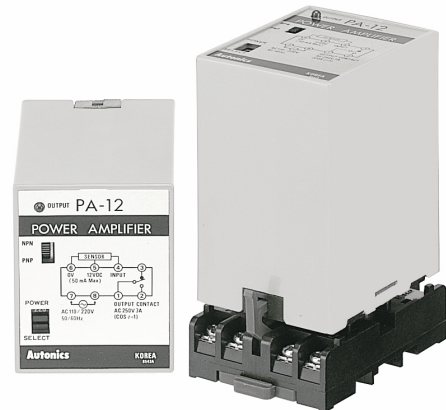


## Sensor controller

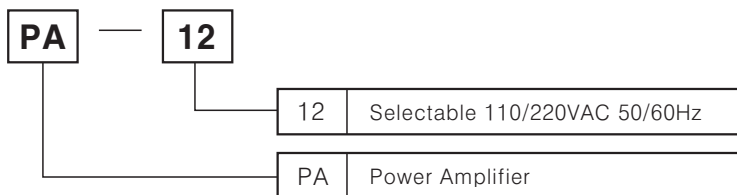
### ■ Features

- Selectable use of 110/220VAC
- Selectable use of NPN, PNP input
- Able to drive loads up to 3A, 250VAC with proximity sensor or photo sensor input
- Convenient to mount on Socket by plug in type
- Output relay with both NO and NC contacts

**⚠ Please read "Caution for your safety" in operation manual before using.**



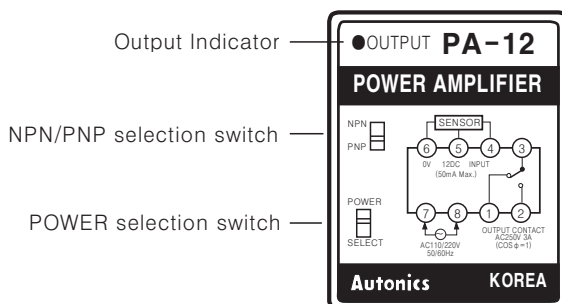
### ■ Ordering information



### ■ Specifications

|                            |            |   |  |
|----------------------------|------------|---|--|
| Model                      |            | <b>PA-12</b>  |  |
| Type                       |            | Selectable NPN/PNP  |  |
| Power supply               |            | Selectable 110~220VAC 50/60Hz   |  |
| Control output             | Contact    | SPDT(1a1b)  |  |
|                            | Capacity   | 250VAC 3A resistive load  |  |
| Power for proximity sensor |            | 12VDC 50mA  |  |
| Power consumption          |            | Approx. 4VA   |  |
| Input signal               | P N P      | High Level : 7~12VDC, Low Level : 0~5VDC  |  |
|                            | N P N      | Short-circuit impedance : Max. 1kΩ, Residual voltage : Max. 2VDC, Open-circuit impedance : Min. 100kΩ |  |
| Respose time               | Input      | Max. 0.2ms  |  |
|                            | Output     | Max. 10ms   |  |
| Input impedance            |            | 10kΩ  |  |
| Ambient temperature        |            | -10 ~ +50°C (at non-freezing status)  |  |
| Ambient humidity           |            | 45 ~ 85%RH  |  |
| Relay life cycle           | Mechanical | Min. 10,000,000 times   |  |
|                            | Electrical | Min. 100,000 times (250VAC 3A resistive load)   |  |
| Weight                     |            | Approx. 269g  |  |

### ■ Front panel identification



(A) Counter

(B) Timer

(C) Temp. controller

(D) Power controller

(E) Panel meter

(F) Tacho/Speed/Pulse meter

(G) Display unit

(H) Sensor controller

(I) Proximity sensor

(J) Photo electric sensor

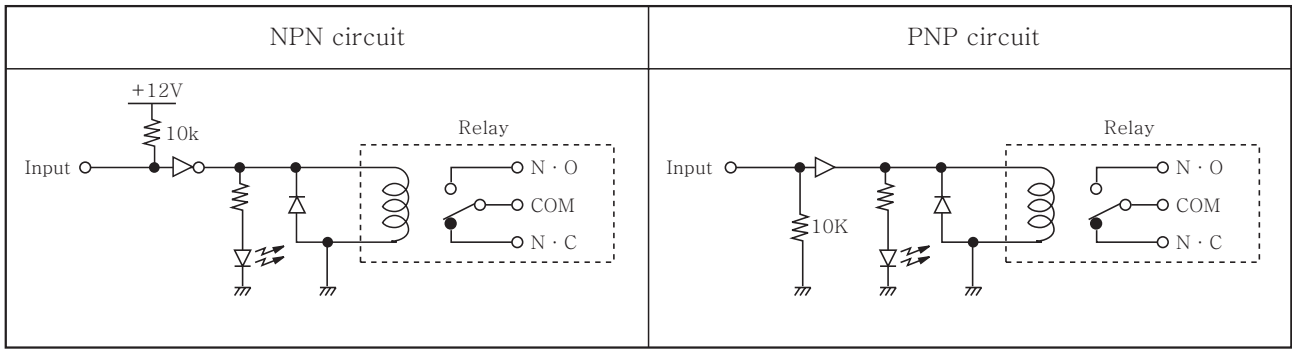
(K) Pressure sensor

(L) Rotary encoder

(M) 5-Phase stepping motor & Driver & Controller

# PA-12

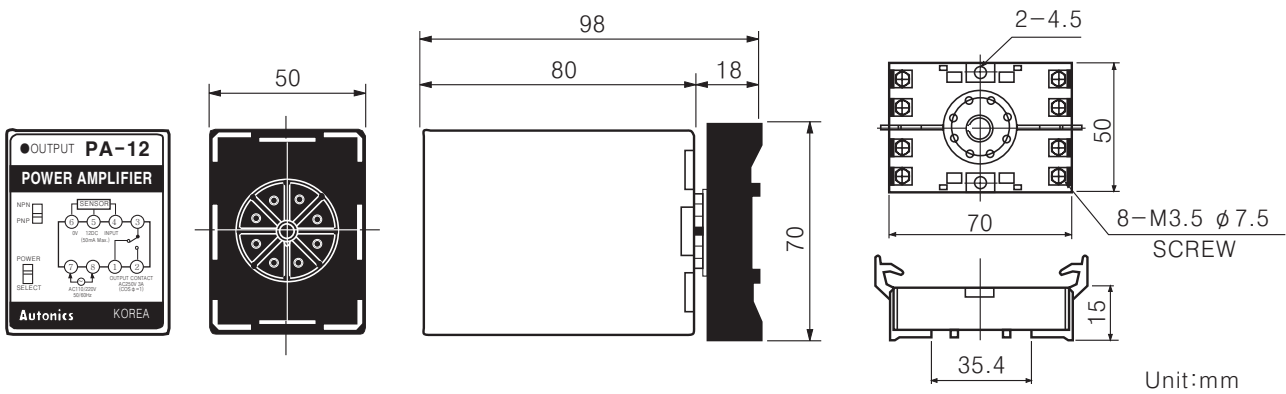
## Function diagram



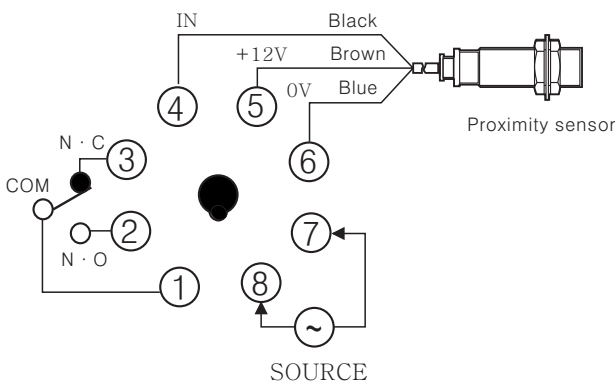
## Operation mode

| Input        | NPN       | PNP       |
|--------------|-----------|-----------|
| Relay output |           |           |
| Output LED   | NO<br>NC  | NO<br>NC  |
| LED          | ON<br>OFF | ON<br>OFF |

## Dimensions



## Connections



## Proper usage

1. Power selection switch is set according to power voltage.
2. Please check connections before wiring.
3. There is no over current protection in PA12 for sensor power supply.
4. Do not install this unit at place where steam, dust, corrosive gas and water exist.