Technical News Bulletin

Steinhausen, February 2024

FlexIS Drive Replacement

- With over 2500 systems installed it has become the leading control system for glass forming.
- All new drives have a safety input to safely disable the drive.
- Any drive that is older than 6 years cannot be repaired anymore.

Introduction

The FlexIS control and timing system was introduced in 2003 and has established itself as the leading control system for glass forming machines with over 2500 installed systems. However, like all electronic components and systems, FlexIS hardware faces challenges related to the obsolescence of its subcomponents. In particular:
The JetMove JM-215 (601-10146 & 601-10719) and JM-204 (601-10702) became obsolete by the end of 2016.
The JetMove JM-215 (601-10847) and JM-204 (601-10848) will be obsolete by early 2024. They have been succeeded by the latest models, JM-215B (601-11546) and JM-204 (601-11545).
The JetMove JM-203 (601-10499) is already obsolete and has been replaced by the new model JM-203B (601-11067). This drive is exclusively used in the FlexIS Eco.

Details about the Drive Generations

JetMove JM-215

Part number	Name	Safety (STO) S1	CPU	Required Software Version	Obsolete
601-10146	JM215-480-OEM	No	Old	All	End 2016
601-10719	JM215B-480-OEM-S1	Yes	Old	1.07.02.008 and higher	End 2016
601-10847	JM215B-480-JC310-S1	Yes	New	1.07.02.029 and higher 1.07.03.014 and higher	Beginning 2024
601-11546	JM215B-480-JC310-S1X	Yes	New	FlexIS1: 2.11.00.010 and higher FlexIS2: 2.35-release-1185 and higher FlexIS3: 3.03-release-1351 and higher	

JetMove JM-204

Part number	Name	Safety (STO) S1	CPU	Required Software Version	Obsolete
601-10702	JM204-480-OEM-S1	Yes	Old	1.07.02.008 and higher	End 2016
601-10848	JM204-480-JC310-S1	Yes	New	1.07.02.029 and higher 1.07.03.014 and higher	Beginning 2024
601-11545	JM204-480-JC310-S1X	Yes	New	FlexIS1: 2.11.00.010 and higher FlexIS2: 2.35-release-1185 and higher FlexIS3: 3.03-release-1351 and higher	

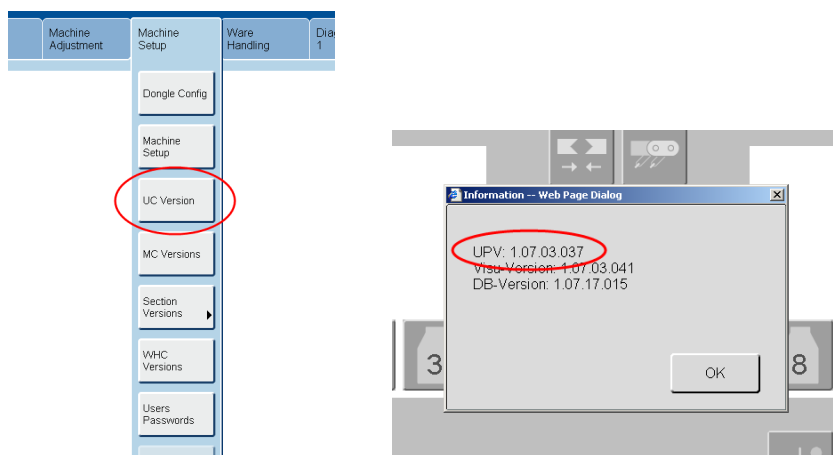| Part number	Name	Safety (STO) S1	CPU	Required Software Version	Obsolete
601-10499	JM203-230-OEM	No	Old	All	Oct 2015
601-11067	JM203B-230-JC310	No	New	1.07.02.029 and higher 1.07.03.014 and higher	

The dimensions and mounting of the drives remain unchanged.

The newest drives require following FlexIS Software Version (Update Package Version):
- FlexIS1: 2.11.00.010 and higher
- FlexIS2: UC2 Version 2.35-release-1185 and higher
- FlexIS3: UC2 Version 3.03-release-1351 and higher

Please make sure that your FlexIS software is up to date as per below instructions.

How to Find Software Version on FlexIS 1

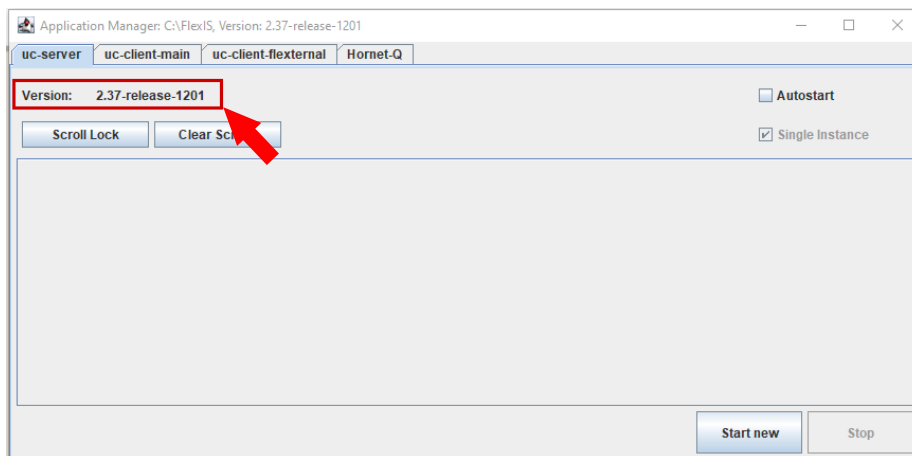To find the software version (UPV = Update Package Version) on the FlexIS, click on the UC Version button.

On older systems you find the version information under the tab "Jobs / UC Version"
If you do not see the UPV on your FlexIS then you have a very old UPV which definitely needs to be upgraded.
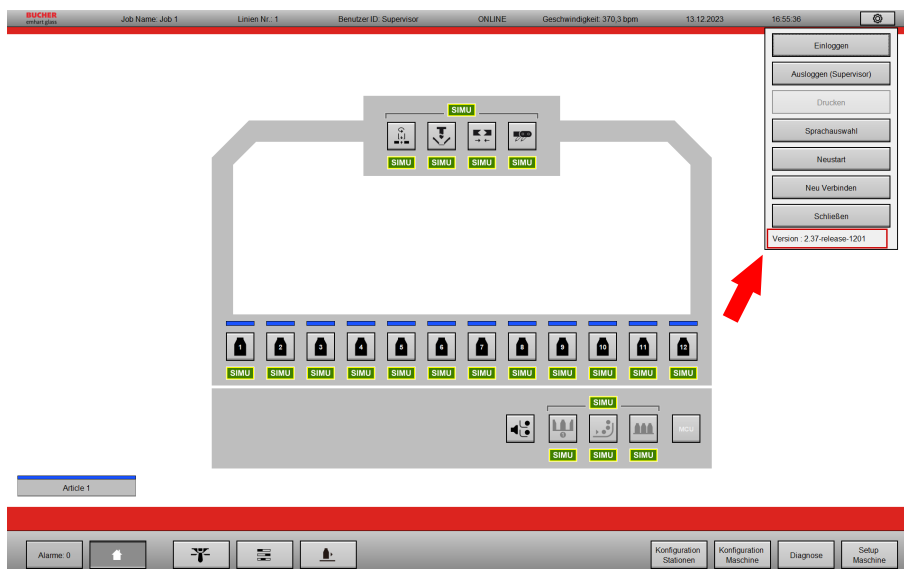
How to Find Software Version on FlexIS 2 and FlexIS 3

On FlexIS 2 and FlexIS 3, you can find the software version in the AppManager or on the UC2 user interface.

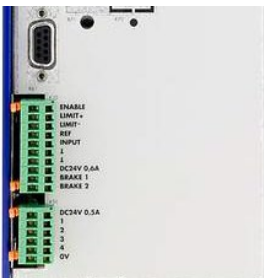AppManager screen:

UC2 Home screen
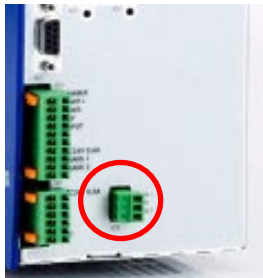
Wiring Modification when Replacing a JM-215 Drive

All new drives have a safety input to safely disable the drive (STO = Safe Torque Off). The old JetMove JM-215 (601-10146) does not have this safety input.
When replacing a JetMove JM-215 (601-10146) by a new model, it is necessary to add some wiring to enable this safety input: this input must be powered with 24 VDC.
If your FlexIS is still using the JM-215 drive, we recommend that you prepare the wiring for all drives.
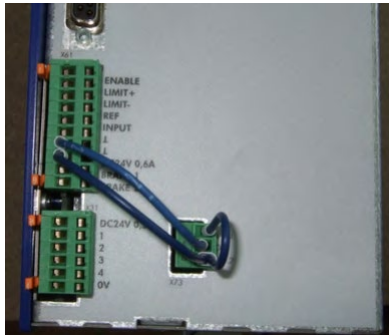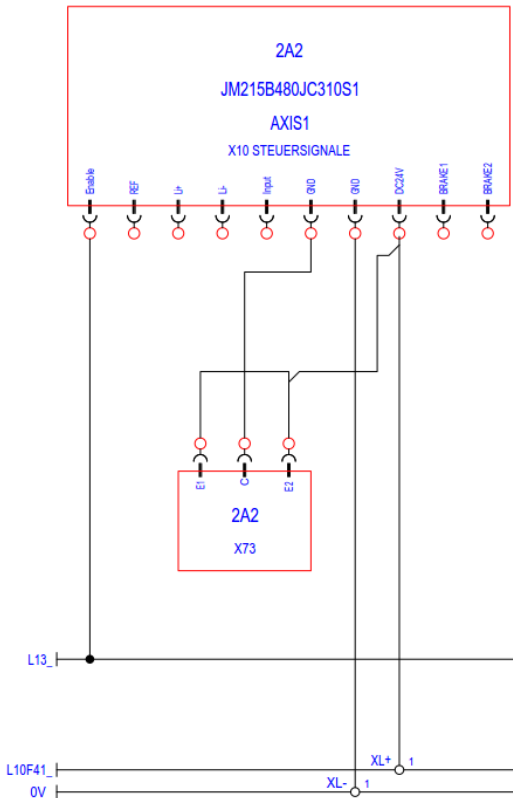

JetMove JM-215

JetMove JM-215B and JM-204

Safety (STO) input

Below you can see how to wire up the safe enable input:

- Enable1 (E1) and Enable2 (E2) are connected to 24 VDC which can be taken from the 24V supply of the drive.
- COM (C) is connected to 0V which can also be taken from the 0V supply of the drive.

601-20103

Summary – What do you need to do?

If you have following drives:
- 601-11546   JM215B-480-JC310-S1X
- 601-11545   JM204-480-JC310-S1X

No action is required.

If you have following drives:
- 601-10847   JM215B-480-JC310-S1
- 601-10848   JM204-480-JC310-S1

You must check that your Software version is at least:
- FlexIS1   2.11.00.010 and higher
- FlexIS2   2.35-release-1185 and higher
- FlexIS3   3.03-release-1351 and higher

If you have following drives:
- 601-10719   JM215B-480-OEM-S1
- 601-10702   JM204-480-OEM-S1

You must check that your software version is at least:
- FlexIS1   2.11.00.010 and higher
- FlexIS2   2.35-release-1185 and higher
- FlexIS3   3.03-release-1351 and higher

If your software is up to date, then no action is required.

If you have following drives:
- 601-10146   JM215-480-OEM

You must add wiring and you must check that your software is up to date.

The wiring kit for upgrade can be ordered under this reference 601-20103.
We recommend that you prepare the wiring on all drives as soon as possible.

Contact your sales representative for a quote for the necessary software upgrade.
Standard service packages are available.

Repair of Drives

Any drive older than 6 years cannot be repaired anymore.
This is due to the limited lifetime of the capacitors. Replacing all capacitors in the drive is not cost-effective, making it impractical to send out repaired drives older than 6 years.

While it is entirely feasible for drives to operate for 10 years or more, we cannot provide a guarantee for such longevity.