**Referenced to Water Corporation Standards: DS21, DS22, DS26-03, DS26-04, DS26-06, DS26-15, DS26-20, AND DS26-23.**

|  |  |
| --- | --- |
| **1. GENERAL DATA** | |
| PROJECT NAME: | PROJECT NO: |
| IDENTIFICATION: |  |

|  |  |
| --- | --- |
| **2. MOTOR DATA** | |
| TYPE: CAGE SLIP RING LV HV SUBMERSIBLE | |
| MAKE: | SERIAL NO: |
| FRAME: | MOUNTING: |
| ENCLOSURE PROTECTION: | INSULATION CLASS: |
| KW: | FREQUENCY: |
| STATOR VOLTAGE: | ROTOR VOLTAGE: |
| STATOR CURRENT: | ROTOR CURRENT: |
| SPEED: | COOLING: |
| STATOR CONNECTION: | DIRECTION OF ROTATION: |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **3. TEST PROCEDURE** | | **DONE**  **/YES** | **NO** | **N/A** | **COMMENTS/DETAILS** |
| 1 | Record cold winding and bearing temperatures - confirm as expected. |  |  |  |  |
| 2 | Megger heaters - confirm acceptable. |  |  |  |  |
| 3 | Energise heaters for 24 hours and record heated winding and bearing temperatures - confirm as expected. |  |  |  |  |
| 4 | Megger motor including a Polarisation Index – confirm acceptable. |  |  |  |  |
| 5 | Confirm cooling water system pressure tested and pre-commissioned separately. |  |  |  |  |
| 6 | Confirm cooling air ducting tested and pre-commissioned separately. |  |  |  |  |
| 7 | Confirm Starter and Cabling have been pre-commissioned separately. |  |  |  |  |
| 8 | Confirm Brush lifting gear operates as required. |  |  |  |  |
| 9 | Confirm pump uncoupled and motor shaft free to rotate. |  |  |  |  |
| 10 | Bump Test motor on no-load. Confirm rotation is as required. |  |  |  |  |
| 11 | Run motor on no-load for one hour. Record Volts, Amps, Power and bearing/winding temperatures – confirm as expected. |  |  |  |  |
| 13 | Grease bearings if required. |  |  |  |  |

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| **4. REMARKS / REMEDIAL ACTIONS** |
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| **5. TESTS** | | | | | | | | | | | | | | | |
| 5.1 Test Equipment | | | | | | | | | | | | | | | |
| Megger | | | | | | | | | | | | | | | |
| Manufacturer: | | | | | | | Model: | | | | | | | | |
| Serial No.: | | | | | | | Last Calibration Date: | | | | | | | | |
| Multimeter | | | | | | | | | | | | | | | |
| Manufacturer: | | | | | | | Model: | | | | | | | | |
| Serial No.: | | | | | | | Last Calibration Date: | | | | | | | | |
|  | | | | | | | | | | | | | | | |
| 5.2 Insulation Resistance Test | | | | | | | | | | | | | | | |
| **Circuit Description** | | **Stator (\_\_\_\_V) 1min** | | | | **Stator (\_\_\_\_V) 10 min** | | | | | | | **Heaters (\_\_\_V)** | | |
| **Resistance (Ω)** | |  | | | |  | | | | | | |  | | |
| **Polarisation Index** | |  | | | | | | | | | | |  | | |
|  | | | | | | | | | | | | | | | |
| 5.3 Winding RTD Measurements | | | | | | | | | | | | | | | |
| **Description** | | | **Ambient** | **U (1)** | | **V (1)** | | | **W (1)** | **U (2)** | | | **V (2)** | | **W (2)** |
| **Temp (ºC) – Cold** | | |  |  | |  | | |  |  | | |  | |  |
| **Temp (ºC) – Heaters 24 Hours** | | |  |  | |  | | |  |  | | |  | |  |
| **Temp (ºC) – 1 Hour No Load** | | |  |  | |  | | |  |  | | |  | |  |
|  | | | | | | | | | | | | | | | |
| 5.4 Bearing RTD Measurements | | | | | | | | | | | | | | | |
| **Description** | | | **Ambient** | **DE Motor** | | | | **NDE Motor** | | | **DE Pump** | | | **NDE Pump** | |
| **Temp (ºC) – Cold** | | |  |  | | | |  | | |  | | |  | |
| **Temp (ºC) – Heaters 24 Hours** | | |  |  | | | |  | | |  | | |  | |
| **Temp (ºC) – 1 Hour No Load** | | |  |  | | | |  | | |  | | |  | |
|  | | | | | | | | | | | | | | | |
| 5.6 Motor Measurements | | | | | | | | | | | | | | | |
| **Description** | **Volts** | | | | **Amps** | | | | | | | **Power (kW)** | | | |
| **No Load** |  | | | |  | | | | | | |  | | | |

|  |  |  |  |  |
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| **6. SIGNOFFS** | |  | | |
| NAME (PRINT) | COMPANY / ROLE | | SIGNATURE | DATE |
| NAME (PRINT) | COMPANY / ROLE | | SIGNATURE | DATE |
| NAME (PRINT) | COMPANY / ROLE | | SIGNATURE | DATE |