**Referenced to Water Corporation Standards: DS26-14, DS26-18, DS26-19, DS26-25, and DS26-40.**

**This procedure maybe undertaken by the Contractor with a Water Corporation employee present.**

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

|  |  |
| --- | --- |
| **2. VARIABLE SPEED DRIVE DATA** | |
| MANUFACTURER (MF): |  |
| TYPE: HV  LV  With Input Isolating TX  Part of a System  Soft Starter | |
| MODEL NO: | SERIAL NO: |
| INPUT VOLTAGE: | MOUNTING: FLOOR  WALL: |
| COOLING: PRIMARY: AIR | SECONDARY: AIR  WATER |
| WC DWG NO.(S): | MF DWG NO.(S): |

|  |  |
| --- | --- |
| **3. MOTOR DATA** | |
| MAKE: | SERIAL NO: |
| KW: | SPEED: |
| STATOR VOLTAGE: | STATOR CURRENT: |

|  |  |  |  |  |  |
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| **4. INSPECTION** | | **DONE**  **/YES** | **NO** | **N/A** | **COMMENTS/DETAILS** |
| 1 | Follow the appropriate manufacturer’s manual for the setup procedure. |  |  |  | MF Manual No: |
| 2 | Megger starter, record values and confirm as acceptable. |  |  |  |  |
| 3 | With motor line contactor isolated, do an emergency start. |  |  |  |  |
| 4 | Confirm Starter starts correctly. |  |  |  |  |
| 5 | Confirm Keypad and indicator lights operate correctly. |  |  |  |  |
| 6 | Confirm a simulated Motor Starter fault interfaces with the motor control circuit correctly. |  |  |  |  |
| 7 | With the motor line contactor isolated, do a manual start. |  |  |  |  |
| 8 | Confirm status and alarm inputs to the PLC interface correctly. |  |  |  |  |
| 9 | With the motor line contactor in the operating position, but motor decoupled, do a start and confirm expected operation. Conduct No Load Test. |  |  |  |  |
| 10 | Couple motor to pump and do a normal start (and stop if not “coast to stop”). Record stator current and confirm ramp times and current values are as expected. |  |  |  |  |
| 11 | Check all external signals. |  |  |  |  |
| 12 | Record and save all parameter settings. |  |  |  |  |

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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** | | **Main Circuit** | | | | | | | **Control Circuit** | | | | | |
| **Resistance (Ω)** | |  | | | | | | |  | | | | | |
|  | | | | | | | | | | | | | | |
| 5.3 Starting Cycle Testing | | | | | | | | | | | | | | |
| **Description** | | | **Start Ramp** | **Stop Ramp** | |  | |  | |  | |  |  |  |
| **Time** | | |  |  | |  | |  | |  | |  |  |  |
| **Motor Primary Current (A)** | | |  |  | |  | |  | |  | |  |  |  |
|  | | | | | | | | | | | | | | |
| 5.4 Cooling Temperature Measurements | | | | | | | | | | | | | | |
| **Description** | **Ambient** | | | | **Primary Coolant** | | | | | | **Secondary Coolant** | | | |
| **Pre-Start** |  | | | |  | | | | | |  | | | |
| **Post-Start** |  | | | |  | | | | | |  | | | |
| **After 1hr** |  | | | |  | | | | | |  | | | |

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| **6. REMARKS / REMEDIAL ACTIONS** |
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| **7. SIGNOFFS** | |  | | |
| NAME (PRINT) | COMPANY / ROLE | | SIGNATURE | DATE |
| NAME (PRINT) | COMPANY / ROLE | | SIGNATURE | DATE |
| NAME (PRINT) | COMPANY / ROLE | | SIGNATURE | DATE |