



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 ITS 12.0064X issue No.: 0 Certificate history:

Status: Current

Date of Issue: 2014-06-10 Page 1 of 3

Applicant: **STS Motors**
Doulton Road
Cradley Heath
West Midlands
B64 5QB
United Kingdom

Electrical Apparatus: E132 DC Motor
Optional accessory:


Type of Protection: Flameproof (Ex d)

Marking: Ex d I Mb
Ex d IIB T4 Gb
Tamb -40°C to +60°
IECEX ITS 12.0064X

Approved for issue on behalf of the IECEx Certification Body: A Dickinson

Position: Certification Officer

Signature:
(for printed version)


10 June 2014

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.

Certificate issued by:

Intertek Testing & Certification Limited
ITS House, Cleeve Road,
Leatherhead,
Surrey, KT22 7SB
United Kingdom



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Manufacturer: **STS Motors**
Doulton Road
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West Midlands
B64 5QB
United Kingdom

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 : 2011 Explosive atmospheres - Part 0: General requirements
Edition: 6.0

IEC 60079-1 : 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition: 6

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:

GB/ITS/ExTR12.0063/00

GB/ITS/ExTR12.0063/01

Quality Assessment Report:

GB/ITS/QAR14.0003/00



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The E132 is a flameproof DC Motor that can be supplied in various sizes dependant on rating (voltage/output power/duty cycle).

The motor comprises of motor frame & brush gear compartments manufactured from cast iron to BS EN 1563 grade EN-GJS-500-7 and drive end cover & terminal cover plate manufactured from cast iron to BS EN 1561 grade EN-GJL-250. The enclosure comprises of the following flamepaths:

3 x flange joints (Drive end cover to motor frame, motor frame to brush gear cover and brush gear cover to terminal cover plate).

1 x cylindrical joint (Shaft through drive end cover).

3 x (max) cable entries (either M20, M25, M32, ½"NPT, ¾"NPT or 1"NPT).

18 x M8 threaded joints for securing of internal poles and interpoles.

The motor has the following overall dimensions: Diameter = 244mm, Length = 478mm to 538mm (dependant on armature core length).

Both internal and external eathing points are provided and must be connected.

Variants covered by this initial certificate are rated as follows:

Type	Voltage	Output (kW)	Duty	Ambient temperature range
E132M	110	2.00	S2 30 mins	-40°C to +60°C
E132M	120	1.50	MCR	-40°C to +60°C
E132L	24	1.87	S2 120 mins	-40°C to +60°C
E132L	24	1.65	S1 Continuous	-40°C to +57°C

CONDITIONS OF CERTIFICATION: YES as shown below:

1. Temperatures at the cable entry or branching point could reach +135°C – suitably rated cable must be utilized.
2. No modifications must be made to the flamepaths of the unit without consultation of the manufacturers drawing.
3. Use only fasteners of property class 8.8 with minimum tensile strength of 800MPa for securing drive end cover to motor frame, motor frame to brush gear cover and brush gear cover to terminal cover plate.
4. Motors marked with a duty cycle must be operated in accordance with the requirements of IEC 60034-1 (Rotating Electrical Machines, Part 1: Rating and Performance).
5. Motors marked with a lower ambient of $\leq -30^{\circ}\text{C}$ must use L627 grease (or equivalent to cover the operating temperature range of the motor).