

Sensor Controllers



PA10 Series
CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

Features

- High-speed output response
- DIN rail or panel mount installation
- Various models
 - PA10-V : general-purpose controllers
 - PA10-W : 2-channel controllers
 - PA10-U : high performance controllers
- PA10-U features
 - 13 operation modes (DIP switches)
 - Flip-flop mode for level control
 - Timer operation mode
- Wide range power supply : 100 - 240 VAC ~ 50 / 60 Hz

Ordering Information

This is only for reference, the actual product does not support all combinations. For selecting the specified model, follow the Autonics website.

PA 10 - ① ②

① Function

U: High-function
V: General
W: 2 CH

② Input

No mark: NPN input
P: PNP input

Product Components

- Product
- Instruction manual

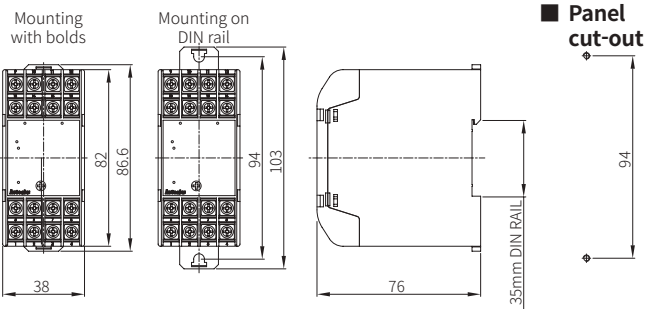
Specifications

Model	PA10-U	PA10-V□	PA10-W□
Power supply	100 - 240 VAC ~ ± 10 % 50 / 60 Hz		
Power consumption	≤ 10 VA (12 VDC = / 200 mA load)		
Sensor supply power	12 VDC = ± 10 % ≈ 200 mA ⁰¹⁾		
Input logic	AND, OR (switch)	AND	Individual
Input method	NPN input	NPN / PNP input model	
No-voltage input	Short-circuit impedance: ≤ 680 Ω Short-circuit residual voltage: ≤ 0.8 V Open-circuit impedance: ≥ 100 kΩ	Short-circuit impedance: ≤ 300 Ω Short-circuit residual voltage: ≤ 2 V Open-circuit impedance: ≥ 100 kΩ	
Voltage input	-	Input impedance: 5.6 kΩ [H]: 5 - 30 VDC = [L]: 0 - 2 VDC =	
Output	O.C OUT1 / 2	O.C OUT1	OUT1, OUT2
Contact output	250 VAC ~ 3 A resistance load		
Solid-state output	NPN open collector output ≤ 30 VDC = , ≤ 100 mA	-	
Output response time	Relay output: ≤ 10 ms, Transistor output: ≤ 0.05 ms		
Function	Operation mode (1 to 12, DIP switch)	-	-
Relay life cycle	Mechanical: Min. 10,000,000 times Electrical: Min. 100,000 times (250 VAC ~ 3 A resistance load)		
Dielectric strength	2000 VAC ~ 50 / 60 Hz for 1 min		
Insulation resistance	≥ 100 MΩ (500 VDC = megger)		
Ambient temperature	-10 to 55 °C, storage: -25 to 60 °C (no freezing or condensation)		
Ambient humidity	35 to 85 %RH, storage: 35 to 85 %RH (no freezing or condensation)		
Approval	ERC		
Unit weight	≈ 150 g		≈ 160 g

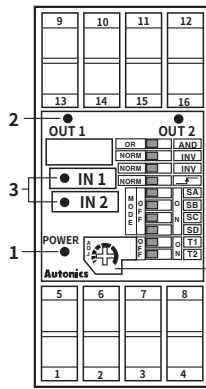
01) If the load is connected over 200 mA at the sensor output, it may cause mechanical trouble.

Dimensions

- Unit: mm, For the detailed drawings, follow the Autonics website.



Unit Descriptions



1. Power indicator
2. Output 1 / 2 indicator
3. Sensor input 1 / 2 indicator
Turns ON when sensor input signal is low.
4. Input logic switch
Input logic (AND / OR) selection
5. Sensor input signal switch
NORM: When input signal is low, valid signal (⏏).
INV: When input signal is high, valid signal (⏏).
6. IN 2 AND logic operation switch
NORM : IN 2 input signal reverse turn function
⏏: IN 2 input signal derivative action
7. Operation mode setting switch
8. Timer / Frequency selection switch
Switch functions are different varied by operation mode setting.
9. Timer time setting volume

• Based on PA10-U.

In case of PA10-V / W□ model, indicators and sensor input signal switch are only available.

■ Factory default

Switch	PA10-U	PA10-V□	PA10-W□
Input logic switch	OR	-	-
Sensor input signal switch	NORM	NORM	NORM
IN2 AND logic operation switch	NORM	-	-
Operation mode setting switch	MODE 1	-	-
Timer / Frequency selection switch	OFF / OFF	-	-