

Aptus Automation

RPM CONTROLLER

User Manual

Notice before start-up

Please confirm the specification of instrument is to totally with your requirement before using it, also read this manual in detail.



Danger

Danger! Electric Shock! DON'T touch AC power wiring terminals when instrument has been powered!

Keep the power off until all of the wirings are completed!



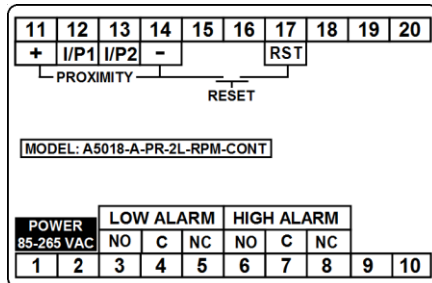
Warning

- 1) Please confirm the AC power wiring to instrument is correct, otherwise it would be caused aggravated damage on instrument.
- 2) Be sure to use the rated power supply, otherwise it would be caused aggravated damage on instrument.
- 3) Please confirm wires are connected with correct terminal (Power, Input and Output).
- 4) Avoid installing instrument in following spaces:
 - I. A place where the ambient temperature may reach beyond the range from 0 to 50°C
 - II. A place where the ambient humidity may reach beyond the range from 20 to 90% RH.
 - III. A place where the instrument likely to come into contact with water, oil, chemicals, steam and vapor.
 - IV. A place where the instrument is subject to interface with static electricity, magnetism and noise.
- 5) For proximity input, use shield compensating lead wire.

TECHNICAL SPECIFICATIONS

Product Name : RPM CONTROLLER.
Model No. : A5018-A-PR-2L-RPM-CONT
Counter Type : Counter.
Input 1 : npn/pnp proxy sensor.
Input 2 : Reset Push button.
Output : 2 Relay - 5Amp/1CO.
Power Supply : 230VAC $\pm$ 10%, 50Hz.

A5018-A-96mm x 96mm Terminal Wiring



INPUT TYPE	A5018-A-PR-2L-RPM-CONT
230 V AC Power supply	Terminal 1 & 2
NPN Proxy sensor Input	Short Terminal 11 & 12, Terminal 11(+Ve),13(NPN Signal) & 14(-Ve)
PNP Proxy sensor Input	Short Terminal 13 & 14,Terminal 11(+Ve),12(PNP Signal) & 14(-Ve)
Reset Input	Terminal 14 & 17 (Potential Free Contact)
Low Alarm(Relay-1)	Terminal 3(NO), 4(C) & 5(NC)
High Alarm(Relay-2)	Terminal 6(NO), 7(C) & 8(NC)

CONFIGURATION MENU:

- To enter in this menu, press SET+UP Key till 3 sec. Configure parameters as per your requirement.

KEY	LOWER DISPLAY	UPPER DISPLAY	FUNCTION	RANGE
SET+UP	PASS	0000	Password: To enter in configuration menu enter password value 808, then press ENTER key, and go to next parameter.	0~9999
SET	FCtr	1.000	Factor: Set a factor value. This factor value will be multiply with input pulse and finally Running Counter Value will be according this multiplied value.	0.001~9.999
ENTER	PPR	0100	Pulse Per Revolution: Set a value of Pulse per Revolution of the RPM controller.	0001~9999

PARAMETER MENU:

- Press SET key till 1 sec to set parameters which are required to change frequently.
- Use UP and SHIFT key to change parameter options or value then press SET key, to save and goes to next parameter.
- Parameter list will appear according selected counter. After last parameter first parameter will be repeated.
- To exit press Enter Key till 1 sec.

KEY	LOWER DISPLAY	UPPER DISPLAY	FUNCTION	RANGE
SET	LOAL	0100	LOW ALARM VALUE: Set Low alarm value according to your requirement.	0000~9999
SET	HIAL	0200	HIGH ALARM VALUE: Set High alarm value according to your requirement.	0000~9999
SET	bAnd	0010	BAND: Set Band value according to your requirement.	0000~9999
ENTER	tlmE	10	TIME: Set a time. After this set time, operation of output-1 will be start.	01~99 sec

Display Indication:

Running RPM value ----- = on Upper display
Low alarm value----- = on Lower display

Working:

Working is described below.

- Principle of operation > > >
 - Running RPM = (Pulse Count * Factor) / (PPR)

RELAY-1:-

The Relay-1 is operated After a set Time in this way as described below...

- Running RPM Value <= Low alarm Value = Low Alarm RELAY ON
- Running RPM Value >= Low alarm Value + Band Value = Low Alarm REALY OFF

RELAY-2:-

The Relay -2 is operated in this way as described below...

- Running RPM Value >= High alarm Value = High Alarm RELAY ON
- Running RPM Value <= High alarm Value - Band Value = High Alarm REALY OFF