

# EC type examination certificate



Product Service

**No.: EX5 01 06 39250 004**

according to annex III of the Council Directive no. 94/9/EC referring to devices and protective systems for the intended use in explosive atmospheres for

**MAICO Elektroapparate-Fabrik GmbH**  
Steinbeisstr. 20


**D-78056 Villingen-Schwenningen**

**Product: Fans, blowers (explosion protection standards)**  
**Semi centrifugal duct fans with electric drive motor**

**Model: ERM 25 E Ex e**

**Characteristics: Device group II, category 2G**  
**Ignition protection type EEx e II T1, T2 or T3**  
**Rated voltage 100 V up to 250 V / 50 Hz**

Rated power 0.3 kW

Marking:  II 2 G

The device designated above corresponds to the relevant regulations of the directive.

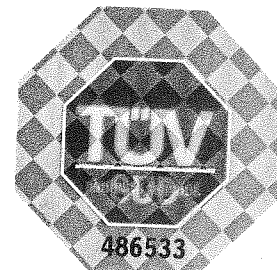
This certificate is based on the test sample presented for the test and the certification as well as its technical documentation. The detailed test results as well as the technical documentation will be described in the test report.

Test report number: 70000605-1

This certificate refers exclusively to the test sample provided to TÜV PRODUCT SERVICE for the test. Therefore, it is not limited in time.

Approved by the certification body of TÜV PRODUCT SERVICE with the above EC type examination certificate number.

Division:  STGTEC / go  
Date: 18<sup>th</sup> June 2001



TÜV PRODUCT SERVICE GMBH is a named body according to the Council Directive no. 94/9/EC referring to devices and protective systems with the identification number 0123 for the intended use in explosive atmospheres. 12/98

Translation of the original Certificate



## 1. Supplement to the EC type examination certificate EX5 01 06 39250 004

Maico Elektroapparate-Fabrik GmbH; Steinbeisstr. 20; 78056 Villingen-Schwenningen

### 1 Supplement

Additional alternative with modified stator and rotor dimensions for the semi centrifugal duct fan type: ERM 25 E Ex e with the marking

II 2 G Ex e II T1,T2,T3

### 2 Technical data

The construction of the semi-radial duct fan type: ERM 25 E Ex e remains unaffected with regard to the ignition protection type, the ambient temperatures, the type designation and the electric data mentioned in the EC type examination certificate EX5 01 06 39250 004.

Type:.....ERM 25 E Exe  
 Device group (94/9/EC):.....II  
 Category (94/9/EC):.....2G  
 Temperature class.....T1, T2, T3  
 Marking according to standard:.....Ex e II T1,T2,T3  
 Supply voltage:.....230 V  
 Max. current consumption:.....1.4 A  
 Rated power:.....300 W  
 Rated frequency:.....50 Hz  
 IP protection type: .....IP64  
 Speed:.....2820 min<sup>-1</sup>  
 Operating mode:.....S1 continuous operation  
 Circuit: .....Y  
 Relation I<sub>A</sub> / I<sub>N</sub>:.....3.5  
 Time t<sub>E</sub>:.....for T1 = 24s, T2 = 24s, T3 = 19s  
 Thermal class (insulants):.....F  
 Ambient temperature:.....-20°C ≤ T<sub>a</sub> ≤ +50°C  
 Stand inside Ø:.....45.0 mm, length = 60 mm  
 Rotor outside Ø:.....44.4 mm, length = 60 mm  
 Minimum air gap: .....0.23 mm  
 Motor capacitor (characteristics):...16 µF / 280 V / 50 Hz

Translation of the original Certificate



Product Service

### 3 Result

The test has shown that the device described above meets the applicable basic requirements of the directive 94/9/EC if the conditions for the construction and the safe operation listed under point 4 are observed.

### 4 Conditions for the construction and the safe operation

The conditions listed hereinafter are necessary for the installation, the safe use and for the maintenance of the ignition protection type.

Each fan must be delivered with an appropriate and certified junction box.

An external overload protection adjusted to the nominal current of the motor and the tE times must be slotted in ahead of each fan.

TÜV SÜD Product Service GmbH

TÜV SÜD Product Service GmbH

Technical report checked

Examiner

p.p. Dipl.-Phys. Andreas Pfeil  
Industry competence centre  
Machinery and industrial products

p.p. Frank Pscheidt-Denzler  
Industry competence centre  
Machinery and industrial products