

ESD 100 A

Study of electrical, pneumatic and electro-pneumatic automation

The ESD 100 A is a modular board designed to ensure a very progressive training in the 3 fields of automation:

- Pneumatics,
- Electrics
- PLC control

This modular bench is also available in a pneumatic /electropneumatic only configuration (ref ESD 100 B)

Pedagogical purposes

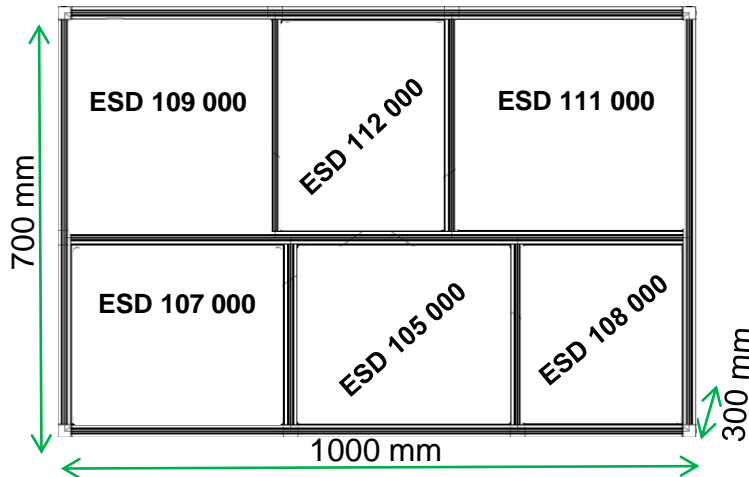
- Progressive training in automatic control.
- Study of the components and their technology.
- Study of basic pneumatic logic functions.
- Wiring and simulation of pneumatic, electric and electro-pneumatic diagrams.

Targeted trainings

- | | |
|---|--|
| <ul style="list-style-type: none"> ▪ Vocational Training ▪ Technical high schools ▪ Polytechnics | <ul style="list-style-type: none"> ▪ Technical Bachelor ▪ Engineer schools |
|---|--|

ESD 100 000: Structure made of aluminium profile, with 6 locations

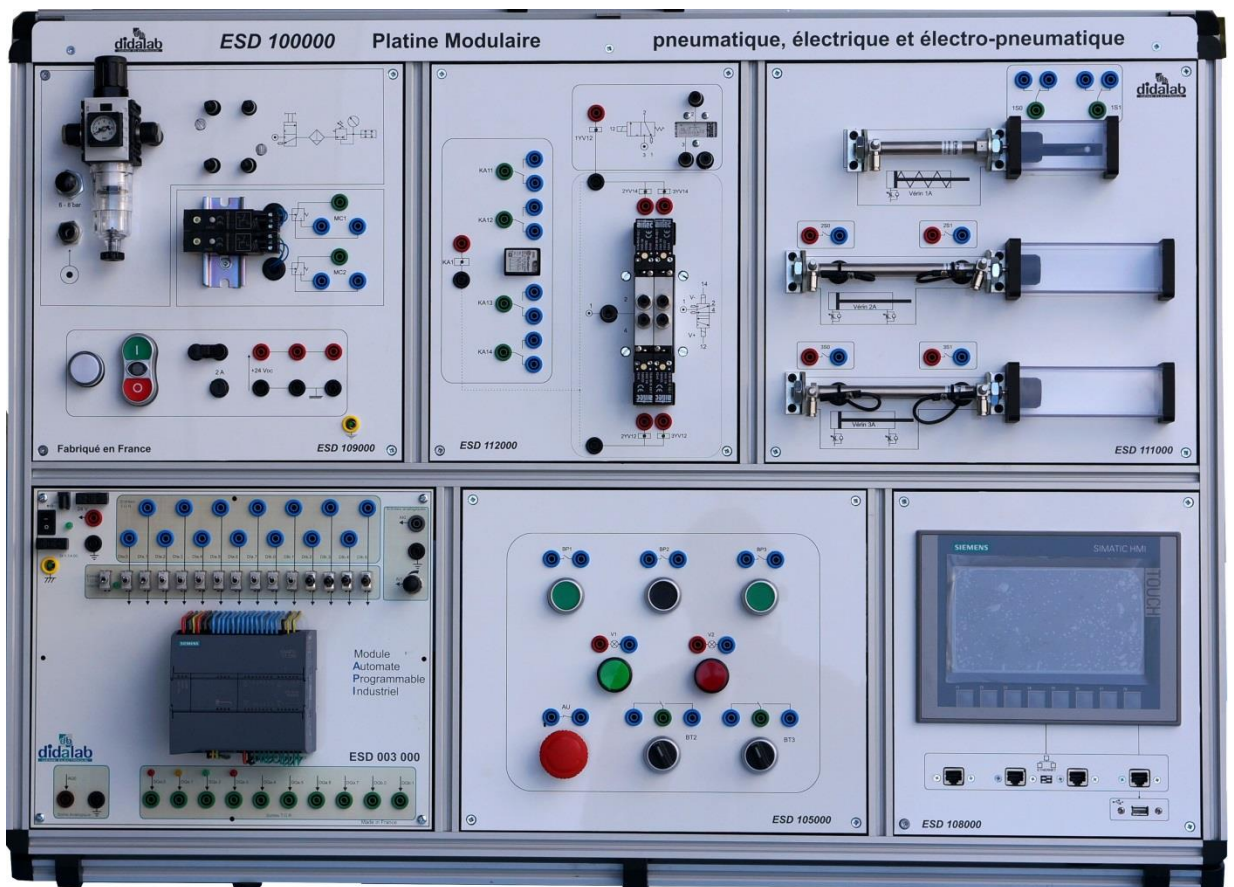
This structure made of aluminium profile can be put on a table,



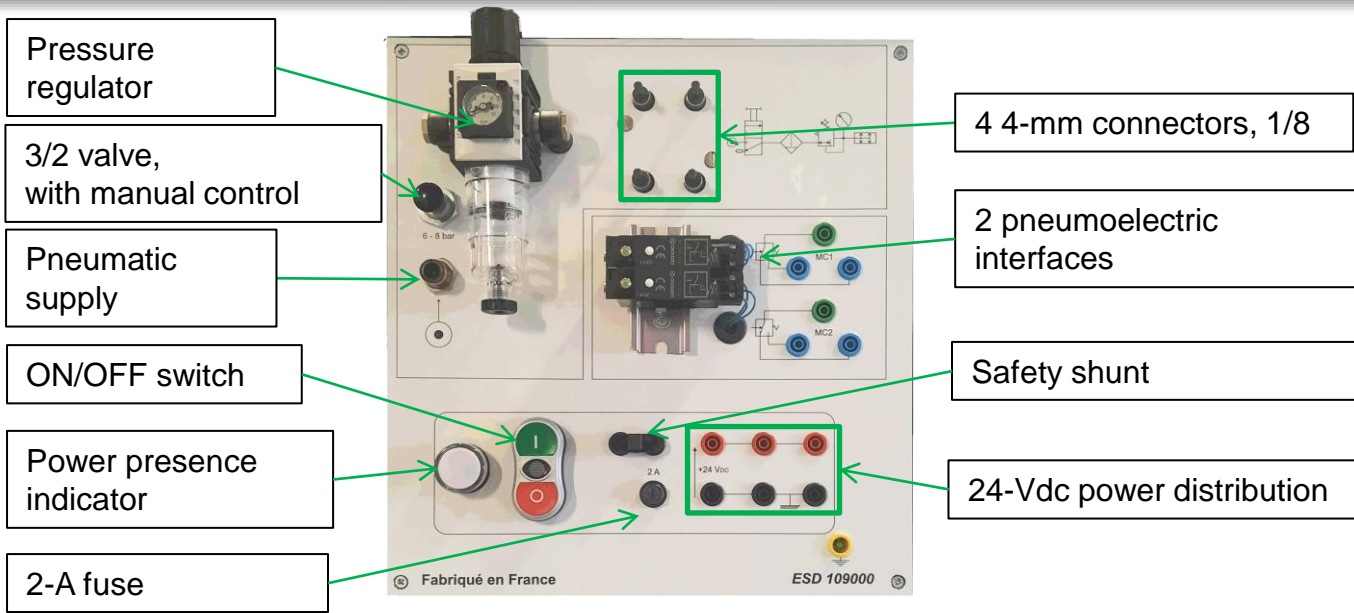
- **ESD 109 000** : Electric / pneumatic supplies module
- **ESD 112 000** : Electropneumatic and pneumo electric interface module
- **ESD 111 000** : Cylinders module (electric limit switches)
- **ESD 107 000** : S7-1200 PLC module with Tia Portal software
- **ESD 105 000** : Electric HMI module
- **ESD 108 000** : KTP 700 HMI module

Standard Configuration

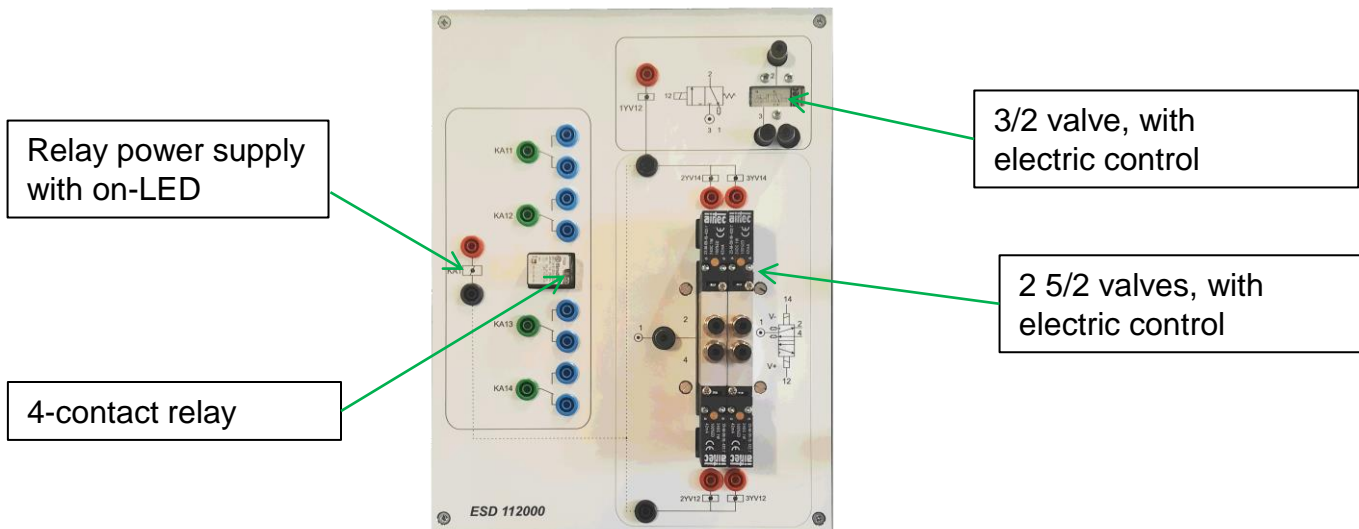
ESD 100 A: Modular bench with PLC for the study of Pneumatic, electrical, electropneumatic Technologies



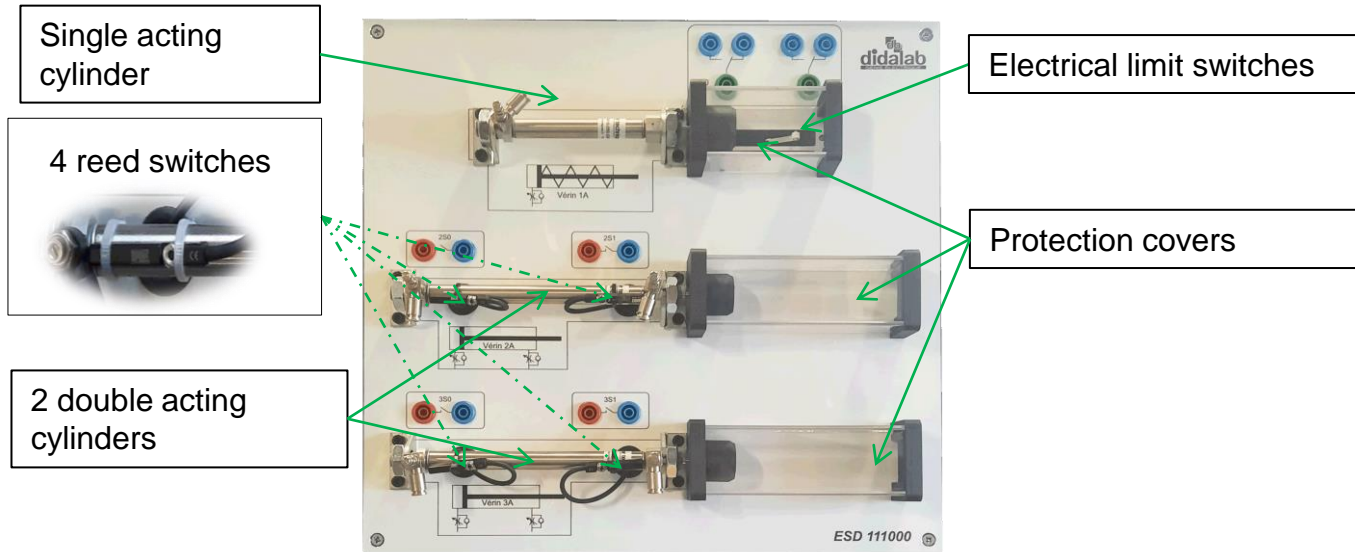
ESD 109 000 : Electric/pneumatic power supplies module



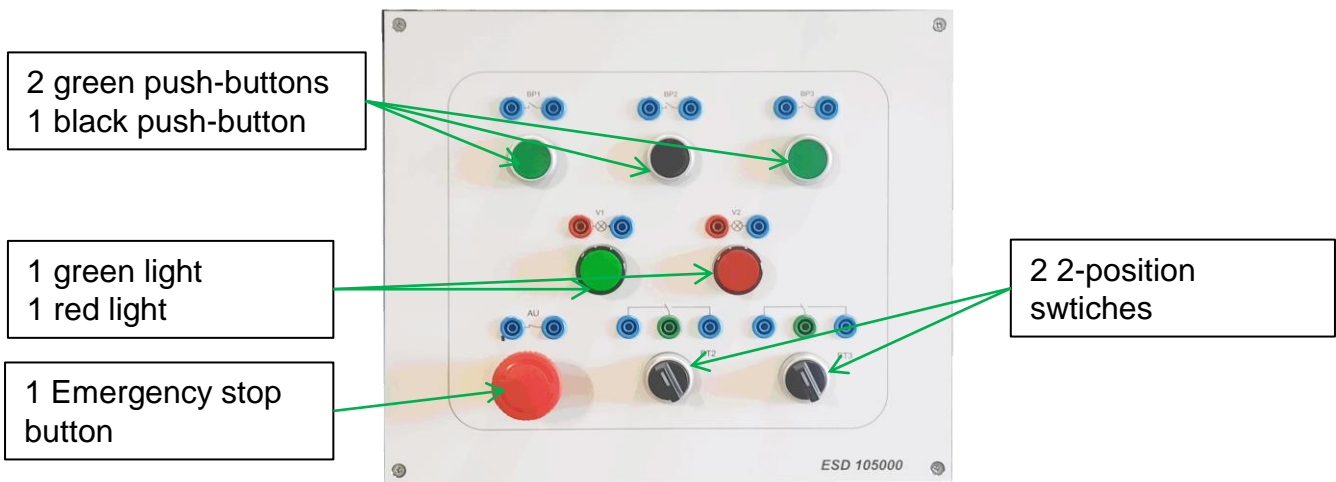
ESD 112 000 : Electropneumatic interface module



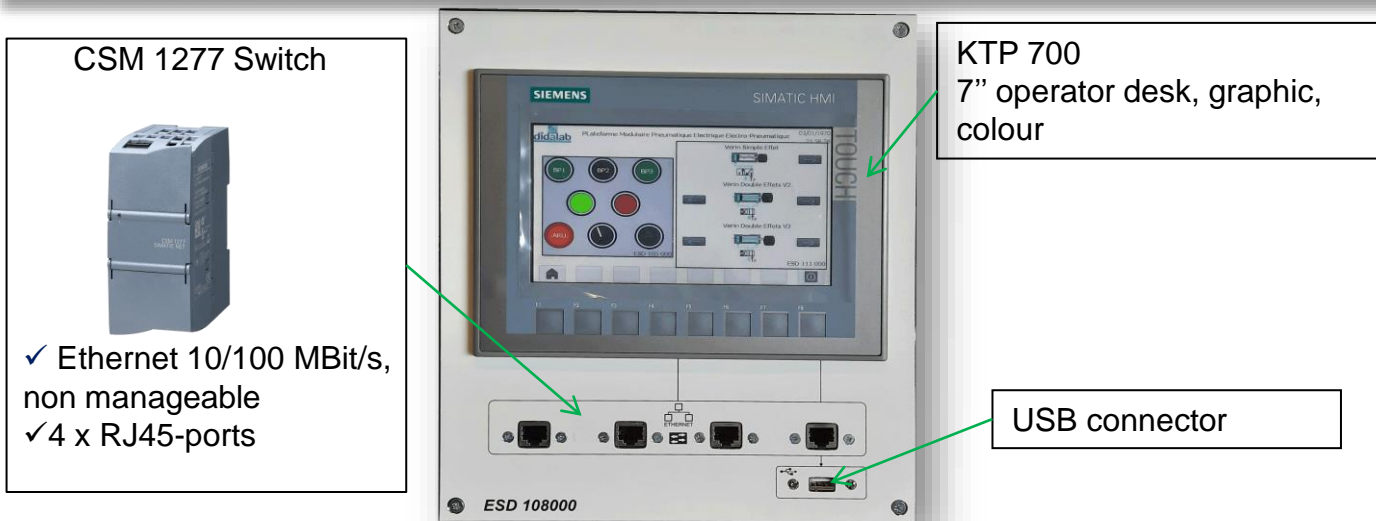
ESD 111 000 : Cylinders module (Electrical limit switches)



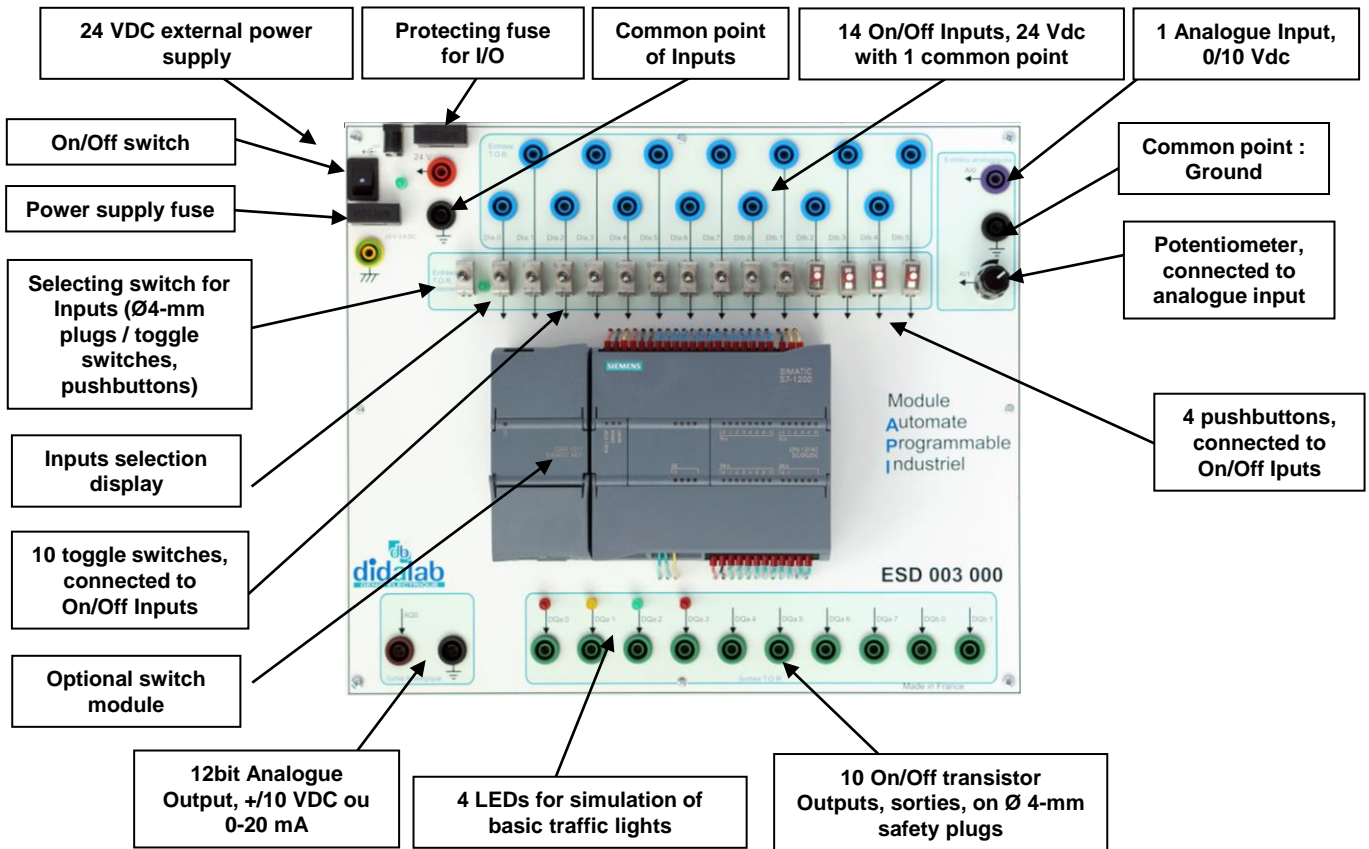
ESD 105 000 : Electric HMI module



ESD 108 000 : KTP 700 HMI module



ESD 107 000 : S7-1200 PLC module with Tia Portal software



Softwares



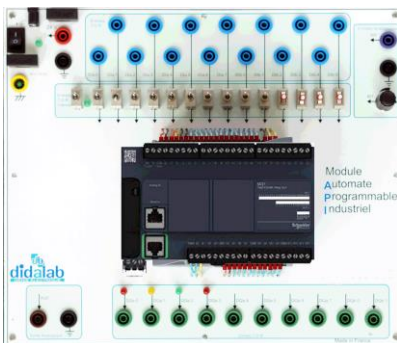
Tia Portal : Work environment for the integrated development of SIMATIC STEP 7 applications



Automgen : programming software for Grapcet, Gemma, Ladder, logigram, ...

Alternative

Version with Schneider PLC and HMI



ESD113000 : M221 PLC

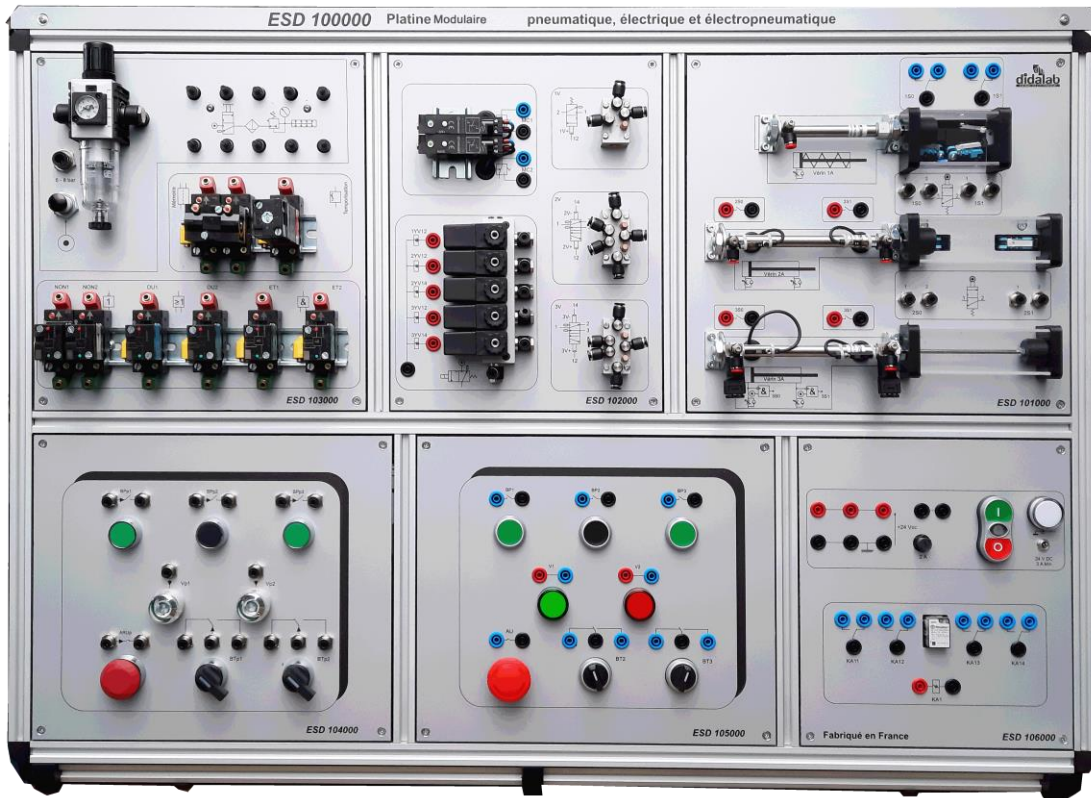


ESD114000 : Magelis HMI

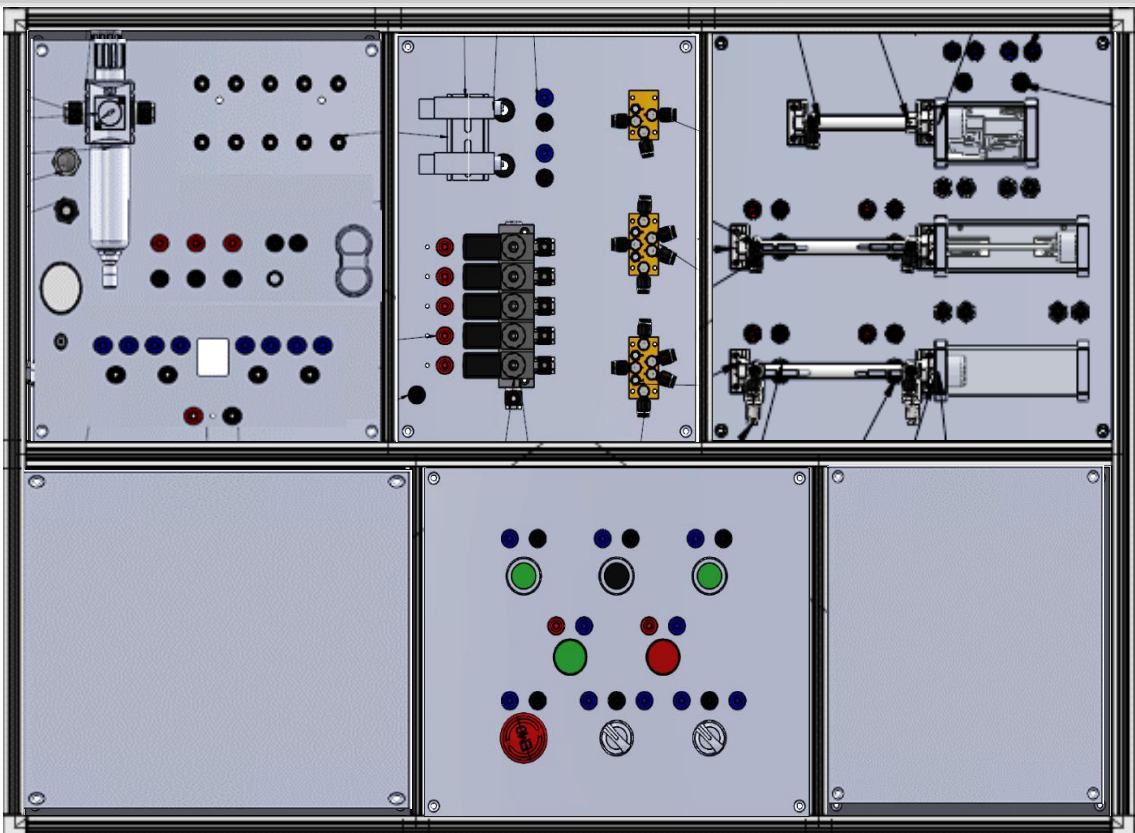
ESD 10x 000 : for another PLC model: please ask

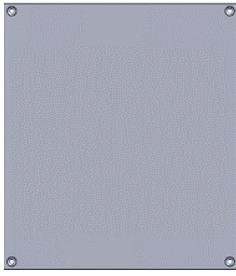
Other configurations

ESD 100 B: Modular bench for the study of Pneumatic, electrical, electropneumatic Technologies ([documentation here](#))



Other example of configuration



ESD 190 000 : Blank module**EGD 000 025 : Low noise compressor****Standard Configuration:****ESD 100 A: Modular bench with PLC for the study of Pneumatic, electrical, electropneumatic Technologies**

Référence	Désignation	Qtés
ESD100000	Structure made of aluminium profile, with 4 locations for electrical and PLC modules.	1
	supplied with two Ø4-mm, 25-m hoses (1 red + 1 blue), 1 pipe cutter, one 2-m Ø 8-mm hose	1
	1 flash drive with the technical and user guide, the pedagogical book with experiments..	1
ESD111000	Cylinders module (1 single acting cylinder, 2 double acting cylinders, reed sensors)	1
ESD112000	Interfaces module (2 pneumoelectric and 5 electropneumatic interfaces)	1
ESD109000	Electric/pneumatic power supplies module	1
ESD107000	PLC module	1
	S7-1200 PLC, supplied with TIA Portal software	
	- 14 On/Off Inputs, 24 VDC, 10 outputs with state visualization,	
	- 1 analogue Input, 0/10 V ; 1 analogue output, +/-10V, 12 bits,	
	- 1 simulator with 8 miniswitches	
	Put on a pedagogical module with Ø 4-mm security	
ESD003100	Autongen software extension	1
ESD108000	KTP 700 HMI module with 4 RJ45-ports and 1 USB connector	1
ESD105000	Electric HMI interface (1 Emergency stop button, 1 green light, 1 red light, 2 2-position switches, 2 green push-buttons, 1 black push-button)	1
PEM080030	Set of 10 patching cords, 1 m, black, Ø4-mm safety sockets, stackable	1
PEM080031	Set of 10 patching cords, 1 m, red, Ø4-mm safety sockets, stackable	1
PEM080032	Set of 10 patching cords, 1 m, blue, Ø4-mm safety sockets, stackable	1

For any other configuratio, please ask

ESD 100 B: Modular bench for the study of Pneumatic, electrical, electropneumatic Technologies ([documentation here](#))

Electronique

Electronique
de puissance

Electrotechnique

Informatique
Industrielle

Télécom

Automatisme

Réseau & VDI

Asservissements

Mesure



didalab

Z.A. de la Clef Saint-Pierre
5, rue du Groupe Manoukian
78990 ELANCOURT
FRANCE



(33) 1 30 66 08 88

Du lundi au vendredi
de 9h à 12h30
et de 14h à 18h



Fax: (33)1 30 66 72 20



www.didalab.fr

E-mail: didalab@didalab.fr

didalab
GÉNIE ÉLECTRIQUE