

CATALOGUE



## CAMOZZI TRAINING SIMULATORS



# CAMOZZI TRAINING SIMULATORS

Training simulators developed by Camozzi using the knowledge from over 50 years of pneumatic. We are able to offer these simulators to all branches and customers with the goal of increasing the knowledge locally. Where each office can perform easy exercises and train internal staff for a better understanding of pneumatic components.

These simulators are widely used in universities, high school, training campuses, etc ..

We also develop videos and exercises via our new eLearning platform where branches can perform in-house training with new products and new applications.

## TABLE OF CONTENTS

Training Simulator DID-BASE . . . . .	3
Training Simulator DID-BASE-MINI . . . . .	10
Training Kit Universal . . . . .	17

# Training Simulator DID-BASE

Pneumatic automation, electro-pneumatic automation, PLC programming

- Laboratories of universities, colleges and schools
- Training centers of industrial enterprises and corporate universities

The double-sided training simulator is designed to provide training in fundamentals of pneumatic and electric circuit engineering, relay logic, PLC programming, mechatronics.



- » Double-sided training simulator
- » Simultaneous work of 8 students
- » Industrial pneumatic and electro-pneumatic components
- » Electric and pneumatic sensors
- » Electric buttons and relays
- » Programmable logic controller – basic (cyclic drives) and advanced (servo drives, proportional, fieldbus) performance
- » Methodological support (a manual and a set of laboratory works)

You can find supply options on page 4.

## GENERAL CHARACTERISTICS

<b>Supply options</b>	in accordance with codificator on the page 4
<b>Electric connection</b>	safe power cable 220 V AC EURO
<b>Pneumatic connection</b>	tube 8/6 or quick-release fitting that are the part of the set DID-START-KIT (see page 8)
<b>Operating pressure</b>	nominal pressure: 6 bar (operating pressure: 2 ...10 bar)
<b>Mounting</b>	mobile base on wheels with locking function
<b>Overall Dimensions</b>	1520 x 780 x 1834 mm (length x depth x height, floor-mounted version)

**DID-BASE TRAINING SIMULATOR DELIVERY OPTIONS**

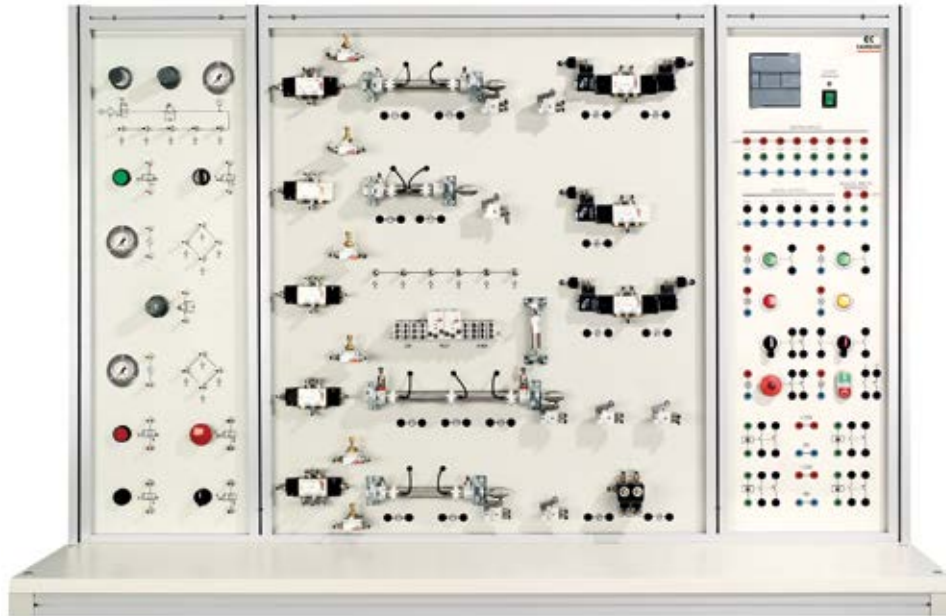
<b>DID-BASE</b>	<b>-</b>	<b>2T</b>	<b>-</b>	<b>2R12</b>	<b>-</b>	<b>2P2E</b>
-----------------	----------	-----------	----------	-------------	----------	-------------

<b>DID-BASE</b>	TYPE OF SIMULATOR <sup>1</sup> DID-BASE = training simulator on mobile platform with wheels
<b>2T</b>	SIDES OF THE SIMULATOR AND FORMAT OF THE CENTRAL PANEL <sup>2</sup> F = single-sided with fixed elements 2F = double sided, each side with fixed elements <sup>3</sup> T = single-sided with aluminium profile panel 2T = double sided, each side with aluminium profile panel
<b>2R12</b>	FORM OF RIGHT PANEL <sup>4</sup> R12 = panel with relay-contact circuits and PLC S7-1200 CPU1212 Pneumatic, electropneumatic and PLC laboratory works (books A, B, C, D).  R15 = panel with relay-contact circuits and PLC S7-1200 CPU1215 Pneumatic, electropneumatic, PLC, proportional, profinet CX laboratory works (A, B, C, D, PR, S).
<b>2P2E</b>	SETS OF ELEMENTS <sup>5</sup> 0 = no sets (only for F, 2F versions with fixed elements)  P = pneumatics. Allows to solve lab. works from books A и B. Book A - controlling of single drive. Book B - controlling of group of drives.  E = electropneumatics and sensors. Allows to solve lab. works from books C and D. Book C - electropneumatic drives with relay-contact circuits. Book D - electropneumatic drives with PLC.  PR = proportional. Allows to solve lab. works from book PR. S = set of islands. Allows to solve lab. works from book S.

- 1 – each DID-BASE unit contains one set DID-START-KIT
- 2 – version F, 2F contains one storage box on wheels without lodgements  
version T contains one storage box with lodgements for sets P and E, version 2T – two storage boxes
- 3 – number 2 before letters means amount of the sides / electric panels / sets of elements in order
- 4 – each version of simulator with right panel contains sets DID-WR-F (versions F/2F),  
DID-WR-T (versions T/2T), single-sided unit – one set, double-sided unit - two sets
- 5 – sets and books PR, S in the process of development (availability on request)

## DID-BASE TRAINING SIMULATOR BASIC OPTION (F/T MODEL)

### DID-BASE-F simulator with fixed set of elements on the central panel



- The central panel is a set of pneumatic, electropneumatic and sensor elements designed for individual operation from 1 till 4 pneumatic or electro-pneumatic drives and for their group operation in accordance with preset sequence. The left panel contains a source of air supply, start and stop buttons, pressure control devices and emergency button. The right panel contains electric buttons, relay contact circuit's elements and PLC. The full set of elements is listed below.
- DID-BASE-F training simulator with fixed elements complies with the Plug-and-Play ideology – you just need to configure pneumatic tubes and electric wires and the simulator is ready to start. It provides significant time saving when solving tasks, safety of elements and reliable protection from vandalism.
- The set of elements is adapted for the laboratory books A, B, C, D which can be received in electronic format by request (see codificator on page 4).

### COMPONENTS OF THE PANELS

#### Left panel (one panel):

- Input isolation valve and regulator with gauge + group of latching fittings 4/2 mm.
- The set of 3/2 way manually operated buttons 3 pcs. (green, black, red).
- 3/2 way manually operated selector 1 pc.
- 3/2 way manually operated emergency button 1 pc.
- Separate pressure regulator 1 pc.
- Pressure gauges 2 pcs.
- Manifold with fittings with latching function 2 pcs.

#### Central panel (one panel F version):

- 1 single-acting cylinder with pneumatic and electric proximity switches.
- 3 double-acting cylinders with pneumatic 3/2 and electric proximity switches.
- 5/2 valves bistable, 3 pcs. with pneumatic control.
- 5/2 valve monostable, 1 pc. with pneumatic control.
- 5/3 valve with close center, 1 pc. with pneumatic control.
- 5/2 valves bistable, 2 pcs. with electric control, connectors with LED.
- 5/2 valve monostable, 1 pc. with electric control, connectors with LED.
- 3/2 valve monostable, 2 pcs. with electric control, connectors with LED.
- 6 unidirectional throttles. Logic valves AND x 4 pcs, OR x 4 pcs and NOT x 2 pcs.
- Manifold with fittings with latching function 1 pc. (contains 6 fittings).

### Right panel

PLC Siemens S7-1200 with 2xAI, 8xDI, 6xDO (version R12) / S7-1200 with 2xAI (universal 0...10V, 0...20 mA), 2xAO (universal 0...10V, 0...20 mA), 14xDI, 10xDO (version R15)

LED indicators 2 pcs., yellow and red.

Non-locking button with indicator, NO contacts 2 pcs.

Selector switch, white, NO+NC contacts, 1 pc.

Selector switch, red, 2xNO contacts, 1 pc.

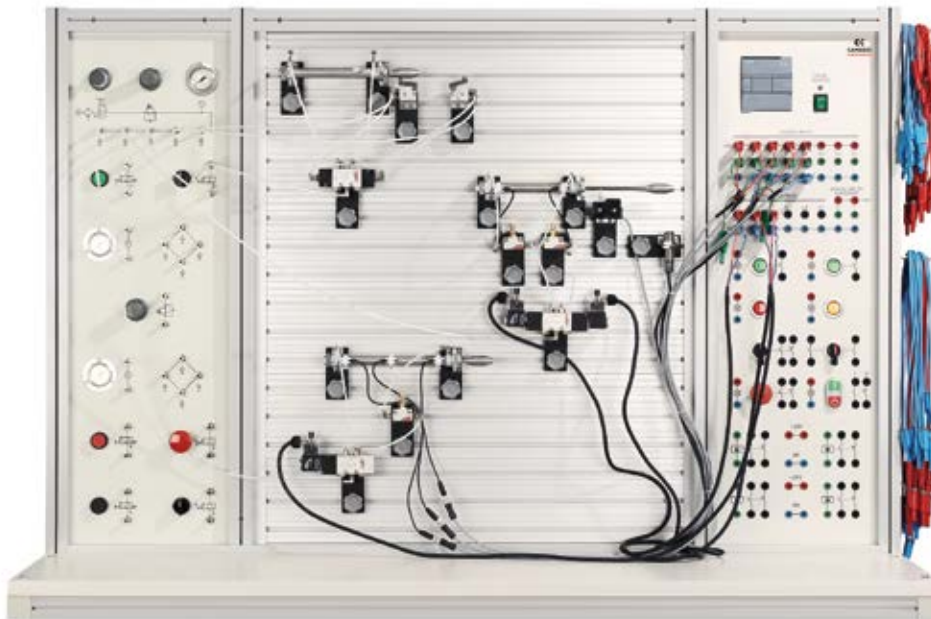
Emergency button with indicator, NO+NC contacts, 1 pc.

Double acting button with indicator, NO+NC contacts, 1 pc.

Electromechanical relay with group of NO+NC contacts, 4 pcs.

Block of 24 VDC contacts, 2 pcs.

### DID-BASE-T simulator with flexible mounting of elements on T-slot panel



- Central panel is a profiled plate with T-slots Pneumatic element on the plastic fastener DID-FIX-R can be installed in any place of the T-slot panel.
- Such performance of DID-BASE simulator provides the trainee with absolute freedom of creation both when making circuit solutions «on paper» and when installing elements on the T-slot panel.
- Sets of elements (see page 7) are adapted to fit different laboratory books (see codificator on page 4). Left and right panels are the same as for DID-BASE-F version

## Simulator DID-BASE-T can be supplied with different sets of elements:

### Set P

Single-acting minicylinder	DID-R-CYL50	1 pc.
Double-acting minicylinder with flow control valves	DID-R-CYL100T	1 pc.
Valve 5/2, monostable, pneumatic control	DID-R-V52PM	1 pc.
Valve 5/2, bistable, pneumatic control	DID-R-V52PB	3 pcs.
Valve 5/2, bistable, pneumatic control, fittings installed in all ports	DID-R-V52PBF	1 pc.
Valve 5/2-way CC, pneumatic control	DID-R-V53P	1 pc.
Valve 3/2-way, monostable, mechanical control of roller type	DID-R-PS	6 pcs.
Unidirectional flow control valve	DID-R-THRVR	4 pcs.
Logical element «NO»	DID-R-NOT	2 pcs.
Assembly with two logical elements «OR»	DID-R-OR	2 pcs.
Assembly with two logical elements «AND»	DID-R-AND	2 pcs.
Receiver	DID-R-VOL	1 pc.

DID-R-CYL50



DID-R-CYL100T



DID-R-V52PM



DID-R-V52PB



DID-R-V52PBF



DID-R-V53P



DID-R-PS



DID-R-THRVR



DID-R-NOT



DID-R-OR



DID-R-AND



DID-R-VOL



### Set E

Double-acting minicylinder with two proximity switches	DID-R-CYL100G	1 pc.
Double-acting minicylinder with three proximity switches	DID-R-CYL150G	1 pc.
Valve 3/2, monostable, electric control	DID-R-V32E	1 pc.
Valve 5/2, monostable, electro-pneumatic control	DID-R-V52EM	1 pc.
Valve 5/2, bistable, electro-pneumatic control	DID-R-V52EB	2 pcs.
Electromechanical limit switch	DID-R-SEM	4 pcs.
Optical proximity sensor	DID-R-SO	1 pc.
Capacity-type proximity sensor	DID-R-SC	1 pc.
Inductive proximity sensor	DID-R-SI	1 pc.
Pressure sensor with digital, analog output and display	DID-R-SP	1 pc.

DID-R-CYL100G



DID-R-CYL150G



DID-R-V32E



DID-R-V52EM



DID-R-V52EB



DID-R-SEM



DID-R-SO



DID-R-SC



DID-R-SI



DID-R-SP



## EXAMPLE OF THE STORAGE BOX ON WHEELS



### THE SETS OF ELECTRIC SAFE CABLES DID-WR



Training simulator DID-BASE-F contains set DID-WR-F:

Electric safe cable, red, 400 mm	DID-WR-RA0400	4 pcs.
Electric safe cable, red, 1200 mm	DID-WR-RA1200	5 pcs.
Electric safe cable, blue, 400 mm	DID-WR-BA0400	2 pcs.
Electric safe cable, blue, 800 mm	DID-WR-BA0800	4 pcs.
Electric safe cable, blue, 1200 mm	DID-WR-BA1200	2 pcs.
Electric safe cable, green, 800 mm	DID-WR-GA0800	4 pcs.
Electric safe cable, green, 1200 mm	DID-WR-GA1200	10 pcs.

Training simulator DID-BASE-T with electric panel contains set DID-WR-T:

Electric safe cable, blue, 400 mm	DID-WR-BA0400	5 pcs.
Electric safe cable, green, 400 mm	DID-WR-GA0400	12 pcs.
Electric safe cable, green, 800 mm	DID-WR-GA0800	3 pcs.
Electric safe cable, red, 400 mm	DID-WR-RA0400	4 pcs.
Electric safe cable, red, 800 mm	DID-WR-RA0800	2 pcs.

For double-sided training simulators double set will be supplied.

### THE SET DID-START-KIT



Any kind of simulator contains one set DID-START-KIT:

Quick exhaust valve	VSO 426-04	4 pcs.
Fitting	6950	4 pcs.
Metal male plug 4 mm	8900 4-S02	20 pcs.
Tube 4/2	TRN 4/2	50 m
Fitting	6540 4	10 pcs.
Fitting	6580 4	10 pcs.
Scissors for tube	PNZ-12	1 pc.
Tube extractor	SP 4	2 pcs.
Spare part fittings	S6520 4-1/8 6522 4-M5	10 pcs. 10 pcs.
Tube 8/6	TPU 8/6	5 m
Fitting	1511 8/6-1/4	1 pc.
Fitting	5054 8/6	1 pc.

### SOFTWARE SIMATIC STEP 7 BASIC



STEP 7 offers an engineering solution for basic automation tasks as it can be used for both, programming the SIMATIC S7-1200 Basic Controllers and configuring SIMATIC HMI Basic Panels.

NOT included in training simulator, ordering separately.



## TRAINING AND METHODOLOGICAL SUPPORT

### The book "Pneumatic Automation" (ENG)

The book is written on the basis of great knowledge of Camozzi Spa in industrial pneumatic automation. Inside this book You will find information about physical principles of air-driven systems, learn a lot about pneumatic components and the structure of pneumatic drive. You will learn how to choose cylinders, valves, throttles, tubes and many other components of pneumatic drive. A lot of attention is dedicated to the organization of the control systems of drives based on the laws of Boolean algebra and realized on pneumatic logical elements or on electronic devices.

The book is designed for all enthusiasts that take care of the equipment realizing the controlled movement of mechanical objects. This material will be especially useful to the experts of the industry occupied with development and operation of pneumatic drives and systems and also to students of universities, colleges, technical schools etc.

NOT included in training simulator, ordering separately.



### The set of laboratory works

Includes 40 tasks on pneumatic automation (books A and B), 15 tasks on electro-pneumatic automation (book C) and 20 tasks on programming of pneumatic drives by means of PLC (book D).

#### Laboratory works are subdivided into the following groups on the basis of the subject:

1. Studying the main methods of pneumatic drives control based on speed and position.
2. Implementation of logical functions in the course of pneumatic drives control.
3. Examination of time-controlled pneumatic drives.
4. Examination of pressure-controlled pneumatic drives.
5. Examination of pneumatic drives controlled by pneumatic impulse generators.
6. Synchronizing operation of several pneumatic drives by means of sensors with pneumatic and electric output signals.
7. Relay-contact control systems of electro-pneumatic drives.
8. Implementing cyclic movement of pneumatic drives by means of PLC.
9. Using timers and counters in PLC-based pneumatic drives control programs.
10. Synchronizing operation of several pneumatic drives by means of PLC
11. Interrupt operation in PLC-based pneumatic drives control programs.
12. Work with sub-programs in the course of PLC-based control of pneumatic drives.

Points 1...5 = book A.  
 Point 6 = book B.  
 Point 7 = book C.  
 Points 8...12 = book D.

These books will be provided in electronic format together with training simulator.

# Training Simulator DID-BASE-MINI

Training simulator is designed to learn fundamentals of pneumatics, mechatronics, relay-contact circuits and PLC programming.

- Universities, colleges, schools, quantoriums (technology parks), CYIC, adult educational centers.

Pneumatic and electro-pneumatic drives, mechatronics, sensors, PLC programming. Training simulator DID-BASE-MINI consists from aluminium table panel with T-slot grooves DID-TSLOTSQ, sets of elements DID-SET and electric modules DID-A4 in format A4. All parts can be easily mounted on the table to solve different tasks.



**Profiled panel with compact size allows you to place the elements of pneumatic automation conveniently.**

**DID-FIX-R universal fasteners provide fast and reliable mounting of elements on the panel.**

**A4-format compact desktop electric modules provide maximum space saving, flexibility of the learning process and after the lessons can be removed into the cabinet (storage place).**

**Electric cables with fully insulated contacts provide fast and safe electrical connection.**

» Compact table panel with T-slot grooves DID-TSLOTSQ

» Sets of elements DID-SET are designed for mounting on the panel DID-TSLOTSQ and solving of laboratory works of different levels and complexity

» A4 modules are designed to learn how to control of electropneumatic drives with relay-contact circuits and PLCs of different platforms (Siemens S7-1200, Siemens LOGO!, Arduino etc.)

## GENERAL CHARACTERISTICS

<b>Delivery options</b>	The profiled panel DID-TSLOTSQ supplies in different sizes in accordance with codificator on page 11 Sets of elements DID-SET are shown on pages 12-14. Electric modules DID-A4 are supplied in accordance with the codes on page 15
<b>Materials</b>	Panel – anodized aluminum profile, fasteners – plastic A4-format modules – plastic and aluminum
<b>Electric connection</b>	Safe power cable 220 V AC EURO for modules DID-A4-PS2415 and DID-A4-RCC Electric power for other modules can be taken by means of electric safe cables from modules DID-A4-PS2415 or DID-A4-RCC
<b>Pneumatic connection</b>	Fitting 5054 8/6 (included in set DID-START-KITMINI) or hand pump with output tube 4/2 mm (set DID-SET-PNEUMO-SCH)
<b>Operating pressure</b>	Nominal pressure: 6 bar (operating pressure: 2 ...10 bar)
<b>Mounting</b>	Desktop version on rubber legs
<b>Required air flow</b>	From 10 NL / min

## CODE FOR ORDER OF PROFILED PANEL DID-TSLOTSQ

<b>DID</b>	<b>-</b>	<b>TSLOTSQ</b>	<b>-</b>	<b>0600</b>	<b>-</b>	<b>0900</b>	<b>-</b>	<b>L</b>
------------	----------	----------------	----------	-------------	----------	-------------	----------	----------

<b>DID-TSLOTSQ</b>	TABLE T-SLOT PANEL
<b>0600</b>	PANEL HEIGHT: 0300 = 300 mm 0450 = 450 mm 0600 = 600 mm 0750 = 750 mm 0900 = 900 mm
<b>0900</b>	PANEL LENGTH: 0100 ... 2400 mm
<b>L</b>	OPTIONS: _ - without rubber legs L - with rubber legs

### EXAMPLE OF THE DID-TSLOTSQ PANEL

The most typical profiled panel that is ordering in serial way is:  
 DID-TSLOTSQ-0450-0600-L  
 Panel with height 450 mm, length 600 mm on rubber legs for table mounting.  
 All other sizes on request.



**CODE FOR ORDERING OF SETS OF ELEMENTS DID-SET**

<b>DID</b>	<b>-</b>	<b>SET</b>	<b>-</b>	<b>PNEUMO</b>	<b>-</b>	<b>S</b>
<b>DID-SET</b>	THE SET					
<b>PNEUMO</b>	MODIFICATION: PNEUMO = PNEUMATIC ELECTRO = ELECTRIC SENSORS = SENSORS					
<b>S</b>	VERSION: S, M, L = VERSION SCH = FOR SCHOOLS					

**Sets of elements DID-SET**

Code	Description of the set
<b>DID-SET-PNEUMO-SCH</b>	Simulator for studying in schools the laws of air flow, methods and means of regulation of air flows, pressures, structures and functions of valves, control methods of pneumatic drives, functions of Boolean algebra. Includes set DID-START-KITMINI and hand pump DID-PUMP.

**The set DID-SET-PNEUMO-SCH**

Single-acting minicylinder	DID-R-CYL50	1 pc.
Double-acting minicylinder with flow control valves	DID-R-CYL100T	1 pc.
Valve 3/2 monostable, manual control, pneumatic button	DID-R-V32MMB	2 pcs.
Valve 5/2, bistable, manual control, lever	DID-R-V52MBL	1 pc.
Ball valve	DID-R-TAP	4 pc.
Valve 5/2, bistable, pneumatic control	DID-R-V52PB	1 pc.
Valve 3/2, monostable, mechanical control of roller type	DID-R-PS	2 pcs.
Hand Pump	DID-PUMP	1 pc.
Pressure regulator	DID-R-REG	1 pc.
Unidirectional flow control valve	DID-R-THRVRN	2 pcs.
Bidirectional flow control valve	DID-R-THR	1 pc.
Logical element «NO»	DID-R-NOT	1 pc.
Assembly with two logical elements «OR»	DID-R-OR	1 pc.
Assembly with two logical elements «AND»	DID-R-AND	1 pc.
Receiver 0.5 L	DID-R-VOL05L	1 pc.
Pressure gauge with manifold	DID-R-PGAUGE-R06	2 pcs.
Check Valve	VNR-210-1/8	1 pc.
Fitting	S6510 4-1/8	2 pcs.
The Set for work with desktop simulators	DID-START-KITMINI	1 pc.

DID-R-CYL50



DID-R-CYL100T



DID-R-V32MMB



DID-R-V52MBL



DID-R-TAP



DID-R-V52PB



DID-R-PS



DID-PUMP



DID-R-REG



DID-R-THRVRN



DID-R-THR



DID-R-NOT



DID-R-OR



DID-R-AND



DID-R-VOL05L



DID-R-PGAUGE-R06



Code	Description of the set
<b>DID-SET-PNEUMO-S</b>	The set for studying of basic schemes for controlling of one pneumatic drive. The set is provided with 10 laboratory works.
<b>DID-SET-PNEUMO-M</b>	This is the set S + pneumatic logics and elements for realization of time delay by means of pneumatics. The set is provided with 25 laboratory works.
<b>DID-SET-PNEUMO-L</b>	This is the set M + elements for realization of schemes for controlling of two pneumatic drives. The set is provided with 30 laboratory works.

### Sets DID-SET-PNEUMO

Type of the set		S	M	L
Single-acting minicylinder	DID-R-CYL50	1 pc.	1 pc.	1 pc.
Double-acting minicylinder with flow control valves	DID-R-CYL100T	1 pc.	1 pc.	2 pc.
Valve 3/2 monostable, manual control, pneumatic button	DID-R-V32MMB	1 pc.	2 pcs.	2 pcs.
Valve 5/2 monostable, manual control, pneumatic button	DID-R-V52MMB	1 pc.	1 pc.	1 pc.
Valve 5/2, bistable, manual control, lever	DID-R-V52MBL	1 pc.	1 pc.	1 pc.
Valve 5/2, monostable, pneumatic control	DID-R-V52PM	1 pc.	2 pcs.	2 pcs.
Valve 5/2, bistable, pneumatic control	DID-R-V52PB	1 pc.	1 pc.	2 pcs.
Valve 5/2, bistable, pneumatic control, fittings installed in all ports	DID-R-V52PBF	-	1 pc.	1 pc.
Valve 5/3 with closed center, pneumatic control	DID-R-V53P	-	-	1 pc.
Valve 3/2, monostable, mechanical control of roller type	DID-R-PS	2 pcs.	2 pcs.	4 pcs.
Unidirectional flow control valve	DID-R-THRVNR	1 pc.	2 pc.	2 pc.
Logical element «NO»	DID-R-NOT	-	1 pc.	2 pc.
Assembly with two logical elements «OR»	DID-R-OR	-	1 pc.	1 pc.
Assembly with two logical elements «AND»	DID-R-AND	-	1 pc.	1 pc.
Receiver	DID-R-VOL	-	1 pc.	1 pc.
Filter-regulator with shut-off slide valve	DID-R-FREG-R12-COL-V	1 pc.	1 pc.	1 pc.
The set for work with desktop simulators	DID-START-KITMINI	1 pc.	1 pc.	1 pc.



### The set DID-START-KITMINI

Quick exhaust valve	V50 426-04	2 pcs.
Fitting	6950 4	2 pcs.
Fitting	6540 4	5 pcs.
Fitting	6580 4	5 pcs.
Metal male plug	8900 4-S02	10 pcs.
Scissors for tube	PNZ-12	1 pc.
Tube extractor	SP 4	1 pc.
Fitting	S6520 4-1/8	5 pcs.
Fitting	6522 4-M5	5 pcs.
Tube 4/2	TRN 4/2	10 m
Tube 8/6	TPU 8/6	5 m
Fitting	1511 8/6-1/4	1 pc.
Fitting	5054 8/6	1 pc.

Code	Description of the set
<b>DID-SET-ELECTRO</b>	The set for studying of electropneumatic drives. The set is provided with 10 laboratory works for studying of relay-contact circuits (electric module DID-A4-RCC required) and 15 laboratory works for studying of PLC programming (electric modules DID-A4-RCC and DID-A4-1212 required).

### The set DID-SET-ELECTRO

Single-acting minicylinder	DID-R-CYL50	1 pc.
Double-acting minicylinder with two proximity switches and two flow control valves	DID-R-CYL100GT	1 pc.
Valve 3/2, monostable, electric control	DID-R-V32E	1 pc.
Valve 5/2, monostable, electro-pneumatic control	DID-R-V52EM	1 pc.
Valve 5/2, bistable, electro-pneumatic control	DID-R-V52EB	1 pc.
Filter-regulator with shut-off slide valve	DID-R-FREG-R12-COL-V	1 pc.
The set for work with desktop simulators	DID-START-KITMINI	1 pc.

DID-R-CYL50



DID-R-CYL100GT



DID-R-V32E



DID-R-V52EM



DID-R-V52EB



DID-R-FREG-R12-COL-V



Code	Description of the set
<b>DID-SET-SENSORS</b>	Additional set with different sensors to the set DID-SET-ELECTRO

### The set DID-SET-SENSORS

Electromechanical limit switch	DID-R-SEM	1 pc.
Optical proximity sensor	DID-R-SO	1 pc.
Capacity-type proximity sensor	DID-R-SC	1 pc.
Inductive proximity sensor	DID-R-SI	1 pc.
Pressure sensor with digital, analog output and display	DID-R-SP	1 pc.

DID-R-SEM



DID-R-SO



DID-R-SC



DID-R-SI



DID-R-SP



## CODE FOR ORDER ELECTRICAL MODULES DID-A4

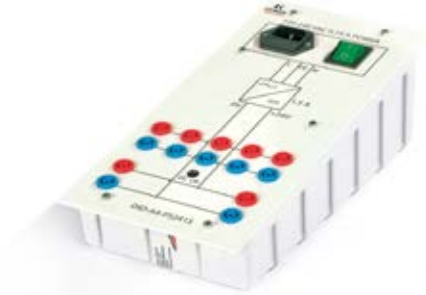
<b>DID</b>	<b>-</b>	<b>A4</b>	<b>-</b>	<b>RCC</b>	<b>-</b>	<b>WR</b>
------------	----------	-----------	----------	------------	----------	-----------

<b>DID-A4</b>	A4-format electrical module
<b>RCC</b>	<b>MODIFICATION:</b> RCC = power supply, buttons, lights, relays PS2415 = Power Supply 1212 = module with PLC Siemens S7-1200 CPU1212 LOGO = module with PLC Siemens LOGO! 24RC ARDUINO = module with ARDUINO PLC
<b>WR</b>	<b>THE SET OF ELECTRIC SAFE CABLES:</b> - = without electric safe cables WR = with electric safe cables

## ELECTRIC MODULES DID-A4 IN A4 FORMAT

### A4-format Power module

- Power supply 24 V DC, 1.5A



Code

DID-A4-PS2415

### A4-format module DID-A4-RCC with relay-contact circuits

- Power supply 24V DC
- Emergency stop button (1 pc.)
- Electric button without fixation, with a lamp (2 pcs.)
- Control lamp yellow (1 pc.)
- Electromechanical relay with LED indication (2 pcs.)

Module DID-A4-RCC-WR include wires:

Electric safe cable, blue, 400 mm	DID-WR-BA0400	5 pcs.
Electric safe cable, red, 400 mm	DID-WR-RA0400	9 pcs.
Electric safe cable, green, 800 mm	DID-WR-GA0800	12 pcs.



Code

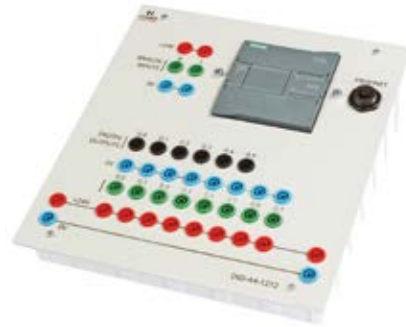
DID-A4-RCC

DID-A4-RCC-WR

**A4-format module DID-A4-1212 with programmable logic controller Siemens S7-1200 CPU1212**

8 digital inputs  
6 digital outputs  
2 analog inputs

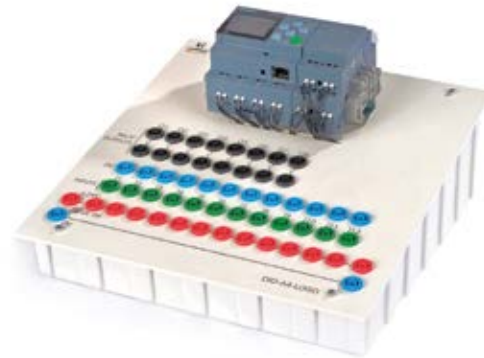
Software Simatic STEP 7 Basic can be ordered separately



Code
<b>DID-A4-1212</b>

**A4-format module DID-A4-LOGO with Siemens LOGO! 24RC**

The module is designed to study the basics of automation and PLC programming based on an entry level controller.  
12 inputs.  
8 digital outputs.

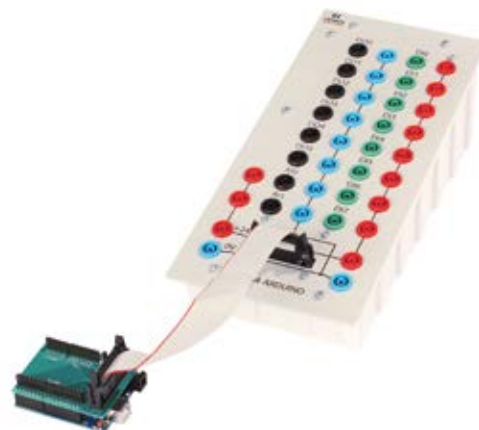


Code
<b>DID-A4-LOGO</b>

**A4-format module DID-A4-ARDUINO for connection of ARDUINO controllers with adapter and IDC20 cable**

The module converts the input and output signals of ARDUINO 5V DC (3.3 V DC) into 24V DC signals and transmits them to the front panel with electric safe sockets for controlling electropneumatic drives. Applicable for lessons of additional education in schools, CYIC and youth educational technical centers.

The microcontroller ARDUINO UNO is not included in supply.



Code
<b>DID-A4-ARDUINO</b>



# Training Kit Universal

Training Kit Universal, is our basic kit for training the fundamentals of pneumatics. The student is able to build different types of pneumatic circuits based upon industrial applications. The components are stored in a robust case and all the mounting are made on the foldable base plate.



Training Kit Universal includes the most common industrial pneumatic components such as:

- Manual Valves 3/2, 5/2 and 5/3 function
- Pneumatic valve 5/2 function
- Mechanical valve 3/2 function
- Solenoid valve 3/2 and 5/2 function
- Flow control valves
- Single acting and double acting cylinders with sensors
- FRL units, pressure regulator
- Quick exhaust valve

For more advanced training in pneumatics we recommend Training Kit A and B which includes a larger variety of components and experiments.

## GENERAL CHARACTERISTICS

Size base plate	WxHxD 600x640x30
Weight base plate	8 kg
Size case	WxHxD 600x500x170
Weight case	12 kg
Voltage supply	230V AC
Working pressure	4-6 bar 4mm pneumatic fitting

Code

TKA-Universal

## Training Kit A

Training Kit A covers the basics and advanced pneumatics and is based on our experience of industry.

The system contains a wide range of components such as different types of:

- Manually, mechanically and pneumatically controlled valves
- Single action, double action and rodless cylinders
- Air treatment systems such as filters and regulators



Code

**TKA-Kit A**

## Training Kit B

Training Kit B together with Training Kit A is experiment equipment designed for training in electrical pneumatics. The kit is customized for upper secondary school, universities qualified vocational education alternatively industrial training.

The experiment equipment is for example being used for:

- Cylinder sensors
- Electropneumatically operated valves
- Compact valve islands with multipole
- PLC-control



Code

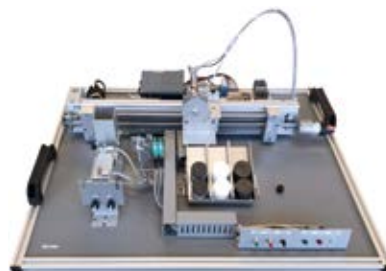
**TKA-Kit B**

## Training objects

Training Object Line is a small scale table top production line for training in industrial automation. The production line consists of up to three Training Objects, Sorting, Assembly and ASRS.

Each object can be used stand alone or connected in different combinations as a complete line.

Each of the objects has a pre mounted PLC system, Siemens S7-1200 with accessories, are easy to move by handles and can be placed on a regular table.



For more info regarding the training objects, or other questions, please contact Camozzi Sweden



## Contacts

### **Camozzi Automation AB**

Bronsyxegatan 7  
213 75 Malmö  
Sweden  
Tel. +46 40 6005800  
info@camozzi.se  
www.camozzi.se

### **Camozzi Pneumatic LLC**

Chasnikovo,  
Solnechnogorskiy District  
Moscow 141592  
Russian Federation  
Tel. +7 495 7866585  
Fax +7 495 7866585  
info@camozzi.ru  
www.camozzi.ru

