Deutsche Akkreditierungsstelle D-PL-12089-01-00

TEST REPORT

IEC/EN 60529
Degree of protection provided by enclosure (IP Code)

Report Number. ..... :	22PP384-03_0
Date of issue ..... :	2024-01-04
Total number of pages	17

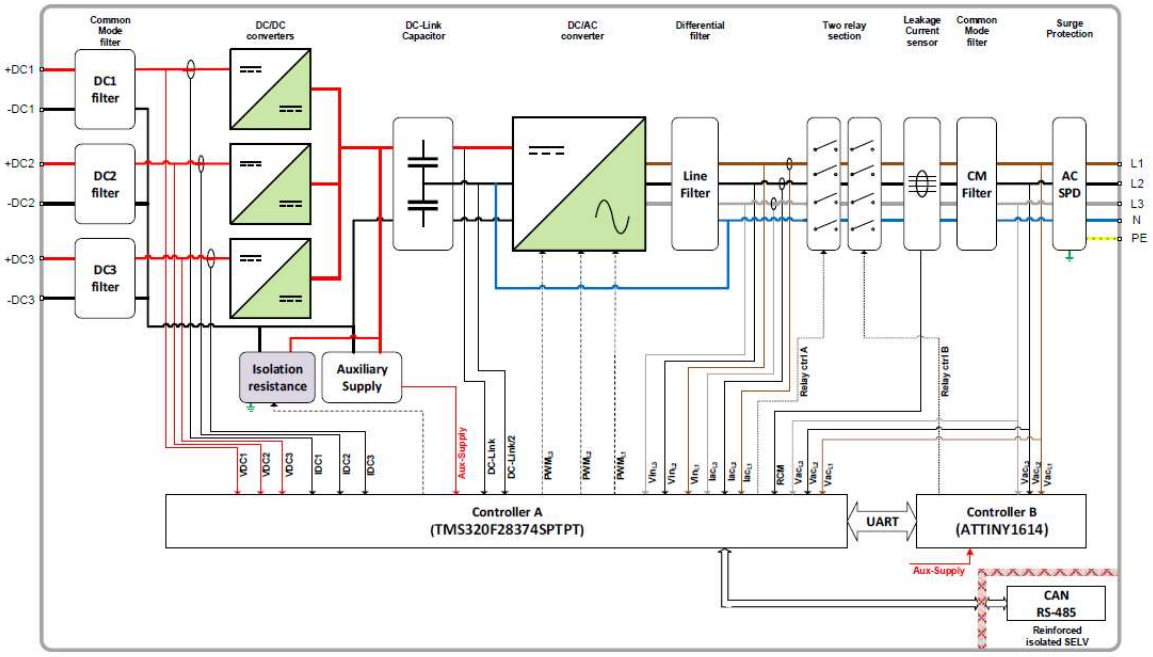
Tested by ..... :	Javier Jaime Solis Leon
(printed name and signature) ..... :	J. Jaime Solis Leon - Digitally signed | see http://ca.kiwa-deutschland.de for more details -
Approved by ..... :	Nadiya Eichberg
(printed name and signature) ..... :	Nadiya Eichberg - Digitally signed | see http://ca.kiwa-deutschland.de for more details -
Testing Laboratory ..... :	Kiwa Primara GmbH
Address ..... :	Gewerbestrasse 28, 87600 Kaufbeuren; Germany
Applicant's name ..... :	RE Convert
Address ..... :	Pascalbaan 2 3439 MP Nieuwegein Netherlands
Test specification:	
Standard ..... :	EN 60529:1991 + A1:2000 + A2:2013 IEC 60529:1989 + A1:1999 + A2:2013
Test procedure ..... :	IP Testing for IP65
Non-standard test method..... :	N/A
Test item description ..... :	Multipurpose Inverter
Trade Mark ..... :	InREC-36
Manufacturer ..... :	Connect Group Nederland BV De Run 4281, 5503 LM Veldhoven, Netherlands
Model/Type reference ..... :	InREC-36
Ratings ..... :	A.C. Port quantities: Voltage range: 230V -10%/+10% Maximum continuous current 55A Nominal frequency: 50Hz Maximum power: 30kVA D.C. port quantities: Voltage range: 150V to 500V Maximum continuous current (33,3 per input): 100A

General Product Information:

The power conversion equipment (PCE) is a bidirectional DC-AC converter, comprised of a DC/DC and a DC/AC with two operation modes grid-connected or stand-alone (island operation). The PCE does not provide galvanic isolation between the DC and AC. Reinforced insulation between the DC and AC is provided by redundant relays on all AC lines (phases and neutral) conductors.

There are two controllers in the PCE, the main (controller A) and the redundant controller (controller B). Controller A performs measurements (DC and AC voltages, currents, residual current monitoring, isolation resistance and temperatures). Controller A also controls the DC/DC and DC/AC converter, fans and checks controller B status. While controller B, measures AC voltage and frequency and checks controller A status.

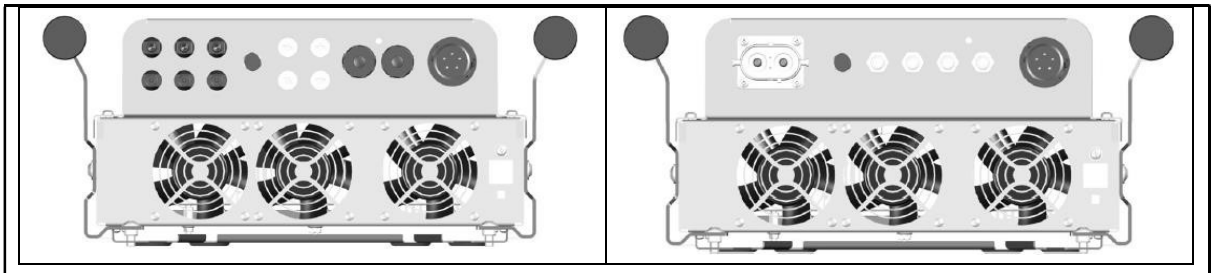
Both controllers are needed to operate the relay section on the output. Consequently, in any fault situation involving one control circuit or one relay, there will still be at least one relay always providing basic isolation. This construction achieves the single fault tolerant requirements.



Model differences

There are two different configurations for the device, the InREC-36-HA-100 and the InREC-36-HA-200. These two configurations have identical specifications, the only difference is in the number of DC inputs and communication ports. The InREC-36-HA-100 has three DC inputs and RJ45 panel mounted feedthrough connectors for communication, while the InREC-36-HA-200 has a single DC input and M12 connectors for communications.

InREC-36-HA-100	InREC-36-HA-200



Information about IP Testing:

The first characteristic numeral indicated the degree of protection against ingress of solid foreign objects.

The second characteristic numeral indicates the degree of protection against harmful effect of ingress of water