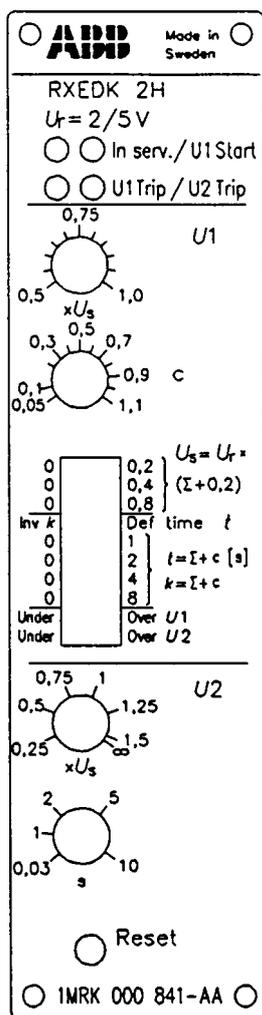


CONNECTION AND SETTING GUIDE

Rated voltage of the relay U_r (available variants : 2/5 V, 20/50 V or 100/200 V
16Hz : 2/5 V or 20/50 V
16Hz alternativ version : 20/50 V)



1MRK 000 117-40

Fig. 1 Front layout

LED indicators:

In serv. (green): indicates relay in service.
Start (yellow): indicates operation of U1 (no time delay).
Trip U1 (red): indicates operation of U1 after the set time delay.
Trip U2 (red): indicates operation of U2 after the set time delay.

U1:

Potentiometer (P1) for setting of the operate value for the function U1.

Potentiometer (P2) for setting of the definite time delay or inverse time factor for the function U1.

10-pole programming switch (S1) for setting of the scale-constant U_s , time delay characteristics, inverse time factor k, def.time delay t and over-/undervoltage functions.

U2:

Potentiometer (P3) for setting of the operate value for the function U2.

Potentiometer (P4) for setting of the definite time-delay for the function U2. *)

Reset push-button

*) The setting ranges are different for the different variants of the relay
All variants except 16Hz : 30 ms - 10 s
16Hz : 80 ms - 10 s
16Hz alternative version : 80 ms - 10 s

CONNECTION:

The RXEDK 2H relay requires a dc-dc converter type RXTUG for auxiliary supply ± 24 V. Connection of voltage RL shall be made only when the binary input is used.

Observe that the relay has two rated voltages U_r (2/5 V, 20/50 V or 100/200 V) depending on if the voltage is connected to 324-325 (low) or 323-325 (high).

NOTE! The auxiliary voltage supply should be interrupted or the output circuits should be blocked to avoid the risk of unwanted alarm or tripping, before the relay is plugged into or withdrawn from its terminal base.

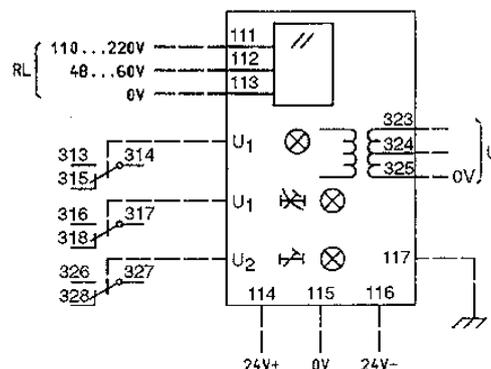


Fig. 2 Terminal diagram

SETTINGS:

All settings can be changed while the relay is in normal service.

1. Setting of the scale-constant U_s .

U_s is common for both the stages U1 and U2, and is set with the programming switches S1:1, S1:2 and S1:3 and by connecting the voltage input to the wanted U_r . The setting range is from 0,2 to 1,6 times the rated voltage U_r .

2 Setting of the operate value for stage U1.

The operate value is set with the potentiometer P1 according to $U1 = P1 \times U_s$.

3. The time delay characteristic of stage U1.

This stage has two time characteristics, definite- or inverse-time delay, which are programmed on the programming switches S1:4 to S1:8.

Definite-time delay.

Set the programming switch S1:4 in position "Def. time t=", where $t = \Sigma + c$. Switches S1:5 to S1:8 are used for the main adjustment, $\Sigma = 0 - 15$ s, and potentiometer P2 is used for the fine adjustment $c = 0,05 - 1,1$ s. The minimum time delay is 50 ms and the maximum time delay is 16,1 s.

Inverse-time delay.

Set switch S1:4 in position "Inv". The inverse time factor $k = 0,05 - 16,1$, is set with switches S1:5 to S1:8 and with potentiometer P2 in the same way as for the definite-time delay, t.

4. Setting of the operate value for stage U2.

The operate value is set with potentiometer P3 according to $U2 = P3 \times U_s$.

This function can be blocked by setting potentiometer P3 to "∞".

5. The time delay of stage U2.

The time delay for stage U2 has a definite-time characteristic. The setting is done with potentiometer P4. *)

6. Setting of over- or undervoltage functions

Stages U1 and U2 can be set to over- or undervoltage function independantly of each other, by the setting of switches S1:9 for U1 and S1:10 for U2.

7. The binary input.

The binary input is used for remote reset of the LED indicators. The function is activated when a voltage RL is applied to the binary input.

INDICATION

There are four LED indicators. The trip indicators seal-in and are reset manually by the "Reset" pushbutton or electrically via the binary input, while the start indicator resets automatically when the relay resets.

When the "Reset" pushbutton is depressed during normal operating conditions, all LEDs except "In serv." will light up.

When connecting RXEDK 2H to the supply voltage, the relay performs a self test. The "In serv." LED is alight, after performing the self test and when the relay is ready for operation. In case of a fault, the LEDs will start flashing.

TRIPPING AND START OUTPUTS

The RXEDK 2H relay has one start and one tripping output for stage U1, and one trip output for stage U2. Each output is provided with one change-over contact. All outputs reset automatically when the voltage decreases to a value below the resetting value of the relay.

ESD

The relay contains electronic circuits which can be damaged if exposed to static electricity. Always avoid to touch the circuit board when the relay cover is removed during the setting procedure.