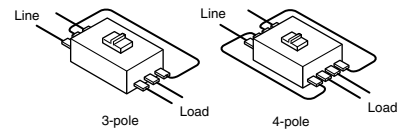


NF-L / NF-H / NF-R (High-performance class)

Frame (A)	50	60	63	100	125	125	125	125
Model	NF63-HV			NF125-HV		NF125-LGV	NF125-HGV	NF125-RGV
Image								
Rated current In (A) Rated ambient temperature 40°C (45°C for marine use)	10 15 16 20 25 30 32 40 50	60	(63)	15 16 20 30 32 40 50 60 63 75 80 100	125	16-20 20-25 25-32 32-40 35-40-50 45-50-63 53-63-80 70-80-100 90-100-125	16-20 20-25 25-32 32-40 35-40-50 45-50-63 53-63-80 70-80-100 90-100-125	16-20 20-25 25-32 32-40 40-50 50-63 63-80 80-100 100-125
Number of poles	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3
Rated insulation voltage Ui (V)	690	690	690	690	690	690	690	690
Rated short-circuit breaking capacities (kA) IEC 60947-2 EN 60947-2 (Icu/Ics) AC	690V	2.5/2.5	2.5/2.5	2.5/2.5	10/8	10/8	8/8	10/8
	500V	7.5/7.5	7.5/7.5	7.5/7.5	30/23	30/23	36/36	50/38
	440V	10/8	10/8	10/8	50/38	50/38	50/50	65/65
	415V	10/8	10/8	10/8	50/38	50/38	50/50	70/70
	400V	10/8	10/8	10/8	50/38	50/38	50/50	75/75
	380V	10/8	10/8	10/8	50/38	50/38	50/50	75/75
	230V	25/19	25/19	25/19	100/75	100/75	90/90	100/100
	200V	25/19	25/19	25/19	100/75	100/75	90/90	100/100
DC	250V	7.5/7.5 (*5)	7.5/7.5 (*5)	7.5/7.5 (*5)	-	-	20/20 (300V) (*2)	40/40 (300V) (*2)
Rated impulse withstand voltage Uimp (kV)	8	8	8	8	8	8	8	8
Current	AC/DC compatible (*1)	AC/DC compatible (*1)	AC/DC compatible (*1)	AC	AC	AC/DC compatible	AC/DC compatible	AC
Suitability for isolation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reverse connection	Available	Available	Available	Available	Available	Available	Available	Available
Number of operating cycles	Without current	15,000	15,000	15,000	25,000	25,000	50,000	50,000
	With current (440VAC)	8,000	8,000	8,000	10,000	10,000	30,000	30,000
Utilization category	A	A	A	A	A	A	A	A
Pollution degree	3	3	3	3	3	3	3	3
EMC environment condition (environment A or B)	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Overall dimensions (mm)	a	50 75 100	50 75 100	50 75 100	90 120	90 120	105 140	105 140
	b	130	130	130	130	130	165	165
	c	68	68	68	68	68	68	68
	ca	90	90	90	90	90	92	92
	Mass of front-face type (kg)	0.5 0.7 0.9	0.55 0.75 1.0	0.55 0.75 1.0	0.8 1.0 1.3	0.8 1.0 1.3	1.4 1.6 2.0	1.4 1.6 2.0
Installation and accessories	Front connection (F)	Page	●Screw terminal	●Screw terminal	●Screw terminal	●Screw terminal	●Screw terminal	●Screw terminal
	Solderless (BOX) terminal (SL)		●	●	●	●	●	●
	Rear (B)	98	●Round stud	●Round stud	●Round stud	●Bar stud	●Bar stud	●Bar stud
	Plug-in (PM)		●	●	●	●	●	●
	Alarm switch (AL)	115	●(*3)	●(*3)	●(*3)	●(*3)	●(*3)	●(*3)
	Auxiliary switch (AX)		●(*3)	●(*3)	●(*3)	●(*3)	●(*3)	●(*3)
	Shunt trip (SHT)		●(*3)	●(*3)	●(*3)	●(*3)	●(*3)	●(*3)
Undervoltage trip (UVT)		●(*3)	●(*3)	●(*3)	●(*3)	●(*3)	●(*3)	
With lead-wire terminal block (SLT)	120	●	●	●	●	●	●	
Pre-alarm (PAL)	122	-	-	-	-	-	-	-
External accessories	Enclosure	Closed (S)	●	●	●	●	●	●
		Dustproof (I)	●	●	●	●	●	●
		Waterproof (W)	-	-	-	-	-	-
	Electrical operation device (NFM)	140	-	-	-	●	●	●
		Mechanical interlock (MI) (*4)	Panel mounting	●	●	●	●	●
	Breaker mounting		●	●	●	●	●	
	Handle lock device	LC	●	●	●	●	●	
		HL	●	●	●	●	●	
		HL-S	●	●	●	●	●	
	External operating handle	(F)	●	●	●	●	●	
(V)		●	●	●	●	●		
Terminal cover (TC-L, TC-S, TTC, BTC, PTC)	128	●	●	●	●	●		
Rear stud (B-ST)	98	●	●	●	●	●		
Plug-in (PM)		●	●	●	●	●		
IEC 35mm rail mounting adapters	143	●	●	●	●	●		
CE marking	Self-declaration	Self-declaration	Self-declaration	Self-declaration	Self-declaration	Self-declaration	Self-declaration	
CCC recognition	Recognized	Recognized	Recognized	Recognized	Recognized	Recognized	Recognized	
Marine use approval (☆:Certified) (NK, LR, ABS, DNV-GL)	☆	-	☆	-	☆	-	☆	-
Automatic tripping device	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	
Trip button	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped	
Page of Characteristics and dimensions		148		150		158		158

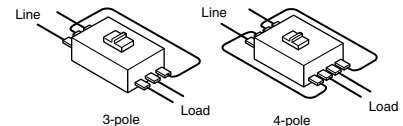
- Notes: *1 The operating characteristics are different between AC and DC.
 *2 For 3-pole product, connect cables/busbars to any two terminals, and for 4-pole product, connect cables/busbars to any two terminals except N-pole.
 When connected cables/busbars as shown on the right, maximum of 500VDC can be applied to 3-pole product and maximum of 600VDC to 4-pole product.
 *3 This accessory is cassette type and can be installed by customer. The frame size up to 250A can be closely installed, except for those with UVT.
 *4 No isolation function except 400A to 800A frame.
 *5 For 3-pole product, connect cables/busbars to any two terminals, and for 4-pole product, connect cables/busbars to any two terminals except N-pole.
 Not available for use with connection as shown on the right.







NF-H / NF-R (High-performance class)

Frame (A)		250		400				630				800			
Model		NF250-HEV		NF400-HEV		NF400-REW		NF630-HEV		NF630-REW		NF800-HEV		NF800-REW	
Image															
Rated current In (A)		80-160(by 8A)		Adjustable 200 225		Adjustable 250 300 350 400		Adjustable 200 225 400 500 600 630		Adjustable 300 350 400 500 600 630		Adjustable 400 450 500 600 700 800		Adjustable 400 450 500 600 700 800	
Rated ambient temperature 40°C (45°C for marine use)		125-250(by 12.5A)													
Number of poles		3 4		3 4		3		3 4		3		3 4		3	
Rated insulation voltage Ui (V)		690		690		690		690		690		690		690	
Relative short-circuit breaking capacities (kA)	IEC 60947-2 EN 60947-2 (Icu/Ics)	AC	690V	10/8	35/18	-	35/18	-	15/15	-					
			500V	50/38	50/50	70/35	50/50	70/35	50/50	70/35					
			440V	65/65	65/65	125/63	65/65	125/63	65/65	125/63					
			415V	70/70	70/70	125/63	70/70	125/63	70/70	125/63					
			400V	75/75	70/70	125/63	70/70	125/63	70/70	125/63					
			380V	75/75	70/70	125/63	70/70	125/63	70/70	125/63					
			230V	100/100	100/100	150/75	100/100	150/75	100/100	150/75					
			200V	100/100	100/100	150/75	100/100	150/75	100/100	150/75					
			DC	250V	-	-	-	-	-	-	-				
			Rated impulse withstand voltage Uimp (kV)		8		8		8		8		8		8
Current		AC		AC		AC		AC		AC		AC		AC	
Suitability for isolation		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Reverse connection		Available		Available		Available		Available		Available		Available		Available	
Number of operating cycles	Without current	25,000		6,000		6,000		6,000		6,000		4,000		4,000	
	With current (440VAC)	10,000		1,000		1,000		1,000		1,000		500		500	
Utilization category		A		B		B		B		B		B		B	
Rated short time with stand current Icu (kA) at 0.25s		-		5		5		7.6		7.6		9.6		9.6	
Pollution degree		3		3		3		3		3		3		3	
EMC environment condition (environment A or B)		A		A		A		A		A		A		A	
Overall dimensions (mm)	a	105	140	140	185	140	185	140	185	140	280	210	280	210	
	b	165		257		257		257		257		275		275	
	c	68		103		103		103		103		103		103	
	ca	92		155		155		155		155		155		155	
Mass of front-face type (kg)		1.7 2.2		6.0 7.6		6.0		6.5 8.3		6.0		10.9 14.2		10.9	
Installation and connections	Front connection (F)	Screw terminal		Busbar terminal		Busbar terminal		Busbar terminal		Busbar terminal		Busbar terminal		Busbar terminal	
	Solderless (BOX) terminal (SL)	-		-		-		-		-		-		-	
	Rear (B)	Bar stud		Bar stud		Bar stud		Bar stud		Bar stud		Bar stud		Bar stud	
Plug-in (PM)	-		-		-		-		-		-		-		
Cassette-type accessories	Alarm switch (AL)	●(*1)		●(*1)		●(*1)		●(*1)		●(*1)		●(*1)		●(*1)	
	Auxiliary switch (AX)	●(*1)		●(*1)		●(*1)		●(*1)		●(*1)		●(*1)		●(*1)	
	Shunt trip (SHT)	●(*1)		●(*1)		●(*1)		●(*1)		●(*1)		●(*1)		●(*1)	
	Undervoltage trip (UVT)	●(*1)		●(*1)		●(*1)		●(*1)		●(*1)		●(*1)		●(*1)	
	With lead-wire terminal block (SLT)	●		●		●		●		●		●		●	
	Pre-alarm (PAL)	●		●(*2)		●(*2)		●(*2)		●(*2)		●(*2)		●(*2)	
External accessories	Enclosure Closed (S)	-		-		-		-		-		-		-	
	Dustproof (I)	●		-		-		-		-		-		-	
	Waterproof (W)	●		-		-		-		-		-		-	
	Electrical operation device (NFM)	●		●(*3)		●(*3)		●(*3)		●(*3)		●(*3)		●(*3)	
	Mechanical interlock (MI) (*4)	●		●		●		●		●		●		●	
	Panel mounting Breaker mounting	●		-		-		-		-		-		-	
	Handle lock device LC	●		-		-		-		-		-		-	
	HL	●		-		-		-		-		-		-	
	HL-S	●		-		-		-		-		-		-	
	External operating handle (F)	●		-		-		-		-		-		-	
(V)	●		-		-		-		-		-		-		
Terminal cover (TC-L, TC-S, TTC, BTC, PTC)	●		●		●		●		●		●		●		
Rear stud (B-ST)	●		●		●		●		●		●		●		
Plug-in (PM)	●		●		●		●		●		●		●		
IEC 35mm rail mounting adapters	-		-		-		-		-		-		-		
CE marking	Self-declaration		Self-declaration		Self-declaration		Self-declaration		Self-declaration		Self-declaration		Self-declaration		
CCC recognition	Recognized		Recognized		Recognized		Recognized		Recognized		Recognized		Recognized		
Marine use approval (*:Certified) (NK, LR, ABS, DNV-GL)	☆		-		☆		-		☆		-		☆		
Automatic tripping device	Electronic (effective value detection)		Electronic (effective value detection)		Electronic (effective value detection)		Electronic (effective value detection)		Electronic (effective value detection)		Electronic (effective value detection)		Electronic (effective value detection)		
Trip button	Equipped		Equipped		Equipped		Equipped		Equipped		Equipped		Equipped		
Page of Characteristics and dimensions	160		164		164		170		170		172		172		

Notes: *1 This accessory is cassette type and can be installed by customer. The frame size up to 250A can be closely installed, except for those with UVT.
 *2 Solid state relay output is available as an option. Specify if this contact output is required. Lead-wire terminal block (SLT) is equipped as standard.
 *3 Place an order with circuit breaker.
 *4 No isolation function except 400A to 800A frame.



NF-U (Ultra current-limiting class)

125 NF125-UV												250 NF250-UV						400 NF400-UEW						800 NF800-UEW					
																													
15 20 30 40 50 60 75 100 125												125 150 175 200 225 250						Adjustable 200 225 250 300 350 400						Adjustable 400 450 500 600 700 800					
2 3 4												2 3 4						3 4						3 4					
690												690						690						690					
10/10												15/15						-						35/35					
200/200												200/200						170/170						170/170					
200/200												200/200						200/200						200/200					
200/200												200/200						200/200						200/200					
200/200												200/200						200/200						200/200					
200/200												200/200						200/200						200/200					
200/200												200/200						200/200						200/200					
200/200												200/200						200/200						200/200					
-												-						-						-					
8												8						8						8					
AC												AC						AC						AC					
Yes												Yes						Yes						Yes					
Available												Available						Available						Available					
25,000												25,000						6,000						4,000					
10,000												10,000						1,000						500					
A												A						B						B					
-												-						5						9.6					
3												3						3						3					
Not Applicable												Not Applicable						A						A					
90												105						140						210					
120												140						280						280					
191												240						297						322					
68												68						200						200					
90												92						252						252					
1.35												2.5						16.2						27.6					
1.5												2.7						25.4						33.7					
1.9												3.7						-						-					
●Screw terminal												●Screw terminal						●Busbar terminal						●Busbar terminal					
●Bar stud												●Bar stud						●Bar stud						●Bar stud					
●Bar stud												●Bar stud						-						-					
●												●						●						●					
●(*1)												●(*1)						●(*1)						●(*1)					
●(*1)												●(*1)						●(*1)						●(*1)					
●(*1)												●(*1)						●(*1)						●(*1)					
●(*1)												●(*1)						●(*1)						●(*1)					
●												●						●						●					
●												●						●(*2)						●(*2)					
-												-						-						-					
-												-						-						-					
-												-						-						-					
●												●						●(*3)						●(*3)					
●												●						●						●					
●												●						●						●					
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●												●						●						●					
-												-						-						-					
-												-						-						-					
Self-declaration												Self-declaration						Self-declaration						Self-declaration					
-												-						-						-					
☆												☆						☆						-					
Thermal-magnetic												Thermal-magnetic						Electronic (effective value detection)						Electronic (effective value detection)					
Equipped												Equipped						Equipped						Equipped					
152												156						166						176					

Remarks: 1. Products with rated current parenthesized are produced when an order is placed.
 2. Specify "P-LT" when selecting plug-in type with lead-wire terminal block.
 3. The circuit breaker has the rated short-circuit breaking capacity specified in the shaded cells.