


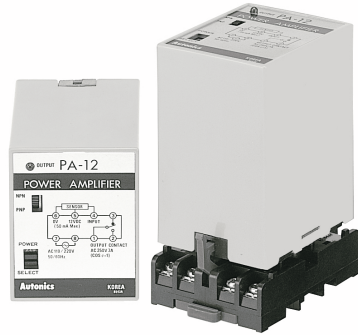
PA-12 Series

8-Pin Plug Type General-Purpose Sensor Controller

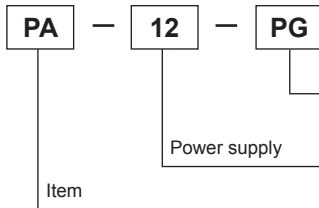
■ Features

- 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



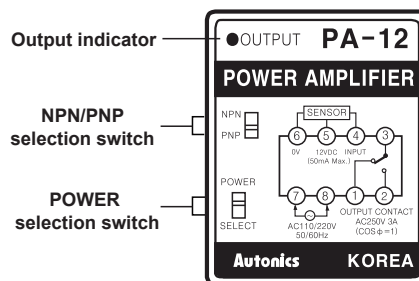
No mark	Power Amplifier
PG	Pulse generator (NPN type)
PGP	Pulse generator (PNP type)
12	Selectable 110/220VAC 50/60Hz
PA	Power amplifier

■ 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	NPN	Short-circuit impedance: Max. 1kΩ, Residual voltage: Max. 2VDC, Open-circuit impedance: Min. 100kΩ	—
	PNP	High level: 7-12VDC, Low level: 0-5VDC	High Level: 7-12VDC, Low Level: 0-5VDC
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.

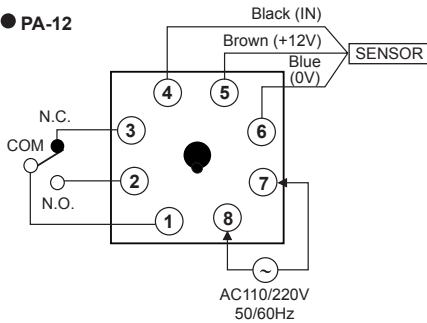
■ Unit Description



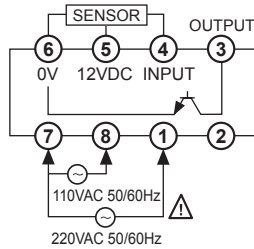
8-Pin Plug Type General-Purpose Sensor Controller

Connections

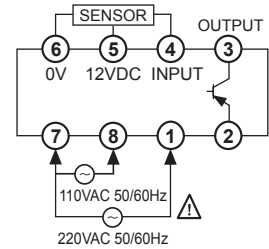
● PA-12



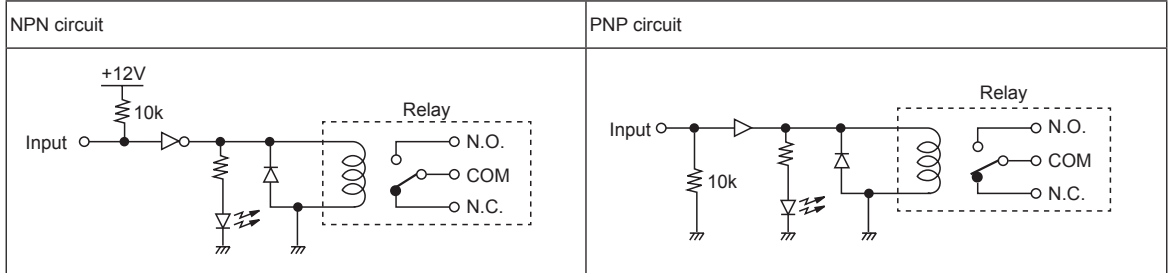
● PA-12-PG



● PA-12-PGP



Function Diagram



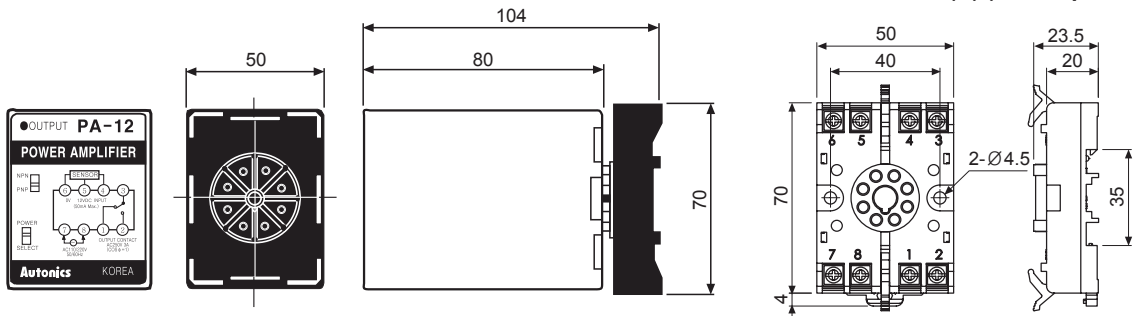
Operation Mode

Input	NPN	PNP
Input level		
Relay output		
LED		

Dimensions

(unit: mm)

● 8 Pin socket: PS-08(N) (sold separately)



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/ Connector Cables/ Sensor Distribution Boxes/ 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