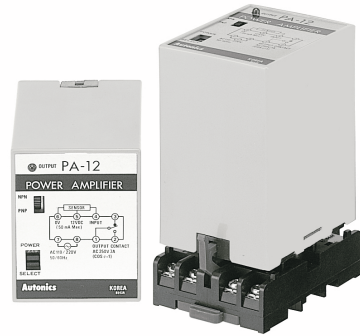


General Purpose Sensor Controller

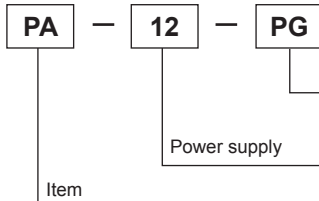
■ Features

- 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 N.O. and N.C. contacts

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



■ Ordering Information



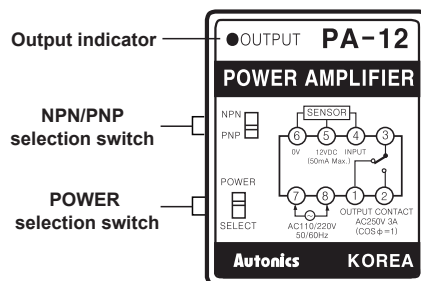
No mark	Power Amplifier
PG	Pulse generator (NPN type)
PGP	Pulse generator (PNP type)
12	Selectable 110/220VAC 50/60Hz
PA	Power amplifier

■ Specifications

Model		PA-12	PA-12-PG	PA-12-PGP
Type		Selectable NPN/PNP	NPN open collector output	PNP open collector output
Power supply		Selectable 110/220VAC 50/60Hz	110/220VAC 50/60Hz	
Power consumption		Approx. 4VA		
Power for external sensor		12VDC 50mA	12VDC ±10% 30mA	
Input signal	PNP	High level: 7-12VDC, Low level: 0-5VDC	High Level["H"]: 7-12VDC, Low Level["L"]: 0-5VDC	
	NPN	Short-circuit impedance: Max. 1kΩ, Residual voltage: Max. 2VDC, Open-circuit impedance: Min. 100kΩ		
Response time	Input	Min. 0.2ms		
	Output	Min. 10ms		
Input resistance		10kΩ	—	—
Control output		Contact composition: SPDT (1a1b) Contact capacity: 250VAC 3A (For resistive load)	NPN open collector output	PNP open collector output
Environment	Ambient temperature	-10 to 50°C		
	Ambient humidity	45 to 85%RH		
Relay life cycle	Mechanical	Min. 10,000,000 operations		
	Electrical	Min. 100,000 operations (250VAC 3A resistive load)		
Unit weight		Approx. 269g		

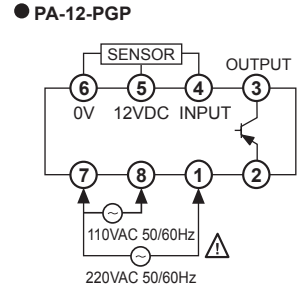
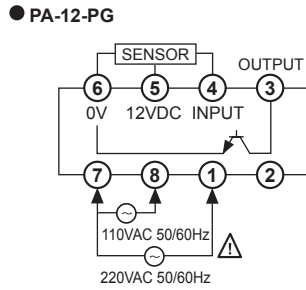
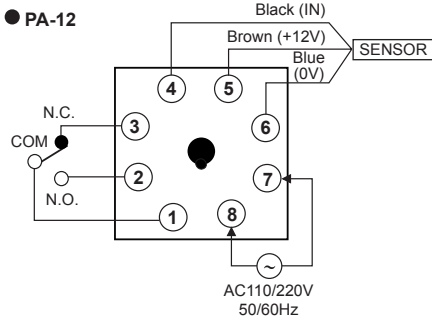
※Environment resistance is rated at no freezing or condensation.

■ Unit Description

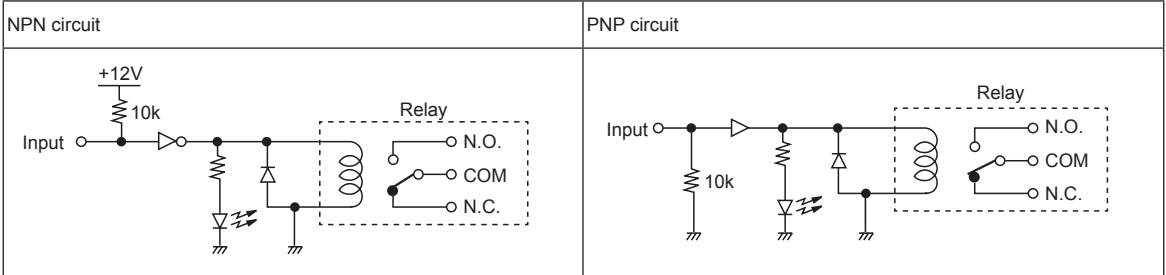


Sensor Controller

Connections



Function Diagram

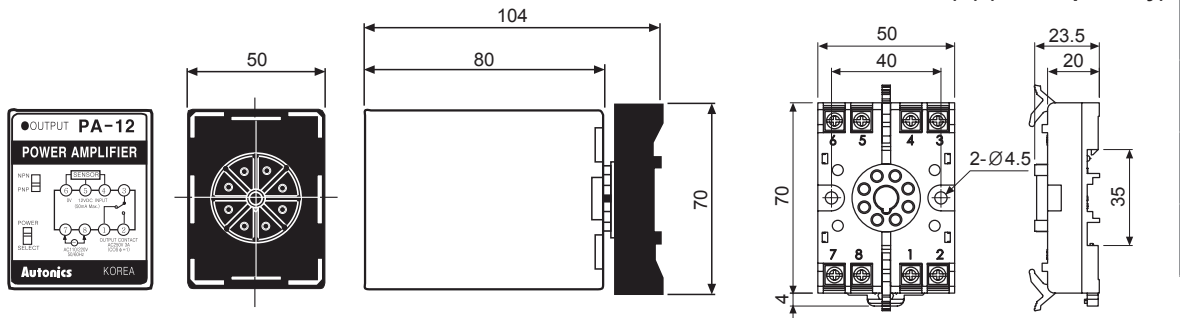


Operation Mode

Input	NPN	PNP
Input level		
Relay output		
LED		

Dimensions

(unit: mm)



Proper Usage

- Power selection switch is set according to power voltage.
- Please check connections before wiring.
- Please be cautious not to short-circuit the 12VDC terminal at GND.
- Do not install this unit at place where steam, dust, corrosive gas and water exist.

- (A) Photoelectric Sensors
- (B) Fiber Optic Sensors
- (C) Door/Area Sensors
- (D) Proximity Sensors
- (E) Pressure Sensors
- (F) Rotary Encoders
- (G) Connectors/ Sockets
- (H) Temperature Controllers
- (I) SSRs / Power Controllers
- (J) Counters
- (K) Timers
- (L) Panel Meters
- (M) Tacho / Speed / Pulse Meters
- (N) Display Units
- (O) Sensor Controllers
- (P) Switching Mode Power Supplies
- (Q) Stepper Motors & Drivers & Controllers
- (R) Graphic/ Logic Panels
- (S) Field Network Devices
- (T) Software