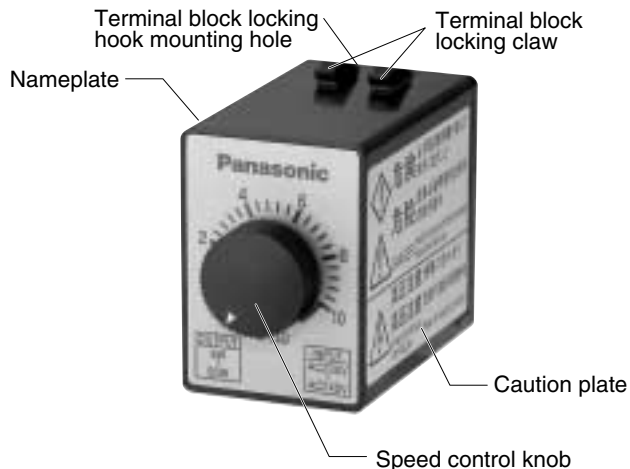
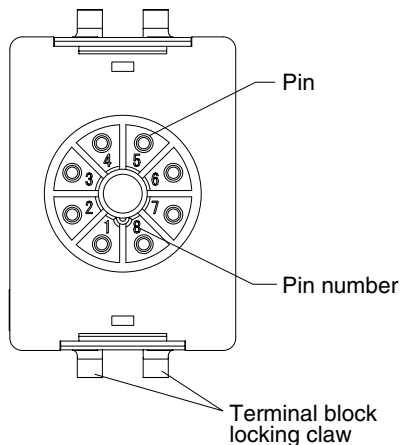


## 2. Names and functions



<Rear panel>



## 3. Installation

### Installation location

- (1) Indoors free from rain and direct sunlight: the product is not of a waterproof construction.
- (2) Free from vibration  $4.9 \text{ m/s}^2$  or more; shock, dust, iron powder or oil mist; splash of water, oil and grinding fluid; and away from flammable materials, corrosive gas ( $\text{H}_2\text{S}$ ,  $\text{SO}_2$ ,  $\text{NO}_2$ ,  $\text{Cl}_2$ , etc.) or flammable gas.
- (3) Well ventilated dry and clean location containing negligible amount of oil or dust.

### Environmental condition

Item	Condition
Operating temperature	-10 – 50°C
Storage temperature	-20 – 60°C
Operating humidity	90% RH or below (no dewing)
Allowable vibration	4.9 m/s <sup>2</sup> or below (10 – 60 Hz)
Altitude	1000 m max.

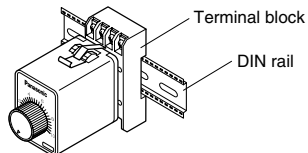
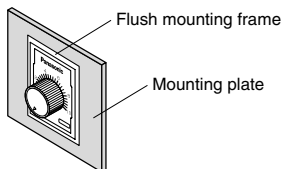
## 3. Installation

### Installing method

The product can be mounted in either of the following two ways but must be installed inside the control board.

Orientation of the product in the control board is not limited.

- Using flush mounting frame (sold separately: see p. 34)
- Using miniature DIN terminal block (sold separately: see pp. 32 and 33)



For further information, consult the manufacturer of terminal block.

### Caution

Special care is always given to our products during manufacturing and delivery to keep quality from deteriorating. Customer is also required to keep the quality by designing and providing failsafe and safety operating field and condition so that external noise, electrostatic charge, wrong wiring, wrong parts are prevented or eliminated.

In rare instances, the product may give off fume like a smoke of a cigarette if it is in a specific malfunctioning state. Precaution against possible fumes should be taken into consideration when the product is used in a clean room, etc.



**DON'T**

**Don't turn the shaft of speed control potentiometer using a tool with the knob removed.**

High voltage is applied to the potentiometer:  
Danger!

## 4. Wiring diagram

### Considerations for wiring

- Use a terminal block or socket for connection. Do not solder the lead to the pin.
- When using a transformer or variable transformer, its capacity must be larger than the rated current of the product by the factor of 2 or more, to assure reliable operation.
- If the input lead is longer than 1 m (e.g. lead from a tachometer generator), seal it or replace it with shielded cable to prevent induction of noises.

### <Precautions>

- Don't ground the shielding.
- The length of the wiring between the speed controller and the motor should be 3 m or shorter.
- Wiring from the tachometer generator (TG) carries current at a high voltage: Risk of electrical shock.
- When using a cooling fan motor or a motor with thermal protector, also see p. 26.