

RCD Selections for Growatt MAX

Residual Current Monitoring Device (RCMD)

Growatt MAX inverters integrated an all-current sensitive residual-current monitoring device (RCMD), the RCMD monitors AC and DC residual currents. The MAX inverter are certificated by testing according to VDE 0126-1-1 and IEC/EN 62109-2, for all inverters, sudden changes in residual current $\geq 30\text{mA}$ will cause inverter disconnect from grid, and for inverters $> 30\text{kVA}$ the maximum 10mA per kVA of rated continuous output power is the limit value.

External RCD device

An external RCD is required in some countries, Growatt suggest to use a Type A RCD and the operating current must bigger than 10mA/kVA of continuous output power.

Refer to below table for MAX series:

| Inverter Model | Minimum RCD value |
|------------------|-------------------|
| MAX 50KTL3 LV | 600mA |
| MAX 60KTL3 LV/MV | 700mA |
| MAX 70KTL3 LV/MV | 800mA |
| MAX 80KTL3 LV/MV | 900mA |

Note:

For Multiple inverters, one RCD for each inverter is required.

An RCD of 300mA may easy trip due to capacitive leakage currents occurring during operation.