

Configuration of Agilent Quick Change Valve Heads with new RFID Tag

Technical Note

This Technical Note describes the configuration of Agilent Quick Change Valve Heads with new RFID Tag in G1316C TCC, G1170A Valve Drive, G4227A Flexible Cube.

Agilent Quick Change Valve Heads 2

Configuration of a Quick Change Valve Head with new RFID Tag for usage in G1316C TCC 3

Modules affected (with A-firmware) 11

Modules affected (with B-firmware) 11

Modules affected (with C-firmware) 11

Modules affected (with D-firmware) 12

Firmware Compatibility 12

Software 12

Agilent Quick Change Valve Heads

The Agilent Quick Change Valve Heads are equipped with an RFID (radio-frequency identification) Tag, which stores information on valve type, pressure, ports and positions and the serial number. From September 1st 2016, the original RFID Tag for the Agilent Quick Change Valve Heads is no longer available on the worldwide market.

Due to this reason, the RFID Tag used in recent Agilent assemblies has been changed to a new version of RFID Tag. The old and new tags can be distinguished visually by the color of the tag. The old tag is black, while the new tag is gray. The difference in color of the old and new RFID Tag is shown in [Figure](#) on page 2. The implementation of this change was started in the second half of 2015 and implies that the selected instruments need an update to a compatible firmware revision. This new firmware revision allows the usage of both, old and new RFID Tag versions in the TCC (see “[Modules affected \(with A-firmware\)](#)” on page 11, “[Modules affected \(with B-firmware\)](#)” on page 11 (when they host the C-module), “[Modules affected \(with C-firmware\)](#)” on page 11, and “[Modules affected \(with D-firmware\)](#)” on page 12).

Old RFID Tag vs new RFID Tag

NOTE

In the G1316C TCC the valve has to be configured manually.

NEW RFID Tag (gray)



OLD RFID Tag (black)



If a Quick Change Valve Head with a new RFID Tag is to be used in the G1316C TCC a firmware update is required that allows the user to manually select the appropriate valve type via ChemStation C.01.07 SR2 with LC Drivers rev. A.02.13 or higher or OpenLab CDS 2.3.

Configuration of a Quick Change Valve Head with new RFID Tag for usage in G1316C TCC

Configure the Quick Change Valve Head with OpenLab CDS or OpenLab ChemStation

Prerequisites:

Before starting to configure the new Quick Change Valve Head:

- Verify that LC stack has the newest firmware set.
- If necessary update the firmware to the newest set.
- For further information on firmware and latest Firmware revision, see

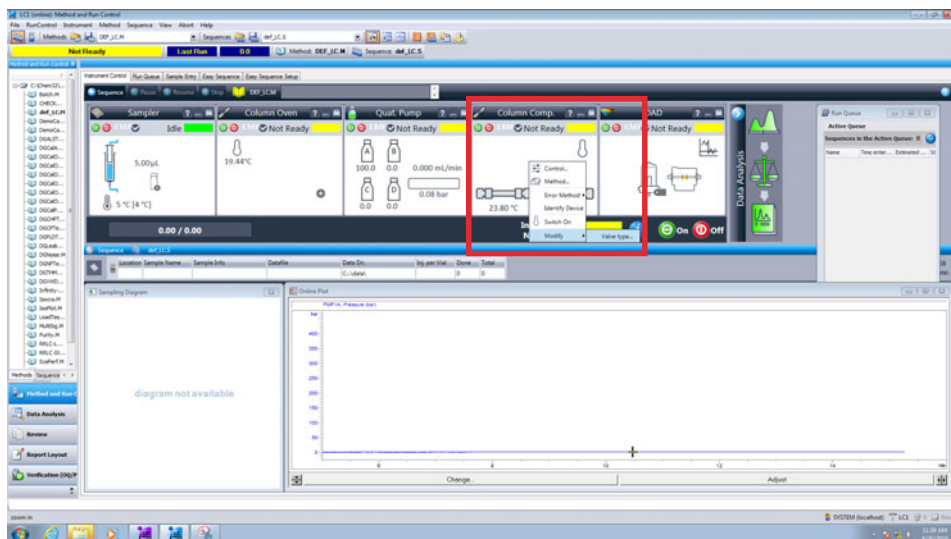
<http://www.agilent.com/en-us/firmwareDownload?whid=69761>

NOTE

The information from the RFID Tag is read from the RFID-reader of the module only during the initialization.

Configuration of a Quick Change Valve Head with new RFID Tag for usage in G1316C TCC

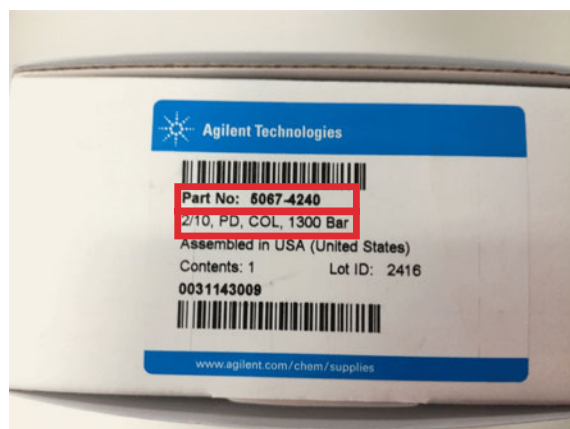
- 1 Start OpenLab CDS 2.3 or OpenLab ChemStation C.01.07 SR2. To set the correct valve tag, right-click the Dashboard of the TCC and select **Modify > Valve type** from the dropdown list.



- 2 Select the correct description of the Quick Change Valve Head in use.

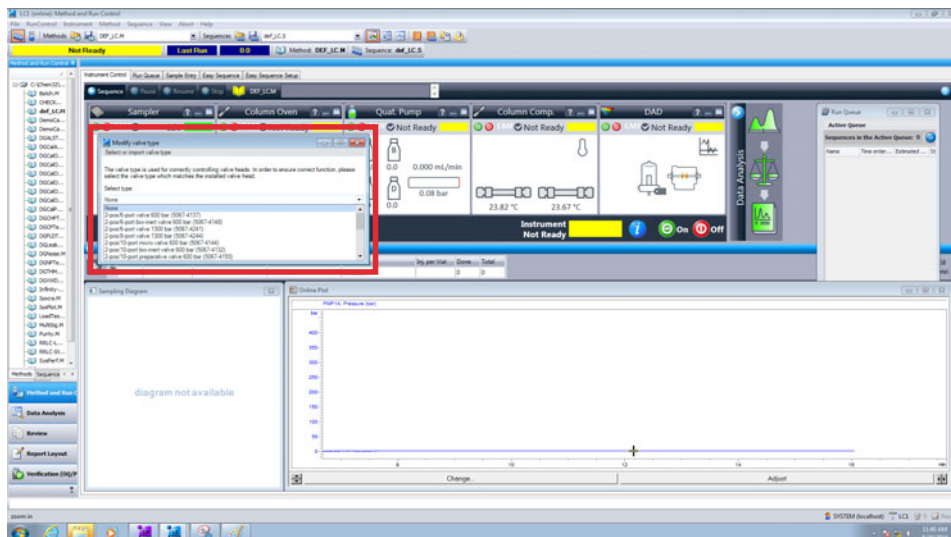
NOTE

Information on the valve type and the part number, for example 5067-4xxx, can be found on the box in which the valve was delivered.

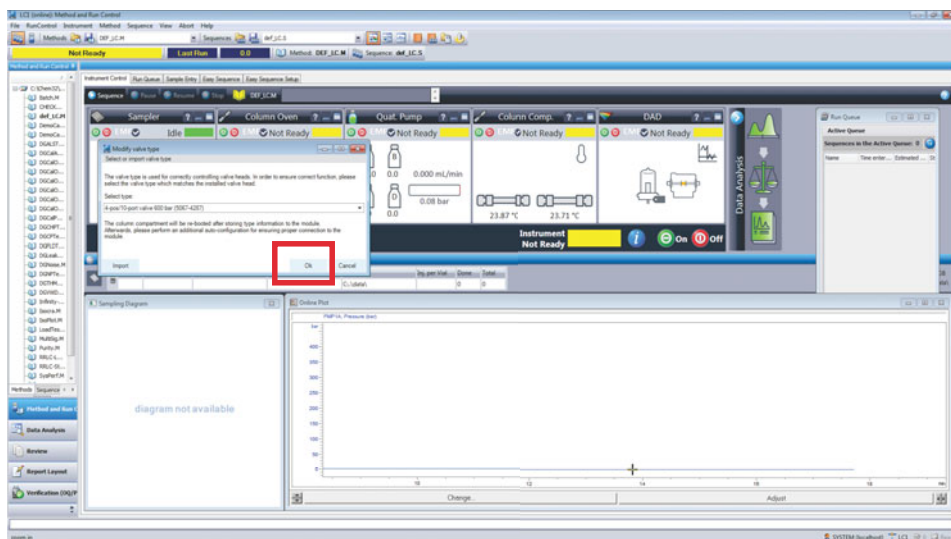


Configuration of a Quick Change Valve Head with new RFID Tag for usage in G1316C TCC

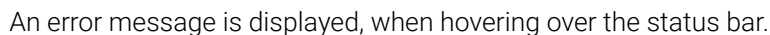
3 Select the type of the Quick Change Valve Head.



4 Click **Ok** to confirm the valve head type.



5 Wait until the TCC turns offline.

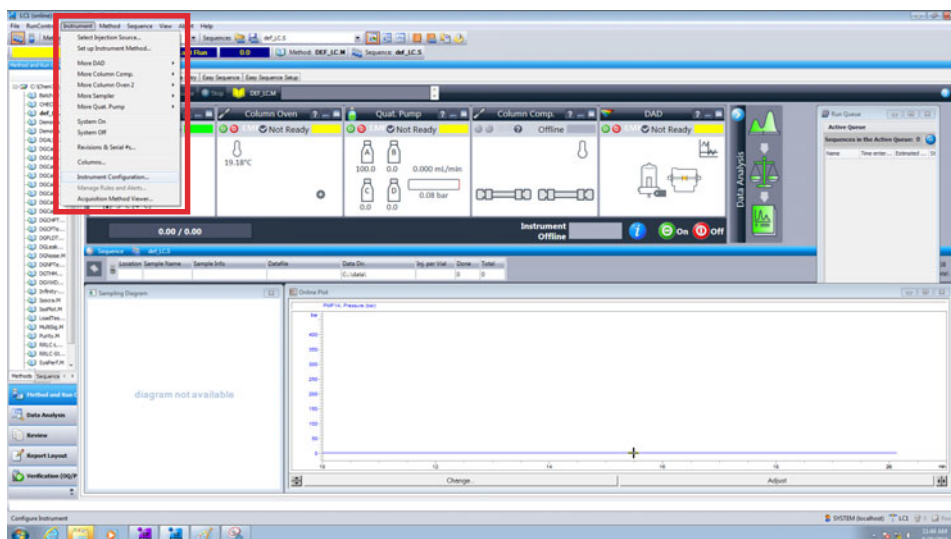


7 Power cycle the TCC.

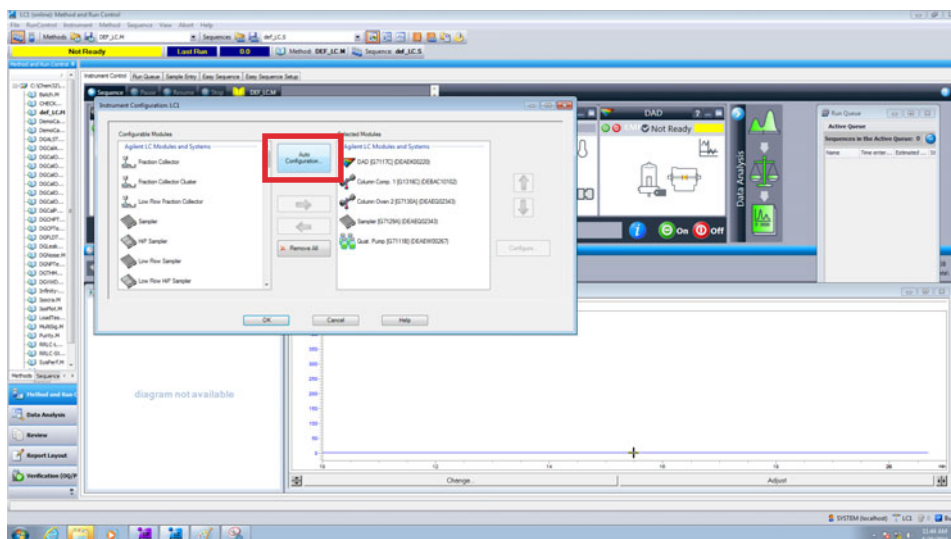
6 Configuration of Agilent Quick Change Valve Heads with new RFID Tag

Configuration of a Quick Change Valve Head with new RFID Tag for usage in G1316C TCC

8 Select **Instrument > Instrument Configuration** and continue to re-configure the LC stack.

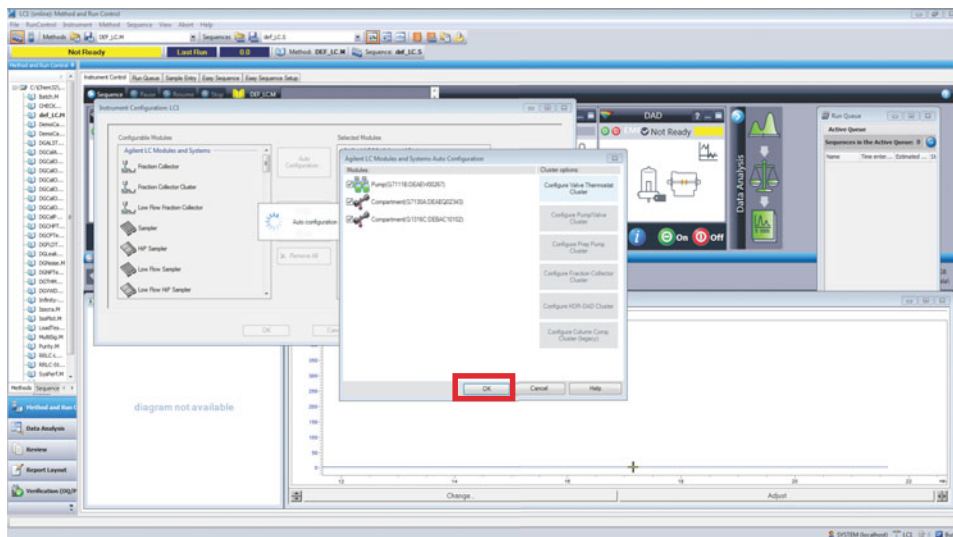


9 Perform **Auto Configuration**.

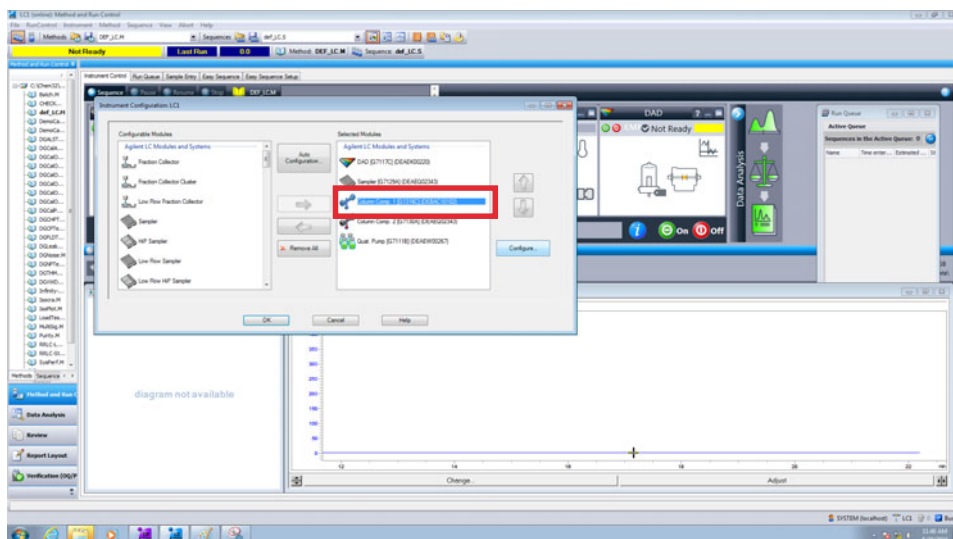


Configuration of a Quick Change Valve Head with new RFID Tag for usage in G1316C TCC

10 Continue by clicking **Ok**.

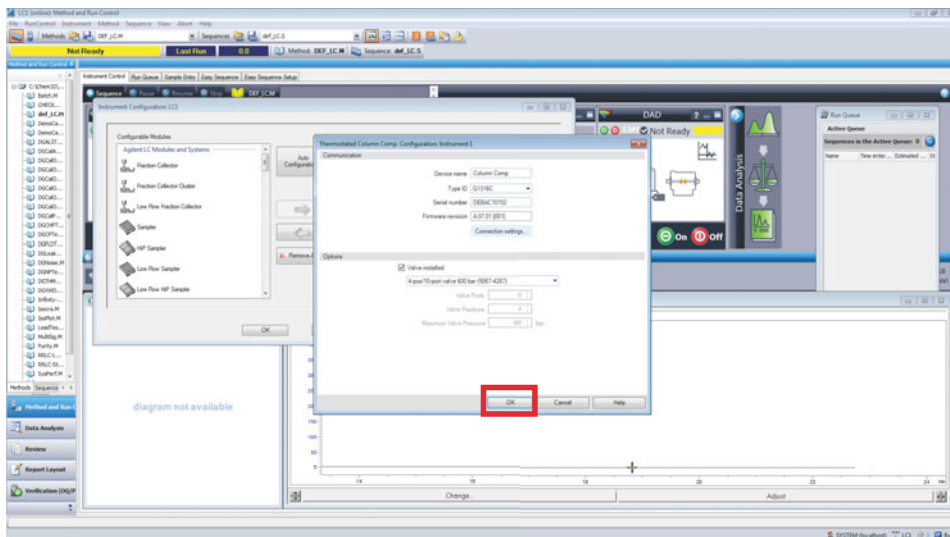


11 Select the Column Compartment (**Column Comp.**) in the selection menu to verify that the correct configuration is selected.

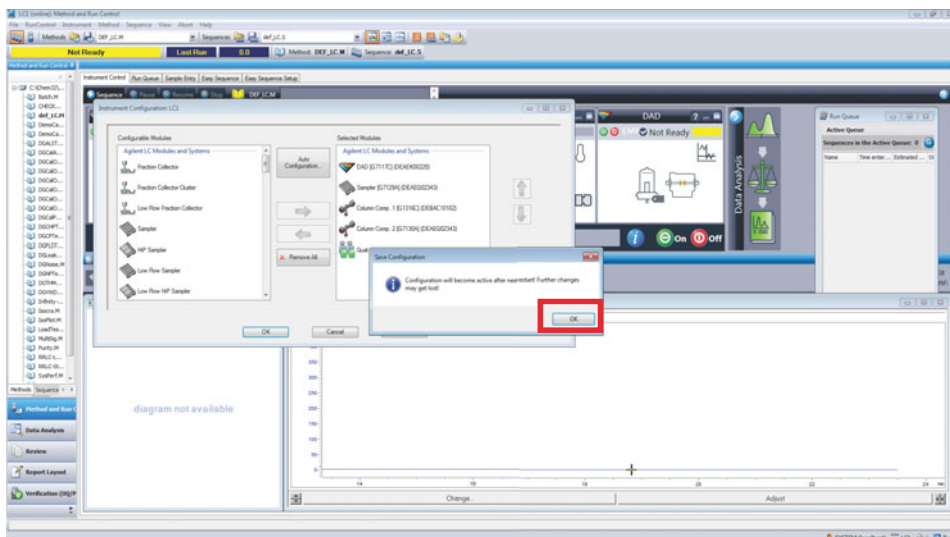


Configuration of a Quick Change Valve Head with new RFID Tag for usage in G1316C TCC

In the dialog box **Thermostated Column Comp Configuration** under **Options** the tick box **Valve installed** should be selected. In addition, in the drop-down menu below the correct valve type with the part number should be selected/displayed.



12 Close this dialog box by clicking **Ok**. This will direct one back to **Instrument Configuration**.



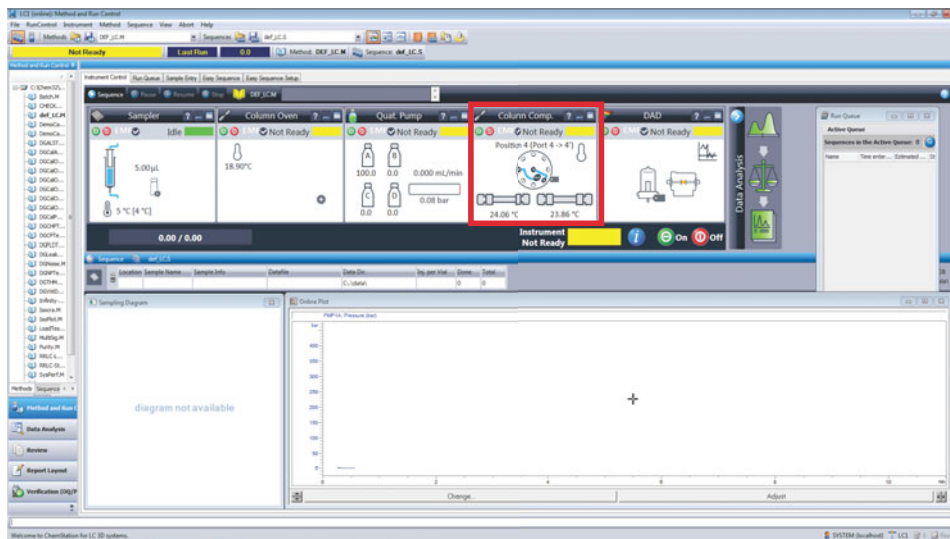
Configuration of a Quick Change Valve Head with new RFID Tag for usage in G1316C TCC

13 In **Instrument Configuration** select **Ok**.

14 Restart the software to save this configuration.

During the restart the TCC initializes as well and the information is read from the RFID Tag.

The TCC is online again and the Quick Change Valve Head is displayed correctly in the dashboard of the TCC.



Modules affected (with A-firmware)

- Quick Change Valve Heads in G1316C TCC

Current Firmware Version	Recommended Compatible Version
A.06.10 to A.06.17	A.06.18
A.06.30 to A.06.32	A.06.33
A.06.50 to A.06.54	A.06.55 or higher

As the Valve Heads have been migrated to the new RFID Tags, the G1316C TCC needs a new firmware that allows the user to manually select the appropriate Valve Head, see ["Configure the Quick Change Valve Head with OpenLab CDS or OpenLab ChemStation"](#) on page 3.

Modules affected (with B-firmware)

- Lamps/Flow Cells in G1314D/E/F VWD, G1315C/D DAD, G1365C/D MWD, G4212A/B DAD, G4294B DAD (1220 LC) and G7100ACE
- Pump Heads, Purge Valves, Mixers in G4204A, G4220A/B, G7104A, G7120A pumps

Current Firmware Version	Recommended Compatible Version
B.06.10 to B.06.27	B.06.28 (except for the G7100ACE)
B.06.30 to B.06.44	B.06.45
B.06.50 to B.06.71	B.06.73 or higher

Modules affected (with C-firmware)

- Quick Change Valve Heads in G1170A Infinity Valve Drive, G4227A Flexible Cube

Current Firmware Version	Recommended Compatible Version
C.06.40 to C.06.44	C.06.45
C.06.50 to C.06.71	C.06.72 or higher

Modules affected (with D-firmware)

The Infinity II platform supports both RFID versions since firmware version D.06.70.

NOTE

For A-, B-, C-, or D-version firmware, it is critical that you update all the modules in your stack to the corresponding / latest firmware of the firmware set in use, not just the module using this assembly. This ensures full compatibility of your modules between each other.

Firmware Compatibility

In case you require a firmware version that has a version number lower than the compatible revision, we assure that this newer firmware is 100% backward compatible to earlier firmware versions and therefore will not have an impact to your control software.

The firmware update does not require requalification of the LC module/system.

Please refer to our firmware compatibility statements within the firmware release documents available on the Agilent web (see below).

Software

The following software revisions are recommended:

- LC Drivers A.02.13 or higher
- ChemStation C.01.07 SR2
- OpenLab CDS 2.3

Workflows using earlier revisions of the software will vary in detail.

www.agilent.com

© Agilent Technologies Inc. 2016-2021

Printed in Germany

Edition: 07/2021



Part No: 01200-90133 Rev. C

Document No: SD-29000201 Rev. C

