

# TYPE EXAMINATION CERTIFICATE



[1]

[2]

**Component intended for use on/in Equipment or Protective System  
Intended for use in Potentially Explosive Atmospheres  
Directive 2014/34/EU**

[3]

Type Examination Certificate Number: **DEMKO 15 ATEX 1632U Rev. 1**

[4]

Component: **Low Power AC Component Fans, Model CF4113H, CF4113M, CF4113L Series**

[5]

Manufacturer: **Sunonwealth Electric Machine Industry Co. Ltd.**

[6]

Address: **No. 30 Ln. 296 Xinya Rd, Qianzhen Dist., Kaohsiung, 806 Taiwan**

[7]

This Component and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8]

UL International Demko A/S certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of components intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of 26 February 2014.

The examination and test results are recorded in confidential report number: **4787826970**

[9]

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0:2012+A11:2013**

**EN 60079-15:2010**

except in respect of those requirements listed at item 18 of the Schedule.

[10]

The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

[11]

This Type Examination Certificate relates only to the design of the specified component, and not to specific items of component subsequently manufactured.

[12]

The marking of the component shall include the following:

 **II 3 G Ex nA IIC Gc**

## Certification Manager

Jan-Erik Storgaard

This is to certify that the sample(s) of the Component described herein ("Certified Component") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the component sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the component. The Manufacturer are solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

**Date of issue:** 2016-03-01

**Re-issued:** 2017-02-21

## Certification Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark  
Tel. +45 44 85 65 65, [info.dk@ul.com](mailto:info.dk@ul.com), [www.ul.com](http://www.ul.com)



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[14]

## Schedule TYPE EXAMINATION CERTIFICATE No. DEMKO 15 ATEX 1632U Rev. 1

[15]

Description of Component:

The devices are Low Power AC Component Fans, Model CF4113H, CF4113M, CF4113L followed by S, B or V, followed by T or L, followed by (Y), followed by A, followed by B, C, D, E or F, and followed by D, where (Y) stands for 30 variables alphanumeric characters. They are open type, low power AC component fans with brushless, single-phase thermally protected motor and intended for use in industrial application. All circuits were completely encapsulated in suitable compound and the devices are intended for installation into an end-user supplied enclosure that utilizes a tool removable door or cover.

Nomenclature:

|        |    |     |    |     |   |    |   |
|--------|----|-----|----|-----|---|----|---|
| CF4113 | H  | B   | L  | (Y) | A | B  | D |
| I      | II | III | IV | V   |   | VI |   |

- I. Model Designation:  
CF4113
- II. Speed:  
H: High speed  
M: Mid speed  
L: Low speed
- III. Bearing:  
S: Sleeve  
B: Ball  
V: VAPO
- IV. Wiring Method:  
T: Terminal  
L: Lead wire
- V. Customer Code:  
“(Y)” stands for 30 variables alphanumeric characters
- VI. Function Code:  
B, C, D, E or F: Represent encapsulated in compound.

Electrical data

| Models         | Electrical Rating                                  |
|----------------|--|
| CF4113H Series | Input: 100 VAC, 50/60 Hz, 240 VAC, 50/60 Hz, 5.1 W |
| CF4113M Series | Input: 100 VAC, 50/60 Hz, 240 VAC, 50/60 Hz, 3.4 W |
| CF4113L Series | Input: 100 VAC, 50/60 Hz, 240 VAC, 50/60 Hz, 1.8 W |

Routine tests:

No routine tests are necessary.

[16]

Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [ 8 ] on page 1 of this Type Examination Certificate.

[17]

Schedule of Limitations:

- The devices shall be installed in an enclosure that provides a degree of protection not less than IP 54 in accordance with EN 60079-15 or the device must be evaluated as part of end –product evaluation.
- The devices shall only be used in an area of not more than pollution degree 2, as defined in EN 60664-1.
- Transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage value at the supply terminal to the devices.
- The devices are for use in -40°C to 70°C. During temperature test, the highest measured temperature within device was 91.2°C at 70°C surrounding air temperature.
- The internal and external grounding shall be provided by end-product.

[18]

Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

The trademark **SUNON** will be used as the company identifier on the marking label.