

## **CB TEST CERTIFICATE**

Ref. Certificate No.

NL-31894/A1

# IEC SYSTEM OF CONFORMITY ASSESSMENT SCHEMES FOR ELECTROTECHNICAL EQUIPMENT AND COMPONENTS (IECEE) CB SCHEME

Issued by:

DEKRA Certification B.V.

Product:

Moulded case circuit breaker used as a manual motor starter

Applicant:

LSIS Co., Ltd.

127, LS-ro, Dongan-gu, Anyang-si, Korea, Republic of

Gyeonggi-do

Manufacturer:

LSIS Co., Ltd.

127, LS-ro, Dongan-gu, Anyang-si, Korea, Republic of

Gyeonggi-do

Factory:

LSIS Co., Ltd., Cheongju Plant

95, Baekbong-ro, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do

Korea, Republic of

Rating and principal

characteristics:

Ue up to 690 V; le up to 100 A; 3 pole; Shunt release; UV release and auxiliary contact; see annex for

further ratings

Trade mark (if any):

LS

Type of Manufacturer's Testing Laboratories

used:

WMT

Model/Type reference:

MMS-32S/H/HI; MMS-32 RCS; MMS-63S/H/HI; MMS-100S/H/HI; FX-...; LX.....

Additional information:

This CB Test Certificate replaces CB NL-15408/M1/A2.; A1: editorial modifications. Date of first issue:

2013-07-11.

Sample of product tested to be in conformity with IEC:

Standard(s):

60947-2(ed.4);am1

60947-5-1(ed.3);am1

Test Report Ref. No:

2168876.50 .. 55; 2168876.60 .. 61; 2129426.50 ..51; 2116563.70 .. 74; 2038108.51 .. 58

This CB Test Certificate is issued by the National Certification Body:

DEKRA Certification B.V. Meander 1051, 6825 MJ Arnhem The Netherlands

Signed by: H.L. Schendstok

Date of issue: 2016-03-09







#### Annex to CB Test Certificate No. NL-31894/A1

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#### **Product data:**

Type(s) : MMS-32S

Number of poles : 3
Rated impulse voltage : 6 kV
Utilisation category : AC 3
Rated operational voltage (AC) : up to 690 V

Rated current Ith = Ie : 0,16 - 40 A

lcu : 30 kA at 240 V, 15 kA at 415 V, 6 kA at 440 V,

5 kA at 500 V, 3 kA at 690 V.

: 22 kA at 240 V, 11 kA at 415 V, 4 kA at 440 V,

4 kA at 500 V, 3 kA at 690 V.

Type(s) : MMS-32H, MMS-32H RCS

Number of poles : 3
Rated impulse voltage : 6 kV
Utilisation category : AC 3
Rated operational voltage (AC) : up to

Rated operational voltage (AC) : up to 690 V Rated current Ith = Ie : 0.16 - 40 A

lcu : 100 kA at 240 V, 50 kA at 415 V, 20 kA at 440 V,

25 kA at 440 V (only for 17-32 A), 10 kA at 500 V, 4 kA at 690 V.

ics : 100 kA at 240 V, 38 kA at 415 V, 15 kA at 440 V,

8 kA at 500 V, 4 kA at 690 V.

Type(s) : MMS-63S

Number of poles: 3Rated impulse voltage: 8 kVUtilisation category: AC 3

Rated operational voltage (AC) : up to 690 V
Rated current Ith = Ie : 10 - 65 A

: 50 kA at 240 V, 25 kA at 415 V, 10 kA at 440 V,

6 kA at 500 V, 4 kA at 690 V.

: 38 kA at 240 V, 19 kA at 415 V, 8 kA at 440 V,

5 kA at 500 V, 3 kA at 690 V.



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Type(s) : MMS-63H, MMS-63HI

Number of poles : 3
Rated impulse voltage : 8 kV
Utilisation category : AC 3

Rated operational voltage (AC) : up to 690 V
Rated current Ith = Ie : 10 - 65 A

1cu : 75 kA at 240 V, 50 kA at 415 V, 35 kA at 440 V,

10 kA at 500 V, 5 kA at 690 V.

ics : 75 kA at 240 V, 50 kA at 415 V, 27 kA at 440 V,

8 kA at 500 V, 5 kA at 690 V.

Type(s) : MMS-100S

Number of poles : 3
Rated impulse voltage : 8 kV
Utilisation category : AC 3

Rated operational voltage (AC) : up to 690 V
Rated current Ith = Ie : 17 - 100 A

100 kA at 240 V, 50 kA at 415 V, 40 kA at 440 V,

8 kA at 500 V, 5 kA at 690 V.

ics : 100 kA at 240 V, 38 kA at 415 V, 30 kA at 440 V,

6 kA at 500 V, 4 kA at 690 V.

Type(s) : MMS-100H, MMS-100HI

Number of poles: 3Rated impulse voltage: 8 kVUtilisation category: AC 3

Rated operational voltage (AC) : up to 690 V Rated current Ith = Ie : 17 - 100 A

100 kA at 240 V, 75 kA at 415 V, 50 kA at 440 V,

12 kA at 500 V, 6 kA at 690 V.

Ics : 100 kA at 240 V, 50 kA at 415 V, 38 kA at 440 V,

9 kA at 500 V, 6 kA at 690 V.



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Model Type reference : RS : Shunt Release

Ratings : AC24V 50Hz / AC28V 60Hz

AC110V 50Hz / AC120V 60Hz

AC220V~230V 50Hz / AC240V~260V 60Hz

AC240V 50Hz / AC277V 60Hz

AC380V~400V 50Hz / AC440V~460V60Hz AC415V~440V 50Hz / AC460V~480V 60Hz

Model Type reference : RU : Undervoltage ReleaseRUX : Undervoltage Release with

**Auxiliary Switch** 

Ratings : AC24V 50Hz / AC28V 60Hz

AC110V 50Hz / AC120V60Hz

AC220V~230V 50Hz / AC240V~260V 60Hz

AC240V 50Hz / AC277V 60Hz

AC380V~400V 50Hz / AC440V~460V 60Hz AC415V~440V 50Hz / AC460V~480V 60Hz

Model / type reference : FX-11,20,02 : Front Auxiliary Switch

Ratings : Ith 5A; Ui 250V;

AC-15: 3 A (240 V);

DC-13: 1 A (24 V), 0.1 A (220 V)

Model / type reference : LX-11,20,02 ; LA-11,20,02 ; LAM-11,20,02

Ratings : Ith 10 A; Ui 690 V;

AC-15 : 6 A (24 V); 4 A (240 V); DC-13 : 2 A (24 V), 0.25 A (220 V)



#### IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

#### **CB TEST CERTIFICATE**

Product

Moulded case circuit breaker used as a manual motor starter

Name and address of the applicant

127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do

Korea, Republic of

LSIS Co., Ltd.

LSIS Co., Ltd.

Name and address of the manufacturer

127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do

Korea, Republic of

Name and address of the factory

Note: When more than one factory, please report on page 2

Additional information on page 2

LSIS Co., Ltd., Cheongju Plant 95, Baekbong-ro, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do

Korea, Republic of

Ratings and principal characteristics

Ue up to 690 V; le up to 100 A; 3 pole; Shunt release; UV release and auxiliary

contact; see annex for further ratings

Trademark (if any)

Customer's Testing Facility (CTF) Stage used

WMT

Model / Type Ref.

MMS-32S/H/HI; MMS-32 RCS; MMS-63S/H/HI; MMS-100S/H/HI; FX-...; LX.....

Additional information (if necessary may also be

reported on page 2)

Additional information on page 2

This CB Test Certificate replaces CB NL-15408/M1/A2. Date of first issue: 2013-07-11. A2: Editorial update to include reference to IEC 60947-4-1.

A sample of the product was tested and found to be in conformity with

As shown in the Test Report Ref. No. which forms part of this Certificate

IEC 60947-2:2006/AMD1:2009, IEC 60947-4-1:2009/AMD1:2012, IEC 60947-5-1:2003/AMD1:2009

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DEKRA Certification B.V. Meander 1051, NL-6825 MJ Arnhem, Netherlands



Signature: H.L. Schendstok