Certificate No: LR21223044TA
Issue Date: 28/02/2021
Expiry Date: 27/02/2026

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	**Mitsubishi Electric Corporation**
Address	1-8 Midorimachi, Fukuyama-shi, Hiroshima-ken, 720-8647
Place of Production	Mitsubishi Electric Corporation 1-8 Midorimachi, Fukuyama-shi, Hiroshima-ken, 720-8647
Type	Circuit Breakers (Env Tested)
Description	Molded case circuit breakers
Trade Name	See Appendix for details
Application	Marine and offshore applications for use in environmental categories ENV2 as defined in LR Type Approval System Test Specification No. 1-2020 including Notice No.1 for the specification where the Test Specification is satisfactory for the intended operation. (EMC test is not applicable.)
Specified Standard	IEC60947-2:Edition 5.0
Ratings	See Appendix for details

Sachie Fujii

Senior Surveyor to Lloyd's Register Group Ltd
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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Type Approval Certificate

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Group Ltd of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: 11/10014(E1)

The Design Appraisal Document LR21223044TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Appendix

Trade Name & Ratings

Type	Current rating at 45°C (A)	Rated voltage (V)	Breaking current (RMS) (kA) Icu/Ics	Making current (peak asym-metrical) (kA)	Power factor or Time constant	Over-current release (See note)	Standard
NF63-CV	3-63	AC500 AC450 AC240 DC250 DC125	2.5/2.5 2.5/2.5 7.5/7.5 2.5/2.5 5/5	3.8 3.8 14.4 2.5 5.0	0.9 0.9 0.5 5ms 5ms	Thermal and Magnetic	IEC60947-2 Utilization category:A Pulution degree:3 Suitable for isolation
NF125-CVF	60-100	AC500 AC450 AC240 DC250	7.5/4 10/5 30/15 7.5/4	15.0 20.0 69.0 7.5	0.5/0.8 0.5/0.7 0.25/0.3 5ms		
NF125-CV	50-125	AC500 AC450 AC240 DC250	7.5/4 10/5 30/15 7.5/4	15.0 20.0 69.0 7.5	0.5/0.8 0.5/0.7 0.25/0.3 5ms		
NF250-CV	125-250	AC500 AC450 AC240 DC250	10/8 15/12 36/27 15/12	20.5 31 78.6 15	0.5 0.3 0.25 10ms		
NF32-SV	3-32	AC500 AC450 AC240 DC250 DC125	2.5/2.5 2.5/2.5 7.5/7.5 2.5/2.5 5/5	3.8 3.8 14.4 2.5 5.0	0.9 0.9 0.5 5ms 5ms		

Trade Name & Ratings (Continued)

Type	Current rating at 45°C (A)	Rated voltage (V)	Breaking current (RMS) (kA) Icu/Ics	Making current (peak asym-metrical) (kA)	Power factor or Time constant	Over-current release (See note)	Standard
NF63-SV	3-63	AC500 AC450 AC240 DC250	7.5/7.5 7.5/7.5 15/15 7.5/7.5	15 15 30.7 7.5	0.5 0.5 0.3 5ms	Thermal and Magnetic	IEC60947-2 Utilization category:A Pulution degree:3 Suitable for isolation
NF125-SV	12.5-125	AC690 AC500 AC450 AC240 DC250	8/8 18/18 25/25 50/50 40/40	15.5 36 60.1 110 40	0.5 0.3 0.25 0.25 15ms		
NF250-SV	125-250	AC690 AC500 AC450 AC240 DC250	8/8 30/30 36/36 85/85 20/20	15.5 63 76.8 206 20	0.5 0.25 0.25 0.2 10ms		
NF63-HRV	15-50	AC690 AC500 AC450 AC240 DC250	2.5/1 20/10 30/15 85/43 40/20	3.8 40 73.3 206 40	0.9/0.95 0.3/0.5 0.25/0.3 0.2/0.25 15/10ms		
NF63-HV	10-63	AC690 AC500 AC450 AC240 DC250	2.5/2.5 7.5/7.5 10/8 25/19 7.5/7.5	3.8 15 20.0 53.4 7.5	0.9 0.5 0.5 0.25/0.3 5ms		

Trade Name & Ratings (Continued)

Type	Current rating at 45℃ (A)	Rated voltage (V)	Breaking current (RMS) (kA) Icu/Ics	Making current (peak asym-metrical) (kA)	Power factor or Time constant	Over-current release (See note)	Standard
NF125-HV	15-125	AC690 AC500 AC450 AC240	10/8 30/23 50/38 100/75	19.9 63 115 234	0.5 0.25 0.25 0.2	Thermal and Magnetic	IEC60947-2 Utilization category:A Pulution degree:3 Suitable for isolation
NF250-HV	125-250	AC690 AC500 AC450 AC240 DC250	10/8 50/38 65/65 100/100 40/40	19.9 115 144 234 40	0.5 0.25 0.2 0.2 15ms		
NF125-RV	15-125	AC450 AC240	125/125 150/150	284 354	0.2 0.2		
NF250-RV	125-250	AC450 AC240	125/125 150/150	284 354	0.2 0.2		
NF125-UV	15-125	AC690 AC500 AC450 AC240	10/10 200/200 200/200 200/200	19.9 498 498 498	0.5 0.2 0.2 0.2		
NF250-UV	125-250	AC690 AC500 AC450 AC240	15/15 200/200 200/200 200/200	31.5 498 498 498	0.3 0.2 0.2 0.2		

-End of Appendix-