





## Ośrodek Badań, Atestacji i Certyfikacji Sp. z o.o. 44-121 Gliwice, ul. Łabędzka 21

#### TYPE EXAMINATION CERTIFICATE (1)

(2) Equipment, components and protective systems intended for use in potentially explosive atmospheres. Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014.

(3) Type examination certificate No: OBAC 23 ATEX 0234X, Issue 0

(4) Product:

Fan Unit SDS-M0440/SDS-M0450

(5) Manufacturer:

safetec Brandes und Niehoff GmbH

(6) Address:

Kringelsburg 2a, 21379 Scharnebeck, Germany

- (7) This equipment, product or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) Ośrodek Badań, Atestacji i Certyfikacji OBAC Sp. z o.o. (The Institute for Research and Certification "OBAC" Ltd) certifies that this equipment, component or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment, component or protective systems intended for use in potentially explosive atmospheres given in Annex II to the European Council Directive 2014/34/EU.

The examination and test results and the list of agreed technical documentation are recorded in the confidential Report no OBAC/22/ATEX/0234.

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

EN ISO 80079-36:2016

EN ISO 80079-37:2016

EN 14986:2017

Other standards: IACS UR-F29 Rev.6

- (10) If the sign "X" is placed after the certificate number, it indicates that the product concerned is subject to specific conditions of use specified in the schedule to this certificate.
- (11) This certificate is valid from 31.05.2023 until 30.05.2028 and relates only to the design, assessment and tests of the specified equipment according to the Directive 2014/34/EU. The certificate does not apply to further requirements of the Directive relating to the manufacture and placing on the market of this equipment.
- (12) The marking of the equipment, component or protective system must include the following:

 $-25^{\circ}C < T_{amb.} < +55^{\circ}C$ 

II 2/- G Ex h IIC T6 Gb/ - -2:
where zone 1 (2G) is present only inside the spiral body of the fans.

Gliwice, 31 May 2023.

Piotr Tarnawski M. Com.

Head of Certification Body







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(13)

### **SCHEDULE**

(14)

to the Type Examination Certificate No. OBAC 23 ATEX 0234X, Issue 0

#### (15) Ex Product description:

Fan assembly SDS-M0440/SDS-M0450 is intended for taking (extracting) air samples from ship's holds and pump them to the smoke detection panel.

After passing through the smoke detection panel, the air sample is discharged outside.

The fan assembly is built of two fans, consisting of one rotor and one electric motor each. The rotors of both fans are located inside a spiral body, which also acts as the support frame of the assembly, equipped with vibration dampers.

The fans are automatically activated at regular intervals by the smoke detection system, with only one fan normally running. If one fan fails, the smoke detection system will switch the other fan to system standby automatically. The supply and exhaust air connections are located at the top of the fan assembly.

#### Marking:

#### Fan Unit SDS-M0440/SDS-M0450

#### Fan Unit

Fan type in the assembly:

- SDS02.440, connection diameter φ75 mm
- SDS02.442, connection diameter \$49 mm

Fan type in the assembly:

- SDS02.450, connection diameter φ89 mm

#### Rated data:

Supply voltage	220VAC / 230VAC
Supply frequency	50Hz / 60Hz
Rotation speed	2790min <sup>-1</sup> / 3330min <sup>-1</sup>
Drive power	230 V: 510 W (50 Hz) / 630 W (60 Hz)
Degree of protection	IP54
Impact resistance of the spiral body	0,7m/1kg
of the rotors for group II	
Dimensions	830 x 365 x 397,5 mm (SDS02.440/SDS02.442)
(length × height × diameter)	830 x 399 x 397,5 mm (SDS02.445)
Weight	46 kg (SDS02.440/SDS02.442)
	48 kg (SDS02.450)









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(13)

### **SCHEDULE**

(14)

- to the Type Examination Certificate No. OBAC 23 ATEX 0234X, Issue 0
- (16) Report:
  - OBAC/23/ATEX/0234.
- (17) Specific conditions of use:
  - The device must be grounded at the point of operation.
  - The transported gas-air mixture must be free of dust.
  - The fan assembly must be installed outside of any explosive area.
  - Ambient temperature:  $-25^{\circ}\text{C} \le T_{\text{amb.}} \le +55^{\circ}\text{C}$ .
- (18) Essential health and safety requirements:

Met by compliance with the requirements mentioned in item 9.

