



RM35 JA3 MW

Presentation

Multifunction current control relays RM35 JA3 MW monitor both a.c. and d.c. currents.

- Automatic \square or \sim recognition,
- Measurement ranges from 2 mA to 15 A,
- Selection between overcurrent and undercurrent,
- Measurement as true rms value,
- Selectable memory function.

Settings are protected by a sealable cover.

Control status is indicated by a LED.

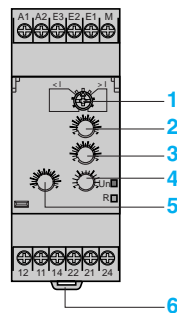
The relays are designed for clip-on mounting on \square rail

Applications

- Excitation control of d.c. machines,
- Control of load state of motors and generators,
- Control of current drawn by a 3-phase motor,
- Monitoring of heating or lighting circuits,
- Control of pump draining (undercurrent),
- Control of overtorque (crushers),
- Monitoring of electromagnetic brakes or clutches.

Description

RM35 JA31MW, RM35 JA32MW



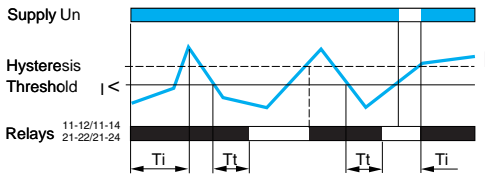
- 1 Configuration: selection of operating mode $<I / >I$, (with or without memory)
Memory - No Memory.
- 2 Current threshold setting potentiometer.
I %
- 3 Hysteresis adjustment potentiometer.
Hysteresis
- 4 Time delay adjustment potentiometer. **Tt**
- 5 Starting inhibit time delay adjustment potentiometer. **Ti**
- 6 Spring for clip-on mounting on 35 mm \square rail.

Un Green LED: indicates that supply to the relay is on.

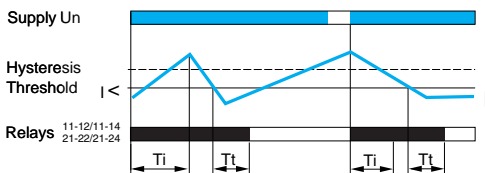
R Yellow LED: indicates relay output state.

Function diagrams

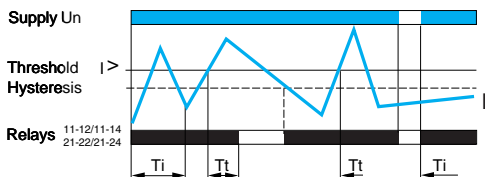
- Function: Undercurrent detection. $< I$
- without memory. **No Memory**



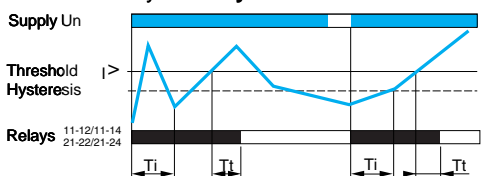
- with memory. **Memory**



- Function: Overcurrent detection. $> I$
- without memory. **No Memory**



- with memory. **Memory**



Ti: starting inhibit time (adjustable on front panel)

Tt: time delay after crossing of threshold (adjustable on front panel)

Operating principle

Control relays RM35 JA3●MW are designed for the monitor of a.c. or d.c. currents.

They automatically recognise the form of the \sim or \sim (50 or 60 Hz) signal and can provide direct monitor up to 15 A. Above this value, a current transformer can be connected.

Fault signalling is by LED.

a.c. or d.c. current control relays: RM35 JA31MW and JA32MW

The operating mode is fixed by the user:

A switch allows selection between the following modes:

- Undercurrent, with or without memory,
- Overcurrent, with or without memory.

The position of the switch, and therefore the operating mode, is read by the product on energisation.

If the switch is set to an unacceptable position, the product detects a fault, the output relay stays open and the LEDs flash to signal the position error.

If the switch position is changed while the device is operating, all the LEDs flash, but the product continues to operate normally with the function selected at the time of energisation preceding the change of position.

The LED's return to their normal state if the switch is returned to the original position selected prior to the last energisation.

The undercurrent or overcurrent threshold value is set by means of a potentiometer graduated as a percentage of the scale value of I to be monitored.

The hysteresis is adjusted by means of a potentiometer graduated from 5...50 % of the threshold setting.

The hysteresis value must not exceed the limit values of the measuring range.

In overcurrent (undercurrent) mode, if the current exceeds (falls below) the threshold setting for a time greater than that set on the front panel (0.3...30 s), the relays open and the LED goes out.

As soon as the current returns to below (above) the threshold minus (plus) hysteresis, the relay instantly closes again.

"Memory" mode:

If "Memory" mode is selected, the relay opens when crossing of the threshold is detected and then stays in that position.

The power must be switched off to reset the product.

On energisation, an inhibit time delay (1...20 s) makes it possible to inhibit current peaks (or troughs) on start-up of equipment.

References

Function	Range controlled	Supply	Output	Reference	Weight
					V
■ Overcurrent or undercurrent	2 ... 500 mA	\sim/\sim 24...240	2 C/O 5 A	RM35 JA31MW	0.130
	0.15...15 A	\sim/\sim 24...240	2 C/O 5 A	RM35 JA32MW	0.130



RM35 JA31MW



RM35 JA32MW