

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

## CB TEST CERTIFICATE

### Product

Moulded-Case Circuit-Breaker

### Name and address of the applicant

LS ELECTRIC Co., Ltd.  
127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do  
Korea, Republic of

### Name and address of the manufacturer

LS ELECTRIC Co., Ltd.  
127, LS-ro, Dongan-gu, Anyang-si, Gyeonggi-do  
Korea, Republic of

### Name and address of the factory

LS ELECTRIC Co., Ltd. Cheongju Plant  
95, Baekbong-ro, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do  
Korea, Republic of

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

☐ Additional information on page 2

### Ratings and principal characteristics

Ue: 220 / 240 / 250 / 380 / 415 / 440 / 460 Vac, 50 / 60 Hz, Ui: 1000 Vac, Uimp: 8 kV  
In:  
15 A, 16 A, 20 A, 25 A, 30 A, 32 A, 40 A, 45 A, 50 A, 60 A, 63 A, 75 A, 100 A, 125 A for fixed type,  
16 A, 20 A, 25 A, 32 A, 40 A, 50 A, 63 A, 80 A, 100 A, 125 A for adjustable type  
2P, 3P and 4P (N pole without overcurrent protection) for fixed type,  
3P and 4P (N pole without overcurrent protection) for adjustable type  
Icu:  
125 kA at 220 / 240 / 250 Vac, 60 kA at 380 / 415 / 440 / 460 Vac for ABL series  
100 kA at 220 / 240 / 250 Vac, 50 kA at 380 / 415 / 440 / 460 Vac for ABH series  
85 kA at 220 / 240 / 250 Vac, 42 kA at 380 / 415 / 440 / 460 Vac for ABP series  
85 kA at 220 / 240 / 250 Vac, 37 kA at 380 / 415 / 440 / 460 Vac for ABSxxxx series  
65 kA at 220 / 240 / 250 Vac, 26 kA at 380 / 415 / 440 / 460 Vac for ABSxxxx series  
Ics:  
100 kA at 220 / 240 / 250 Vac, 50 kA at 380 / 415 / 440 / 460 Vac for ABL series  
Ics = 100% Icu for ABH / ABP / ABS series  
See annex for further ratings

### Trademark / Brand (if any)

LS

### Customer's Testing Facility (CTF) Stage used

### Model / Type Ref.

ABL102c, ABL103c, ABL104c, ABL52c, ABL53c, ABL54c, ABH102c,  
ABH103c, ABH104c, ABH52c, ABH53c, ABH54c, ABP102c, ABP103c,  
ABP104c, ABP52c, ABP53c, ABP54c, ABS102c, ABS103c, ABS104c,  
ABS103e, ABS104e

### Additional information (if necessary may also be reported on page 2)

This certificate replaces certificate no. NL-36228/A3 issued on 2017-06-27.  
The tests were performed in 2008, 2014, 2015, 2016 and 2023.

☐ Additional information on page 2

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

IEC 60947-2:2016, IEC 60947-2:2016/AMD1:2019

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

3327374.50, 2195256.51, 3307649.50, 3306469.50, 2109959.51, 2116563.52 and 2116563.53

This CB Test Certificate is issued by the National Certification Body

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



Date: 2023-05-11

Signature: F.S.Strikwerda

**Ratings:**

Number of poles	: 2P, 3P and 4P (N pole without overcurrent protection) for fixed overload release 3P and 4P (N pole without overcurrent protection) for adjustable overload release
Rated operational voltage (Ue)	: 220 / 240 / 250 / 380 / 415 / 440 / 460 Vac
Rated insulation voltage (Ui)	: 1000 V
Rated impulse withstand voltage (Uimp)	: 8 kV
Rated frequency	: 50 / 60 Hz
Rated current (In)	: 15 A, 16 A, 20 A, 25 A, 30 A, 32 A, 40 A, 45 A, 50 A, 60 A, 63 A, 75 A, 100 A, 125 A for fixed type 16 A, 20 A, 25 A, 32 A, 40 A, 50 A, 63 A, 80 A, 100 A, 125 A for adjustable type
Conventional thermal current (Ith)	: Equal to In
Current rating for four-pole circuit-breakers	: Equal to In
Rated service short-circuit breaking capacity (Ics)	: 100 kA at 220 / 240 / 250 Vac, 50 kA at 380 / 415 / 440 / 460 Vac for ABL series 100% Icu for ABH / ABP / ABS series
Rated ultimate short-circuit breaking capacity (Icu)	: 125 kA at 220 / 240 / 250 Vac, 60 kA at 380 / 415 / 440 / 460 Vac for ABL series 100 kA at 220 / 240 / 250 Vac, 50 kA at 380 / 415 / 440 / 460 Vac for ABH series 85 kA at 220 / 240 / 250 Vac, 42 kA at 380 / 415 / 440 / 460 Vac for ABP series 85 kA at 220 / 240 / 250 Vac, 37 kA at 380 / 415 / 440 / 460 Vac for ABS102c/103c/104c series 65 kA at 220 / 240 / 250 Vac, 26 kA at 380 / 415 / 440 / 460 Vac for ABS103e/104e series
Individual pole short-circuit (I <sub>IT</sub> )	: Yes, 2250 A at 460 Vac
Suitable for isolation	: Suitable
Selectivity category	: A
Safety distance (screen-circuit breaker)	: Front / Back: 0 mm, Left / Right: 50 mm, Up / Down: 100 mm
Reference temperature	: 40 °C
Method of mounting	: Fixed
EMC environment	: A and B
Tightening torque for terminals	: M8 / 6 Nm
Line/load terminal	: Marked
Connection	: Copper conductor with cable lug

Inverse time delay release	: Thermal type, For fixed overload release: fixed  For adjustable overload release: Ir: 0,8 In, 0,9 In, 1,0 In, if In = 16 A Ir: 0,7 In, 0,85 In, 1,0 In, if In = 20 - 125 A
Time setting of the inverse time delay release	: Fixed
Instantaneous release	: Magnetic type, fixed, 2 poles in series: Ii = 12 In for In ≥ 40 A, Ii = 400 A for In ≤ 32 A single pole: 15 In for In ≥ 40 A, 750 A for In ≤ 32 A

## Nomenclature breakdown:

AB L10 4 c 125A FMU

a b c d e f

a - code denoting the product category: "AB" means MCCB

b - code denoting the product type: "S", "P", "H" or "L"

c - code denoting the frame size: "10" or "5" means 125 A Frame

d - code denoting the poles number: "4" means 4P, "3" means 3P, "2" means 2P

e - code denoting the rated current: 15 A, 16 A, 20 A, 25 A, 30 A, 32 A, 40 A, 45 A, 50 A, 60 A, 63 A, 75 A, 80 A, 100 A or 125 A

f - code denoting the trip unit: "Blank" means fixed overload release, "FMU" means adjustable overload release