CONNECTION AND SETTING GUIDE

General
Rated voltage: 24-48, 110-125 or 220-250 V DC.
Time delay setting range: 0,1-320 s.

Front lay-out

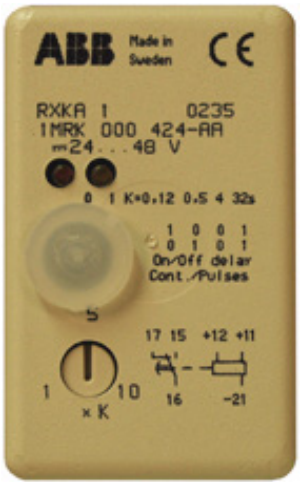

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Fig.1 Front layout

LED indicators: Yellow LED: Indicates that the relay is energised
Red LED: Indicates that the output relay is in operate condition.

Programming switch: Four-pole programming switch (S1) behind the plastic plug for selection of:
- the value of the time scale constant K (two switches)
- on-delay or off-delay function
- continuous or pulsed output function

Potentiometer: For presetting of the time delay.

Connection

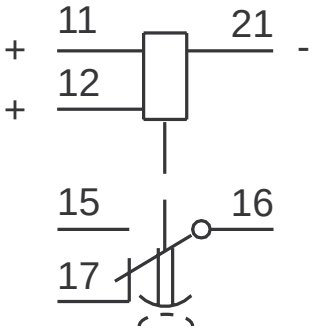

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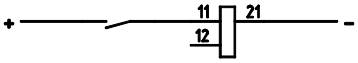
Fig. 2 Terminal diagram

For **on-delay** function the timing starts when the DC voltage supply is connected to terminals 11 (+) and 21 (-).



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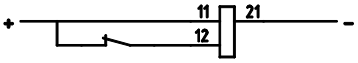
For **off-delay** function the DC voltage supply shall continuously be connected to terminals 11 and 21. Then the output relay operates when terminal 12 is connected to terminal 11. The off-delay timing starts when terminal 12 is disconnected from terminal 11.



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Settings

Selection of the time scale constant K
Remove the plastic plug in the front of the relay. Then the switches on the programming switch S1 are accessible by a small screw-driver.
The two upper switches S1:1 and S1:2 are used for selection of one out of the four time constants K ; 0,12 , 0,5 , 4 or 32 seconds, as indicated on the relay cover. For example when both switches are in position 0 (= to the left) the time constant K is equal to 4 seconds and when they both are in position 1 (= to the right) the time constant K is equal to 32 seconds.

Selection of on-delay or off-delay function
When switch S1:3 is set in position 0 (= to the left) the function of the relay is on-delay, i. e. the timing starts when the relay is energised. After that the setting time has elapsed, the output relay switches to its operate condition.

When switch S1:3 is set in position 1 (= to the right)) the function of the relay is off-delay, i. e. the timing starts when the energising voltage to terminal 12 is disconnected. After that the setting time has elapsed, then the output relay switches to its release condition. When the energising voltage is reconnected to terminal 12, the output relay instantaneously switches to its operate condition.

Selection of continuous or pulsed output function
With the relay set for on-delay function and the switch S1:4 set in position 0 (= to the left), after operation the output relay remains in operate condition as long as the relay is energised.

With the switch S1:4 set in position 1 (= to the right) the output relay switches to operate condition after set time, then it switches to release condition and after set time it switches to operate condition again, etc. as long as the relay is energised.

Setting of the time delay
The time delay is set by the potentiometer on the front of the relay. The setting range is 0,8 - 10 times the value of the selected time constant K.

Indication

The relay has one yellow LED (Light Emitting Diode) and one red LED on the front of the relay.
The yellow LED lights when the terminals 11 and 21 is energised with a voltage within the operate range of the relay.
The red LED lights when the output relay is in operate condition.

ESD

The relay contains electronic components, which can be damaged if they are exposed to electrostatic discharge (ESD). Always avoid touching the circuit board during the setting procedure.