

28 June 2019

Manufacturer Declaration
AS/NZS 5033:2014 Amd 2 Compliant Load Break Disconnecter

This letter is to declare that the following Redback Technologies products which include an integrated PV Disconnecter comply to AS/NZS 5033:2014 including Amendments 2 published in 2018:

SH5000 Smart Hybrid Inverter

The disconnecter complies with the requirements for a disconnecting device:

- The disconnecter is installed with the balance of systems below the PCE. The enclosure is suitably rated for exposed to sunlight outdoor installations as per clause 4.3.3.5.
- The disconnecter disconnects all poles of the PV array and is enclosed in a metal shrouding which can't be removed without a tool. When the disconnecter is in the off position, both the positive and negative circuits of the array are isolated from the PCE and inverter maintenance or replacement of the PCE component is possible without risk of electrical hazards (clause 4.4.1.2 and 4.3.5.1)
- The disconnecter in accordance with clause 4.3.5.2:
 - o is rated to interrupt the full load and prospective fault currents from the PV array and any other connected power sources such as batteries, generators and the grid if present;

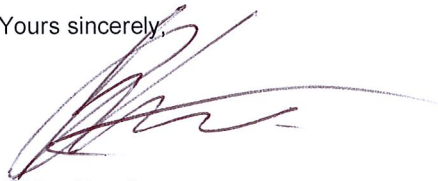
Ue	Ie	Ambient Temperature Range
1100 V	5 A	-5°C to +70°C
1000 V	8 A	-5°C to +70°C
800 V	12.5 A	-5°C to +70°C

- o interrupts all live conductors simultaneously;
- o is capable of being secured in the open position;
- o has an independent manual operation;
- o has one pole per polarity;
- o is rated for DC use;
- o not polarity sensitive;
- o $I_{the} = 50A$
- The disconnecter is certified to AS 60947.3:2018 and AS/NZS IEC 60947.1 and has a utilization category of DC-PV2 (clauses 4.3.5.2)

Since the PV disconnecter is integral to the inverter balance of systems, according to clause 4.4.1.4 there is no need install an additional DC disconnecter between the PV array and the inverter.

All works must be carried out by a qualified electrician as per the procedures detailed in the relevant Redback Technologies manual and comply with safe work practices.

Yours sincerely,


Adrian Knack
Director of Engineering