

5. Characteristics and Dimensions

Molded-case Circuit Breakers

- NF125-SGV
- NF250-SGV
- NF160-LGV
- NF125-HGV
- NF250-HGV
- NF250-RGV
- NF160-SGV
- NF125-LGV
- NF250-LGV
- NF160-HGV
- NF125-RGV



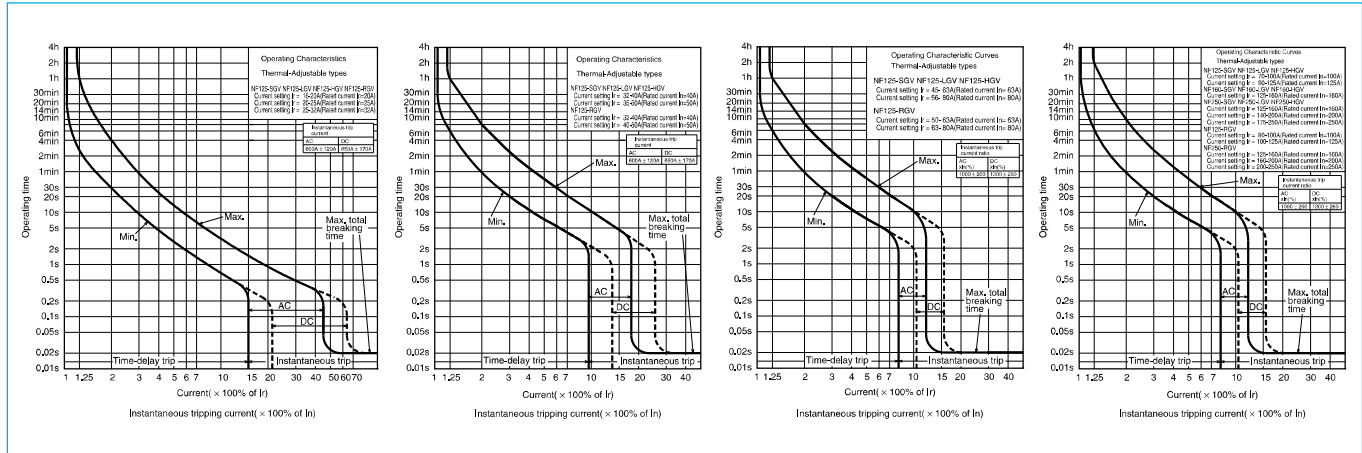
NF250-SGV

Type name		NF125-SGV	NF160-SGV	NF250-SGV	NF125-LGV	NF160-LGV	NF250-LGV	
Rated current In (A)		16-20, 20-25, 25-32 32-40, 35-50, 45-63 56-80, 70-100, 90-125	125-160	125-160 140-200 175-250	16-20, 20-25, 25-32 32-40, 35-50, 45-63 56-80, 70-100, 90-125	125-160	125-160 140-200 175-250	
Number of poles		2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	2 3 4	
Rated insulation voltage Ui (V)		690	690	690	690	690	690	
Rated short-circuit breaking capacity (kA)	IEC 60947-2 (Icu/Ics)	AC	690V	8/8	8/8	8/8	8/8	8/8
			500V	30/30	30/30	30/30	36/36	36/36
			440V	36/36	36/36	36/36	50/50	50/50
			415V	36/36	36/36	36/36	50/50	50/50
			400V	36/36	36/36	36/36	50/50	50/50
			380V	36/36	36/36	36/36	50/50	50/50
			230V	85/85	85/85	85/85	90/90	90/90
			200V	85/85	85/85	85/85	90/90	90/90
DC (*1)		300V	20/20	20/20	20/20	20/20	20/20	
Standard attached parts (front connection)		Mounting screw: M4×0.7×55 (2 and 3P: 2pcs, 4P: 4pcs) Insulation barrier: (2P: 2pcs, 3P: 4pcs, 4P: 6pcs)						

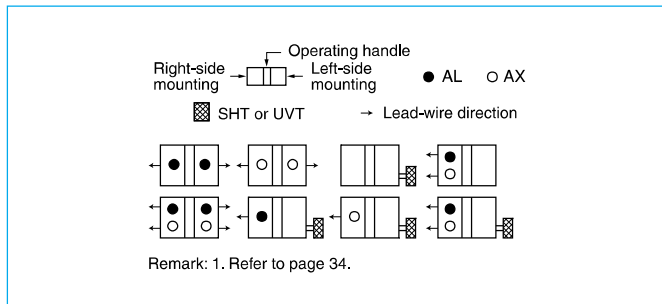
Type name		NF125-HGV	NF160-HGV	NF250-HGV	NF125-RGV	NF250-RGV		
Rated current In (A)		16-20, 20-25, 25-32 32-40, 35-50, 45-63 56-80, 70-100, 90-125	125-160	125-160 140-200 175-250	16-20, 20-25, 25-32 32-40, 40-50, 50-63 63-80, 80-100, 100-125	125-160 160-200 200-250		
Number of poles		2 3 4	2 3 4	2 3 4	2 3	2 3		
Rated insulation voltage Ui (V)		690	690	690	690	690		
Rated short-circuit breaking capacity (kA)	IEC 60947-2 (Icu/Ics)	AC	690V	10/8	10/8	-	-	
			500V	50/38	50/38	50/38	-	-
			440V	65/65	65/65	65/65	125/125	125/125
			415V	70/70	70/70	70/70	150/150	150/150
			400V	75/75	75/75	75/75	150/150	150/150
			380V	75/75	75/75	75/75	150/150	150/150
			230V	100/100	100/100	100/100	150/150	150/150
			200V	100/100	100/100	100/100	150/150	150/150
DC (*1)		300V	40/40	40/40	-	-		
Standard attached parts (front connection)		Mounting screw: M4×0.7×55 (2 and 3P: 2pcs, 4P: 4pcs) Insulation barrier: (2P: 2pcs, 3P: 4pcs, 4P: 6pcs)						

Note: *1 When wired as shown at the bottom of page 13, three-pole models can be used for up to 500VDC, and 4-pole models for up to 600VDC.

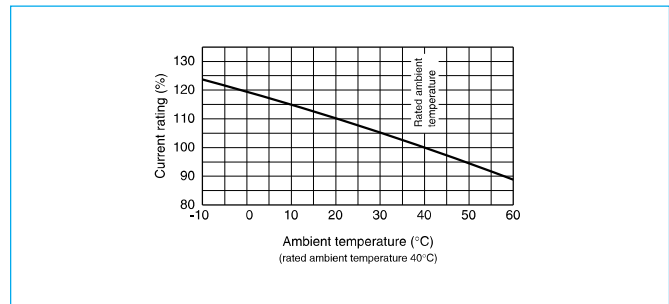
Operating Characteristics



Internal Accessories



Ambient Compensating Curve

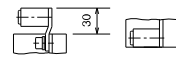
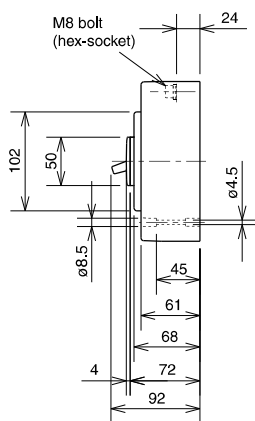
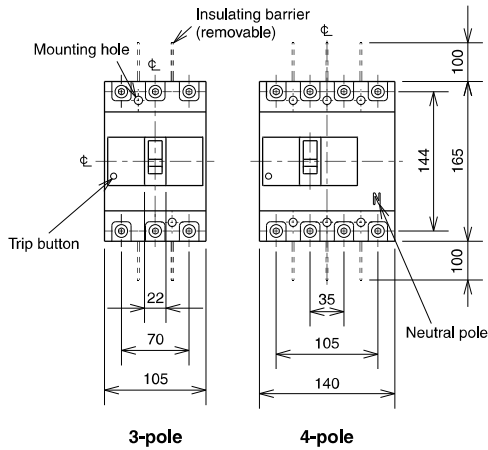


External Accessories

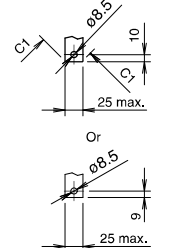
Accessories			Type name	Reference page	Accessories			Type name	Reference page	
Operating handle	F	F-2SV		37	Mechanical interlock	MI	2, 3P	MI-05SV3	40	
	V	V-2SV		38			4P	MI-2SV4		
	S	S-2SV		39	Terminal cover	Small	TC-S	2, 3P	TCS-2SV3	
Handle lock device	LC	LC-05SV		41		Large	TC-L	2, 3P	TCL-2SV3L	
	(*1) HLF	HLF-05SV		41				4P	TCL-2SV4	
	HL	HLN-05SV		41		Skeleton	TTC	2, 3P	TTC-2SV3	
	HL-S	HLS-2SV		41		Rear	BTC	2, 3P	BTC-2SV3	
						Plug-in	PTC	2, 3P	PTC-2SV3	
Electrical operation device					(*2)					40

Notes: *1 HLF types are used for OFF-lock and HLN types for ON-lock.
*2 Specify the working voltage. Refer to the reference page for type name.
*3 Available for NF250-CV/SV.

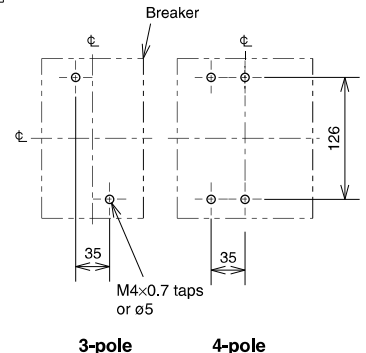
Front connection



Solderless terminal for wire size
 125~175A 14~95mm²
 200~250A 70~125mm²
 Wire connection



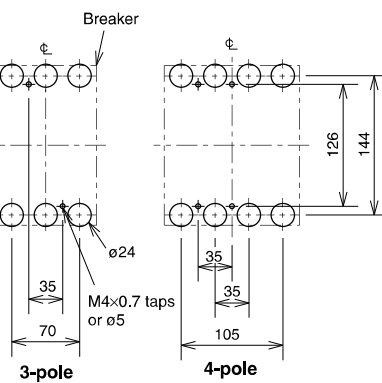
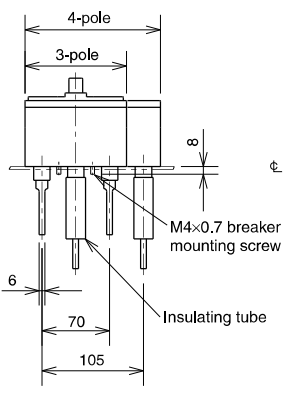
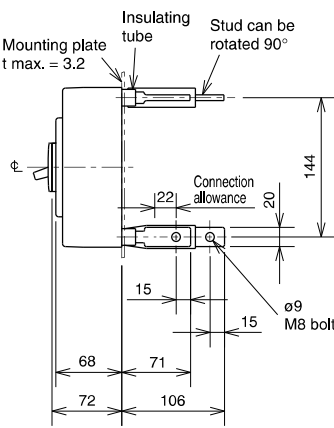
(Conductor thickness $t = 7$ max.)



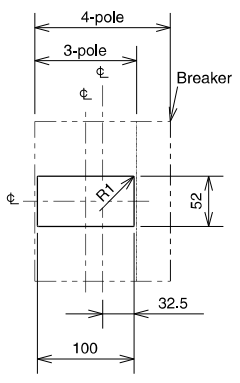
Conductor drilling for direct connection

Drilling plan

Rear connection



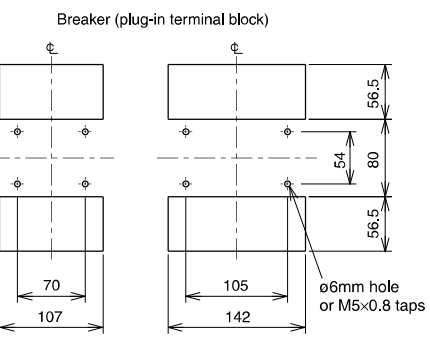
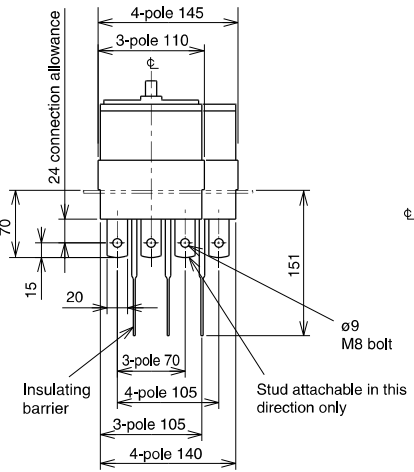
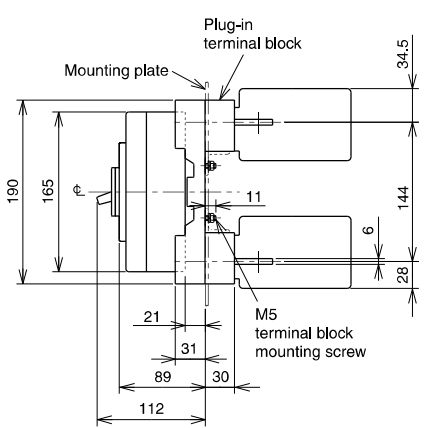
Drilling plan



1mm clearance on each side of the handle frame

Front-panel cutout

Plug-in



Drilling plan

Remark: 1. Two-pole models are three-pole models with the central pole removed.