



Lloyd's
Register


Type Approval Certificate Extension

This is to certify that Certificate No. 11/10014 for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Mitsubishi Electric Corporation Fukuyama Works
PLACE OF PRODUCTION	1-8, Midorimachi, Fukuyama-city, Hiroshima 720-8647, Japan
DESCRIPTION	Molded case circuit breakers
TYPE	NF32-SV, NF63-SV, NF125-SV, NF250-SV, NF63-CV, NF125-CVF, NF125-CV, NF250-CV, NF63-HV, NF63-HRV, NF125-HV, NF250-HV, NF125-RV, NF250-RV, NF125-UV, NF250-UV
APPLICATION	Marine and offshore applications for use in environmental categories ENV2 as defined in LR Type Approval System Test Specification No. 1-2002 where the Test Specification is satisfactory for the intended operation.
DESIGN CODE STANDARD	IEC60947-2:Edition 4.1

Certificate No.	11/10014(E1)
Issue Date	28 February 2016
Expiry Date	27 February 2021
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Lloyd's Register Group Limited

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RATINGS

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

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RATINGS(cont.)

Type	Current rating at 45°C (A)	Rated voltage (V)	Breaking current (RMS) (kA) Icu/Ics	Making current (peak asymmetrical) (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	2.5/2.5	3.8	0.9		
		AC500 AC450 AC240 DC250	7.5/7.5 10/8 25/19 7.5/7.5	15 20.0 53.4 7.5	0.5 0.5 0.25/0.3 5ms		

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RATINGS(cont.)

Type	Current rating at 45°C (A)	Rated voltage (V)	Breaking current (RMS) (kA) Icu/Ics	Making current (peak asymmetrical) (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		

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"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 Limited of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. 11/10014(E1) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 11/10014 to which this extension should be attached.

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