DNV·GL

Certificate No:
TAE00002YH

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Circuit Breaker

with type designation(s)
BF52S

Issued to
LSIS Co., Ltd. (Cheong-ju Plant)
Cheongju-si, Chungcheongbuk-do, Republic of Korea

is found to comply with
DNV GL rules for classification – Ships, offshore units, and high speed and light craft
IEC 60947-2

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.
Rated voltage (V) 220
Rated current (A) 50

Issued at **Busan** on **2018-06-27**
This Certificate is valid until **2023-06-26**.
DNV GL local station: **Seoul**

Approval Engineer: **Eun Sook Kim**

for **DNV GL**

Michael Jost Auf der Stroth
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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Job Id: **262.1-008461-4**
Certificate No: **TAE00002YH**

Product description
Moulded Case Circuit Breaker with the following type designation: BF52S

Technical data:

Frame size	50AF
Number of poles	2
Rated insulation voltage AC (V)	460
Rated operational voltage AC(V)	220
Rated current, at 45 ºC (A)	10-15-20-30-40-50
Rated frequency (Hz)	50/60
Rated service breaking capacity Ics (kA)	2.5
Rated ultimate breaking Capacity Icu (kA)	5
Rated making capacity (kA)	7.5
Utilization category	A

Application/Limitation
Shall be installed and tested according to DNV GL' Rules for Classification of Ships, High Speed & Light Craft and DNV GL' Offshore Standards.
The manufacturer's instructions to be observed.

Suitable for use in an IT system with a capacity of 1.2 times the maximum trip current at 220 V AC.

Type Approval documentation

Tests carried out
IEC 60947-2 (2016), Test sequence I, II and III and Annex H
Inclination-, vibration-, dry heat-, damp heat- & EMC immunity-test.

Marking of product
Manufacturer name – Model name / Rating (type designation)

Periodical assessment
The scope of the periodical assessment survey is to verify that the conditions stipulated for the Type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the periodical assessment are:
- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routines (RT) checked (if not available tests RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer’s product type marking and Type Approval Certificate.

Assessment to be performed at 2 and 3.5 year and at renewal.

END OF CERTIFICATE