

CERTIFICATE

Issued to:
Applicant:
**MITSUBISHI ELECTRIC CORPORATION
FUKUYAMA WORKS
1-8, MIDORI-MACHI FUKUYAMA-CITY
HIROSHIMA-PREF, JAPAN**

Manufacturer/Licensee:
**MITSUBISHI ELECTRIC CORPORATION
FUKUYAMA WORKS
1-8, MIDORI-MACHI FUKUYAMA-CITY
HIROSHIMA-PREF, JAPAN**

Product(s) : Moulded-Case Circuit-Breaker
Trade name(s) : MITSUBISHI ELECTRIC
Type(s)/model(s) : NF63-SV, NF63-HV

The product and any acceptable variation thereto is specified in the Annex to this certificate and the documents therein referred to.

DEKRA hereby declares that the above-mentioned product has been certified on the basis of:

- a type test according to the standard EN 60947-2:2006 + A1:2009 + A2:2013; IEC 60947-2:2006 + A1:2009 + A2:2013;
- an inspection of the production location according to CENELEC Operational Document CIG 021
- a certification agreement with the number 2116095

DEKRA hereby grants the right to use the KEMA-KEUR certification mark.

The KEMA-KEUR certification mark may be applied to the product as specified in this certificate for the duration of the KEMA-KEUR certification agreement and under the conditions of the KEMA-KEUR certification agreement.

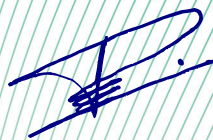
This certificate is issued on: 17 January 2017 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 3310622.01

DEKRA Certification B.V.



drs. G.J. Zoetbrood
Managing Director



F.S. Strikwerda
Certification Manager

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ACCREDITED BY THE
DUTCH ACCREDITATION
COUNCIL



SPECIFICATION OF THE CERTIFIED PRODUCT**Product data**

product	:	Moulded-Case Circuit-Breaker
trade name(s)	:	mitsubishi electric
type(s)	:	NF63-SV, NF63-HV
number of poles	:	3P or 4P (N pole without protection)
protected pole	:	3
rated operational voltage (Ue)	:	230 Vac, 380 Vac, 400 Vac, 415 Vac, 250 Vdc
rated insulation voltage (Ui)	:	NF63-SV: 600 V, NF63-HV: 690 V
rated impulse withstand voltage (Uimp)	:	8 kV
reference temperature (°C)	:	40°C
rated tightening torque for terminals (Nm)	:	2 Nm for M5 (M5 for 3 - 50 A) 6 Nm for M8 (M8 for 60 - 63 A)
rated current (In)	:	NF63-SV: 3 A, 4 A, 5 A, 6 A, 7,1 A, 8 A, 10 A, 12 A, 15 A, 16 A, 20 A, 25 A, 30 A, 32 A, 40 A, 45 A, 50 A, 60 A, 63 A NF63-HV: 10 A, 15 A, 16 A, 20 A, 25 A, 30 A, 32 A, 40 A, 45 A, 50 A, 60 A, 63 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)	:	NF63-SV: 15 kA at 230 Vac, 7,5 kA at 380 / 400 / 415 Vac, 7,5 kA at 250 Vdc; NF63-HV: 25 kA at 230 Vac, 10 kA at 380 / 400 / 415 Vac, 7,5 kA at 250 Vdc
rated service short-circuit breaking capacity (Ics)	:	NF63-SV: 100% Icu; NF63-HV: 19 kA at 230 Vac, 8 kA at 380 / 400 / 415 Vac, 7,5 kA at 250 Vdc
suitable for isolation	:	Suitable
utilization category	:	A
safety distance (screen-circuit breaker)	:	Left / Right: 25 mm Up / Down: 10 mm Front / Back: 150 mm

instantaneous release	: Magnetic type, fixed, NF63-SV: 3 - 8 A, 40 - 63 A: li = 15 In for 2 phases in series (AC) 3 - 8 A, 40 - 63 A: li = 22,5 In for single pole (AC) 3 - 8 A, 40 - 63 A: li = 21 In for 2 phases in series (DC) 3 - 8 A, 40 - 63 A: li = 31,5 In for single pole (DC) 10 - 32 A: li = 600 A for 2 phases in series (AC) 10 - 32 A: li = 900 A for single pole (AC) 10 - 32 A: li = 850 A for 2 phases in series (DC) 10 - 32 A: li = 1275 A for single pole (DC) NF63-HV: 40 - 63 A: li = 15 In for 2 phases in series (AC) 40 - 63 A: li = 22,5 In for single pole (AC) 40 - 63 A: li = 21 In for 2 phases in series (DC) 40 - 63 A: li = 31,5 In for single pole (DC) 10 - 32 A: li = 600 A for 2 phases in series (AC) 10 - 32 A: li = 900 A for single pole (AC) 10 - 32 A: li = 850 A for 2 phases in series (DC) 10 - 32 A: li = 1275 A for single pole (DC)
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
individual pole short-circuit breaking capacity (I_{su})	: N/A
Individual pole short-circuit breaking capacity (I_{IT})	: Yes (only suitable for 3P) NF63-SV: : For 3 - 8 A, 40 - 63 A, 22,5 In at 415 Vac For 10 - 32 A, 900 A at 415 Vac NF63-HV: For 40 - 63 A, 22,5 In at 415 Vac For 10 - 32 A, 900 A at 415 Vac
line/load terminal connection	: Immaterial : Prepared copper conductor with cable lug

TESTS**Test requirements**

EN 60947-2:2006 + A1:2009 + A2:2013

IEC 60947-2:2006 + A1:2009 + A2:2013

Test result

The test results are laid down in DEKRA test file 3310622.01 and reports 3310622.50, 3303054.50, 3303055.50 and also based on CQC CB test certificate CN21959 issued on 2011-10-31 with CQC CB test report C009-CB2010CQC-030867 issued on 2011-07-11 and CQC CB test certificate CN22207 issued on 2011-11-04 with CQC CB test report C009-CB2010CQC-030875 issued on 2011-07-11.

Remarks

This certificate replaces certificate no. 2154225.01 issued on 20 June 2012.

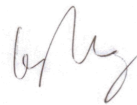
Conclusion

The examination proved that all test requirements were met.

Tested by : CQC and Ivan Wan



Checked by : King Wang

**Factory locations**

MITSUBISHI ELECTRIC CORPORATION FUKUYAMA WORKS
1-8, MIDORI-MACHI FUKUYAMA-CITY HIROSHIMA-PREF, JAPAN