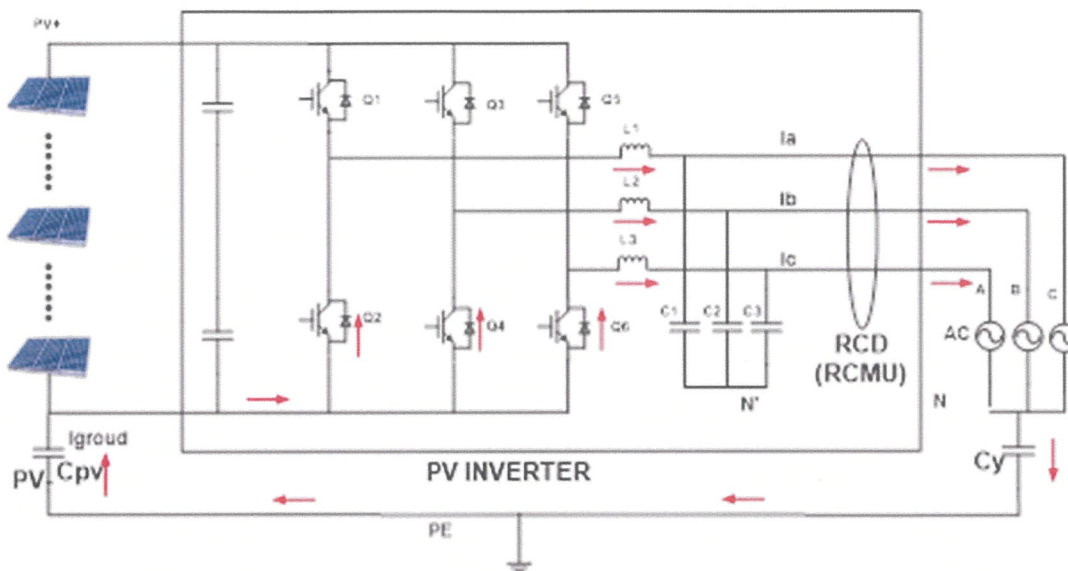


Confirmation Letter

RCMU function in an IT grid for DC faults



When there is a DC fault (PV+ to PE or PV- to PE) a current will flow through C_y to the inverter. This is the case because our inverter design is transformerless and the DC and AC side are not isolated. Therefore a DC fault will also be supplied by an AC current from the grid.

The RCMU will measure an unbalanced current and that will trigger the AC relays.

According to IEC62109-2:2011 the following current changes will trigger the RCMU:

Table 31 – Response time limits for sudden changes in residual current

Residual current sudden change	Max time to inverter disconnection from the mains
30 mA	0,3 s
60 mA	0,15 s
150 mA	0,04 s

NOTE These values of residual current and time are based on the RCD standard IEC 61008-1.

Before the feed in into the grid starts the inverter will perform an isolation measurement and after the





10.10.2022

feed in has started the continuous residual current monitoring will detect DC faults also in an IT grid. Therefore, Huawei can provide a constant monitoring of DC faults to ground.

On behalf of
Huawei Technologies Co., Ltd

