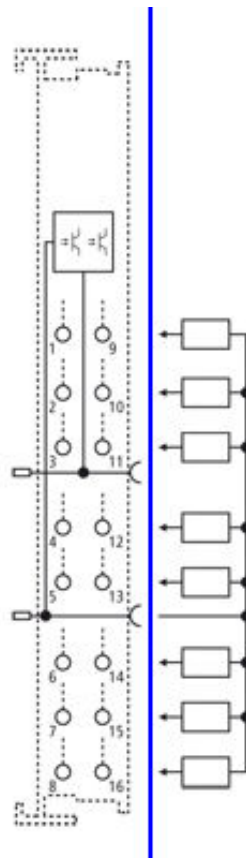


Fig. 20: EL2809 - Actuator connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.3.8 EL2904

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

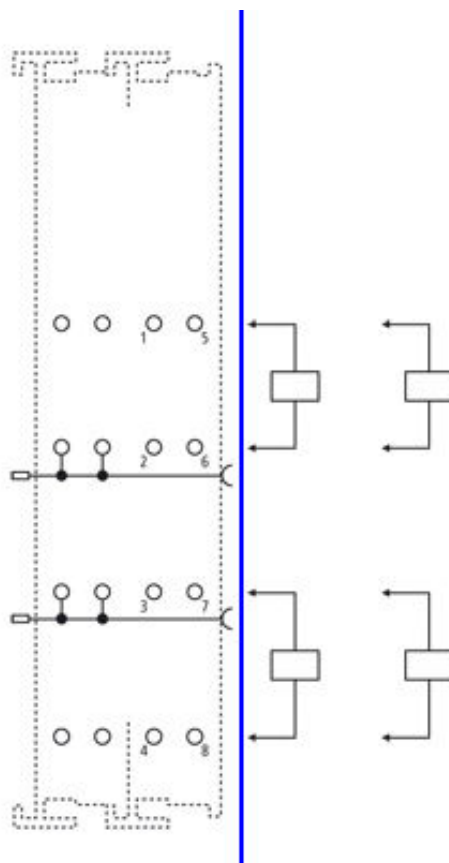


Fig. 21: EL2904 - Actuator connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.4 EtherCAT Terminals with analog inputs

2.4.1 EL3044/ES3044

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

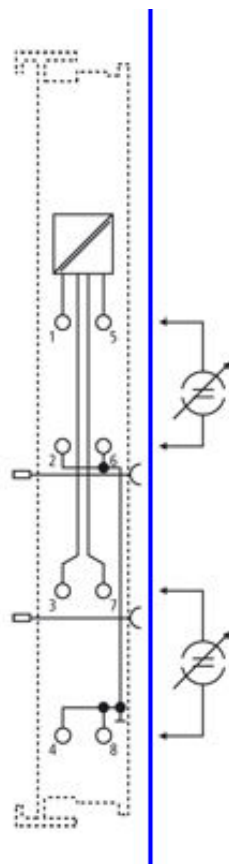


Fig. 22: EL3044/ES3044 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.4.2 EL3104/ES3104

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

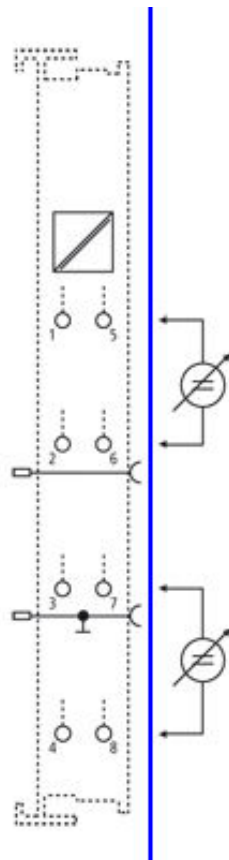


Fig. 23: EL3104/ES3104 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.4.3 EL3124/ES3124

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

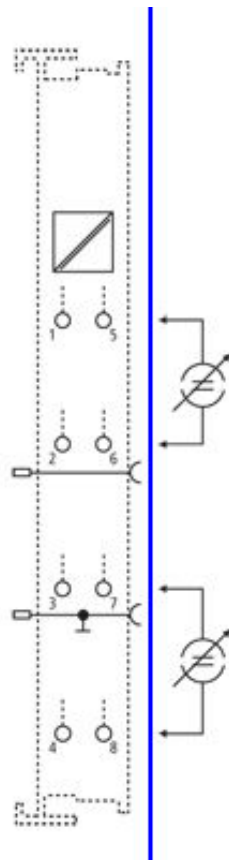


Fig. 24: EL3124/ES3124 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.4.4 EL3151/ES3151

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

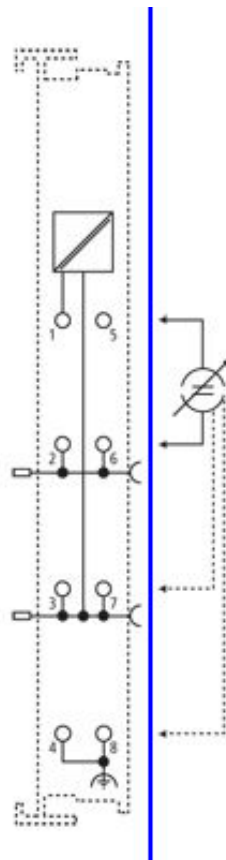


Fig. 25: EL3151/ES3151 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.4.5 EL3152/ES3152

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

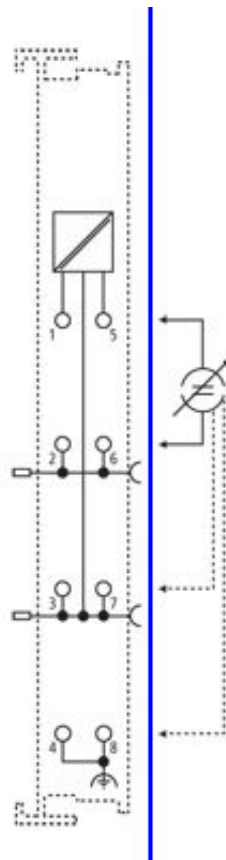


Fig. 26: EL3152/ES3152 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.4.6 EL3154/ES3154

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

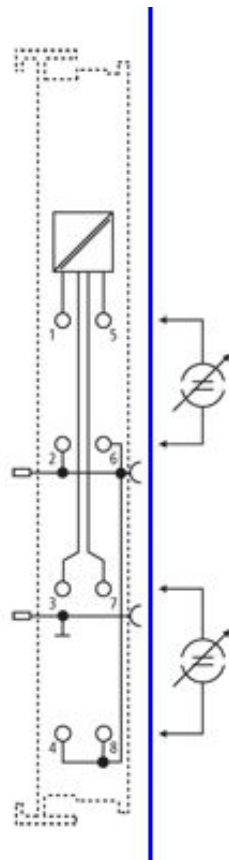


Fig. 27: EL3154/ES3154 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.4.7 EL3174-0000

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

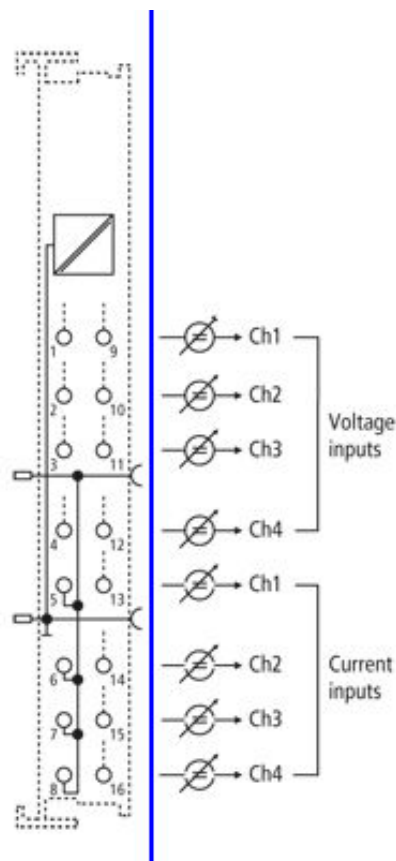


Fig. 28: EL3174-0000 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.4.8 EL3174-0002

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

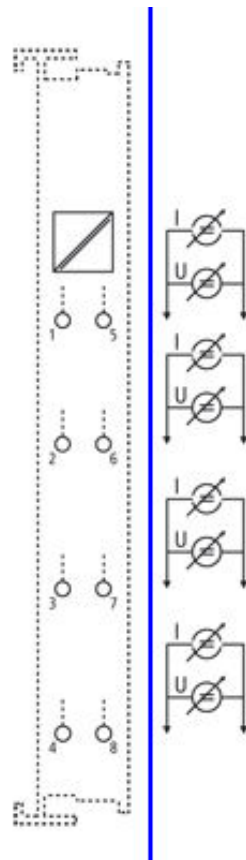


Fig. 29: EL3174-0002 - Sensor connection

NOTE**Installation, parameterization, programming etc.**

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.4.9 EL3174-0032

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

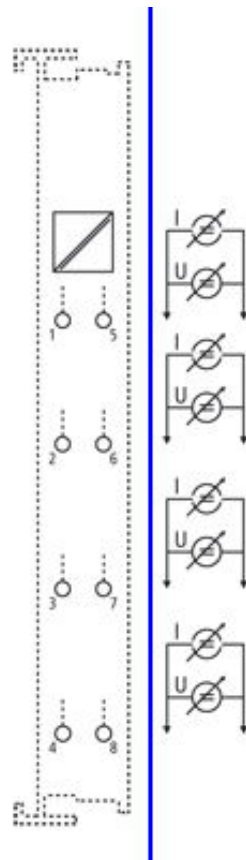


Fig. 30: EL3174-0032 - Sensor connection

NOTE**Installation, parameterization, programming etc.**

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.4.10 EL3182/ES3182

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

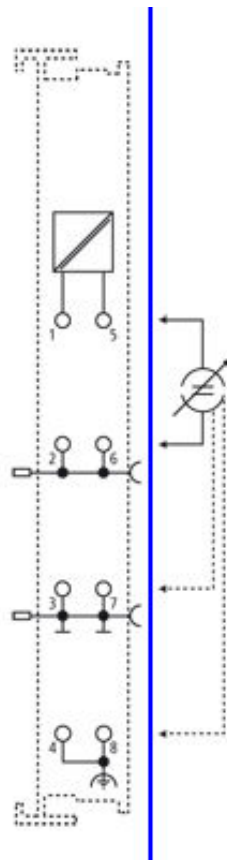


Fig. 31: EL3182/ES3182 - Sensor connection

NOTE**Installation, parameterization, programming etc.**

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.4.11 EL3204/ES3204

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

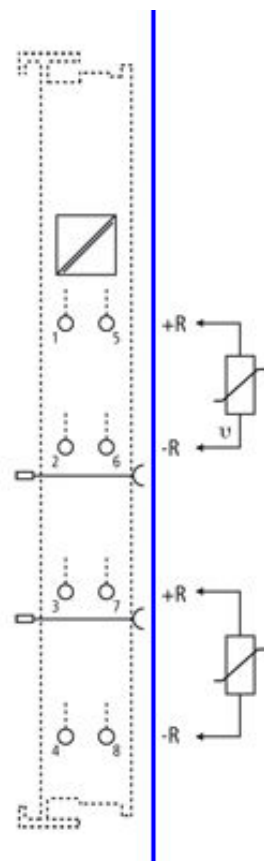


Fig. 32: EL3204/ES3204 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.4.12 EL3314

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

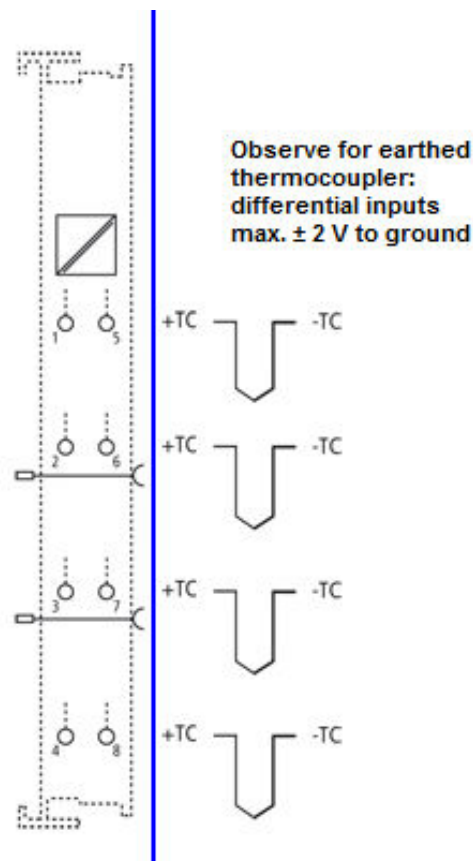


Fig. 33: EL3314 - Sensor connection

NOTE**Installation, parameterization, programming etc.**

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.4.13 EL3318

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

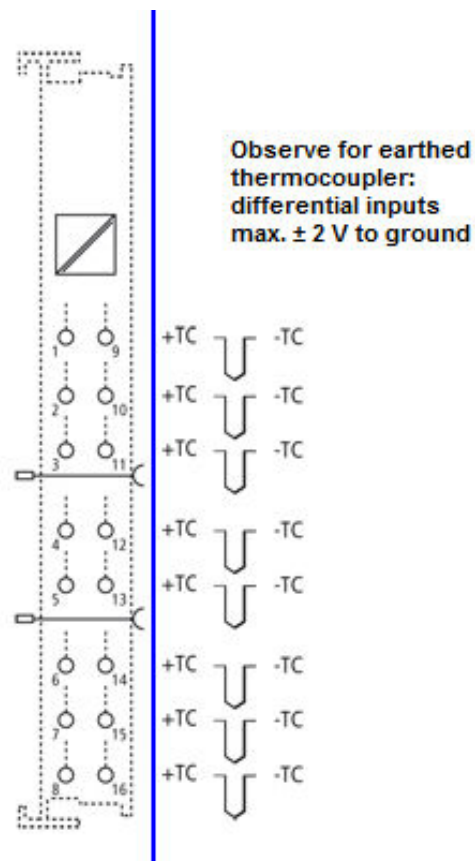


Fig. 34: EL3318 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.4.14 EL3356-0010

non-hazardous location or classified hazardous location Class I, Div. 2, Groups A, B, C, D or Zone 2, Group IIC	non-hazardous location or classified hazardous location Class I, Div. 2, Groups A, B, C, D Class II, Div. 2, Groups E, F, G or Zone 2, Group IIC Zone 22, Group IIIC
---	--

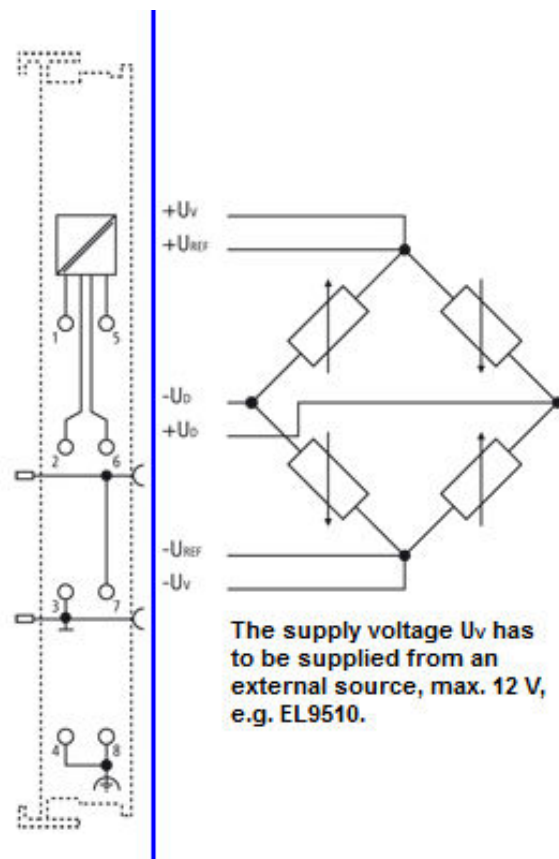


Fig. 35: EL3356-0010 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.4.15 EL3702/ES3702

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

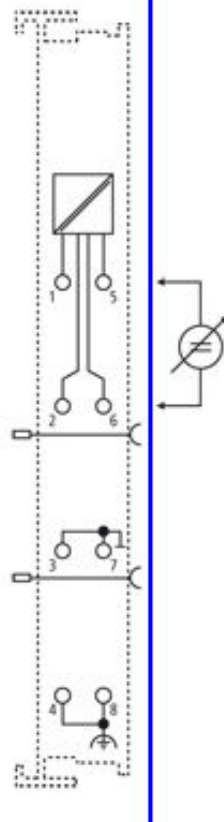


Fig. 36: EL3702/ES3702 - Sensor connection

NOTE**Installation, parameterization, programming etc.**

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.5 EtherCAT Terminals with analog outputs

2.5.1 EL4014/ES4014

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

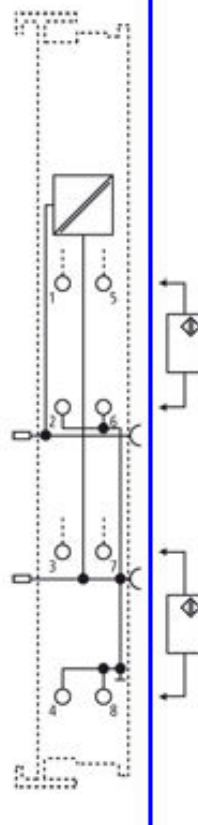


Fig. 37: EL4014/ES4014 - Actuator connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.5.2 EL4022/ES4022

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

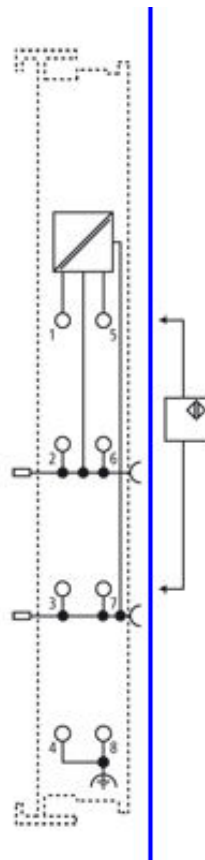


Fig. 38: EL4022/ES4022 - Actuator connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.5.3 EL4732/ES4732

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

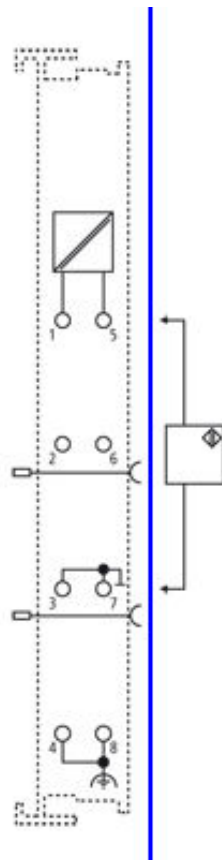


Fig. 39: EL4732/ES4732 - Actuator connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.6 Further EtherCAT Terminals

2.6.1 EL5152/ES5152

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

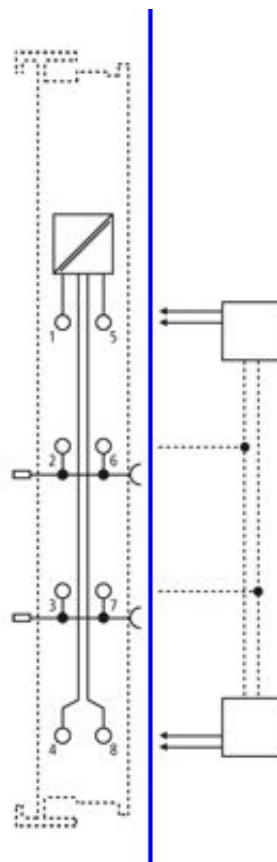


Fig. 40: EL5152/ES5152 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.6.2 EL6021-0000

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

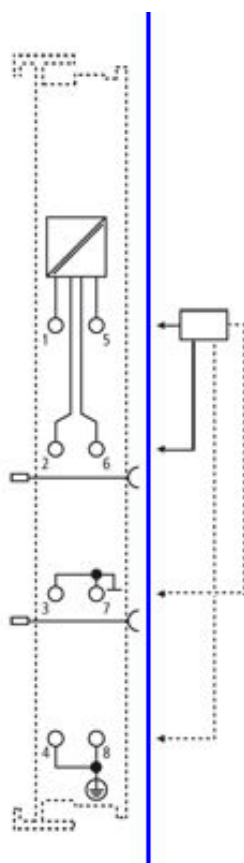


Fig. 41: EL6021-0000 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.6.3 EL6021-1001

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

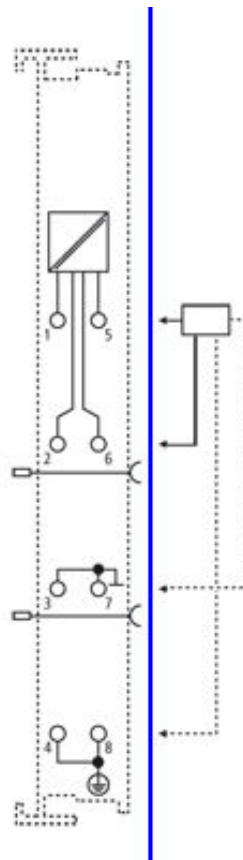


Fig. 42: EL6021-1001 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.6.4 EL6070

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

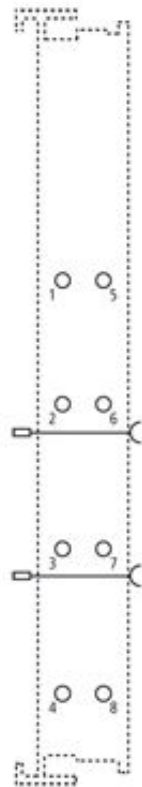


Fig. 43: EL6070 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.6.5 EL6601

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

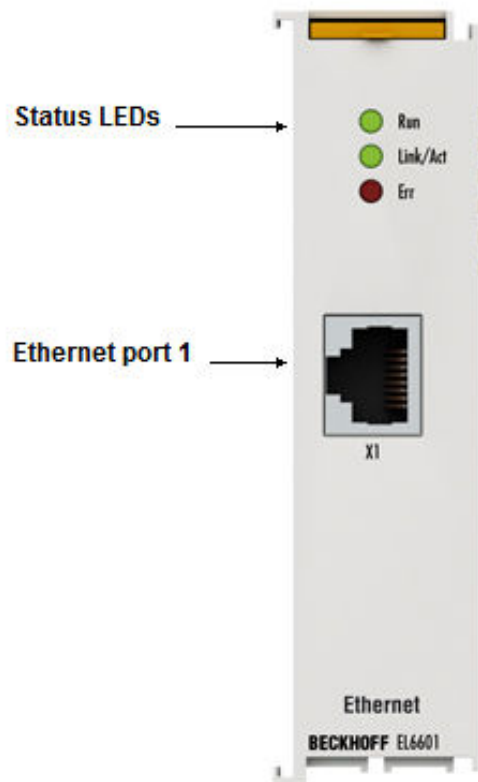


Fig. 44: EL6601 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.6.6 EL9550/ES9550

non-hazardous location

or

classified hazardous location

Class I, Div. 2, Groups A, B, C, D

or

Zone 2, Group IIC

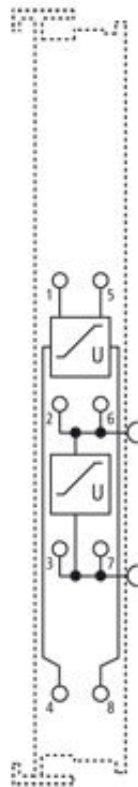


Fig. 45: EL9550/ES9550 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/ethercat-terminals>.

2.7 Bus Coupler

2.7.1 BK3120

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

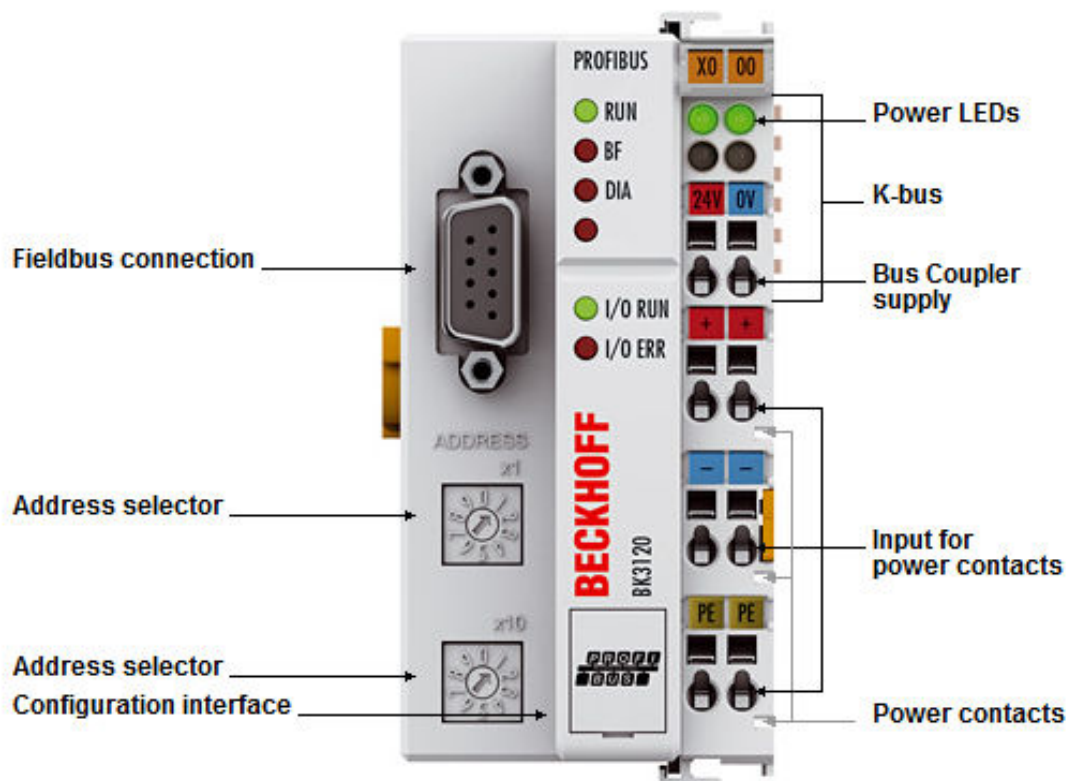


Fig. 46: BK3120 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/bus-terminals>.

2.8 Bus Terminals

2.8.1 KL1352/KS1352

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

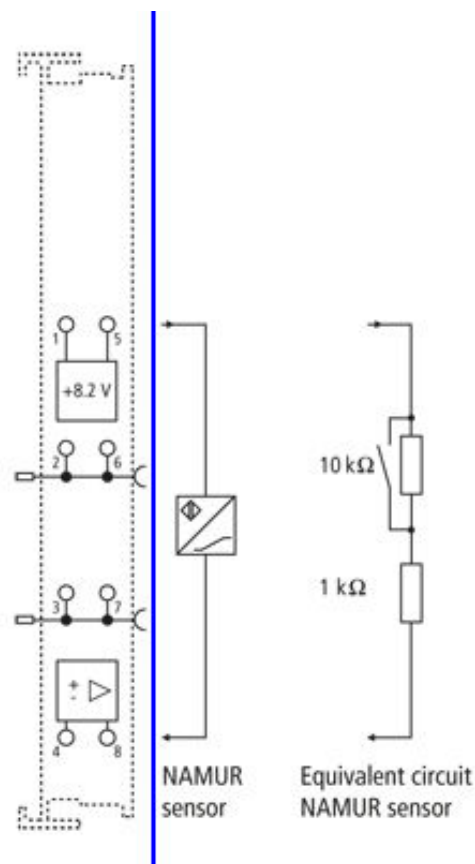


Fig. 47: KL1352/KS1352 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/bus-terminals>.

2.8.2 KL1501/KS1501

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

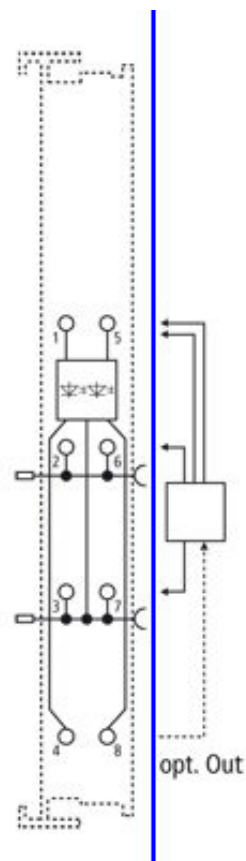


Fig. 48: KL1501/KS1501 - Sensor connection

NOTE**Installation, parameterization, programming etc.**

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/bus-terminals>.

2.8.3 KL2408/KS2408

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

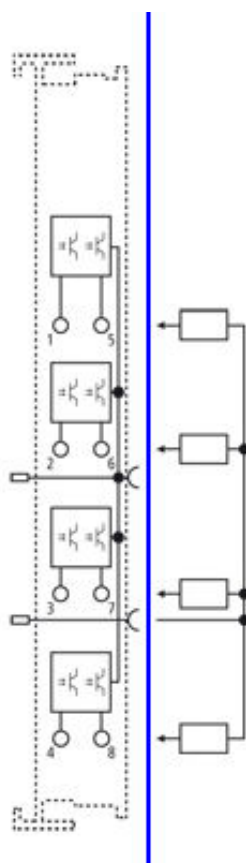


Fig. 49: KL2408/KS2408 - Actuator connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/bus-terminals>.

2.8.4 KL2502/KS2502

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

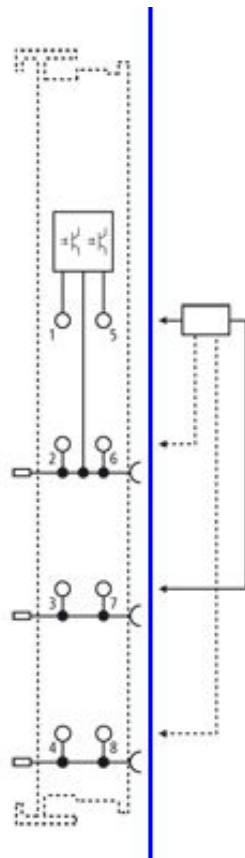


Fig. 50: KL2502/KS2502 - Actuator connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/bus-terminals>.

2.8.5 KL3012/KS3012

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

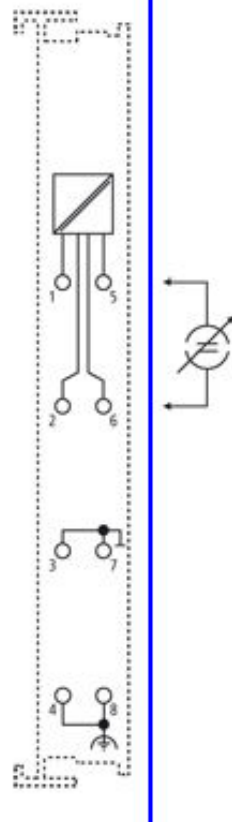


Fig. 51: KL3012/KS3012 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/bus-terminals>.

2.8.6 KL3054/KS3054

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

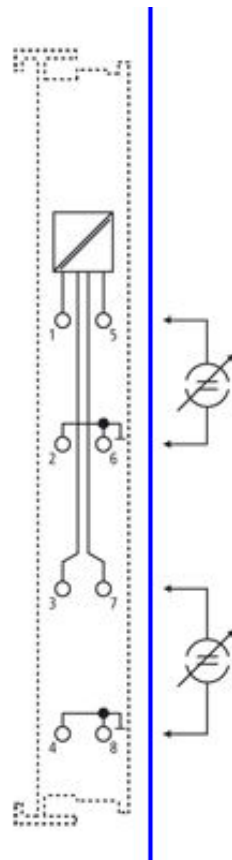


Fig. 52: KL3054/KS3054 - Sensor connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/bus-terminals>.

2.8.7 KL4424/KS4424

non-hazardous location	non-hazardous location
or	or
classified hazardous location	classified hazardous location
Class I, Div. 2, Groups A, B, C, D	Class I, Div. 2, Groups A, B, C, D
or	Class II, Div. 2, Groups E, F, G
Zone 2, Group IIC	or
	Zone 2, Group IIC
	Zone 22, Group IIIC

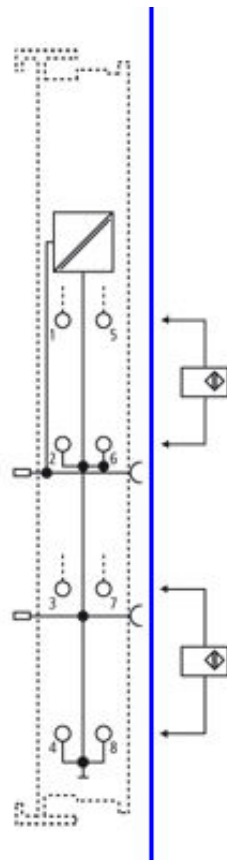


Fig. 53: KL4424/KS4424 - Actuator connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/bus-terminals>.

2.8.8 KL9010

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC



Fig. 54: KL9010 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/bus-terminals>.

2.8.9 KL9110/KS9110

non-hazardous location

or

classified hazardous location

Class I, Div. 2, Groups A, B, C, D

or

Zone 2, Group IIC

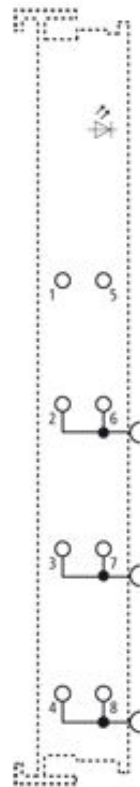


Fig. 55: KL9110/KS9110 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective terminal-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/i-o/bus-terminals>.

2.9 Embedded PCs

2.9.1 CX5120

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

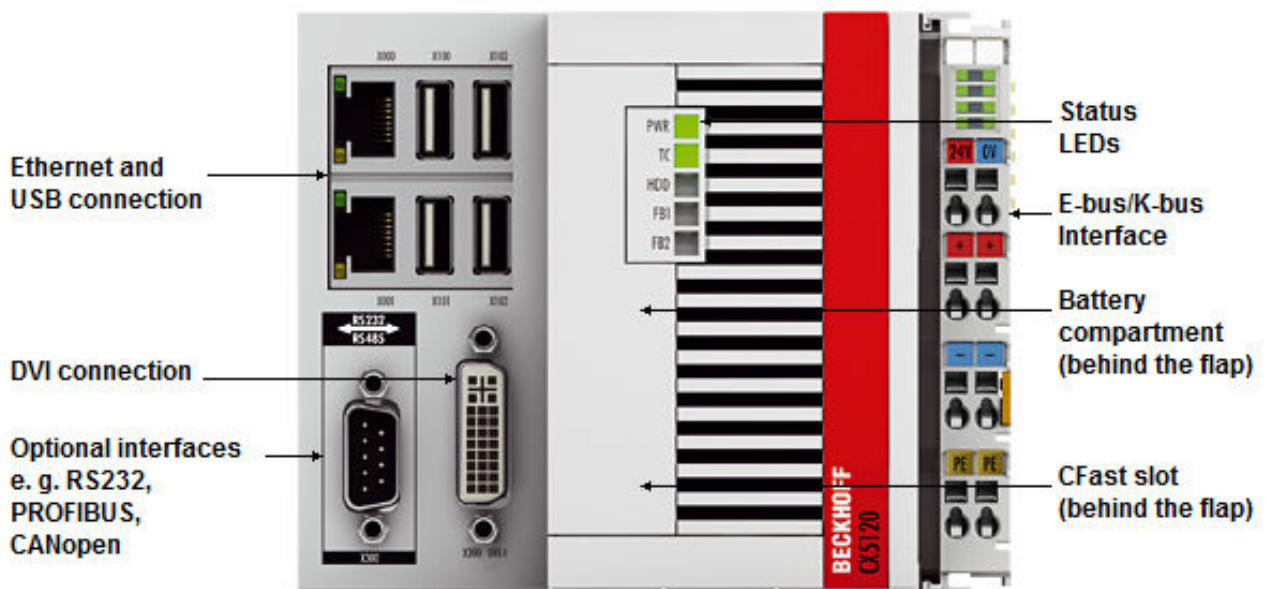


Fig. 56: CX5120 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/ipc/embedded-pcs>.

2.9.2 CX5130

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

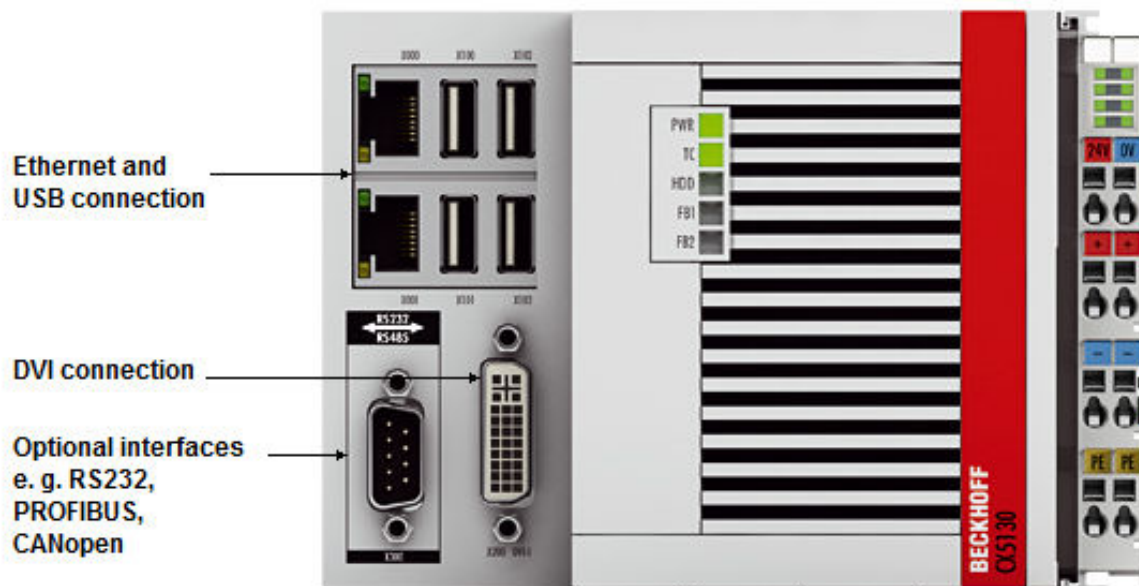


Fig. 57: CX5130 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/ipc/embedded-pcs>.

2.9.3 CX5140

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

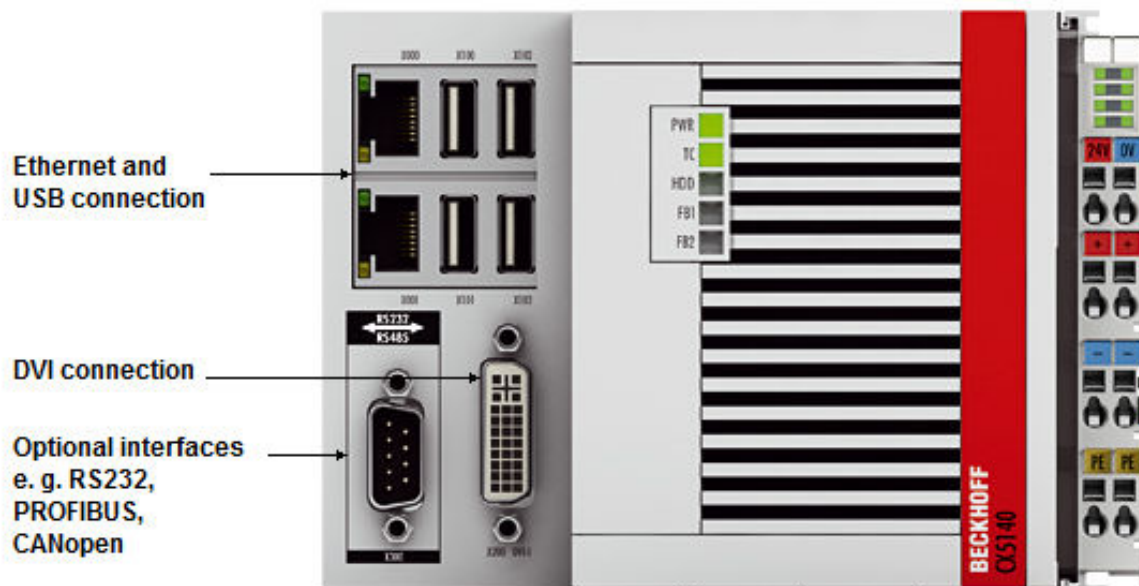


Fig. 58: CX5140 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/ipc/embedded-pcs>.

2.9.4 CX8010

non-hazardous location

or

classified hazardous location

Class I, Div. 2, Groups A, B, C, D

or

Zone 2, Group IIC

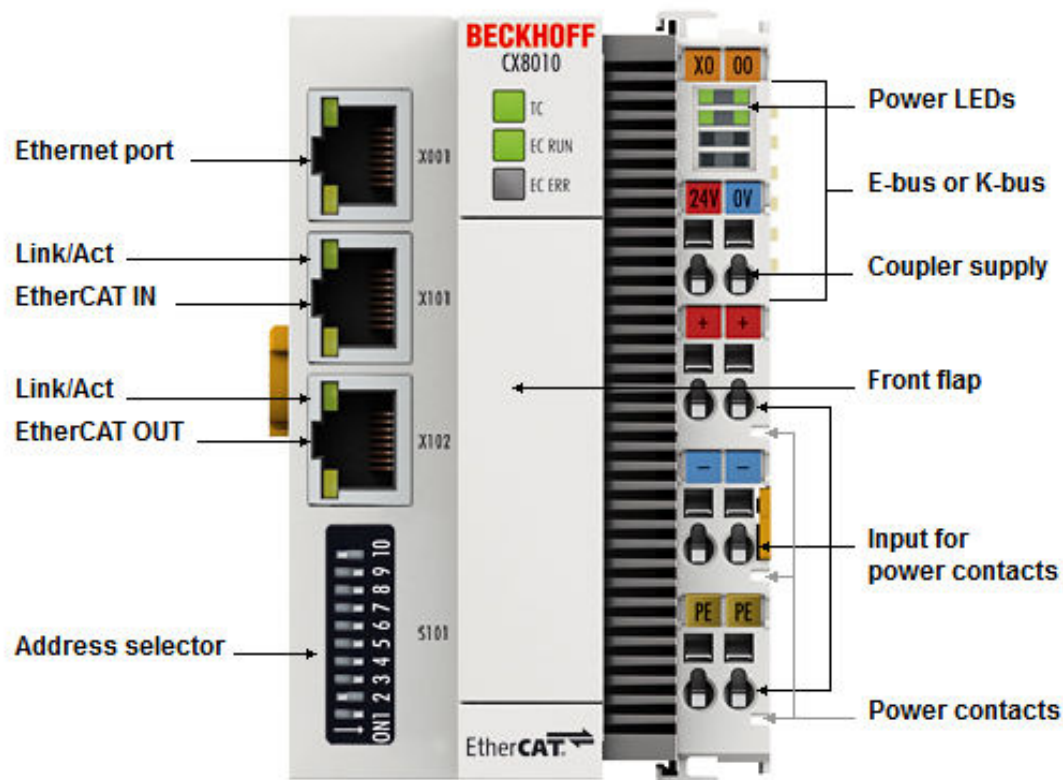


Fig. 59: CX8010 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/ipc/embedded-pcs>.

2.9.5 CX8030

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

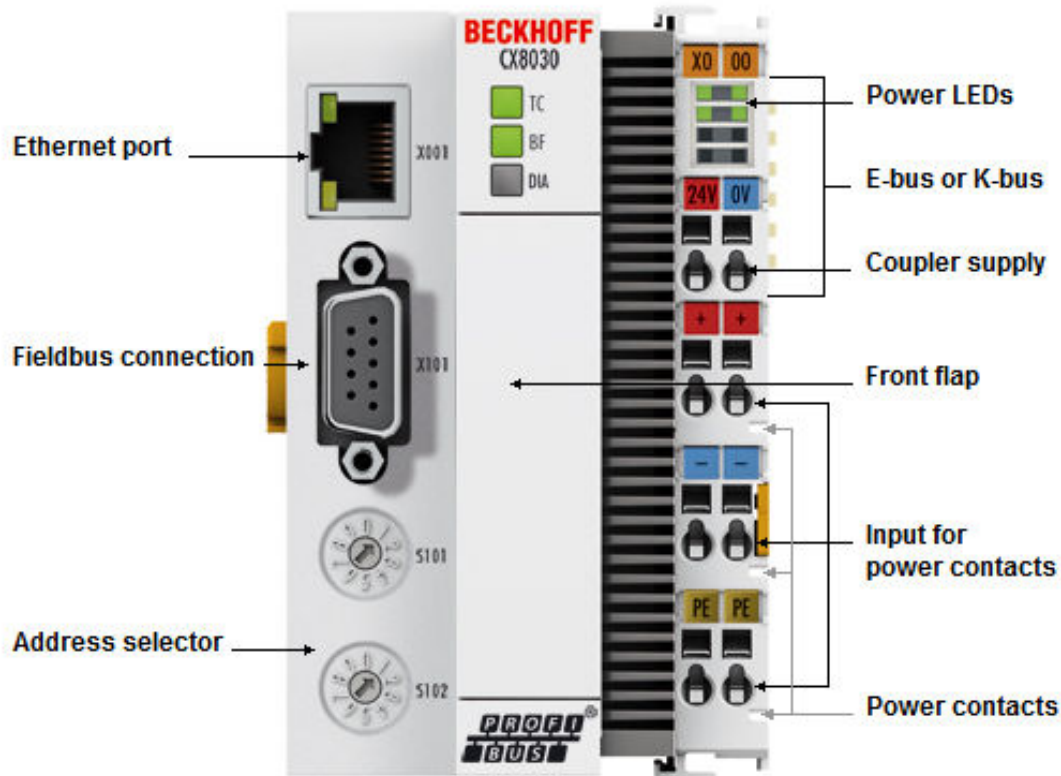


Fig. 60: CX8030 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/ipc/embedded-pcs>.

2.9.6 CX8031

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

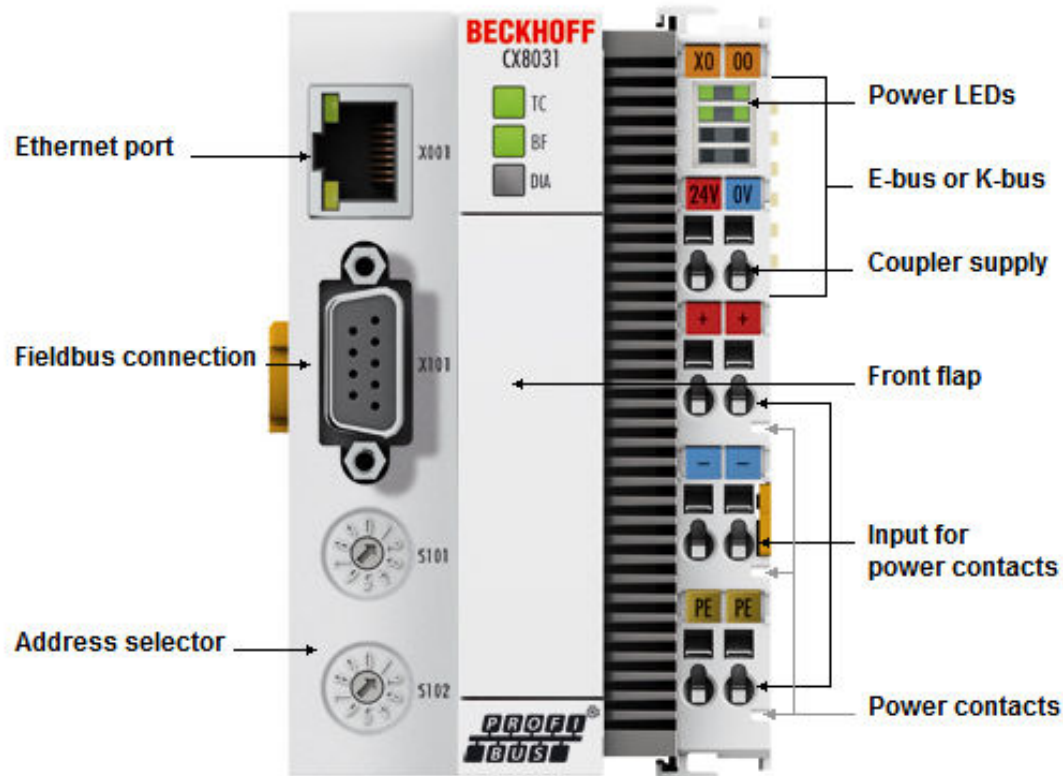


Fig. 61: CX8031 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/ipc/embedded-pcs>.

2.9.7 CX8050

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

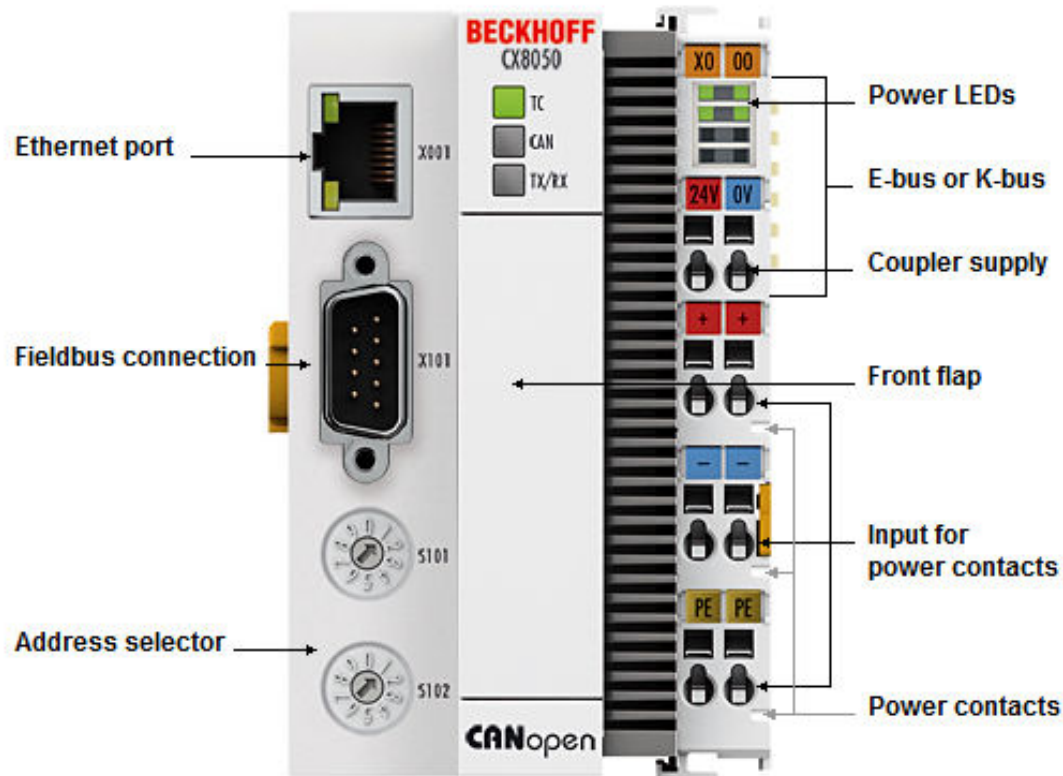


Fig. 62: CX8050 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/ipc/embedded-pcs>.

2.9.8 CX8051

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

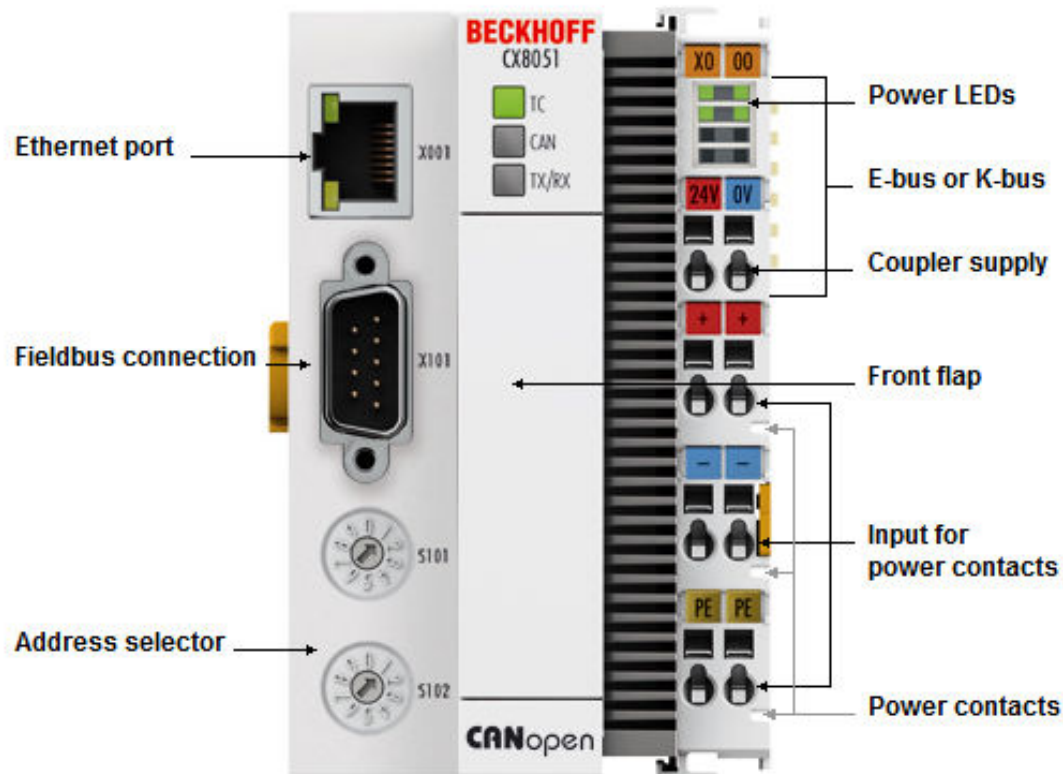


Fig. 63: CX8051 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/ipc/embedded-pcs>.

2.9.9 CX8080

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

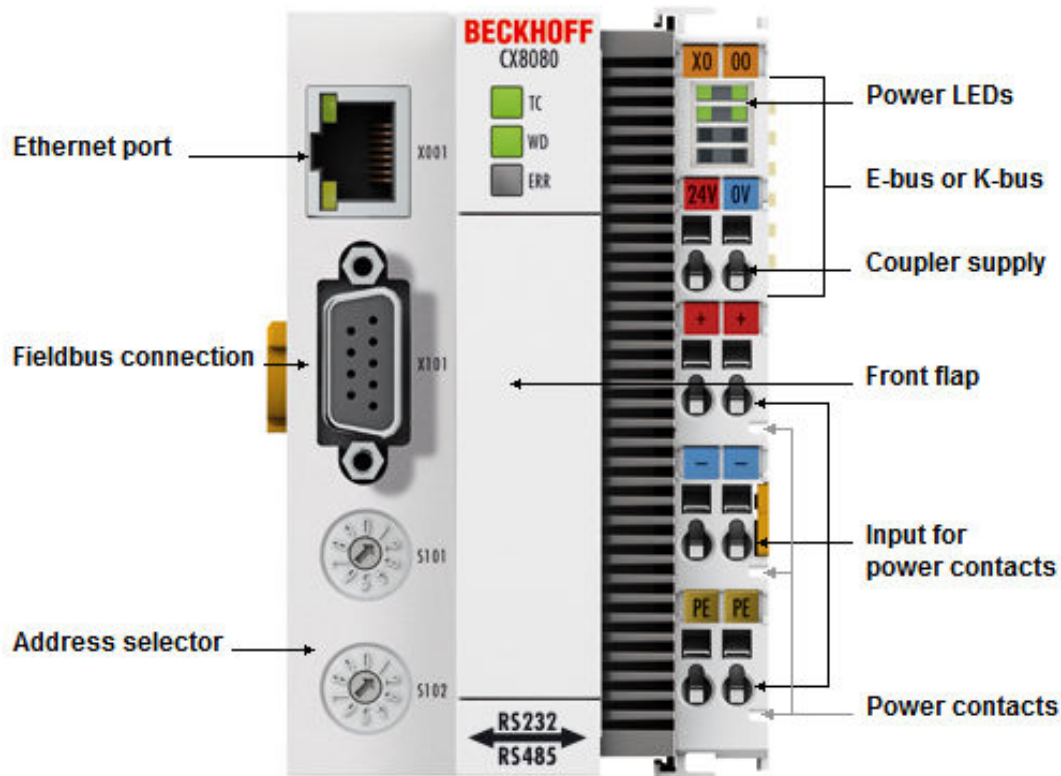


Fig. 64: CX8080 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/ipc/embedded-pcs>.

2.9.10 CX8090

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

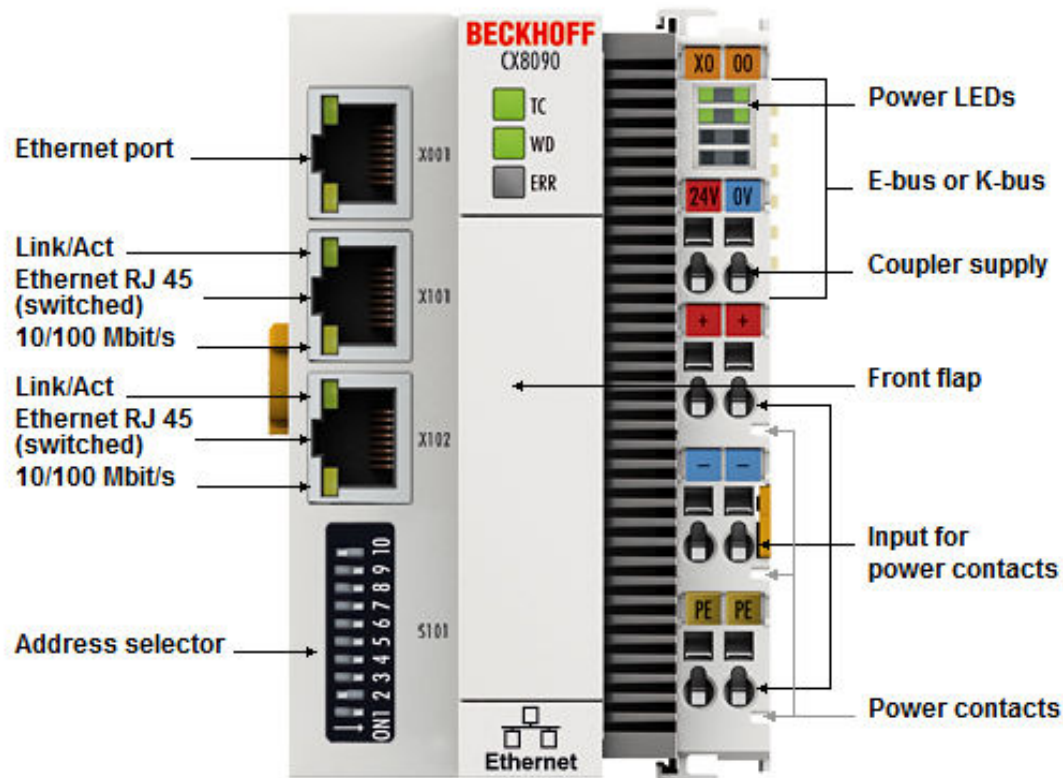


Fig. 65: CX8090 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/ipc/embedded-pcs>.

2.9.11 CX8091

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

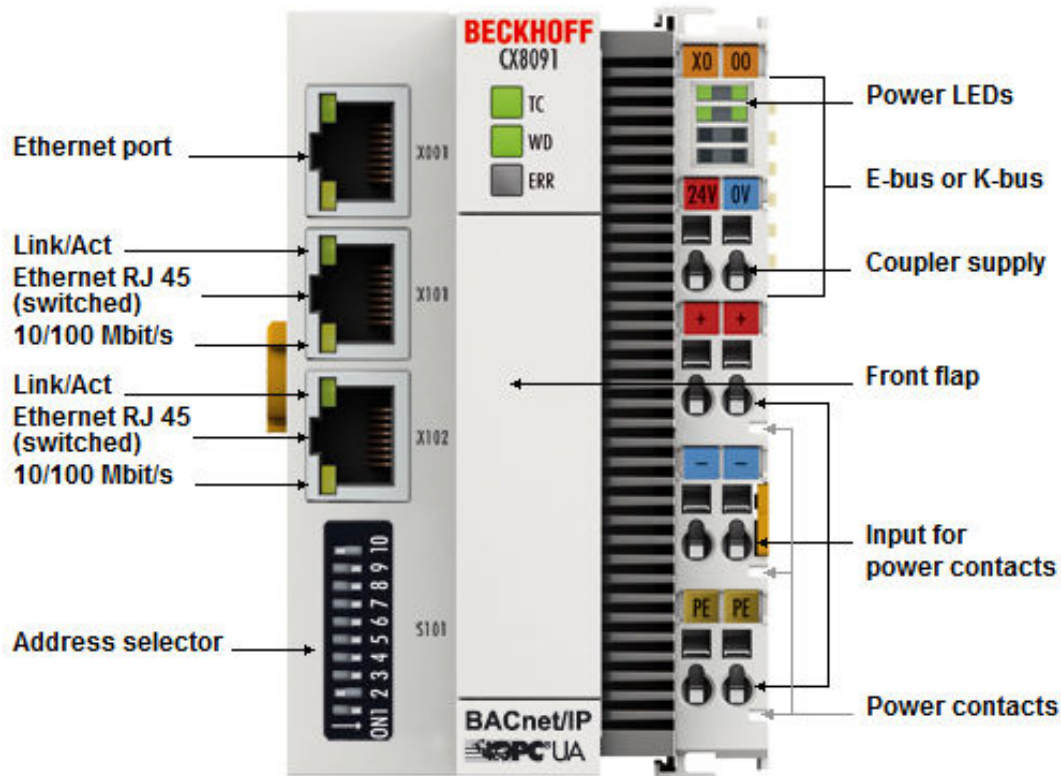


Fig. 66: CX8091 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/ipc/embedded-pcs>.

2.9.12 CX8093

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

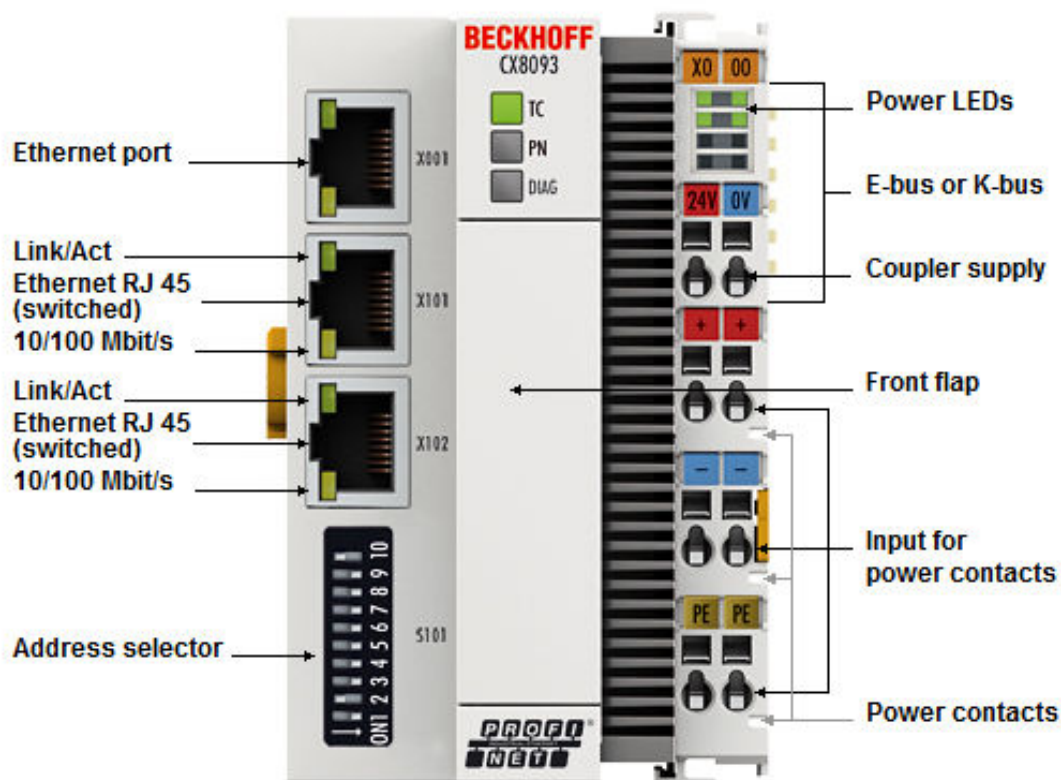


Fig. 67: CX8093 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/ipc/embedded-pcs>.

2.9.13 CX8095

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

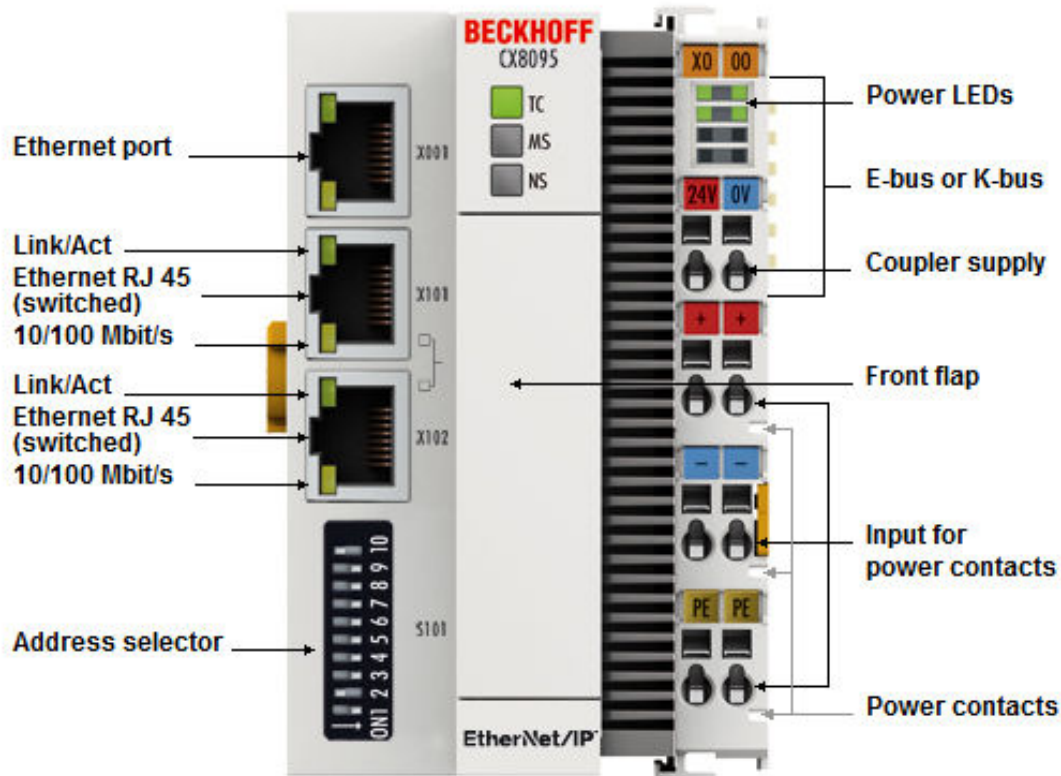


Fig. 68: CX8095 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/ipc/embedded-pcs>.

2.9.14 CX9020

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
or
Zone 2, Group IIC

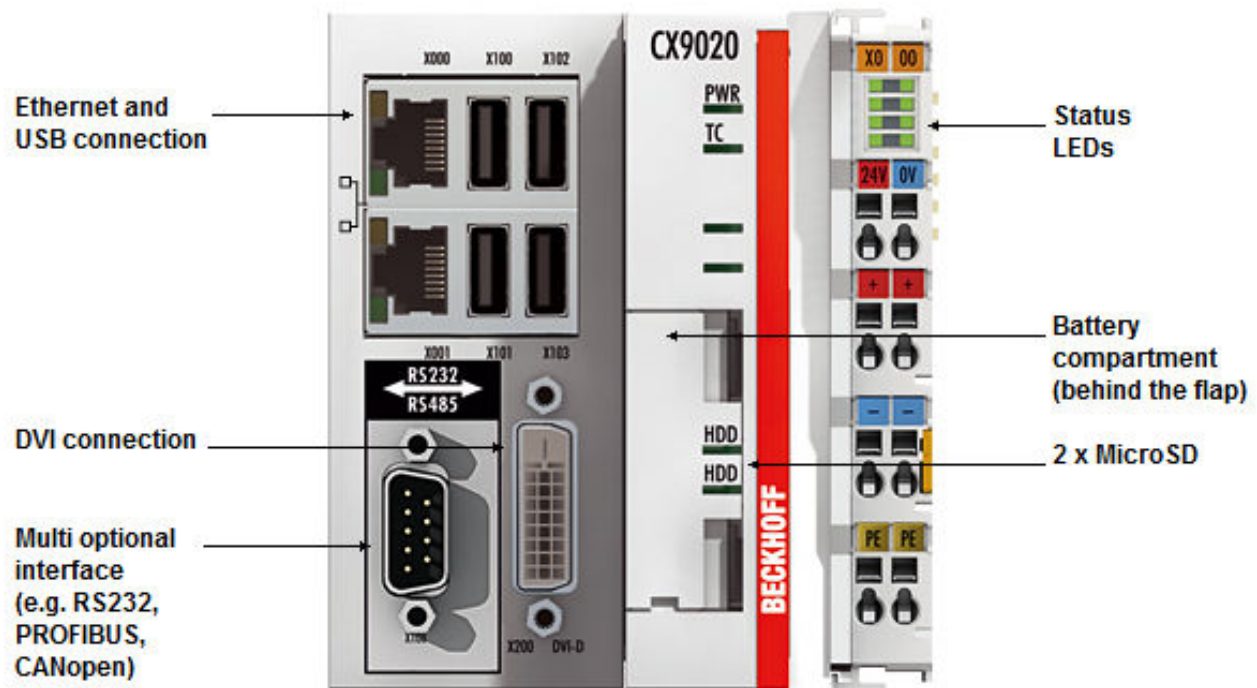


Fig. 69: CX9020 - Connection

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/en-us/products/ipc/embedded-pcs>.

2.10 Control Panels and Panel PCs

2.10.1 CPX27xx

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
Class II, Div. 2, Groups F, G
Class III, Div. 2
or
Zone 2, Group IIC
Zone 22, Group IIIB



Fig. 70: CPX27xx

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/cpx>.

2.10.2 CPX29xx

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
Class II, Div. 2, Groups F, G
Class III, Div. 2
or
Zone 2, Group IIC
Zone 22, Group IIIB



Fig. 71: CPX29xx

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/cpx>.

2.10.3 CPX37xx

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
Class II, Div. 2, Groups F, G
Class III, Div. 2
or
Zone 2, Group IIC
Zone 22, Group IIIB



Fig. 72: CPX37xx

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/cpx>.

2.10.4 CPX39xx

non-hazardous location
or
classified hazardous location
Class I, Div. 2, Groups A, B, C, D
Class II, Div. 2, Groups F, G
Class III, Div. 2
or
Zone 2, Group IIC
Zone 22, Group IIIB



Fig. 73: CPX39xx

NOTE



Installation, parameterization, programming etc.

Further information on installation, parameterization, programming etc. can be found in the respective Embedded-PC-specific documentation, which is available for download on <https://www.beckhoff.com/cpx>.

3 Ex markings

3.1 Ex marking on coupler housings

(EK, BK)

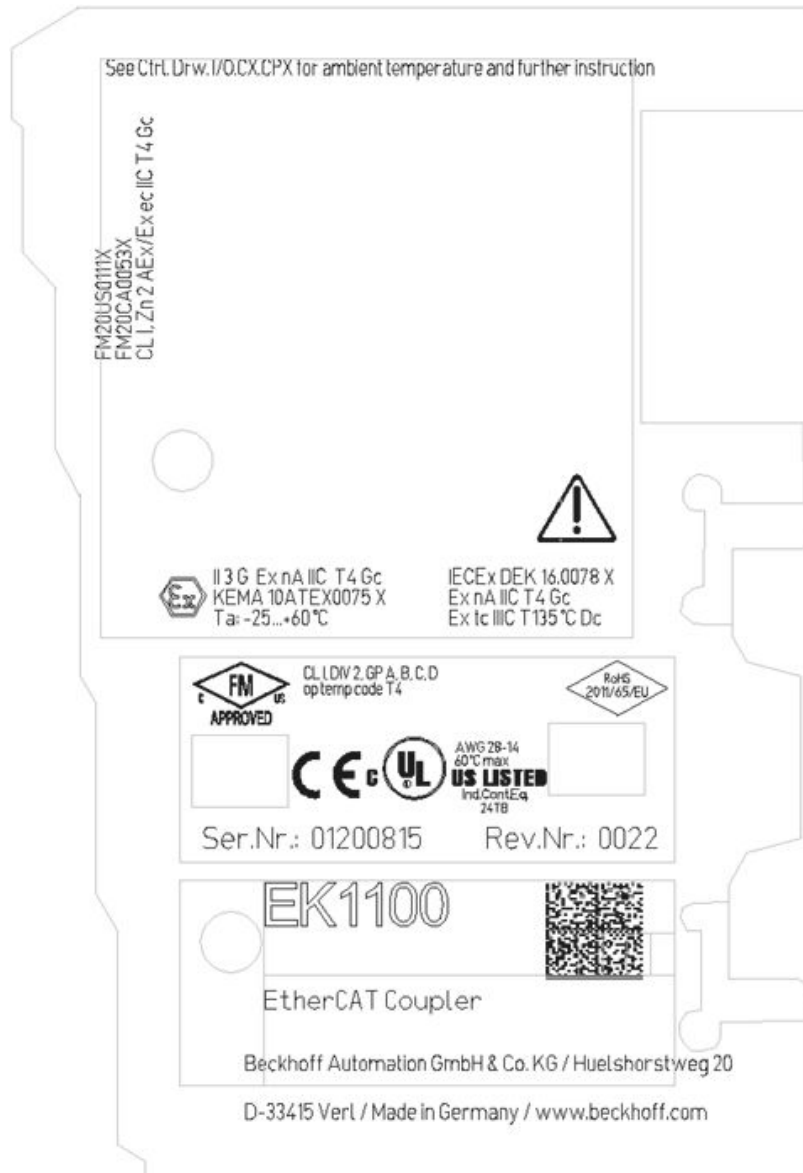


Fig. 74: EK1100 with Ex marking

3.2 Ex marking on terminal housings

(EL, ES, KL, KS)

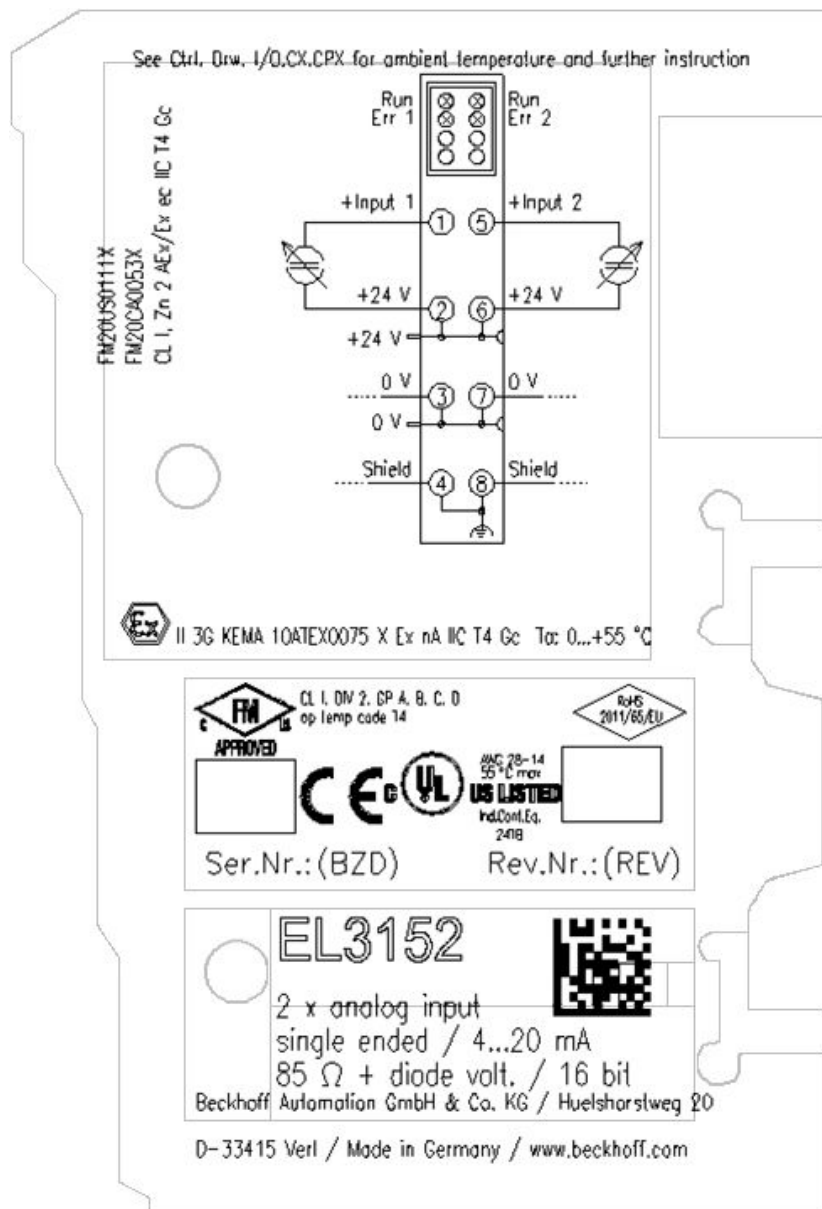


Fig. 75: EL3152 with Ex marking

3.3 Ex marking on HD housings

(EL, KL)

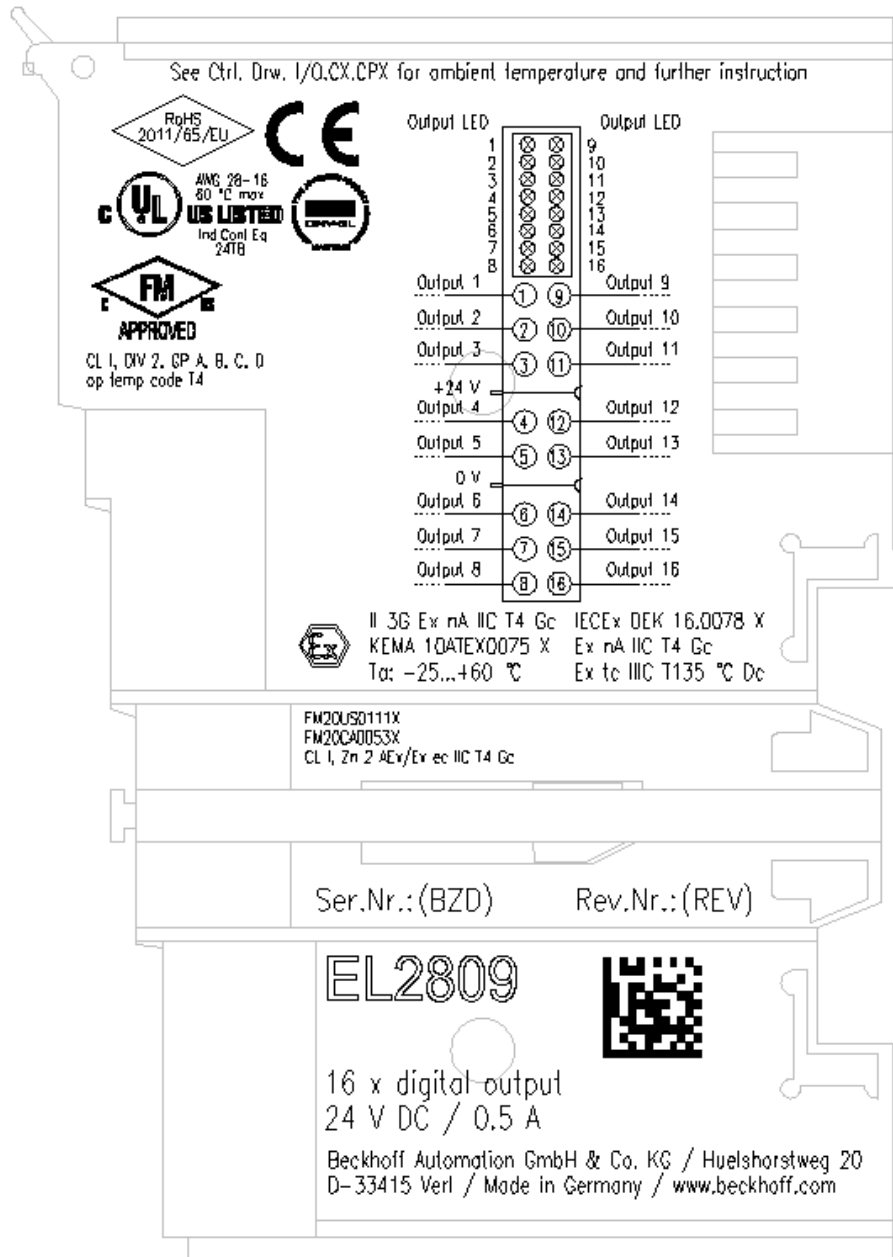


Fig. 76: EL2809 with Ex marking

3.4 Ex marking on KM housings

(EM, EL, EK, KM, KL)



Fig. 77: EK1122 with Ex marking

3.5 Ex marking on measurement terminals

(ELM, EKM)

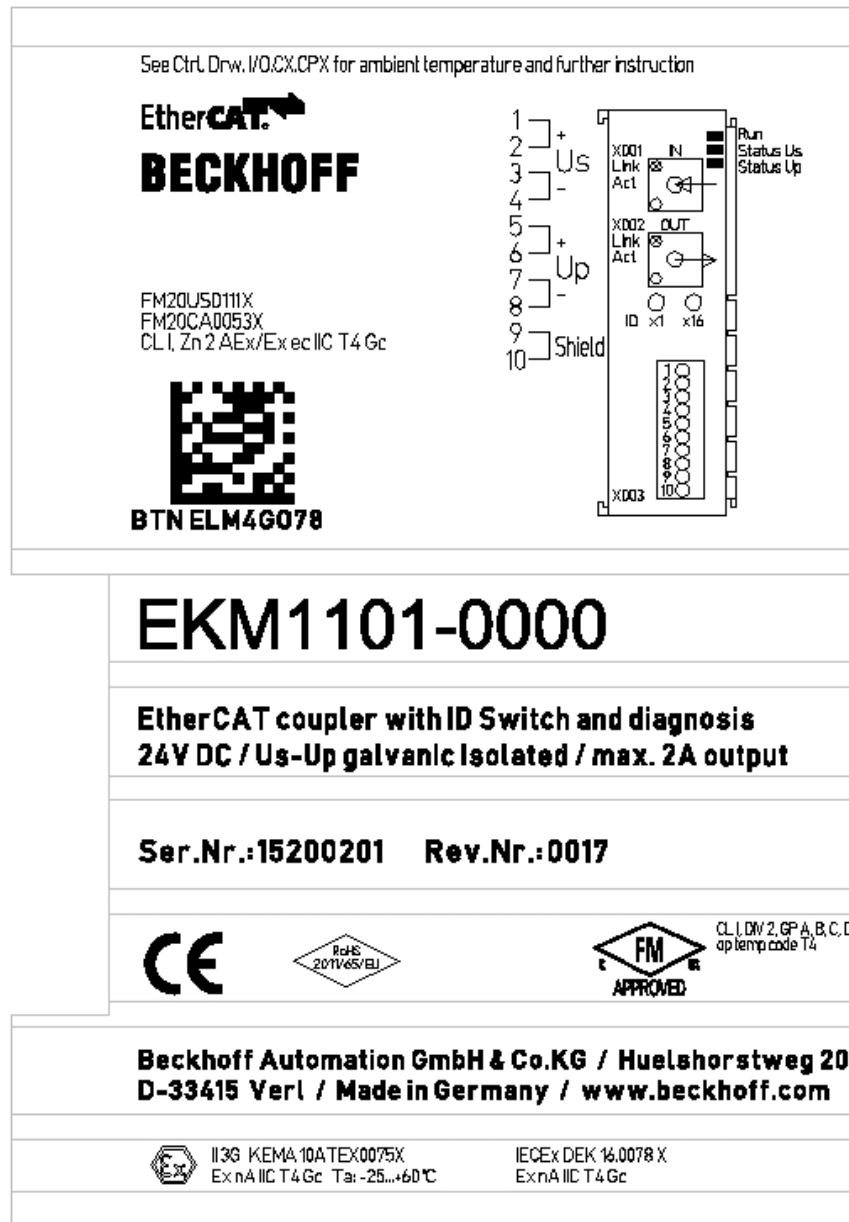


Fig. 78: EKM1101 with Ex marking

3.6 Ex markings on Control Panels and Panel PCs

(CPX)

CPX2715-0010 Var:000058483		This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.	See Ctrl. Drw. I/O,CX,CPX for ambient temperature and further instruction FM20US0111X FM20CA0053X CL I, Zn 2 AEx/Ex ec IIC T4 Gc Zn 22 AEx/Ex tc IIIB T135°C Dc CL I, DIV 2, GP A, B, C, D CL II, CL III, DIV 2, GP F, G op temp code T4/T135°C IECEX BVS 17.0102 X Ex ec IIC T4 Gc Ex tc IIIC T135°C Dc  BVS 17 ATEX E 119 X Ta: 0..55°C II 3G Ex ec IIC T4 Gc II 3D Ex tc IIIC T135°C Dc 	Beckhoff Automation GmbH & Co. KG Huelshorstweg 20 D-33415 Verl, Germany Documentation: www.beckhoff.com Use 4 Amp. fuse or Class 2 power supply   Made in Germany
--------------------------------------	--	--	--	--

261.01

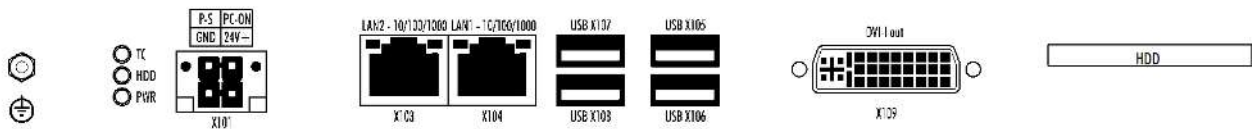


Fig. 79: CPX2715-0010 - Ex marking

CPX2919-0000 Serial No.: 000033dt Date: 15.05.2019 Display: 19.0" G190ETN01.2 Touchscreen: 19" PCT V04.2 Power supply: 24V DC, Class 2		This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada. See Ctrl. Drw. I/O,CX,CPX for ambient temperature and further instruction FM20US0111X FM20CA0053X CL I, Zn 2 AEx/Ex ec IIC T4 Gc Zn 22 AEx/Ex tc IIIB T135°C Dc CL I, DIV 2, GP A, B, C, D CL II, CL III, DIV 2, GP F, G op temp code T4/T135°C Use 4 Amp. fuse or Class 2 power supply 	Beckhoff Automation GmbH & Co. KG Huelshorstweg 20 D-33415 Verl, Germany Documentation: www.beckhoff.com   Made in Germany
--	--	--	--

IECEx BVS 17.0102 X
 Ex ec IIC T4 Gc
 Ex tc IIIC T135°C Dc

BVS 17 ATEX E 119 X Ta: 0..55°C
 II 3G Ex ec IIC T4 Gc
 II 3D Ex tc IIIC T135°C Dc

137.04

Fig. 80: CPX2919-0000 - Ex marking

CPX3721-0010

Var:000007933

Serial No: 000063tu
 Date: 15.05.2020
 Mainboard: CB3263-0008
 CPU: Atom E3845 1.91GHz
 Memory: 8192MB DDR3L-RAM SO
 Display: 21.5" G215HVN01 V0
 Touchscreen: 21.5" PCT V04.2
 Flash: 80GB CFast
 Power supply: 24V DC, Class 2
 MAC1: 000105454C22
 MAC2: 000105454C23

Beckhoff Automation GmbH & Co. KG
 Huelshorstweg 20
 D-33415 Verl, Germany
 Documentation: www.beckhoff.com

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class A digital apparatus complies with Canadian ICES-003.
 Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

IECEX DEK 18.0028 X
 Ex nA IIC T5 Gc
 Ex tc IIIC T100°C Dc



DEKRA 18ATEX0053 X
 II 3G Ex nA IIC T5 Gc
 II 3D Ex tc IIIC T100°C Dc

See Ctrl. Drw. I/O, CX, CPX for ambient temperature and further instruction
 FM20US0111X
 FM20CA0053X
 CL I, Zn 2 AEx/Ex ec IIC T5 Gc
 Zn 22 AEx/Ex tc IIIB T100°C Dc
 CL I, DIV 2, GP A, B, C, D
 CL II, CL III, DIV 2, GP F, G
 op temp code T5/T100°C



291.02

Fig. 81: CPX3721-0010 - Ex marking

CPX3919-0010

Serial No: 00006p48
Date: 21.07.2020
Display: 19.0" G190ETN01.2
Touchscreen: 19" PCT V04.2
Power supply: 24V DC, Class 2

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class A digital apparatus complies with Canadian ICES-003.
 Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Beckhoff Automation GmbH & Co. KG
 Huelshorstweg 20
 D-33415 Verl, Germany
 Documentation: www.beckhoff.com

IECEX DEK 18.0028 X
 Ex nA IIC T5 Gc
 Ex tc IIIC T100°C Dc



DEKRA 18ATEX0053 X
 II 3G Ex nA IIC T5 Gc
 II 3D Ex tc IIIC T100°C Dc

See Ctrl. Drw. I/O, CX, CPX for ambient temperature and further instruction
 FM20US0111X
 FM20CA0053X
 CL I, Zn 2 AEx/Ex ec IIC T5 Gc
 Zn 22 AEx/Ex tc IIIB T100°C Dc
 CL I, DIV 2, GP A, B, C, D
 CL II, CL III, DIV 2, GP F, G
 op temp code T5/T100°C



293.01

Fig. 82: CPX3919-0010 - Ex marking

4 Appendix

4.1 Support and Service

Beckhoff and their partners around the world offer comprehensive support and service, making available fast and competent assistance with all questions related to Beckhoff products and system solutions.

Beckhoff's branch offices and representatives

Please contact your Beckhoff branch office or representative for local support and service on Beckhoff products!

The addresses of Beckhoff's branch offices and representatives round the world can be found on her internet pages: <https://www.beckhoff.com>

You will also find further documentation for Beckhoff components there.

Beckhoff Support

Support offers you comprehensive technical assistance, helping you not only with the application of individual Beckhoff products, but also with other, wide-ranging services:

- support
- design, programming and commissioning of complex automation systems
- and extensive training program for Beckhoff system components

Hotline: +49 5246 963 157
Fax: +49 5246 963 9157
e-mail: support@beckhoff.com

Beckhoff Service

The Beckhoff Service Center supports you in all matters of after-sales service:

- on-site service
- repair service
- spare parts service
- hotline service

Hotline: +49 5246 963 460
Fax: +49 5246 963 479
e-mail: service@beckhoff.com

Beckhoff Headquarters

Beckhoff Automation GmbH & Co. KG

Huelshorstweg 20
33415 Verl
Germany

Phone: +49 5246 963 0
Fax: +49 5246 963 198
e-mail: info@beckhoff.com
web: <https://www.beckhoff.com>

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Beckhoff Automation GmbH & Co. KG
Hülshorstweg 20
33415 Verl
Germany
Phone: +49 5246 9630
info@beckhoff.com
www.beckhoff.com