


PA-12

General Purpose Sensor Controller

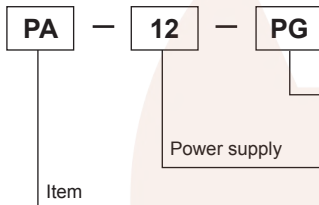
■ Features

- 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



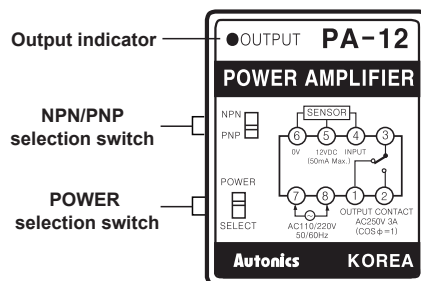
No mark	Power Amplifier
PG	Pulse generator (NPN type)
PGP	Pulse generator (PNP type)
12	Selectable 110/220VAC 50/60Hz
PA	Power amplifier

■ 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.

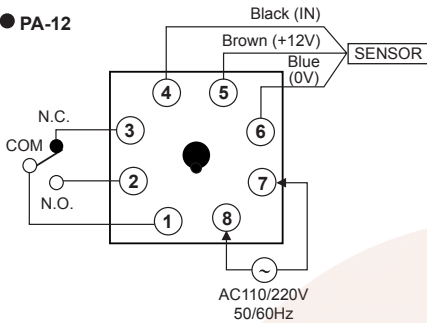
■ Unit Description



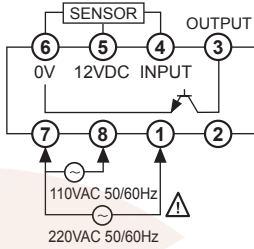
Sensor Controller

Connections

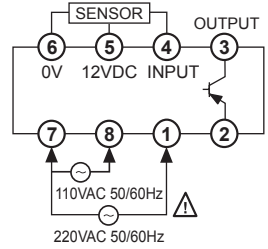
● PA-12



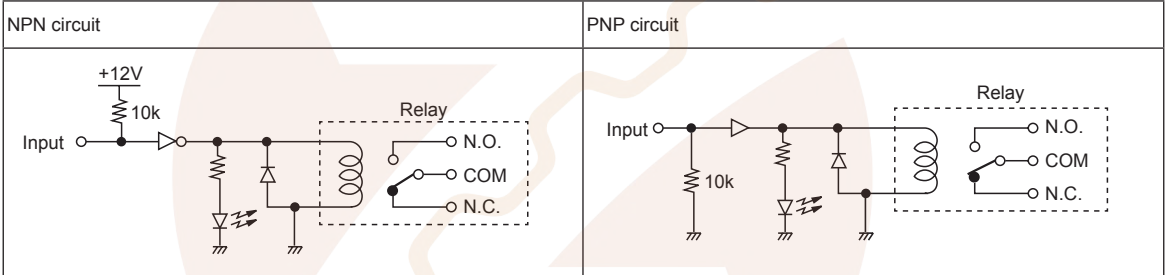
● PA-12-PG



● PA-12-PGP



Function Diagram

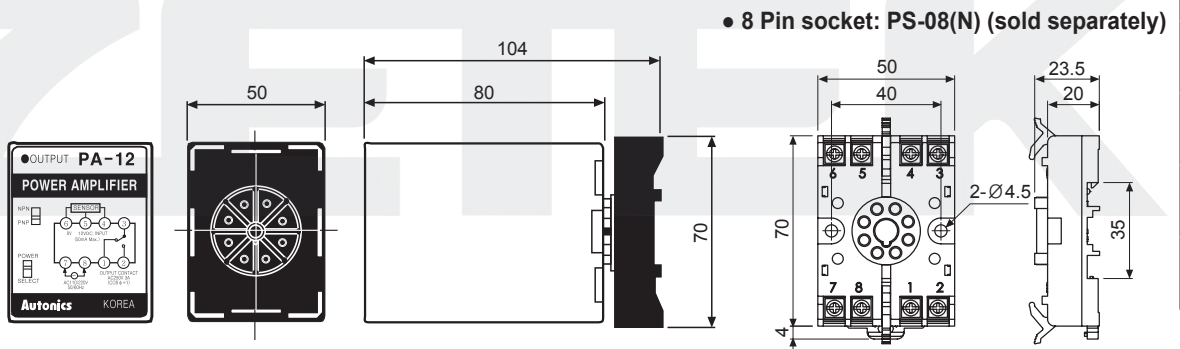


Operation Mode

Input	NPN	PNP
Input level		
Relay output	N.O. N.C.	N.O. N.C.
LED	ON OFF	ON OFF

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