

Product Area

# Controls

We don't make the conveyor.

**We make  
it smart.**

# Catalogue Overview

Intelligent  
Performance.

## Controls

### Networked Drive Controls

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# Product Overview

## Networked Drive Controls



### ConveyLinx-Ai2 24V

Our Two Zone Network Control.



### ConveyLinx-Ai2 48V

Our Two Zone Network Control for 48V applications.



### ConveyLinx-Ai2-F 24V

Our Two Zone Network Control for Freezer Applications.



### ConveyLinx-Ai3-RC/FC 24V

Our Two Zone Network Control with Piercing Technology for Flat and Round Cable.



### ConveyLinx-Ai3-FC 48V

Our Two Zone Network Control with Piercing Technology for Flat Cable for 48V applications.



### ConveyLinx-Ai3-FCM 24V

Our Two Zone Network Control with Piercing Technology and M12 bus connectors.



### MotionLinx-Ai

Our Two Zone High-Speed Control, especially designed for EtherCat.



### ConveyProxy

Our Gateway for systems with ConveyLinx controls to reduce the number of IP-addresses.



### ConveyLinx-JST-B 24V

Our Two Zone Network Control for brake motor rollers with 9-Pin JST connector.



## Simple Drive Controls



### **EQUBE-Ai 24V**

Our Motor Control for a drive without bus connection with M8-4Pin connection.



### **EZ-QUBE-Ai 24V**

Our Motor Control for a drive without bus connection with JST-9Pin connection.



### **EZ-QUBE-W-Ai 24V**

Our Motor Control for a drive with Bluetooth configuration and extended diagnostics with M8-4Pin connection.

## I/O Modules



### **MotionLinX-Ai**

Our Input/Output Module based on the ConveyLinX-Ai2.



### **MotionLinX-IO**

Our Input/Output Module based on the MotionLinX-Ai.



### **IO X Interface**

Our Interface Module for the conversion of the NPN output on ConveyLinX into a usable PNP.

24V



The ConveyLinx-Ai2 24V gives you the opportunity to control our motor rollers and geared drives with M8-4Pin connection. You can use our ConveyLinx-Ai2 24V for simple zero pressure accumulation (ZPA) applications as well as part of a PLC-configured system with complex applications. It gives you the power of free decision-making.

# Two Zone Network Control for 24V Motor Roller and Geared Drives.

A zero-pressure accumulation conveyor can be controlled by ConveyLinx-Ai2 fully autonomously without the use of a PLC. Alternatively, if a higher-level control is preferred, a PLC can be integrated using ProfiNet, Ethernet IP, Modbus TCP and CCLink. However, the PLC does not need to control every zone, it need only control a limited number of decision points. If the application is to be fully controlled by a PLC, the configuration and control of all ConveyLinx-Ai2's can be made using the Topology from TIA Portal or STEP

7. Nevertheless, the use of ConveyLinx-Ai2's internal logic is still possible and thus relieves the source code of the PLC.

ConveyLinx-Ai2 offers extensive diagnostic tools for the drives. This enables a cost-effective preventive maintenance program drastically reducing unplanned downtime. Senergy-Ai and PGD-Ai are easily connected via proven and robust standard M8-4Pin connectors for a plug-in safe and fast mechanical installation.

## Benefits

- Small footprint for easy installation inside the side-frame
- High flexibility to fit in all applications
- Fast module replacement
- 4 Ethernet protocols
- Significant reduction of PLC source code
- Fully integrated in topology configuration

## Features

- Two-Zone motor control
- Profinet and ODVA approved
- Connection for 2 motors and 4 sensors
- Tracking data handling
- Advanced diagnostic functions
- Internal ZPA logics



4-Pin M8 standard connector



4-Pin M8 standard connector on ConveyLinx



## General Technical Data

• Voltage:	24V DC
• Protection Class:	IP54
• Rated Current:	ECO: 5,0A   BOOST: 7,0A with two drives
• Starting Current:	ECO: 6,0A   BOOST: 10,0A with two drives
• Connection:	M8 - 4Pin Connector
• Ambient Temperature:	0°C – +40°C
• Ambient Humidity:	10% – 90% (No Condensation)
• Certifications:	UL, CE, UKCA, RoHS, REACH

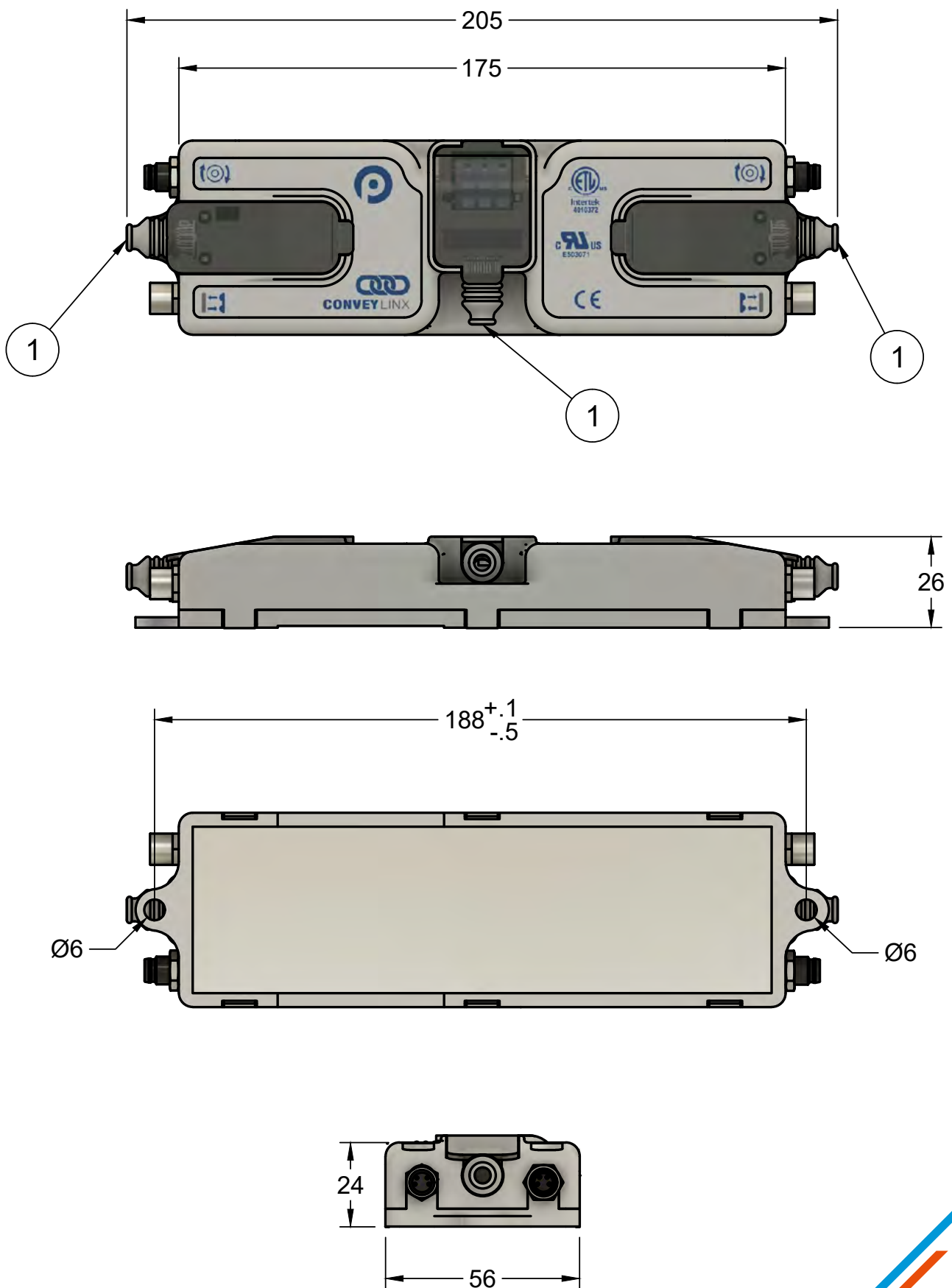
## Supported Fieldbus systems



All four above mentioned field busses of ConveyLinx family operate on one hardware. Pulseroller provides for each of those field busses required driver software individually designed for respective PLCs.



## Dimensions of ConveyLinx-Ai2



1 - Cable Shrouds are shipped unattached and are field installed.



# ConveyLinx-Ai2

## 48V



The ConveyLinx-Ai2 48V gives you the opportunity to control our motor rollers and geared drives with M8-4Pin connection. You can use our ConveyLinx-Ai2 48V for simple zero pressure accumulation (ZPA) applications as well as part of a PLC-configured system with complex applications. It gives you the power of free decision-making.

# Two Zone Network Control for 48V Motor Roller and Geared Drives.

In the simplest case, zero pressure accumulation conveyor technology can be controlled autonomously using the integrated logic and therefore completely without a PLC.

If required, a PLC can also be connected as a higher-level controller via ProfiNet, which can only intervene in the conveyor process if necessary. If a complex system is to be controlled as a whole by the PLC, all ConveyLinx-Ai 48V can be configured and controlled directly from TIA Portal or STEP7 using topology.

Nevertheless, it is still possible to use the internal logic, thus relieving the source code of the PLC. ConveyLinx-Ai2 48V offers extensive diagnostic tools for the connected drives, which enable cost-saving, targeted system maintenance.

This drastically reduces unplanned system downtimes. Senergy-Ai 48V and PGD-Ai 48V are simply connected via tried-and-tested, robust four-pole standard M8 connectors.

This ensures quick and reliable mechanical installation.

## Benefits

- Small footprint for easy installation inside the side-frame
- High flexibility to fit in all applications
- Fast module replacement
- 4 Ethernet protocols
- Significant reduction of PLC source code
- Fully integrated in topology configuration

## Features

- Two-Zone motor control
- Profinet and ODVA approved
- Connection for 2 motors and 4 sensors
- Tracking data handling
- Advanced diagnostic functions
- Internal ZPA logics



4-Pin M8 standard connector



4-Pin M8 standard connector on ConveyLinx



## General Technical Data

- **Voltage:** 48V DC
- **Protection Class:** IP54
- **Rated Current:** 1,6A\* per motor
- **Adjustable Starting Current Limitation:** 1,7A | 2,0A | 2,5A | 3,5A | 4,0A\* per motor
- **Connection:** M8 - 4Pin Connector
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH

\*Current limiting option selectable.

## Supported Fieldbus systems

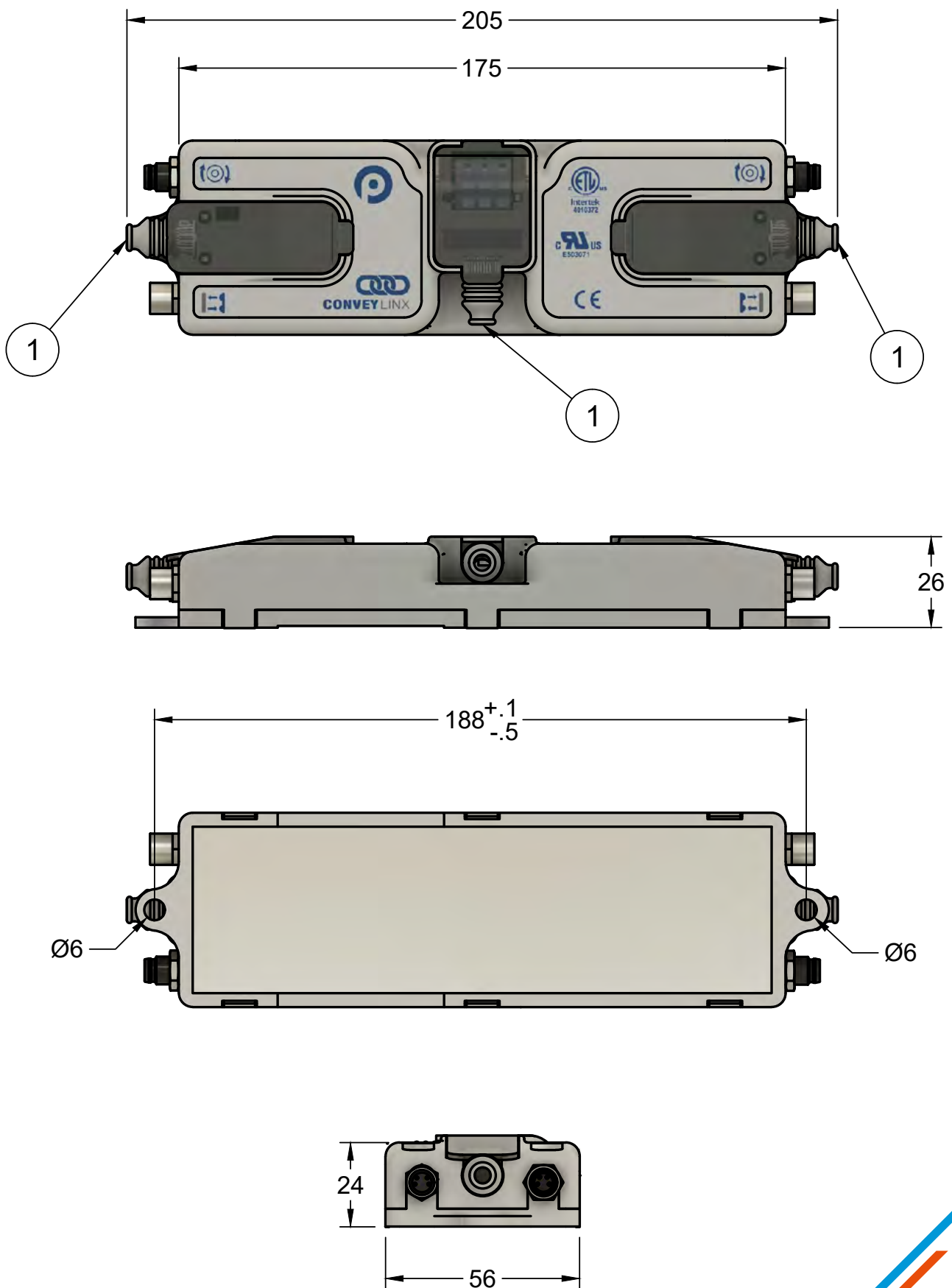


All four above mentioned field busses of ConveyLinx family operate on one hardware. Pulseroller provides for each of those field busses required driver software individually designed for respective PLCs.





## Dimensions of ConveyLinx-Ai2 48V



1 - Cable Shrouds are shipped unattached and are field installed.

# ConveyLinx-Ai2-F

## 24V



## **Two-Zone Network Control for 24V motor rollers and geared drives in freezer applications**

The ConveyLinx-Ai2-F 24V gives you the opportunity to control our motor rollers and geared drives with M8-4Pin connection in freezer applications.

You can use our ConveyLinx-Ai2-F 24V for simple zero pressure accumulation (ZPA) applications as well as part of a PLC-configured system with complex applications.

This innovative solution utilises special electronic components that are suitable for use in deep-freeze environments and therefore guarantee reliable and safe operation at temperatures down to  $-30^{\circ}\text{C}$ . The software and firmware of the ConveyLinx-Ai2-F correspond exactly to the standard version for the normal temperature range. When using the deep-freeze version, however, it must be ensured that no condensation of humidity forms on the device in order to ensure proper functioning.

#### Benefits

- **Small footprint for easy installation inside the side-frame**
- **High flexibility to fit in all applications**
- **Fast module replacement**
- **4 Ethernet protocols**
- **Significant reduction of PLC source code**
- **Fully integrated in topology configuration**
- **Operations possible to  $-30^{\circ}\text{C}$**

#### Features

- **Two-Zone motor control**
- **Profinet and ODVA approved**
- **Connection for 2 motors and 4 sensors**
- **Tracking data handling**
- **Advanced diagnostic functions**
- **Internal ZPA logics**



M8-4Pin standard connector

M8-4Pin standard connector on ConveyLinx



## General Technical Data

- **Voltage:** 24V DC
- **Protection Class:** IP54
- **Rated Current:** ECO: 5,0A | BOOST: 7,0A with two drives
- **Starting Current:** ECO: 6,0A | BOOST: 10,0A with two drives
- **Connection:** M8 - 4Pin Connector
- **Ambient Temperature:** -30°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH

## Supported Fieldbus systems

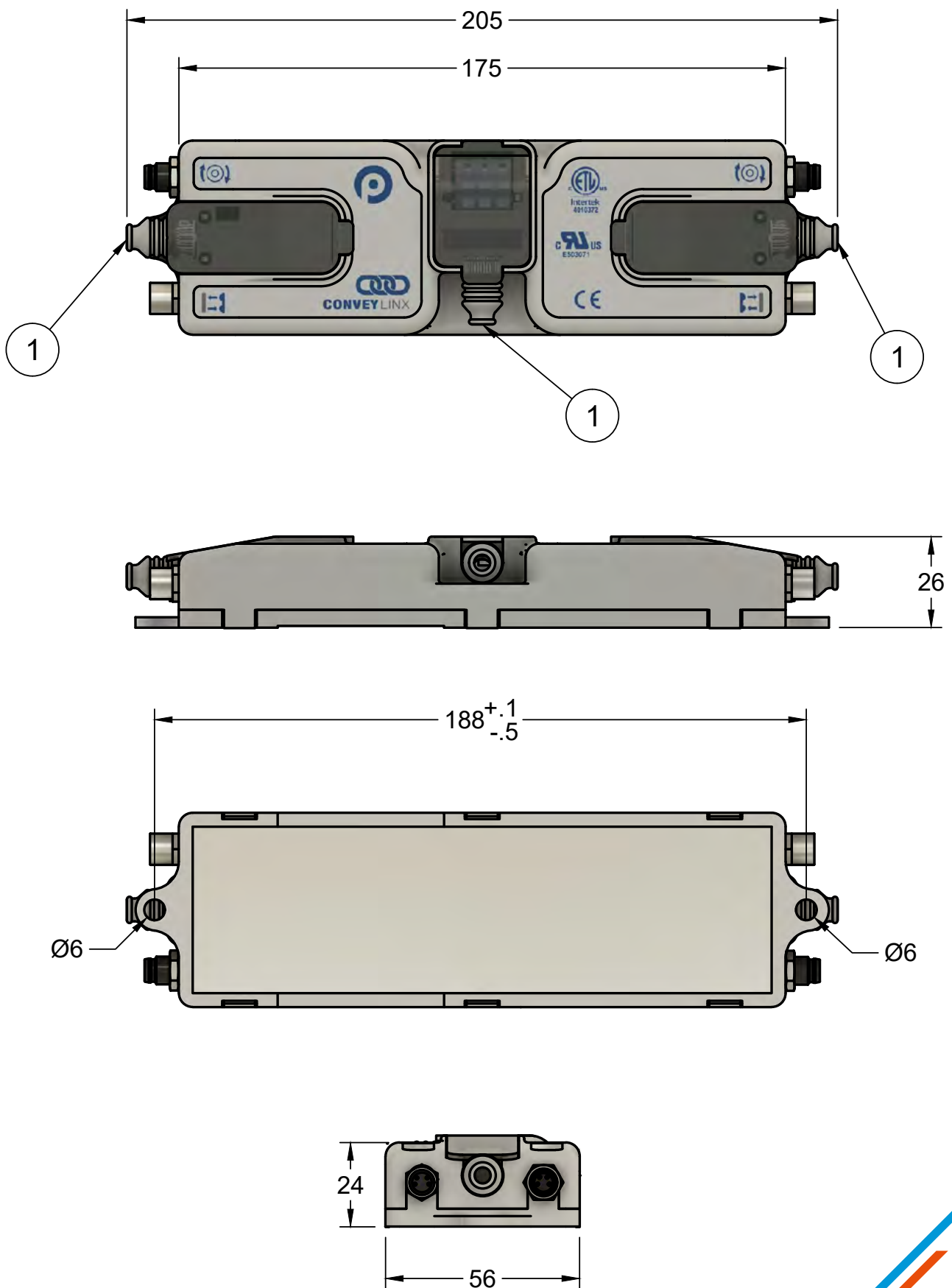


All four above mentioned field busses of ConveyLinx family operate on one hardware. Pulseroller provides for each of those field busses required driver software individually designed for respective PLCs.





# Dimensions of ConveyLinx-Ai2 DeepFreeze



1 - Cable Shrouds are shipped unattached and are field installed.

# ConveyLinx-Ai3

## RC/FC 24V



## **Zwo-Zone Network Control for 24V motor rollers and geared drives with our „Piercing Technology“**

The ConveyLinx-Ai3-FC/RC 24V connects the advantages of our ConveyLinx controls family with the simplicity of our patented „Piercing Technology“ which speeds up as well as making installation much more easier.

It gives you the opportunity to control our motor rollers and geared drives with M8-4Pin connection.

ConveyLinx-Ai3 is a solution that significantly simplifies and speeds up both the installation of the control unit and its replacement. The key to this is its cable piercing technology, whereby needles penetrate the insulation of the cable and make secure contact with the current conducting wires. No need for wire stripping or time-consuming press, screw, or soldering fixtures.

**ConveyLinx-Ai3 is available in two variants – RC and FC.**

The RC variant (Round Cable) enables the use of 6mm<sup>2</sup> round cables for the motor voltage supply and 2.5mm<sup>2</sup> cables for the logic voltage supply. The 6mm<sup>2</sup> cable, offers an extensive cable length range.

The FC variant (Flat Cable) uses an ASI standard ribbon cable and is suitable for carrying the motor voltage supply and separate logic voltage supply. By using a 2.5mm<sup>2</sup> ASI cable a high degree of standardization in the wiring is possible while at the same time simplifying the overall construction. With ConveyLinx-Ai3 a much easier and quicker method of cabling and connection is assured.

#### Benefits

- **Fast and easy wiring**
- **Tool-free connection**
- **High flexibility to fit in all applications**
- **Fast module replacement**
- **4 Ethernet protocols**
- **Easy interchangeability of the control unit**
- **Fully integrated in topology configuration**

#### Features

- **Power supply using piercing technology**
- **Profinet and ODVA approved**
- **Increased cable lengths possible especially with 6mm<sup>2</sup> round cable**
- **Separate power supply for motors and logic**
- **Advanced diagnostic functions**
- **Internal ZPA logics**



M8-4Pin standard connector



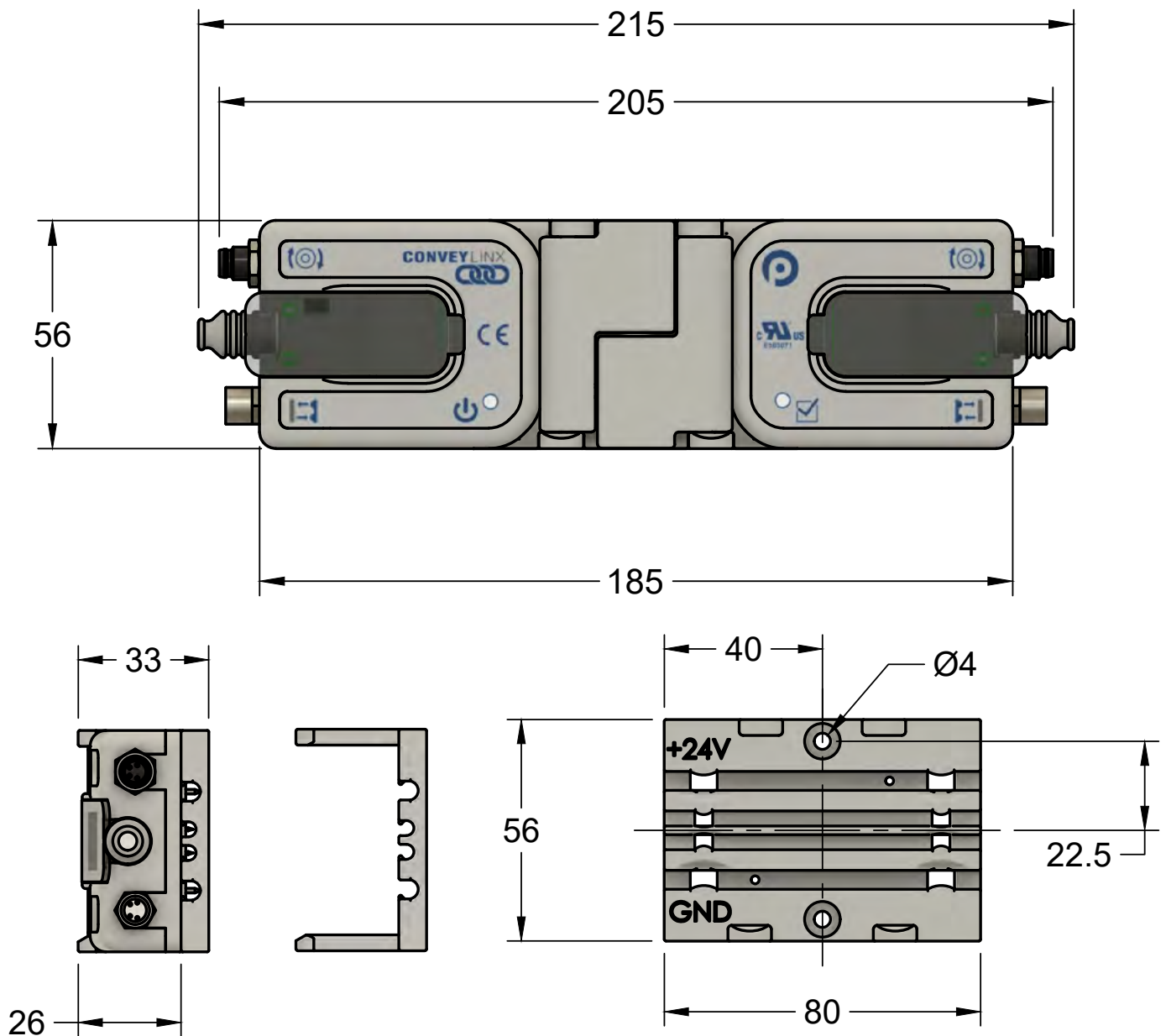
M8-4Pin standard connector on ConveyLinx



## General Technical Data

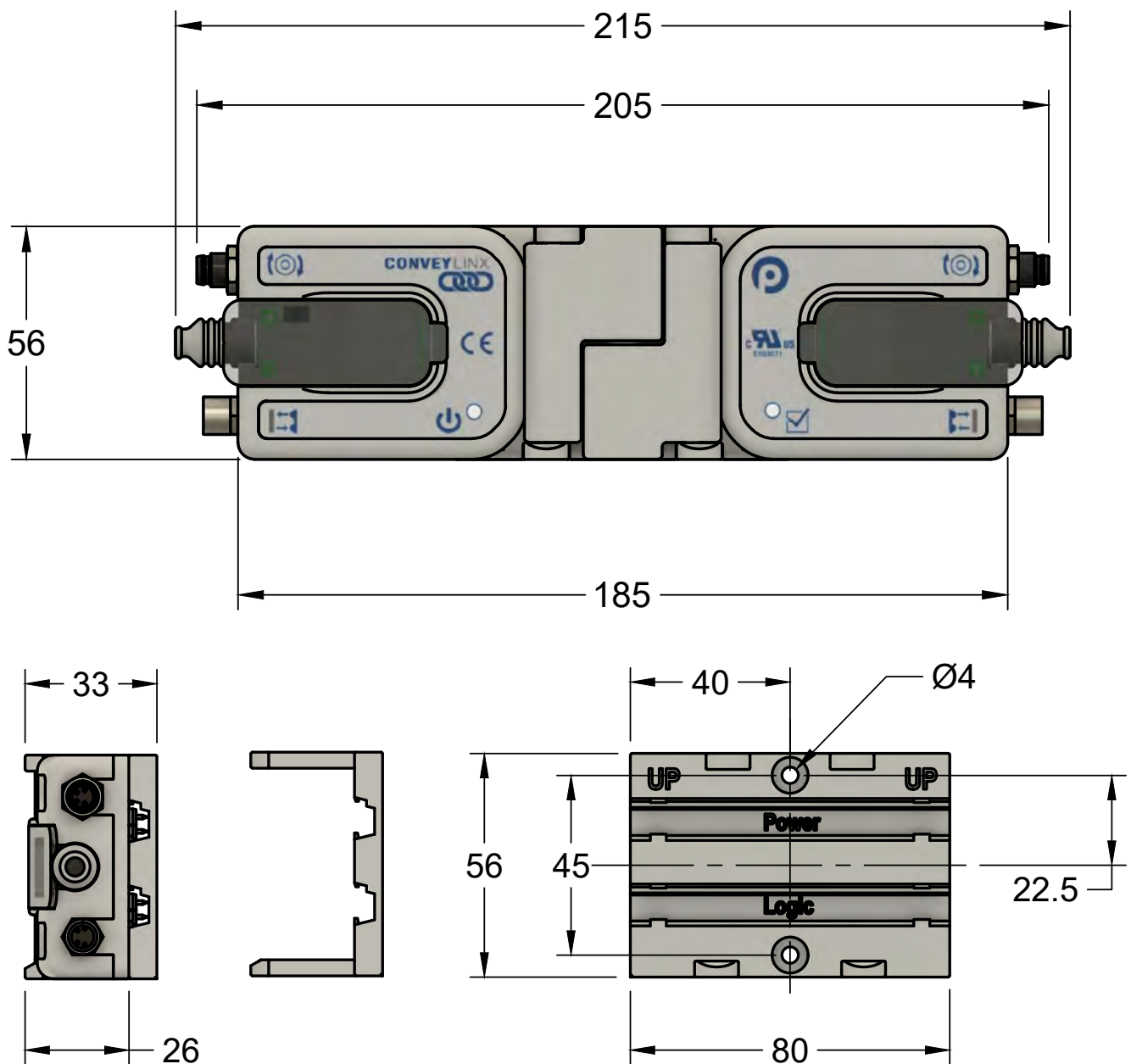
- **Voltage:** 24V DC
- **Protection Class:** IP54
- **Rated Current:** ECO: 5,0A | BOOST: 7,0A with two drives
- **Starting Current:** ECO: 6,0A | BOOST: 10,0A with two drives
- **Connection:** M8 - 4Pin Connector
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH

## Dimensions of ConveyLinx-Ai3 Round Cable (RC)





## Dimensions of ConveyLinx-Ai3 Flat Cable (FC)



## Supported Fieldbus systems



All four above mentioned field busses of ConveyLinx family operate on one hardware. Pulseroller provides for each of those field busses required driver software individually designed for respective PLCs.

# ConveyLinx-Ai3

## FC 48V



## **Zwo-Zone Network Control for 48V motor rollers and geared drives with our Flat Cable „Piercing Technology“**

The ConveyLinx-Ai3-FC 48V connects the advantages of our ConveyLinx controls family with the simplicity of our patented „Piercing Technology“ which speeds up as well as making installation much more easier. It gives you the opportunity to control our motor

rollers and geared drives with M8-4Pin connection. You can use our ConveyLinx-Ai3-FC 48V for simple zero pressure accumulation (ZPA) applications as well as part of a PLC-configured system with complex applications.

The patent pending 'Active Power Management' is a system that fundamentally prevents power supply overloading. Configuring the system using EasyRoll+, a ConveyLinx-Ai3-FC group is formed that is connected to one power supply. The maximum amperage of this power supply is defined for the group. Active Power Management then monitors the power consumption of the group and regulates the individual drives, optimizing or reducing their power consumption as required. This not only ensures reliable, efficient conveying under all operating conditions but also prevents power supply failure in rare cases of full or peak load.

With Active Power Management it is now possible at the design stage to eliminate uncertainty when calculating power requirements. There is no need

to build-in oversize power reserves when defining the number of power supplies in a system. The system can be defined with its 'average' power requirement instead of its 'peak' power. In this way the number of power supply units can be kept to a minimum and the Active Power Management will prevent system failure under peak load.

With Active Power Management, the reliability and availability of the system will be significantly increased under all operating conditions without the need of oversizing the power supply units.

#### Benefits

- Fast and easy wiring
- Tool-free connection
- High flexibility to fit in all applications
- Fast module replacement
- 4 Ethernet protocols
- Less power supplies needed
- Fully integrated in topology configuration

#### Features

- Active Power management
- Profinet and ODVA approved
- Separate power supply for motors and logic
- Advanced diagnostic functions
- Internal ZPA logics
- Increase of system availability



## General Technical Data

- **Voltage:** 48V DC
- **Protection Class:** IP54
- **Rated Current:** 1,6A\* per motor
- **Adjustable Starting Current Limitation:** 1,7A | 2,0A | 2,5A | 3,5A | 4,0A\* per motor
- **Connection:** M8 - 4Pin Connector
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH

\*Current limiting option selectable.

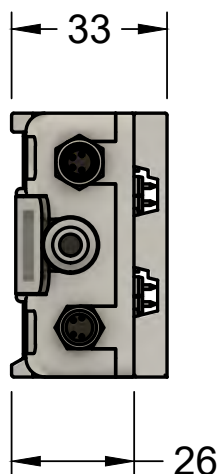
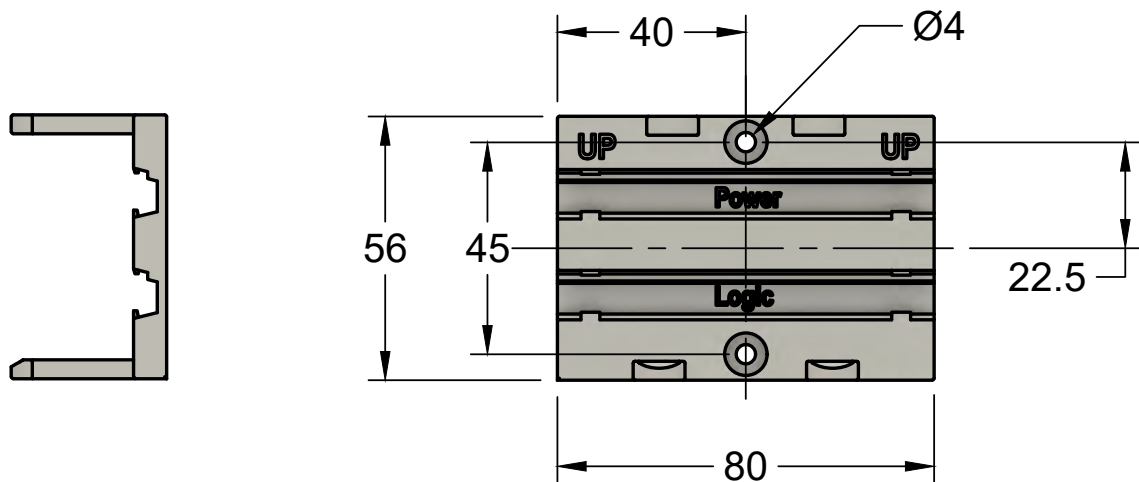
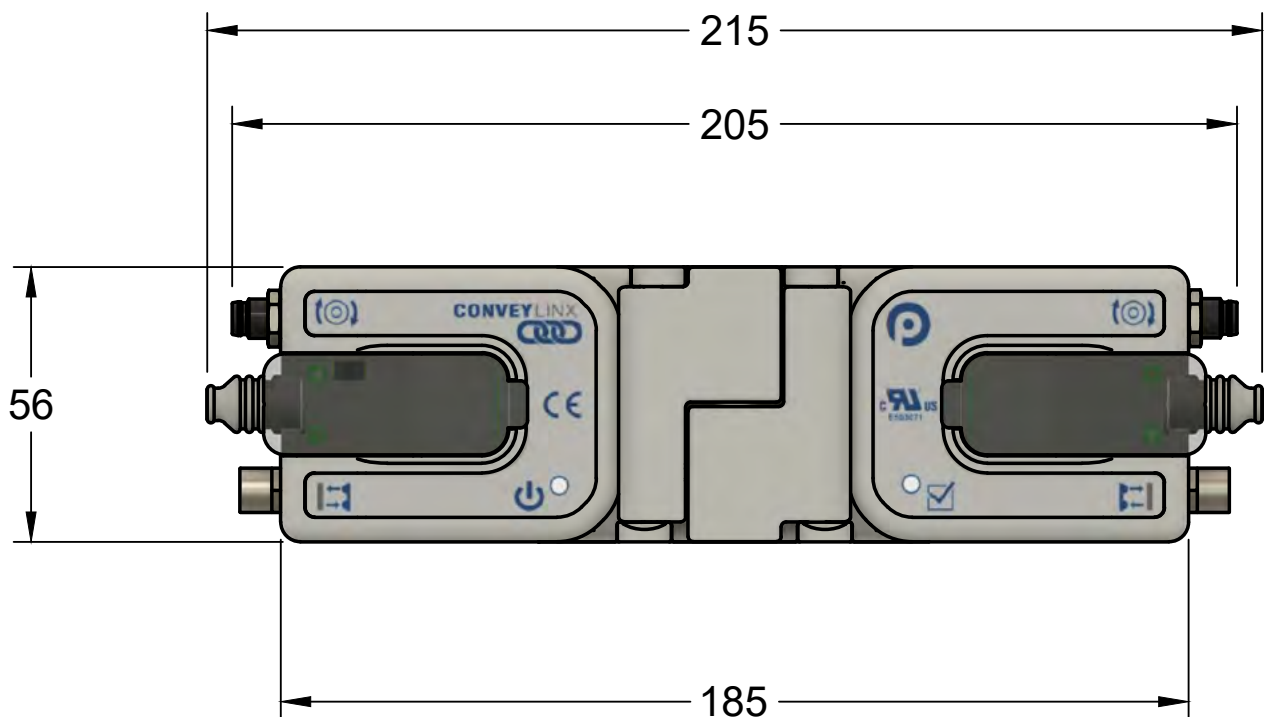
## Supported Fieldbus systems



All four above mentioned field busses of ConveyLinX family operate on one hardware. Pulseroller provides for each of those field busses required driver software individually designed for respective PLCs.



## Dimensions of ConveyLinx-Ai3 Flat Cable (FC)





# ConveyLinx-Ai3

## FCM 24V



## **Zwo-Zone Network Control for 24V motor rollers and geared drives with M12 bus connector.**

The ConveyLinx-Ai3-FCM 24V connects the advantages of our ConveyLinx controls family with the simplicity of our patented „Piercing Technology“ as well as using the M12 bus connectors for reliable connection even in extreme environments. It gives you the oppor-

tunity to control our motor rollers and geared drives with M8-4Pin connection. You can use our ConveyLinx-Ai3-FCM 24V for simple zero pressure accumulation (ZPA) applications as well as part of a PLC-configured systems.

The ConveyLinx-Ai3-FCM is an innovative solution designed specifically for the toughest industrial environments. Built to meet and exceed the strictest industrial standards, this product thrives in harsh conditions, ensuring your operations remain efficient and reliable. It was never easier to install a control than with our ConveyLinx-Ai3-FCM 24V version. With its „Piercing Technology“ you achieve tool free installation and wiring. On the back of the control are piercing needles which make contact with the cable laying behind it. With our ConveyLinx-Ai3-FCM 24V, a zero-pressure accumulation (ZPA) conveyor can be controlled fully autonomously without the use of a PLC. Alternatively, if a higher-level control is preferred, a PLC can be integrated using ProfiNet,

Ethernet IP, Modbus TCP and CCLink. The PLC does not need to control every zone, it needs to control only a limited number of decision points. If the application should be fully controlled by a PLC, the configuration and control of all ConveyLinx-Ai3' 24V can be made while using the Topology from TIA Portal or STEP 7.

#### Benefits

- Fast and easy wiring
- Tool-free connection
- High flexibility to fit in all applications
- Robust installation technology
- 4 Ethernet protocols
- Easy interchangeability of the control unit
- Fully integrated in topology configuration

#### Features

- Power supply using piercing technology
- Profinet and ODVA approved
- M12 connection for bus
- Separate power supply for motors and logic
- Advanced diagnostic functions
- 4 IP-based bus systems



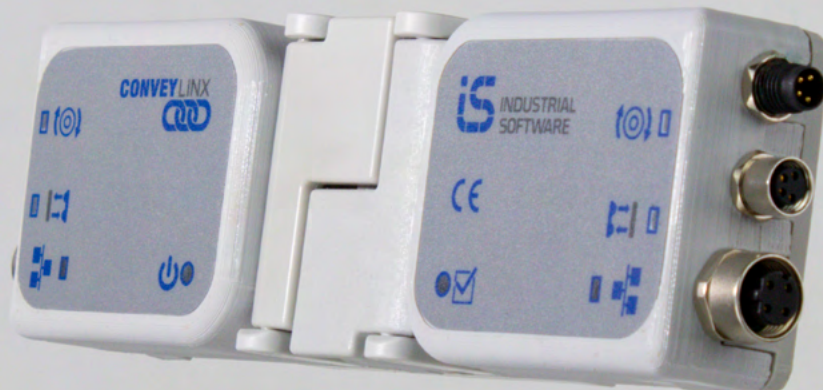
## General Technical Data

- **Voltage:** 24V DC
- **Protection Class:** IP54
- **Rated Current:** 2,6A
- **Starting Current:** 3,0A | 5,0A | 8,0A (per Motor)
- **Connection:** M8 - 4Pin Connector
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH

## Supported Fieldbus systems

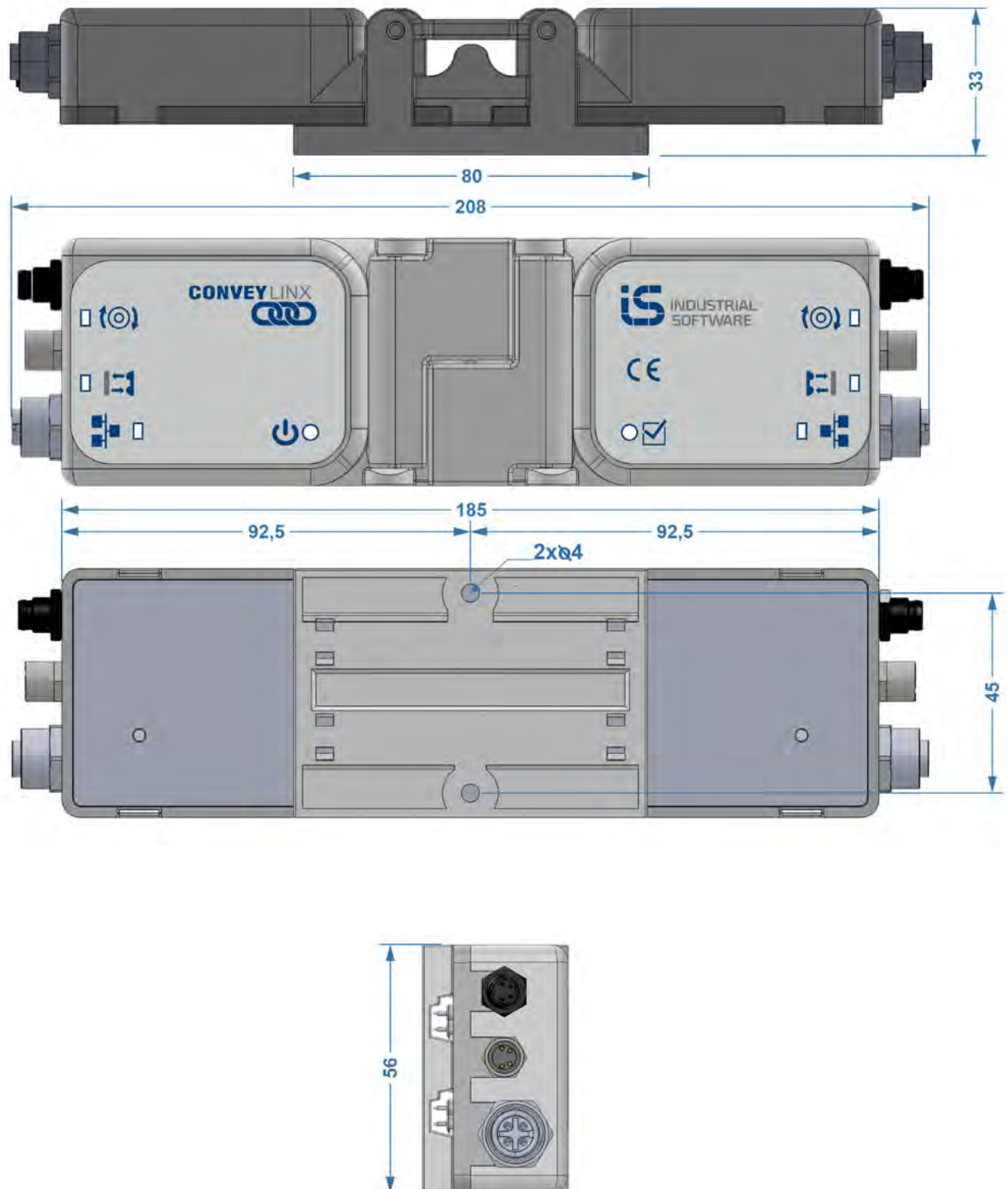


All four above mentioned field busses of ConveyLinx family operate on one hardware. Pulseroller provides for each of those field busses required driver software individually designed for respective PLCs.





## Dimensions of ConveyLinx-Ai3-FCM 24V



# MotionLinx-Ai

## 24V



The MotionLinx-Ai 24V is Pulseroller's advanced EtherCAT two-zone high-speed controller, specifically designed for a wide range of applications in the conveyor industry and general machine building. It can power two Senergy-Ai or two PGD-Ai motors simultaneously, providing high-performance control for demanding systems.

# Two-Zone Network Control for 24V motor rollers and geared drives specially designed for EtherCAT.

For configuration no proprietary software is required. All parameters can be configured via Service Data Objects (SDO) following fully EtherCAT standards. Preventive maintenance data can be retrieved from MotionLinx-Ai with read Service Data Object transfer.

Due to its small footprint, MotionLinx Ai can be integrated in virtually all field environments very easily. Sharing the

outer dimensions with ConveyLinx-Ai2, MotionLinx-Ai is perfect for design standardisation and low height installation with a protection rate of IP54.

MotionLinx Ai opens the world of high-speed bus control to all Pulseroller products – sharing their great benefits like Ai technology, durability, and excellent design.

## Benefits

- **Small footprint for easy installation inside the side-frame**
- **High flexibility to fit in all applications**
- **Fast module replacement**
- **High communication speed**
- **Real time applications**

## Features

- **Two-Zone motor control**
- **Connection for 2 motors and 4 sensors**
- **Advanced diagnostic functions**
- **Internal ZPA logics**



## General Technical Data

- **Voltage:** 24V DC
- **Protection Class:** IP54
- **Rated Current:** ECO: 2,5A x 2 | BOOST: 3,5A x 2 | BOOST-8: 3,5A x 2
- **Starting Current:** ECO: 3,0A x 2 | BOOST: 5,0A x 2 | BOOST-8: 8,0A x 2
- **Connection:** M8 - 4Pin Connector
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH

## Supported Fieldbus systems

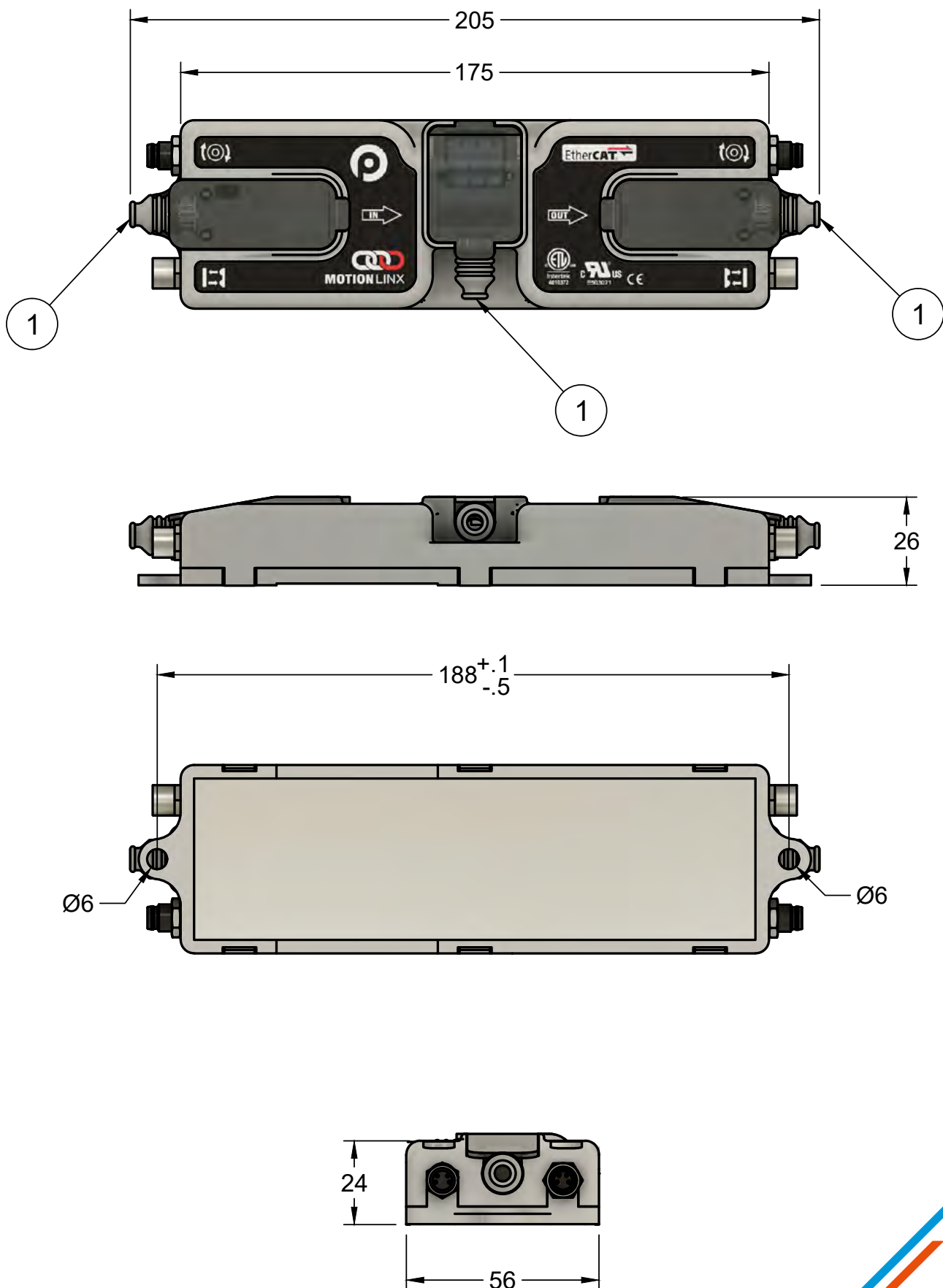


Our MotionLinx products are specially designed to support EtherCAT connection.





## Dimensions of MotionLinX-Ai



1 - Cable Shrouds are shipped unattached and are field installed.

# Convey Proxy



**Gateway for systems with  
ConveyLinux to reduce the  
number of IP addresses.**

In systems where numerous ConveyLinx devices are networked, each requiring its own IP address, the demand for connections in the PLC can be significant. ConveyProxy serves as a solution by acting as a central connection point, aggregating data from multiple ConveyLinx devices and allowing them to be controlled and monitored through a single IP address and connection.

In such systems, numerous ConveyLinx are networked and each requires its own IP address, which leads to a high demand for connections in the PLC.

The ConveyProxy acts as a central connection point for multiple ConveyLinx, aggregating the data connection and allowing multiple devices to be

controlled and monitored via a single IP address and connection. This simplifies network management, saves resources and enables the seamless integration of different systems into a smaller PLC.

With ConveyProxy, companies can coordinate their logistics and materials handling processes more efficiently

## Benefits

- **Control of large systems with small PLC**
- **Can be fully integrated into Siemens PLC**
- **Independent PLC function**

## Features

- **Structurally identical to ConveyLinx-Ai2**
- **Various operating modes**
- **Simplified topology**

while minimising IP address usage. This results in cost savings and improved scalability of automation systems, contributing to a more efficient and economical solution overall.



## General Technical Data

- **Voltage:** 24V DC
- **Protection Class:** IP54
- **Connection:** LAN
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH

## Supported Fieldbus systems

Our Gateway ConveyProxy does support following common used communication protocols...

...for PLC connection:

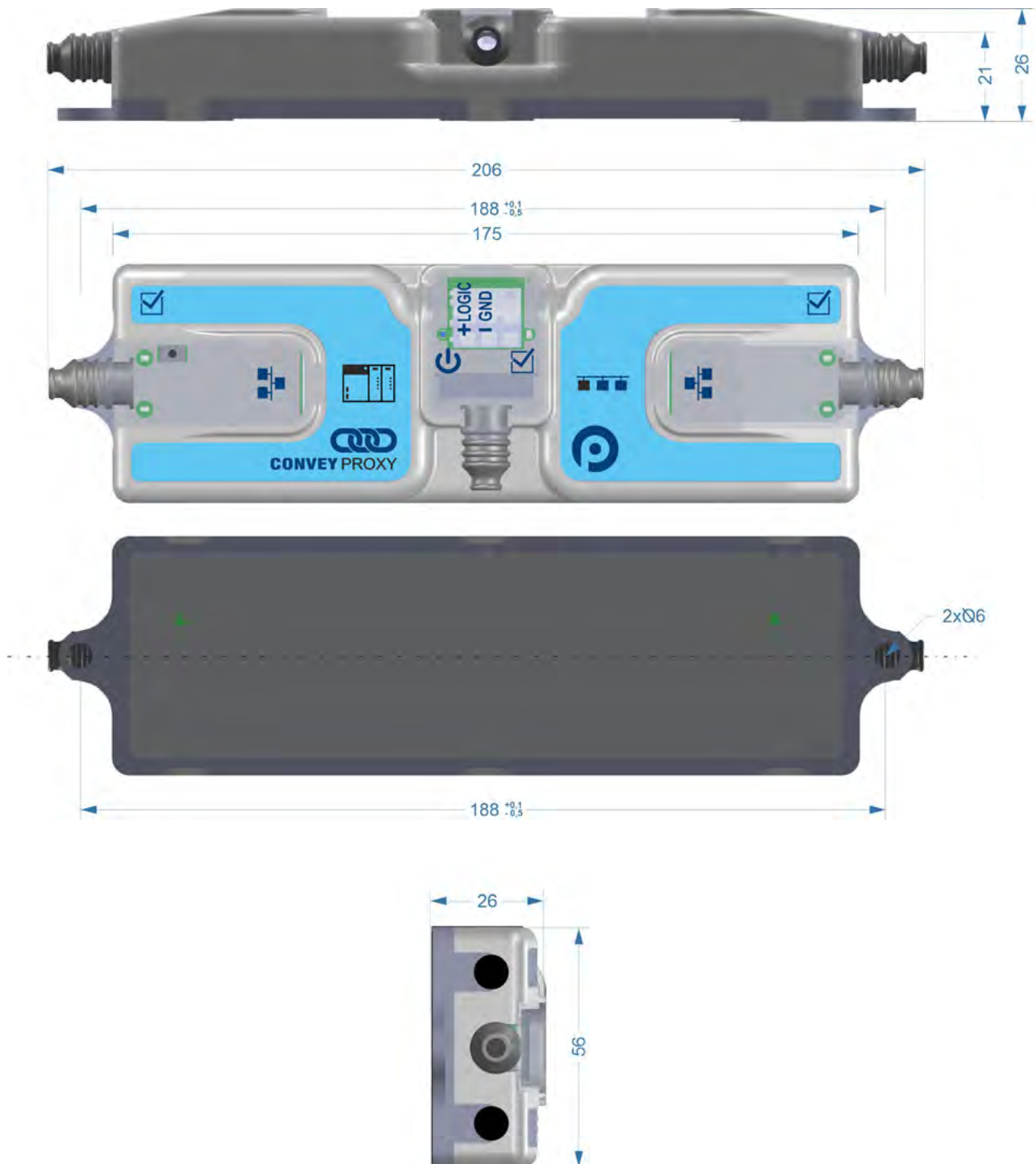


...for non-PLC connection:





## Dimensions of ConveyProxy



# ConveyLinx-JST-B

## 24V



The ConveyLinx-JST-B 24V gives you the opportunity to control our motor rollers and geared drives with 9-Pin JST connection. You can use our ConveyLinx-JST-B 24V for simple zero pressure accumulation (ZPA) applications as well as part of a PLC-configured system with complex applications. It gives you the power of free decision-making.

# Two Zone Network Control for 24V Motor Roller and Geared Drives with JST connector.

The ConveyLinx-JST-B is the dedicated control for the Senergy-JST-B motorised roller, featuring an integrated holding brake, as well as our PGD-JST and PGD-JST-B geared drives. The brake is fully deactivated automatically, eliminating the need for intervention by the higher-level controller. When de-energized, the brake reliably closes due to its spring-loaded mechanism and is only released by an electromagnet, ensuring secure and precise operation.

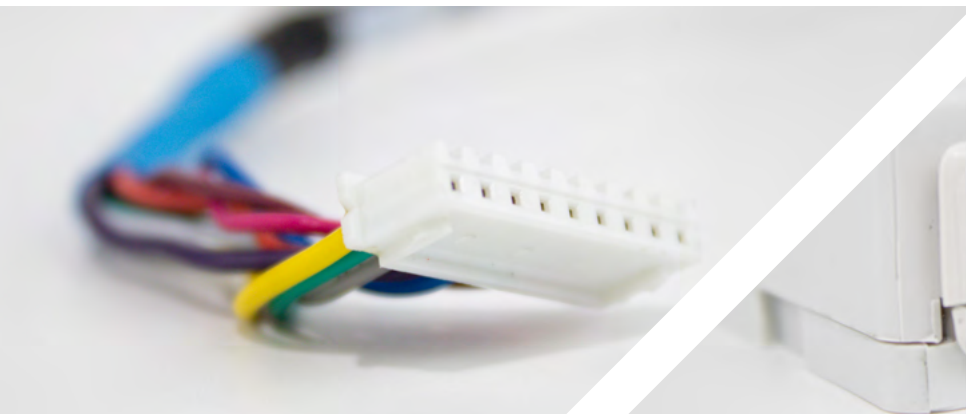
The motorised roller connects via a 9-Pin JST connector, which also manages the control of the mechanical holding brake. This system offers full compatibility with other controllers in the ConveyLinx family, enabling seamless integration of a mechanically braked motorised roller in any conveyor zone. All logic functions available in the ConveyLinx system remain fully accessible, ensuring flexibility and consistency across the entire setup.

## Benefits

- Automatic brake control
- Full compatibility with other control systems
- Robust housing
- 4 Ethernet protocols
- Significant reduction of PLC source code
- Fully integrated in topology configuration

## Features

- Two-Zone motor control
- Profinet and ODVA approved
- Connection for 2 motors and 4 sensors
- Tracking data handling
- Advanced diagnostic functions
- Internal ZPA logics



9-Pin JST connector



9-Pin JST connector on ConveyLinx-JST-B



## General Technical Data

• Voltage:	24V DC
• Protection Class:	IP54
• Rated Current:	ECO: 2,5A x2   BOOST: 3,5 x2   BOOST-8: 3,5 x2
• Starting Current:	ECO: 3,0A x2   BOOST: 5,0 x2   BOOST-8: 8,0 x2 (only HTF)
• Connection:	9Pin JST Connector
• Ambient Temperature:	0°C – +40°C
• Ambient Humidity:	10% – 90% (No Condensation)
• Certifications:	UL, CE, UKCA, RoHS, REACH

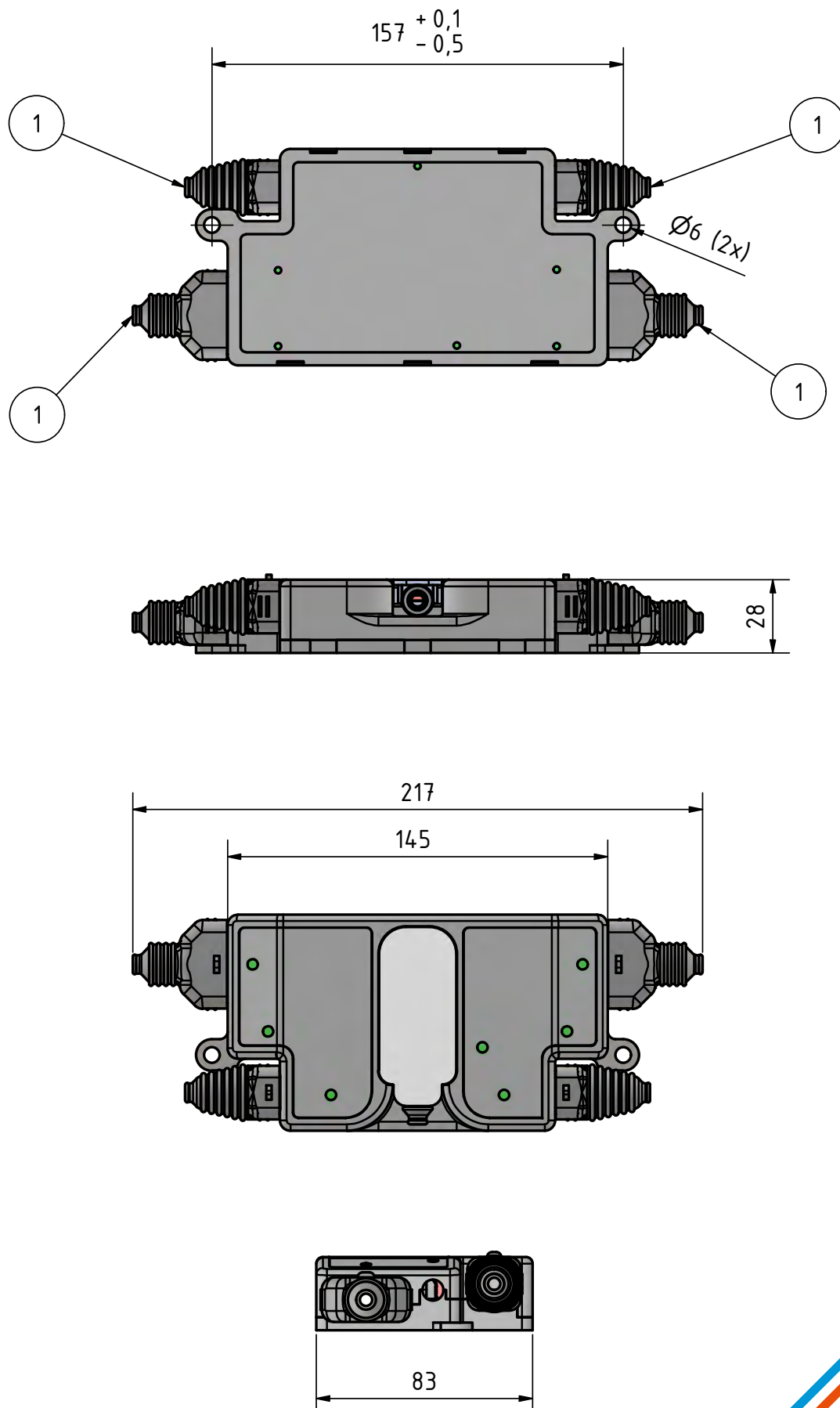
## Supported Fieldbus systems



All four above mentioned field busses of ConveyLinx family operate on one hardware. Pulseroller provides for each of those field busses required driver software individually designed for respective PLCs.



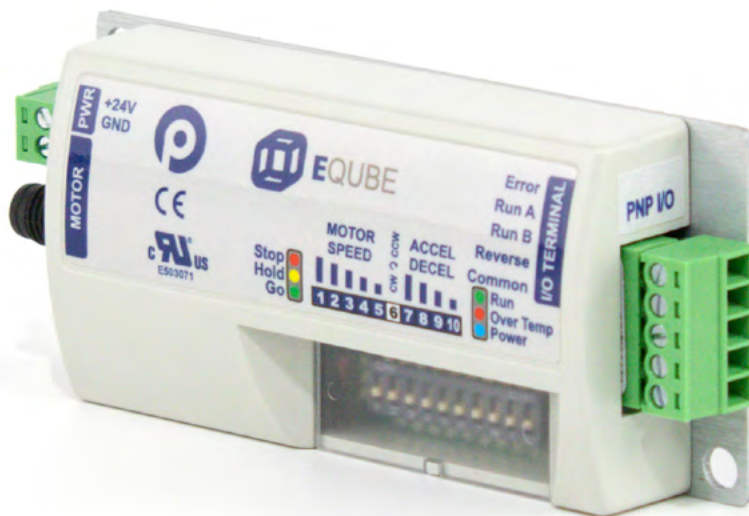
# Dimensions of ConveyLinx-JST-B





# EQUBE-Ai

## 24V



## Simple control for a 24V motor roller or geared drive.

The EQUBE-Ai 24V is our simplest control to power and control our Senergy-Ai 24V or PGD-Ai 24V using M8-4Pin connection. Based on its compact design, EQUBE-Ai 24V is the perfect control for areas with a very limited space, as it is fitting easily into every conveyor side frame.

Using DIP-switches, many parameters like acceleration, deceleration, direction of rotation and speed can be quickly selected or changed. The speed can also be set by digital inputs from an external control. With a motor error output, the motor condition can be

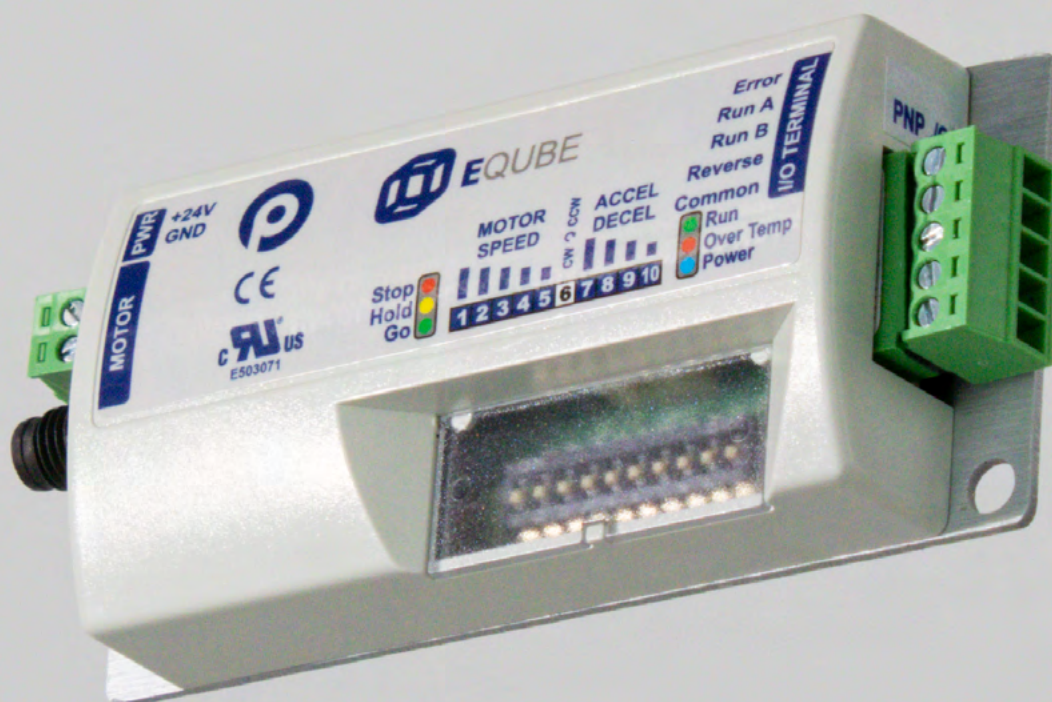
monitored continuously in real time. All external signal wires are connected via simple in-line clamps. Due to its small size, EQUBE-Ai can be installed in areas of limited space and in virtually all conveyor side frames.

#### Benefits

- **Very small footprint**
- **Speed selection via two I/Os**
- **Failure output**
- **Acceleration and deceleration settings**

#### Features

- **Motor control for Senergy-Ai and PGD-Ai**
- **DIP-switches for configuration**
- **Status LEDs**

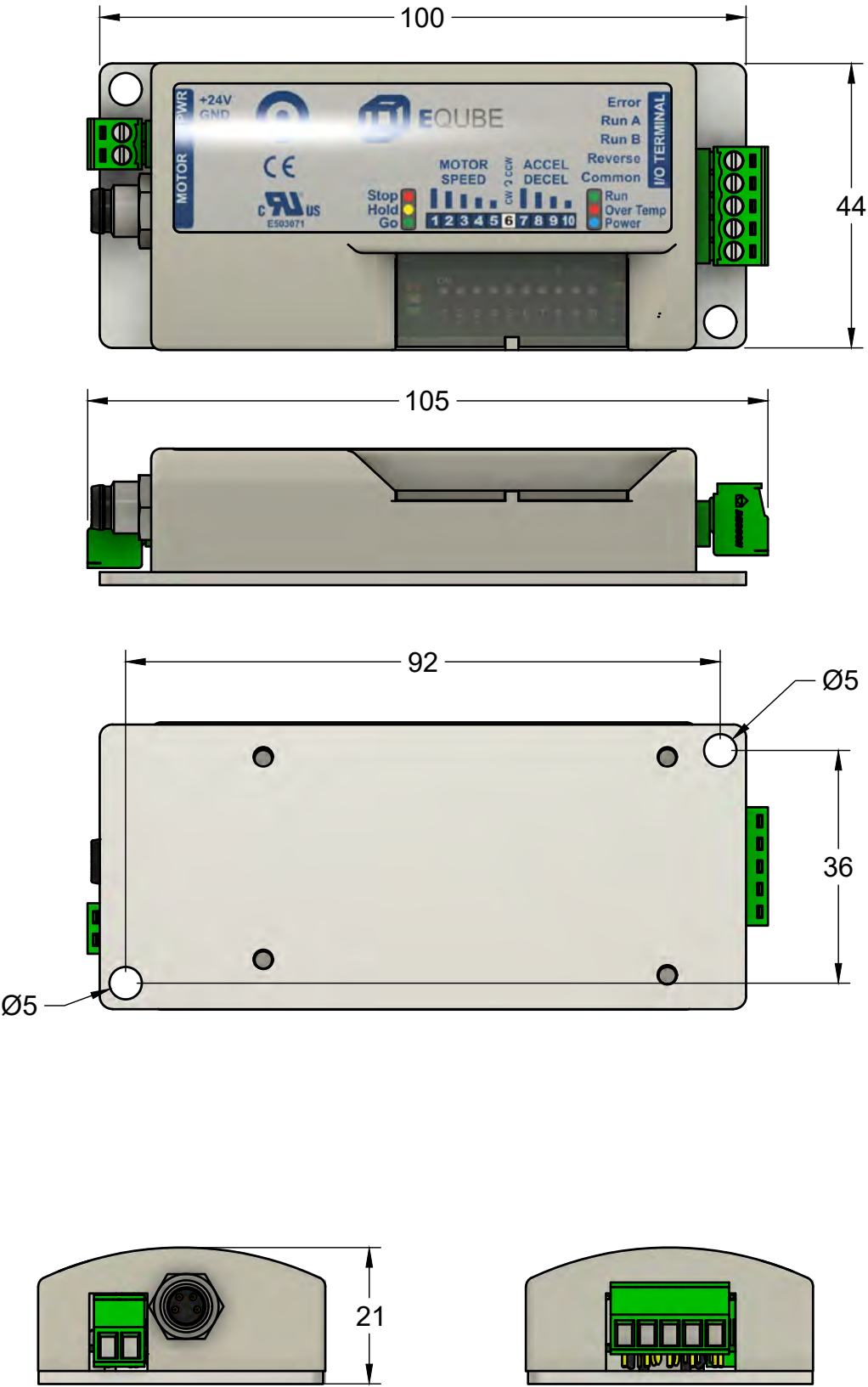


## General Technical Data

- **Voltage:** 24V DC
- **Protection Class:** IP20
- **Rated Current:** ECO: 2,5A
- **Starting Current:** ECO: 3,0A
- **Connection:** M8 - 4Pin Connector
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH



# Dimensions of EQUBE-Ai





# EZ-QUBE

## 24V



## Simple control for a 24V motor roller or geared drive with JST 9-Pin connector.

The EZ-QUBE 24V is our simplest control to power and control our Senergy-JST or PGD-JST with or without brake using 9Pin JST connection. Based on its compact design, EZ-QUBE is the perfect control for areas with a very limited space, as it is fitting easily into every conveyor side frame.



Using DIP-switches, many parameters like acceleration, deceleration, direction of rotation and speed can be quickly selected or changed. The speed can also be set by digital inputs from an external control. With a motor error output, the motor condition can be

monitored continuously in real time. All external signal wires are connected via simple in-line clamps. Due to its small size, EZ-QUBE can be installed in areas of limited space and in virtually all conveyor side frames.

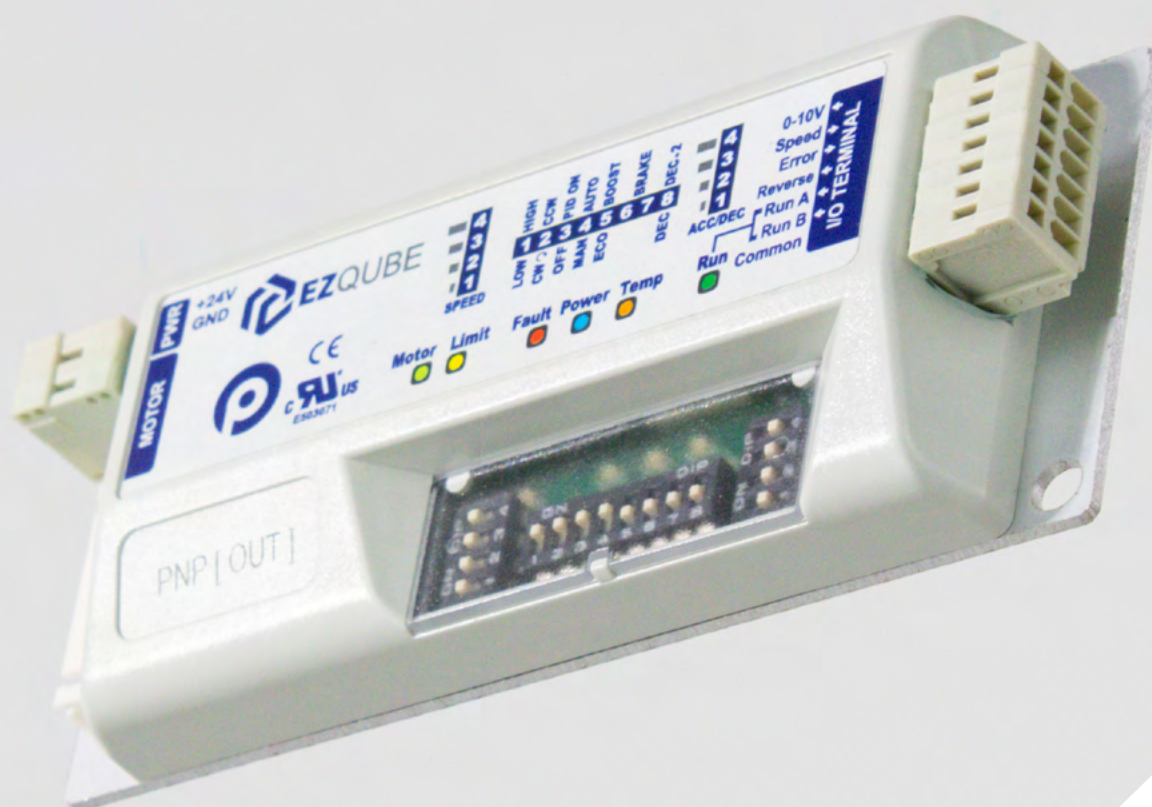


### Benefits

- **Very small footprint**
- **Speed selection via two I/Os**
- **Failure output**
- **Acceleration and deceleration settings**

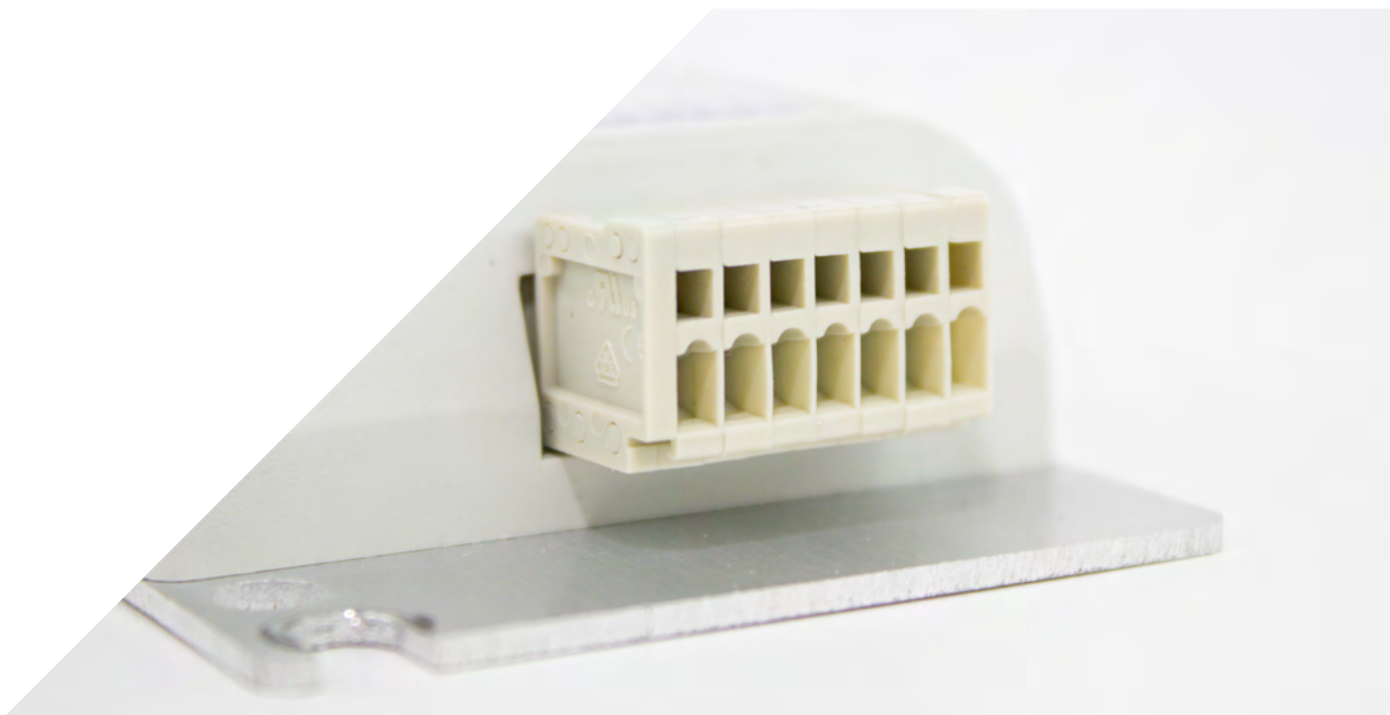
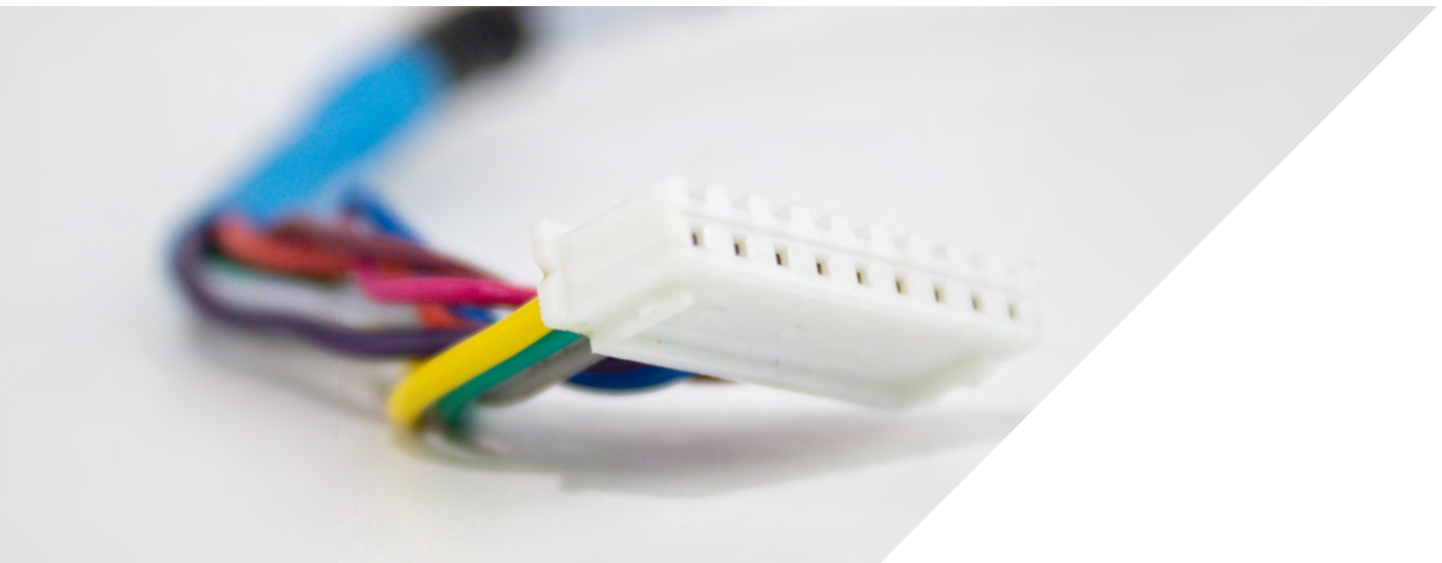
### Features

- **Motor control for Senenergy-JST and PGD-JST**
- **DIP-switches for configuration**
- **Status LEDs**

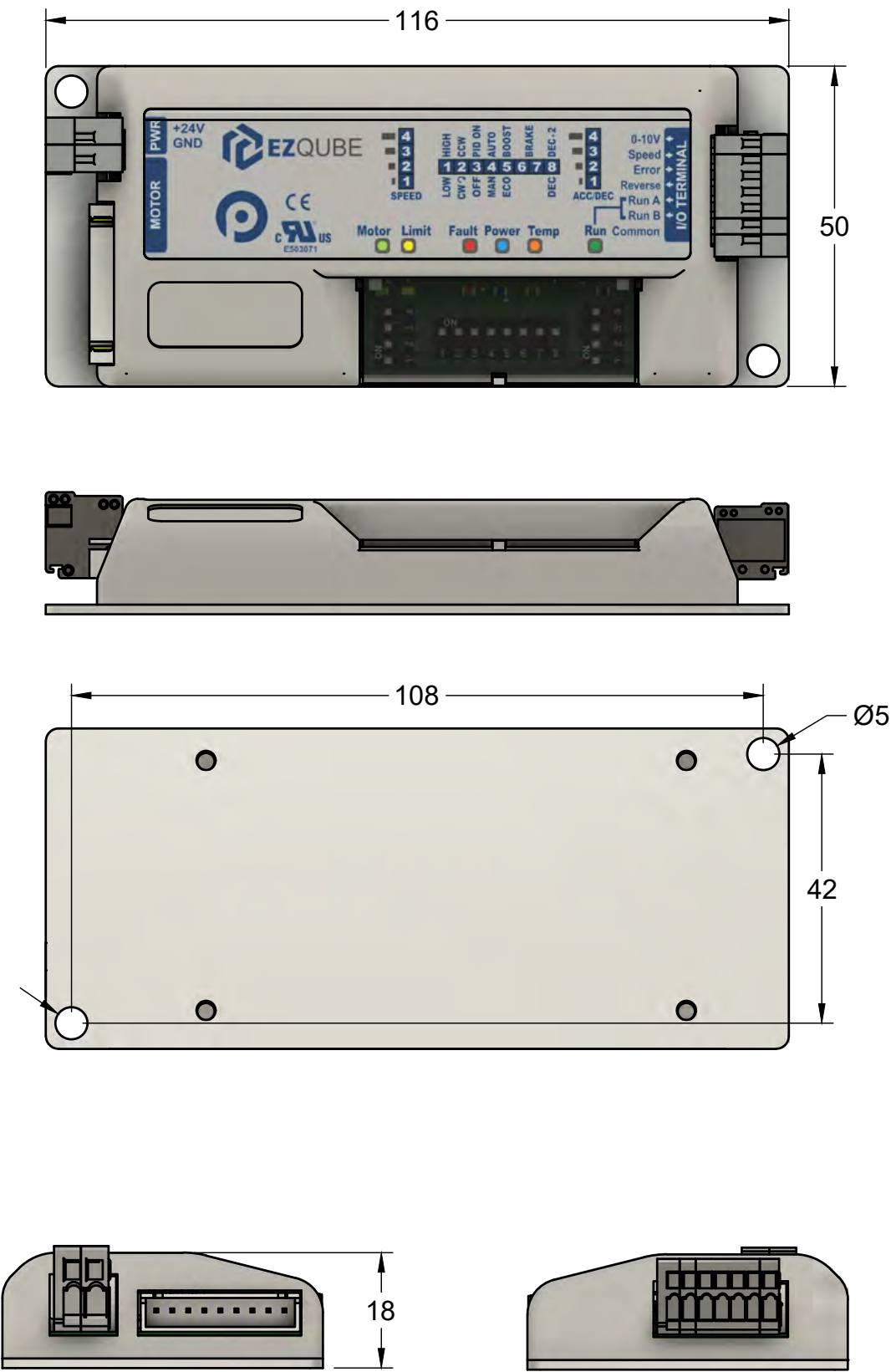


## General Technical Data

- **Voltage:** 24V DC
- **Protection Class:** IP20
- **Rated Current:** ECO: 2,5A | BOOST: 3,5A
- **Starting Current:** ECO: 3,0A | BOOST: 5,0A
- **Connection:** 9Pin JST Connector
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH



# Dimensions of EZ-QUBE



# EZ-QUBE-W-Ai

## 24V



## Simple control for a 24V motor roller or geared drive with Bluetooth configuration.

The EZ-QUBE-W-Ai 24V is our bluetooth control to power and control our Senergy-Ai or PGD-Ai using M8-4Pin connection. Based on its compact design, EZ-QUBE-W-Ai is the perfect control for areas with a very limited space, as it is fitting easily into every conveyor side frame.



Individual controls or groups of controls can now be configured using an app on a smartphone, tablet, or laptop and without the use of DIP switches.

**The EZ-Qube-W-Ai is equipped with:**

- Infinitely variable speed adjustment
- Separate setting of braking and acceleration ramps
- Holding brake
- Eco, Boost and Boost 8 drive modes
- Online and offline configuration mode
- App-based
- Program-based for a large number of controls at the same time
- Integrated error memory with evaluation function: In the case of analysis, all data can be read directly from the EZQube Ai-W using the mobile device.



### Benefits

- **Very small footprint**
- **Speed selection via two I/Os**
- **Failure output**
- **Bluetooth-based configuration**

### Features

- **Motor control for Senergy-Ai and PGD-Ai**
- **Error memory**
- **Status LEDs**
- **Highly convenient configuration**

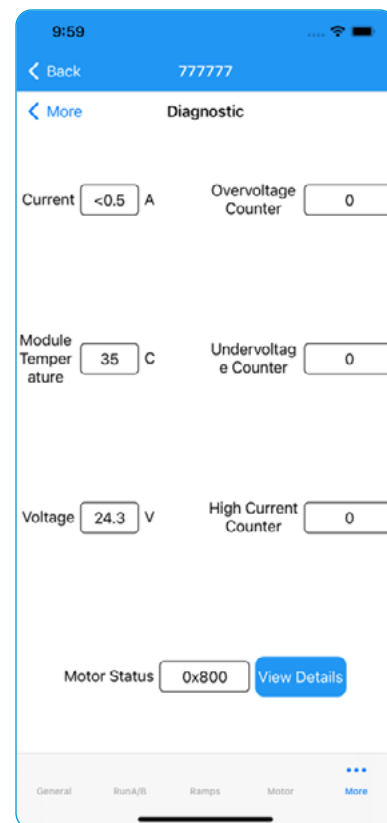
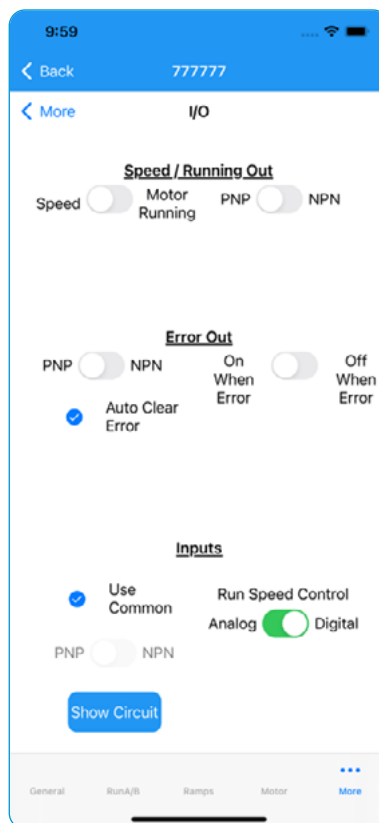
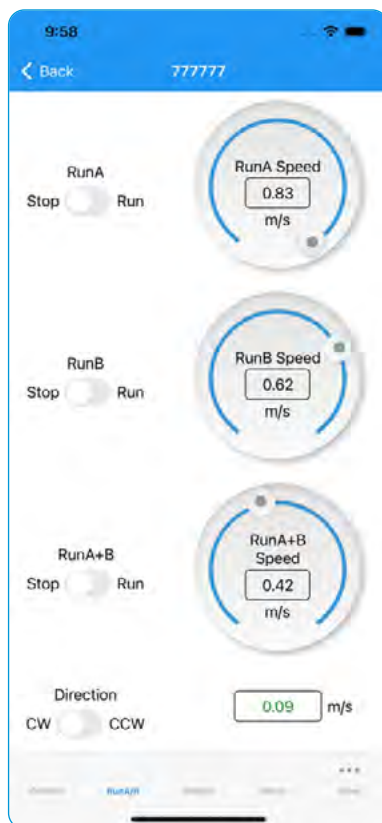




## General Technical Data

- **Voltage:** 24V DC
- **Protection Class:** IP20
- **Rated Current:** ECO: 2,5A | BOOST: 3,5A
- **Starting Current:** ECO: 3,0A | BOOST: 5,0A
- **Connection:** M8 - 4Pin Connector
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH

## Screenshots of control app



Free download  
in the App Store

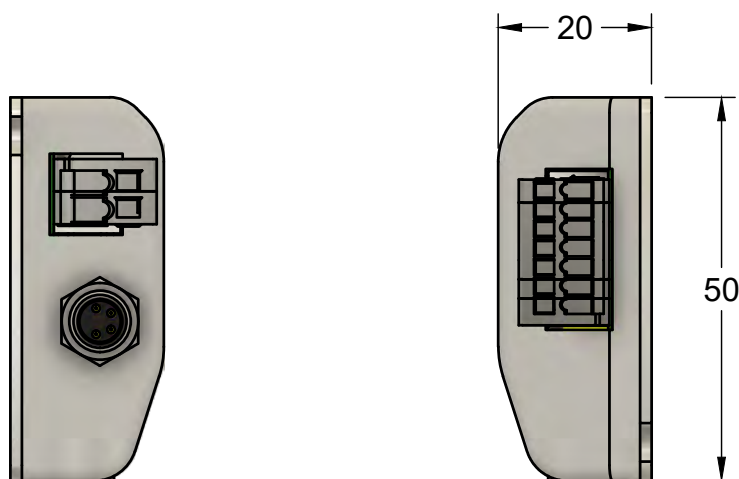
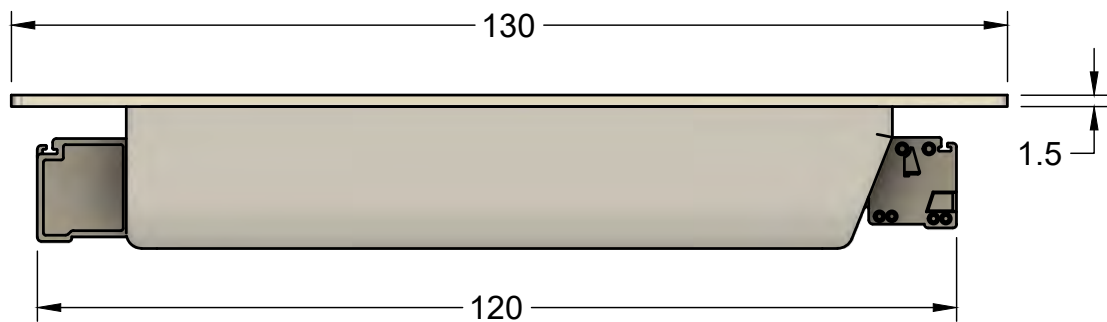
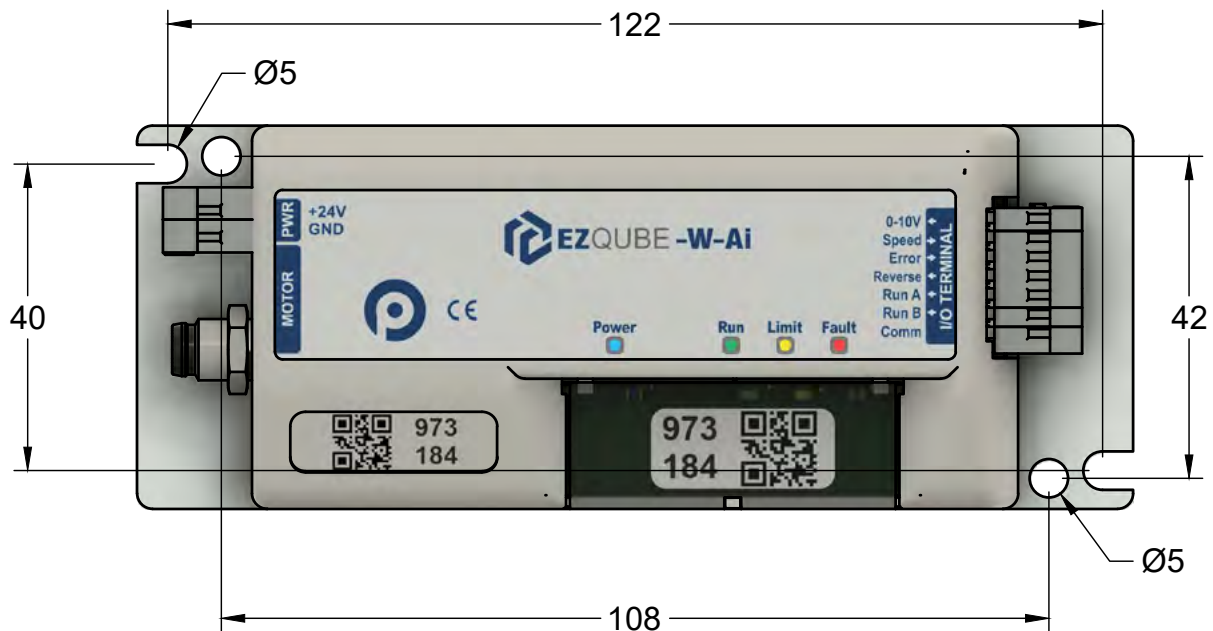
iOS App Store



Google Play Store



## Dimensions of EZ-QUBE-W-Ai



# ConveyLinx

## I/O



## **Input and Output module for 24V motor rollers and geared drives based on the ConveyLinx-Ai2.**

For many conveyor applications, the demand for multiple I/O points often exceeds the number of controls for motorized rollers.

In such cases, additional I/O blocks are required, which typically need to be sourced from third-party suppliers. With Pulseroller, there is no need to look elsewhere for I/O solutions.

This being the case, additional I/O blocks will be necessary and would normally have to be purchased from a second party. However, there is no need to source I/O's from another supplier as you can obtain them from Pulseroller where you can be assured that they will be compatible with other Pulseroller products.

ConveyLinX I/O offers the unique feature of having a system internal I/O block at your fingertips. The Pulseroller I/O is already integrated in the GSDML file. So, integration in your project will be fast. ConveyLinX I/O is an additional strong member of the Pulseroller product portfolio.

#### Benefits

- Small footprint for easy installation inside the side-frame
- High flexibility to fit in all applications
- Fully compatible with all ConveyLinX
- High communication speed
- Real time applications
- Error-free commissioning
- All components from a single source

#### Features

- 8 configurable I/O points
- Standard I/O pin assignment
- PNP/NPN logic conversion
- Separate power supply for the outputs
- Outputs drive up to 300mA permanently
- Configuration via PLC and GSDML file



## General Technical Data

- **Voltage:** 24V DC
- **Protection Class:** IP54
- **Maximum current per output:** 300mA
- **Connection:** M8 - 4Pin Connector
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH

## Supported Fieldbus systems

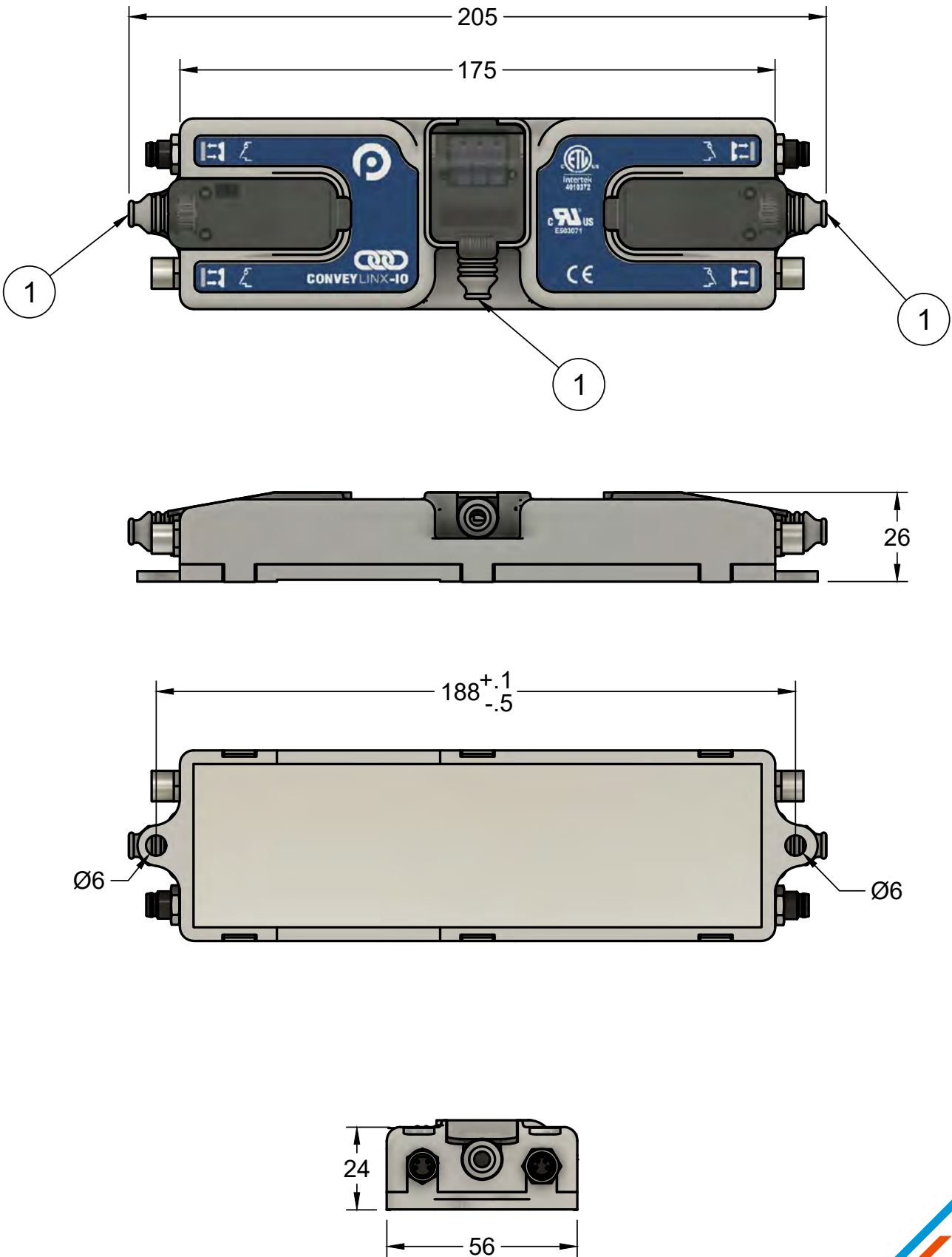


All four above mentioned field busses of ConveyLinx family operate on one hardware. Pulseroller provides for each of those field busses required driver software individually designed for respective PLCs.





# Dimensions of ConveyLinx-I/O



1 - Cable Shrouds are shipped unattached and are field installed.

# MotionLinx

## I/O



**Input and Output module for 24V motor rollers and geared drives based on the MotionLinx-Ai.**

When a system requires more I/O connections than can be supported by MotionLinx-Ai, the MotionLinx-I/O serves as the perfect extension.

This solution allows for the seamless expansion of complex system layouts, all while maintaining compatibility with Pulseroller products.

Complex system layouts can be supplemented and realised with Pulseroller products in this way. With up to 8 inputs or 8 outputs, MotionLinX I/O offers a high degree of flexibility with very compact dimensions.

Configuration does not require proprietary software but is carried out using Service Data Objects (SDO).

#### Benefits

- Small footprint for easy installation inside the side-frame
- High flexibility to fit in all applications
- Fast integration in system
- High communication speed
- Real time applications
- Error-free commissioning
- All components from a single source

#### Features

- 8 configurable I/O points
- Standard I/O pin assignment
- Configuration via SDO
- Separate power supply for the outputs
- Outputs drive up to 300mA permanently
- Data exchange via PDO



## General Technical Data

- **Voltage:** 24V DC
- **Protection Class:** IP54
- **Maximum current per output:** 300mA
- **Connection:** M8 - 4Pin Connector
- **Ambient Temperature:** 0°C – +40°C
- **Ambient Humidity:** 10% – 90% (No Condensation)
- **Certifications:** UL, CE, UKCA, RoHS, REACH

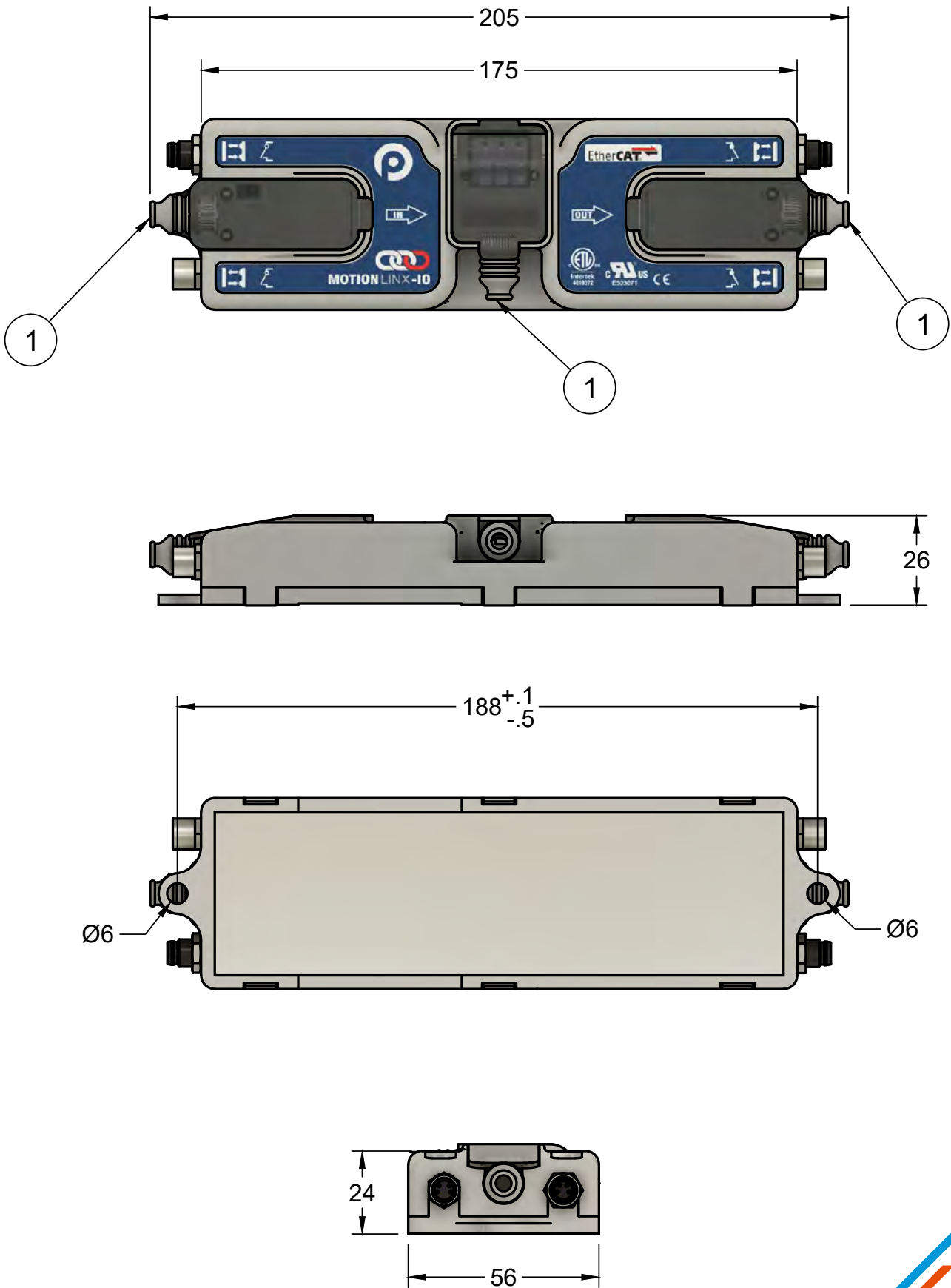
## Supported Fieldbus systems



Our MotionLinx products are specially designed to support EtherCAT connection.



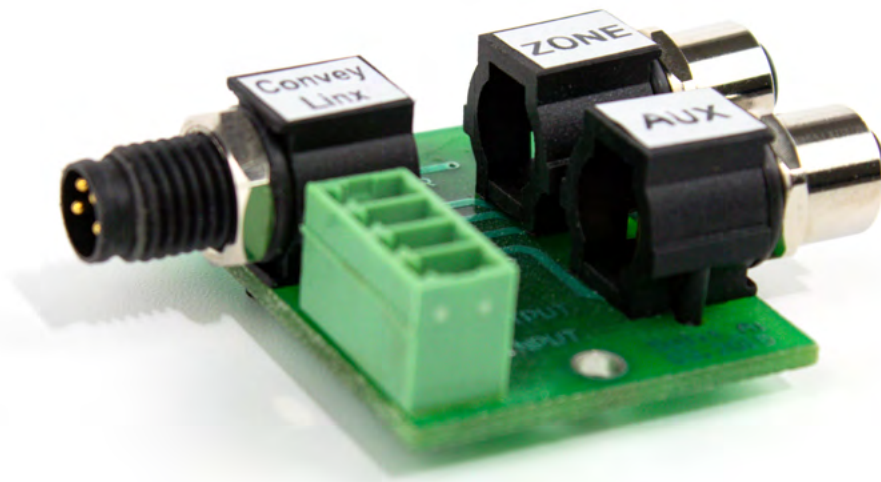
# Dimensions of MotionLinx-I/O



1 - Cable Shrouds are shipped unattached and are field installed.



# I/O X Interface

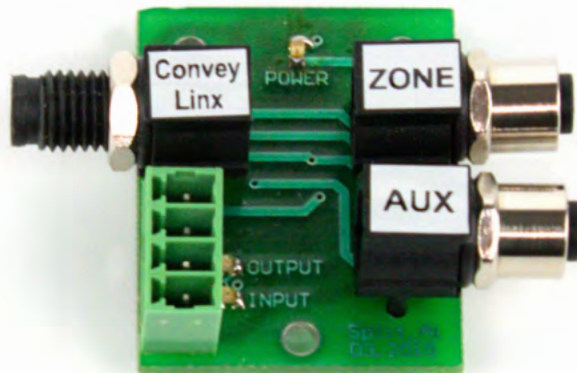


## I/O Interface Module

The I/O X interface is a simple but useful addition to the controllers of the ConveyLinX family.

It enables the conversion of the NPN output on the ConveyLinx into a usable PNP output. This enables a complete handshake to upstream and downstre-

am conveyor technology. In addition, the I/O X serves as a splitter for the sensor connection so that two sensors can be connected there using M8.



#### Benefits

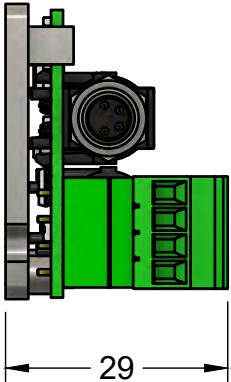
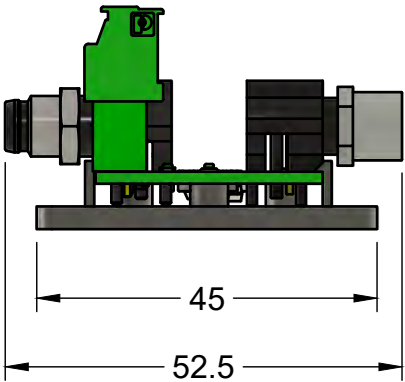
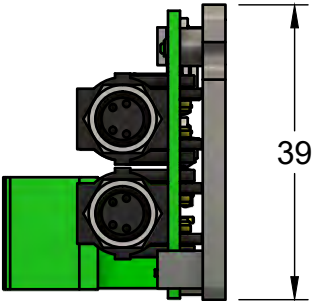
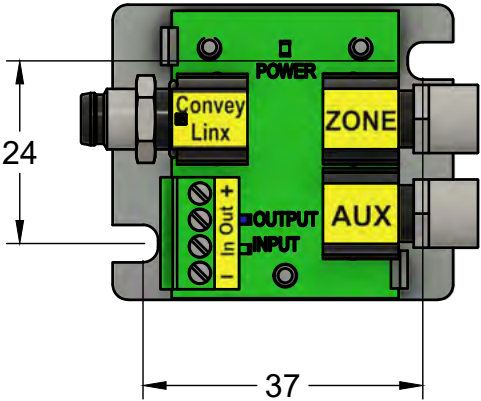
- **Full handshake with external systems**
- **PNP standard for inputs and outputs**
- **Compact design**

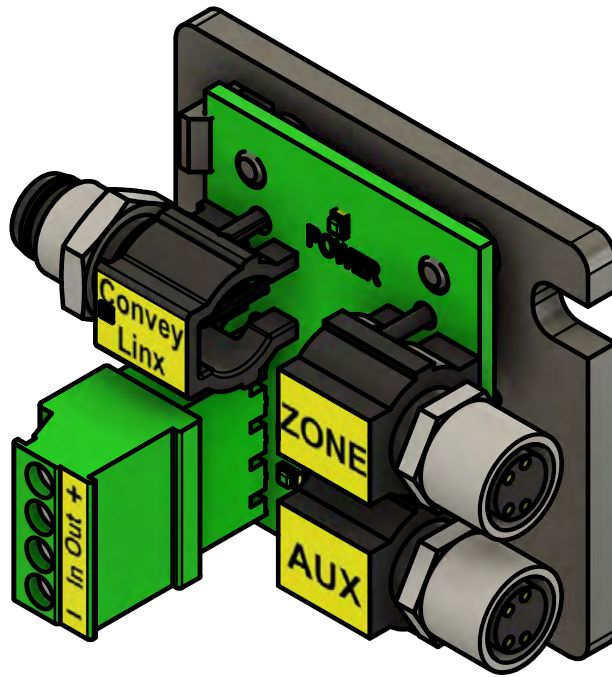
#### Features

- **Conversion of the ConveyLinx Ai2 output to PNP**
- **Maximum output power 500mAh**
- **Sensor connection using screw terminal or M8**
- **Leading out the Pin2 of the ConveyLinx to standard M8**



# Dimensions of I/O X Interface







Learn more  
about us!



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