


Adjustment procedure MTDV4 relay

This adjustment procedure is valid for all MTDV4 relay types with adjustable voltages and time delay.




1. Set time delay to lowest value to adjust voltages



Turn knob fully counter clockwise  until its stop.


2. Pull-in voltage



- Turn top right potentiometer (Pull-in voltage U_{on}) fully clockwise  until its stop.
- Turn bottom right potentiometer fully counter clockwise  until its stop.
- Apply the desired pull-in voltage across relay terminals 1 and 2 (1 is positive). The relay should NOT pull in at this moment.
- Slowly turn the top right potentiometer counter clockwise  until the relay pulls-in.
- Keep the pull-in voltage applied across the relay terminals, the relay should remain pulled-in.


3. Drop-out voltage



- Decrease the applied voltage across the relay terminals to the desired drop-out voltage. The relay should still be pulled-in after the voltage has been decreased.
- Slowly turn the bottom right potentiometer clockwise  until the relay drops out.

4. Set time delay to desired value



- If available remove voltage from terminals 1 and 2. The relay is switched-off.
- Turn the knob clockwise . Apply the desired pull-in voltage across relay terminals 1 and 2 (1 is positive).
- If the relay has an adjustable delay-on: measure if the required delay-on time has been reached. If not, adjust the knob and test again.

If the relay has an adjustable delay-off: decrease the applied voltage to the drop-out voltage. Measure if the required delay-off time has been reached. If not, adjust the knob and test again.

- When the required time delay is reached, lock the knob by fastening the screw. Torque value screw to lock knob: 0.2-0.4 Nm

The relay is now adjusted and ready for use.