1 Description

Two position controllers are used for the control of slow processes with modest demands for the quality of control. Two position controllers are widespread in the control of temperatures, speed of simple drives or liquid level systems. Because of the incremental rotary encoder and the 7-segment display, the hysteresis of the controller can be set easily and with high precision. The LED OVER indicates a saturation of the controller input (= output of the summing point). For active LED, the voltage exceeds the range -10 V ... +10 V).

2 Safety Instructions

The device corresponds to the safety stipulations for devices of electrical measurement, control and for general laboratory equipment according to DIN EN 61010 part 1. It is exclusively dedicated for use in a dry environment which is suitable for the operation of electrical instrumentation. When the device is operated properly, both the safety of the operator as well as the working-life of the device are guaranteed. However safety cannot be guaranteed if the device is operated in an uneducated manner or careless. In case of any suspicious reaction of the device or with visible damage the device must be deactivated immediately.

Intended Operation

- Operate the device with the intended power supplies, e.g. 726 86 Stabilized Power Supply +/-15 V / 3 A.
- Operate the device in experiment set-ups as shown in this instruction sheet or in experiments as described in the manuals.
3 Scope of Delivery
1 Training panel

4 Setting into Operation
Additionally required:
1 PC, from 1 GHz, Windows XP, SP2
1 Profi-CASSY
1 CASSY Lab2 software

Install and start CASSY Lab2 on your PC. The two position controller is part of the equipment set E 4.2.1 Control of Technical Systems and E 4.2.3 Control of Electronic Systems. The operation of the two position controller requires additional components from these equipment sets. Profi-CASSY is used for the generation of the reference signal and for the measurement of the output-signals. With CASSY Lab2 the measurement quantities are evaluated and graphically presented.

5 Technical Data
Supply voltage: ± 15 V
Input voltage: ± 10 V
Output voltage: ± 10 V or -10 V
Hysteresis: ± 2.5 V maximal
Dimensions: 297 mm × 100 mm × 80 mm
Mass: 0.5 kg

6 Operation
• Set up the experiment as shown and switch the power supply on. The example shows the control of a transfer element of 2nd order (734 0951). Set-ups with other controlled systems are explained in the training manuals.
• Load the CASSY-Lab example from the manual, the CASSY help or make your own settings.
• Set the hysteresis (in V) to the desired value with the rotary encoder.
• Each turn of the rotary encoder is answered by a token point in the right element of the 7-segment display. After this token has passed the actual settings are stored inside the memory. The settings are non-volatile and still active after the next turn on.
• Start the measurement by pressing F9.