

Fearlie® AC current switch

Working principle

Normally open: M3050/M3060/M3070/M3080

When the current of the perforation line exceeds the set value, the red light goes on and the output signal is a closed one; when the current is below the set value, the green light goes on and the switch is open.

Model No.	Setpoint range	Aperture Dia.	Dimension	Case type
M3050	0-30A	10mm	65X25x47mm	NO
M3060	0-50A	10mm	65X25x47mm	NO
M3070	0-100A	20mm	80X27x70mm	NO
M3080	0-200A	20mm	80X27x70mm	NO

Normally closed: M3056/M3066/M3076/M3086

When the current of the perforation line exceeds the set value, the green light goes on and the output signal is an open one; when the current is below the set value, the red light goes on and the switch is closed.

Model No.	Setpoint range	Aperture Dia.	Dimension	Case type
M3056	0-30A	10mm	65X25x47mm	NC
M3066	0-50A	10mm	65X25x47mm	NC
M3076	0-100A	20mm	80X27x70mm	NC
M3086	0-200A	20mm	80X27x70mm	NC

Brand	Fearlie	Environmental	-20~60°C	Response time	<200ms
Max.Off-state Leakage	0.1A	Power supply	None,Self-powered	Overload	100%
Contact capacity	0.3A@240V AC/DC	humidity	0-95% Rh, non-cond.	Hysteresis	<1%
Output a switch signal by detecting the perforation current	Ipwaterproof level	Ip30	Repeatability	100%	

Installation Precautions

- 1.The detected perforation current must be alternating current, not direct current, and variable frequency current and variable power are not suitable.
- 2.The detected perforation current must be within the allowable range and cannot exceed the maximum limit value. Exceeding the limit current will damage the product components
- 3.The maximum contact capacity load is 0.3A@240V(AC/DC), usually 24V(DC) or 240V(AC) can be connected, 380V voltage is not allowed
- 4.Terminals K1/K2 can connect or disconnect AC/DC. They are dry contacts. They are usually connected to the power supply in series with the load to connect or disconnect the load. It is strictly forbidden to connect the power supply directly to K1/K2 without the load. Otherwise, it will completely burn the device
- 5.The detected perforated wire can only wear one wire, not two, otherwise, the current sensing switch will not work properly
- 6.When the detected perforation current is small, it is not possible to use a multimeter to detect whether the switch is turned on. You can judge whether the switch is turned on by detecting the load condition.
- 7.Pay attention to the safety of electricity use, and operate in strict accordance with the electrician's electricity standards when using it

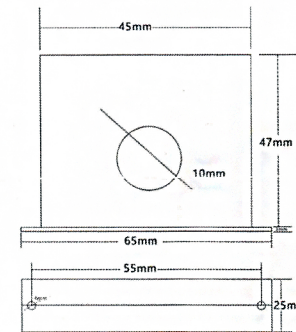
- actual inductance current monitoring, security
- isolation of input and output, self power
- >The range of the monitored current is up to200A; the monitoring threshold is adjustable within 0 - 200A.
- >Hysteresis is less than 1%. It can be used in strong magnetic environment.
- >Non-contact electronic switch with fast reaction and unlimited number of on-and-off operations.
- >The shell is made of environmentally-friendly flame-retardant PC material.

Current action threshold setting

- 1.The current value of the perforation line is adjusted to the switch action threshold to be set.
2. Adjust the current regulator on the switch to the position where the red light and the green light just switch.

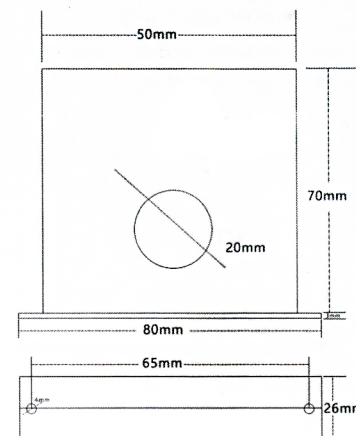
Specification diagram

M3050/M3056/M3060/M3066

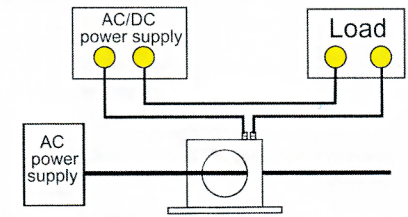


Specification diagram

M3070/M3076/M3080/M3086



Wiring schematic diagram

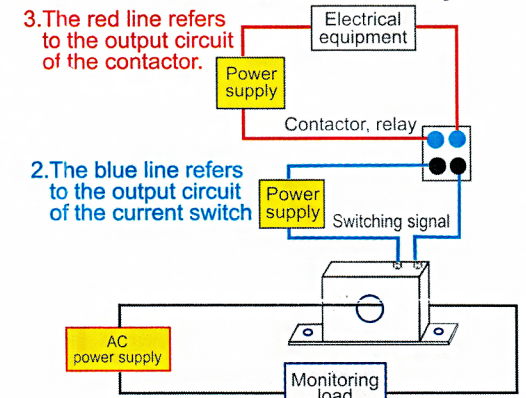


Note:

Monitoring AC current

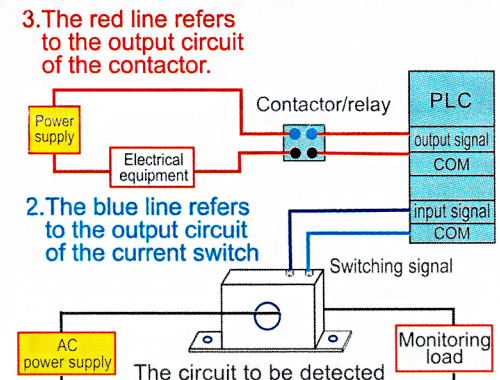
- 1.The contact capacity of the switch: 0.3A@240V AC/DC.
- 2.Only one-phase electricity is monitored.

Sample 1: The relay/contactor is used to control the AC and DC load indirectly.



- 1.The black line refers to the input circuit of the current switch (the circuit of the equipment to be monitored)

Sample 2: As a signal source, the current transformer switch is used together with PLC to achieve intelligent control or intelligent protection



- 1.The black line refers to the input circuit of the current switch (the circuit of the equipment to be monitored)