

SMA Australia Pty. Ltd.

67 Epping Road, North Ryde, NSW 2113

PO Box 645, North Ryde BC, NSW 1670

Tel: +61 2 9491 4200

Fax: +61 2 9491 4290

info@SMA-Australia.com.au

www.SMA-Australia.com.au



Declaration – Use of DC-breakers with SMA transformerless PV inverters

In an updated version of the October 2010 Clean Energy Council (CEC) Tech Info, the CEC has included a description of how to deal with circuit breaker sizing with respect to Transformerless (TL) (non-galvanically-isolated) inverters on page three of the document.

The CEC Tech Info suggests that:

“If an installer is confident that the inverter they install does physically disconnect the neutral from the DC 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 can then rate the DC isolation in each conductor at $0.6 \times V_{oc}$ and use the statement as the evidence of why they have chosen to do so.”

Thus, with regards to the use of transformerless (non-galvanically-isolated) inverters for grid connected solar PV Systems in Australia, SMA hereby declares that all SMA manufactured TL inverters disconnect the neutral from the DC side of the inverter under the first fault condition.

Conclusively, please use the SMA documentation entitled ‘Increased requirements on external DC-breakers for transformerless PV inverters in Australia’ as the necessary evidence to suggest why you have chosen to use a DC isolation device which is rated at $0.6 \times \text{System-Voc/pole}$ instead of the previously suggested $1.2 \times \text{System-Voc/pole}$. The document is available for download on SMA-Australia.com.au.