



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx DEK 13.0030 Issue No: 0 Certificate history:
Issue No. 0 (2015-05-22)

Status: **Current** Page 1 of 3

Date of Issue: **2015-05-22**

Applicant: **Swift Energy Sdn Bhd**
Lot 48521 (PT 25145) Batu 6
Off Jalan Bukit Kamuning, Section 34,
40470 Shah Alam, Selangor
Malaysia

Equipment: **Solar Module Type SM090EX**
Optional accessory:

Type of Protection: **Ex e mb**

Marking: Ex e mb IIC T4 Gb

*Approved for issue on behalf of the IECEx
Certification Body:*

R. Schuller

Position:

Certification Manager

*Signature:
(for printed version)*

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

DEKRA Certification B.V.
Meander 1051,
6825 MJ Arnhem
The Netherlands





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Manufacturer: **Swift Energy Sdn Bhd**
Lot 48521 (PT 25145) Batu 6
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40470 Shah Alam, Selangor
Malaysia

Additional Manufacturing
location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

| | |
|---|--|
| IEC 60079-0 : 2007-10 Edition:5 | Explosive atmospheres - Part 0:Equipment - General requirements |
| IEC 60079-18 : 2009 Edition:3 | Explosive atmospheres Part 18: Equipment protection by encapsulation "m" |
| IEC 60079-7 : 2006-07 Edition:4 | Explosive atmospheres - Part 7: Equipment protection by increased safety "e" |

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[NL/DEK/ExTR11.0024/01](#)

Quality Assessment Report:

[NL/DEK/QAR11.0005/03](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Solar Module Type SM090Ex contains 4 x 9 high efficiency series connected solar cells, a junction box in type of protection increased safety "e", a partly encapsulated terminal block and an electronics assembly. The Solar Module may be connected as stated below. Ambient temperature range -20 °C to +55 °C.

Electrical data Output Rating: max. 30 V, 90 W Max. System operation voltage: 275 V

| Connection of the Solar Module | Maximum output rating of the junction box |
|----------------------------------|---|
| 2 Modules in series | 48 V, 200 W |
| 2 Modules parallel | 30 V, 200 W |
| 2 Modules in series / 2 parallel | 48 V, 400 W |
| 2 Modules in series / 3 parallel | 48 V, 600 W |

CONDITIONS OF CERTIFICATION: NO