



ABS/ASR POWER CONTROL SYSTEM TRAINER



LEARNING EXPERIENCE

This demonstration panel presents the working of the automatic brake power system ABS and the anti-slip regulation system ASR in motor vehicles with the aid of a microprocessor controller.

It is manufactured to allow laboratory practices aiming at measurement of voltage and sequence of input signals and responses of the programmer to the dynamic changes of the above-mentioned input signals as well as testing of changes of pressure on hydraulic circuits.

GENERAL CHARACTERISTICS

Dim. mm approx (HxLxW): 1700x1200x500

Weight approx. kg 150

Power supply: AC 220V±10% 50/60 Hz

Working temperature: -40° C $\sim +50^{\circ}$ C.

MAIN CHARACTERISTICS

The trainer facilitates the representation of normal states of programmer in the conditions of simulated driving, braking and braking with triggering of ABS/ASR (ABS/ABD) system response to extensive delays. Additionally, the functioning of the anti-skidding ASR system also is represented. The trainer allows also the demonstrating of reaction of a system to the most frequently observed types of failures, such as interruptions in wheel sensor circuits or in output circuits, i.e. electro-hydraulic valves or too small values of controlling signals (amplitudes of those signals).

OTHER CHARACTERISTICS

The experimental stand facilitates the measurement of the following signals:

The voltage of four different rotational speed sensor





- The characteristics of the voltage from the sensors depending on the rotational speed of the toothed ring.
- The characteristics of the voltage from the sensors depending on the gap width for the specified rotation speed
- The depth of the amplitude modulation of the sensors' signal being a result of the whipping of the toothed ring in the function of the gap width
- The pressure value in the hydraulic circuits (in the brake master cylinder or after a correction made by the ABS/ASR system)

Complete with user manual that will allow teachers to develop their own experiments.