

Ducted Systems Technical Services Service Tips Letter

Letter: **ST-010-2020**

Date: May 29, 2020

To: All Unitary Products Branch Service, Sales, and Training Managers

All Unitary Products Distribution Service, Sales, and Training Managers

Subject: Delta Variable Frequency Drives (VFD)

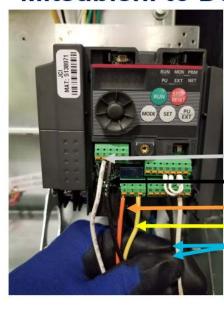
Product: Commercial

Summary: Mitsubishi VFD to the Delta VFD

1. Recently, Johnson Controls changed VFD's from a Mitsubishi D700 series to a Delta MS300 series. The wiring from a Mitsubishi VFD to a Delta VFD is as follows;

Mitsubishi Terminal Code	Drive Control Wire	Wire Color	Delta Terminal Code
А	24V input	Orange	RA
С	Fault 24V Out	Yellow	RC
2	0-10 VDC Signal	White	AVI
5	Analog Common	Black	ACM
STF	Run Close	White	MI1
SD	Run Close Common	Black	DCM

Mitsubishi to Delta



2 (0-10VDC Signal) AVI

5 (Analog Common) ACM

A (24V input) RA C (Fault 24V Out) RC

STF/STR (Run Close) MI1 SD (Run Close Common) DCM



2. The Parameters are as follows;

Description	Delta Parameters	Mitsubishi Parameters
Carrier Frequency	00-17	N/A
Source of the master frequency command (AUTO)	00-20	N/A
Source of the operation command (AUTO)	00-21	N/A
Stop method	00-22	250
Digital keypad STOP function	00-32	N/A
Output frequency of motor	01-01	1
Output voltage of motor	01-02	19
Output Frequency Minimum	01-07	2
Accel Time	01-12	7
Decel Time	01-13	8
Zero Speed Setting	01-34	N/A
AVI voltage lowest point	03-03	N/A
Positive/negative bias mode (AVI)	03-07	N/A
Analog input Gain (AVI)	03-11	N/A
Full-load current of induction motor (A)	05-01	9
Rated power of induction motor (kW)	05-02	N/A
Rated speed of induction motor (rpm)	05-03	N/A
Over-current stall prevention during operation	06-04	22
Over-torque Detection Selection	06-06	N/A
Over-torque Detection level	06-07	N/A
Over-torque Detection Time	06-08	N/A
Treatment of restart after Fault	07-10	N/A
Restart Times after fault	07-11	67

3. The Parameters may be adjusted after entering the Passcode;

Enter Password to Unlock VFD

Pressing the ENTER button will ring up the first segment of the parameter display.

Press ENTER a second time and the second segment parameter point appears.

Press the UP arrow to 00.07

Press **ENTER** and 0 is displayed.











Press **ENTER** to accept the password. Display will show **END** then revert to 00.07



Password is now entered and all parameters will be visible and can be changed.

***If the unit is going off on Alarm code "Ot1", you can change parameter 06.06 to 1.

This will not allow the VFD to Over Torque (Ot1), but your Hertz will be limited to the maximum Amp draw of the unit.

Press the **Mode** button and "**0**0." will appear.



Press the UP arrow to **06.**



Then press **ENTER**. "06.00" Will be displayed.



Press the UP arrow to **06.** "06.06" will be displayed.



Then press ENTER. "2" will be displayed.



Press the DOWN arrow to 1. Press ENTER.



Now turn off power to the unit. Only turn power back on after a minimum of 30 seconds.

4. The following link will provide additional guidance;
$\underline{https://www.dropbox.com/s/aiqd4954cty2m11/Delta\%20Password\%201234.mp4?dl=0}$
5. Seek guidance from your local distributor or contact Tech Services at 1-855-251-8267 with any questions you may have.