

EN

OPERATING MANUAL POWER DISTRIBUTOR





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You can download the current version of the operating manual and the EU declaration of conformity via the following link:



PV16



https://hub.trotec.com/?id=43726

PV32



https://hub.trotec.com/?id=43727

Notes regarding the operating manual

Symbols



Warning of electrical voltage

This symbol indicates dangers to the life and health of persons due to electrical voltage.



Warning

This signal word indicates a hazard with an average risk level which, if not avoided, can result in serious injury or death.



Caution

This signal word indicates a hazard with a low risk level which, if not avoided, can result in minor or moderate injury.

Note

This signal word indicates important information (e.g. material damage), but does not indicate hazards.



Info

Information marked with this symbol helps you to carry out your tasks quickly and safely.



Follow the manual

Information marked with this symbol indicates that the operating manual must be observed.

Safety

Read this manual carefully before starting or using the device. Always store the manual in the immediate vicinity of the device or its site of use.



Warning

Read all safety warnings and all instructions.

Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

- Do not use the device in potentially explosive rooms.
- Do not use the device in aggressive atmosphere.
- Do not use the device with wet or damp hands.
- Do not immerse the device in water.
- This appliance is not a toy. Keep away from children and animals. Do not leave the device unattended during operation.
- Check the device for potential damage before each application. Do not use any defective devices or device parts.
- Never use the device if electric cables or the power connection are damaged!



- Insert the CEE plug into a properly secured CEE socket.
- Observe the following safety rules when performing work on the electrical equipment: 1. De-energise, 2. Secure against restart, 3. Verify de-energised state, 4. Earth and short-circuit, 5. Cover or fence off live parts.
- Before carrying out maintenance, care or repair work on the device, remove the mains plug from the mains socket.
 Hold onto the mains plug while doing so.
- Do not under any circumstances use the device if you detect damages on the mains plug or power cable. If the supply cord is damaged, it must be replaced by the manufacturer, his service agent or similarly qualified persons in order to avoid a hazard. Defective power cables pose a serious health risk!
- Observe the storage and operating conditions as given in the Technical data chapter.
- Do not expose the device to heat or direct sunlight.
- Do not remove any safety signs, stickers or labels from the device. Keep all safety signs, stickers and labels in legible condition.
- Any operation other than as described in this manual is prohibited. Non-observance renders all claims for liability and guarantee null and void.

Intended use

The device serves as mobile power distributor.

The power distributor is designed for indoor and outdoor applications.

Only use power distributors matching the protection type required at the application site.

Never stack more than max. 4 devices on top of one another.

Improper use

Any unauthorised changes, modifications or alterations to the device are forbidden.

Do not use the device in potentially explosive areas. Do not place the device on wet or flooded ground.

Personnel qualifications

People who use this device must:

 have read and understood the operating manual, especially the Safety chapter.

Initial start-up and maintenance tasks which require the housing to be opened must only be carried out by qualified electricians.

Electrically skilled person

Electrically skilled personnel 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 ensure the functionality of electrical components and to identify possible hazards from electrical and electronic systems.

Residual risks



Warning of electrical voltage

Work on the electrical components must only be carried out by a qualified electrician!



Warning of electrical voltage

Before any work on the device, remove the mains plug from the mains socket!

Do not touch the mains plug with wet or damp hands. Hold onto the mains plug while pulling the power cable out of the mains socket.



Warning of electrical voltage

Have loose or defective mounting sockets replaced by a qualified electrician.



Warning of electrical voltage

Connection and extension lines must not be kinked, jammed or run over.



Warning

Covering the power distributor can lead to heat buildup within the housing possibly resulting in a fire. Never cover the power distributor. Do not place any objects on the power distributor.



Warning

Risk of suffocation!

Do not leave the packaging lying around. Children may use it as a dangerous toy.



Warning

The device is not a toy and does not belong in the hands of children.



Warning

Dangers can occur at the device when it is used by untrained people in an unprofessional or improper way! Observe the personnel qualifications!



Caution

Keep a sufficient distance from heat sources.

Note

To prevent damages to the device, do not expose it to extreme temperatures, extreme humidity or moisture.

Note

Do not use abrasive cleaners or solvents to clean the device.

Behaviour in the event of an emergency

- 1. In an emergency, disconnect the device from the mains feed-in:
 - Pull the mains plug.
- 2. Do not reconnect a defective device to the mains.



Information about the device

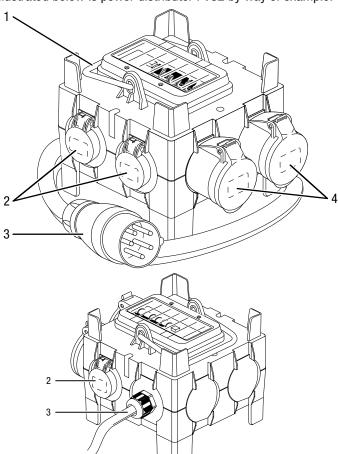
Device description

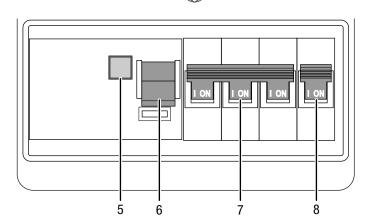
The device serves for the mobile distribution of electricity at varying application sites. It comes with the following device characteristics:

- Supply line of 2 m length with 5-pin CEE plug
- 2 CEE sockets of 400 V each and 4 safety sockets in case of the PV16 or 3 for the PV32
- Stackable, dust- and splash-proof housing which is characterized by a high (notched bar) impact strength, a high thermal stability, dielectric strength, weather and UV resistance, abrasion resistance and a good resistance to plenty of chemicals
- A foldable carrying handle facilitating transport
- A residual current device and 2 circuit breakers (PV32 only) ensuring the necessary safety

Device depiction

Illustrated below is power distributor PV32 by way of example.





No.	Designation	
1	Carrying handle	
2	230 V safety socket	
3	Supply line with 400 V CEE plug	
4	400 V CEE socket	
5	TEST button	
6	Residual current device	
7	1-pole circuit breaker (PV32 only)	
8	3-pole circuit breaker (PV32 only)	



Technical data

Parameter	PV16	PV32
Model	PV16	PV32
CEE sockets	2 x 16 A, 5-pin, 400 V	1 x 32 A, 5-pin, 400 V 1 x 16 A, 5-pin, 400 V
Safety sockets	4 pc.	3 pc.
Residual current device(s)	1 x 40 A, 4-pole, 30 mA (type A, 25 A (slow-blowing))	1 x 63 A, 4-pole, 30 mA (type A, 40 A (slow-blowing))
Circuit breaker(s)	-	1 x 16 A, 3-pole, type C 1 x 16 A, 1-pole, type C
Supply line	H07RN-F-5G2,5	H07RN-F-5G6
Plug of the supply line	CEE plug 16 A, 5-pin, 400 V	CEE plug 32 A, 5-pin, 400 V
Length of the supply line	2 m	2 m
Type of protection	IP 44	IP 44
Operation (temperature)	-25 °C to +35 °C	-25 °C to +35 °C
Storage (temperature)	-25 °C to +35 °C	-25 °C to +35 °C
Dimensions (length x width x height)	250 mm x 230 mm x 210 mm	250 mm x 230 mm x 210 mm
Weight (packaging excluded)	approx. 2.8 kg	approx. 4.1 kg

Transport and storage

Note

If you store or transport the device improperly, the device may be damaged.

Note the information regarding transport and storage of the device.

Transport

To make the device easier to transport, it is fitted with a carry handle.

Before transporting the device, observe the following:

• Insert the CEE plug of the supply line (3) into one of the two CEE sockets (4).

Storage

When the device is not being used, observe the following storage conditions:

- dry and protected from frost and heat
- protected from dust and direct sunlight
- with a cover to protect it from invasive dust, if necessary
- The storage temperature is the same as the range given in the Technical data chapter.



Start-up



Warning of electrical voltage

Work on the electrical components must only be carried out by a qualified electrician!



Warning of electrical voltage

Before any work on the device, remove the mains plug from the mains socket!

Do not touch the mains plug with wet or damp hands. Hold onto the mains plug while pulling the power cable out of the mains socket.

- Do not create tripping hazards when laying the power cable or other electric cables when positioning the device.
 If necessary, use cable bridges.
- Make sure that extension cables are unrolled completely.
- Do not cover the device.
- Do not place any further objects on the device.
- Insert the CEE plug into a properly secured socket.

Operation

Connecting the power distributor

- ✓ The residual current device (6) is set to the switch
 position ON.
- ✓ The 1-pole circuit breaker (7, PV32 only) is set to the switch
 position ON.
- ✓ The 3-pole circuit breaker (8, PV32 only) is set to the switch
 position ON.
- 1. Insert the CEE plug of the supply line (3) into a properly secured CEE socket provided with the fusing specified in the Technical data chapter.
- 2. Install the supply lines of the consumers to be connected. Do not create tripping hazards when laying the cables.
- Connect the consumers' supply lines to the power distributor. In doing so, make sure to observe the performance characteristics specified in the Technical data chapter.

Residual current device

The device is equipped with a residual current device (6) interrupting the power supply in case of a residual current of 30 mA (difference between the incoming currents on the 3 phases and the outgoing currents on the neutral conductor). The residual current device (6) serves for personal protection and fire prevention.

The residual current device (6) is tripped when one of the connected consumers causes the corresponding residual current.

If so, please proceed as follows:

- 1. Disconnect all consumers from the CEE (4) and safety sockets (2).
- 2. Open the protective cover above the residual current device.
- 3. Switch the residual current device (6) back to the switch position *ON*.
- 4. First insert the plug of one consumer into one of the sockets and wait for a brief period.
- 5. If the residual current device (6) did not trip, insert the next plug.
- Repeat this process until the residual current device (6) is tripped again, thus indicating the defective circuit / consumer.
- Disconnect this circuit / consumer from the power distributor.
- 8. Switch the residual current device (6) back to the switch position *ON*.
 - ⇒ Now you can use the power distributor again.
- Have the defective circuit / consumer checked by a qualified electrician or a specialist electrical company.

Circuit breakers (PV32 only)

The device is equipped with one 1-pole and one 3-pole circuit breaker (7, 8). Both protect the connected lines and consumers from overload and short circuit.

Please proceed as follows if one of the circuit breakers (7, 8) is tripped:

- 1. Disconnect the connected consumer(s) from the CEE (4) and safety sockets (2).
- 2. Open the protective cover above the circuit breakers.
- 3. Switch the tripped circuit breaker (7 or 8) to the switch position *ON*.
- 4. First insert the plug of one consumer into one of the corresponding sockets and wait for a brief period.
- 5. If the circuit breaker (7 or 8) did not trip, insert the next plug.
- 6. Repeat this process until the residual current device (7 or 8) is tripped again, thus indicating the defective circuit / consumer.
- 7. Disconnect this circuit / consumer from the power distributor.
- 8. Switch the circuit breaker (7 or 8) back to the switch position *ON*.
 - ⇒ Now you can use the power distributor again.
- 9. Have the defective circuit / consumer checked by a qualified electrician or a specialist electrical company.



Cleaning



Warning of electrical voltage

Before any work on the device, remove the mains plug from the mains socket!

Do not touch the mains plug with wet or damp hands. Hold onto the mains plug while pulling the power cable out of the mains socket.

Clean the device with a soft, damp and lint-free cloth. Ensure that no moisture enters the housing. Protect electrical components from moisture. Do not use any aggressive cleaning agents such as cleaning sprays, solvents, alcohol-based or abrasive cleaners to dampen the cloth.

Wipe the housing dry after cleaning.

Errors and faults

The device has been checked for proper functioning several times during production. If malfunctions occur nonetheless, check the device according to the following list.

- Check the cable and the CEE plug for damages.
- Check whether the CEE plug is inserted into a properly secured CEE socket.
- Check whether the residual current device has tripped and, if necessary, deactivate it as described in chapter Operation.
- Check whether the circuit breaker (PV32 only) has tripped and, if necessary, deactivate it as described in chapter Operation.

Maintenance

Visual inspection

Check the device for external damage before every start-up. Should you detect any damage at the device or its mains cable, have it fixed by a qualified electrician.

Regular inspections



Warning of electrical voltage

Work on the electrical components must only be carried out by a qualified electrician!

The device must be regularly checked by a qualified electrician for proper functioning and proper condition. If used in office spaces or similar ambient conditions, this inspection shall be carried out at least every 2 years. If used on construction and installation sites, the inspection shall be carried out every 3 months. If an error rate of < 2 % is reached, the inspection intervals may be extended to max. once per year.

Checking the residual current device



Info

Generally, the power supply of all consumers is interrupted for testing the residual current device.

Make sure that – when testing the residual current device – no currently required consumer is connected to the device.

The proper functioning of the residual current device (6) needs to be checked at intervals of approx. 3 months. To do so, please proceed as follows:

- 1. Press the *TEST* button (5) on the residual current device (6).
 - ⇒ The residual current device (6) should be tripped and change to the switch position *OFF*.
- 2. Switch the residual current device (6) back to the switch position *ON* and continue using the device as usual.
- 3. If the residual current device (6) did not trip, do not use the device any more Have the device checked by a specialist electrical company.

Disposal

The icon 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. You will find collection points for free return of waste electrical and electronic equipment in your vicinity. The addresses can be obtained from your municipality or local administration. For further return options provided by us please refer to our website https://de.trotec.com/shop/.

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.

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