

Number	13050088712	Replaces	N.a.
Issued	07-11-2013	First issued on	N.a.
Valid till	N.a.	Scope/NACE	N.a.

Declaration positive test result

Herewith KIWA Nederland B.V. declares,

that the junction box repair-kit from New Energy Systems Services (type reference TCF130010): to repair the Solexus junction boxes of Scheuten Solar modules, is tested by KIWA Nederland B.V. based on a test program that is tuned and agreed by the Dutch authorities (see nVWA website as given below *).

This test program is derived from the existing standards, EN 50548 and EN 61730-2. This test program is an addition to these standards and has not the intention to cover these standards. As such, the test program focuses on the repair method only.

The original junction box has been tested and certified by TÜV Rheinland according to DIN VDE 0126-5:2008 (certificate number 60026366 and report numbers 21141229-001 / -002 / -003).

The test program consists of:

1. Cycling test panel in combination with the junction box, max current of 9 Amps.
2. Temperature shock test, quick temperature cycling between -25°C and 90°C.
3. Temperature test to determine possible cold Flow situation.
4. Bypass diode thermal test.
5. Bypass diode thermal test one diode disconnected.
6. IP 65 test (according to IEC 60529)
7. Flexing test soldered wire in junction box 40.000 times.
8. Temperature development test in PCB tracks at rated current.

On the repair kit with the modified MC4 connector, the above mentioned tests have been successfully completed.

Kiwa test report, number: 13050088712, dated November 2013.

*) <http://www.vwa.nl/onderwerpen/meest-bezocht-a-z/dossier/zonnepanelen/nieuwsoverzicht/nieuwsbericht/2037221/reparatie-brandgevaarlijke-scheuten-solar-zonnepanelen-nu-moqelijk>

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