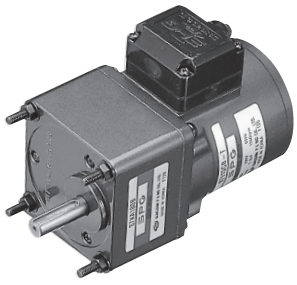
TERMINAL BOX TYPE MOTOR의 특징 (CHARACTERISTICS OF TERMINAL BOX TYPE INDUCTION, REVERSIBLE MOTORS)



1. TERMINAL BOX TYPE MOTOR의 특징 (Characteristics of Terminal Box Type Motors)

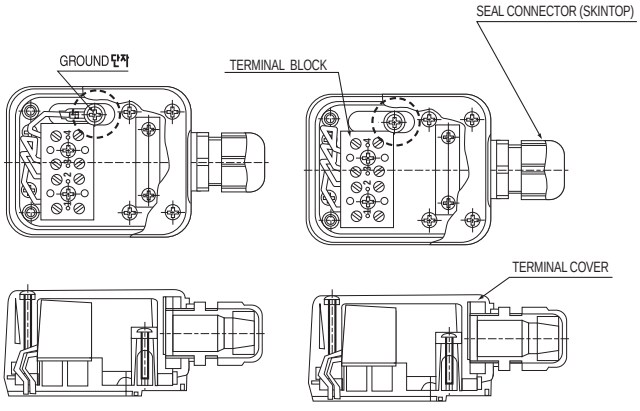
- TERMINAL BOX에 의해 MOTOR의 구출선 등 충전부가 밀폐되어 먼지, 수분 등을 보호합니다. (The motor's charging section including leadwire is made airtight by the terminal box to provide the protection from dust and moisture.)
- 따라서 내환경성이 중요시되는 곳에서 사용이 용이합니다. (Therefore, the motor can be used in harsh environment.)
- 또한 GASKET를 사용하여 확실하게 밀폐되어 있습니다. (And the motor is made completely airtight with a gasket.)
- 당사의 TERMINAL BOX TYPE은 T TYPE(TERMINAL BLOCK)과 T1 TYPE(PCB용 TERMINAL BLOCK)의 2가지가 있습니다. (SPG has two terminal box types; Skintop terminal box type and cord bush terminal box type)
- 당사 TERMINAL BOX부의 기기보호구조에 대한 등급은 IP54로 되어 있습니다.(MOTOR부에 대한 보호등급은 종류에따라 IP20~IP54 범위임) (The classification of the device protection structure for the skintop terminal box type motor is IP54.)
- COMPACT한 설계로 되어있습니다. (The motor features a compact design.)
- GROUND단자가 부착되어 있습니다. 단, T TYPE(6~15W)과 T1 TYPE의 단상 INDUCTION MOTOR는 접지가 TERMINAL BOX 내부에 설치되어 있지를 않습니다. MOTOR 외부에 앞에서 설명된 EARTH 방법에 의해 설치하여 사용하십시오. (The ground terminal is attached to the motor. However, the cord bush terminal box type of the single-phase induction motor does not have a built-in ground inside the terminal box. Before use, install the ground at the outside of the motor.)
- 배관에 편리한 구조로 되어있어 결선시 작업성이 뛰어나며, CABLE이 확실하게 고정되어 CABLE 배선 후 인장력이 높습니다. (Since the motor is structured to make piping work easier, it is excellent in connection work. The cable is firmly fixed to provide strong tension when wiring the cable. When using a cap tire cable, it is recommended to use a cable having an outside diameter of Ø6~Ø12.)
- T TYPE의 TERMINAL BLOCK은 안전성이 높은 유럽규격 인증품을 사용하고 있습니다. (The terminal block uses a VDE certified product that provides high reliability.)
- AWG NO. 24~AWG No.10(0.25㎟ ~4.0㎟) shall be used for the lead wire, and the peeled-off lead wire shall be about 8㎜.

2. TERMINAL BOX 구조도 (Diagram of Terminal Box Structure)

(1) TERMINAL BLOCK BOX TYPE (T TYPE)

1) □80 15W ~ □90 90W

- Terminal Box 재질 (Material of Terminal Box) : 알루미늄 (Aluminum)
- 적용 Cable 외경 (Applicable Cable Diameter) : Ø6~Ø12
- 적용 Lead Wire (Applicable Lead Wire) : AWG 24~12(0.2~4.0㎟)
- 탈피길이 (Peeled-off Lead Wire Length) : 8㎜

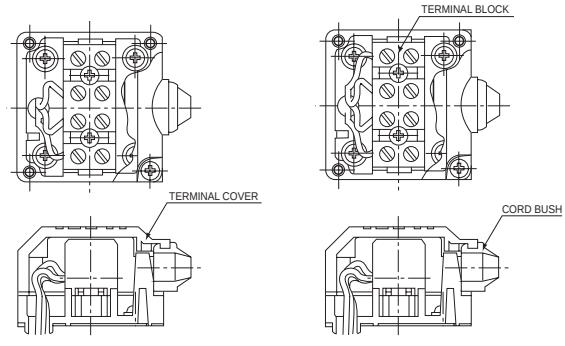


단상 REVERSIBLE MOTOR의 경우
삼상 INDUCTION MOTOR의 경우
(In case of Single-phase Reversible Motor
In case of Three-phase Reversible Motor)

단상 INDUCTION MOTOR의 경우
(In case of Single-phase Induction Motor)

2) □60 6W ~ □70 15W

- Terminal Box 재질 (Material of Terminal Box) : 플라스틱 (Plastic)
- 적용 Cable 외경 (Applicable Cable Diameter) : Ø6.8 ~ Ø8.6

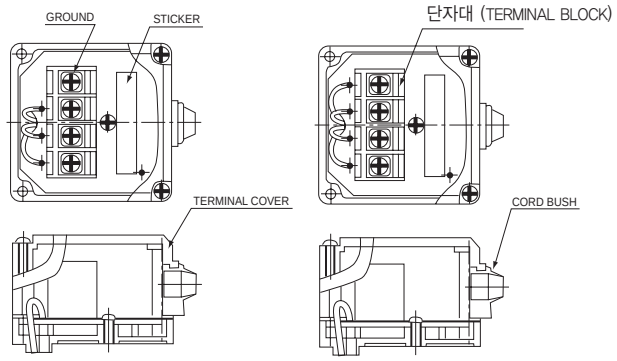


단상 REVERSIBLE MOTOR의 경우
(In case of Single-phase Reversible Motor)

단상 INDUCTION MOTOR의 경우
(In case of Single-phase Induction Motor)

(2) PCB TERMINAL BOX TYPE (T1 TYPE) : □80 25W ~ □90 90W

- Terminal Box 재질 (Material of Terminal Box) : 플라스틱 (Plastic)
- 적용 Cable 외경 (Applicable Cable Diameter) : Ø6.8 ~ Ø8.6



단상 REVERSIBLE MOTOR의 경우
삼상 INDUCTION MOTOR의 경우
(In case of Single-phase Reversible Motor
In case of Three-phase Induction Motor)

단상 INDUCTION MOTOR의 경우
(In case of Single-phase Induction Motor)

(3) CONDUIT BOX TYPE (T2 TYPE) : □80 25W ~ □90 90W

3. MOTOR의 외관구조도 (External Structure of Motor)

- REVERSIBLE MOTOR의 CE용 MOTOR는 방진(防塵), 방수(放水) 효과를 높이기 위하여 추가로 Cover를 뒷부분에 조립하였습니다. 따라서 Motor의 길이가 약 4.0㎜ 정도 길어졌습니다. 양지하시고 사용하여 주십시오. (The reversible motor for CE mark has a cover 'A' assembled to the back side of the motor to improve dust-proof and water-proof. (Refer to the figure in page 65) As a result, the motor is 4.0mm longer than induction motor lengthwise, which requires the user's attention.)

GENERAL SPECIFICATION OF INDUCTION MOTORS

항목 (ITEM)	사양 (Specification)
절연저항 (Insulation Resistance)	상온 상습에서 MOTOR을 정격으로 운전 후 MOTOR의 COIL, MOTOR CASE사이를 DC 500V MEGGER로 측정하여 100㏁ 이상임. (100㏁ or more when 500V megger is applied between the windings and the housing after rated motor operation under normal ambient temperature and humidity)
절연내압 (Dielectric Strength)	상온 상습에서 MOTOR을 정격으로 운전 후 MOTOR의 COIL, MOTOR CASE사이에 1500V 50/60Hz를 1분간 인가하여 이상 없음. (Sufficient to withstand 1500V at 50/60Hz applied between the windings and the case after rated motor operation under normal ambient temperature and humidity for 1min.)
온도상승 (Temperature Rise)	MOTOR를 정격으로 운전 후 온도계법으로 측정하여 온도상승치(△T)가 80℃(K) 이하임 (80℃ or less increase measured by thermometer after rated operation.)
절연등급 (Insulation Class)	B종 (Class B) (130℃)
과열보호장치 (Overheat Protection Device) (T/P)	THERMAL PROTECTOR 내장(자동 복귀형) (Built-in thermal protector (automatic return type)) : 개방 (Open) 120℃±5℃ 복귀 (Close) 76℃±15℃
사용온도 (Ambient Temperature)	-10℃ ~ 40℃
사용습도 (Ambient Humidity)	85% 이하 (maximum) (결로 없는 곳 (non condensing))