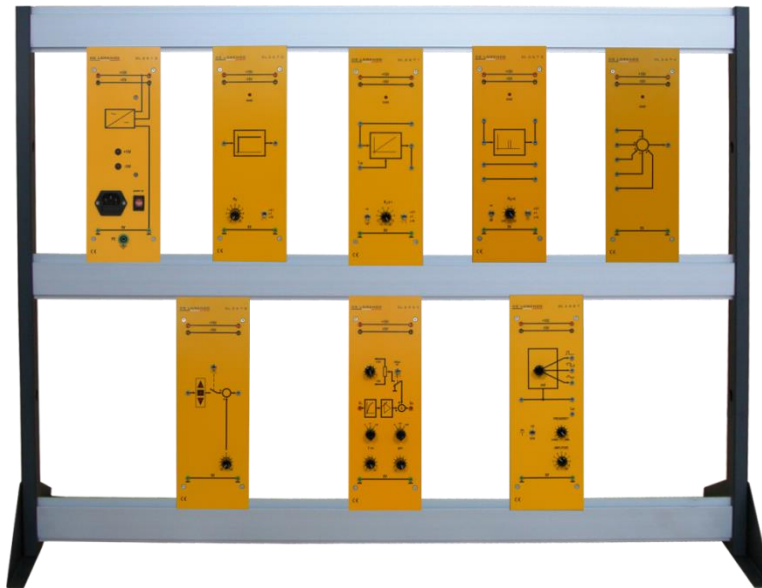## Controllers - PID

This laboratory is designed to study and to analyze the characteristics and the typical behaviors of the controllers: linearity, proportionality, dynamic behavior, gain, conventional values, critical frequency, phase, etc. After having analyzed the single P, I and D elements, students is able to study their PI, PD and PID combinations and he can set up both series and parallel configurations. The knowledge of the typical characteristics of the controllers is extremely important for a correct approach to the design of the control systems.

This trainer has a modular structure and it consists of didactic panels installed on a vertical frame. It is supplied with a theoretical and practical manual. The modularity of this didactic system can give the students a direct and immediate approach to the topics, offering the opportunity to study various subjects, performing several experiments as following:

- P Controller
- I Controller
- D Controller
- PI Controller
- PD Controller
- PID Controller
- PID controller with gain and offset regulation

List of modules for experiments:

No	EXPERIMENT	DL 2613	DL 2670	DL 2671	DL 2672	DL 2674	DL 2678	DL 2625	DL 2687	DL PS-MODE	DL ACTSW	DL 1893	DL 115ACT	DL 2100-3M
							MODULES							
1	Controller P	1	1						1		1	1	1	1
2	Controller I	1		1					1		1	1	1	1
3	Controller D	1			1				1		1	1	1	1
4	Controller PI	1	1	1		1			1		1	1	1	1
5	Controller PD	1	1		1	1	1		1	1	1	1	1	1
6	Controller PID	1	1	1	1	1			1		1	1	1	1
7	PID controller with gain and offset regulation	1	1	1	1	1		1	1		1	1		
8	**TOTAL**	1	1	1	1	1	1	1	1	1	1	1	1	1