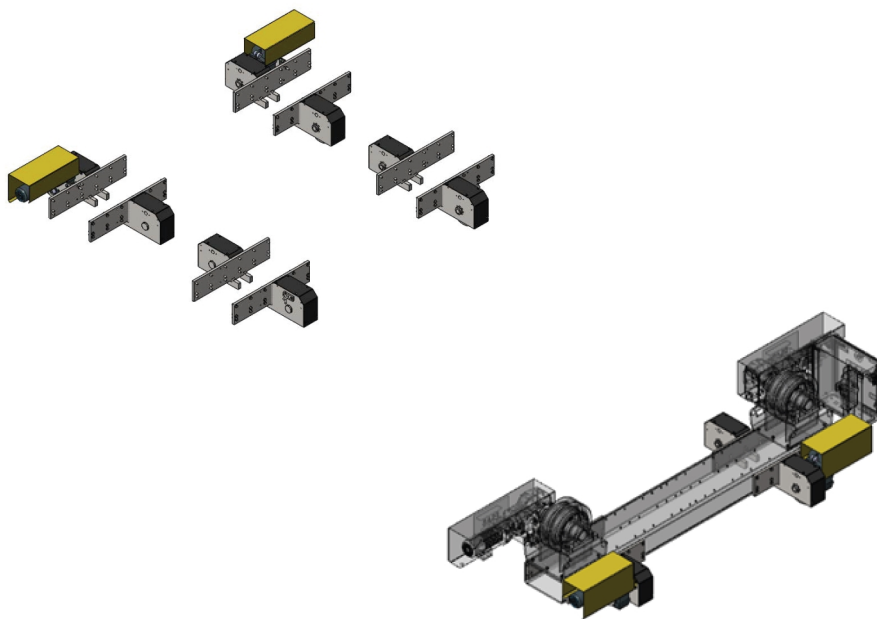




# ***EDB-15/30, EIB-15/30, EDB-60, EIB-60, EDB-90/120, EDB-120 Rail Cars***



## **Instruction manual**



## EU DECLARATION OF CONFORMITY

According to  
The Machinery Directive 2006/42/EU, entering into force 17 May 2006  
The EMC Directive 2014/30/EU, entering into force 20 April 2016  
The RoHS Directive 2011/65/EU, entering into force 2 January 2013

### Type of equipment

Welding handling equipment, Rail Cars  
(For use together with Conventional Roller Bed, Self-aligning Roller Bed and Fit-Up units)

### Type designation

EDB-15/-30, EDB-60, EDB-90, EDB-120 (Drive unit) from serial number 026 xxx xxxx (2020 w26)  
EIB-15/-30, EIB-60, EIB-90/-120 (Idler unit) from serial number 026 xxx xxxx (2020 w26)

### Brand name or trade mark

ESAB

### Manufacturer or his authorised representative established within the EEA

Name, address, and telephone No:  
ESAB AB Welding Automation  
SE-69581 Laxå, Sweden  
Phone: +46 (0)584 81000, [www.esab.com](http://www.esab.com)

### The following harmonised standard in force within the EEA has been used in the design:

EN 12100:2010 EN 61000-6-2:2005 / AC:2005  
EN 60204-1:2006 / AC:2010 EN 61000-6-4:2007 / A1:2011

### Additional Information:

Restrictive use, Class A equipment, intended for use in location other than residential

By signing this document, the undersigned declares as manufacturer, or the manufacturer's authorised representative established within the EEA, that the equipment in question complies with the safety requirements stated above.

Date	Signature	Position
Gothenburg		
2020-12-11	Peter Kjällström	Director Welding Automation

CE 2020

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# 1 SAFETY

## 1.1 Meaning of symbols

As used throughout this manual: Means Attention! Be Alert!



### **DANGER!**

Means immediate hazards which, if not avoided, will result in immediate, serious personal injury or loss of life.



### **WARNING!**

Means potential hazards which could result in personal injury or loss of life.



### **CAUTION!**

Means hazards which could result in minor personal injury.



### **WARNING!**

Before use, read and understand the instruction manual and follow all labels, employer's safety practices and Safety Data Sheets (SDSs).



## 1.2 Non-compliant operation



### **CAUTION!**

These rail cars are not suitable for the following:

- Any work piece which is heavier than the maximum weight limit of the rail cars.

## 1.3 Safety precautions

Users of ESAB equipment have the ultimate responsibility for ensuring that anyone who works on or near the equipment observes all the relevant safety precautions. Safety precautions must meet the requirements that apply to this type of equipment. The following recommendations should be observed in addition to the standard regulations that apply to the workplace.

All work must be carried out by trained personnel well-acquainted with the operation of the equipment. Incorrect operation of the equipment may lead to hazardous situations which can result in injury to the operator and damage to the equipment.

1. Anyone who uses the equipment must be familiar with:
  - its operation
  - location of emergency stops
  - its function
  - relevant safety precautions
  - welding and cutting or other applicable operation of the equipment
2. The operator must ensure that:
  - no unauthorised person is stationed within the working area of the equipment when it is started up
  - no-one is unprotected when the arc is struck or work is started with the equipment
3. The workplace must:
  - be suitable for the purpose
  - be free from drafts

4. Personal safety equipment:

- Always wear recommended personal safety equipment, such as safety glasses, flame-proof clothing, safety gloves
- Do not wear loose-fitting items, such as scarves, bracelets, rings, etc., which could become trapped or cause burns

5. General precautions:

- Make sure the return cable is connected securely
- Work on high voltage equipment **may only be carried out by a qualified electrician**
- Appropriate fire extinguishing equipment must be clearly marked and close at hand
- Lubrication and maintenance must **not** be carried out on the equipment during operation



**WARNING!**

Arc welding and cutting can be injurious to yourself and others. Take precautions when welding and cutting.



**ELECTRIC SHOCK - Can kill**

- Do not touch live electrical parts or electrodes with bare skin, wet gloves or wet clothing
- Insulate yourself from work and ground.
- Ensure your working position is safe



**ELECTRIC AND MAGNETIC FIELDS - Can be dangerous to health**

- Welders having pacemakers should consult their physician before welding. EMF may interfere with some pacemakers.
- Exposure to EMF may have other health effects which are unknown.
- Welders should use the following procedures to minimize exposure to EMF:
  - Route the electrode and work cables together on the same side of your body. Secure them with tape when possible. Do not place your body between the torch and work cables. Never coil the torch or work cable around your body. Keep welding power source and cables as far away from your body as possible.
  - Connect the work cable to the workpiece as close as possible to the area being welded.



**FUMES AND GASES - Can be dangerous to health**

- Keep your head out of the fumes
- Use ventilation, extraction at the arc, or both, to take fumes and gases away from your breathing zone and the general area



**ARC RAYS - Can injure eyes and burn skin**

- Protect your eyes and body. Use the correct welding screen and filter lens and wear protective clothing
- Protect bystanders with suitable screens or curtains



**NOISE - Excessive noise can damage hearing**

Protect your ears. Use earmuffs or other hearing protection.

**MOVING PARTS - Can cause injuries**



- Keep all doors, panels and covers closed and securely in place. Have only qualified people remove covers for maintenance and troubleshooting as necessary. Reinstall panels or covers and close doors when service is finished and before starting the roller beds.



- Stop the roller beds before installing or connecting unit.
- Keep hands, hair, loose clothing and tools away from moving parts.

**FIRE HAZARD**



- Sparks (spatter) can cause fire. Make sure therefore that there are no inflammable materials nearby

**HOT SURFACE - Parts can burn**



- Do not touch parts bare handed.
- Allow cooling period before working on equipment.
- To handle hot parts, use proper tools and/or insulated welding gloves to prevent burns.

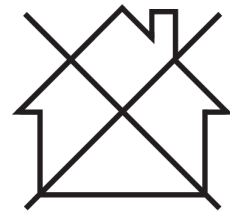
**MALFUNCTION - Call for expert assistance in the event of malfunction.**

**PROTECT YOURSELF AND OTHERS!**



**CAUTION!**

Class A equipment is not intended for use in residential locations where the electrical power is provided by the public low-voltage supply system. There may be potential difficulties in ensuring electromagnetic compatibility of class A equipment in those locations, due to conducted as well as radiated disturbances.



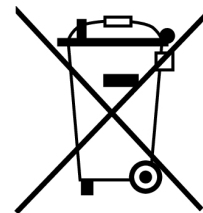
**NOTE!**

**Dispose of electronic equipment at the recycling facility!**

In observance of European Directive 2012/19/EC on Waste Electrical and Electronic Equipment and its implementation in accordance with national law, electrical and/or electronic equipment that has reached the end of its life must be disposed of at a recycling facility.

As the person responsible for the equipment, it is your responsibility to obtain information on approved collection stations.

For further information contact the nearest ESAB dealer.



**ESAB has an assortment of welding accessories and personal protection equipment for purchase. For ordering information contact your local ESAB dealer or visit us on our website.**

## 2 INTRODUCTION

This instruction manual describes the use and maintenance of the optional rail cars EDB-15/-30, EIB-15/-30, EDB-60, EIB-60, EDB-90, EIB-90/-120 and EDB-120 used together with conventional roller beds, self-aligning roller beds and/or fit-up units referred to as rail cars in this document. Actions that must be carried out by the manufacturer are not included in this manual.

This manual is part of the rail cars. Keep a copy of the manual with the rail cars and store the original in a safe place. If the rail cars are sold, supply the manual with them.

The pictures and diagrams used in this manual are for illustrative purposes only. The supplied equipment might differ slightly.

### 2.1 Equipment

The rail car drive unit (EDB) are supplied with:

- 2 × Driven wheel units
- 2 × Idling wheel units
- Contactors (7.3 and 7.4) to be installed in the control panel on the driven roller bed
- Instruction manual

The rail car idler unit (EIB) is supplied with:

- 4 × Idling wheel units

### 2.2 Purpose and function of rail cars

The rail cars are designed as an accessory to roller beds and/or fit-up units, to make it possible to move them along floor mounted rails.

Rail cars mounted to the roller beds and/or fit-up units make it possible to join round objects to each other in a controlled way, for example, wind tower sections, vessels and others.

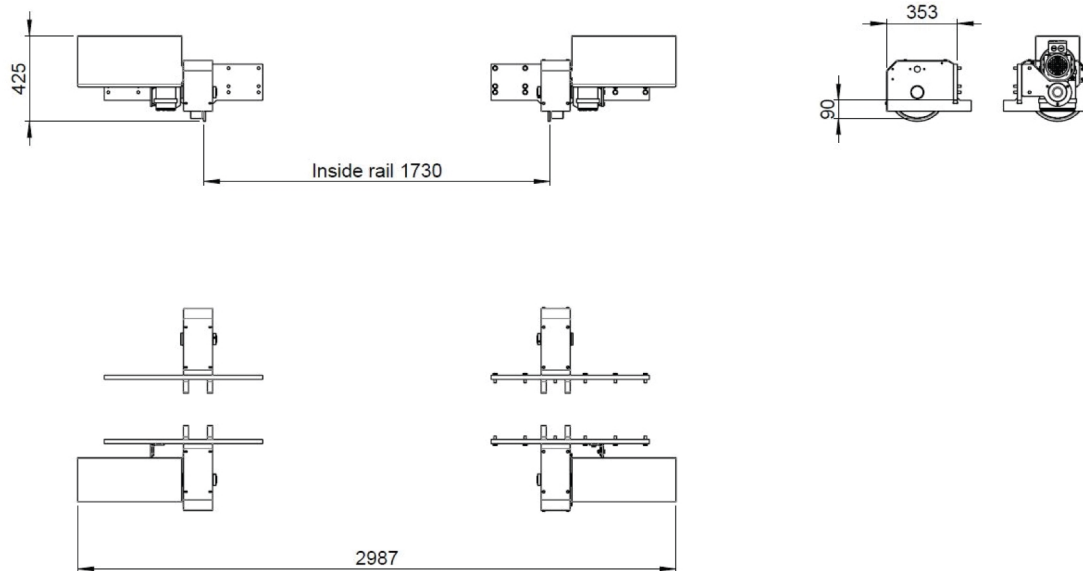
### 2.3 Terminology used in this manual

Drive unit	Rail car section with powered wheels.
Idler unit	Rail car section with free-wheeling wheels.
Rail car driven set (EDB)	One set consists of two (2) driven wheel units and two (2) idling wheel units.
Rail car idler set (EIB)	One set consists of four (4) idling wheel units.
Control panel	Electrical control box mounted on the drive unit.
Wireless remote - control pendant	A wireless operator hand control pendant.
Receiver	The receiver that communicates with the wireless remote-control pendant.
Vessel	Any component or device that is handled on the rail car set.

## 3 TECHNICAL DATA

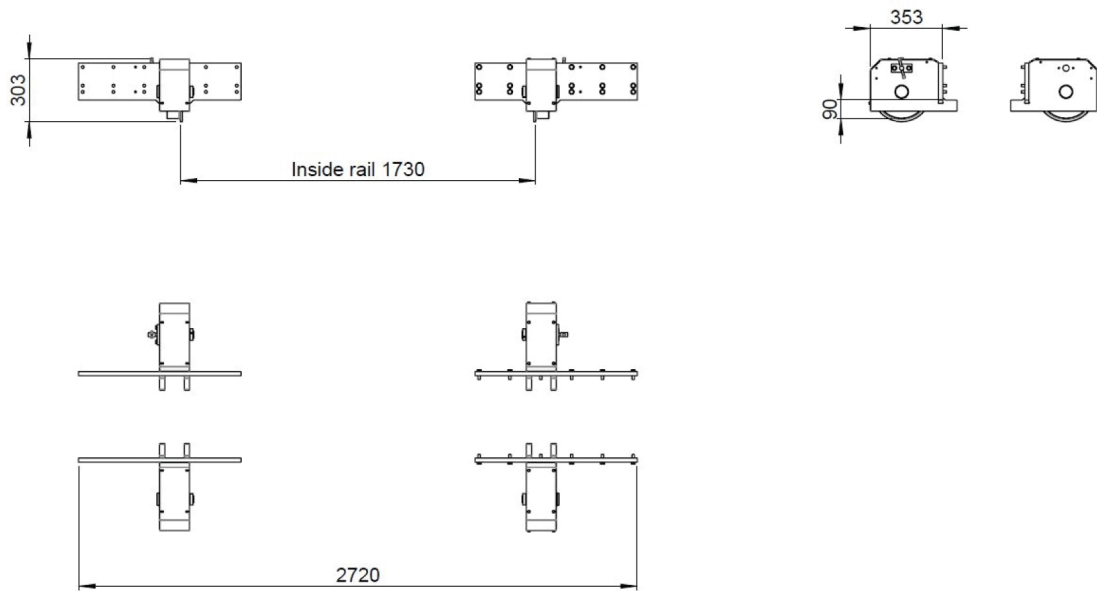
### 3.1 EDB/EIB-15/-30

#### 3.1.1 Drive unit, EDB-15/-30



<b>EDB-15/-30</b>	
Max loading capacity	15 000 kg (33 069 lb)
Travelling capacity	30 000 kg (66 138 lb)
Drive motor	2×0.12 kW
Travelling Speed Low / High	200/2000 mm/min (5.51/78.74 in./min)
Track width	1730 mm (68.11 in.)
Mains supply	380 – 440 V, 3 phase, 50 Hz
Mains fuse	16 A
Wheel type	Steel wheels with single flange
Weight (one set of EDB)	436 kg (2×128 kg + 2×90 kg) / (961 lb (2×282 lb + 2×198.5 lb))
Extended width to the roller bed (along the rails)	706 mm (2×353 mm) 27.8 in. (2×13.9 in.)
Extended height to the roller bed	90 mm 3.54 in.
Control voltage	24 V
Operation temperature	-15 to +40 °C

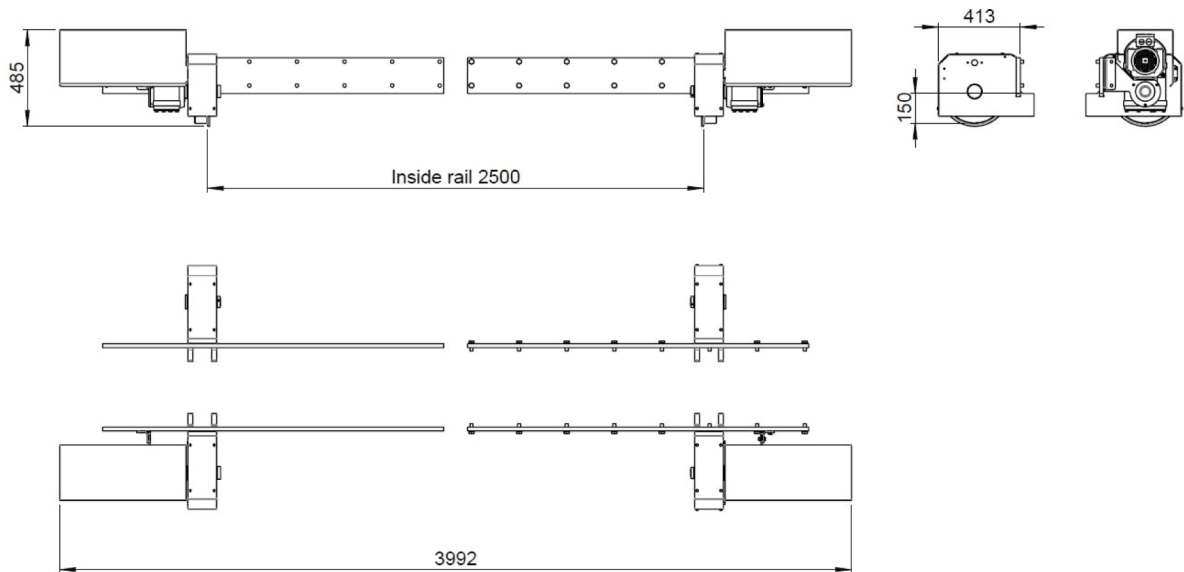
### 3.1.2 Idler unit, EIB-15/-30



<b>EIB-15/-30</b>	
Max loading capacity	15 000 kg (33 069 lb)
Wheel type	Steel wheels with single flange
Track width	1730 mm (68.11 in.)
Weight (one set of EIB)	360 kg (4×90 kg) / (794 lb (4×198.5 lb))
Extended width to the roller bed (along the rails)	706 mm (2×353 mm) 27.8 in. (2×13.9 in.)
Extended height to the roller bed	90 mm 3.54 in.

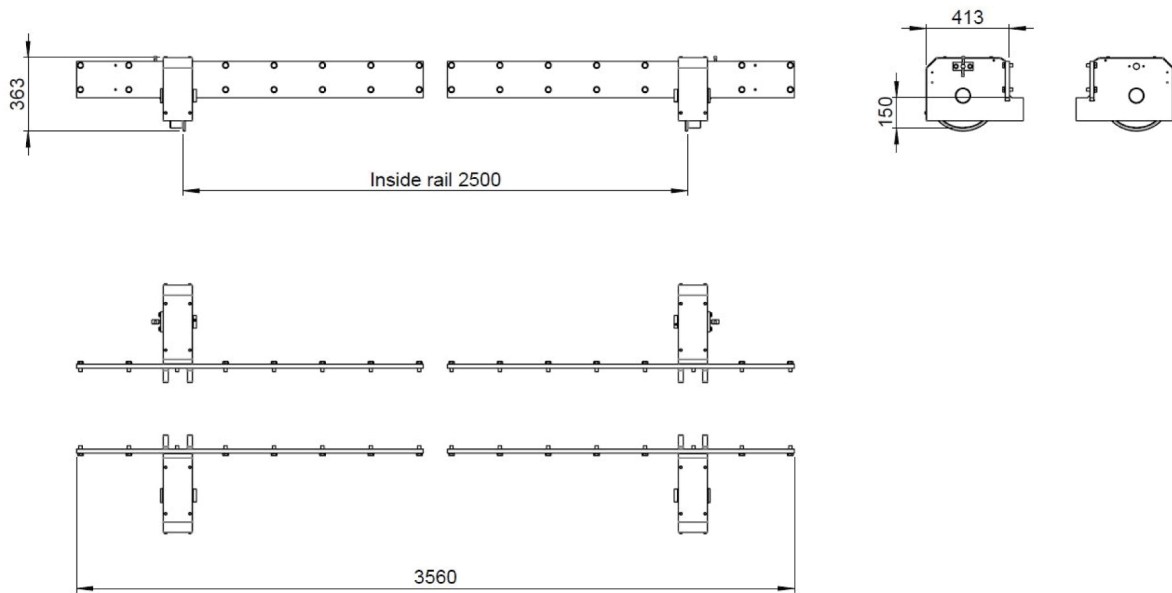
## 3.2 EDB/EIB-60

### 3.2.1 Drive unit, EDB-60



EDB-60	
Max loading capacity	30 000 kg (66138 lb)
Travelling capacity	60 000 kg (132276 lb)
Drive motor	2×0.25 kW
Travelling Speed Low / High	200/2000 mm/min (5.51/78.74 in./min)
Track width	2500 mm (98.43 in.)
Mains supply	380 – 440 V, 3 phase, 50 Hz
Mains fuse	16 A
Wheel type	Steel wheels with single flange
Weight (one set of EDB)	716 kg (2×207 kg + 2×151 kg) / (1579 lb (2×456.5 lb + 2×333 lb))
Extended width to the roller bed (along the rails)	826 mm (2×413 mm) 32.52 in. (2×16.26 in.)
Extended height to the roller bed	150 mm 5.91 in.
Control voltage	24 V
Operation temperature	-15 to +40 °C

### 3.2.2 Idler unit, EIB-60

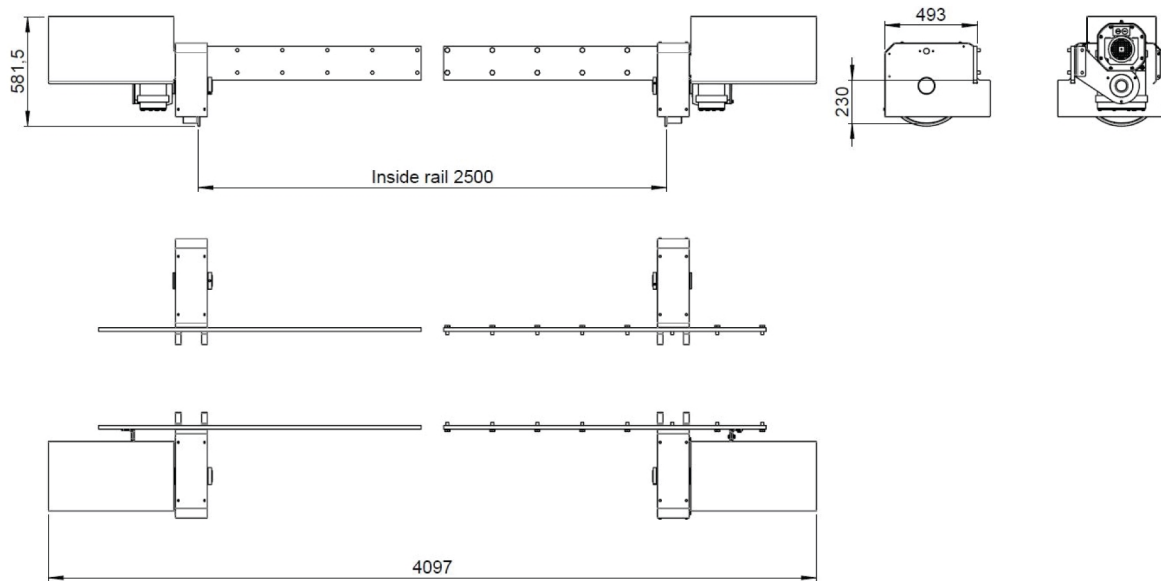


<b>EIB-60</b>	
Max loading capacity	30 000 kg (66138 lb)
Wheel type	Steel wheels with single flange
Track width	2500 mm (98.43 in.)
Weight (one set of EIB)	604 kg (4×151 kg) / (1332 lb (4×333 lb))
Extended width to the roller bed (along the rails)	826 mm (2×413 mm) 32.52 in. (2×16.26 in.)
Extended height to the roller bed	150 mm 5.91 in.



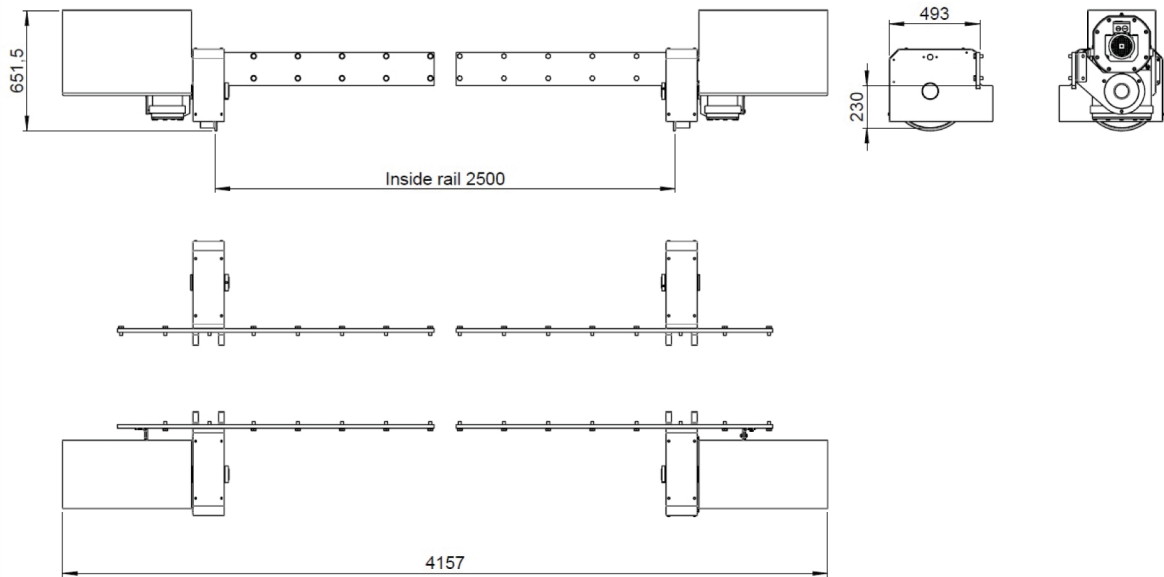
### 3.3 EDB-90 and EIB-90/-120

#### 3.3.1 Drive unit, EDB-90



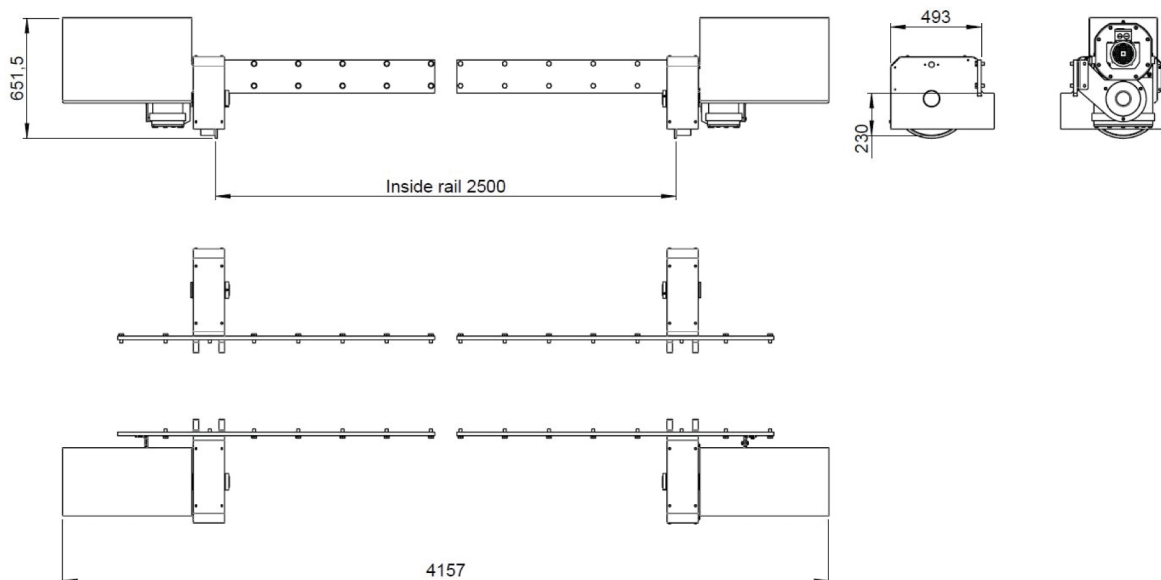
<b>EDB-90</b>	
Max loading capacity	45 000 kg (99207 lb)
Travelling capacity	90 000 kg (198416 lb)
Drive motor	2×0.37 kW
Travelling Speed Low / High	200/2000 mm/min (5.51/78.74 in./min)
Track width	2500 mm (98.43 in.)
Mains supply	380 – 440 V, 3 phase, 50 Hz
Mains fuse	16 A
Wheel type	Steel wheels with single flange
Weight (one set of EDB)	1142 kg (2×334 kg + 2×237 kg) / (2518 lb (2×736.5 lb + 2×522.5 lb))
Extended width to the roller bed (along the rails)	986 mm (2x493 mm) 38.8 in. (2x19.4 in.)
Extended height to the roller bed	230 mm 9.06 in.
Control voltage	24 V
Operation temperature	-15 to +40 °C

### 3.3.2 Idler unit, EIB-90/-120



<b>EIB-90/-120</b>	
Max loading capacity	60 000 kg (132 276 lb)
Wheel type	Steel wheels with single flange
Track width	2500 mm (98.43 in.)
Weight (one set of EIB)	948 kg (4×237 kg) / (2090 lb (4×522.5 lb))
Extended width to the roller bed (along the rails)	986 mm (2×493 mm) 38.8 in. (2×19.4 in.)
Extended height to the roller bed	230 mm 9.06 in.

### 3.4 EDB-120



### 3 TECHNICAL DATA

<b>EDB-120</b>	
Max loading capacity	60 000 kg (132 276 lb)
Travelling capacity	120 000 kg (264 552 lb)
Drive motor	2×0.37 kW
Travelling Speed Low / High	200/2000 mm/min (5.51/78.74 in./min)
Track width	2500 mm (98.43 in.)
Mains supply	380 – 440 V, 3 phase, 50 Hz
Mains fuse	16 A
Wheel type	Steel wheels with single flange
Weight (one set of EDB)	1234 kg (2×380 kg + 2×237 kg) / (2720 lb (2×838 lb + 2×522 lb))
Extended width to the roller bed (along the rails)	986 mm (2×493 mm) 38.8 in. (2×19.4 in.)
Extended height to the roller bed	230 mm 9.06 in.
Control voltage	24 V
Operation temperature	-15 to +40 °C

---

## 4 INSTALLATION

---

### 4.1 Location

**WARNING!**

Always ensure that there is sufficient space around the roller beds before mounting the rail cars.

Make sure to have suitable access and enough space around the roller bed or fit-up unit and remove any loaded workpiece.

### 4.2 Lifting instructions

**NOTE!**

Read the lifting instructions for roller bed or fit-up units before assembling the rail cars.

- 0463 740 \*, Conventional Roller Bed
- 0463 751 \*, Self-aligning Roller Bed
- 0463 760 \*, Fit-up unit

The three last digits in the document number of the manual show the version of the manual. Therefore they are replaced with \* here. Make sure to use a manual with a serial number or software version that corresponds with the product, see the front page of the manual.

### 4.3 Installation procedure

Follow this installation procedure before the first use, after maintenance or repair work, or after a storage period of the roller beds or fit-up unit equipped with rail cars.

Roller beds equipped with rail cars from factory are fully tested functionally before shipping.

It is recommended to check the operation of all controls before the roller beds and rail cars are taken into production.

If the purchased rail cars are used, and they will be mounted on-site, make sure that the roller bed or fit-up base frame is undamaged and clean on the sides where the rail cars will be bolted.

The roller bed or fit-up unit needs to be lifted up a bit before the rail cars can be mounted. It is recommended to place temporary beams beneath the base frame before assembling.

Make sure that the rail cars are tightened to the correct torque.

- M12 (8.8 quality) 81 Nm
- M16 (8.8 quality) 197 Nm

Installation procedure:

- Check that all moving parts, for example, the wheels, can move freely.
- Check the oil level in the gearbox, see section "Gearbox lubrication".
- Check the integrity of all cables, mains, and motors, make sure there are no cuts, and so forth.
- Check that all wireless remote - control pendant controls operate correctly.
- Check that the emergency stop on both wireless remote - control pendants is functional and locks all other controls so the roller beds cannot restart, then reset on the control panel.
- Check that the emergency stop on the control panel works and locks all other controls so the roller beds cannot restart, then reset on the control panel.
- Check that the steel framework is not damaged.

## 5 OPERATION

Rail cars are either driven type or idling type. The driven rail car cannot work as a standalone unit but it is depending on either a roller bed or a fit-up unit equipped with an electrical control panel. The driven rail car is powered by an inverter inside that control panel. The driven rail car is manually controlled from the same wireless remote - control pendant that is included in the driven roller bed or fit-up unit.



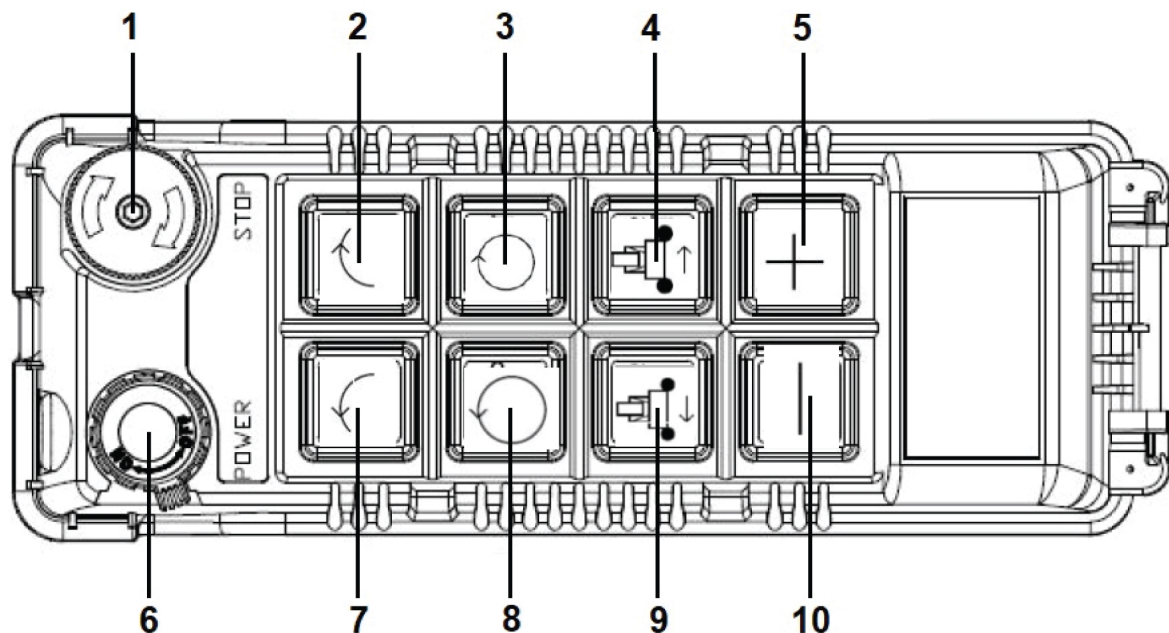
### NOTE!

It is important to read the Operation chapter in any of the following instruction manuals before operating the rail cars:

- 0463 740 \*, Conventional Roller Bed
- 0463 751 \*, Self-aligning Roller Bed
- 0463 760 \*, Fit-up unit

The three last digits in the document number of the manual show the version of the manual. Therefore they are replaced with \* here. Make sure to use a manual with a serial number or software version that corresponds with the product, see the front page of the manual.

### 5.1 Operating the rail cars



- |   |  |
|---|--|
| 1 Emergency stop button                                       | 6 Main switch, ON/OFF  |
| 2 Incremental rotation clockwise                              | 7 Incremental rotation anti-clockwise                              |
| 3 Continuous rotation clockwise.<br>Toggling function ON/OFF. | 8 Continuous rotation anti-clockwise. Toggling<br>function ON/OFF. |
| 4 Rail car motion direction A                                 | 9 Rail car motion direction B                                      |
| 5 Increase rotation speed                                     | 10 Decrease rotation speed   |

- 1) Go through the start up sequence described in instruction manuals for roller beds or fit-up units.
- 2) When the rail cars are correctly mounted and aligned on the rails, start loading the vessel on the roller beds or fit-up unit.

To prevent shock loading the roller beds, this must be done steadily. Shock loading cause damage to the gear motors.

Ensure that during rotation no protuberances on the vessel can strike objects around the roller beds or the floor.

- 3) Before starting the rail cars, make sure that the turning motion on the roller bed is stopped.  
Press the desired travel direction (pushbutton 4 or 9) and the rail cars start to move along the rails.
- 4) The available rail car speed is low, basic and high speed.  
By pressing only pushbutton 4 or 9 the speed is set to 100 cm/min (basic speed).  
By pressing pushbutton 4 or 9 and at the same time press the pushbutton - (pushbutton minus) the speed will change to 20 cm/min (low speed).  
By pressing pushbutton 4 or 9 at the same time as pushbutton + (pushbutton plus) the speed will change to 200 cm/min (high speed).
- 5) When the additionally pressed pushbutton - or + is released, the speed will go back to basic speed.



**NOTE!**

Test the emergency stop functionality frequently by pressing the emergency stop pushbuttons, at least once a month.

## 5.2 Operation safety

Do not place multiple drive units under one vessel. This is only possible if the optional synchronization cable (W212) has been supplied with the roller beds and rail cars. In this case, the primary control panel (RB1) controls the secondary drive unit (RB2).

Do not let parts of the vessel, for example, the connection tubes, come into contact with the roller beds, rail cars, floor, or objects in the vicinity during rotation. This can cause damage to the roller beds and cause the wheels to slip or overload the units.

Make sure to have proper earthing during welding. Lack of proper earthing can cause the electrics on the roller beds and rail cars to short out.

If the emergency stop button is pressed in, find out the reason for the action before restarting the roller bed with rail cars.

## 5.3 Stopping the rail cars

To stop the traveling motion release the pushbutton 4 or 9 on the wireless remote - control pendant. Traveling along the rails starts again when any of the rail car pushbuttons is pressed.



**NOTE!**

Use the emergency stop button on the control panel and wireless remote - control pendant in case of an emergency only.

---

## 6 MAINTENANCE

---

### 6.1 General

**WARNING!**

During all maintenance or repair procedures, the roller beds with its rail cars must be electrically isolated. Switch off the main electrical supply and unplug the mains cable.

**WARNING!**

After disconnecting the power, there may be some residual charge in some components in the panel. Wait for a few minutes after disconnecting the mains power before commencing work on any electrical elements of the roller bed and driven rail cars.

The installation procedure must be carried out after maintenance, repair, or storage period, see section "Installation procedure".

### 6.2 Storage

Store the roller beds with rail cars in a cool dry place. After a long period of storage, the roller beds with rail cars must be thoroughly checked before use.

**WARNING!**

When the roller beds with rail cars are stored or transported in a cold climate and moved into a warm location, condensation can be built up in the roller beds or the electrical controls. To prevent damage, allow the roller bed to adjust to the new environment temperature.

**CAUTION!**

Do not store the roller beds with rail cars outside unprotected. The complete unit must be sheeted, bare metal areas, bearings, gears, and shafts suitably greased to prevent corrosion.

### 6.3 Repair and maintenance

Keep the roller beds and rail cars clean and free from dirt or waste from the welding process.

Check the gearbox oil regularly and keep it at the correct levels. See the "Gearbox maintenance" section.

Inspect the entire roller beds with rail cars at least once per year. Pay particular attention to:

- Electrical contacts
- Switches and controls
- Mechanical parts, fixings are not loose.
- Condition of PU wheels
- Wheel rotation is full and there is no eccentric rotation around the axles.
- Metal corrosion
- Frame damage
- Signs of damage to the wheel bearings
- Gearbox maintenance
- Cable damage: mains and any visible cable running from the control panel to the motors.
- Correct functioning of the emergency stops and the control panel mains switch.

Remove and replace any damaged parts.

## 6.4 Cleaning

**WARNING!**

Rail cars must be electrically isolated before cleaning. Electrical components must not come in contact with water or other cleaning fluids.

**NOTE!**

Ensure that the rail cars are clean. Any arc sparks, flux or slag must be removed from the roller beds as soon as possible.

Frequently check that the equipment is free from any damages, mechanical or electrical. At least one time a month.

The rail cars do not require any special cleaning instructions. The rail cars do not create any pollution to the environment around them during normal operation, although, the welding process being carried out on them may pollute the roller beds.

## 6.5 Breakdowns

If the roller beds stop working, the equipment must be repaired by authorised ESAB service technicians.

**NOTE!**

Repeated faults indicate a problem with the roller beds. Inform the person responsible for service and maintenance.

## 6.6 Gearmotors

### 6.6.1 Gearmotors inspection and maintenance

To ensure that the rail cars have a long service life the oil in the gearbox must be regularly checked and changed.

Regular maintenance checks:

- Under normal working conditions and with an oil sump temperature not exceeding 80 °C the service life of the oils is 10 000 operation hours or two years, whichever comes first.
- Check if the seal is leaking or damaged.
- Check if there are any unusual noises during operation. If yes, the bearing may be broken.
- Check the breathing hole of gearbox is obstruction free.
- To aid cooling of the gearbox it is recommended that the external housing is kept clean.
- Check the bolts, tighten if loose.

### 6.6.2 Gearbox lubrication

The gearboxes on the rail cars were filled with the proper quantity of lubricant (CLP ISO VG220: Fuchs Renolin CLP220) before shipping from the factory.

Oil charge per roller bed size:



Model	Volume per gearbox
EDB-15/-30	1.6 dm <sup>3</sup>
EDB-60	2.8 dm <sup>3</sup>
EDB-90	4.7 dm <sup>3</sup>
EDB-120	9.8 dm <sup>3</sup>

All gearmotors are of Siemens brand.

More detailed information around maintenance of SIMOGEAR gearbox (BA 2030) and motors (BA2330) can be found at Siemens web site.

For changing gearbox oil and/or bearing lubrication follow the steps in chapter 8, Service and maintenance in respective manual by download the them from the following links:

BA 2030

<https://support.industry.siemens.com/cs/document/60666158/operating-instructions-ba-2030%3A-simogear-gearbox?dti=0&lc=en-DE>

BA 2330

<https://support.industry.siemens.com/cs/document/60666508/operating-instructions-ba-2330%3A-la-le-motors-for-mounting-on-simogear-gearboxes?dti=0&lc=en-DE>

In the manuals tables of recommended lubricant to use in gearboxes and bearings can be found.

**NOTE!**

Do not mix oils of different brands. Drain the oil from the gearbox before refilling with oil from a different brand.

## 7 TROUBLESHOOTING

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**NOTE!**

Please read the Troubleshooting chapter in any of the following instruction manuals:

- 0463 740 \*, Conventional Roller Bed
- 0463 751 \*, Self-aligning Roller Bed
- 0463 760 \*, Fit-up unit

The three last digits in the document number of the manual show the version of the manual. Therefore they are replaced with \* here. Make sure to use a manual with a serial number or software version that corresponds with the product, see the front page of the manual.

## 8 ORDERING SPARE PARTS

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**CAUTION!**

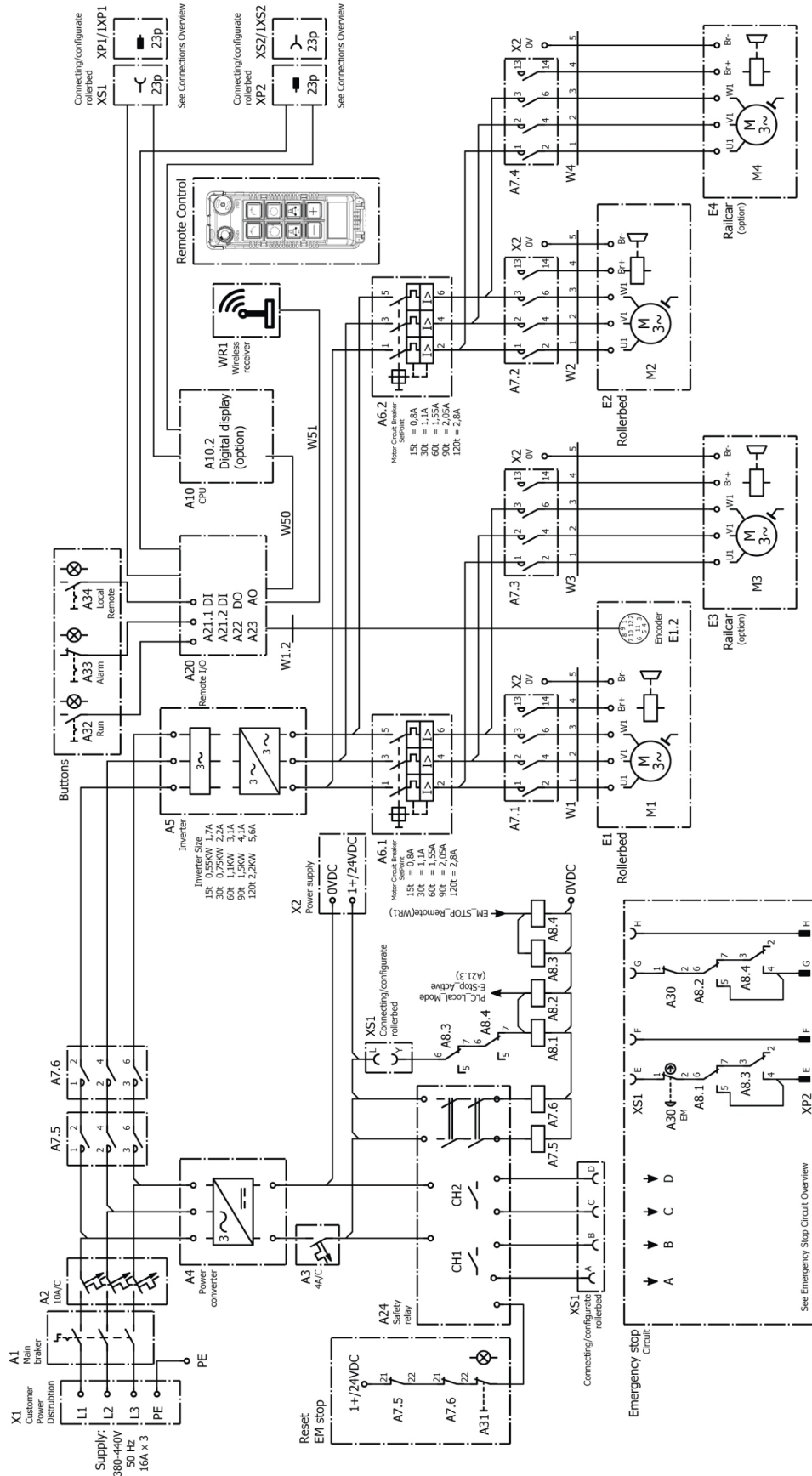
Repair and electrical work should be performed by an authorised ESAB service technician. Use only ESAB original spare and wear parts.

EDB-15/-30, EIB-15/-30, EDB-60, EIB-60, EDB-90, EIB-90/-120 and EDB-120 are designed and tested in accordance with the international and European standards **EN 12100:2010, EN ISO 13857:2008, EN ISO 349:1993/A1:2008, EN 60204-1:2006/AC:2010, EN 61000-6-2:2005/AC:2005** and **EN 61000-6-4:2007/A1:2011**. On completion of service or repair work, it is the responsibility of the person(s) performing the work to ensure that the product still complies with the requirements of the above standards.

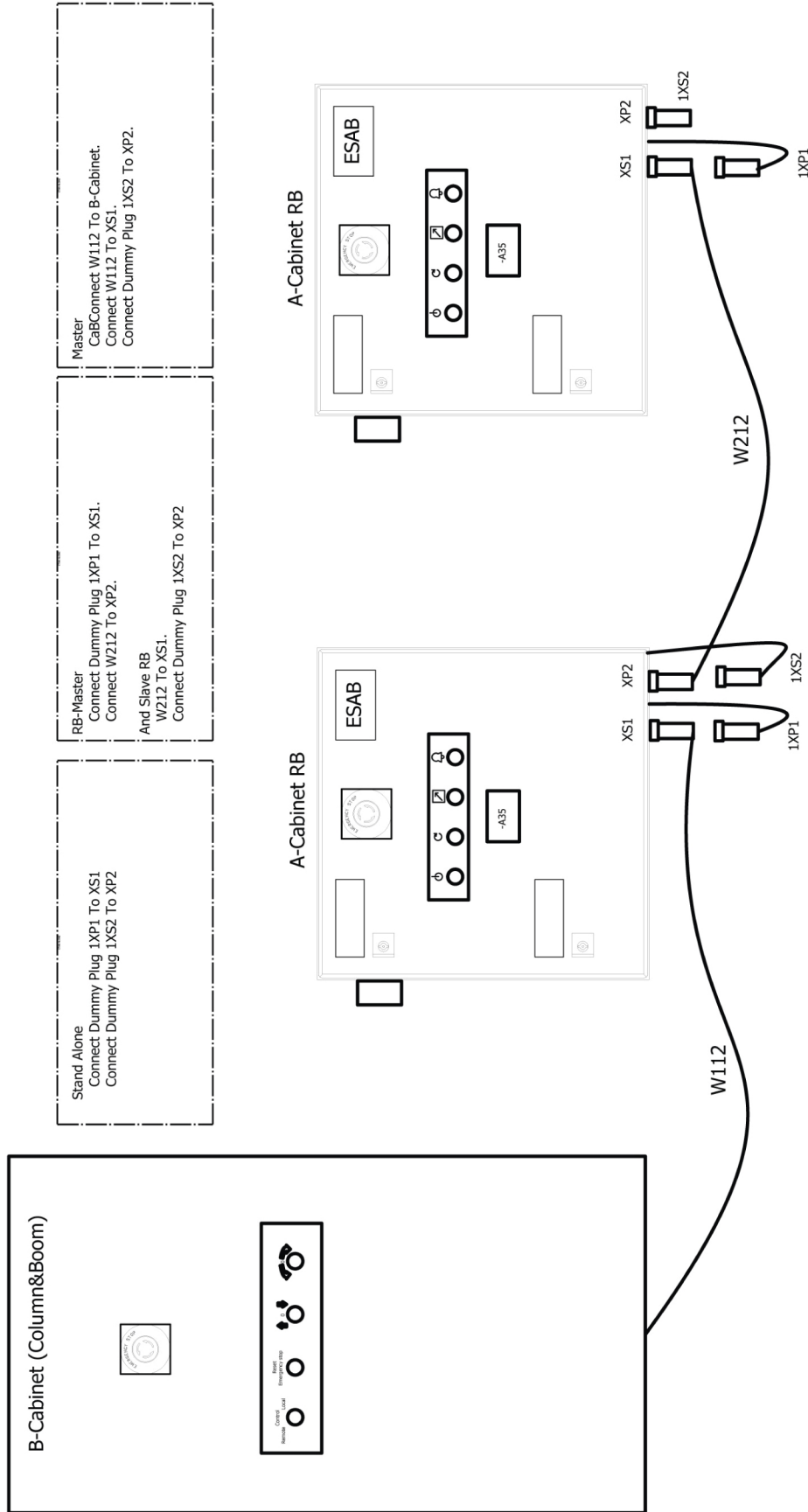
Spare parts and wear parts can be ordered through your nearest ESAB dealer, see [esab.com](http://esab.com). When ordering, please state product type, serial number, designation and spare part number in accordance with the spare parts list. This facilitates dispatch and ensures correct delivery.

# APPENDIX

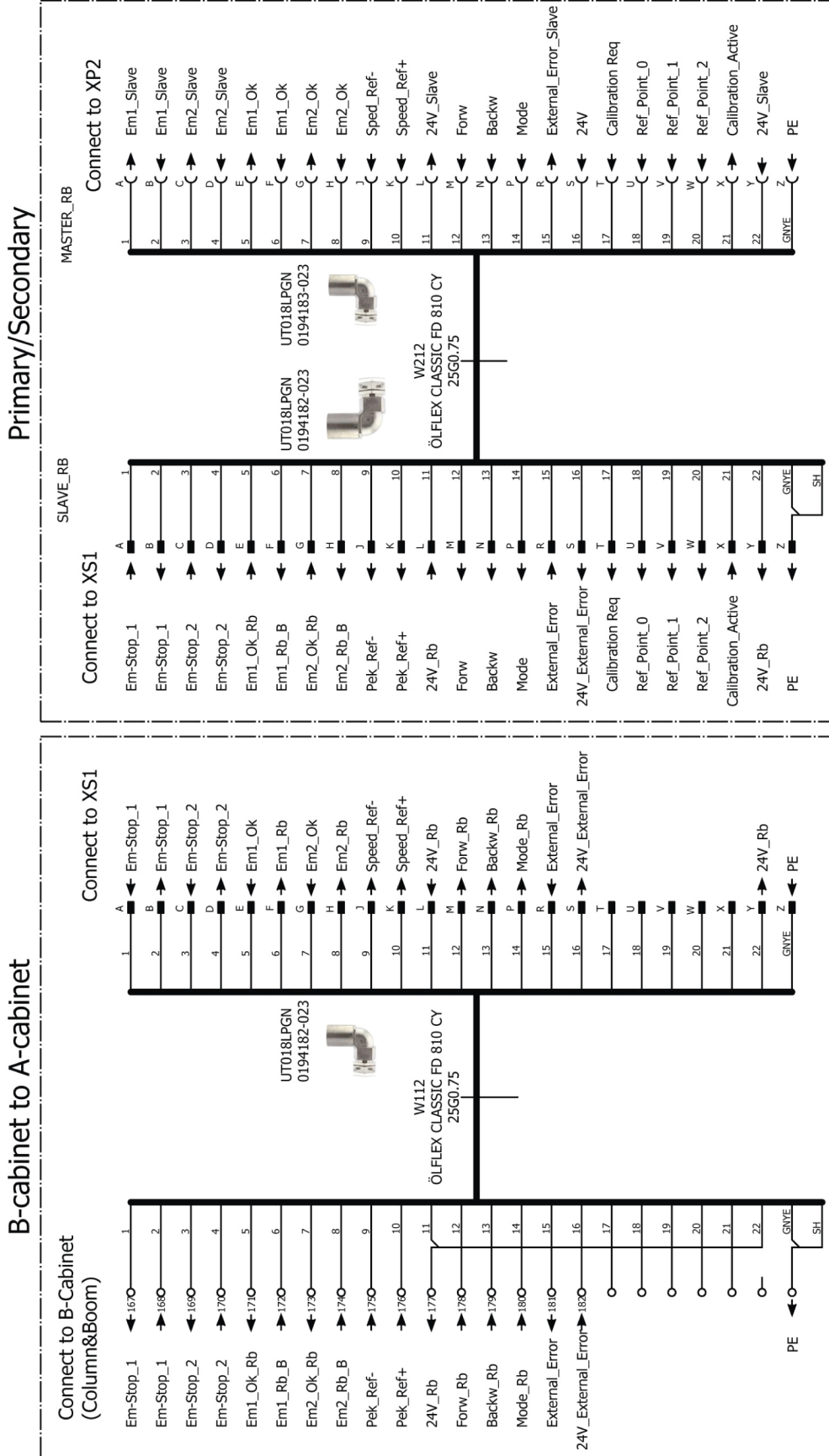
## WIRING DIAGRAM



Connections overview

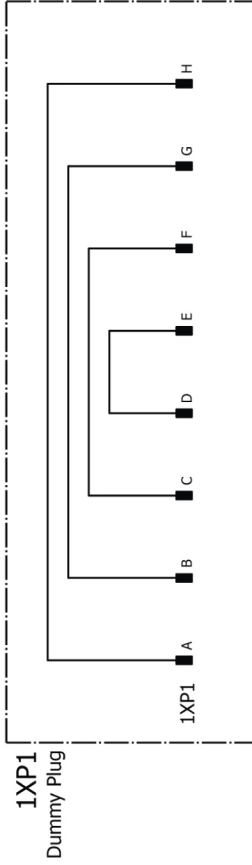


Connections B to A cabinet and primary to secondary

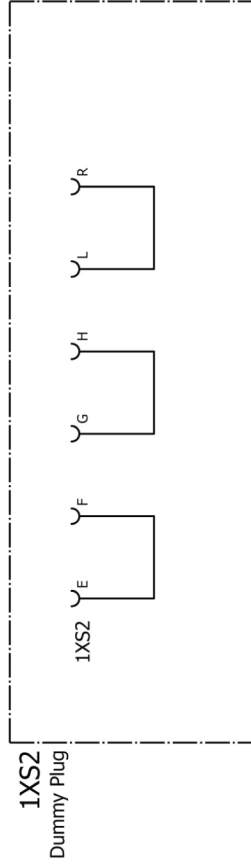


Connections XS1 and XP2

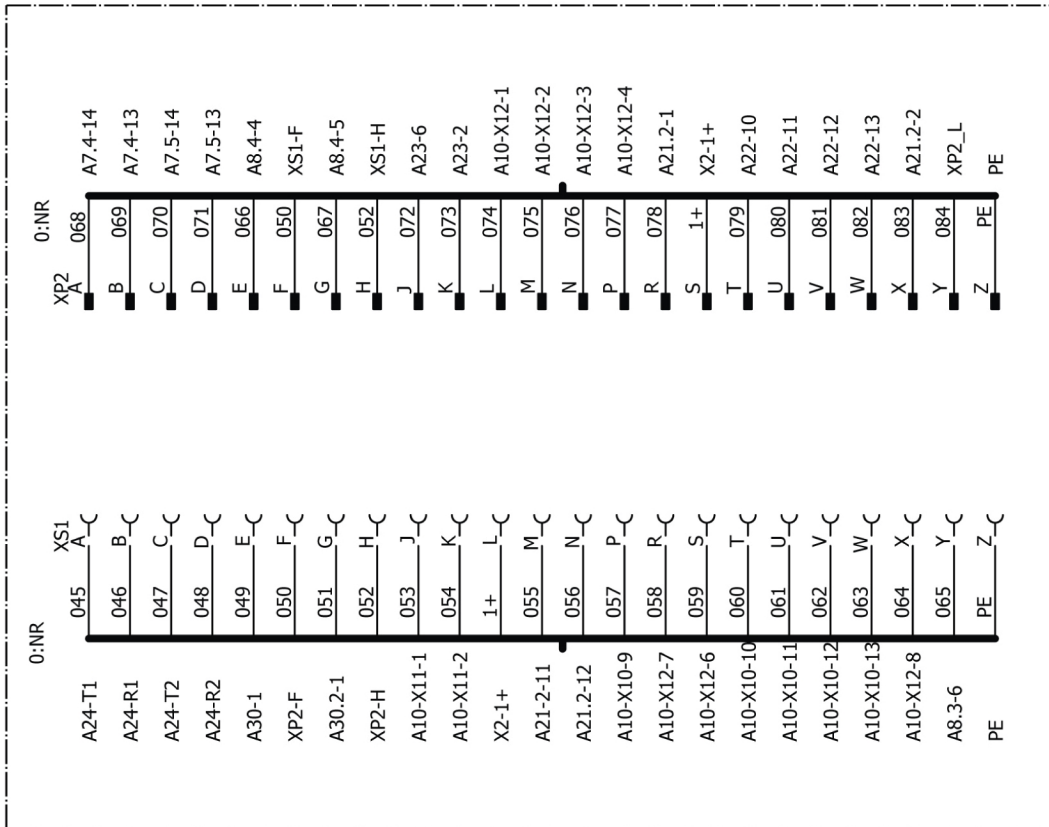
PIN PLUG-23PIN  
0368541-005



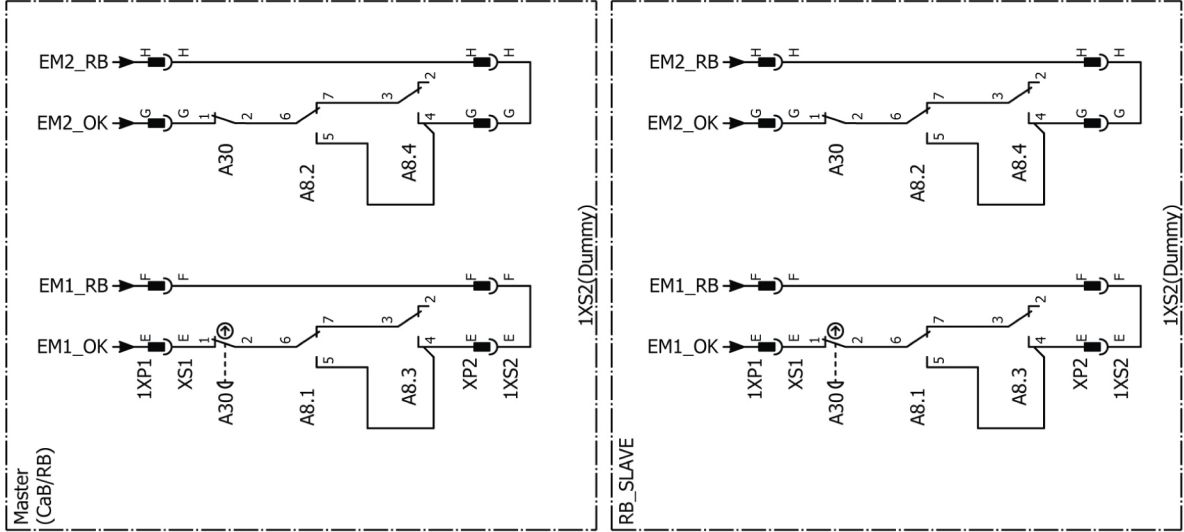
SOCKET PLUG-23PIN  
0368542-005



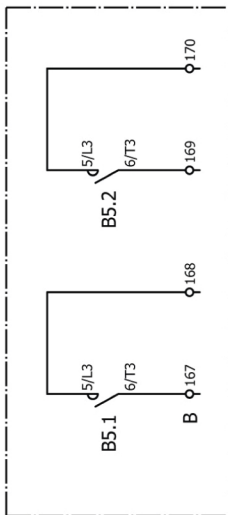
OVERVIEW A-Cabinet  
XS1 AND XP2



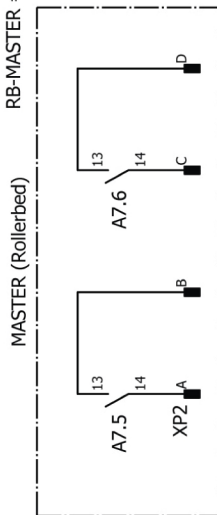
Emergency stop circuit overview



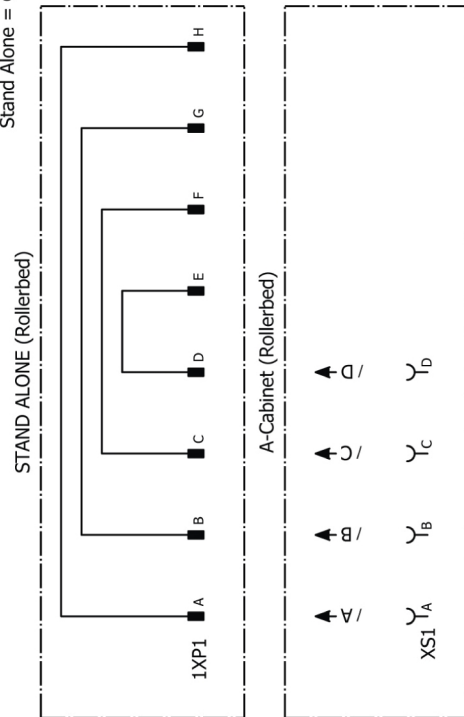
MASTER (Column&Boom) Master Cab = Connect W112 To B-Cabinet.  
Connect W112 To RB- XS1.  
Connect Dummy Plug 1XS2 To RB- XP2.



RB-MASTER = Connect Dummy Plug 1XP1 To RB- XS1.  
and  
Connect W212 To RB- XP2.  
Slave RB= W212 To RB- XS1.  
Connect Dummy Plug 1XS2 To RB- XP2

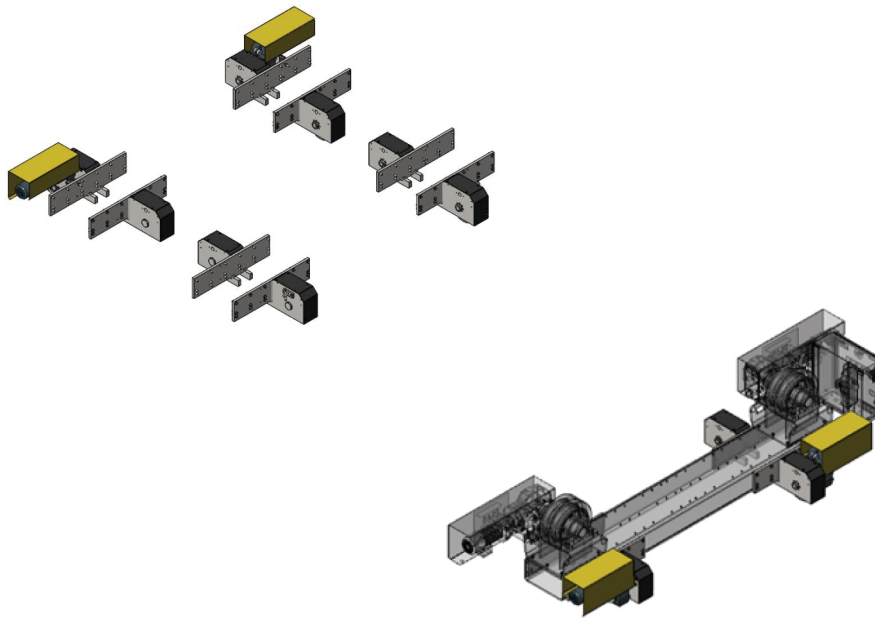


Stand Alone = Connect Dummy Plug 1XP1 To RB- XS1  
Connect Dummy Plug 1XS2 To RB-XP2





## ORDERING NUMBERS



Ordering number	Denomination	Type	Notes
0909 025 880	Rail car Drive	EDB-15/-30	
0909 026 880	Rail car Idler	EIB-15/-30	
0909 029 880	Rail car Drive	EDB-60	
0909 030 880	Rail car Idler	EIB-60	
0909 031 880	Rail car Drive	EDB-90	
0909 032 880	Rail car Idler	EIB-90/-120	
0909 033 880	Rail car Drive	EDB-120	
0463 761 *	Instruction manual		

The three last digits in the document number of the manual show the version of the manual. Therefore they are replaced with \* here. Make sure to use a manual with a serial number or software version that corresponds with the product, see the front page of the manual.

Technical documentation is available on the Internet at: [www.esab.com](http://www.esab.com)

## SPARE PARTS

### Repairs and replacement parts

During the warranty period repairs must be carried out under the direction of the manufacturers. Any unauthorized repairs may damage the roller beds and invalidate the warranty.

It is recommended to contact the manufacturer for the supply of all replacement parts. This ensures that the correct part or suitable alternative parts are supplied and used in the equipment.

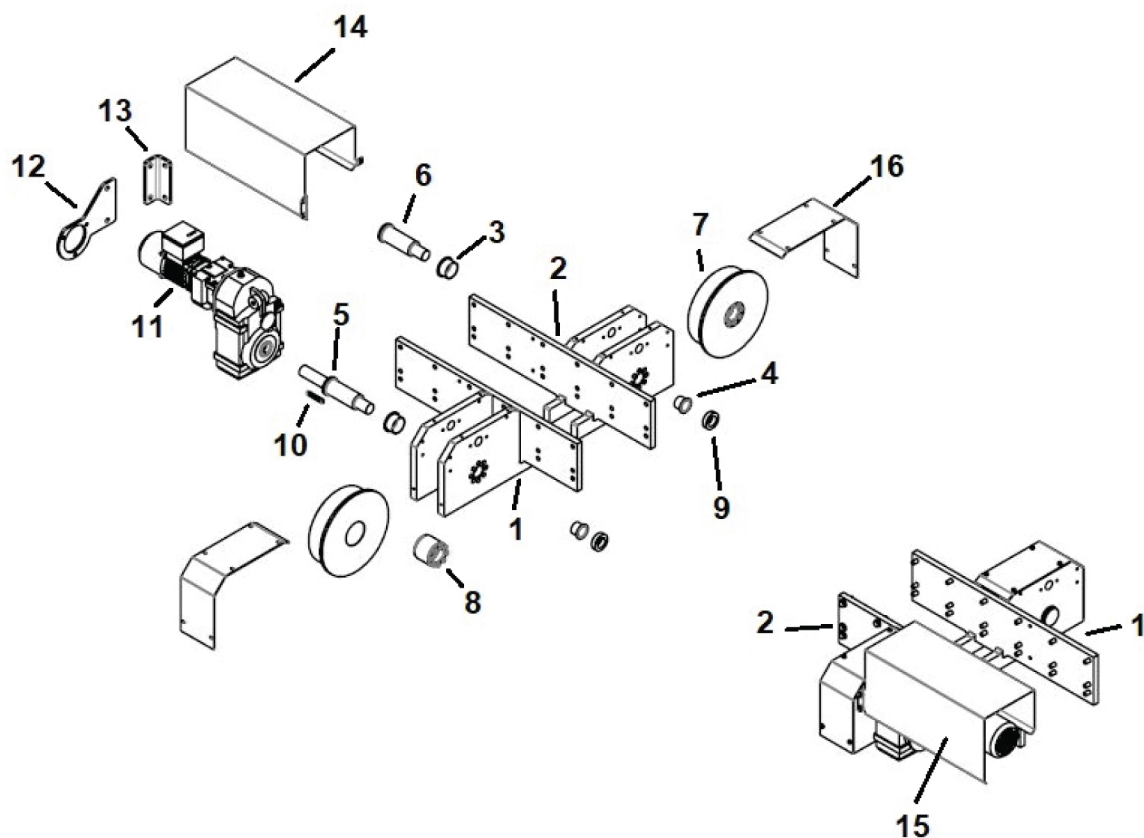


#### **WARNING!**

Not following the recommendations for replacement parts can have consequences for the safety of the equipment. The manufacturers cannot be held liable for any subsequent problems after fitting non-recommended parts.

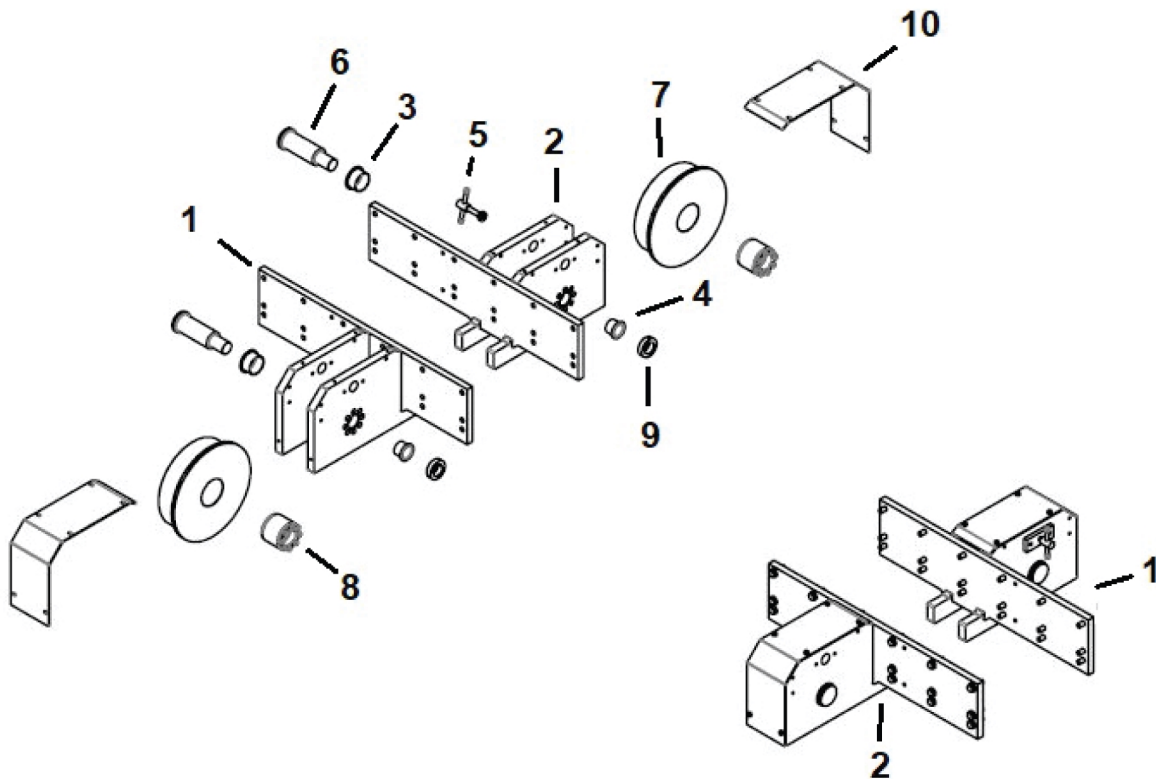
## SPARE PARTS - EDB-15/-30 Mechanical parts list - Drive section

Item	Qty	Ordering no.	Denomination	Notes
1	2	0909 190 880	Wheel holder right	
2	2	0909 190 881	Wheel holder left	
3	4	0909 173 012	Slide bearing with flange	∅50mm
4	4	0909 173 006	Slide bearing with flange	∅35mm
5	2	0909 180 001	Drive shaft	
6	2	0909 182 001	Idler shaft	
7	4	0909 178 001	Flange wheel	
8	4	0909 181 001	Locking assembly	MAV4061 ∅50mm
9	4	0193 733 024	Stop ring	
10	2	0215 701 312	Key	10×8×70
11	2	0909 212 001	Drive unit	0.12 kW
12	2	0909 193 001	Torque stop	
13	2	0909 194 001	Bracket torque stop	
14	1	0909 192 001	Cover right	
15	1	0909 192 002	Cover left	
16	4	0909 191 001	Cover, flange wheel	



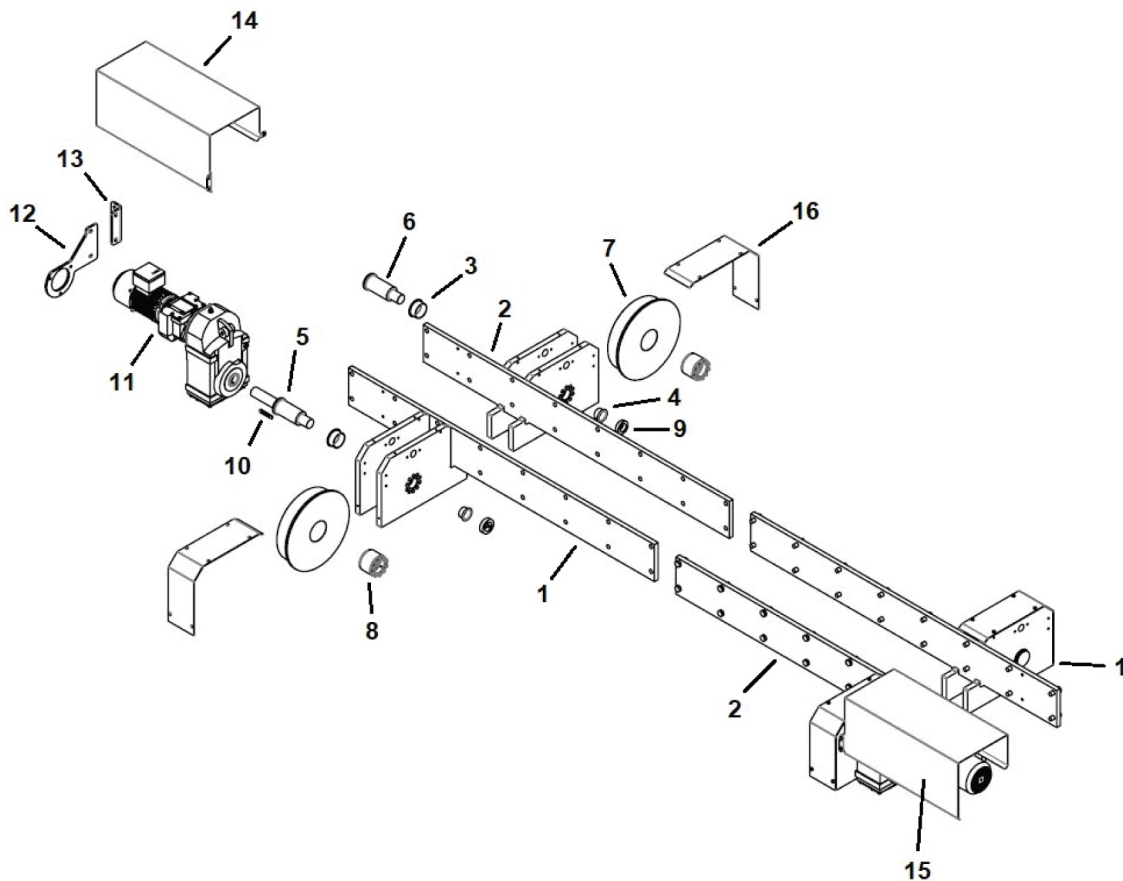
## SPARE PARTS - EIB-15/-30 Mechanical parts list - Idler section

Item	Qty	Ordering no.	Denomination	Notes
1	2	0909 190 880	Wheel holder right	
2	2	0909 190 881	Wheel holder left	
3	4	0909 173 012	Slide bearing with flange	∅50mm
4	4	0909 173 006	Slide bearing with flange	∅35mm
5	2	0331 468 003	Locking screw	
5	2	0331 468 104	Pressure plate, locking screw	
6	2	0909 182 001	Idler shaft	
7	4	0909 178 001	Flange wheel	
8	4	0909 181 001	Locking assembly	MAV4061 ∅50mm
9	4	0193 733 024	Stop ring	
10	4	0909 191 001	Cover flange wheel	10×8×70



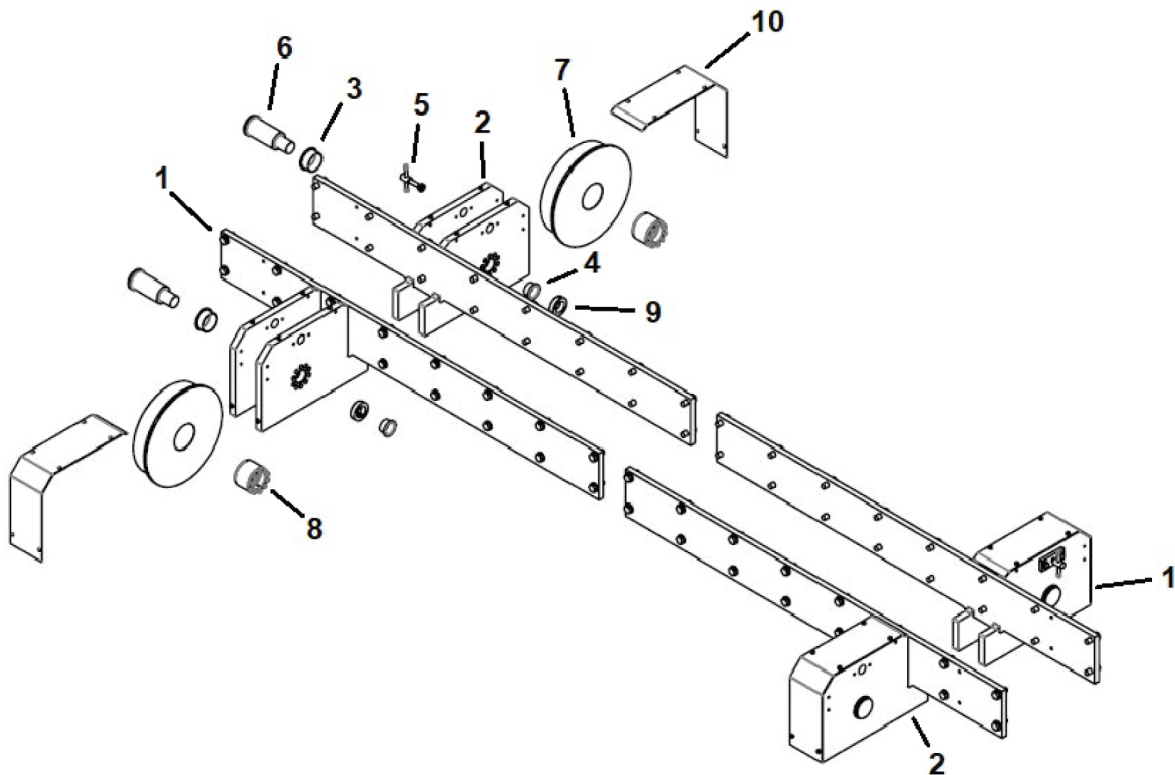
## SPARE PARTS - EDB-60 Mechanical parts list - Drive section

Item	Qty	Ordering no.	Denomination	Notes
1	2	0909 196 880	Wheel holder right	
2	2	0909 196 881	Wheel holder left	
3	4	0909 173 016	Slide bearing with flange	∅60mm
4	4	0909 173 007	Slide bearing with flange	∅40mm
5	2	0909 185 001	Drive shaft	
6	2	0909 187 001	Idler shaft	
7	4	0909 179 001	Flange wheel	
8	4	0909 186 001	Locking assembly	MAV4061 ∅60mm
9	4	0193 733 027	Stop ring	
10	2	0215 701 329	Key	12×8×70
11	2	0909 213 001	Drive unit	0.25 kW
12	2	0909 199 001	Torque stop	
13	2	0909 194 001	Bracket torque stop	
14	1	0909 198 001	Cover right	
15	1	0909 198 002	Cover left	
16	4	0909 197 001	Cover, flange wheel	



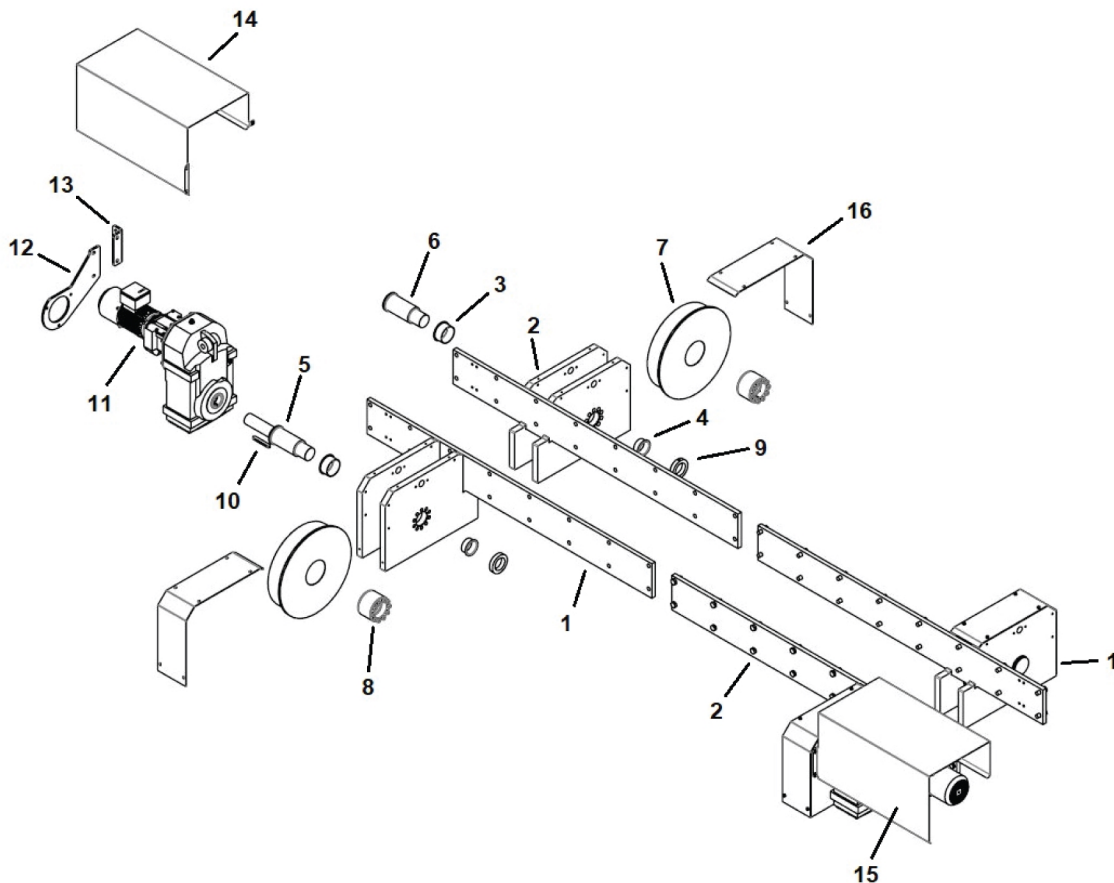
## SPARE PARTS - EIB-60 Mechanical parts list - Idler section

Item	Qty	Ordering no.	Denomination	Notes
1	2	0909 196 880	Wheel holder right	
2	2	0909 196 881	Wheel holder left	
3	4	0909 173 016	Slide bearing with flange	∅60mm
4	4	0909 173 007	Slide bearing with flange	∅40mm
5	2	0331 468 003	Locking screw	
5	2	0331 468 104	Pressure plate, locking screw	
6	2	0909 187 001	Idler shaft	
7	4	0909 179 001	Flange wheel	
8	4	0909 186 001	Locking assembly	MAV4061 ∅60mm
9	4	0193 733 027	Stop ring	
10	4	0909 197 001	Cover flange wheel	



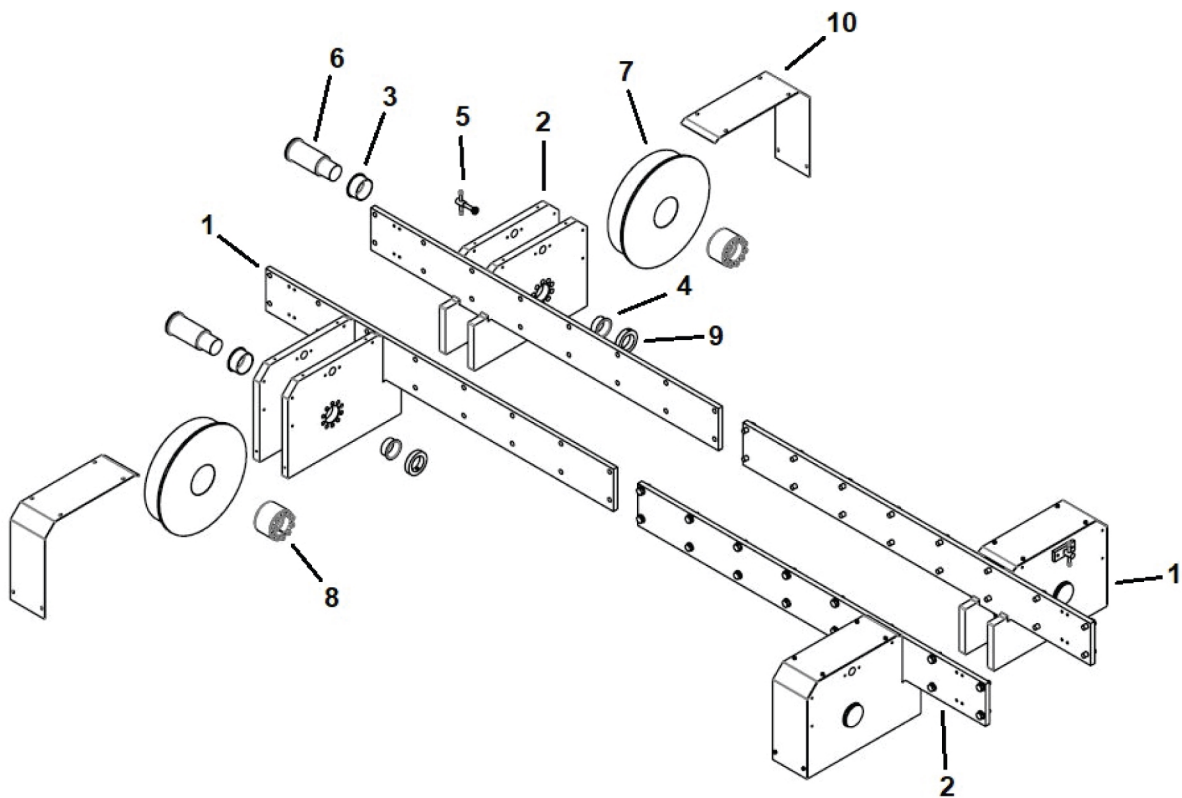
## SPARE PARTS - EDB-90 Mechanical parts list - Drive section

Item	Qty	Ordering no.	Denomination	Notes
1	2	0909 127 880	Wheel holder right	
2	2	0909 127 881	Wheel holder left	
3	4	0909 173 023	Slide bearing with flange	∅75mm
4	4	0909 173 016	Slide bearing with flange	∅60mm
5	2	0909 125 001	Drive shaft	
6	2	0909 124 001	Idler shaft	
7	4	0909 139 001	Flange wheel	
8	4	0909 188 001	Locking assembly	MAV4061 ∅75mm
9	4	0193 733 035	Stop ring	
10	2	0215 701 346	Key	14×9×100
11	2	0909 214 001	Drive unit	0.37 kW
12	2	0909 144 001	Torque stop	
13	2	0909 194 001	Bracket torque stop	
14	1	0909 121 001	Cover right	
15	1	0909 121 002	Cover left	
16	4	0909 122 001	Cover, flange wheel	



## SPARE PARTS - EIB-90/-120 Mechanical parts list - Idler section

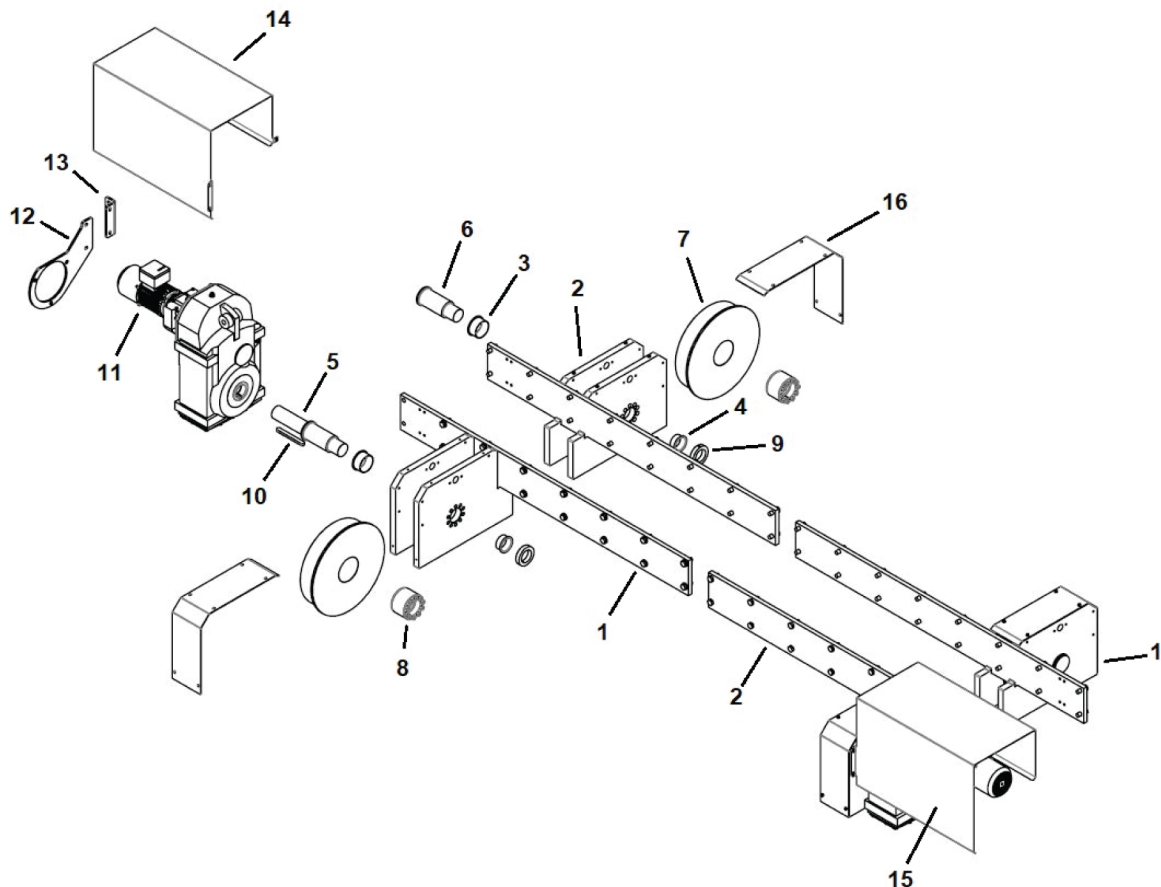
Item	Qty	Ordering no.	Denomination	Notes
1	2	0909 127 880	Wheel holder right	
2	2	0909 127 881	Wheel holder left	
3	4	0909 173 023	Slide bearing with flange	∅75mm
4	4	0909 173 016	Slide bearing with flange	∅60mm
5	2	0331 468 003	Locking screw	
5	2	0331 468 104	Pressure plate, locking screw	
6	2	0909 124 001	Idler shaft	
7	4	0909 139 001	Flange wheel	
8	4	0909 188 001	Locking assembly	MAV4061 ∅75mm
9	4	0193 733 035	Stop ring	
10	4	0909 122 001	Cover flange wheel	





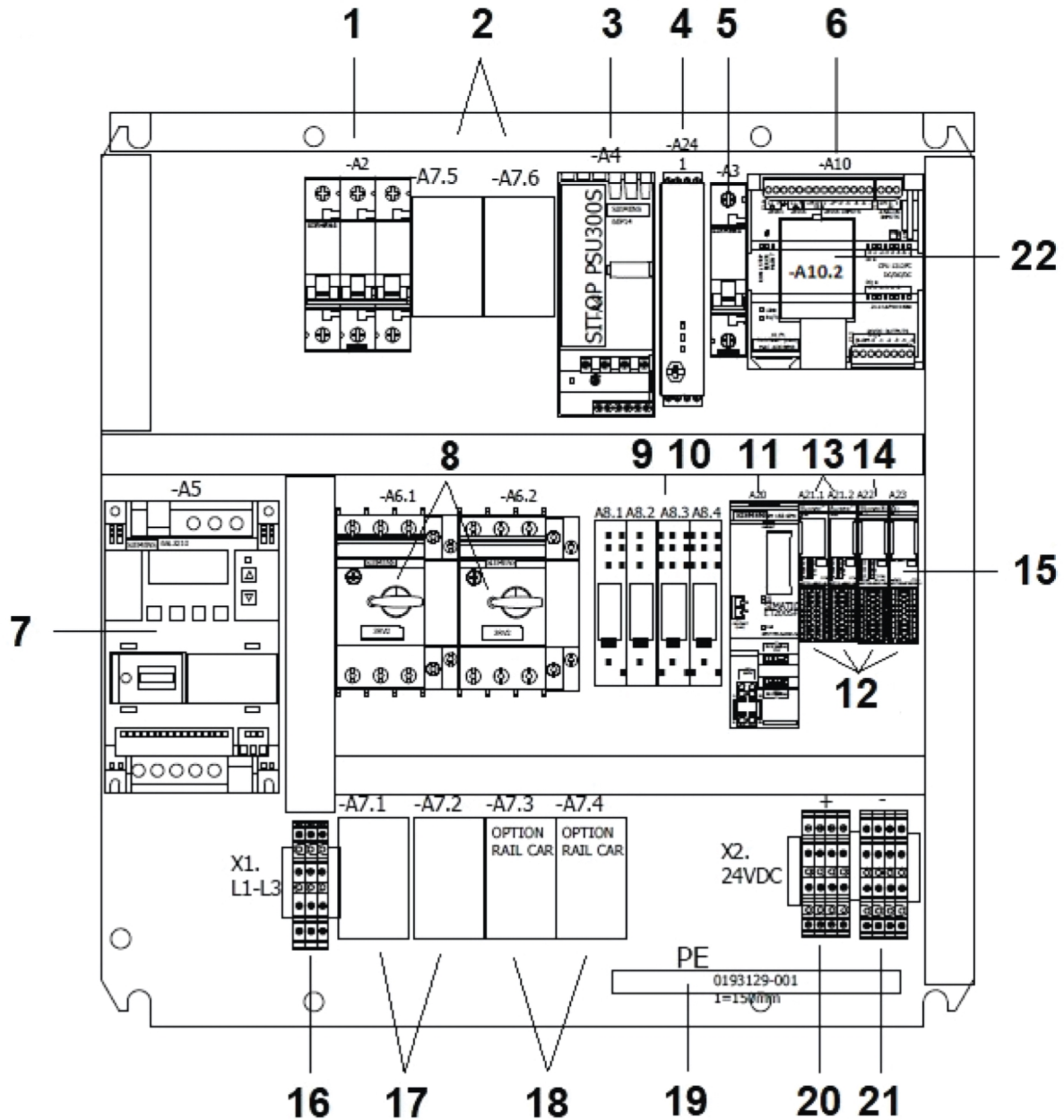
## SPARE PARTS - EDB-120 Mechanical parts list - Drive section

Item	Qty	Ordering no.	Denomination	Notes
1	2	0909 127 880	Wheel holder right	
2	2	0909 127 881	Wheel holder left	
3	4	0909 173 023	Slide bearing with flange	∅75mm
4	4	0909 173 016	Slide bearing with flange	∅60mm
5	2	0909 189 001	Drive shaft	
6	2	0909 124 001	Idler shaft	
7	4	0909 139 001	Flange wheel	
8	4	0909 188 001	Locking assembly	MAV4061 ∅75mm
9	4	0193 733 035	Stop ring	
10	2	0215 701 411	Key	18×11×140
11	2	0909 215 001	Drive unit	0.37 kW
12	2	0909 222 001	Torque stop	
13	2	0909 194 001	Bracket torque stop	
14	1	0909 225 001	Cover right	
15	1	0909 225 002	Cover left	
16	4	0909 122 001	Cover, flange wheel	



## SPARE PARTS - Control cabinet

Item	Qty	Ordering no.	Denomination	Marking	Notes
18	2	0805 586 002	Motor Contactor, rail car	A7.3 and A7.4	24 VDC



**NOTE!**

For other spare parts see Instruction manuals for the standard roller bed with document numbers range 0463 740 \* and 0463 751 \*.

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