Statement -
Use of DC circuit breakers in Australia

Manufacturer: ABB Oy
Address: P.O Box 184, FIN-00381 Helsinki, Finland.

herewith state under our sole responsibility that the transformerless solar inverter series for photovoltaic power systems with type marking:


to which this statement relates safely disconnects the neutral from the DC side of the inverter under the first fault condition (such as earth faults) and is in conformity with applicable requirements according to standards VDE 0126-1-1 (Automatic disconnection device between a generator and the public low-voltage grid) and IEC62109-2 (Safety of power converters for use in photovoltaic power systems – Part 2: Particular requirements for inverters), provided that the equipment is selected, installed and used according to our instructions.

Instructions for safety, installation, operation and maintenance are according to the product documentation.

Particularly this statement refers to document ‘Technical Info – PV Isolation, October 2010 UPDATED’ published by Australian Clean Energy Council. The document makes following statement regarding the use of DC breakers with non-isolated (transformerless) inverters:

’If an installer is confident that the inverter they install does physically disconnect the neutral from the d.c. side of the inverter then they must obtain a written statement from the manufacturer that the inverter safely disconnects as soon as a PV earth fault occurs. The installer could then rate the d.c. isolation in each conductor at 0.6 x Voc and use the statement as the evidence of why they have chosen to do so.’

Helsinki, 2012-02-16

Hannu Haapaniemi
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