

R1.00

Original assembly and operating instructions – IPD-S / IPD-S-KS

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Contents

1	General information.....	1
2	Safety	2
3	Product description	4
4	Assembly and installation	6
4.1	Preparing for installation.....	6
4.2	Assembly of the control device	7
4.3	Electrical installation	8
5	Functional description	9
6	Disposal.....	9
7	Figures.....	10

1 General information

These assembly and operating instructions describe the installation and operation of the IPD-S / IPD-S-KS control device (hereinafter referred to as control device). The instructions are intended for technicians that install and maintain the product, and for the operator using the product.

The illustrations in these assembly and operating instructions help you to better understand the descriptions and procedures. The illustrations only serve as examples and may deviate slightly from your product's actual appearance.

Explanation of symbols



WARNING

WARNING

... indicates a hazardous situation which, if not avoided, could result in death or serious injury.

Hazard symbols



Crush hazard to the whole body!

This sign indicates hazardous situations with a crush hazard to the whole body.



Crush hazard to limbs

This sign indicates hazardous situations with a limb crush hazard.

Notice symbols

NOTICE

NOTICE

... indicates important information (e.g. material damage), but does not indicate hazardous situations.

Refers to text and image

a

Refers to a graphic of the corresponding connection variant in the **Figures** chapter

2 Safety

Observe the following safety information:

WARNING

Risk of injury when disregarding the safety information and instructions!

Failure to observe the safety information and instructions can cause electric shock, fire and / or severe injuries.

- Following the safety information and directives given in these assembly and operating instructions helps to avoid personal injuries and material damage while working on and with the product.
 - Before starting work on the product, read the assembly and operating instructions, especially the **Safety** chapter and the respective safety information, completely and carefully. It is important for you to have understood what you have read.
- Keep all safety information and instructions for future reference.
 - Only use genuine spare parts of the manufacturer. Wrong or faulty spare parts can cause damage, malfunctions or even a total failure of the product.
 - Children shall not play with the appliance.
 - Cleaning and user maintenance shall not be made by children without supervision.

Occupational safety

Following the safety information and directives given in these assembly and operating instructions helps to avoid personal injuries and material damage while working on and with the product. Failure to comply with the safety information and directives given in these original assembly and operating instructions or with the accident prevention regulations and general safety regulations relevant to the field of application shall exempt the manufacturer or its representative from all liability and shall render any damage claims null and void.

Intended use

The IPD-S / IPD-S-KS is intended exclusively as a control device for the DCC industrial door drive. Never make any modifications or changes to the product without the express written authorization of the manufacturer.

Foreseeable misuse

Any use other than described in chapter Intended use is regarded as reasonably foreseeable misuse. This includes but is not limited to:

- The use on third-party control systems.
- Inserting or attaching components to the control device which do not comply with the intended use.
- Modifications and changes to the product without the express permission of the manufacturer.

Any damage or injury as a result of reasonably foreseeable misuse or of not following the assembly and operating instructions will render the manufacturer's liability null and void.

Personnel qualifications

The following persons are qualified to perform electrical installation work and to work on the electrical system (troubleshooting, repair & deinstallation):

- Qualified electricians

Skilled electricians must be able to read and understand electric circuit diagrams, to put electrical systems into service and to maintain them, to wire control cabinets, to install the control software, to ensure the functionality of electrical components and to identify possible hazards resulting from handling electrical and electronic systems.

The following persons are authorised to handle the product:

- Operating personnel

The operator must have read and understood the instructions, in particular the "Safety" chapter and must be aware of the hazards associated with handling the product and the controlled door system.

The operator must have been instructed with regard to handling the controlled door system.

Dangers which may be posed by the product and motor-driven door

The product has undergone a risk assessment. The product's design and construction, which are based on this risk assessment, correspond to the current state-of-the-art. The product is safe to operate when used as intended. Nevertheless, residual risks remain!

WARNING



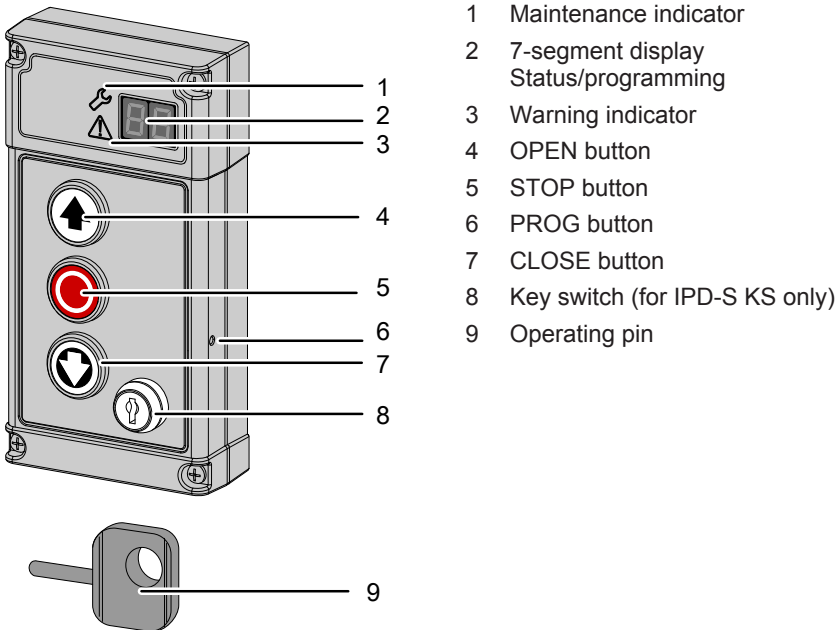
Crush hazard and risk of being struck by the closing door!

Persons can be struck when the door is closed or collide with the door.

- The control device must be mounted within sight of the door and at a safe distance from moving parts.
- The control device IPD-S cannot be locked against unauthorised operation. Therefore, the device is to be installed at a height of 1.5 m and inaccessible to the public. The control device IPD-S-KS is also equipped with a key switch that is used to lock the operation of the drive.

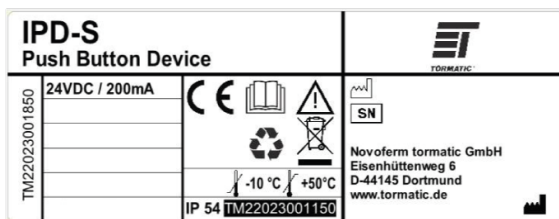
3 Product description

The control device IPD-S / IPD-S-KS is to be connected to the DCC door drive. The control device has a two-digit 7-segment display. The IPD-S indicates the current status of the door and, during the programming process, the menu and setting value. With an IPD-S connected to the DCC, you can access an extended function menu in the programming mode. Furthermore, the IPD-S is equipped with additional inputs and outputs. The control device IPD-S-KS is also equipped with a key switch that is used to lock the operation of the drive.

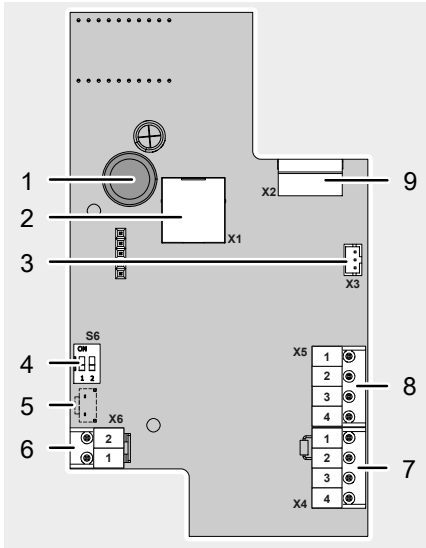


Rating plate

The rating plate is located at the side on the control housing. Observe the power supply specifications.



Overview connection terminals



- 1 Acoustic warning indicator
- 2 X1 = socket RJ45 for connection to DCC door drive
- 3 X3 = internal connection SMART-TM BUS
- 4 S6 = configuration switch
- 5 PROG button
- 6 X6 = key switch connection terminal
- 7 X4 = input for door connection box
- 8 X5 = input for photoelectric sensor
- 9 X2 = slot for BT-D-K (Bluetooth dongle)

Technical data

General	
Height x width x depth	180 mm x 92 mm x 45 mm
Electrical specifications	
Control voltage	24V DC, 200 mA
Mechanical specifications	
Continuous sound pressure level of buzzer	< 85 dB(A)
Cable feed-throughs	4 mm x 5 mm
Surroundings	
Protection type	IP 54
Operating temperature	
Manufacturer	Novoferm tormatic GmbH Eisenhüttenweg 6 D-44145 Dortmund www.tormatic.de

4 Assembly and installation

4.1 Preparing for installation

Safety information for installation and assembly

- Installation work may only be carried out by qualified technicians.
- Read these installation instructions before you start installing the product.

Scope of delivery

NOTICE

Check the supplied screws and wall plugs to make sure that they are suitable for the structural condition on the installation site.

The scope of delivery is determined by the product configuration. It usually consists of the control device and the assembly material.

The following components are included:

- 1 x housing with electronics
- 3 x dowel 6 mm
- 3 x screws for wall mounting
- 4 x housing screws
- 1 x operating pin
- 1 x assembly and operating instructions
- 3 x rubber plug
- 1 x strain relief incl. 3 screws
- 3 x hinges

Required tools

For the assembly of the control device, the following tools are required:

- folding rule
- pencil
- spirit level
- drilling machine
- 6 mm drill
- PH2 screwdriver
- slotted screwdriver, 2 mm

connecting cable

- Use a CAT6 patch cable or one with a better quality to connect the control device to the drive. The patch cable can be ordered in three different lengths (**01** = 5 m, **02** = 7.5 m and **03** = 10 m) (220213-**0x**-1-50).
- Please observe the maximum permissible cable length of 10 m between the drive and the control device.

4.2 Assembly of the control device

Follow the instructions as well as the illustrations in the "Figures" chapter.

WARNING



Crush hazard and risk of being struck by the closing door!

Persons can be struck when the door is closed or collide with the door.

- The control device must be mounted within sight of the door and at a safe distance from moving parts.
- The control device IPD-S cannot be locked against unauthorised operation. Therefore, the device is to be installed at a height of 1.5 m and inaccessible to the public. The control device IPD-S-KS is also equipped with a key switch that is used to lock the operation of the drive.

Wall mounting

Mount the control device at an operating height of 1.5 m. Ensure that the mounting surface is suitable.

Fig. **a** Mark the three drill holes on the wall as depicted, then drill the holes in the wall.

Fig. **b** Insert the dowels into the drill holes and screw the back panel of the control device to the wall. Then place the supplied rubber plugs on the screw connection points to seal them.

4.3 Electrical installation

NOTICE

Malfunction due to defective insulation of the cables

- When connecting the cables, ensure that the cable sheath is stripped close to the connection terminal so that the cables remains insulated from each other.
- Avoid stowing cables in the connection compartment if they are too long. Shorten the cables if they are too long.

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- When connecting the cables, ensure that the cable sheath is stripped close to the connection terminal so that the cables remains insulated from each other.
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1. Cable installation

Fig. **a** Insert the connector of the connection cable into the socket X1. Then feed the cable through the cable guide as depicted.

Fig. **b** Guide the connecting cable to the DCC. Insert the connector to slot J7 of the DCC.

2. Input X5 – Photoelectric sensor

Connect a photoelectric sensor to input X5 according to the following variants:

Fig. **a** Connection of 2-wire photoelectric sensor LS2

Fig. **b** Connection of 4-wire photoelectric sensor with testing

Fig. **c** Connection of Sick-WL280 or Witt RP25 reflective photoelectric sensor

Select the corresponding photoelectric sensor in the configuration menu of the DCC.

3. Input X4 – Door connection box

Fig. **a** The door connection box allows for the connection of a safety edge, a wicket door contact and slack rope switches on the DCC or the control device.

As an alternative to connection terminal J3 on the DCC, you can connect the coiled cable to connection terminal X4 of the IPD-S / IPD-S-KS. The terminal assignment is identical to terminal J3 of the DCC. Please refer to the installation instructions of the DCC for information on the sensors to be used and on the parameter selection.

4. Connection X6 – Key switch

Fig. **a** + **b** For the IPD-S-KS variant, the switching contact of the pre-assembled key switch is connected to connection terminal X6. A maximum cable length of 1 m must be observed when connecting an external key switch.

5. Slot X2 – BTD-K (Bluetooth dongle)

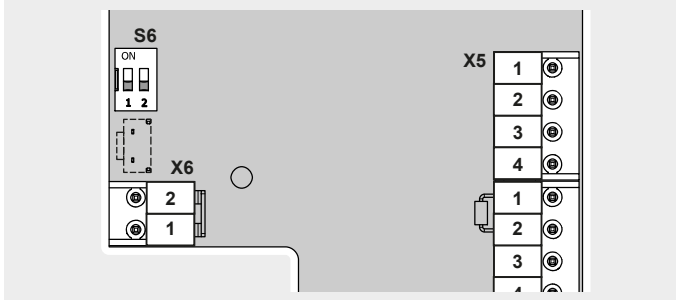
When using a Bluetooth dongle "BTD-K", it can either be plugged into slot J9 of the DCC or alternatively into slot X2 of the control device IPD-S / IPD-S-KS. The Bluetooth dongle "BTD-K" allows you to configure the drive via the "NovoSmart" app.

Fig. **a** Plug the Bluetooth dongle "BTD-K" to slot X2 of the control device. The BTD-K is automatically detected. Follow the instructions in the app for the final configuration.

5 Functional description

Configuration switch S6

Switch S6 allows you to set various functions independently of the drive configuration.



Switch S6.1 Buzzer

The buzzer can be used as an acoustic warning signal. An acoustic warning signal is emitted during a door movement.

- ON position = acoustic warning signal is switched on
- OFF position = no acoustic warning signal

Switch S6.2 Key switch input

Configure the key switch input X6.

- ON position = operation of the drive is locked
- OFF position = operation of the drive is released

Refer to the assembly and operating instructions of the DCC door drive for further information on the operation.

6 Disposal

Dispose of packaging material in an environmentally friendly way and in accordance with the applicable local disposal regulations.



■ The symbol with the crossed-out waste bin on waste electrical or electronic equipment stipulates that this equipment must not be disposed of with the household waste at the end of its life. The separate collection of waste electrical and electronic equipment aims to enable the re-use, recycling and other forms of recovery of waste equipment as well as to prevent negative effects for the environment and human health caused by the disposal of hazardous substances potentially contained in the equipment. Dispose of the waste electrical or electronic equipment in accordance with national legislation.

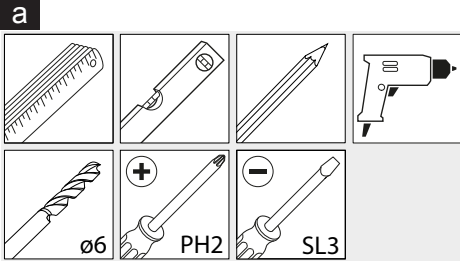
UK (The following applies for the United Kingdom)

According to Waste Electrical and Electronic Equipment Regulations 2013 (SI 2013/3113) (as amended) devices that are no longer usable must be collected separately and disposed of in an environmentally friendly manner.

7 Figures

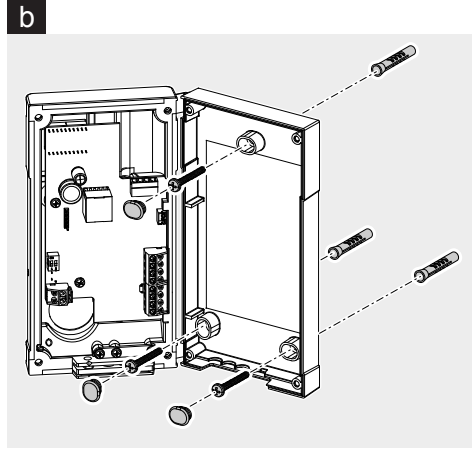
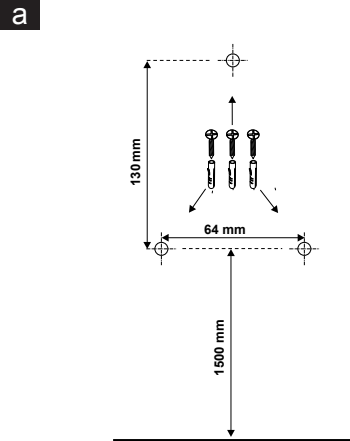
Preparing for installation

Tools required



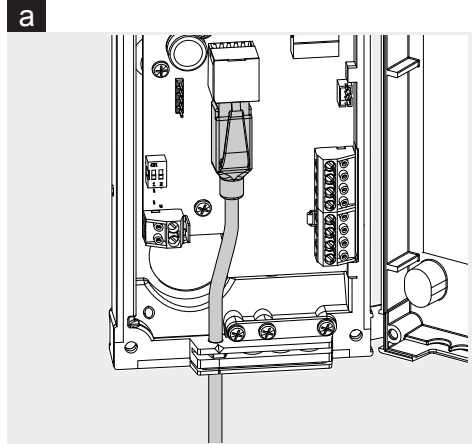
Assembly of the control device

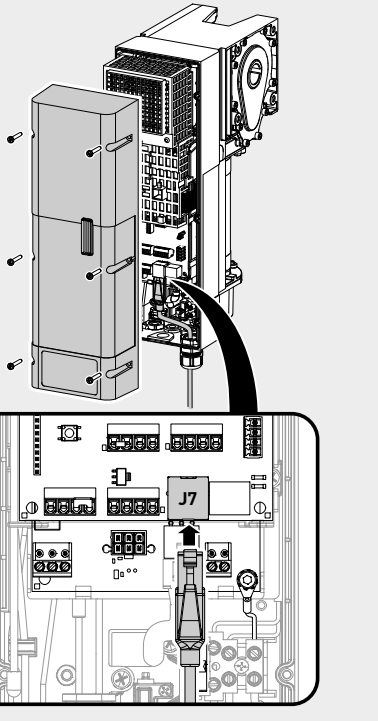
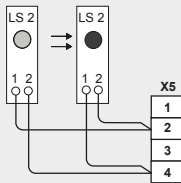
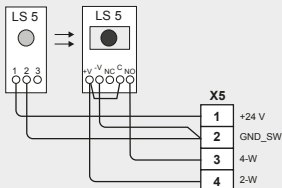
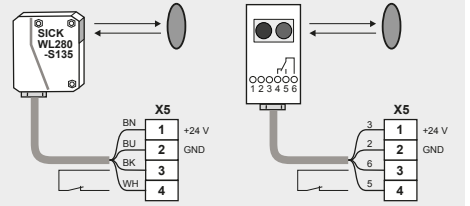
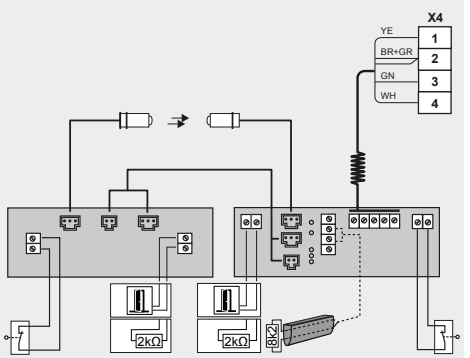
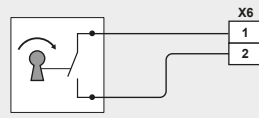
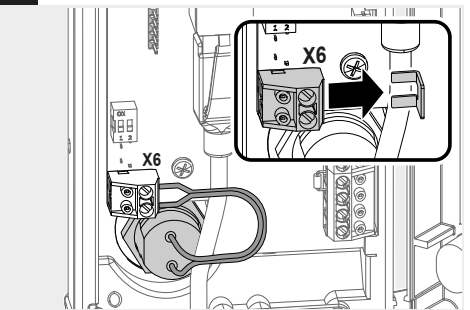
Wall mounting



Electrical installation

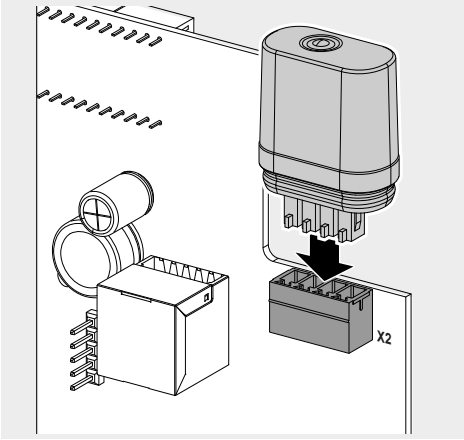
1. Cable installation



b**2. Input X5 – Photoelectric sensor****a****b****c****3. Input X4 – Door connection box****a****4. Connection X6 – Key switch****a****b**

5. Slot X2 – BT-D-K (Bluetooth dongle)

a



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