

Integrated **RCMU** Functionality

Application Note

KACO Inverter

blueplanet 15.0-20.0 TL3

blueplanet 50.0 TL3

blueplanet 60.0 TL3

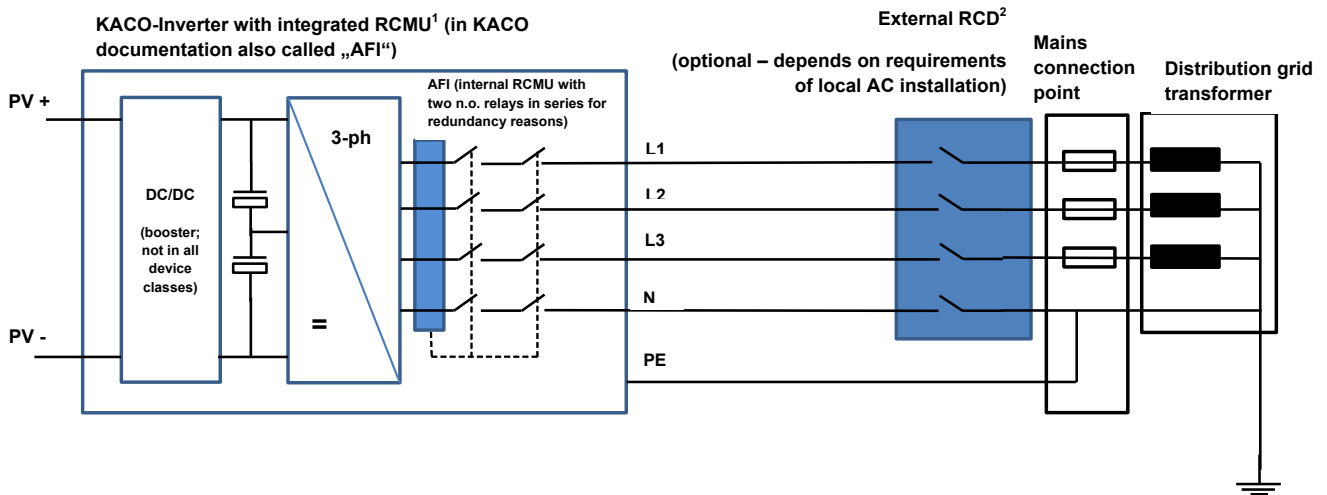
Powador 30.0-72.0 TL3

1 Purpose and Scope

This document describes the functionality and characteristic of the inverter integrated RCMU (in KACO documentation also called "AFI") on a glance.

2 Description of integrated RCMU in KACO Inverters

2.1 Wiring diagram (assumed grid configuration: TN-C-S)



¹ RCMU: Residual Current Monitoring Unit (Modul)

² RCD: Residual Current protective Device

2.2 Characteristics according IEC62109-2; Chapter 4.8.3.5

2.2.1 Continuous residual current

Max. value (rms) for continuous residual current	Max. time to inverter disconnection from the mains
Inverter Power Rating \leq 30 kVA: 300 mA	Within 0.3 seconds
Inverter Power Rating $>$ 30 kVA: 10 mA per kVA (e.g. Powador 60.0 TL3 \rightarrow 49,9 kVA \rightarrow 500 mA)	Within 0.3 seconds

2.2.2 Sudden changes in residual current

Residual current, sudden change	Max. time to inverter disconnection from the mains
30 mA	Within 0.3 seconds
60 mA	Within 0.15 seconds
150 mA	Within 0.04 seconds

