

StringConnectorBox SCB

Energy with a System



Training

Technology and Application

As part of the
support and sales staff

Solare Datensysteme GmbH

...by Markus Michelberger, KNUBIX GmbH

String Connection Box by

Structure

- Application Example
- Overview of the StringConnectorBox
- Cable Glands
- ComModul
- Warnings
- Questions

Application Example

33 strings on each inverter:

1. 33 strings : SCB12 = 2,75 SCBs
2. 33 strings : SCB16 = 2,06.. SCBs
3. => 3 x SCB12 voted with 11 strings

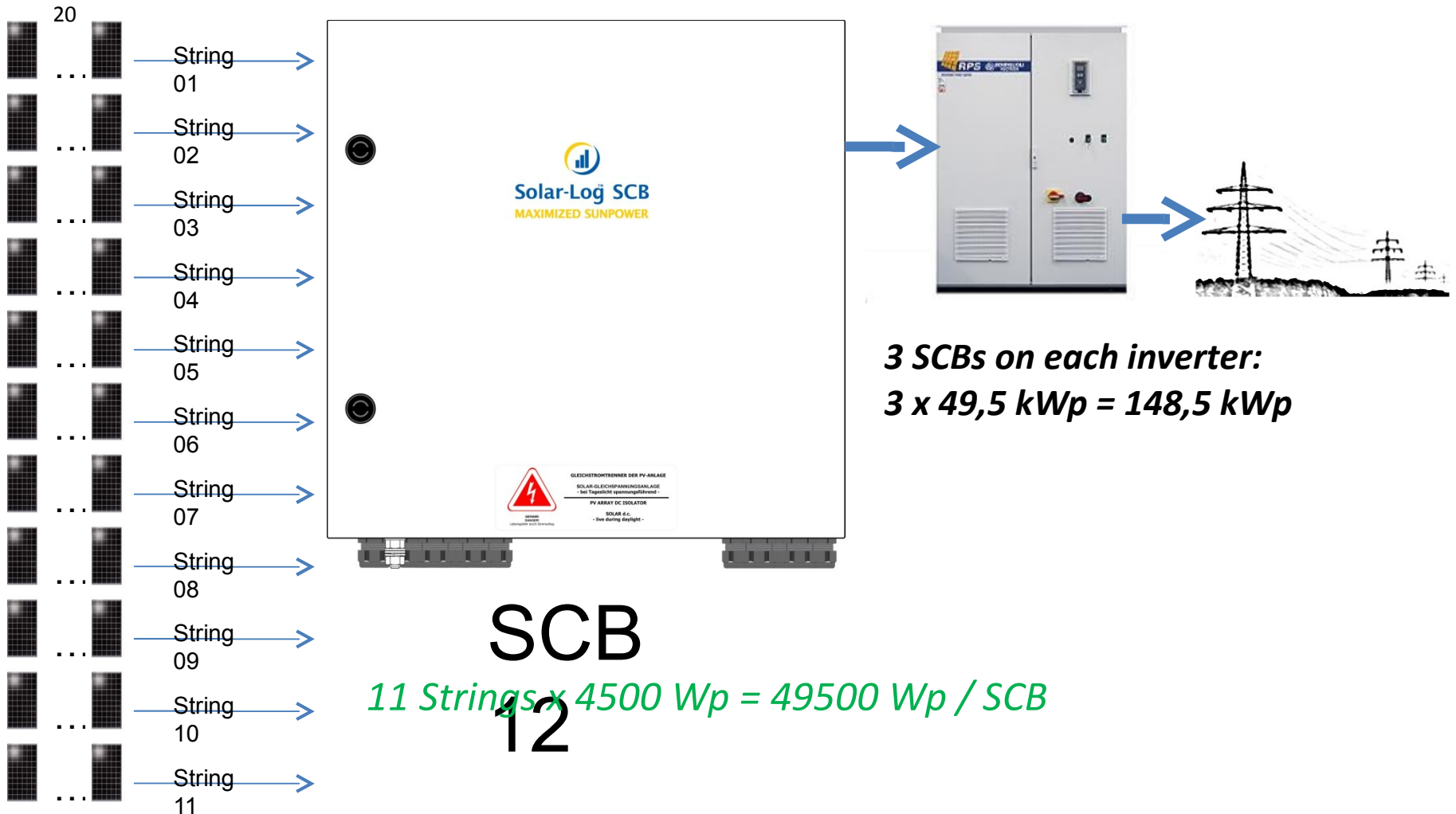
Moduldata (STC):

$$U_{oc} = 37,25 \text{ V} \times 20 \text{ modules} = \underline{745 \text{ V}} \text{ Open circuit voltage}$$

$$U_{mpp} = 29,29 \text{ V} \times 20 \text{ modules} = \underline{585,8 \text{ V}} \text{ Operating voltage}$$

$$I_{mpp} = \underline{7,68 \text{ A}} \text{ Operating current}$$

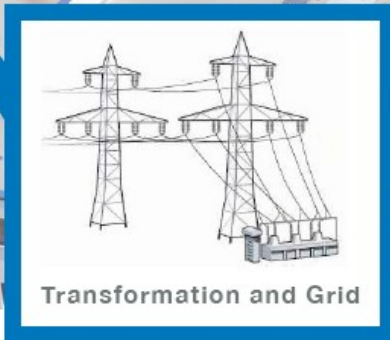
Application Example



Example realized : What is what?



Result:
~ 1,9 MWh/day



Overview of the SCB

Lightning and surge arrester, Typ I+II (B+C)

Moulded Case Circuit Breakers
1100 V, 160 A
IEC 60947-3

To inverter
M12 for
35 – 150 mm² (240)

Aluminum housing,
plastic-coated

Grounding:
Outside on M12 bolt
connection

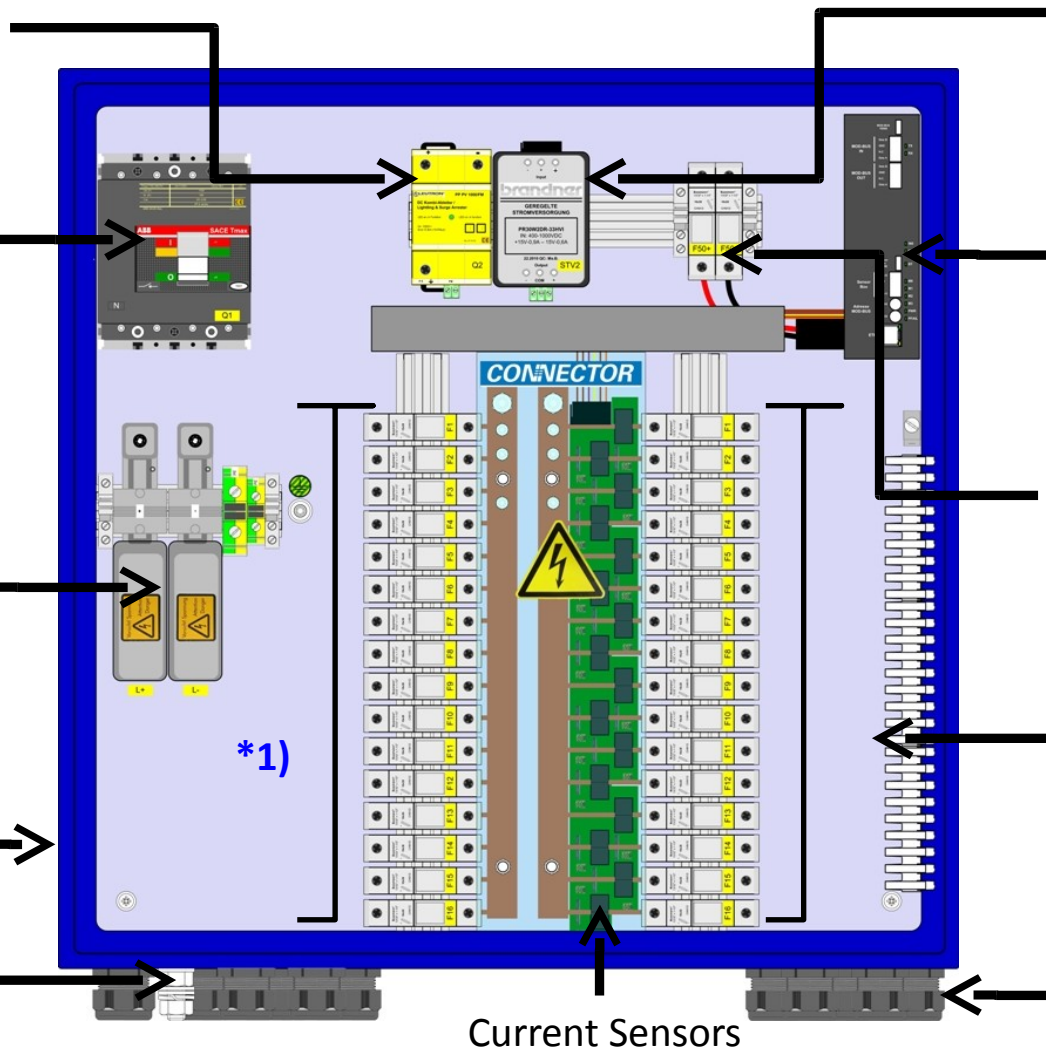
DC/DC Power Supply
Power supply directly
from the PV-generator

COMMODUL

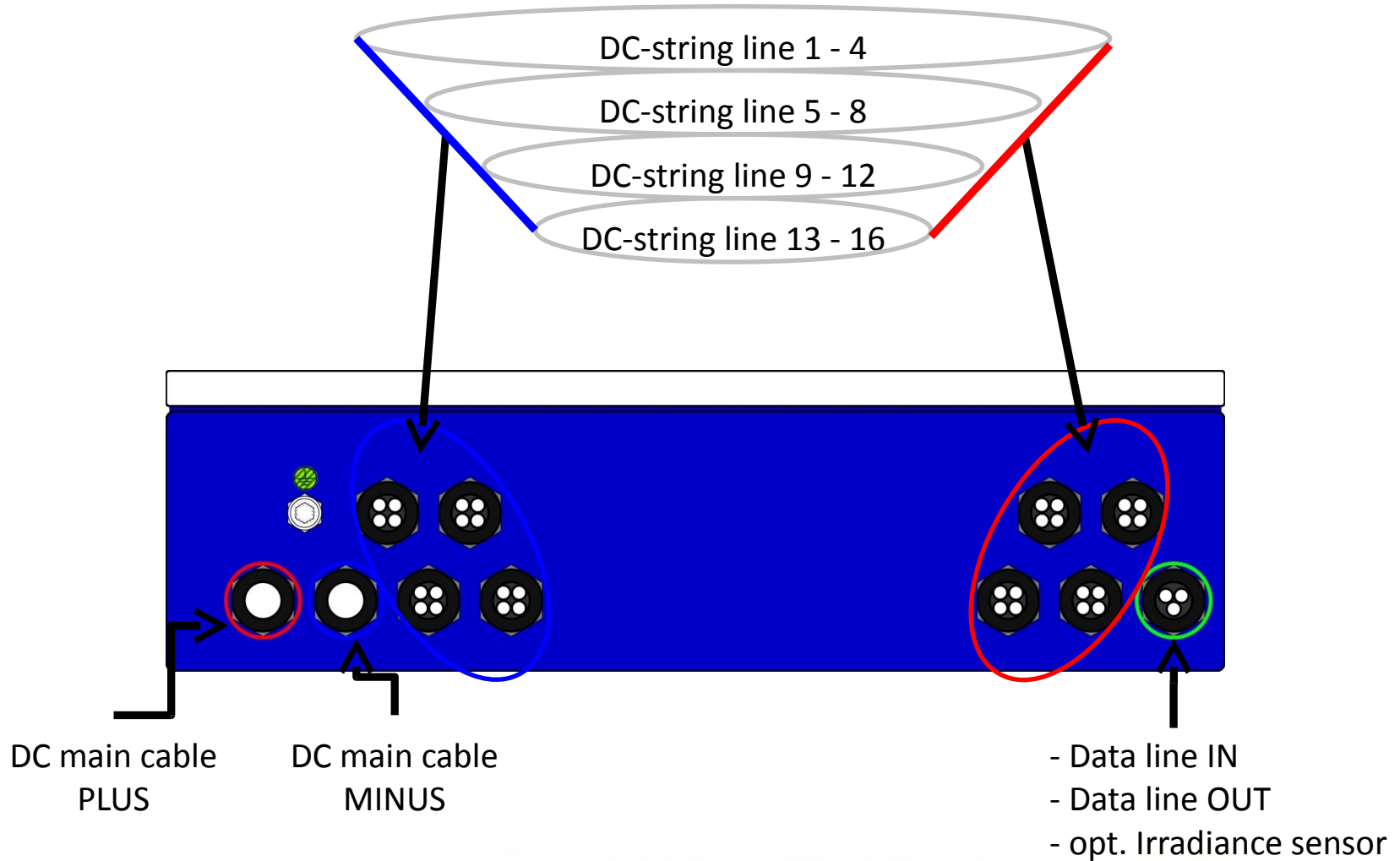
Fuse DC
voltage measurement

12 or 16 string
positive voltage
inputs
***1)** negative voltage

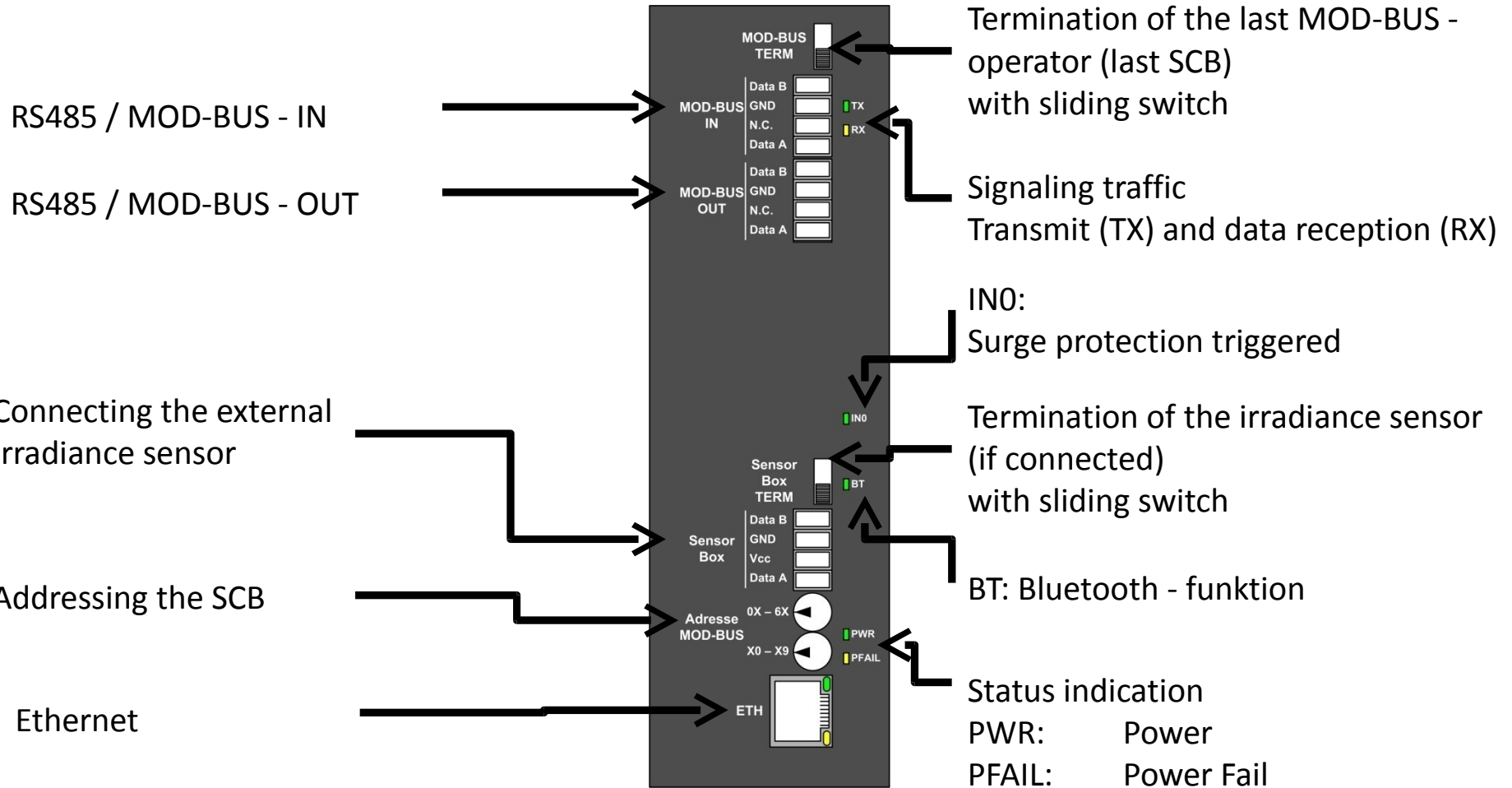
UV resistant cable
glands M40/M32



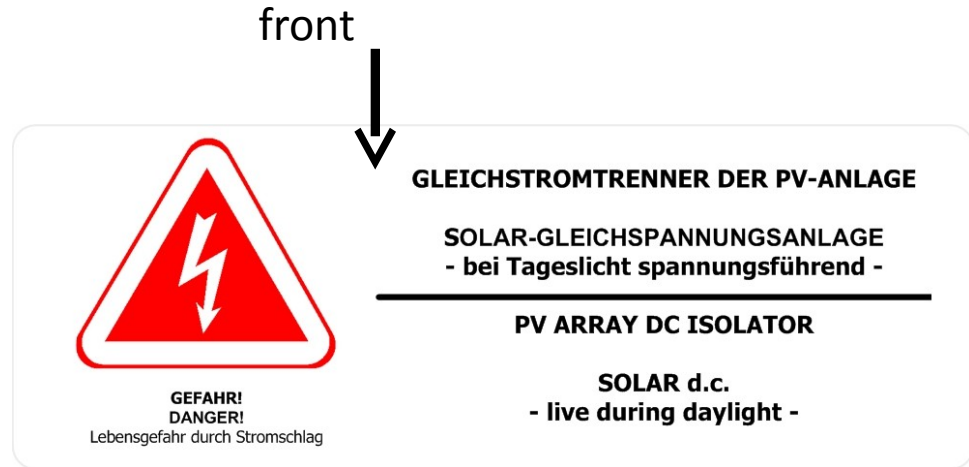
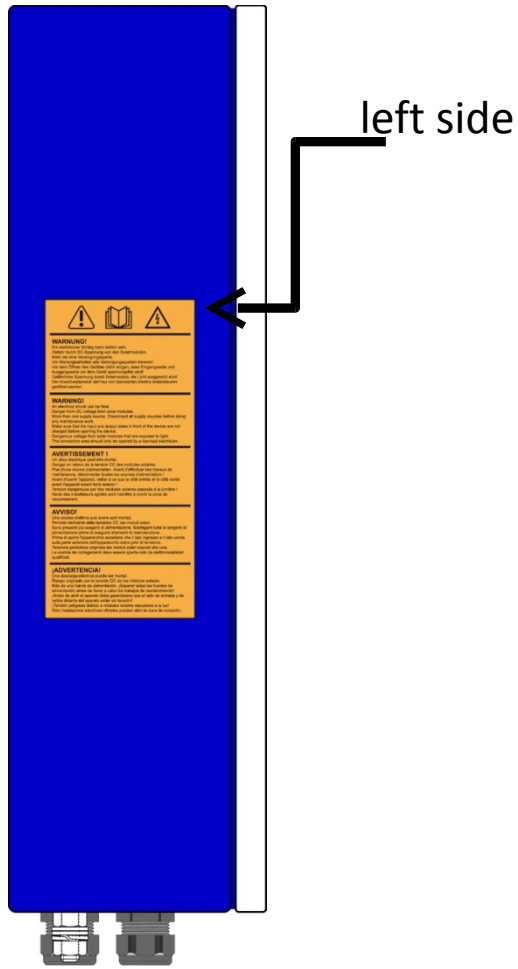
Cable Glands



ComModul



Warnings



Caption by:

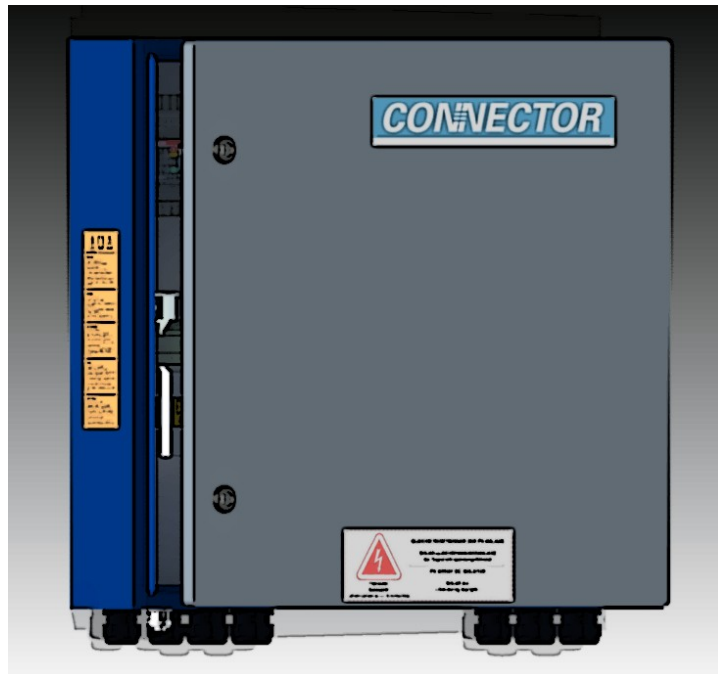
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Questions



Thank you for your attention!



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