AI-302M Flashing light Alarm Unit

Operation Instruction

1. Summary

Al-302M flashing light alarm unit can indicate 8 channels of alarms by sound and light. The hardware adopts Yudian Al-3 platform, which is designed for frequency and ON-OFF signal. Al-302M features:

- Advanced modularized design, flexible and fast delivery.
- > The alarm signal circuit is photoelectric isolated. It is reliable and has strong anti-interference ability.
- Applies semiconductor flash components, which is of high brightness, soft color, low power consumption, and long life.
- > Equipped with normal open relay for alarm output action and buzzer.
- Provided test and silencer, can be operated by the panel keys or by external connected switches.
- ➤ Universal 100~240VAC or 24VDC power supply.
- ➤ ISO9001-2000 approved.

2. Ordering Code

AI-302M can install up to 6 modules. I5 module, which can provide 2 ON-OFF signal inputs, can be installed in socket M1 to M5, and relay output module - L2 can be installed in socket COMM.

ON-OFF signal input: the ON-OFF signal input can be relay contact signal or collecting electrode of NPN triode. The COMM terminal is connected to negative pole, and signal terminal to the positive pole. When the circuit is break, the withstanding voltage on the triode is about 24 to 30V, and when the circuit is closed, the current passing the triode is less than 1mA.

ON-OFF signal output (relay contact): L2 is single relay output module, is normal open.

The ordering code is as below:

1 Show the instrument model.

Al – 302M: Eight flashing light alarm unit.

2 Shows the dimension of the instrument

B7: Eight flashing light alarm unit panel, cutout size is 76mm×152mm

- 3-8 Indicate the modules installed in socket M1, M2, M3, M4, M5 and COMM.
- 9 show the power supply.

Empty means 100 \sim 240 VAC power supply, and 24 V means 24 \sim 32 VDC or AC power supply.

In the above example, the model is Al-302MB7, I5 module is installed in M1, M2, M3, M4 and M5, and L2 module is installed in COMM socket. There are totally 10 inputs and 1 output. Since the function of Al-302M is fixed, the ordering code can be shorten to "Al-302M" without indicting the modules.

3. Modules

L2: Relay contact switch output module (Capacity: 3030VDC/1A, 250VAC/1A)

15: Two channels of external frequency / ON-OFF signal inputs, dry contact.

When the instrument works, if one of multiple alarms occurs, the corresponding light pane is lighting and flashing, and the buzzer and relay are triggered. Press the silencer key, the buzzer and relay will be turned off. The light pane will continue light (but no flash) until the alarm is released.

4. Technical specification

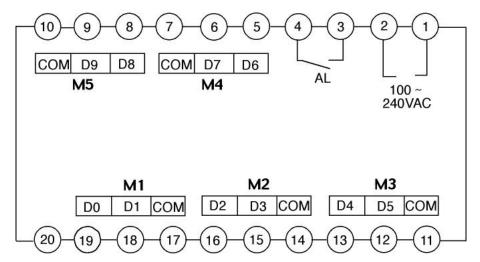
ON-OFF signal input: photoelectric coupler dry contact input, the withstanding voltage is less than 35V, and the withstanding current is less than 1mA.

ON-OFF signal output: relay contact output, 250VAC/1A or 30VDC/1A

Power supply: $100\sim240$ VAC(+ $10\%\sim-15\%$)/50 ~60 Hz

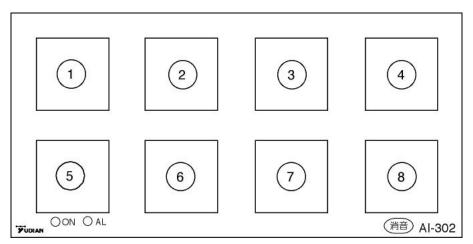
Power consumption: ≤2W Ambient temperature: 0~60°C

6. Wiring and terminals layout



D0-D7 for external alarm switches inputs. D8 is for silencer switch input, and D9 for test switch input. AL is for relay output. ALL the COMs are the common terminals and internal connected.

7. Instrument panel



When D0 \sim D7 is connected to COM terminal, the corresponding LED light $1\sim\!8$ will flashing.

"AL" alarm indicate light: when any of D0 to D7 alarm switch is closed, AL light will be on and AL relay is triggered.

"ON" power indicate light: when the instrument is power on, press the silencer key (Key 8), the buzzer will stop. Pressing the key and keeping for 2 seconds will trigger test, and then all 8 lights will flash and the buzzer will be turned on. Press the silencer key again, and the test will be ended, and the alarms are released.