ARTESIS MCM MV INVERTER QUICK INSTALLATION GUIDE

ARTESIS MCM Connections

1. Connect ARTESIS MCM sockets <u>except communication socket</u> as shown in the connection diagram.
2. Once the motor connections are completed. Apply power to the ARTESIS MCM unit.
3. Ensure that Power led and LCD lights are on.
4. Ensure that **"IDLE"** message appeared in the LCD display. **"ENTER"** key in the front panel is used to enter a menu or to confirm an entered value. **"CLEAR"** key is used to return to previous menu or to cancel a process.

Entering Settings Menu

1. Go to "**Edit Settings**" menu using ⬇ key.
2. Press "**ENTER**" key twice. "**Enter password**; ✱✱✱✱✱✱ " will appear in the LCD display.
3. Enter "m✱✱✱✱✱✱" letter using ⬆ key.
4. Press "**ENTER**" key four times. "**Configuration**; **Motor values**" will appear in the LCD display.

Entering ARTESIS MCM Communication Address

1. Go to "**Configuration**; **Comm. settings**" menu using ⬆key.
2. Press "**ENTER**" key four times. "**Device address**; **Edit 0** " will appear in the LCD display.
3. Enter communication address using ⬆⬇ keys.

   If there are more than one MCMs connected to the system, ensure that each ARTESIS MCM has a unique address between 1-255.
4. Press "**ENTER**" key twice to confirm ARTESIS MCM address.
5. Press "**CLEAR**" key twice. "**Configuration**; **Comm. settings**" will appear in the LCD display.

Entering ARTESIS MCM Nominal Voltage

1. Go to "**Configuration**; **Motor settings**" menu using ⬆⬇ keys.
2. Press "**ENTER**" key four times to go to "**Nominal voltage;Edit 230**" menu.
3. Enter motor nominal phase to neutral voltage using ⬆⬇keys.

   Motor nominal voltage is inverter output voltage supplied to the motor as phase-neutral voltage!
4. Press "**ENTER**" key twice to confirm voltage value.

Entering ARTESIS MCM Nominal Current

1. Press⬆ key to go to "**Nominal current;Display 300**" menu.
2. Press "**ENTER**" key twice. "**Nominal current; Edit 300**" will appear in the LCD display.
3. Enter motor nominal current using⬆⬇ keys.
4. Press "**ENTER**" key twice to confirm current value.

Entering ARTESIS MCM Nominal Frequency

1. Press⬆ key to go to "**Nominal freq.;Display 50.00**" menu.
2. Press "**ENTER**" key twice. "**Nominal freq.;Edit 50.00**" will appear in the LCD display.
3. Enter motor nominal frequency using⬆⬇ keys. Nominal frequency should be the frequency point where motor runs most of the time. In the check mode motor should run at this frequency point. Otherwise ARTESIS MCM will give Alarm 0x800000 (Frequency Range)
4. Press "**ENTER**" key twice to confirm frequency value.

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Please refer to ARTESIS MCM User's Manual for details.

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1

Entering Motor Speed

1. Press ⬆ key to go to "**Nominal RPM**; **Display 1500**" menu.
2. Press "**ENTER**" key twice. "**Nominal RPM**; **Edit 1500**" will appear in the LCD display.
3. Enter motor speed using⬆⬇ keys.
4. Press "**ENTER**" key twice to confirm motor speed value.

Entering Motor Connection Type

1. Press ⬆ key to go to "**Connection type**; **Display Star**" menu.
2. Press "**ENTER**" key twice. "**Connection type**; **Edit Star**" will appear in the LCD display.
3. Enter motor connection type using⬆⬇ keys.
4. Press "**ENTER**" key twice to confirm motor connection type.

Entering Calibration Values

1. Press "**CLEAR**" key twice and using ⬆⬇ keys go to "**Configuration**; **Calibration**" menu.
2. Press "**ENTER**" key twice and using ⬆⬇ keys go to "**I Channel1**; **Display 1.000**" menu.
3. Press "**ENTER**" key twice. "**I Channel1**; **Edit 1.000**" will appear in the LCD display. Find the calibration value of the current sensor from below table and enter this value using⬆⬇ keys.
4. Press "**ENTER**" key twice to confirm current calibration value and using ⬆⬇ keys go to "**I Channel2**; **Display 1.000**" menu.
5. Press "**ENTER**" key twice. "**I Channel2**; **Edit 1.000**" will appear in the LCD display. Enter current calibration value using⬆⬇ keys.
6. Press "**ENTER**" key twice to confirm current calibration value and using ⬆⬇ keys go to "**I Channel3**; **Display 1.000**" menu.
7. Press "**ENTER**" key twice. "**I Channel3**; **Edit 1.000**" will appear in the LCD display. Enter current calibration value using⬆⬇ keys.
8. Press "**ENTER**" key twice to confirm current calibration value.
9. Press "**CLEAR**" key four times to go to main menu. "**IDLE**" will appear in the LCD display.

Sensor	Input (A)	Output (mA)	Calibration Value
LA 55-P	50	50	1000
LA 55-P/SP1	50	25	2000
LA 105-P	100	50	2000
LA 200-P	200	100	2000
LA 305-S	300	120	2500
LT 505-S	500	100	5000
LF 1005-S	1000	200	5000
LT 1005-S	1000	200	5000
LF 2005-S	2000	400	5000
LT 2005-S	2000	400	5000

Starting ARTESIS MCM Check Mode

1. Before sending ARTESIS MCM unit to check mode, ensure that motor is running and voltage and current sockets are connected.
2. Press ⬆ key to go to "**Check**" menu.
3. Press "**ENTER**" key twice to send ARTESIS MCM to "**CHECK**" mode.
4. Wait until "**CHECK**" mode is finished. Check mode will take approximately 2 minutes.
5. Once "**CHECK**" mode is finished, ARTESIS MCM will display either the message "**Motor values**" or a warning or alarm indication. At this point ⬆⬇ keys can be used to cycle through a list of calculated parameters. If an **"Alarm"** is present, left and right keys will cycle through the list of alarms. In this case problem related with this Alarm should be fixed and ARTESIS MCM should be sent to **"CHECK"** mode one more time. Please refer to ARTESIS MCM User's Manual for details.

Starting ARTESIS MCM

1. Press "**CLEAR**" key twice to go to main menu. "**IDLE**" will appear in the LCD display.
2. Go to '**Run**' menu using ⬆⬇ keys and press '**ENTER**' key twice to start ARTESIS MCM.
3. At this point **"Lose learn data? Clear to exit"** message might appear. If you see this message, press '**ENTER**' key to accept.
4. '**LEARN**; **iteration 1**' message will appear in the LCD display. Ensure that iteration number increases every 1.5 minutes.
5. Connect communication socket and establish computer connection through MCMSCADA + Diagnostics and finish ARTESIS MCM installation.

If the motor runs at a frequency point other than nominal frequency in Learn mode, ARTESIS MCM will give Alarm 0x800000 (Frequency Range). Once Learn mode is completed ARTESIS MCM will work at all frequency points without giving a frequency range alarm.

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