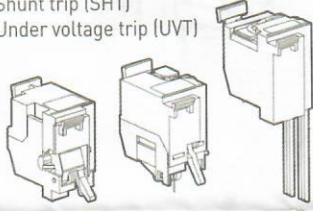


# HG-Series MCCB Inner Accessories

## HGM / HGE 100~250

- Auxiliary switch (AUX)
- Alarm switch (ALT)
- Auxiliary + Alarm switch (AXT)
- Shunt trip (SHT)
- Under voltage trip (UVT)



### 주의

- 제품을 설치하기 전 주의사항을 반드시 읽고 설명에 따라 설치하여 주십시오.
- 차단기의 설치 및 보수는 유자격자(전기공사자)가 행하여 주십시오. 잘못된 설치로 인한 오동작 또는 사고가 발생할 위험이 있습니다.

### CAUTION

- Before installation, be sure to read the manual carefully to ensure proper operation
- Installation, maintenance and inspection of the circuit breaker should be performed by persons who are qualified for electric work.

### CUIDADO

- Antes da instalação, certifique-se de ler atentamente o manual e entender os procedimentos para o funcionamento adequado
- A instalação, manutenção e inspeção do disjuntor deve ser realizada por pessoas qualificadas para o trabalho elétrico.

### PRECAUCION

- Antes de la instalación, asegúrese de leer el manual cuidadosamente y comprenda los procedimientos para la apropiada operación
- La Instalación, mantenimiento e inspección del interruptor automático debe ser realizada por personas cualificadas para el trabajo eléctrico.

### ПРЕДУПРЕЖДЕНИЕ

- Перед установкой, внимательно прочтите инструкцию по эксплуатации и ознакомьтесь с порядком выполнения необходимых условий и процедур для корректной работы оборудования.
- Установка, ремонт и осмотр автоматического выключателя должен выполняться квалифицированным специалистом по электрооборудованию.

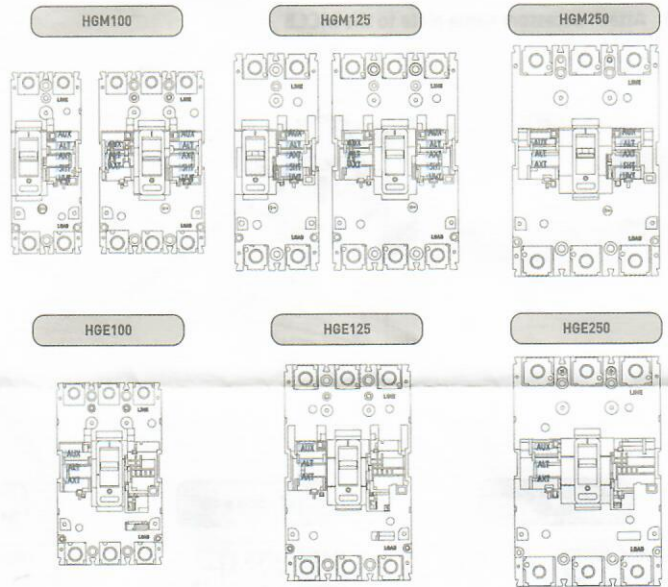
### 현대일렉트릭

울산광역시 동구 방어진순환도로 700  
A/S 센터 : Tel)080-230-7778 / 052-202-7777  
홈페이지 : www.hyundai-elec.com

### HYUNDAI ELECTRIC

700 Bangeojinsunhwando-ro, Dong-gu, Ulsan, Korea  
A/S center : Tel)080-230-7778 / 052-202-7777  
Homepage : www.hyundai-elec.com

### Installation



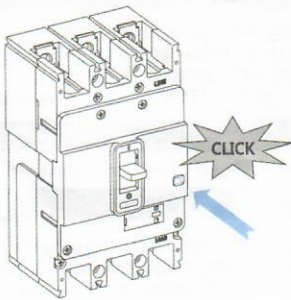
### 설치 가능 조합(250AF 이하)

TYPE	극수	AUX	ALT	SHT	UVT	AXT	AUX	AUX	SHT	UVT	SHT	UVT	SHT	UVT
		ALT	ALT	AUX	AUX	ALT	ALT	AXT	AXT					
HGM100 HGM125	2	□	□	□	□	□								
HGM100 HGM125 HGM250	3/4	□	□	□	□	□	□	□	□	□	□	□	□	□
HGE100 HGE125 HGE250	2/3/4	□	□			□								

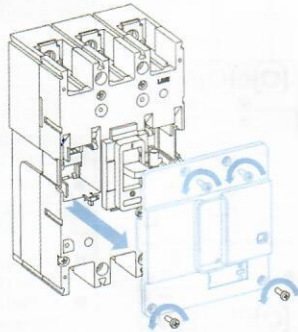
※ AUX: Auxiliary Switch □ / ALT: Alarm Switch ■ / SHT: Shunt Trip □ / UVT: Under Voltage Trip □ / AXT: Auxiliary Alarm Switch □

### Installation

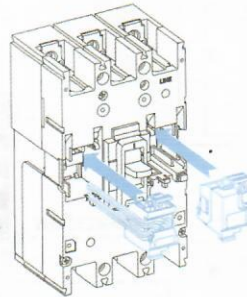
1 Push to Trip



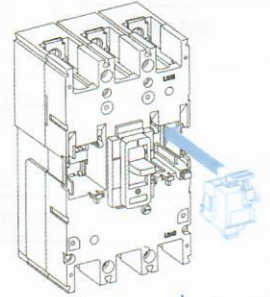
2 Open the front cover



3-1 AUX/ALT/AXT Assembly

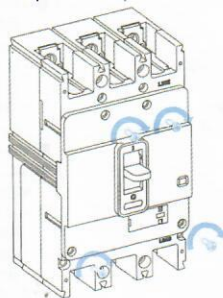
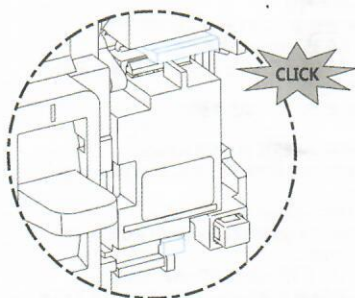


3-2 SHT/UVT Assembly(MCCB only)

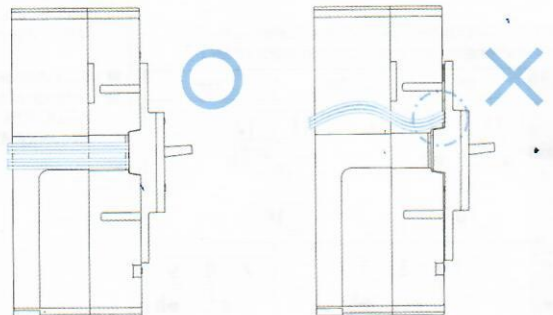


\* Assembling Inner Accessories

4 Close the front cover



### CAUTION(Inner Accessories Lead-wire Position)

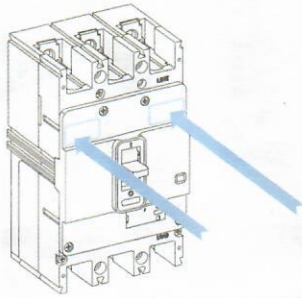


\* 조립 및 제품 이동시, 리드선 손상에 주의하십시오.  
Be careful not to damage lead wire during installation or moving a product.

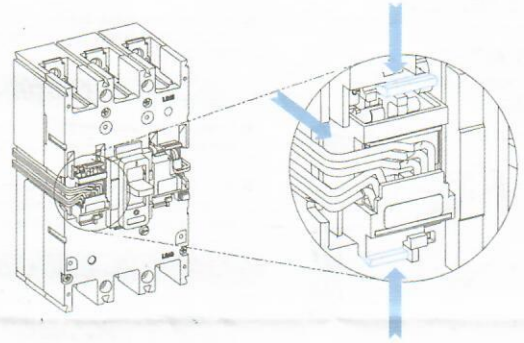
P/H Screw, M3XL9 9kgf.cm

Installation

5 Attach accessory name plate to the MCCB



\* Removing Inner Accessories (AUX/ALT/AXT/SHT/UVT)



**AUX Name plate (1ab)**

AUX, SWITCH

AC125V	5 A
AC250V	3 A
DC125V	0.4 A
DC250V	0.2 A

11 12

10

**ALT Name plate**

ALARM SWITCH

AC125V	5 A
AC250V	3 A
DC125V	0.4 A
DC250V	0.2 A

7 8 9

a b

TRIP

**SHT Name plate (without controller)**

SHUNT TRIP

DC24V

3 5

**AUX Name plate (2ab)**

AUX, SWITCH

AC125V	5 A
AC250V	3 A
DC125V	0.4 A
DC250V	0.2 A

11 12 21 22

10 20

**AXT Name plate**

AXT, SWITCH

AC125V	5 A
AC250V	3 A
DC125V	0.4 A
DC250V	0.2 A

11 12 8 9

a b c d

10 7

**UVT Name plate (with controller)**

UNDERVOLTAGE TRIP

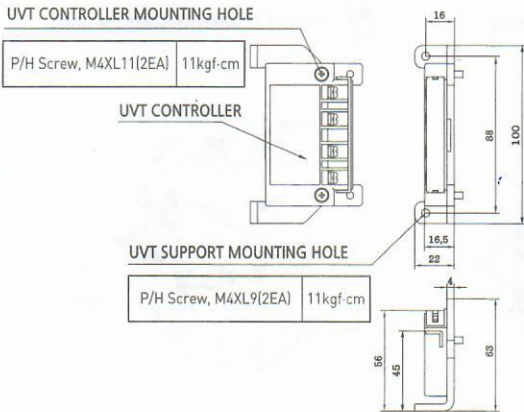
INPUT : CONTROLLER  
DC110V 50Hz  
OUTPUT : DC45V SOURCE

정격 전압 (Rated voltage)

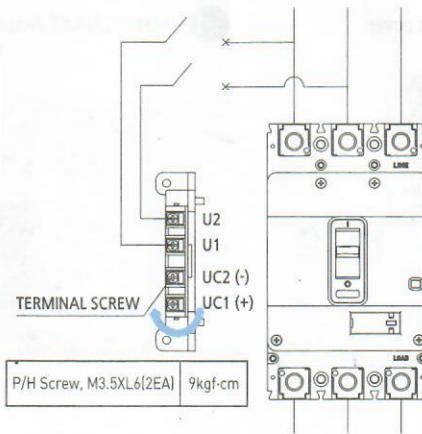
SHT	
정격전압	
AC (50/60Hz)	100~120V
	200~250V
	380~480V
DC	24V
	48V
	60V
	100~120V
	125V

UVT	
정격전압	
AC (50/60Hz)	100~120V
	200~230V
	380~415V
DC	440~480V
	24V
	48V
	100~125V

UVT Controller dimension



UVT Controller wiring diagram



CAUTION(UVT Controller)

- 위험**
- 감전의 위험이 있으니, 단자 부위를 절대로 만지지 마십시오.
- 주의**
- UVT를 사용 시에는 반드시 UVT CONTROLLER가 필요합니다. UVT CONTROLLER를 사용하지 않으면 UVT COIL이 손상될 수 있습니다.
- 정격전압에 적합한 UVT CONTROLLER를 사용하십시오. 정격전압이 맞지 않으면 UVT CONTROLLER가 손상될 수 있습니다.
- DANGER**
- Do not touch terminals. Otherwise, Electric shock may occur.
- CAUTION**
- Certainly, use the UVT CONTROLLER when using the UVT (Under Voltage) Otherwise, the UVT COIL would be damaged.
- Use the UVT CONTROLLER suitable for rated voltage. Otherwise, the UVT COIL would be damaged.

Operating test

Auxiliary switch(AUX) and Alarm switch (ALT)

- 스위치는 아래표에 표기된 사양을 기준으로 하고 MCCB의 동작에 따라 스위치가 동작 할 것.
- AUX and ALT shall comply with the specification in the table and they shall operate according to the position of MCCB.

MCCB	ON	OFF	TRIP
Position of AUX			
Position of ALT			

Shunt trip devices (SHT)

- SHT에 아래와 같은 전압을 인가할 때 MCCB가 트립할 것.
- 사용 전압 및 주파수 범위
  - AC/DC 70%~110% Ue (Ue:정격전압)
  - 주파수: 45Hz~65Hz (교류에만 적용)
- MCCB shall be tripped at the voltage listed below
- The range of rated voltage and frequency
  - AC/DC 70%~110% Ue (Ue:Rated voltage)
  - frequency: 45Hz~65Hz (only applicable to AC voltage)

Under voltage trip devices (UVT)

- 정격 전압의 85%에서 투입 가능할 것.
- 정격 전압의 20~70%, 또는 무전압에서 트립 될 것.
- 사용 전압 및 주파수 범위
  - 투입조작 가능 전압:  $U = 0.85 * U_e$  (Ue:정격전압)
  - Trip 전압:  $U \leq 0.35 * U_e$  (Ue:정격전압)
  - $U = 0.35 \sim 0.7 * U_e$  구간에서는 차단기가 Trip 될 수 있으나, 동작을 보충하지는 않습니다.
  - 주파수: 45Hz~65Hz (교류에만 적용)
- Shall be closed at the 85% of rated voltage.
- MCCB shall be tripped at the 20~70% of rated voltage or at no voltage.
- The range of rated voltage and frequency.
  - Possible voltage for closing operation:  $U = 0.85 * U_e$  (Ue:Rated voltage)
  - Trip voltage:  $U \leq 0.35 * U_e$  (Ue:Rated voltage)
  - If the supply voltage is between  $0.35 * U_e$  and  $0.7 * U_e$ , opening is possible, but not guaranteed.
  - frequency: 45Hz~65Hz (only applicable to AC voltage)

⚠ MCCB의 전면 Cover를 닫은 후 수직 또는 수평위치에서 확인하여 주십시오. Test with the front cover closed of MCCB in vertical or horizontal position.