

## Inspection and Test Plans (ITP) – MUM-19 VSD Installation Checklist

| Client:             | Project Name: |                               |       |            |  |  |
|---------------------|---------------|-------------------------------|-------|------------|--|--|
| Area:               | Drawing No's: |                               | Date: |            |  |  |
| Check Conducted By: | Signature:    | Check Approved By: Signature: |       | Signature: |  |  |

INSPECTION CHECKLIST FOR: VSD

The below checks are to be completed by the Mechanical Contractor prior to start of associated fan or FCU commissioning

|     |   |     |             | INSPECTION HISTORY |        |       |           |  |  |  |  |  |
|-----|---|-----|-------------|--------------------|--------|-------|-----------|--|--|--|--|--|
| NO: | DESCRIPTION:  |     | INSPECTION: |                    | TABLE: | DATE: | COMMENTS: |  |  |  |  |  |
|     | Quality Control   |     |             |                    |        |       |           |  |  |  |  |  |
| 1   | VSD type, model number and manufacturer approved for use  | Yes | No          | Yes                | No     |       |           |  |  |  |  |  |
| 2   | VSD units not being used are correctly stored   | Yes | No          | Yes                | No     |       |           |  |  |  |  |  |
|     | <u>Installation</u>   |     |             |                    |        |       |           |  |  |  |  |  |
| 3   | Drawings on site are the latest issue   | Yes | No          | Yes                | No     |       |           |  |  |  |  |  |
| 4   | VSDs are not damaged in anyway  | Yes | No          | Yes                | No     |       |           |  |  |  |  |  |
| 5   | VSDs are installed in correct location as per approved drawings and equipment schedule                      | Yes | No          | Yes                | No     |       |           |  |  |  |  |  |
| 6   | VSDs are clearly labelled including number, manufacturer model number and duty                              | Yes | No          | Yes                | No     |       |           |  |  |  |  |  |
| 7   | Confirm adequate provision has been made to access the VSDs for maintenance and removal                     | Yes | No          | Yes                | No     |       |           |  |  |  |  |  |
| 8   | Confirm correct electrical connections to the VSDs have been made as per the manufacturers wiring schematic | Yes | No          | Yes                | No     |       |           |  |  |  |  |  |
| 9   | Confirm fuses or circuit breakers do not exceed the motor and VSD rating                                    | Yes | No          | Yes                | No     |       |           |  |  |  |  |  |
| 10  | Confirm correct controls wiring has been installed to the controls company requirements                     | Yes | No          | Yes                | No     |       |           |  |  |  |  |  |

|     |   |     |             | INSPECTION HISTORY |        |       |           |  |  |  |  |
|-----|---|-----|-------------|--------------------|--------|-------|-----------|--|--|--|--|
| NO: | DESCRIPTION:  |     | INSPECTION: |                    | ΓABLE: | DATE: | COMMENTS: |  |  |  |  |
|     | Commissioning   |     |             |                    |        |       |           |  |  |  |  |
| 11  | VSD powers up properly  | Yes | No          | Yes                | No     |       |           |  |  |  |  |
| 12  | VSD stop button works   | Yes | No          | Yes                | No     |       |           |  |  |  |  |
| 13  | Motor rotation is correct   | Yes | No          | Yes                | No     |       |           |  |  |  |  |
| 14  | Minimum and maximum speeds reached using remote command                           | Yes | No          | Yes                | No     |       |           |  |  |  |  |
| 15  | VSD restarts automatically  | Yes | No          | Yes                | No     |       |           |  |  |  |  |
| 16  | No disconnect on the load side of the VSD   | Yes | No          | Yes                | No     |       |           |  |  |  |  |
| 17  | Critical frequencies have been programmed out                                     | Yes | No          | Yes                | No     |       |           |  |  |  |  |
| 18  | Motor runs in bypass mode while servicing or removing VSD                         | Yes | No          | Yes                | No     |       |           |  |  |  |  |
| 19  | Motor overload protection and phase loss protection provided during bypass mode   | Yes | No          | Yes                | No     |       |           |  |  |  |  |
| 20  | System starts and runs without any unusual noise or vibration                     | Yes | No          | Yes                | No     |       |           |  |  |  |  |
| 21  | Mark alterations, sizes + final location on As Built drawings for record purposes | Yes | No          | Yes                | No     |       |           |  |  |  |  |

|  |  |  | NTS: |
|--|--|--|------|
|  |  |  |      |