INTERROLL ROLLERDRIVE EC310 AND CONVEYOR CONTROL
BRINGING INTELLIGENT CONVEYING TO THE NEXT LEVEL
UNIT HANDLING CONVEYOR TECHNOLOGY IS ON THE MOVE. WORLDWIDE.

The name for intelligent conveying
The advantages of the RollerDrive EC310 over traditional unit handling conveyor technology are self-evident:

- Lower primary energy consumption
- Up to 30% energy savings due to feedback energy
- Intelligent control systems
- Maintenance-free

Today the simplicity of controls architecture is decisive in terms of using RollerDrive technology or not. With the new generation of RollerDrives it is now possible to unify components to a full functional system.

RollerDrive EC310 takes over extended control functions enabling the users to focus more on their core competency expertise. System integrators can focus on material flow strategy and OEMs on the best possible modularity of their equipment.

New and proven Interroll components can thus be integrated into one overall function, enabling customers to reduce costs, and at the same time improving the quality of their processes.

THE FEATURES

- Excellent acceleration and braking performance
- Integral motor controller
- Motor protection functions
- Low noise level due to decoupling
- 9 gear configurations available for optimal design flexibility
- Speed adjustment within each gear configuration
- Protection rating IP54 and IP66
- 450 mm cable with M8 snap-in plug
- Cable can be extended by up to 10 m

THE OPTIMUM DRIVE COMPONENTS FOR UNIT HANDLING CONVEYOR TECHNOLOGY
Conveying is a challenging business - especially zero pressure accumulation. And as the range of parameters extends widely from A to Z, from Actuators to zone control, with the Interroll RollerDrive EC310 we are presenting a premium component that you can use to design your own, tailor made and versatile conveyor and assembly lines. EC310 guaranties perfectly coordinated functions that can be seamlessly integrated into your logistics system.

The configuration software of our ConveyorControls will enable you to coordinate zones or highly-complex, networked controls according to your concept. Whatever you want to move, you are in the fast lane with the Interroll RollerDrive EC310.
RollerDrive EC310
Utilizing nine different gear stages combined with 32 watt mechanical output, EC310 will address a wide range of applications. Some of these applications include unit conveyor facilities, high throughput rate facilities and light duty pallet conveyor technology. RollerDrive EC310 moves all types of products quietly, efficiently and reliably. The energy feedback in deceleration mode provides up to 30% energy savings in the overall system.

THE BENEFITS
• A SINGLE DRIVE FOR EVERY APPLICATION
• ENERGY RECOVERY
• SAFE DUE TO 24 V DC TECHNOLOGY
The Features

• Housing has protection rating IP20 and IP54
• Housing fitted with standard markers
• Input/output settings:
  - Start
  - Direction of rotation
  - 3-bit coded speed
  - Error output
• DIP switch settings:
  - Direction of rotation
  - Speed

DriveControl 20 and DriveControl 54
THE VERSATILE DRIVE FOR THE ROLLERDRIVE EC310

The Benefits

• HIGH FLEXIBILITY
• STRONG HOUSING DESIGN
• EASY INTERFACE BY GALVANICALLY DECOUPLED INPUTS/OUTPUTS
ZoneControl

THE SIMPLE CONTROLLER FOR ZERO PRESSURE ACCUMULATION CONVEYOR TECHNOLOGY

The Features

- Single zone controller with integrated zero pressure accumulation logic
- Integration of all DriveControl functions
- Connection of a zone sensor and start sensor
- Handshake-functions for upstream and downstream conveyors
- Zone start/stop in every zone
- Central signals:
  - Conveyor speed
  - Error output
  - Start
- Peer-to-peer cabling with CAT 5 cables (network cable)
- IP20 protection rated housing
- Housing fitted with standard marker

THE BENEFITS

- FAST AND SIMPLE INSTALLATION
- STANDARD CABLEING
- ON THE FLY CONFIGURATION
Interroll’s ConveyorControl allows for maximum cost efficiency with 24VDC technology. The mechanical advantage and optimum control technology combined complement each other. The control platform consists of four different modules and configuration software that are matched for optimum performance. The overall solution can be installed and commissioned rapidly; this ease of installation is suitable for industrial large-scale applications.

The independent length of cable concept, while incorporating the piercing technology, provides rapid and low cost installations. This proven design enhances the reliability of the overall system.

The IP54 protection rating satisfies the industrial standard for these type of applications.

Flexible configuration of the system provides networking integration that would not be possible in standard configurations.

**THE FEATURES**

- Fully configurable accumulation conveyor system
- IP54 protection rating throughout
- Cabling concept with piercing technology
- PC-based graphic configuration software
- Gateway ProLibus and Profinet
- Settable acceleration and braking ramps

**A NEW DIMENSION IN ZERO PRESSURE ACCUMULATION CONVEYING TECHNOLOGY**
TWO DISTINCT MODULES

CentralControl - Allows ConveyorControl to be configured and all parameters created through a PC interface. Software supplied with this option facilitates adaption to a wide range of conveyor applications. This allows for a broader range of applications than presently exist in the market today. Utilizing built-in functionality, there is less requirement for timely and costly programming with PLC’s.

GatewayControl - Is used to connect ConveyorControl to higher-level controls in the system architecture and to integrate into the network of an existing system. Two types of GatewayControl exist depending on the type of bus available - Profibus and Profinet.

Interroll RollerDrive and ConveyorControl combined, provide efficient, swift and reliable conveying, and set new standards in unit handling technology.
ComControl
This is used for single zone control of the conveyor system. It has three inputs and outputs. Two outputs are supplied with voltage from the system and 0.5 amps can be applied, the remaining output is a relay contact. Terminals are integrated within an IP54 rated enclosure. Input and output functions can be created freely in the Configurator.

SegmentControl
SegmentControl utilizes two sensors and two RollerDrives. The SegmentControl can then control two zones of a conveyor system. Parameters for the switching logic of the sensors can be created easily in the Configurator.

The addressing of the SegmentControl and ComControl modules is done by a magnetic contact, thus no further operating elements are needed. Three LEDs immediately display different statuses.
CentralControl
This is an USB Interface that is used for uploading mapping and settings for a conveyor with a PC and configurator. This control is not used for zone control and is used for monitoring data communication between modules.

GatewayControl
Profibus/Profinet
GatewayControl is used to connect Conveyor-Control to higher-level controls in the system architecture and to integrate it into the network of an existing system.

THE BENEFITS
• FAST INSTALLATION AND COMMISSIONING
• FLEXIBLE CONFIGURATION
• HIGH PROTECTION RATING
Flat Ribbon Cable

Rapid and simplified cabling of the system is ensured by utilizing standard commercial flat ribbon conductors in AS interface standard. The flat ribbon cable is connected using piercing technology, with cable cross sections of 2.5 mm² for voltage supply and 1.5 mm² for data lines.

Configurator

This is a PC based graphic user interface used for setting mandatory parameters of the ConveyorControl.

MANDATORY PARAMETERS

- Accumulation Logic
- Direction of Accumulation
- Sensor Type
- Rotational Direction of the RollerDrive
- Acceleration/Deceleration of RollerDrives
- Speed
- Speed changes via I/O
- I/O Stop
- I/O
Inspired by efficiency

Established in 1959 Interroll has grown to become the world’s leading supplier of key products for internal logistics. Whether boxes, pallets or soft goods are to be handled, no other supplier has such a complete product range on offer. That is why system integrators, OEMs and operators select Interroll as their partner for their internal logistics business. Worldwide. The Interroll global network ensures quick delivery and superior service for every local customer. We inspire our customers and provide opportunities for them to increase efficiency.

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