

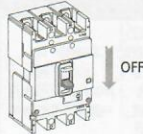
**Installation**

**HGM Series**

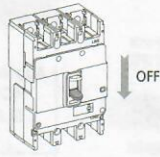
**1 MCCB handle Set off position**



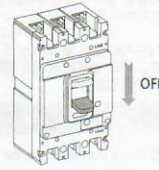
HGM100



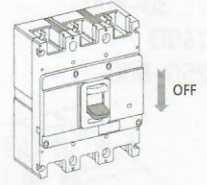
HGM125



HGM250

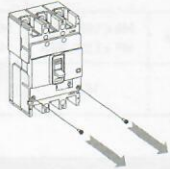


HGM400

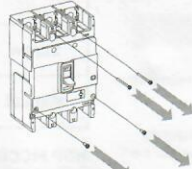


HGM800

**2 Remove the screw**



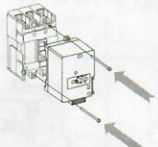
HGM125



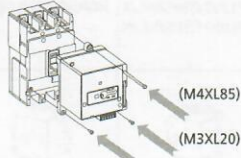
HGM250

HGM100	P/H SCREW, M4XL85(2EA)	11kgf·cm
HGM125	P/H SCREW, M4XL85(1EA)	11kgf·cm
	P/H TAPPING SCREW, M3XL20(2EA)	9kgf·cm
HGM250	P/H TAPPING SCREW, M3XL50(2EA)	9kgf·cm
	P/H TAPPING SCREW, M3XL20(2EA)	
HGM400	P/H SCREW, M4XL20+P-S/W(4EA)	17.5kgf·cm
HGM800	P/H SCREW, M4XL20+P-S/W(4EA)	17.5kgf·cm

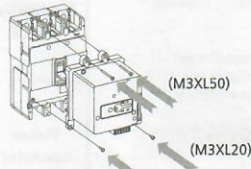
**3 Motor Operator assembly**



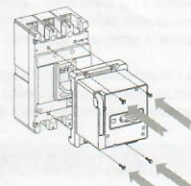
HGM100



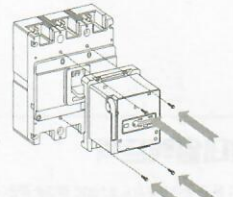
HGM125



HGM250

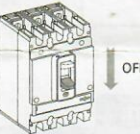


HGM400

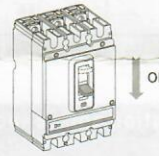


HGM800

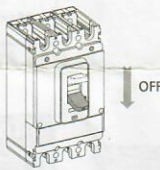
**1 MCCB handle Set off position**



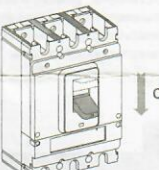
HGP160D



HGP250



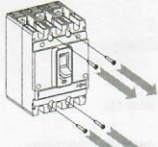
HGP630



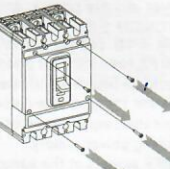
HGP800

**HGP Series**

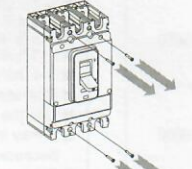
**2 Remove the screw**



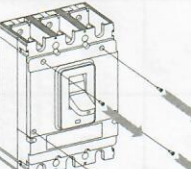
HGP160D



HGP250



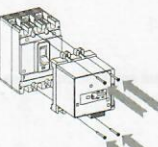
HGP630



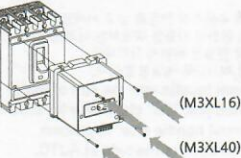
HGP800

HGP160D	P/H TAPPING SCREW, M3.5XL45(4EA)	4.5kgf·cm
HGP250	P/H TAPPING SCREW, M3XL16(2EA)	4.5kgf·cm
	P/H TAPPING SCREW, M3XL40(2EA)	
HGP630	P/H TAPPING SCREW, M4XL70(4EA)	10.5kgf·cm
HGP800	P/H TAPPING SCREW, M4XL20(2EA)	10.5kgf·cm
	P/H TAPPING SCREW, M4XL30(2EA)	

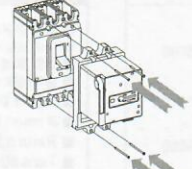
**3 Motor Operator assembly**



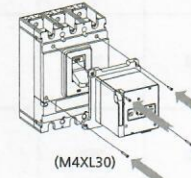
HGP160D



HGP250



HGP630



HGP800

**Handling and maintenance precautions**

**DANGER**

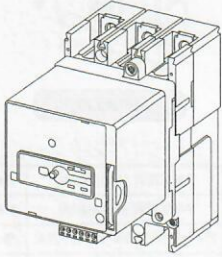
- 절대로 단자를 만지지 마세요. 전기 충격을 받을 수 있습니다.
- 단락으로 인한 전기 충격 및 화재를 예방하기 위해, Power1과 Power2를 접촉하지 마세요.
- Never touch terminals. Otherwise, electric shock may result.
- Don't contact Power1 with Power2 to prevent electric shock and burns due to short circuit.

**CAUTION**

- Motor Operator를 설치하기 전 반드시 MCCB의 핸들을 OFF 위치에 두십시오.
- Motor Operator에 절연 저항 시험을 하지 마세요.
- DC24V제품에는 내전압 시험을 하지 마세요.
- S1, S2, S4에 내전압 시험을 하지 마세요.
  - 내전압 시험 기준은 P1, P2에서 대지 간 AC1500V입니다.
  - 추가 검사는 필요하지 않지만, 일년에 한번 조임 체크 및 동작 체크는 필요합니다.
- Must set the MCCB handle to the off position, before installing the Motor Operator
- Please don't perform the insulation resistance test.
- Products regulated at DC24V should not be taken dielectric withstand voltage test.
- Please don't take dielectric withstand voltage test at S1, S2, S4
  - Dielectric withstand voltage is AC1500V between P1, P2, and ground.
  - It may not be required additional inspection, but in any case, you need to perform the tightening check and operating check once a year.

# Motor operator

HGM/E 30~800  
HGP160D  
HGP250~800



### 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 инструкции 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 방어진순환도로1000 현대중공업(주)  
Tel) 032 - 888 - 4483 Fax) 032 - 881 - 0086  
홈페이지 : www.hyundai-elec.com

## HYUNDAI

1000 Bangeojin sunhwan-doro, Dong-gu, Ulsan, Korea  
Tel) 032 - 888 - 4483 Fax) 032 - 881 - 0086  
Homepage : www.hyundai-elec.com

### Part list

#### HG MCCB/ELCB

	MOT 10GM	MOT 12GM	MOT 25GM	MOT 40GM	MOT 80GM
<b>Applicable MCCB ELCB</b>	HGM30 E/S, HGE30 E/S HGM50 E/S, HGE50 E/S HGM60 E/S/H/L HGE60 E/S/H/L HGM100 E/S/H/L HGE100 E/S/H/L	HGM50 H/L HGE50 H/L HGM125 E/S/H/L HGE125 E/S/H/L	HGM160 E/S/H/L HGE160 E/S/H/L HGM250 E/S/H/L HGE250 E/S/H/L	HGM400 E/S/H/L HGE400 E/S/H/L	HGM630 E/S/H/L HGE630 E/S/H/L HGM800 S/H/L HGE800 S/H/L
<b>Motor operator</b>					
<b>Screw</b>	M4 x L85 : 2EA	M4 x L85 : 1EA M3 x L20 : 2EA	M3 x L50 : 2EA M3 x L20 : 2EA	M4 x L20 : 4EA	M4 x L20 : 4EA
<b>Manual</b>	1EA	1EA	1EA	1EA	1EA

#### HGP MCCB

	MOT16GP	MOT25GP	MOT63GP	MOT80GP
<b>Applicable MCCB</b>	HGP50D F/N/S/H/L/X HGP125D F/N/S/H/L/X HGP160D F/N/S/H/L/X	HGP250 F/N/S/H/L/X	HGP400 F/N/S/H/L/X HGP630 F/N/S/H/L/X	HGP800 F/N/S/H/L/X
<b>Motor operator</b>				
<b>Screw</b>	M3.5 x L45 : 4EA	M3 x L16 : 2EA M3 x L30 : 2EA	M4 x L70 : 4EA	M4 x L20 : 2EA M4 x L30 : 2EA
<b>Manual</b>	1EA	1EA	1EA	1EA

### Motor rating and characteristics

Model	Control* voltage(V)	Operational current(A)	Operation time(ms)		Power consumption (W)	Mechanical life(times)
			Closing	Opening		
MOT 10GM	DC 24V	≤ 2.5	310	200	14	25000
	AC/DC 110V	≤ 0.5				
	AC/DC 240V	≤ 0.5				
MOT 12GM	DC 24V	≤ 2.5	350	230	14	10000
	AC/DC 110V	≤ 0.5				
	AC/DC 240V	≤ 0.5				
MOT 25GM	DC 24V	≤ 2.5	350	230	14	8000
	AC/DC 110V	≤ 0.5				
	AC/DC 240V	≤ 0.5				
MOT 40GM	DC 24V	≤ 6.0	500	350	14	5000
	AC/DC 110V	≤ 3.0				
	AC/DC 240V	≤ 2.0				
MOT 80GM	DC 24V	≤ 6.0	500	350	35	5000
	AC/DC 110V	≤ 3.0				
	AC/DC 240V	≤ 2.0				
MOT 16GP	DC 24V	≤ 2.5	500	500	14	10000
	AC/DC 110V	≤ 0.5				
	AC/DC 240V	≤ 0.5				
MOT 25GP	DC 24V	≤ 2.5	500	500	14	10000
	AC/DC 110V	≤ 0.5				
	AC/DC 240V	≤ 0.5				
MOT 63GP	DC 24V	≤ 6.0	1000	1000	35	5000
	AC/DC 110V	≤ 3.0				
	AC/DC 240V	≤ 2.0				
MOT 80GP	DC 24V	≤ 6.0	1000	1000	35	5000
	AC/DC 110V	≤ 3.0				
	AC/DC 240V	≤ 2.0				

\* The range of operating voltage: 85~110% Ue(DC24V 95~110%)

### The way of operation and connection diagram

#### Auto operation

- 슬라이드 스위치를 AUTO로 설정하면, 자동으로 투입할 수 있습니다.
- 개폐 주기는 시간당 60회 이하로 사용하십시오.
- 설정된 값의 범위에서 ON/OFF 스위치를 사용하십시오.
- 내부 스위치 전원공급 장치로 인해, 라디오와 같은 통신 장비를 방해 할 수 있습니다.
- 자동 동작을 하는 동안, 동시에 ON/OFF 신호를 주지 마십시오.
- UVT가 조립 된 제품의 경우 자동 조작을 구동하기 전에 UVT에 전압을 인가 하십시오.
- Set the slide switch to AUTO, then internal power is closed automatically.
- Operating frequency should be less than 60 operations per hour.
- Use the ON/OFF switch in the range of regulated values.
- It may interfere communication equipments around, such as radio and etc. because of internal switching power supply.
- Please do not input ON/OFF signals at the same time during the automatic operation.
- If the circuit breaker is equipped with UVT, charge UVT on the rated voltage before performing Motor Operator.

#### Manual operation

- 제품 전면의 슬롯에 수동조작 핸들을 넣고 시계방향으로 돌리세요.
- 마이크로 스위치의 안전한 사용을 위해서는 시계방향으로 180도 회전 시켜야 합니다.
- 작업 후에 수동조작 핸들을 원위치 시키세요.
- 슬라이드 스위치를 AUTO로 재설정 합니다.
- Insert the manual handle into the slot of Motor Operator surface and rotate it clockwise.
- It must be rotated just 180° clockwise for safe operation of micro switch.
- Return the manual handle after operation.
- Turn slide switch back to the side of AUTO.

