Important instructions for planning and installation with BRC Optimizer M500

To correctly install the BRC Power Optimizers M500 and to avoid problems from the very beginning, please note the following instructions:

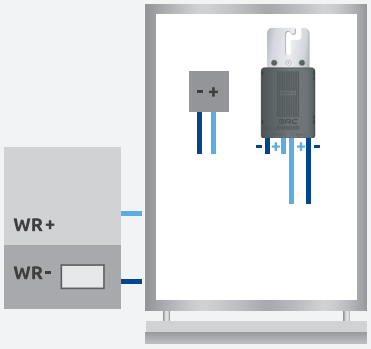
1. **Do not perform any short circuit tests in plants where Power Optimizer M500 are installed!** They might be damaged.

2. If **isolation measurements are performed in plants with Power Optimizer M500 installed**, please ensure that the measuring instrument **does not perform a short circuit test!** A simple isolation test without performing a short circuit test is possible. (Take care of separating the poles during the isolation test) The automatic function of some instruments also performs a short circuit test!

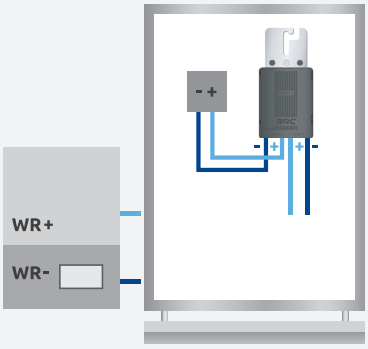
3. If an **inverter with a MPP input current (IMPP) of more than 15A** is used, it is not allowed to install the Power Optimizer M500 at every pv module. In this case it is only allowed to equip a maximum of 50% of all pv modules of each string with a Power Optimizer M500. You can check if this is necessary with our inverter checker: *https://brc-solar.de/en/power-optimizer-en/inverter-checker/*

4. **Do not use the Power Optimizer M500 if strings or pv modules are connected in parallel!** To avoid this situation, please connect all shaded pv modules to a separate string without a parallel connection. This string can then be equipped with the Power Optimizer M500. In case of any further questions regarding those cases, please contact the support of BRC Solar (*Tel.: +49 7243 924 1486 / E-Mail: support@brc-solar.de*).

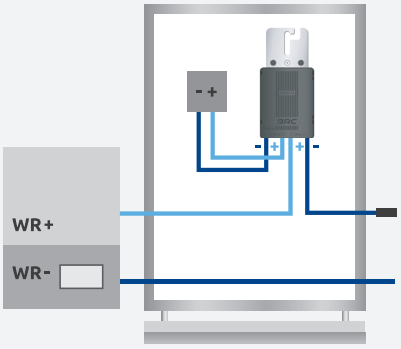
5. Always **connect the M500 Optimizer according to the following sequence:** First connect the short cables to the pv module, then connect the long cables to the string.



1 If the module is already connected on the string side, disconnect the connections from the neighbouring modules.



2 The short cables are connected to the PV module first.
Pay attention to the polarity.



3 The long cables are connected on the string side.
Pay attention to the polarity.

Note:
• PV testing equipment cannot measure the current in a string where every module is equipped with an optimizer. This is only possible by using a current clamp during operation.