



Adjustable HG- MCCB Molded Case Circuit Breakers

Model Selection Table

Molded Case Circuit Breaker (HGM Type) : 125 ~ 250 AF

Common Ratings

Rated Insulation Voltage, Ui	1,000 V	Suitability for Isolation	Yes
Rated Operational Voltage, Ue	690 V	Utilization Category	A
Rated Impulse Withstand Voltage, Uimp	8 kV	Pollution Degree	3
Protection Function	Overload, Instantaneous, Short-Circuit Protection	Reference Standard	IEC 60947-2

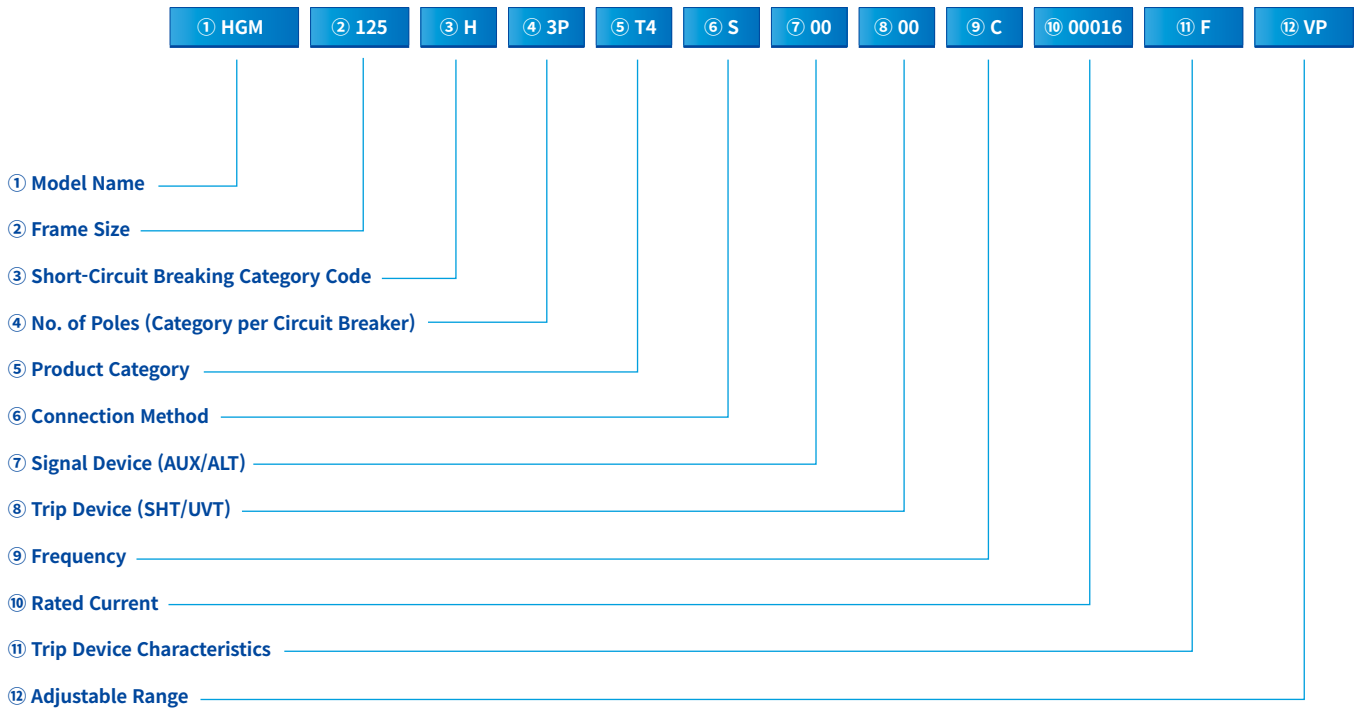
Model Name		HGM125		HGM250		
Frame	(AF)	125		250		
Number of Poles	(P)	3, 4 ¹⁾		3, 4 ¹⁾		
Rated Current, at 40 °C	(A)	16, 20, 25, 32, 40, 50, 63, 80, 100, 125		100, 125, 160, 200, 250		
	Short-Circuit Breaking Category Code	H		H		
Rated Ultimate Short-Circuit Breaking Capacity [Icu] (kA rms)	AC 660/690 V	8		8		
	AC 480/500 V	26		26		
Service Breaking Capacity [Ics = % Icu]	AC 660/690 V	100		100		
	AC 480/500 V	14		14		
Rated Short-Circuit Making Capacity [Icm] (kA peak)	AC 660/690 V	55		55		
	AC 480/500 V	80		80		
Endurance [times] (Durability)	Mechanical	30,000		25,000		
	Electrical (at 460 V)	10,000		10,000		
Trip Device	Thermal	Long Time [LTD]	(0.7 ²⁾ -0.85-1.0)×In		(0.7-0.85-1.0)×In	
	Magnetic	Instantaneous [INST]	16 ~ 32 A : 400 A, 40 ~ 125 A : 10×In		10×In	
Accessory	Internal	Auxiliary Switch	AUX	●	●	
		Alarm Switch	ALT	●	●	
		Shunt Trip	SHT	●	●	
		Under-Voltage Trip	UVT	●	●	
	External	Rotary Handle	Front Contact	TFG	●	●
			Extension	TFH	●	●
		Mechanical Open/Close Device	MOT	●	●	
		Mechanical Interlock	MIF	●	●	
		Handle Locking Device	PLD	●	●	
		Plug-in	TDM (LINE/LOAD)		● (3P Only)	● (3P Only)
TDM (LINE Only)			● (3P Only)	● (3P Only)		
TDF (LINE Only)			● (3P Only)	-		
TDA (1 row)			● (3P Only)	-		
TDA (2 rows)			● (3P Only)	-		
Cage Terminal Block	CTB		●	●		
Terminal Cover	TCF	●	●			
Insulation Barrier	TQQ	●	●			
Terminal Bus Bar	TBB	-	●			
Installation and Dimensions	Connection/Installation	Front Connection	Terminal Screw, Terminal Bus Bar			
		Rear Connection	Horizontal / Vertical			
	Dimension (mm)	Plug-in	Switchgear (Line & Load, Line Only), Switchboard			
			Switchgear (Line & Load, Line Only)			
Weight (kg)	3/4P	1.0/1.3		1.3/1.7		

※ 1) 4 Pole Arrangement : R-S-T-N

2) Except for 0.7×In characteristic, all other specifications including accessories are compatible with standard MCCB.

Order Information

Order Code



① Model Name <table border="1"> <tr> <td>HGM</td> <td>Molded Case Circuit Breaker</td> </tr> </table>	HGM	Molded Case Circuit Breaker	② Frame Size <table border="1"> <tr> <td>125</td> <td>125 AF</td> </tr> <tr> <td>250</td> <td>250 AF</td> </tr> </table>	125	125 AF	250	250 AF	③ Short-Circuit Breaking Category Code <table border="1"> <tr> <td>H</td> <td>H Type</td> </tr> </table>	H	H Type	④ No. of Poles (Category per Circuit Breaker) <table border="1"> <tr> <td colspan="2">General Type of MCCB</td> </tr> <tr> <td>3P</td> <td>3 Pole</td> </tr> <tr> <td>4P</td> <td>4 Pole</td> </tr> </table>	General Type of MCCB		3P	3 Pole	4P	4 Pole																																												
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Overview

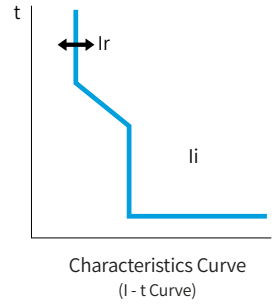
Characteristics

HGM Molded Case Circuit Breaker

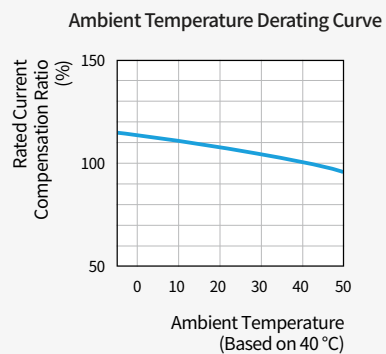
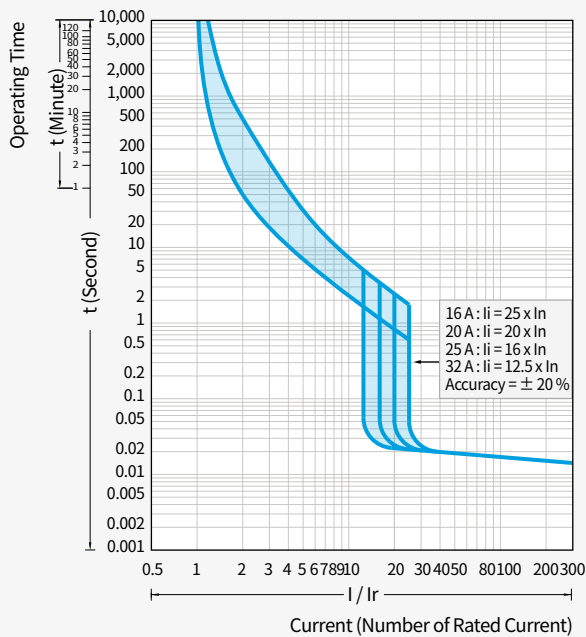
Adjustable Rated Current

The adjustable rated current provides optimal protection for load variations in customer's equipment.

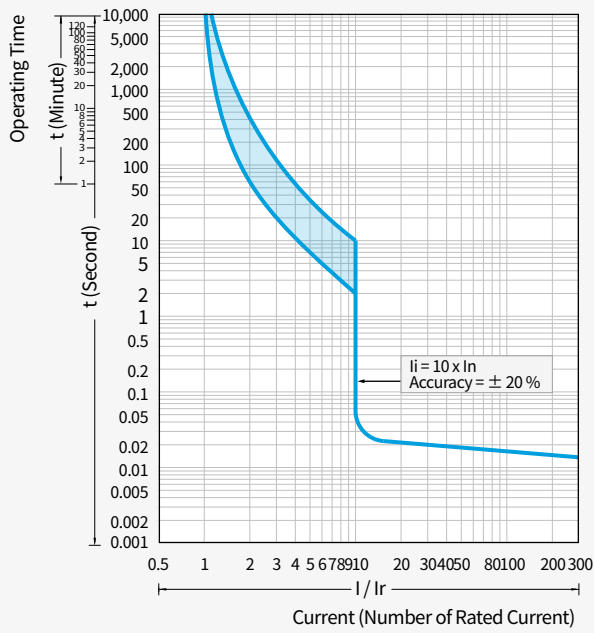
- Long Time :
3-step adjusting, 70 % - 85 % - 100 % of rated current



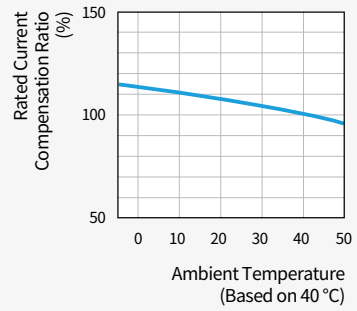
Operation Characteristic Curve | HGM125 (16~32A)



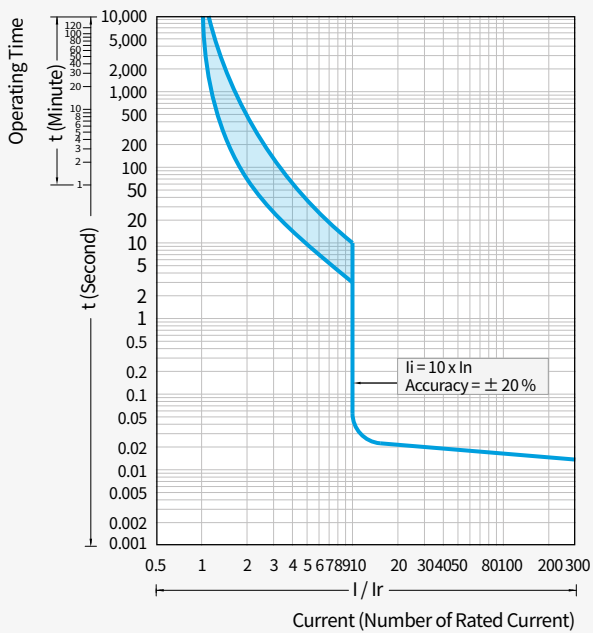
Operation Characteristic Curve | HGM125 (40~125A)



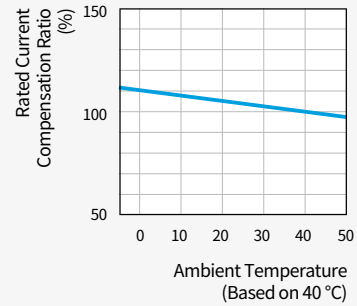
Ambient Temperature Derating Curve



Operation Characteristic Curve | HGM250 (100~250A)



Ambient Temperature Derating Curve

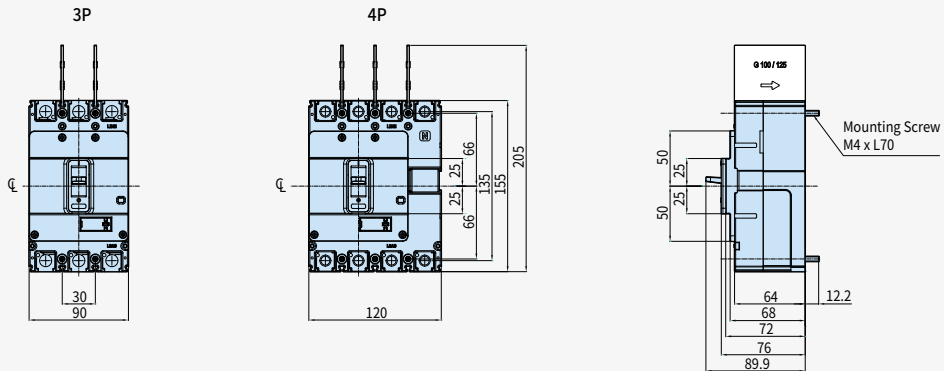


Dimensions

Front Connection HGM125

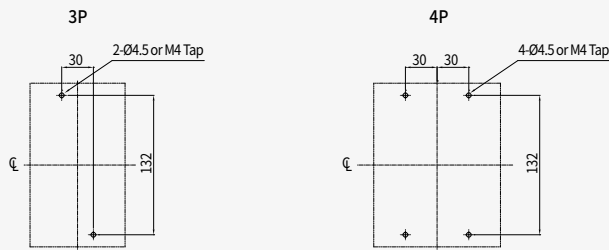
External Dimension

Unit: mm

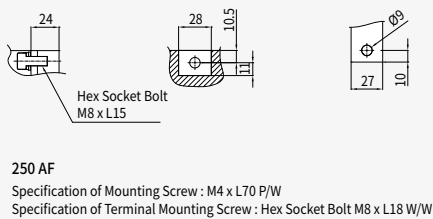


※ The insulation barrier at the line side is provided as default.

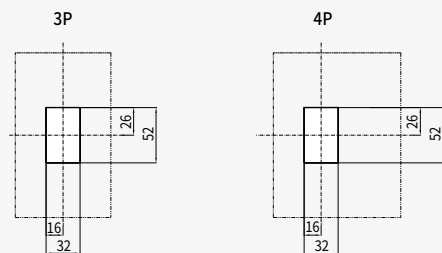
Panel Installation Dimension



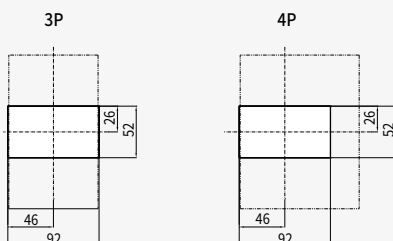
Detail Drawing of Terminal Part/Connecting Conductor



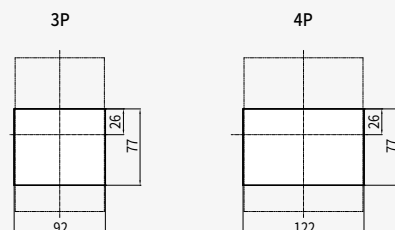
Dimension of Panel Cover Cutting - Handle Exposure



Dimension of Panel Cover Cutting - Handle/Test Button Exposure



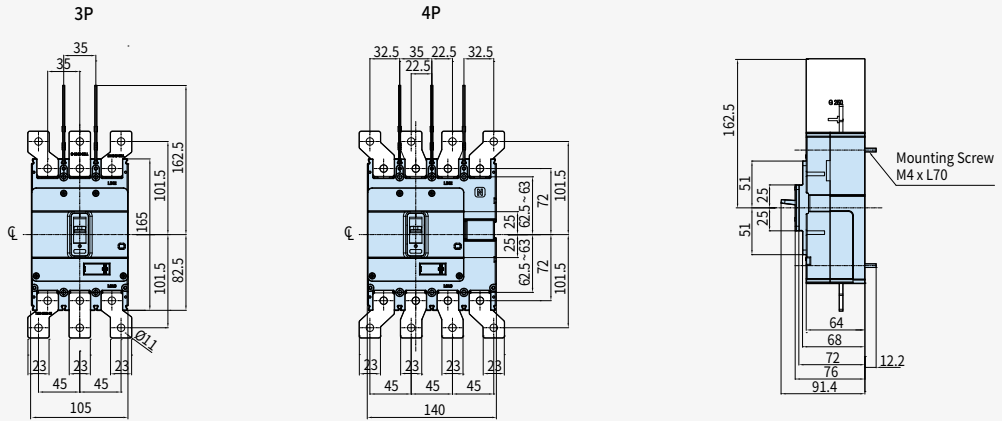
Dimension of Panel Cover Cutting - Handle/Trip Unit Exposure



※ When installing the product in close contact, please consider tolerances for external dimensions.

Front Connection HGM250

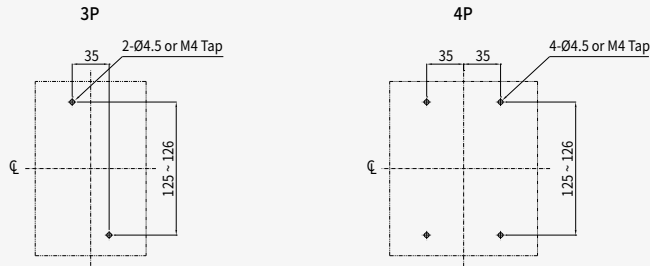
External Dimension



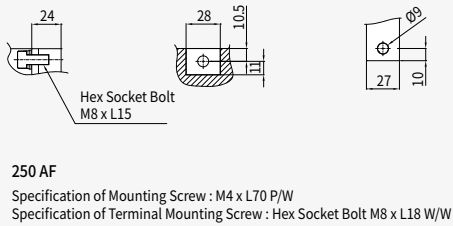
Unit: mm

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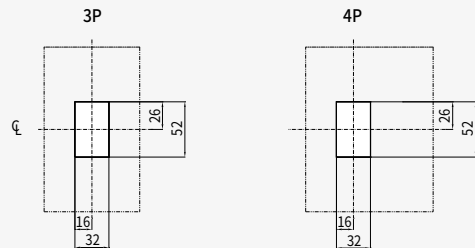
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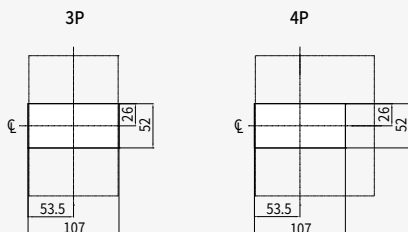
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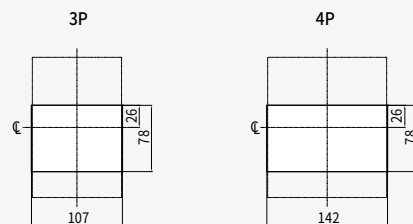
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Dimension of Panel Cover Cutting - Handle/Test Button Exposure



Dimension of Panel Cover Cutting - Handle/Trip Unit Exposure



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