



Using ABB VFD Drive Composer For VFD Parameter Settings

Instruction No. 050164A

IMPORTANT: Any parameter adjustments must **ONLY** be performed by an experienced tunneling technician familiar with VFD drives.

This instruction provides detailed procedures to modify or change the VFD parameter settings on control containers equipped with the ABB ACS880 VFDs and the ABB Drive Composer program.

- Loading/Restoring Parameter Set - page 1
- Changing VFD Drive Name - page 3
- Changing Drive Motor Parameter Setting - page 5

Loading/Restoring VFD Parameter Set

The loading/restoring VFD parameter set is necessary when the MTBM is being switched from a center drive MTBM to a periphery drive MTBM or vice versa, also if the drive motor HP is changing.

It is very important to be sure the correct VFD parameters for the MTBM are set, otherwise the MTBM will not function correctly.

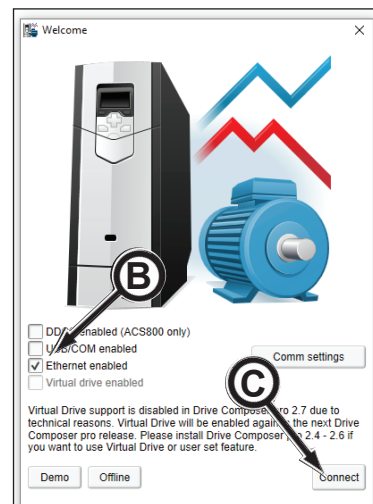
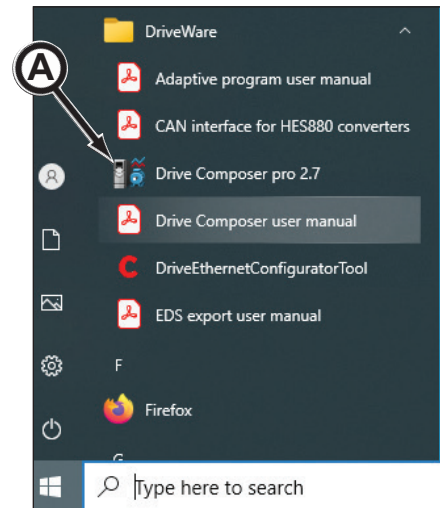
1. BEFORE powering up VFDs:

- All control container switches must be flipped to the OFF or Stop positions.
- Verification must be received from equipment operators that it is acceptable to start up VFDs. Failure to do so may cause serious injury or death from unintended equipment reactivation.

2. Power up VFDs: Cutterhead, Booster, Return and Feed.

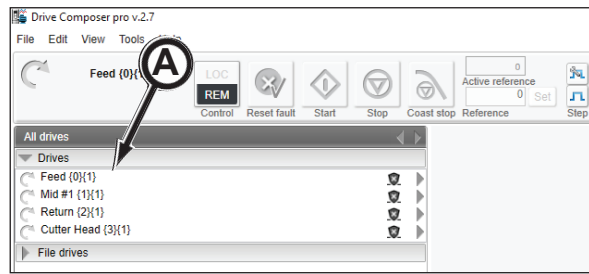
3. Open Drive Composer program. Click Drive Composer Pro (A).

4. The Welcome window appears. Be sure Ethernet enabled box (B) is checked. Click Connect button (C).

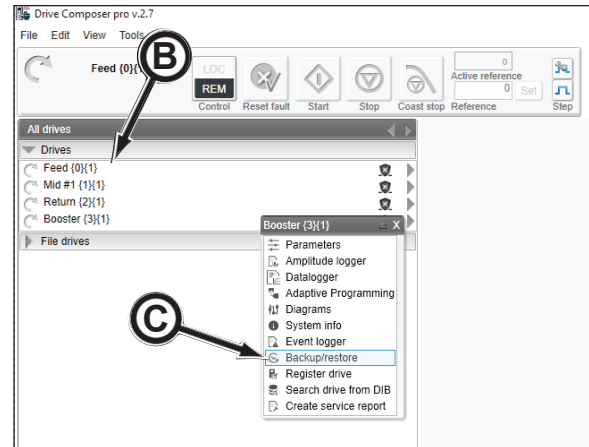


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5. The Drive Composer program window appears, listing any VFD drives (A) that are powered up.

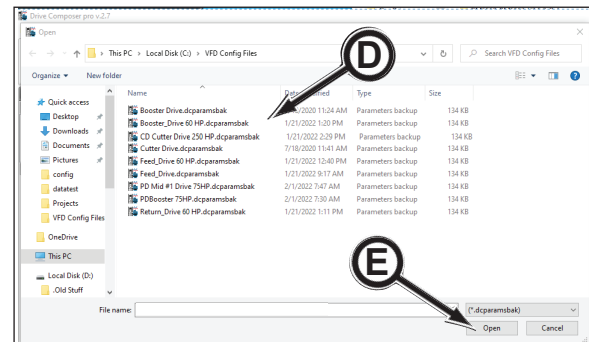


6. Right click on the desired drive (B) to restore parameters. A pull down menu will appear. Click Backup/restore (C).

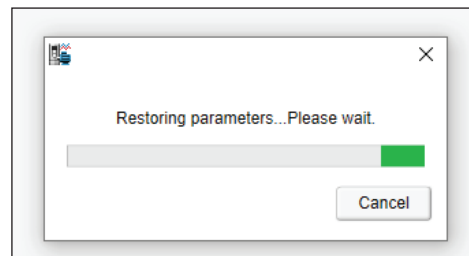


7. The VFD Config Files directory appears. Click the desired configuration file (D) to restore the correct parameters for the drive. Click Open button (E).

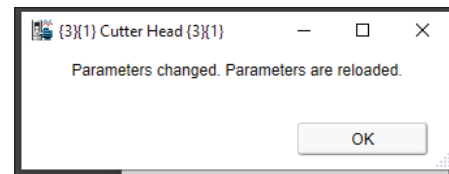
NOTICE If appropriate parameter set is not available and must be recreated, refer to Changing VFD Drive Name on page 3 and Changing Drive Motor Parameter Setting on page 5.



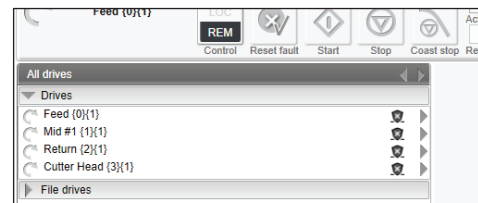
8. The Restoring parameters window appears indicating the restoring of parameters is in process.



9. Once parameters are restored the Parameters change confirmation window appears. Click OK.



10. Restore parameters on other VFD drives as needed. Once all VFD drives have the correct parameters for the equipment being used, close out of the Drive Composer program.



Changing VFD Drive Name

Changing the VFD drive name is necessary when the VFD being used is switching from, for example; cutter head to booster or vice versa.

1. BEFORE powering up VFDs:

- All control container switches must be flipped to the OFF or Stop positions.
- Verification must be received from equipment operators that it is acceptable to start up VFDs. Failure to do so may cause serious injury or death from unintended equipment reactivation.

2. Power up VFDs and open Drive Composer program (A).

3. The Welcome window appears. Be sure Ethernet enabled box (B) is checked. Click Connect button (C).

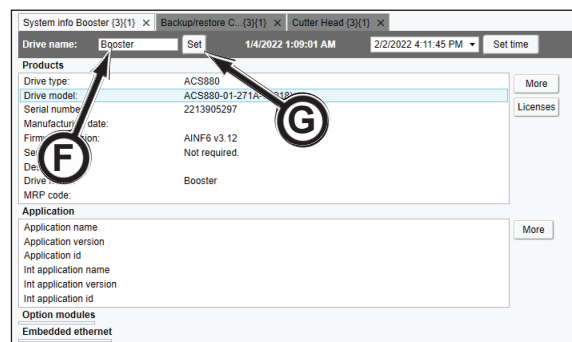
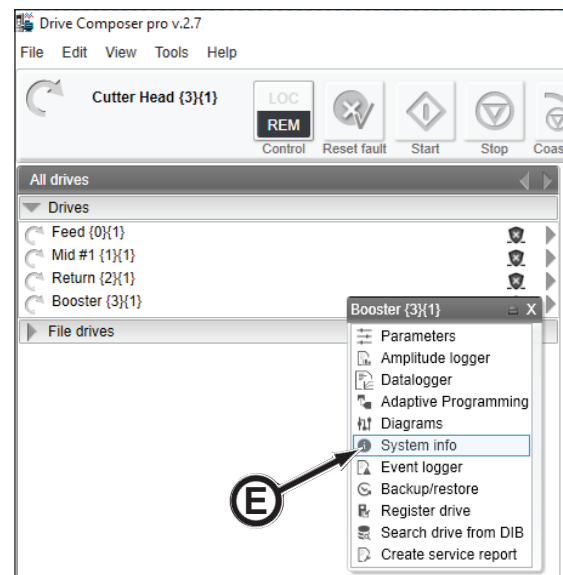
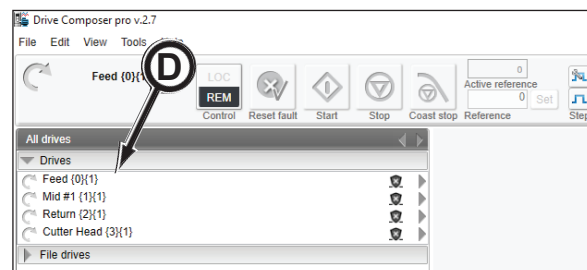
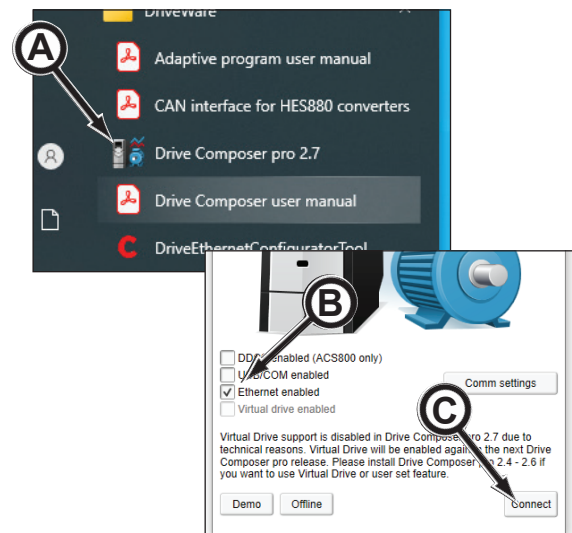
4. The Drive Composer program window appears, listing VFD drives (D) that are powered up.

5. Right click on the desired drive to rename. A pull down menu will appear. Click System Info (E).

6. The System Info window appears. In the Drive Name field (F), type new name and click Set button (G).

7. The main Drive Composer Pro screen appears with the new drive name.

8. To activate the new name on the VFD pendant display, power down the VFD. Once the pendant display is off, power up the VFD.



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9. On the VFD pendant, confirm the new name by pressing select button on pendant.



10. The pendant display will synchronize with the VFD drive.



11. Once synchronization is complete, the main screen will display on pendant.
12. On Drive Composer program window, click File, then click Close to exit the Drive Composer program.

