






NV-C (Economy class) Harmonic Surge Ready

Frame (A)	50	60	63	100	125			
Model	NV63-CV			NV125-CV				
Image								
Rated current In (A) Rated ambient temperature 40°C	(5) (10) (15) 16 20 25 (30) 32 40 50	(60)	63	(60) 63 (75) 80 100	125			
Number of poles	2	3	2	3	3			
Phase line (*1)	1φ2W	3φ3W, 1φ3W, 1φ2W	1φ2W	3φ3W, 1φ3W, 1φ2W	3φ3W, 1φ3W, 1φ2W			
Rated operational voltage Ue (V) (*2) AC	100-240	100-440	100-240	100-440	100-440			
Time-delay type	High-speed type	Rated current sensitivity (mA)	30	30,100/200/500 selectable	30	30,100/200/500 selectable	30,100/200/500 selectable	30,100/200/500 selectable
		Max. operating time (s)	at IΔn	0.1	0.1	0.1	0.1	0.1
			at 5IΔn	0.04	0.04	0.04	0.04	0.04
		Rated current sensitivity (mA)	-	-	-	(100/200/500 selectable)	(100/200/500 selectable)	
Time-delay type	High-speed type	Max. operating time (s) (*3)	-	-	-	(0.45/1.0/2.0 selectable)	(0.45/1.0/2.0 selectable)	
		Internal non-operating (s) (or more)	-	-	-	(0.1/0.5/1.0)	(0.1/0.5/1.0)	
Earth leakage indication system	Mechanical type (button)		Mechanical type (button)	Mechanical type (button)	Mechanical type (button)	Mechanical type (button)		
Rated short-circuit breaking capacity (kA)	AC	440V	-	2.5/2.5	-	2.5/2.5	10/5	10/5
		415V	-	2.5/2.5	-	2.5/2.5	10/5	10/5
		400V	-	5/5	-	5/5	10/5	10/5
		230V	7.5/7.5	7.5/7.5	7.5/7.5	7.5/7.5	30/15	30/15
		200V	7.5/7.5	7.5/7.5	7.5/7.5	7.5/7.5	30/15	30/15
		100V	7.5/7.5	7.5/7.5	7.5/7.5	7.5/7.5	30/15	30/15
Rated impulse withstand voltage Uimp (kV)	6	6	6	6	6			
Current	AC	AC	AC	AC	AC			
Suitability for isolation	Compatible		Compatible	Compatible	Compatible	Compatible		
Reverse connection (below 230VAC)	Possible		Possible	Possible	Possible	Possible		
Number of operating cycles	Without current		10,000	10,000	10,000	10,000		
	With current		6,000	6,000	6,000	6,000		
Utilization category	A		A	A	A	A		
Pollution degree	2		2	2	2	2		
EMC environment condition (environment A or B)	A		A	A	A	A		
Overall dimensions (mm)	a		75	75	75	90	90	
	b		130	130	130	130	130	
	c		68	68	68	68	68	
	ca		90	90	90	90	90	
	ca		90	90	90	90	90	
Mass of front-face type (kg)	0.7	0.75	0.7	0.75	0.7	0.75	1.0	1.0
Installation and connections	Front connection (F)	●Screw terminal		●Screw terminal	●Screw terminal	●Screw terminal	●Screw terminal	
	Solderless (BOX) terminal (SL)	-		-	-	-	-	
	Rear (B)	●Round stud		●Round stud	●Round stud	●Bar stud	●Bar stud	
	Plug-in (PM)	-		-	-	-	-	
Cassette-type accessories	Alarm switch (AL)	●(*4)		●(*4)	●(*4)	●(*4)	●(*4)	
	Auxiliary switch (AX)	●(*4)		●(*4)	●(*4)	●(*4)	●(*4)	
	Shunt trip (SHT)	●(*4)		●(*4)	●(*4)	●(*4)	●(*4)	
	Undervoltage trip (UVT)	●(*4)		●(*4)	●(*4)	●(*4)	●(*4)	
	Earth leakage alarm switch (EAL)	-		-	-	-	-	
	With lead-wire terminal block (SLT)	●		●	●	●	●	
Test button module (TBM)	●(*5)		●(*5)	●(*5)	●(*5)	●(*5)		
External accessories	Enclosure	Closed (S)	-		-	-	-	
		Dustproof (I)	-		-	-	-	
		Waterproof (W)	-		-	-	-	
	Electrical operation device (NFM)	-		-	-	●	●	
	Mechanical interlock (MI) (*7)	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		
CCC recognition	-	Recognition in process	-	Recognition in process	-	Recognition in process	Recognition in process	
Marine use approval (NK, LR, ABS, GL)	-		-	-	-	-		
Automatic tripping device	Thermal-magnetic		Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic		
Trip button	Equipped		Equipped	Equipped	Equipped	Equipped		
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Notes: *1 If using a 3-pole earth leakage circuit breaker as a 1-pole 2-phase device, connect the left and right poles and not the central pole. When wiring to single-phase 3-wire, connect the neutral line to the central pole.
 *2 In case of time delay type, rated voltage is 200-440VAC.
 *3 When the operating time are 0.45, 1.0 and 2.0 seconds, the Earth Leakage circuit breaker operates between 0.15 and 0.45 seconds, between 0.6 and 1.0 seconds and between 1.2 and 2.0 seconds respectively.
 *4 The cassette type design makes it easy for customer to install. Available for installation on side below 250A frame (excluding UVT).
 *5 Standard type is SLT equipped.

*6 Place an order of other models in conjunction with the circuit breaker.
 *7 Not isolation compatible, excluding 400 to 630A frame.
 *8 AC100V does not acquire the CCC certification.

NV-C (Economy class) Harmonic Surge Ready

225		250		400		600		630	
NV250-CV		NV250-CV		NV400-CW		NV400-CW		NV630-CW	
									
125 150 175 200 225		250		250 300 350 400		500 600		(630)	
3		3		3		3		3	
3φ3W, 1φ3W, 1φ2W		3φ3W, 1φ3W, 1φ2W		3φ3W, 1φ3W, 1φ2W		3φ3W, 1φ3W, 1φ2W		3φ3W, 1φ3W, 1φ2W	
100-440		100-440		100-440		200-440		200-440	
30,100/200/500 selectable		30,100/200/500 selectable		(30),100/200/500 selectable		-		-	
0.1		0.1		0.1		-		-	
0.04		0.04		0.04		-		-	
(100/200/500 selectable)		(100/200/500 selectable)		(100/200/500 selectable)		(100/200/500 selectable)		(100/200/500 selectable)	
(0.45/1.0/2.0 selectable)		(0.45/1.0/2.0 selectable)		(0.45/1.0/2.0 selectable)		(0.45/1.0/2.0 selectable)		(0.45/1.0/2.0 selectable)	
(0.1/0.5/1.0)		(0.1/0.5/1.0)		(0.1/0.5/1.0)		(0.1/0.5/1.0)		(0.1/0.5/1.0)	
Mechanical type (button)		Mechanical type (button)		Mechanical type (button)		Mechanical type (button)		Mechanical type (button)	
15/12		15/12		25/13		36/18		36/18	
25/19		25/19		36/18		36/18		36/18	
25/19		25/19		36/18		36/18		36/18	
36/27		36/27		50/25		50/25		50/25	
36/27		36/27		50/25		50/25		50/25	
36/27		36/27		50/25		-		-	
6		6		8		8		8	
AC		AC		AC		AC		AC	
Compatible		Compatible		Compatible		Compatible		Compatible	
Possible		Possible		Possible		Possible		Possible	
8,000		8,000		6,000		6,000		6,000	
4,000		4,000		1,000		1,000		1,000	
A		A		A		A		A	
2		2		3		3		3	
A		A		A		A		A	
105		105		140		140		140	
165		165		257		257		257	
68		68		103		103		103	
92		92		134		155		155	
1.7		1.7		6.1		6.9		6.9	
●Screw terminal		●Screw terminal		●Busbar terminal		●Busbar terminal		●Busbar terminal	
-		-		-		-		-	
●Bar stud		●Bar stud		●Bar stud		●Bar stud		●Bar stud	
-		-		-		-		-	
●(*4)		●(*4)		●(*4)		●(*4)		●(*4)	
●(*4)		●(*4)		●(*4)		●(*4)		●(*4)	
●(*4)		●(*4)		●(*4)		●(*4)		●(*4)	
●(*4)		●(*4)		●		●		●	
-		-		-		-		-	
●		●		●		●		●	
●(*5)		●(*5)		●(*5)		●(*5)		●(*5)	
-		-		-		-		-	
-		-		-		-		-	
-		-		-		-		-	
●		●		●(*6)		●(*6)		●(*6)	
●		●		●		●		●	
●		●		●		●		●	
●		●		●		●		●	
●		●		●		●		●	
●		●		●		●		●	
●		●		●		●		●	
●		●		●		●		●	
●		●		●		●		●	
●		●		●		●		●	
●		●		●		●		●	
-		-		-		-		-	
-		-		-		-		-	
TUV approval		TUV approval		Self-declaration		Self-declaration		Self-declaration	
Recognition in process		Recognition in process		Recognition in process		Recognition in process		Recognition in process	
-		-		-		-		-	
Thermal-magnetic		Thermal-magnetic		Thermal-magnetic		Thermal-magnetic		Thermal-magnetic	
Equipped		Equipped		Equipped		Equipped		Equipped	
184		184		188		188		192	

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

Rated operational voltage	Applicable circuit voltage	Available voltage range
100-240V	100/110/200/220/230/240V	85-264V
100-440V	100/110/200/220/240/254/265/380/400/415/440V	85-484V
200-440V	200/220/240/254/265/380/400/415/440V	170-484V

NV-S (Standard class) Harmonic Surge Ready

Frame (A)	30	32	50	60	63	100	125	125	
Model	NV32-SV		NV63-SV			NV125-SV		NV125-SEV	
Image									
Rated current In (A) Rated ambient temperature 40°C	(5) 6 10 (15) 16 20 25 (30)	(32)	(5) (10) (15) 16 20 25 (30) 32 40 50	(60)	63	(15) 16 20 (30) 32 40 50 (60) 63 (75) 80 100 (*3)	125	63-125	
Number of poles	3	3	3	3	3	3 4	3 4	3 4	
Phase line (*1)	3φ3W, 1φ3W, 1φ2W	3φ3W, 1φ3W, 1φ2W	3φ3W, 1φ3W, 1φ2W	3φ3W, 1φ3W, 1φ2W	3φ3W, 1φ3W, 1φ2W	3φ3W, 1φ3W, 1φ2W 3φ4W	3φ3W, 1φ3W, 1φ2W 3φ4W	3φ3W, 1φ2W 3φ4W	
Rated operational voltage Ue (V) (*2) AC	100-440		100-440			100-440 200-440	100-440 200-440	100-440	
Time-delay type	High-speed type	Rated current sensitivity (mA)	30,100/200/500 selectable		30,100/200/500 selectable			30,100/200/500 selectable	
		Max. operating time (s)	at IΔn 0.1 at 5IΔn 0.04		0.1 0.04			0.1 0.04	
		Rated current sensitivity (mA)	-		-			(100/200/500selectable)	
		Max. operating time (s) (*4)	-		-			(0.45/1.0/2.0selectable)	
Time-delay type	Standard type	Rated current sensitivity (mA)	-		-			(100/200/500selectable)	
		Max. operating time (s) (*4)	-		-			(0.45/1.0/2.0selectable)	
		Internal non-operating (s) (or more)	-		-			(0.1/0.5/1.0)	
		Earth leakage indication system	Mechanical type (button)		Mechanical type (button)			Mechanical type (button)	
Rated short-circuit breaking capacities (kA)	AC	IEC 60947-2	440V 5/5	5/5	7.5/7.5	7.5/7.5	7.5/7.5	25/25	25/25
		EN 60947-2 (Icu/Ics)	415V 5/5	5/5	7.5/7.5	7.5/7.5	7.5/7.5	30/30	30/30
		400V 5/5	5/5	7.5/7.5	7.5/7.5	7.5/7.5	30/30	30/30	
		230V 10/10	10/10	15/15	15/15	15/15	50/50	50/50	
		200V 10/10	10/10	15/15	15/15	15/15	50/50	50/50	
		100V 10/10	10/10	15/15	15/15	15/15	50/50	50/50	
Rated impulse withstand voltage Uimp (kV) Current	6 AC	6 AC	6 AC	6 AC	6 AC	6 AC	6 AC	6 AC	
Suitability for isolation	Compatible		Compatible			Compatible		Compatible	
Reverse connection (below 230VAC)	Possible		Possible			Possible		Possible	
Number of operating cycles	Without current	10,000	10,000	15,000	15,000	15,000	25,000	25,000	
	With current	6,000	6,000	8,000	8,000	8,000	10,000	10,000	
Utilization category	A		A			A		A	
Rated short time withstand current Icu (kA) at 0.25s	-		-			-		-	
Pollution degree	2		2			2		2	
EMC environment condition (environment A or B)	A		A			A		A	
Overall dimensions (mm)		a	75	75	75	75	90 120	90 120	105 140
		b	130	130	130	130	130	130	165
		c	68	68	68	68	68	68	68
		ca	90	90	90	90	90	90	92
		Mass of front-face type (kg)	0.75	0.75	0.75	0.8	0.8	1.1 1.4	1.1 1.4
Installation and connections	Front connection (F)	●Screw terminal		●Screw terminal			●Screw terminal		
	Solderless (BOX) terminal (SL)	-		-			-		
	Rear (B)	●Round stud		●Round stud			●Bar stud		
	Plug-in (PM)	-		-			-		
Cassette-type accessories	Alarm switch (AL)	●(*5)		●(*5)			●(*5)		
	Auxiliary switch (AX)	●(*5)		●(*5)			●(*5)		
	Shunt trip (SHT)	●(*5)		●(*5)			●(*5)		
	Undervoltage trip (UVT)	●(*5)		●(*5)			●(*5)		
	Earth leakage alarm switch (EAL)	-		-			-		
	With lead-wire terminal block (SLT)	●		●			●		
	Test button module (TBM)	●(*6)		●(*6)			●(*6)		
External accessories	Enclosure	Closed (S)	-		-			-	
		Dustproof (I)	-		-			-	
		Waterproof (W)	-		-			-	
	Electrical operation device (NFM)	Mechanical interlock (MI) (*8)	●		●			●	
		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	
CCC recognition	Recognition in process		Recognition in process			Recognition in process		Recognized	
Marine use approval (NK, LR, ABS, GL)	-		-			-		-	
Automatic tripping device	Thermal-magnetic		Thermal-magnetic			Thermal-magnetic		Electronic (effective value detection)	
Trip button	Equipped		Equipped			Equipped		Equipped	
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Notes: *1 If using a 3-pole earth leakage circuit breaker as a 1-pole 2-phase device, connect the left and right poles and not the central pole. When wiring to single-phase 3-wire, connect the neutral line to the central pole.
 *2 In case of time delay type, rated voltage is 200-440VAC.
 *3 In case of time delay type, rated current is produced with 20 amp. or more.
 *4 When the operating time are 0.45, 1.0 and 2.0 seconds, the Earth Leakage circuit breaker operates between 0.15 and 0.45 seconds, between 0.6 and 1.0 seconds and between 1.2 and 2.0 seconds respectively.

*5 Cassette type accessories are field mountable type. It can respond to adhesion attachment of a breaker as standard below 250A frame. (excluding UVT.)
 *6 Standard type is SLT equipped.
 *7 Place an order of other models in conjunction with the circuit breaker.
 *8 Not isolation compatible, excluding 400 to 800A frame.
 *9 AC100V does not acquire the CCC certification.

NV-S (Standard class) Harmonic Surge Ready

225		250		250		400		400		600		630		630		800	
NV250-SV		NV250-SV		NV250-SEV		NV400-SW		NV400-SEW		NV630-SW		NV630-SEW		NV630-SEW		NV800-SEW	
125 150 175 200 225		250		125-250		250 300 350 400		Adjustable 200 225 250 300 350 400		500 600		(630)		Adjustable 300 350 400 500 600 630		Adjustable 400 450 500 600 700 800	
3		3		3		3		3 4		3		3		3 4		3	
3φ3W, 1φ3W, 1φ2W		3φ3W, 1φ3W, 1φ2W		3φ3W, 1φ2W		3φ3W, 1φ3W, 1φ2W		3φ3W, 1φ3W, 1φ2W 3φ4W		3φ3W, 1φ3W, 1φ2W		3φ3W, 1φ3W, 1φ2W		3φ3W, 1φ3W, 1φ2W 3φ4W		3φ3W, 1φ3W, 1φ2W	
100-440		100-440		100-440		100-440		100-440		200-440		200-440		100-440		200-440	
(30),100/200/500 selectable		(30),100/200/500 selectable		(30),100/200/500 selectable		(30),100/200/500 selectable		(30),100/200/500 selectable		-		-		-		-	
0.1		0.1		0.1		0.1		0.1		-		-		-		-	
0.04		0.04		0.04		0.04		0.04		-		-		-		-	
(100/200/500selectable) (0.45/1.0/2.0selectable) (0.1/0.5/1.0)		(100/200/500selectable) (0.45/1.0/2.0selectable) (0.1/0.5/1.0)		(100/200/500selectable) (0.45/1.0/2.0selectable) (0.1/0.5/1.0)		(100/200/500selectable) (0.45/1.0/2.0selectable) (0.1/0.5/1.0)		(100/200/500selectable) (0.45/1.0/2.0selectable) (0.1/0.5/1.0)		100/200/500selectable 0.45/1.0/2.0selectable 0.1/0.5/1.0		100/200/500selectable 0.45/1.0/2.0selectable 0.1/0.5/1.0		(100/200/500selectable) (0.45/1.0/2.0selectable) (0.1/0.5/1.0)		100/200/500selectable 0.45/1.0/2.0selectable 0.1/0.5/1.0	
Mechanical type (button)		Mechanical type (button)		Mechanical type (button)		Mechanical type (button)		Mechanical type (button)		Mechanical type (button)		Mechanical type (button)		Mechanical type (button)		Mechanical type (button)	
36/36		36/36		36/36		42/42		42/42		42/42		42/42		42/42		42/42	
36/36		36/36		36/36		45/45		50/50		50/50		50/50		50/50		50/50	
36/36		36/36		36/36		45/45		50/50		50/50		50/50		50/50		50/50	
85/85		85/85		85/85		85/85		85/85		85/85		85/85		85/85		85/85	
85/85		85/85		85/85		85/85		85/85		85/85		85/85		85/85		85/85	
85/85		85/85		85/85		85/85		85/85		85/85		85/85		85/85		85/85	
6		6		6		8		8		8		8		8		8	
AC		AC		AC		AC		AC		AC		AC		AC		AC	
Compatible		Compatible		Compatible		Compatible		Compatible		Compatible		Compatible		Compatible		Compatible	
Possible		Possible		Possible		Possible		Possible		Possible		Possible		Possible		Possible	
25,000		25,000		25,000		6,000		6,000		6,000		6,000		6,000		4,000	
10,000		10,000		10,000		1,000		1,000		1,000		1,000		1,000		500	
A		A		A		A		B		A		A		B		A	
-		-		-		-		5		-		-		7.6		9.6	
2		2		2		3		3		3		3		3		3	
A		A		A		A		A		A		A		A		A	
105		105		105		140		140 185		140		140		140 185		210	
165		165		165		257		257		257		257		257		275	
68		68		68		103		103		103		103		103		103	
92		92		92		155		155		155		155		155		155	
1.9		1.9		1.9		6.4		6.2 8.2		6.9		6.9		7.1 8.9		15.3	
●Screw terminal		●Screw terminal		●		●Busbar terminal		●Busbar terminal		●Busbar terminal		●Busbar terminal		●Busbar terminal		●Busbar terminal	
-		-		-		-		-		-		-		-		-	
●Bar stud		●Bar stud		●Bar stud		●Bar stud		●Bar stud		●Bar stud		●Bar stud		●Bar stud		●Bar stud	
-		-		-		-		-		-		-		-		-	
●(*5)		●(*5)		●(*5)		●(*5)		●(*5)		●(*5)		●(*5)		●(*5)		●(*5)	
●(*5)		●(*5)		●(*5)		●(*5)		●(*5)		●(*5)		●(*5)		●(*5)		●(*5)	
●(*5)		●(*5)		●(*5)		●(*5)		●(*5)		●(*5)		●(*5)		●(*5)		●(*5)	
●(*5)		●(*5)		●(*5)		●		●		●		●		●		●	
-		-		-		●		●		●		●		●		●	
●(*6)		●(*6)		●(*6)		●(*6)		●(*6)		●(*6)		●(*6)		●(*6)		●(*6)	
-		-		-		-		-		-		-		-		-	
-		-		-		-		●		-		-		●		-	
-		-		-		-		●		-		-		●		-	
●		●		●		●(*7)		●(*7)		●(*7)		●(*7)		●(*7)		●(*7)	
●		●		●		●		●		●		●		●		●	
●		●		●		●		●		●		●		●		●	
●		●		●		●		●		●		●		●		●	
●		●		●		●		●		●		●		●		●	
●		●		●		●		●		●		●		●		●	
●		●		●		●		●		●		●		●		●	
●		●		●		●		●		●		●		●		●	
●		●		●		●		●		●		●		●		●	
-		-		-		-		-		-		-		-		-	
TUV approval		TUV approval		Self-declaration		Self-declaration		Self-declaration		Self-declaration		Self-declaration		Self-declaration		Self-declaration	
Recognition in process		Recognition in process		Recognized		Recognition in process		Recognition in process		Recognition in process		Recognition in process		Recognition in process		Recognition in process	
-		-		-		-		-		-		-		-		-	
Thermal-magnetic Equipped		Thermal-magnetic Equipped		Electronic (effective value detection) Equipped		Thermal-magnetic Equipped		Electronic (effective value detection) Equipped		Thermal-magnetic Equipped		Thermal-magnetic Equipped		Electronic (effective value detection) Equipped		Electronic (effective value detection) Equipped	
184		184		186		188		190		192		194		196		196	

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

4.	Rated operational voltage	Applicable circuit voltage	Available voltage range
	100-440V	100/110/200/220/240/254/265/380/400/415/440V	85-484V
	200-440V	200/220/240/254/265/380/400/415/440V	170-484V





NV-H / NV-R (High-performance class) Harmonic Surge Ready

Frame (A)	50	60	63	100	125	125	225	250	250		
Model	NV63-HV			NV125-HV		NV125-HEV	NV250-HV		NV250-HEV		
Image											
Rated current In (A) Rated ambient temperature 40°C	(15) 16 20 (30) 32 40 50	(60)	63	(15) 16 20 (30) 32 40 50 (60) 63 (75) 80 100 (*3)	125	63-125	125 150 175 200 225	250	125-250		
Number of poles	3	3	3	3	4	3	4	3	3		
Phase line (*1)	3φ3W, 1φ3W, 1φ2W	3φ3W, 1φ3W, 1φ2W	3φ3W, 1φ3W, 1φ2W	3φ3W, 1φ3W, 1φ2W	3φ4W	3φ3W, 1φ3W, 1φ2W	3φ4W	3φ3W, 1φ3W, 1φ2W	3φ3W, 1φ2W		
Rated operational voltage Ue (V) (*2) AC	100-440	100-440	100-440	100-440/200-440	100-440/200-440	100-440	100-440	100-440	100-440		
Time-delay type	High-speed type	Rated current sensitivity (mA)	30,100/200/500 selectable	30,100/200/500 selectable	30,100/200/500 selectable	30,100/200/500 selectable	(30),100/200/500 selectable	30,100/200/500 selectable	30,100/200/500 selectable	(30),100/200/500 selectable	
		Max. operating time (s)	at IΔn 0.1 0.04	0.1 0.04	0.1 0.04	0.1 0.04	0.1 0.04	0.1 0.04	0.1 0.04	0.1 0.04	0.1 0.04
		Rated current sensitivity (mA)	-	-	-	(100/200/500selectable) (0.45/1.0/2.0selectable)	(100/200/500selectable) (0.45/1.0/2.0selectable)	(100/200/500selectable) (0.45/1.0/2.0selectable)	(100/200/500selectable) (0.45/1.0/2.0selectable)	(100/200/500selectable) (0.45/1.0/2.0selectable)	(100/200/500selectable) (0.45/1.0/2.0selectable)
		Max. operating time (s) (*4)	-	-	-	(0.1/0.5/1.0)	(0.1/0.5/1.0)	(0.1/0.5/1.0)	(0.1/0.5/1.0)	(0.1/0.5/1.0)	(0.1/0.5/1.0)
Internal non-operating (s) (or more)	-	-	-	-	-	-	-	-	-		
Earth leakage indication system	Mechanical type (button)			Mechanical type (button)	Mechanical type (button)	Mechanical type (button)	Mechanical type (button)	Mechanical type (button)	Mechanical type (button)		
Rated short-circuit breaking capacity (kA)	AC	IEC 60947-2	440V 10/8	10/8	10/8	50/38	50/38	65/65	65/65	65/65	
		415V 10/8	10/8	10/8	50/38	50/38	70/70	70/70	70/70	70/70	
		400V 10/8	10/8	10/8	50/38	50/38	75/75	75/75	75/75	75/75	
		230V 25/19	25/19	25/19	100/75	100/75	100/100	100/100	100/100	100/100	100/100
		200V 25/19	25/19	25/19	100/75	100/75	100/100	100/100	100/100	100/100	100/100
		100V 25/19	25/19	25/19	100/75	100/75	100/100	100/100	100/100	100/100	100/100
Rated impulse withstand voltage Uimp (kV)	6	6	6	6	6	6	6	6	6		
Current	AC	AC	AC	AC	AC	AC	AC	AC	AC		
Suitability for isolation	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible	Compatible		
Reverse connection (below 230VAC)	-	-	-	-	-	-	-	-	-		
Number of operating cycles	Without current	15,000	15,000	15,000	25,000	25,000	25,000	25,000	25,000		
	With current	8,000	8,000	8,000	10,000	10,000	10,000	10,000	10,000		
Utilization category	A	A	A	A	A	A	A	A	A		
Rated short time withstand current Icu (kA) at 0.25s	-	-	-	-	-	-	-	-	-		
Pollution degree	2	2	2	2	2	2	2	2	2		
EMC environment condition (environment A or B)	A	A	A	A	A	A	A	A	A		
Overall dimensions (mm)		a	75	75	75	90 120	90 120	105 140	105	105	
		b	130	130	130	130	130	165	165	165	
		c	68	68	68	68	68	68	68	68	
		ca	90	90	90	90	90	92	92	92	
		Mass of front-face type (kg)	0.75	0.8	0.8	1.1 1.4	1.1 1.4	1.9 2.5	1.8	1.8	1.9
Installation and connectors	Front connection (F)	Page	●Screw terminal	●Screw terminal	●Screw terminal	●Screw terminal	●Screw terminal	●Screw terminal	●Screw terminal		
	Solderless (BOX) terminal (SL)	-	-	-	-	-	-	-	-		
	Rear (B)	92	●Round stud	●Round stud	●Round stud	●Bar stud	●Bar stud	●Bar stud	●Bar stud		
	Plug-in (PM)	-	-	-	-	-	-	-	-		
Cassette-type accessories	Alarm switch (AL)	●(*5)	●(*5)	●(*5)	●(*5)	●(*5)	●(*5)	●(*5)	●(*5)		
	Auxiliary switch (AX)	●(*5)	●(*5)	●(*5)	●(*5)	●(*5)	●(*5)	●(*5)	●(*5)		
	Shunt trip (SHT)	●(*5)	●(*5)	●(*5)	●(*5)	●(*5)	●(*5)	●(*5)	●(*5)		
	Undervoltage trip (UVT)	●(*5)	●(*5)	●(*5)	●(*5)	●(*5)	●(*5)	●(*5)	●(*5)		
	Earth leakage alarm switch (EAL)	-	-	-	-	-	-	-	-		
	With lead-wire terminal block (SLT)	●	●	●	●	●	●	●	●		
Test button module (TBM)	115	●(*6)	●(*6)	●(*6)	●(*6)	●(*6)	●(*6)	●(*6)			
External accessories	Enclosure	Closed (S)	-	-	-	-	-	-	-		
		Dustproof (I)	-	-	-	-	●	-	-		
	Waterproof (W)	-	-	-	-	-	-	-	●		
	Electrical operation device (NFM)	Mechanical interlock (MI) (*7)	129	●	●	●	●	●	●	●	
		Panel mounting Breaker mounting	-	-	-	-	-	-	-	-	
	Handle lock device	LC	127	●	●	●	●	●	●	●	
		HL	●	●	●	●	●	●	●	●	
		HL-S	●	●	●	●	●	●	●	●	
	External operating handle	(F)	117	●	●	●	●	●	●	●	
		(V)	●	●	●	●	●	●	●	●	
Terminal cover (TC-L, TC-S, TTC, BTC, PTC)	121	●	●	●	●	●	●	●			
Rear stud (B-ST)	94	●	●	●	●	●	●	●			
Plug-in (PM)	-	-	-	-	-	-	-	-			
IEC 35mm rail mounting adapters	137	●	●	●	-	-	-	-	-		
CE marking	Self-declaration	Self-declaration	Self-declaration	Self-declaration	Self-declaration	Self-declaration	Self-declaration	Self-declaration	Self-declaration		
CCC recognition	Recognition in process	Recognition in process	Recognition in process	Recognition in process	Recognition in process	Recognized	Recognition in process	Recognition in process	Recognized		
Marine use approval (NK, LR, ABS, GL)	-	-	-	-	-	-	-	-	-		
Automatic tripping device	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Thermal-magnetic	Electronic (effective value detector)	Thermal-magnetic	Thermal-magnetic	Electronic (effective value detector)		
Trip button	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped	Equipped			
Page of Characteristics and dimensions	-	180	-	-	182	-	186	184	186		

Notes: *1 If using a 3-pole earth leakage circuit breaker as a 1-pole 2-phase device, connect the left and right poles and not the central pole. When wiring to single-phase 3-wire, connect the neutral line to the central pole.
 *2 In case of time delay type, rated voltage is 200-440VAC.
 *3 In case of time delay type, rated current is produced with 20 amp. or more.
 *4 When the operating time are 0.45, 1.0 and 2.0 seconds, the Earth Leakage circuit breaker operates between 0.15 and 0.45 seconds, between 0.6 and 1.0 seconds and between 1.2 and 2.0 seconds respectively.

*5 Cassette type accessories are field mountable type. It can respond to adhesion attachment of a breaker as standard. (excluding UVT.)
 *6 Standard type is SLT equipped.
 *7 Not isolation compatible.
 *8 AC100V does not acquire the CCC certification.

NV-H / NV-R (High-performance class) Harmonic Surge Ready

400 NV400-HEW		400 NV400-REW		630 NV630-HEW		800 NV800-HEW	
							
Adjustable 200 225 250 300 350 400		Adjustable 200 225 250 300 350 400		Adjustable 300 350 400 500 600 630		Adjustable 400 450 500 600 700 800	
3		3		3		3	
3φ3W, 1φ3W, 1φ2W		3φ3W, 1φ3W, 1φ2W		3φ3W, 1φ3W, 1φ2W		3φ3W, 1φ3W, 1φ2W	
100-440		100-440		100-440		100-440	
(30), 100/200/500 selectable		(30), 100/200/500 selectable		-		-	
0.1		0.1		-		-	
0.04		0.04		-		-	
(100/200/500 selectable)		(100/200/500 selectable)		(100/200/500 selectable)		(100/200/500 selectable)	
(0.45/1.0/2.0)		(0.45/1.0/2.0)		(0.45/1.0/2.0)		(0.45/1.0/2.0 selectable)	
(0.1/0.5/1.0)		(0.1/0.5/1.0)		(0.1/0.5/1.0)		(0.1/0.5/1.0)	
Mechanical type (button)		Mechanical type (button)		Mechanical type (button)		Mechanical type (button)	
65/65		125/63		65/65		65/65	
70/70		125/63		70/70		70/70	
70/70		125/63		70/70		70/70	
100/100		150/75		100/100		100/100	
100/100		150/75		100/100		100/100	
100/100		150/75		100/100		100/100	
8		8		8		8	
AC		AC		AC		AC	
Compatible		Compatible		Compatible		Compatible	
-		-		-		-	
6,000		6,000		6,000		4,000	
1,000		1,000		1,000		500	
B		B		B		B	
5		5		7.6		9.6	
3		3		3		3	
A		A		A		A	
140		140		140		210	
257		257		257		275	
103		103		103		103	
155		155		155		155	
6.6		6.6		7.1		15.3	
●Busbar terminal		●Busbar terminal		●Busbar terminal		●Busbar terminal	
-		-		-		-	
●Bar stud		●Bar stud		●Bar stud		●Bar stud	
-		-		-		-	
●(*5)		●(*5)		●(*5)		●(*5)	
●(*5)		●(*5)		●(*5)		●(*5)	
●(*5)		●(*5)		●(*5)		●(*5)	
-		-		-		-	
-		-		-		-	
●(*6)		●(*6)		●(*6)		●(*6)	
-		-		-		-	
●		●		●		●	
●		●		●		●	
●(*7)		●(*7)		●(*7)		●(*7)	
●		●		●		●	
●		●		●		●	
●		●		●		●	
●		●		●		●	
●		●		●		●	
●		●		●		●	
-		-		-		-	
-		-		-		-	
Self-declaration		Self-declaration		Self-declaration		Self-declaration	
Recognition in process		Recognition in process		Recognition in process		Recognition in process	
-		-		-		-	
Electronic (effective value detection)		Electronic (effective value detection)		Electronic (effective value detection)		Electronic (effective value detection)	
Equipped		Equipped		Equipped		Equipped	
190		190		194		196	

Remarks: 1. Products with rated current parenthesized are produced when an order is placed.
 2. The setting is set to 500mA and delivered when not specifying the rated current sensitivity and the time of time-delay type of operation to 2.0 seconds.
 3. Specify "FP-LT" when using a flush plate product with a lead-wire terminal block.
 4. Specify "P-LT" when using a plug-in product with a lead-wire terminal block.
 5. The circuit breaker has the rated short-circuit breaking capacity specified in the shaded cells.

Rated operational voltage	Applicable circuit voltage	Available voltage range
100-440V	100/110/200/220/240/254/265/380/400/415/440V	85-484V
200-440V	200/220/240/254/265/380/400/415/440V	175-484V

2 Detailed Specifications