



# (1) EC-TYPE EXAMINATION CERTIFICATE

- (2) Equipment or protective system intended for use in potentially explosive atmospheres -Directive 94/9/EC
- (3) EC-Type Examination Certificate Number: KEMA 03ATEX2446 X
- (4) Equipment or protective system: Battery Containers, Series BC.-.....
- (5) Manufacturer: Electromach B.V., Member of the R. STAHL Technology Group
- (6) Address: Hamerstraat 10, 7556 MZ Hengelo, The Netherlands
- (7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) KEMA Quality B.V., notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, 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 confidential report no. 2037276.

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

EN 50014: 1997 EN 50019: 2000

- (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 EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment or protective system according to the Directive 94/9/EC. Further requirements of the directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- (12) The marking of the equipment or protective system shall include the following:



II 2 G EEx e II T6

Arnhem, 23 December 2003 KEMA Quality B.V.

C.G van Es

Certification Manager

This Certificate may only be reproduced in its entirety and without any change



# (13) SCHEDULE

## (14) to EC-Type Examination Certificate KEMA 03ATEX2446 X

## (15) Description

The Battery Containers Series BC.-..., for stationary use, consist of sheet steel enclosures which contain a number of batteries as specified in the Schedule of Limitations attached to this certificate. The electrical connection is made by direct entry.

Ambient temperature range -20 °C to +40 °C.

#### Type designation

BCa-b.c.d.e :

a = first letter of cell or battery manufacturer

bcd = battery container dimensions in cm (length x width x height)

e = battery type

#### Electrical data

The data are dependent on the built-in batteries and are to be taken from the attached Schedule of Limitations.

## Degree of protection

Degree of protection according to EN 60529: IP 43.

#### Routine tests

Each battery container, ready for use, shall be submitted to a routine insulation test according to EN 50019, clause 7.2, using a test voltage of at least 100 V. The insulation resistance shall be at least 1 Mohm between the live parts and the battery container.

#### (16) Report

KEMA No. 2037276.

## (17) Special conditions for safe use

Charging in a hazardous area is allowed. The safety limits specified by the battery manufacturer shall be maintained. Precautions must be taken that the maximum allowed charging voltage and current are not exceeded.

Charging with higher current is allowed only outside the hazardous area or under non-hazardous conditions.

The battery containers are for stationary use only.

### (18) Essential Health and Safety Requirements

Covered by the standards listed at (9).

#### (19) Test documentation

 Certificates of Conformity KEMA Nos. Ex-99.E.2419 X, Ex-00.E.2135 X, including Amendments 1 to 8 and Ex-02.E.2197 X and the associated test documentation.

#### dated

Drawing No. 1000-04 (2 sheets)

17.12.2003



# **SCHEDULE OF LIMITATIONS**

to EC-Type Examination Certificate KEMA 03ATEX2446 X

Issue No. 12

Manufacturer:

Electromach B.V.

Address:

Jan Tinbergenstraat 193, 7559 SP Hengelo, The Netherlands

### Battery container Series BC.-... specifications

Size (mm)	Maximum allowed capacity (Ah)	Voltage (V)
360 x 360 x 150	3,5	24
520 x 350 x 500	115	12
520 x 350 x 500	50	24
600 x 500 x 800	180	12
690 x 560 x 500	200	24
800 x 600 x 600	200	24
830 x 560 x 900	960	12
830 x 620 x 800	240	12
850 x 850 x 800	500	24
900 x 850 x 800	230	24
1050 x 890 x 1100	1200	24
1100 x 850 x 800	480	24
1100 x 800 x 900	735	24
1100 x 1100 x 1000	1400	24
1200 x 1100 x 850	214	24
1200 x 1650 x 850	1800	24
1300 x 800 x 800	440	24
1300 x 850 x 800	460	24
1400 x 1050 x 900	1920	24
1500 x 600 x 1000	960	24
1500 x 1000 x 900	200	24
1600 x 650 x 1100	1110	24
1700 x 800 x 1200	1500	24
1800 x 800 x 800	1000	14
1900 x 1050 x 900	2800	24
2025 x 1500 x 900	1110	48
2545 x 1155 x 650	92	192 + 384

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# **SCHEDULE OF LIMITATIONS**

to EC-Type Examination Certificate KEMA 03ATEX2446 X

Issue No. 12

# **Battery type**

Manufacturer	Type or Series	Cell type
Sonnenschein	A200	Lead-acid
Sonnenschein	A500	Lead-acid
Sonnenschein	A600 OpzV Solar	Lead-acid
Sonnenschein	S12 Solar	Lead-acid
Sonnenschein	SB12 Solar Block	Lead-acid
Exide	Powerfit S300	Lead-acid
Exide	EC	Lead-acid
Exide	Maxxima 900	Lead-acid
BP Solar	PVstor	Lead-acid
Hawker	Powersafe	Lead-acid
Hawker	Perfect Plus	Lead Acid
Absolyte	IIP	Lead-acid
Hoppecke	FNC	Ni-Cd
Alcad	HC100P	Ni-Cd
Saft Sunica	SUN 21-2	Ni-Cd
Saft	SBLE	Ni-Cd
Saft	Sunica plus Sun+1110	Ni-Cd
Alcad	VN95-2	Ni-Cd
Enersys	Odyssey PC 545	Lead-acid
Enersys	Odyssey PC 925	Lead-acid
Enersys	Odyssey PC 2150T	Lead-acid
Enersys	PowerSafe SBS C11F	Lead-acid

Arnhem, 1 May 2013 DEKRA Certification B.V.

T. Pijpker Certification Manager

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