



CB TEST CERTIFICATE

Ref. Certificate No.

NL-31918

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		
Applicant:	LSIS Co., Ltd.	127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do	Korea, Republic of
Manufacturer:	LSIS Co., Ltd.	127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do	Korea, Republic of
Factory:	LSIS Co., Ltd. Cheongju Plant	95, Baekbong-ro, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do	Korea, Republic of
Rating and principal characteristics:	Ue: 220 / 240 / 250 / 415 / 440 / 460 Vac, Ui: 750 Vac, Uimp: 8 kV, In: 3 A, 5 A, 10 A, 15 A, 20 A, 30 A, 40 A, 50 A, 60 A, 75 A, 100 A, 50 / 60 Hz 2P, 3P and 4P (unprotected N pole) See annex for further ratings		
Trade mark (if any):	LS		
Model/Type reference:	ABN102d, ABN103d, ABN104d, ABS62d, ABS63d, ABS64d, ABS52d, ABS53d, ABS54d, ABH32d, ABH33d, ABH34d, ABN62d, ABN63d, ABN64d, ABN52d, ABN53d, ABN54d, ABS32d, ABS33d, ABS34d, ABN102c, ABN103c, ABN104c, ABS62c, ABS63c, ABS64c, ABS52c, ABS53c, ABS54c, ABH32c, ABH33c, ABH34c, ABN62c, ABN63c, ABN64c, ABN52c, ABN53c, ABN54c, ABS32c, ABS33c, ABS34c		
Additional information:	This certificate is also based on and replaces certificate no. NL-17236 issued on 2009-11-30 and NL-17237/A1 issued on 2009-12-14.		
Sample of product tested to be in conformity with IEC:	60947-2(ed.4);am1;am2		
Test Report Ref. No:	3306468.50, 2109959.50, 2116563.50/51 and 2128717.60/61/62		

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

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

Signed by: F.S. Strikwerda

Date of issue: 2014-07-29



Ratings:

number of poles	: 2P, 3P and 4P (unprotected N pole)
protected pole	: 2 or 3
rated operational voltage (Ue)	: 220 / 240 / 250 / 415 / 440 / 460 Vac
rated insulation voltage (Ui)	: 750 Vac
rated impulse withstand voltage (Uimp)	: 8 kV
rated current (In)	: 3 A, 5 A, 10 A, 15 A, 20 A, 30 A, 40 A, 50 A, 60 A, 75 A, 100 A
rated operational current (Ie)	: Equal to In
conventional thermal current (Ith)	: Equal to In
current rating for four-pole circuit-breakers	: Equal to In
rated frequency	: 50 / 60 Hz
rated ultimate short-circuit breaking capacity (Icu)	: ABN102d/103d/104d, ABS62d/63d/64d, ABS52d/53d/54d, ABH32d/33d/34d: 50 kA at 220 / 240 / 250 Vac 26 kA at 415 / 440 / 460 Vac ABN62d/63d/64d, ABN52d/53d/54d, ABS32d/33d/34d: 42 kA at 220 / 240 / 250 Vac 22 kA at 415 / 440 / 460 Vac ABN102c/103c/104c, ABS62c/63c/64c, ABS52c/53c/54c, ABH32c/33c/34c (15 - 100 A): 35 kA at 220 / 240 / 250 Vac 18 kA at 415 / 440 / 460 Vac ABN62c/63c/64c, ABN52c/53c/54c, ABS32c/33c/34c (15 - 100 A): 30 kA at 220 / 240 / 250 Vac 14 kA at 415 / 440 / 460 Vac c type for 3 - 10 A: 25 kA at 220 / 240 / 250 Vac 10 kA at 415 / 440 / 460 Vac
rated service short-circuit breaking capacity (Ics)	: ABN102d/103d/104d, ABS62d/63d/64d, ABS52d/53d/54d, ABH32d/33d/34d: 35 kA at 220 / 240 / 250 Vac 18 kA at 415 / 440 / 460 Vac ABN62d/63d/64d, ABN52d/53d/54d, ABS32d/33d/34d: 30 kA at 220 / 240 / 250 Vac 14 kA at 415 / 440 / 460 Vac

Ics = 100% Icu for c type

suitable for isolation	:	Suitable
utilization category	:	A
safety distance (screen-circuit breaker)	:	Front / Back: 0 mm, Left / Right: 25 mm, Up / Down: 50 mm
instantaneous release	:	Magnetic type, fixed, 2 poles in series: $I_i = 12 I_n$, if $I_n = 3 - 10 A$ and $40 - 100 A$, $I_i = 400 A$, if $I_n = 15 - 30 A$, single pole: $15 I_n$, if $I_n = 3 - 10 A$ and $40 - 100 A$, $750 A$, if $I_n = 15 - 30 A$
time setting of the instantaneous release	:	Fixed
inverse time delay release	:	Thermal type, fixed
time setting of the inverse time delay release	:	Fixed
method of mounting	:	Fixed
EMC environment	:	A and B
circuit-breaker for use on phase-earthed systems	:	N/A
circuit-breaker for use in IT systems	:	Yes, 1800 A at 460 Vac
line/load terminal connection	:	Marked Copper conductor with cable lug



CB TEST CERTIFICATE

Ref. Certificate No.

NL-31863

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		
Applicant:	LSIS Co., Ltd.	127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do	Korea, Republic of
Manufacturer:	LSIS Co., Ltd.	127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do	Korea, Republic of
Factory:	LSIS Co., Ltd. Cheongju Plant	95, Baekbong-ro, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do	Korea, Republic of
Rating and principal characteristics:	Ue: 220 / 240 / 250 / 415 / 440 / 460 Vac, Ui: 750 Vac, Uimp: 8 kV, In: 100 A, 125 A, 150 A, 175 A, 200 A, 225 A, 250 A, 50 / 60 Hz 2P, 3P and 4P (unprotected N pole) Icu: 100 kA at 220/240/250 Vac, 50 kA at 415/440/460 Vac for ABH series 85 kA at 220/240/250 Vac, 42 kA at 415/440/460 Vac for ABP series 85 kA at 220/240/250 Vac, 37 kA at 415/440/460 Vac for ABS series 65 kA at 220/240/250 Vac, 26 kA at 415/440/460 Vac for ABN series Ics = 100% Icu See annex for further ratings		
Trade mark (if any):	LS		
Model/Type reference:	ABH202c, ABH203c, ABH204c, ABP202c, ABP203c, ABP204c, ABS202c, ABS203c, ABS204c, ABN202c, ABN203c, ABN204c		
Additional information:	This certificate is also based on and replaces certificate no. NL-17244/A1 issued on 2009-12-14.		
Sample of product tested to be in conformity with IEC:	60947-2(ed.4);am1;am2		
Test Report Ref. No:	3306470.50, 2109959.52 and 2116563.54/55		

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

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

Signed by: F.S.Strikwerda

Date of issue: 2014-07-17



Ratings:

number of poles	:	2P, 3P and 4P (unprotected N pole)
protected pole	:	2 or 3
rated operational voltage (Ue)	:	220 / 240 / 250 / 415 / 440 / 460 Vac
rated insulation voltage (Ui)	:	750 Vac
rated impulse withstand voltage (Uimp)	:	8 kV
rated current (In)	:	100 A, 125 A, 150 A, 175 A, 200 A, 225 A, 250 A
rated operational current (Ie)	:	Equal to In
conventional thermal current (Ith)	:	Equal to In
current rating for four-pole circuit-breakers	:	Equal to In
rated frequency	:	50 / 60 Hz
rated ultimate short-circuit breaking capacity (Icu)	:	100 kA at 220 / 240 / 250 Vac, 50 kA at 415 / 440 / 460 Vac for ABH series 85 kA at 220 / 240 / 250 Vac, 42 kA at 415 / 440 / 460 Vac for ABP series 85 kA at 220 / 240 / 250 Vac, 37 kA at 415 / 440 / 460 Vac for ABS series 65 kA at 220 / 240 / 250 Vac, 26 kA at 415 / 440 / 460 Vac for ABN series
rated service short-circuit breaking capacity (Ics)	:	Ics = 100% Icu
suitable for isolation	:	Suitable
utilization category	:	A
safety distance (screen-circuit breaker)	:	Front / Back: 0 mm, Left / Right: 50 mm, Up / Down: 100 mm
instantaneous release	:	Magnetic type, fixed, 2 poles in series: $I_i = 12 I_n$ single pole: $15 I_n$
time setting of the instantaneous release	:	Fixed
inverse time delay release	:	Thermal type, fixed
time setting of the inverse time delay release	:	Fixed
method of mounting	:	Fixed
EMC environment	:	A and B
circuit-breaker for use on phase-earthed systems	:	N/A
circuit-breaker for use in IT systems	:	Yes, 4500 A at 460 Vac
line/load terminal connection	:	Marked Copper conductor with cable lug



CB TEST CERTIFICATE

Ref. Certificate No.

NL-31800

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		
Applicant:	LSIS Co., Ltd.	127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do	Korea, Republic of
Manufacturer:	LSIS Co., Ltd.	127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do	Korea, Republic of
Factory:	LSIS Co., Ltd. Cheongju Plant	95, Baekbong-ro, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do	Korea, Republic of
Rating and principal characteristics:	Ue: 220 / 240 / 250 / 415 / 440 / 460 Vac, Ui: 750 Vac, Uimp: 8 kV, In: 250 A, 300 A, 350 A, 400 A, 50 / 60 Hz 2P, 3P and 4P (unprotected N pole) Icu: 125 kA at 220/240/250 Vac, 85 kA at 415/440/460 Vac for ABL series 85 kA at 220/240/250 Vac, 65 kA at 415/440/460 Vac for ABH series 75 kA at 220/240/250 Vac, 50 kA at 415/440/460 Vac for ABS series 50 kA at 220/240/250 Vac, 37 kA at 415/440/460 Vac for ABN series Ics = 75% Icu for ABL series Ics = 100% Icu for ABH, ABS and ABN series See annex for further ratings		
Trade mark (if any):	LS		
Model/Type reference:	ABL402c, ABL403c, ABL404c, ABH402c, ABH403c, ABH404c, ABS402c, ABS403c, ABS404c, ABN402c, ABN403c, ABN404c		
Additional information:	This certificate is also based on and replaces certificate no. NL-16682/M2 issued on 2011-05-24.		
Sample of product tested to be in conformity with IEC:	60947-2(ed.4);am1;am2		
Test Report Ref. No:	3306471.50 and 2126589.50/51/52		

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

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

Signed by: F.S. Strikwerda

Date of issue: 2014-07-17



Ratings:

number of poles	:	2P, 3P and 4P (unprotected N pole)
protected pole	:	2 or 3
rated operational voltage (Ue)	:	220 / 240 / 250 / 415 / 440 / 460 Vac
rated insulation voltage (Ui)	:	750 Vac
rated impulse withstand voltage (Uimp)	:	8 kV
rated current (In)	:	250 A, 300 A, 350 A, 400 A
rated operational current (Ie)	:	Equal to In
conventional thermal current (Ith)	:	Equal to In
current rating for four-pole circuit-breakers	:	Equal to In
rated frequency	:	50 / 60 Hz
rated ultimate short-circuit breaking capacity (Icu)	:	125 kA at 220 / 240 / 250 Vac, 85 kA at 415 / 440 / 460 Vac, for ABL series 85 kA at 220 / 240 / 250 Vac, 65 kA at 415 / 440 / 460 Vac for ABH series 75 kA at 220 / 240 / 250 Vac, 50 kA at 415 / 440 / 460 Vac for ABS series 50 kA at 220 / 240 / 250 Vac, 37 kA at 415 / 440 / 460 Vac for ABN series
rated service short-circuit breaking capacity (Ics)	:	Ics = 75% Icu for ABL series Ics = 100% Icu for ABH, ABS and ABN series
suitable for isolation	:	Suitable
utilization category	:	A
safety distance (screen-circuit breaker)	:	2P and 3P: Front / Back: 0 mm, Left / Right: 80 mm, Up / Down: 100 mm 4P: Front / Back: 0 mm, Left / Right: 77,5 mm, Up / Down: 100 mm
instantaneous release	:	Magnetic type, fixed, 2 poles in series: $I_i = 10 I_n$ single pole: $13 I_n$
time setting of the instantaneous release	:	Fixed
inverse time delay release	:	Thermal type, fixed
time setting of the inverse time delay release	:	Fixed
method of mounting	:	Fixed
EMC environment	:	A and B
circuit-breaker for use on phase-earthed systems	:	N/A
circuit-breaker for use in IT systems	:	Yes, 5760 A at 460 Vac
line/load terminal	:	Marked
connection	:	Copper conductor with cable lug





CB TEST CERTIFICATE

Ref. Certificate No.

NL-31801

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		
Applicant:	LSIS Co., Ltd.	127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do	Korea, Republic of
Manufacturer:	LSIS Co., Ltd.	127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do	Korea, Republic of
Factory:	LSIS Co., Ltd. Cheongju Plant	95, Baekbong-ro, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do	Korea, Republic of
Rating and principal characteristics:	Ue: 220 / 240 / 250 / 415 / 440 / 460 Vac, Ui: 750 Vac, Uimp: 8 kV, In: 500 A, 600 A, 630 A, 700 A, 800 A, 50 / 60 Hz 2P, 3P and 4P (unprotected N pole) Icu: 125 kA at 220/240/250 Vac, 85 kA at 415/440/460 Vac for ABL series 100 kA at 220/240/250 Vac, 75 kA at 415/440/460 Vac for ABH series 85 kA at 220/240/250 Vac, 65 kA at 415/440/460 Vac for ABS series 65 kA at 220/240/250 Vac, 50 kA at 415/440/460 Vac for ABK series 50 kA at 220/240/250 Vac, 37 kA at 415/440/460 Vac for ABN series Ics = 75% Icu for ABL and ABH series Ics = 100% Icu for ABS, ABK and ABN series See annex for further ratings		
Trade mark (if any):	LS		
Model/Type reference:	ABL802c, ABL803c, ABL804c, ABL602c, ABL603c, ABL604c, ABH802c, ABH803c, ABH804c, ABH602c, ABH603c, ABH604c, ABS802c, ABS803c, ABS804c, ABS602c, ABS603c, ABS604c, ABK802c, ABK803c, ABK804c, ABK602c, ABK603c, ABK604c, ABN802c, ABN803c, ABN804c, ABN602c, ABN603c, ABN604c		
Additional information:	This certificate is also based on and replaces certificate no. NL-16682/M2 issued on 2011-05-24.		
Sample of product tested to be in conformity with IEC:	60947-2(ed.4);am1;am2		
Test Report Ref. No:	3306471.51 and 2126589.53/54/55		

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

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



Signed by: F.S.Strikwerda

Date of issue: 2014-07-17

Ratings:

number of poles	: 2P, 3P and 4P (unprotected N pole)
protected pole	: 2 or 3
rated operational voltage (Ue)	: 220 / 240 / 250 / 415 / 440 / 460 Vac
rated insulation voltage (Ui)	: 750 Vac
rated impulse withstand voltage (Uimp)	: 8 kV
rated current (In)	: 500 A, 600 A, 630 A, 700 A, 800 A
rated operational current (Ie)	: Equal to In
conventional thermal current (Ith)	: Equal to In
current rating for four-pole circuit-breakers	: Equal to In
rated frequency	: 50 / 60 Hz
rated ultimate short-circuit breaking capacity (Icu)	: 125 kA at 220 / 240 / 250 Vac, 85 kA at 415 / 440 / 460 Vac, for ABL series 100 kA at 220 / 240 / 250 Vac, 75 kA at 415 / 440 / 460 Vac for ABH series 85 kA at 220 / 240 / 250 Vac, 65 kA at 415 / 440 / 460 Vac for ABS series 65 kA at 220 / 240 / 250 Vac, 50 kA at 415 / 440 / 460 Vac for ABK series 50 kA at 220 / 240 / 250 Vac, 37 kA at 415 / 440 / 460 Vac for ABN series
rated service short-circuit breaking capacity (Ics)	: Ics = 75% Icu for ABL and ABH series Ics = 100% Icu for ABS, ABK and ABN series
suitable for isolation	: Suitable
utilization category	: A
safety distance (screen-circuit breaker)	: Front / Back: 0 mm, Left / Right: 80 mm, Up / Down: 97,5 mm
instantaneous release	: Magnetic type, fixed, 2 poles in series: $I_i = 10 I_n$ single pole: $13 I_n$
time setting of the instantaneous release	: Fixed
inverse time delay release	: Thermal type, fixed
time setting of the inverse time delay release	: Fixed
method of mounting	: Fixed
EMC environment	: A and B
circuit-breaker for use on phase-earthed systems	: N/A
circuit-breaker for use in IT systems	: Yes, 11520 A at 460 Vac
line/load terminal	: Marked
connection	: Copper conductor with cable lug



CB TEST CERTIFICATE

Ref. Certificate No.

NL-31754

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		
Applicant:	LSIS Co., Ltd.	127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do	Korea, Republic of
Manufacturer:	LSIS Co., Ltd.	127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do	Korea, Republic of
Factory:	LSIS Co., Ltd. Cheongju Plant	95, Baekbong-ro, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do	Korea, Republic of
Rating and principal characteristics:	Ue: 415 Vac, Ui: 690 Vac, Uimp: 6 kV, In: 1000 A, 1200 A, 50 / 60 Hz 3P Icu: 65 kA for ABS series, 50 kA for ABK series Ics = 50% Icu See annex for further ratings		
Trade mark (if any):	LS		
Model/Type reference:	ABS1203b, ABK1203b, ABS1003b, ABK1003b		
Additional information:	This certificate is also based on and replaces certificate no. NL-14836/M1 issued on 2011-05-23.		
Sample of product tested to be in conformity with IEC:	60947-2(ed.4);am1;am2		
Test Report Ref. No:	3306472.50 and 2116563.60		

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

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

Signed by: F.S.Strikwerda

Date of issue: 2014-07-10



Ratings:

number of poles	: 3P
protected pole	: 3
rated operational voltage (Ue)	: 415 Vac
rated insulation voltage (Ui)	: 690 Vac
rated impulse withstand voltage (Uimp)	: 6 kV
rated current (In)	: 1000 A, 1200 A,
rated operational current (Ie)	: Equal to In
conventional thermal current (Ith)	: Equal to In
current rating for four-pole circuit-breakers	: N/A
rated frequency	: 50 / 60 Hz
rated ultimate short-circuit breaking capacity (Icu)	: 65 kA for ABS series, 50 kA for ABK series
rated service short-circuit breaking capacity (Ics)	: Ics = 50%Icu
suitable for isolation	: Suitable
utilization category	: A
safety distance (screen-circuit breaker)	: Front / Back: 0 mm, Left / Right: 40 mm, Up / Down: 90 mm
instantaneous release	: Magnetic type, adjustable, 2 poles in series: $I_i = (3 - 6) \times I_n$ single pole: $(3,6 - 7,2) \times I_n$
time setting of the instantaneous release	: Fixed
inverse time delay release	: Thermal type, fixed
time setting of the inverse time delay release	: Fixed
method of mounting	: Fixed
EMC environment	: A and B
circuit-breaker for use on phase-earthed systems	: N/A
circuit-breaker for use in IT systems	: N/A
line/load terminal	: Marked
connection	: Copper busbar