Technical News Bulletin
Cham, 17 November 2015

FlexIS Drive Replacement

1. Introduction

The FlexIS control and timing system was introduced in 2003. With over 800 systems installed it has become the leading control system for glass forming machines. Like all electronic components and systems, the FlexIS faces some obsolescence challenges with subcomponents.

The old JetMoves JM-215 (601-10146 & 601-10719) and JM-204 (601-10702) will be obsolete by end of 2016. They have been replaced by the newest JM-215B (601-10847) and JM-204 (601-10848).

The JetMoves JM-203 (601-10499) are obsolete already and have been replaced by the new JM-203B (601-11067). These drives are only used in the FlexIS Eco.

Please update your software as soon as possible.
2. Details

JetMove JM-215

<table>
<thead>
<tr>
<th>Part number</th>
<th>Name</th>
<th>Safety (STO) S1</th>
<th>CPU</th>
<th>Required Software Version</th>
<th>Obsolete</th>
</tr>
</thead>
<tbody>
<tr>
<td>601-10146</td>
<td>JM215-480-OEM</td>
<td>No</td>
<td>Old</td>
<td>All</td>
<td>End 2016</td>
</tr>
<tr>
<td>601-10719</td>
<td>JM215B-480-OEM-S1</td>
<td>Yes</td>
<td>Old</td>
<td>1.07.02.008 and higher</td>
<td>End 2016</td>
</tr>
<tr>
<td>601-10847</td>
<td>JM215B-480-JC310-S1</td>
<td>Yes</td>
<td>New</td>
<td>1.07.02.029 and higher</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.07.03.014 and higher</td>
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</table>

JetMove JM-204

<table>
<thead>
<tr>
<th>Part number</th>
<th>Name</th>
<th>Safety (STO) S1</th>
<th>CPU</th>
<th>Required Software Version</th>
<th>Obsolete</th>
</tr>
</thead>
<tbody>
<tr>
<td>601-10702</td>
<td>JM204-480-OEM-S1</td>
<td>Yes</td>
<td>Old</td>
<td>1.07.02.008 and higher</td>
<td>End 2016</td>
</tr>
<tr>
<td>601-10848</td>
<td>JM204-480-JC310-S1</td>
<td>Yes</td>
<td>New</td>
<td>1.07.02.029 and higher</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td>1.07.03.014 and higher</td>
<td></td>
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</table>

JetMove JM-203

<table>
<thead>
<tr>
<th>Part number</th>
<th>Name</th>
<th>Safety (STO) S1</th>
<th>CPU</th>
<th>Required Software Version</th>
<th>Obsolete</th>
</tr>
</thead>
<tbody>
<tr>
<td>601-10499</td>
<td>JM203-230-OEM</td>
<td>No</td>
<td>Old</td>
<td>All</td>
<td>Oct 2015</td>
</tr>
<tr>
<td>601-11067</td>
<td>JM203B-230-JC310</td>
<td>No</td>
<td>New</td>
<td>1.07.02.029 and higher</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.07.03.014 and higher</td>
<td></td>
</tr>
</tbody>
</table>

The dimensions and mounting of the drive have not changed.

The newest drives require following FlexIS Software Version (Update Package Version)

- 1.07.02.029 and higher (released May 11th 2012)
- 1.07.03.014 and higher (released January 31st 2012)

Please make sure that your FlexIS software is up to date.
3. Find software version on FlexIS

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 don’t see the UPV on your FlexIS then you have a very old UPV which definitely needs to be upgraded.

4. Wiring

All new drives have a safety input to safely disable the drive (STO = Safe Torque Off). The old JetMove JM-215 (601-10146) did not have this safety input.
When replacing a JetMove JM-215 (601-10146) by a new model it’s necessary to add some wiring.
The safe enable inputs need to be powered with 24V.
If your FlexIS is still using the JM-215 then we recommend that you prepare the wiring for all drives.
Below you can see how to wire up the safe enable inputs.
E1 and E2 need 24V which can be taken from the 24V supply of the drive.
C needs 0V which can also be taken from the 0V supply of the drive.
5. Summary – What do you need to do?

If you have following drives:
601-10847 JM215B-480-JC310-S1
601-10848 JM204-480-JC310-S1
No actions need to be taken

If you have following drives:
601-10719 JM215B-480-OEM-S1
601-10702 JM204-480-OEM-S1
You need to make sure that your software has at least following level:
1.07.02.029 and higher
1.07.03.014 and higher
**If your software is up to date then no actions need to be taken.**

If you have following drives:
601-10146 JM215-480-OEM
**You need to add wiring and you need to make sure that your software is up to date.**
To receive the new drive (601-10847) including the wiring (601-20103) please order the drive replacement kit (601-10847-Kit)

**If you wish you can order the wiring kit 601-20103 for the upgrade.**
*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.

6. Repair of drives

Any drive that is older than 6 years cannot be repaired anymore.
The reason for this is that the capacitors have a limited lifetime. It’s not economical to replace all capacitors of the drive and therefore it’s not possible to send out repaired drives which are older than 6 years.
It’s very well possible that drives run for 10 years or longer but we can’t give a guarantee for this.