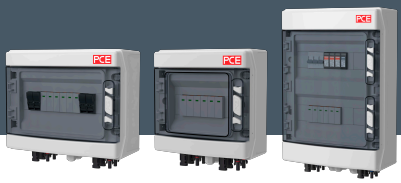
OPERATING MANUAL
PV DC SET



General information

This operating manual contains the information required for the correct installation and operation of DC PV sets. Compliance with the safety information guarantees the safe use of DC PV sets for people and the environment. Read the instructions carefully before starting any work. The manual must be read and understood by all professionals involved in the prefabrication process, operation and in all work related to DC PV sets.

The company PCE Polska Sp. z o.o. shall not be liable for any damage caused by:

- Disregard of this operating manual.
- Improper use.
- Work on the enclosure by unqualified personnel.
- Use of untested components from external suppliers.

Safety information

WARNING

Risk of electric shock due to live equipment!

Before any work is started, the following safety measures must be taken:

- Disconnect the voltage completely.
- Mark the point of switching off.
- Use proper protection to avoid switching on the voltage accidentally.
- Check that there is no voltage on the switched-off equipment and electrical installations.
- Ground the switched-off equipment and electrical installations.
- Cover or fence off adjacent live components.

WARNING

Risk of injury due to improper use in potentially explosive atmospheres!

DC PV sets are not designed for use in explosive atmospheres.

- Use DC PV sets in accordance with their intended use.

ATTENTION

Special operating conditions

Possible damage to the seal!

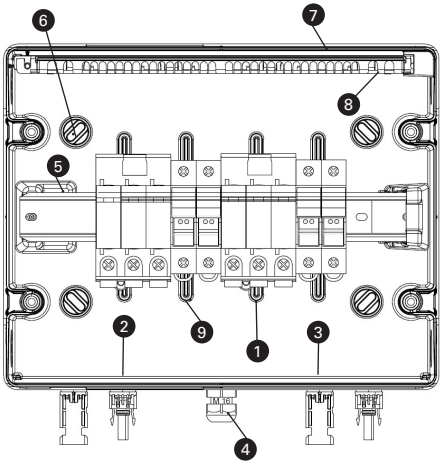
Operating at temperatures below freezing point as well as careless opening can damage the seal in the upper part of the housing and under the inspection window.

- Open the inspection window carefully.
- Replace the housing with damaged seals.

Liability held only by the manufacturer of the distribution sets

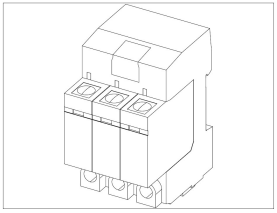
- Work on PV DC sets may only be carried out by qualified electrical technicians. Adequate training and instruction should be provided.
- All required documents should be provided to qualified electrical technicians.
- Appropriate functional personal protective equipment must be provided.
- National guidelines, safety regulations and applicable product standards must be observed. All tests and procedures described therein must be carried out.
- The equipotential bonding and connection of the protective conductor of the built-in appliances must be carried out correctly.
- Use the assembly components in accordance with their intended use, observe the documentation and the required tests.

Components

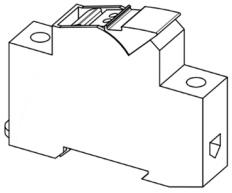


1. Surge protection
2. Photovoltaic connector*
3. Photovoltaic connector*
4. Grounding cable gland
5. DIN rail
6. Fixing points
7. Dashboard box
8. Grounding cable clamp
9. Short-circuit protection - optional equipment

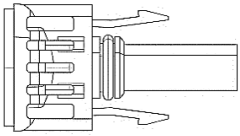
- **Surge arrester**



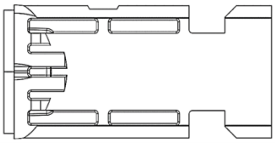
- **Short-circuit protection - optional equipment**



- **Photovoltaic connector type WM4 C, Weidmüller brand, for cables 4 mm2 to 6 mm2**



- **Photovoltaic connector type WM4 C, Weidmüller brand, for cables 4 mm2 to 6 mm2**

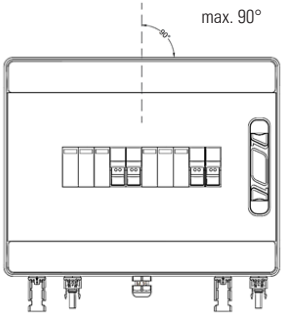


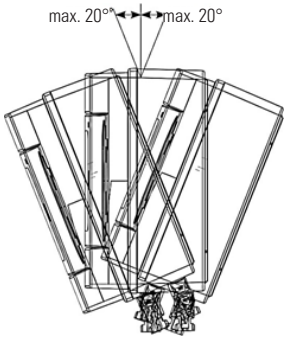
*Versions with cable glands instead of connectors are also available.

Assembly instructions

PV DC sets are suitable for protecting outdoor installations. For safe operation and to prevent potential damage, it is recommended that the following recommendations are followed:

- The installation location must not be in an environment where flammable liquids, gases or dust may be present.
- If possible, it is recommended to choose a mounting location where the product will be protected from rain and direct sunlight.
- Cables must be assembled and installed in such a way that they cannot be damaged by rodents.
- The enclosure is designed for wall mounting in a vertical orientation. The forward or backward tilt must not exceed 20°.





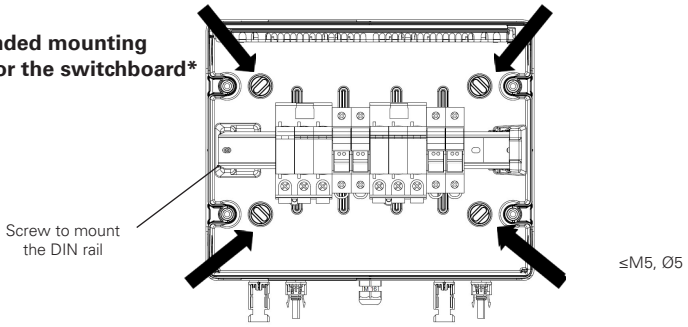
DANGER

Possible destruction of the product!

The described IP degree of protection is only valid if the enclosure is undamaged.

- Do not drill additional holes in the enclosure beyond the designated locations.
- Do not modify existing holes.
- Protect unused connectors with protective caps (not supplied) to prevent dust and moisture from entering.

Recommended mounting locations for the switchboard*



* In case of difficult access to the distribution box mounting locations, it is recommended to remove the DIN rail. To do this, unscrew the screw marked in the above drawing, and then slide the rail out of the holder in the direction of the unscrewed screw. Use a torque of 0.8Nm to screw it back in.



Connection instructions

Enclosure connection sequence:

1) Open the housing according to the IDE manufacturer's instructions:

WARNING

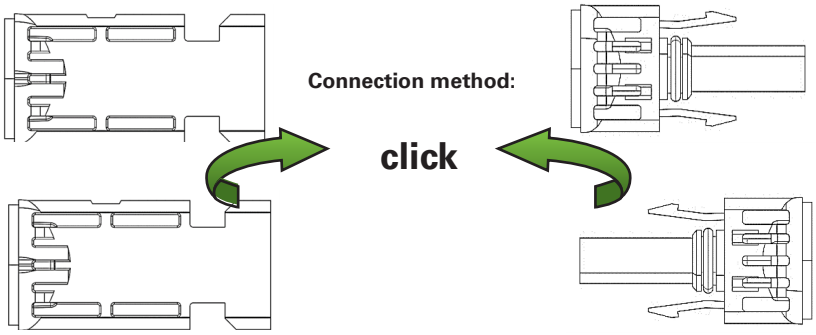
- Do not modify the internal connections as this may affect the operation of the equipment.

2) Unscrew the cable glands to route the cable through it and connect them to the grounding cable clamp.

3) Tighten the cable glands, enter again the cover and tighten screws. Ensure that the housing can be fully closed and is properly seated.

4) Connect the inputs and outputs to the appropriate connectors. For version with assembled cable glands instead of connectors follow according to instruction points no. 2 and no. 3 by connect the wires to appropriate clamp connectors of the set equipment.

- **Connectors for positive inputs and outputs are described as IN+/OUT+**
- **Connector for negative inputs and outputs are described as IN-/OUT-**



ATTENTION

Special operating conditions

- The operator must ensure that the product is not accessible to unauthorised persons.
- Do not connect PV connectors from different manufacturers.
- Local installation regulations must be observed
- Do not disconnect PV connectors under load.

Manufacturer:

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www.pce.pl

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We reserve the right to make changes in the interest of technical improvement as well as possible printing errors.