

Translation

(1) **Certificate of Conformity**

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 94/9/EC**



(3) **Certificate Number** **TÜV 12 ATEX 111822 X**

(4) for the equipment: Electrical Motor types T1A, T1C, MS, T2A, T2C and MS2

(5) of the manufacturer: **TECHTOP**

(6) Address: No. 303 Kangliu Rd., Kangqiao Industrial Zone Pudong, Shanghai, P. R. China

Order number: 8000414971

Date of issue: 2013-02-13

(7) This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The TÜV NORD CERT GmbH, notified body No. 0044 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in the confidential report No. 12 214 111822.


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

EN 60079-0:2009 EN 60079-15:2010 EN 60079-31:2009

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.


(11) This certificate of conformity relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment or protective system must include the following:

 **II 3 G Ex nA IIC T4 Gc**
II 3 D Ex tc IIIC T125 °C Dc

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the notified body



Meyer

Hannover office, Am TÜV 1, 30519 Hannover, Phone +49 (0)511 986 1455, Fax +49 (0)511 986 1590

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(13) **SCHEDULE**

(14) **Certificate of Conformity No. TÜV 12 ATEX 111822 X**

(15) Description of equipment

Motors are designed as being non-sparking, Ex nA and Protected by enclosure, Ex tc. Motors are brushless and built into closed housing with termination compartment, all designed in aluminium, alloy or cast iron. T1, T2 and MS motor series are technical identical but with different efficiency.

Type key:

T1A, T2A, MS and MS2: Aluminium Alloy

T1C and T2C: Cast Iron

Technical data:

230/400/690 Vac 50 Hz

276/480/828 Vac 60Hz

Permissible range of ambient temperature:

-20 °C to +40 °C

(16) Test documents are listed in the test report No. 12 214 111822.

(17) Special conditions for safe use

Only suitable certified Cable glands may be used.

Installer must ensure that gasket is fitted correctly into terminal cover and all excess material is removed.

Only metallic cooling wings may be used.

(18) Essential Health and Safety Requirements

no additional ones

Test Report 12 214 111822 dated 2013-02-13

Customer: TECHTOP, No. 303 Kangliu Rd., Kangqiao Industrial Zone Pudong, Shanghai, P. R. China

Order number: 8000414971

ZA number: 35111822

Test object: Electric Motors, types T1A and T1C

Evaluation principles: EN 60079-0:2009
EN 60 079-15:2010
EN 60 079-31:2009

Test laboratory: TÜV NORD CERT GmbH
Hanover Office
Am TÜV 1
30519 Hannover

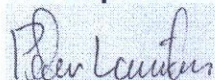
Test location: Denmark

Date of receipt of the test object: 09-08-2012

Test date: 09-08-2012 til 29-10-2012

Interpretations: The test results confirm the compliance of the "equipment" with the requirements of the Evaluation principles mentioned above.

**Compiled
The Expert:**



Peter T. Lauritzen

**Approved
The head of the test laboratory / the
revisor:**



Klaus Hoferichter

This report consists of 6 pages

This technical report contains the result of the examination of the submitted test sample. A generally valid statement on the quality of the products of the current manufacture cannot be derived therefrom. The reproduction of this technical report in abstracts and the utilization for publication purposes requires the written consent of the test laboratory.

1. Order description:

This is a series of electrical motors designed for use in Category 3 Dust and Gas, provided in Aluminium Alloy or Cast Iron for various purposes.

2. Specification of the test object:


Description: Motors are designed as being non-sparking, Ex nA and Protected by enclosure, Ex tc. Motors are brushless and built into closed housing with termination compartment, all designed in aluminium, alloy or cast iron.

Type key: T1A: Aluminium Alloy
T1C: Cast Iron

Technical data:
230 Vac to 480 Vac, 50-60 Hz

Permissible range of ambient temperature:
-20 °C to +40 °C

3. Marking of test object:

 II 3 G Ex nA IIC T4 Gc
II 3 D Ex tc IIIC T125 °C Dc

4. Details to the evaluation principles:

none

5. Tests performed:

Temperature rise tests
Impact tests
Thermal ageing to heat
Thermal ageing to cold
Overpressure test
IP55 tests

6. Test documents submitted:

Title:	Drawing No.:	Rev. Level:	Date:
Aluminium 56#, Stator (B3)	5TB.671	-	-
#56, Front End Shield	8TB.013.001	-	-
Aluminium 56#, B5 Flange	8TB.013.003	-	-
Aluminium 56#, Stator (B14/B5)	5TB.671	-	-
56#, B14 End Shield	8TB.013.002	-	-
MS56, Back End Shield	8TB.013.004	-	-

Aluminium 56#, Fan	8TB.435.001	-	-
MS 56, Fan Cover	8TB.306.001	-	-
Aluminium 56#	8TB.034.001	-	-
MS.MY56#, Rotor	8TB.674.001-002	-	-
MS 56, Terminal Box Base	8TB.354.001	-	-
MS56, Terminal Box Cover	8TB.354.002	-	-
MS 63, Front End Shield	8TB.013.005	-	-
Aluminium 63#, Stator B3	5TB.671.	-	-
MS 63, B5 Flange	8TB.013.007	-	-
Aluminium 63#, Stator B14/B5	5TB.671	-	-
MS63, B14 End Shield	8TB.013.006	-	-
MS63#, Back End Shield	8TB.013.008	-	-
63#, Fan Cover	8TB.306.002	-	-
MS63#, Housing	8TB.034.002	-	-
MS/MY63, Rotor	5TB.674.013-026	-	-
MS90, Rotor	5TB.674.074-084	-	-
MS112, Stator	5TB.671.249-255	-	-
MS112, Stator	5TB.671.256-262	-	-
MS,MY80, Rotor	5TB.674.050-059	-	-
MS (56-71), Terminal Board	8TB.064.001	-	-
MS 56, General Assy. B3	1TB.010.001-006	-	-
MS 56, General Assy. B5	1TB.010.007-012	-	-
MS 56, General Assy. B14	1TB.010.013-018	-	-
MS56, Terminal Box Assy.	5TB.354.002	-	-
MS 63-71, Big terminal box base	8TB.354.007	-	-
MS 63-71, Big terminal box cover	8TB.354.008	-	-
MS63 B3, B3 General Assy	1TB.050.019-026	-	-
MS 63, B5 General Assy	1TB.050.027-034	-	-
MS 63, B14 General Assy	1TB.050.035-042	-	-
MS63-71, Terminal Box Assy.	5TB.354.005	-	-
Aluminium 71#, Front End Shield	8TB.013.010	-	-
MS71 (B3), General Assy.	1TB.050.043-053	-	-
Aluminium Housing 71#, Stator (B3)	5TB.671.053-063	-	-
Aluminium 71#, Stator B14/B5	5TB.671.064-074	-	-
Aluminium housing 71#, B5 Flange	8TB.013.013	-	-
MS71 (B5), General Assy.	1TB.050.065-075	-	-

Aluminium Housing 71#, B14 Reduced size flange	8TB.013.011	-	-
MS71(B14) General Assy.	1TB.050.054-064	-	-
Aluminium Housing 71#, Back end shield	8TB.013.014	-	-
MS71, Fan Cover	8TB.306.003	-	-
MS71, Housing	8TB.034.003-004	-	-
MS71, Rotor	5TB.674. 027-036	-	-
MS63-71, Terminal Box Assy.	5TB.354.004	-	-
MS80-90, Terminal Board	8TB.064.002	-	-
MS80-90, T/Box Assy.	5TB.354.008	-	-
MS80-100, T/Box Base	8TB.354.015	-	-
MS80-100, T/Box cover	8TB.354.016	-	-
Aluminium housing 80B, Front end shield	8TB.013.015	-	-
MS80B, General Assy.	1TB.050.076-086	-	-
Aluminium 80#, Stator (Horizontal)	5TB.671.099-109	-	-
Aluminium Housing 80B5, Flange	8TB.013.018	-	-
Aluminium 80#, Stator (Vertical)	5TB.671.110-120	-	-
Aluminium Housing 80B14, Reduced size flange	8TB.013.016	-	-
MS80B, General Assy.	1TB.050.087-097	-	-
MS80, Back End Shield	8TB.013.019	-	-
MS80, Fan Cover	8TB.306.004	-	-
MS80, Housing	8TB.034.005	-	-
Aluminium housing 90, Front end shield	8TB.013.020	-	-
MS90(B3), General Assy.	1TB.050.109-118	-	-
Aluminium 90#, Stator (B3)	5TB.671.153-162	-	-
Aluminium housing 90B, Flange-big	8TB.013.022	-	-
MS90(B5), General Assy.	1TB.050.129-138	-	-
Aluminium 90#, Stator (Vertical)	5TB.671.163-172	-	-
Aluminium housing 90B14, Reduced size flange	8TB.013.021	-	-
MS90(B14), General Assy.	1TB.050.119-128	-	-
MS90, Back end shield	8TB.013.023	-	-
MS.MY.MYT90, Fan Cover	8TB.306.005	-	-
Aluminium housing 90LL, Housing	8TB.034.008	-	-
MS90 S.L. Housing	8TB.034.003-007	-	-
Aluminium housing 100, B3 front end shield	8TB.013.024	-	-
MS100B3, General Assy.	1TB.050.139-147	-	-
Aluminium 100#, Stator (B3)	5TB.671.205-213	-	-

MS 100, B5Flange	8TB.013.027	-	-
MS100B5, General Assy.	1TB.050.157-165	-	-
Aluminium 100#, Stator (B14/B5)	5TB.671.214-222	-	-
Alu. Housing 100, B14 reduced size flange	8TB.013.025	-	-
MS100B14, General Assy.	1TB.050.148-156	-	-
MS100, Back end shield	8TB.013.028	-	-
MS100, Fan Cover	8TB.306.006	-	-
MS100 Housing	8TB.034.009-010	-	-
MS100, Rotor	5TB.674.100-108	-	-
MS100, Terminal Board	8TB.064.003	-	-
MS100, T/box Assy.	5TB.354.012	-	-
MS112-MS132, Terminal Board	8TB.064.004	-	-
MS112-132, Terminal Box Assy.	5TB.354.015	-	-
MS112-132, T/Box base	8TB.354.023	-	-
MS112-132, T/Box	8TB.354.024	-	-
MS 112, Front end shield	8TB.013.030	-	-
MS 112, B3 General Assy	1TB.050.166-172	-	-
MS112, B5 Alu. Flange	8TB.013.032	-	-
MS 112, B5 General Assy.	8TB.050.180-186	-	-
MS112, B14 Flange	8TB.013.031	-	-
MS 112, B14 General Assy	1TB.050.173-179	-	-
MS112, Back End Shiled (206)	8TB.013.029	-	-
MS 112, Fan Cover	8TB.306.008	-	-
MS112, Housing	8TB.034.011	-	-
MS112, Rotor	8TB.674.122-128	-	-
MS132#, B3 Front end shield	8TB.013.035	-	-
Aluminium Housing 132, B3 General Assy.	1TB.050.187-200	-	-
Aluminium 132#, Stator(B3)	8TB.671.269-282	-	-
Aluminium Housing 132#, B5 Flange	8TB.013.037	-	-
Aluminium Housing 132, B5 General Assy.	1TB.050.215-228	-	-
Aluminium 132#, Stator(B5)	5TB.671.283-296	-	-
MS132#B14, Flange	8TB.013.036	-	-
Aluminium Housing 132, B14 General Assy.	1TB.050.201-214	-	-
MS132, Back End Shield(208)	8TB.013.038	-	-
MS 132, Fan Cover	8TB.306.010	-	-
Aluminium 132, Housing	8TB.034.012-014	-	-

MS132, Rotor	8TB.674.130-143	-	-
MS160-180, Terminal board	8TB.064.005	-	-
MS160-200, T/box base	8TB.354.027	-	-
MS160-180, T/box Cover	8TB.354.028	-	-
MS160, Front end shield	8TB.013.041	-	-
MS 160, B3 General Assy.	1TB.050.229-038	-	-
MS160#, Stator(B3)	5TB.671.297-306	-	-
MS160 B5, Flange	8TB.013.043	-	-
MS160, B5 General Assy.	1TB.050.239-248	-	-
MS160#, Stator(B5)	5TB.671.307-316	-	-
MS160, Back End Shield	8TB.013.042	-	-
MS160 Fan Cover	8TB.306.011	-	-
MS160 Housing	8TB.034.015	-	-
MS160, Rotor	5TB.674.144-153	-	-
MS 160-180, T/Box Assy.	5TB.354.018	-	-

7. Test result:

The individual tests are documented in the confidential test protocol 12 214 111822.

8. Ambient conditions:

Temperature: -20 °C to +40 °C

9. Photo documentation:

See attached test reports

10. Measurement equipment used:

See attached test reports

11. Notes for the erection and operation:

none