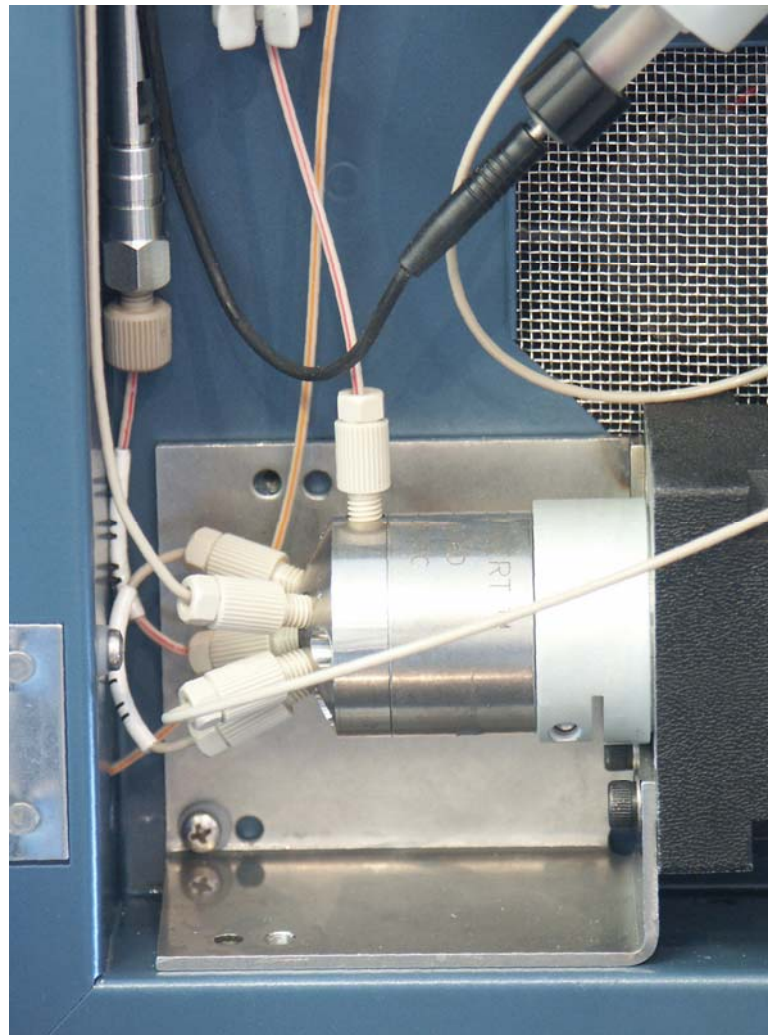


## Installation guide CS valve option, 6-port





## Symbols

The following pictogram is used in this installation guide:



Caution

## General precautions



Execute periodic leak checks on LC tubing and connections. Do not allow flammable and/or toxic solvents to accumulate. Do not close or block drains. Follow a regulated, approved waste disposal program. Never dispose of such products through the municipal sewage system.



**Use proper eye and skin protection when working with solvents.**



**Use of this product outside the scope of this guide may present a hazard.**

## Spare parts and service availability

Manufacturer provides operational spare parts of instruments and current accessories for a period of five years after shipment of the final production run of the instrument. Spare parts will be available after this five years period on an 'as available' basis.

Manufacturer provides a variety of services to support her customers after warranty expiration. Repair service can be provided on a time and material basis. Contact your local supplier for servicing. Technical support and training can be provided by qualified chemists on both contractual or as-needed basis.

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## CHAPTER 1

## Installation guide

### Introduction

The column-switching (CS) valve option (p/n 250.0024) is a tailor-made kit to install a 6-port electrical Valco valve inside the oven compartment of the DECADE II detector in an ALEXYS 100 LC-EC system.

### Unpacking

Inspect the *transport box* for possible damage as it arrives. Immediately inform the transport company in case of damage, otherwise she may not accept any responsibility. Keep the transport box as it is designed for optimum protection during transport and it may be needed again. Carefully unpack the kit and inspect it for completeness and possible damage. The contents of the kit is shown in figure 1.



**Figure 1.** Contents of CS valve option kit, p/n 250.0024.

Contact your supplier in case of damage or if not all marked items on the checklist are included. Prior to shipment, the parts of your CS valve option kit have been inspected and tested to ensure the best possible performance.

**For optimal performance the metal parts of the CS valve should be passivated with a 15% nitric acid solution for 20 minutes.**

## Tools

The following tool are necessary for the installation of the CS valve option:

- 5/16" - 1/4" wrench
- Small flat head screw driver
- PEEK tubing cutter
- Phillips screw driver
- Allen key 9/64"

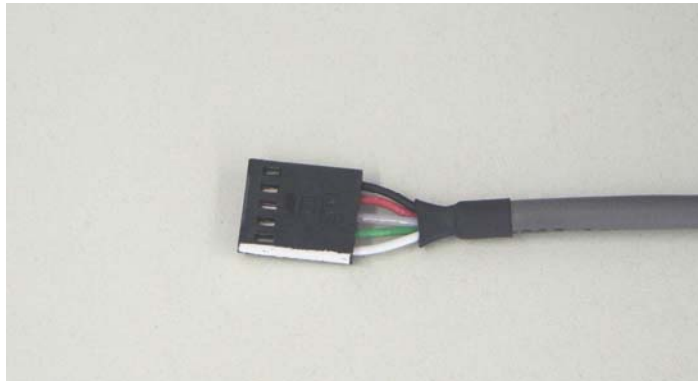


**Figure 2.** Photograph of listed tools. From left-to-right (Allen key not shown).



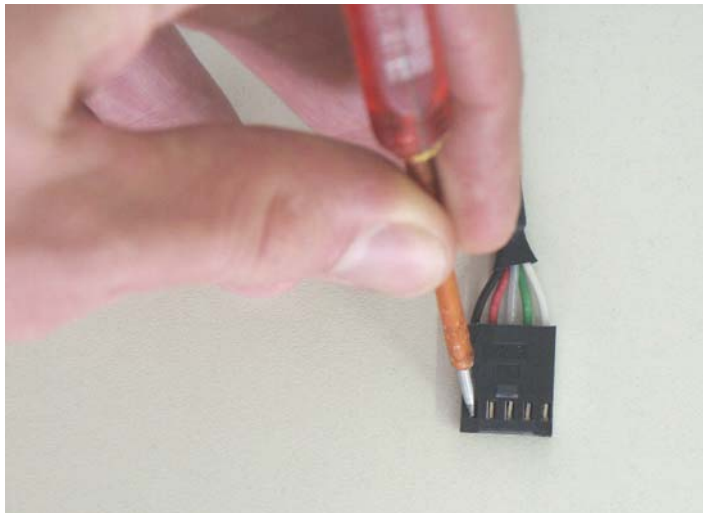
## Installation of the valve-to-control module cable

- Take the valve-to-control module cable from the box. This cable can be identified by the black molex connector with white marker stripe on the side.

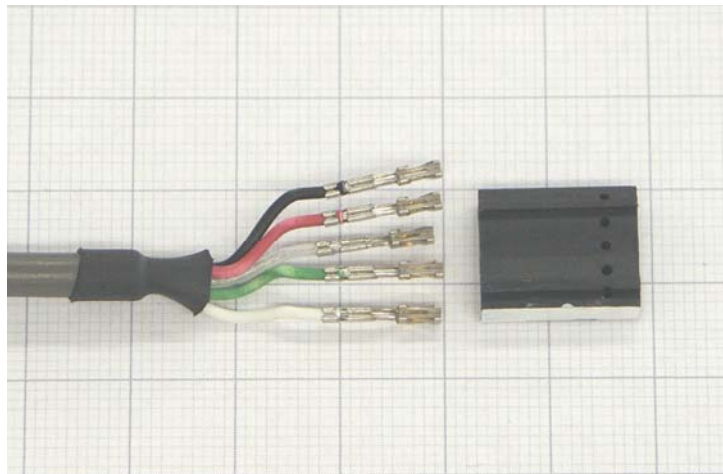


**Figure 3.** Valve-to-control module cable (note white marker stripe on the side of the black Molex connector).

- Remove all contacts inside the black molex connector as depicted in figure 4. Use a flat screwdriver to unlock the contact from the plastic housing. Unlocking is achieved by inserting the screw driver in the slit, and gentle pushing the metal contact while simultaneously pulling the wire out of the housing.



**Figure 4.** Removing contacts of the black molex connector on the valve-to-control module cable.



**Figure 5.** Connector with all contacts removed.

- Remove the black protective rubber tube out of the DECADE II tubing hole located on the lower right side of the oven compartment (see figure 6).



**Figure 6.** Installation of valve-to-module cable inside DECADE II.

Guide the valve-to-control module cable (from the side of the free contacts) through the tubing hole, from the oven compartment to the outside of the detector as depicted in figure 6.

- Subsequently insert the free contacts back into the black Molex connector to restore its original configuration.

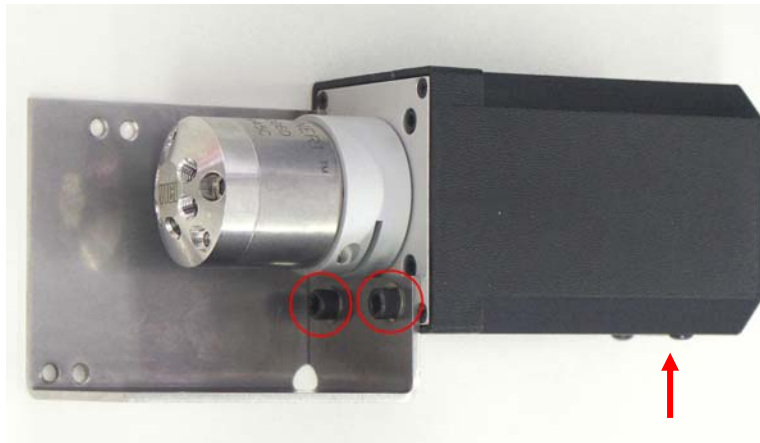


**Install the contacts in the right order as depicted in figure 3. The wire color order is: white-green-transparent-red-black. Make sure that the contacts are firmly locked into the plastic connector housing.**

**INCORRECT WIRING OR LOOSE CONTACTS CAN LEAD TO EXCESSIVE HEATING OF THE ACTUATOR CONTROL MODULE OR POWER ADAPTOR AND CAN RESULT IN A RISK OF FIRE.**

## Installation of the CS valve

- Remove the pre-mounted Valco bracket from the CS valve by unscrewing the two hex screws using the Allen key. Mount the valve on the DECADE II valve bracket supplied in the kit, as depicted in figure 7.



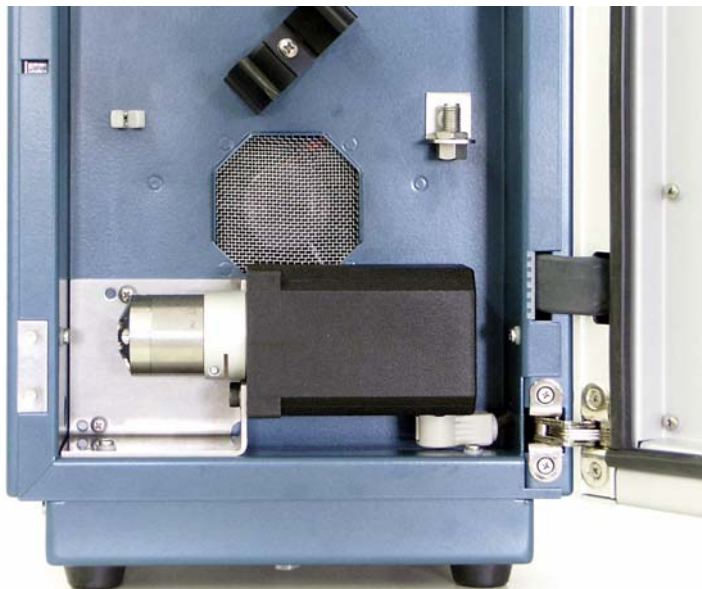
**Figure 7.** CS valve mounted on DECADE II valve bracket. Red circles: location of mounting screws. Red arrow: location of connector.

- Connect the DIN plug of the valve-to-control module cable to the valve plug. The connector is located on the bottom part of the black housing (see red arrow in figure 7) .
- Remove the three M3 screws (circled in red) from the oven compartment using a Philips screw driver, as depicted in figure 8.



**Figure 8.** Installation of valve cable inside DECADE II.

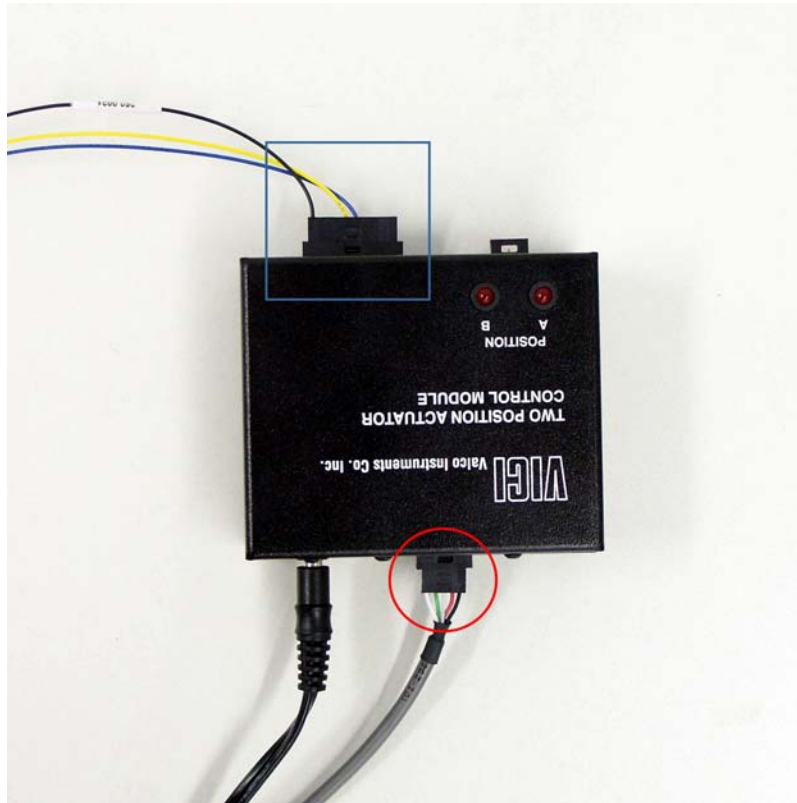
- Mounting the bracket with valve into the DECADE II oven compartment using the same three M3 screws (see figure 9).



**Figure 9.** Valve with bracket mounted in oven compartment.

## Electrical connections

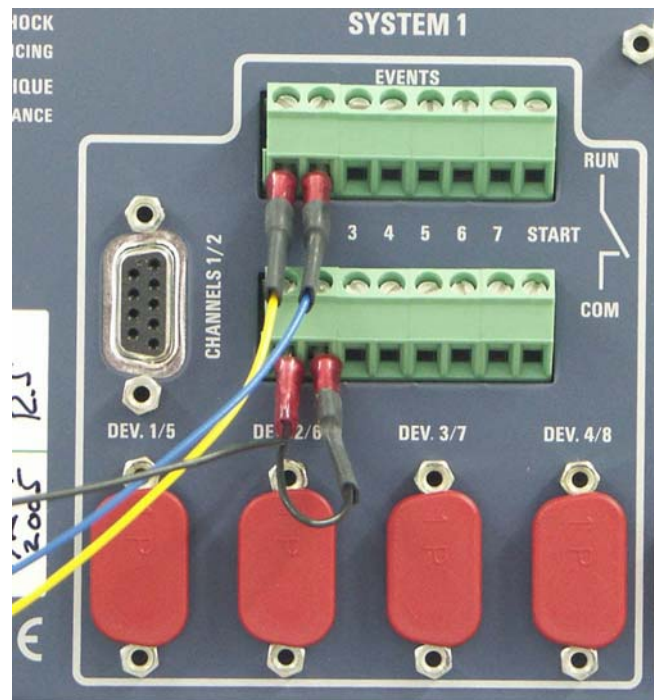
- Connect the black Molex connector of the valve-to-control module cable to the Valco control module (red circle in figure 10).



**Figure 10.** Electrical connections on the Valco actuator control module. Red circle: connection of valve-to-control module cable. Blue square: connection of the AC 100 control cable for Valco electrical injector (p/n 250.0021).

- Connect the black Molex connector of the AC 100 control cable for valco electrical injector (p/n 250.0021) to the Valco control module (blue square in figure 10).
- Connect the power adaptor to the Valco control module.
- Connect the AC 100 control cable for Valco electrical injector (p/n 250.0021) to the AC 100 event output connector in the following manner (see figure 11):

Yellow wire:	Event connector 1 (top)
Blue wire:	Event connector 2 (top)
Black wires:	Event connector 1 and 2 (bottom)



**Figure 11.** connections of the AC 100 control cable (p/n 250.0021) to the AC 100 event output connector.

- For a detailed instruction of all LC connections to the valve, in case the valve is used in a column switching configuration, please consult p/n 180.7018 " Installation guide LC connection kit DCC I-I, CS". This guide can be downloaded from the Antec Leyden internet site at:

[www.antecleyden.com](http://www.antecleyden.com)

