



Application area

Zero-pressure accumulation conveying (ZPA) of many zones. Control of the Interroll Transfer and the Interroll High Performance Divert. Control of RollerDrive EC310 in applications without zero-pressure accumulation conveying.

Product description

The MultiControl is a four-zone control. This means that up to four RollerDrive EC310 and four zone sensors can be connected. The use of Y-lines enables connecting four additional inputs or outputs. The connections can be configured individually.

If MultiControl is used as a network card, the fieldbuses PROFINET, EtherNet/IP or EtherCat can be used by simply toggling them.

With help of the MultiControl, sensors and RollerDrive are directly integrated in to the field bus level. No additional sensor/actuator level is necessary. A standard ribbon cable is used for power connection. The ribbon cable can be cut to the correct length and can be connected very quickly using the penetration technology of MultiControl.

Switching off connected RollerDrive without interrupting the communication is possible if the MultiControl features a second ribbon cable for voltage supply.

The addressing and naming is done over PLC software, a web user interface, or with the Interroll Teach-In method. With the Teach-In method, automatic addressing and configuration of all MultiControl is possible. In addition, the sequence of all MultiControls in the conveyor line can be determined. This saves time during the commissioning on site.

MultiControl can also be used as individual control for special applications. Interroll offers the programming of special software solutions if it cannot be done using a PLC.

Functions

- Easy handling – One controller card for PROFINET, EtherNet/IP and EtherCat (simple toggling of bus protocols)
- Independent power supply possible for RollerDrive
- Plug & Play in case of replacements – no addressing or configuration required
- Status display with LEDs for all functions and I/Os
- Logic for zero-pressure accumulation conveying incl. initialization
- Communication via certified fieldbuses
- Configuration via PLC, web browser menu and via Teach-In method of:
 - Speed, direction of rotation, start and stop ramp of RollerDrive
 - Sensor properties
 - Timer
 - Error handling
 - Logic (single/train release)
- UL-certified
- Voltage limitation via brake chopper

Possible applications

Use of a PLC	Function of a PLC	Function of MultiControl
No	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Implementation of ZPA logic
Yes	<ul style="list-style-type: none"> • Influencing the ZPA logic • Tracking of materials • Error diagnostics 	<ul style="list-style-type: none"> • Implementation of own ZPA logic • Implementation of PLC specifications
Yes	<ul style="list-style-type: none"> • The PLC must be programmed and controls all connected RollerDrive via this program • Tracking of materials and error diagnostics 	<ul style="list-style-type: none"> • Function as network card • Transmits the status of all sensors, RollerDrive and, if necessary, error information to the PLC



Technical data

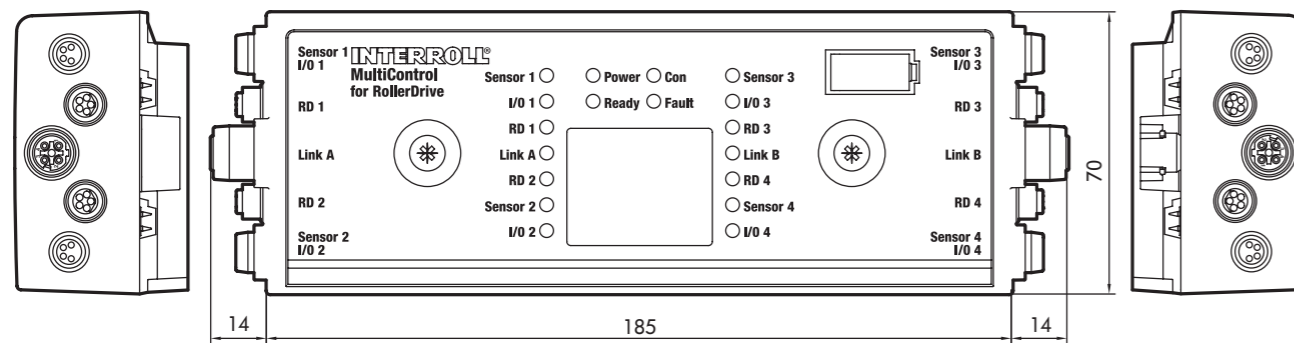
Electrical data	
Rated voltage	24 V DC
Temporarily permissible voltage range	22.8 to 25.2 V DC
Current consumption*	Logic supply voltage: MultiControl: max. 0.2 A + connected sensors/actuators = max. 1.6 A Motor supply voltage: RollerDrive rated current: 4 x 2 A = 8 A RollerDrive startup current: 4 x 4 A = 16 A
Fuse	Present, non-replaceable
Protection rate	IP54
Ambient conditions	
Ambient temperature in operation	-30 °C to +40 °C
Ambient temperature during transport and storage	-40 °C to +80 °C
Max. installation height above sea level**	1000 m

* The effective current in the application depends on the conveyor weight, conveyor speed and number of cycles.

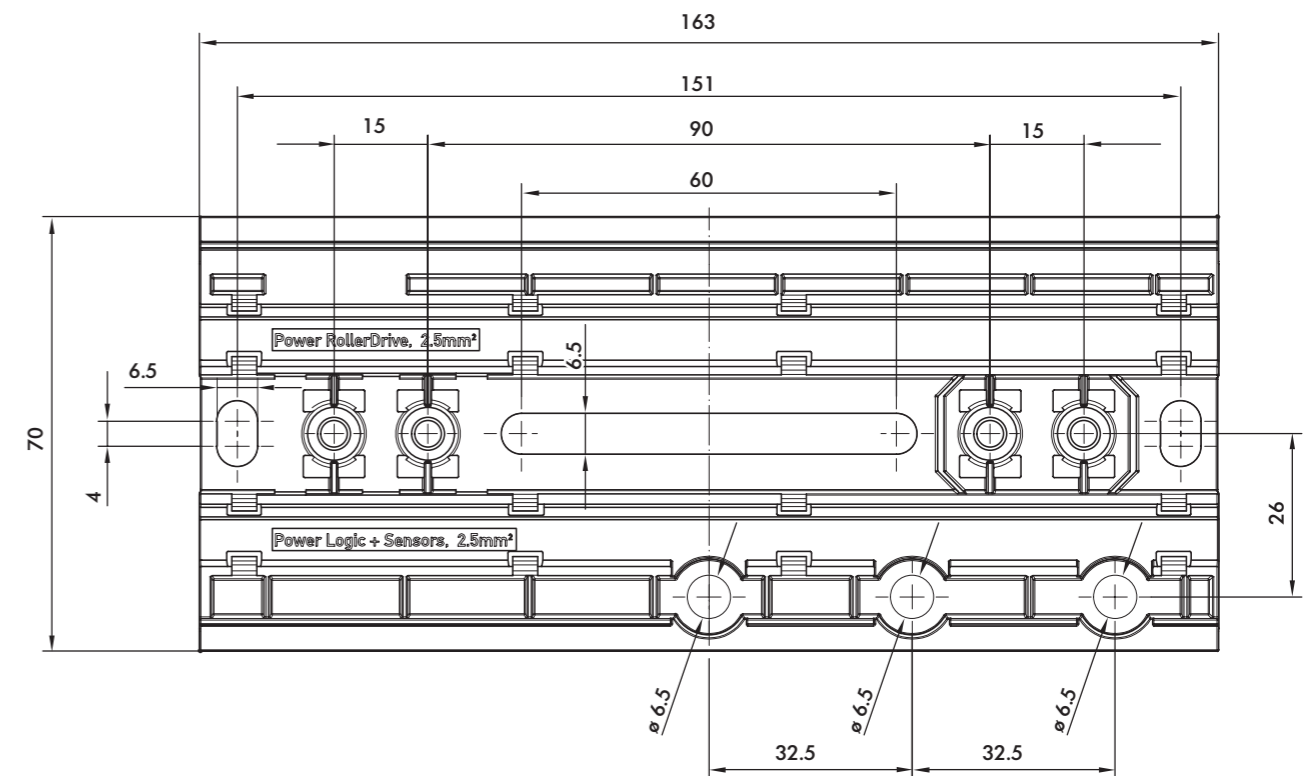
** The installation in systems at an altitude above 1,000 m is possible. However, this can lead to a reduction of the performance values.

Dimensions

MultiControl



Base plate



To be able to position the magnetic key, the distance from the top edge of MultiControl to adjacent components must be at least 10 mm.

Accessories

- Flat cable for voltage supply, page 243
- Magnetic key, page 247
- MultiControl dummy plug, page 244
- RollerDrive EC310 extension cable, page 242
- MultiControl communication cable, page 244
- MultiControl Y-cable, page 244
- PowerControl power supply, page 236

Ordering information

- Article number: S-1101834
- Scope of supply: Base plate
- Questions about spare parts or additions: It is required to provide the existing firmware version.