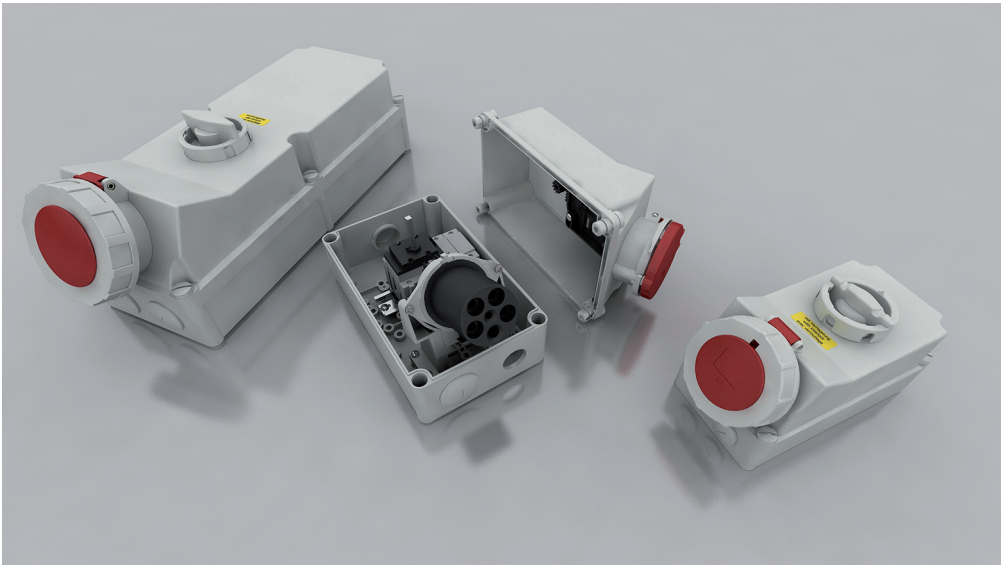
EN

Installation instructions disconnectable wall socket outlets (disconnectable, lockable)



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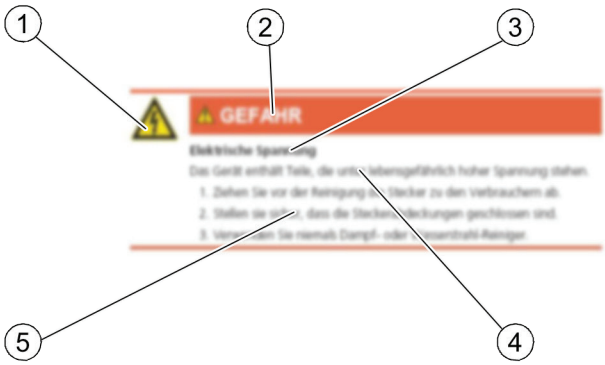
1 About this manual

This manual

- describes the assembly and disassembly of disconnectable wall socket outlets and disconnectable and locked wall socket outlets from Bals Elektrotechnik GmbH & Co. KG
- is an integral part of the product and must be kept in safe custody during the product service life
- must be read carefully and understood before use and any work.

1.1 Structure of the warnings

The following picture illustrates the structure of a sample warning.



1	Hazard-specific symbol
2	Signal word
3	Type and source of the hazard
4	Possible consequences of failing to comply
5	Procedure for avoiding hazards

1.2 Symbols used

	General warning of a hazardous area
	Warning – dangerously high voltage
	Notice

1.3 Signal words used

All warnings in this manual are clearly highlighted. The following signal words are used for warnings:

DANGER	Warns of dangers which will lead to serious injuries or to death if the instructions are not followed.
WARNING	Warns of dangers that may lead to serious injuries or to death and/or cause considerable damage to property if the instructions are not followed.
CAUTION	Warns of dangers that may lead to reversible injuries and/or considerable damage to property if the instructions are not followed.
NOTICE	Warns of dangers that may lead to operational disruptions and/or considerable damage to property. Damage to the environment, too, may occur if the instructions are not followed.

2 Intended use

The disconnectable (disconnectable and locked) wall socket outlets are designed for professional use. The installation and the fixed connection to the mains supply should be carried out only by trained and qualified experts.

Any use going beyond the intended use is considered to be improper. The manufacturer is not liable for damages resulting from improper use. Any such risk shall be borne solely by the user.

In case of unauthorised modifications or conversions, the CE conformity becomes null and void, and thus, also all claims for warranty. Modifications may lead to risks for life and limb as well as damage to the plugs and sockets or loads connected.

Factory-fitted labels and markings on the products should not be removed, modified or blurred.

Protect against foreign bodies and impact of weather

The product meets either the protection degree IP44, IP54 or IP67 in accordance with **DIN EN 60529** (VDE 0470-1), depending on the respective design. Each of these mean:

- Protection degree IP44:
  - Protected against solid bodies with a diameter beyond 1.0 mm, e.g. a wire
  - Protection against water sprayed from all sides
- Protection degree IP67:
  - Dust-proof
  - Complete protection against contact
  - Protection against temporary immersion.

Environment

The following operating conditions apply for the safe operation of the product:

Size	Value
Temperature	–25 ºC … +40 ºC
Humidity	10 %rH … 90 %rH

NOTICE

Material damage caused by mishandling

On the designs "With lock", the rotary switch is locked with the plug connection. The rotary switch must only be actuated if the plug connection has been made.

Never attempt to actuate the rotary switch with force if the plug connection has not been made.

NOTICE

Material damage from chemicals!

Certain chemicals can damage the polycarbonate housing.

1. Avoid any contact with cutting or lubricating oil and with aggressive cleaning agents and solvents.
2. If you are unsure, request the "Resistance of PC moulded parts" summary sheet.

3 General safety instructions

- Safe use is ensured only if this manual is followed completely.
- Before installation, commissioning or operation, read this manual thoroughly.
- The product must be installed, maintained and put into operation properly by qualified experts in accordance with the laws, ordinances and standards.
- Keep easily combustible and explosive materials away from the product.
- Handle the cables with care,
  - by always pulling at the plug and not the cable when unplugging,
  - by preventing the cable from getting damaged mechanically,
  - by keeping intense heat away.
- Never use faulty products or products with dirty, scratched or damage contacts.
- Keep the contacts on the product clean.
- Avoid tripping hazards.

4 Packaging, transport and storage

4.1 Packaging

Packaging materials are valuable raw materials and can be reused. The packaging materials should therefore be brought to an appropriate recycling facility. If this is not possible, dispose of the packaging materials according to the locally applicable regulations.

4.2 Transport

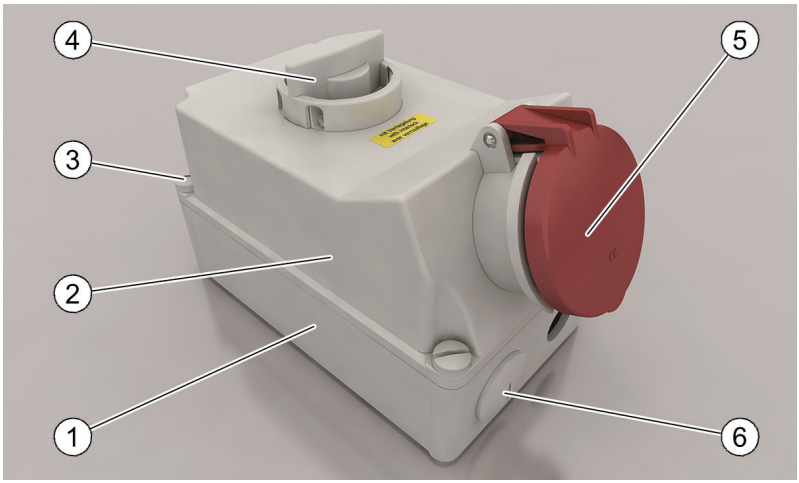
Check the delivery for completeness and integrity. If you identify transit damage or if the delivery is incomplete, notify your dealer or supplier immediately.

4.3 Storage

The product must be stored in clean condition and protected from dust and humidity. The original packaging is best suited for this purpose.

5 Design

Based on an example, the following figure illustrates the main components of a disconnectable and locked wall socket outlet.



1	Bottom part of housing
2	Top part of housing
3	Housing screw connections
4	Rotary switch
5	Cover flap
6	Cable gland

Conductor cross-sections

The following table displays the possible conductor cross-sections that can be connected to the wall socket outlets:

Design	Possible conductor cross-section
16A	1.5 mm^2 ... 4 mm^2
32A	2.5 mm^2 ... 10 mm^2
63A	6 mm^2 ... 25 mm^2
125A	16 mm^2 ... 70 mm^2

Cable diameter

The following table displays the cable diameters that can be used:

Design	Possible cable diameter
16A, 3-pin to 5-pin	8 mm ... 18 mm
32A, 3-pin to 5-pin	11 mm ... 23 mm
63A, 3-pin to 5-pin	16 mm ... 36 mm
125A, 3-pin to 5-pin	26 mm ... 50 mm

Polycarbonate housing material

Depending on the design, the housing of the wall socket outlets may be made from polycarbonate. A corresponding "packaging leaflet" indicates if this is the case.

Technical specifications

The technical specifications of the product depend on the design. You will find them in our catalogue or on our website *http://www.bals.com*.

6 Assembly and disassembly

⚠ DANGER

Danger to life by electrical voltage

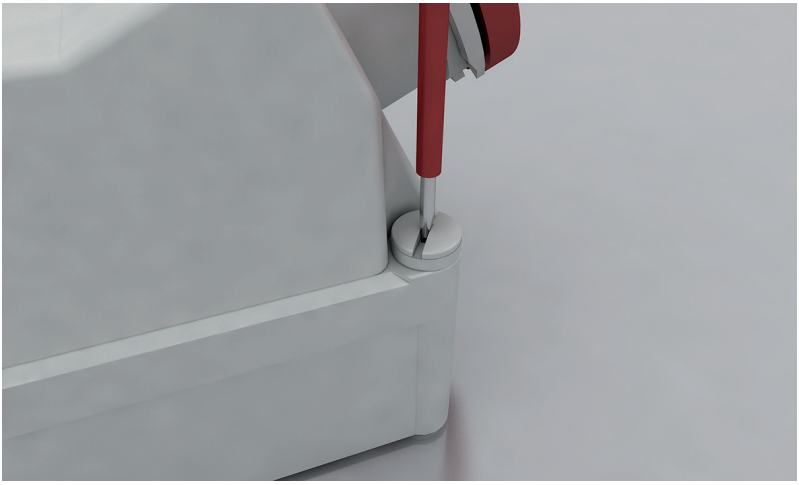
The supply cable may carry high electrical voltage that is fatal. Pay attention to the five safety rules of electricity:

1. De-energise
2. Secure the supply from being switched on again
3. Ensure the de-energised condition
4. Connect to earth and short circuit
5. Cover or cordon off adjacent live parts

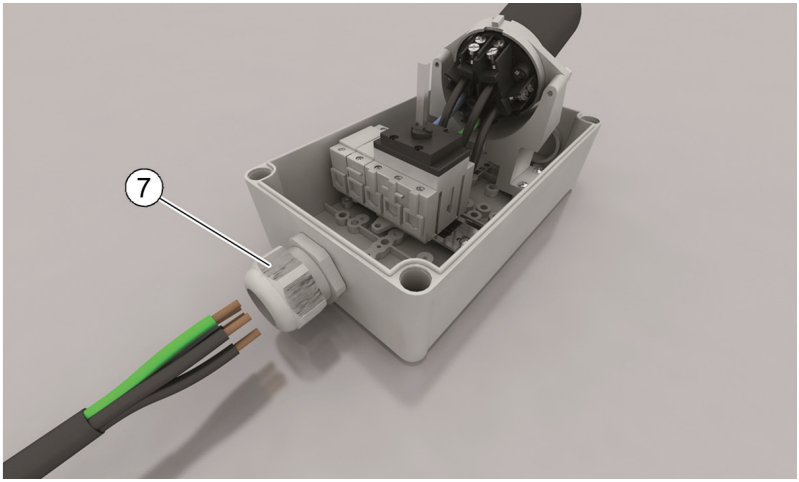
6.1 Connecting a cable to a wall socket outlet

Proceed as follows:

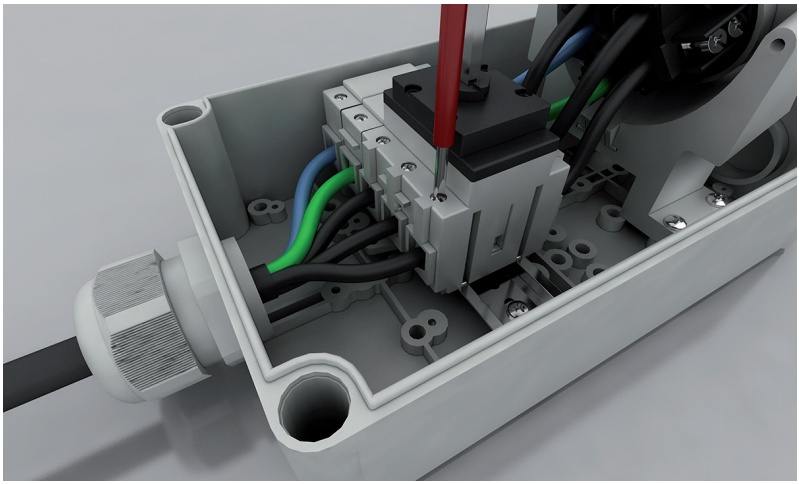
1. Make sure that the cable is de-energised.
2. Strip the cable to the required length.
3. Remove the insulation from the individual conductors (16A designs: 9 mm; 32A designs: 12 mm; 63A designs: 19 mm; 125A designs: 25 mm). Twist the multi-strand copper conductors slightly by hand for flexible conductors. Conductor end sleeves are not necessary but may be used.
4. Loosen the four housing screws in order to open the housing.



5. Fix the bottom part of the housing to the wall with the help of the fixing material suitable for the application.
   On some wall socket outlets (depending on the design), the "drilling template" is imprinted on the back for securing it to the wall.
6. Push the cable through the cable gland (7, to be provided on-site) into the housing.



7. The terminals are open at the time of delivery. Guide the bare individual conductors into the opening and tighten the screws with the minimum torque (16A and 32A design: at least 0.8 Nm; 63A design: at least 2.0 Nm; 125A design: at least 4.0 Nm). Take care to see that only the bare individual conductor (without insulation) is clamped. Pay attention to the marking of the terminals and ensure that the assignment of the individual conductors to the terminals is correct.



8. Check whether the individual conductors are seated tightly by pulling them lightly. If this is not the case, open the terminal and repeat the previous step.
9. Tighten the cable gland (7).
10. Fix the cover with screws to the housing.

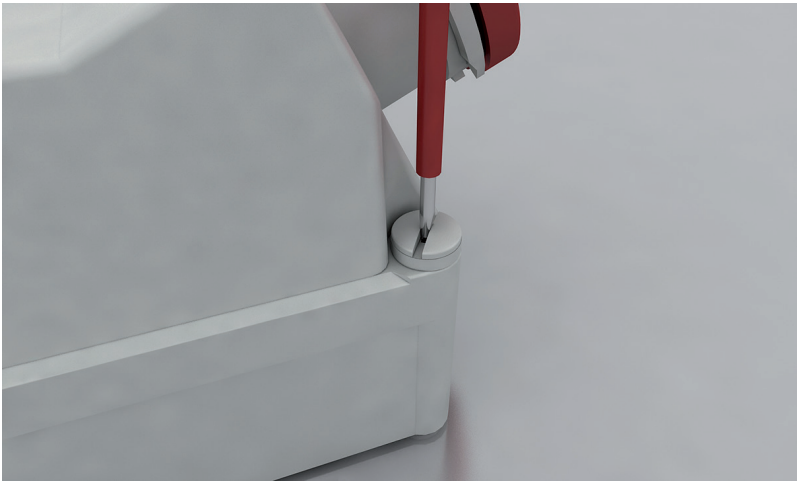
The wall socket outlet is now ready for operation.

6.2 Disconnecting a cable from a wall socket outlet

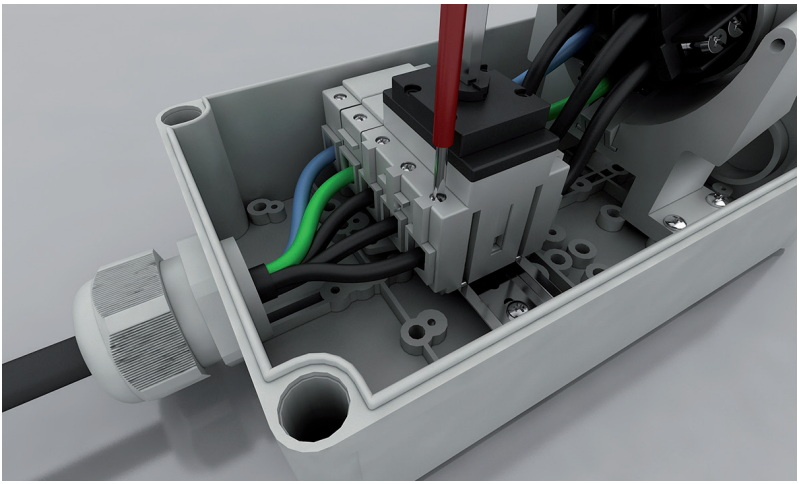
Proceed as follows:

1. Make sure that the cable is de-energised.

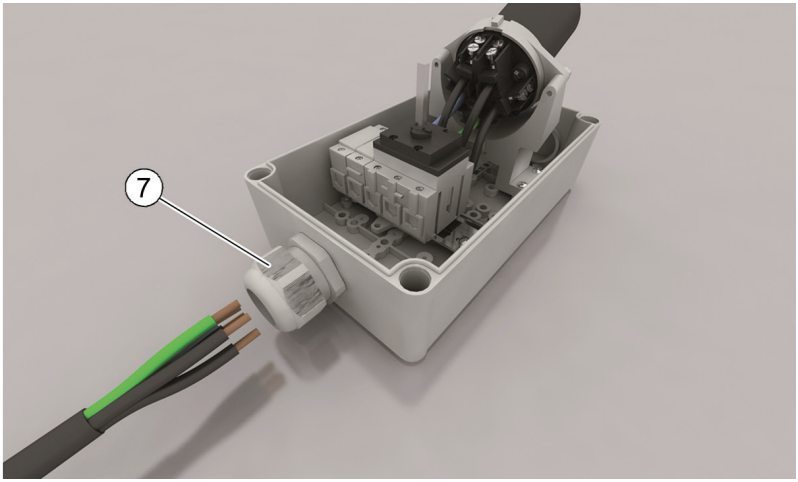
2. Loosen the four housing screws in order to open the housing.



3. Loosen the screws and pull out the individual conductors from the terminals.



4. Pull out the cable from the housing and out of the cable gland (7).



5. Fix the cover with screws to the housing.

7 Cleaning and care

It is recommended to clean the device as required. Use a dry cloth to clean the device. Use a wet cloth if the device is very dirty.

⚠ DANGER

Electrical voltage

The device contains parts that carry hazardous voltage that may be fatal.

1. Pull out the plugs to the loads before cleaning them.
2. Make sure that the plug covers are closed.
3. Never use steam or water jet cleaners.

NOTICE

Damage to the plastic parts.

Corrosive cleaning agents may attack or destroy the plastic parts.

Use only a cloth moistened with water for cleaning.

8 Decommissioning and disposal

Send the worn-out product for recycling or for proper disposal. Always make sure to observe and follow the local regulations.

The product should not be disposed of in household waste. Environmental damage and risk to personal health are avoided with proper disposal.

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