



Warning! Qualified personnel who are familiar with AC drives and their applications are to perform the drive start up. All the safety and application information in the 605 Product Manual, HA463550U001 should be followed.

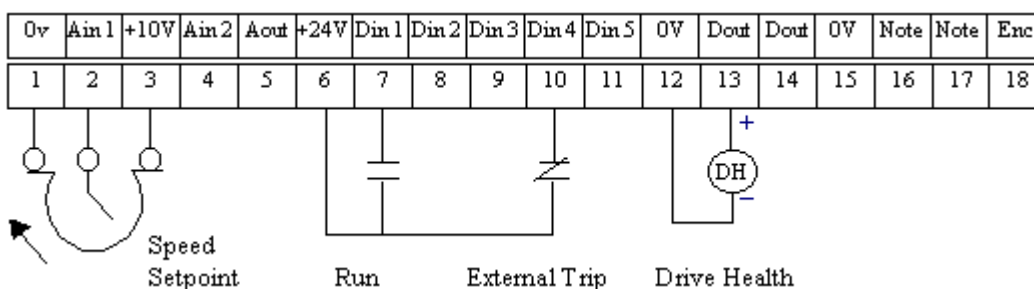
### Objective

To cover the basic start-up of the 605A and 605B drives using factory defaults.

### Procedure

Note: This document expects that the drive has already been installed in its intended location and that all relevant installation procedures have been followed.

Connect the drive as shown in the drawing below. The descriptions below describe each input or output required for a minimum configuration.

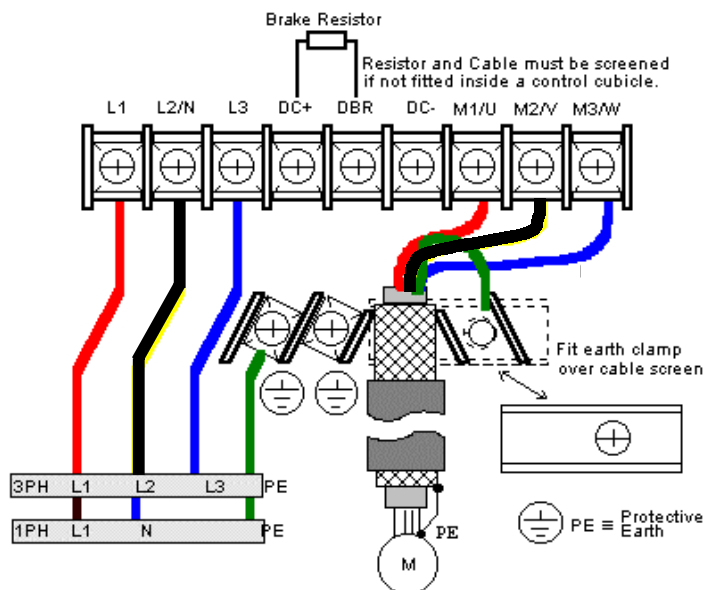


- Terminal 2 (ANIN 1) sets the motor speed. A potentiometer, as shown in the drawing, or a 2-wire speed signal can be used. Connect the 2-wire signal to terminals 1 (-) and 2 (+).
- Terminal 7 (DIN 1) starts/stops the motor; use either a contact or switch.
- Terminal 10 (DIN 4) trips the drive due to an external fault. While this is recommended, it is not required. If there is no external trip contact, jumper terminal 6 (+24 VDC) to terminal 10.
- Terminal 13 (DOUT) supplies a HEALTHY output. The drawing shows a relay connected to the terminal that can supply contacts for indication or other control.

### Power Connections

The drawing shows the power connections to the drive.

- Drive Supply - Connect the three-phase supply to terminals L1, L2, and L3. If you use a single-phase supply, connect the hot wire to terminal L1 and the neutral to L2/N.
- Motor Leads - Connect the motor to terminals M1, M2, and M3. Be sure to use shielded motor cable for best results. The drive has a clamp to secure the cable screen in place.
- Brake Resistor - Connect the resistor between the terminals DC+ and DBR (if needed). See the manual for sizing the resistor.



If you have questions, please call the Product Support Group at (704) 588-3246.



## Setup and Calibrate the Drive

The steps below display the take you to the parameters that must be set to operate the drive properly. The Key Stroke column refers to the buttons on the drive keypad.

Key Stroke	Display	Description
	AC Motor Drive 4.0 KW 400V 5.1	
	Operator Menu Menu at Level 1	
	Diagnostics Menu at Level 1	
	Setup Parameters Menu at Level 1	
	Quick Setup Menu at Level 2	
	Base Frequency 60.0 Hz	Enter the base frequency of the motor.
	Max Speed 60.0 Hz	Enter the desired maximum frequency of the motor.
	Full Load Calib 6.7 Amps	Enter the Full Load amps of the motor (from the motor nameplate).
	No Load Calib 3.2 Amps	Enter the ??? amps of the motor (from the motor nameplate).
	Setup Parameters Menu at Level 1	Return to the Setup Parameters menu level
	Vector Setup Menu at Level 2	
	Vector Enable False	
	Nameplate RPM 1750 n/min	Enter the nameplate RPM
	Motor Volts 460.0 V	Enter the motor output voltage from the motor nameplate.
	Autotune Enable False	Set to TRUE to autotune the motor and then press Start. This calibrates the drive to the motor.

Note: Generally, the “no load calib” is half of the full load current.

Note: Once you have tabbed down to the necessary parameter, by pressing the button this allows the needed value of the parameter to be adjusted.

Note: The has to be pointing towards the parameter that needs to be adjusted.

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### Autotune in Sensorless Vector Mode

1. In the VECTOR SETUP menu, set AUTOTUNE to TRUE.
2. Press the L/R key to switch to LOCAL mode.
3. Press START to start the Autotune process.
4. When the drive stops and no error messages are displayed on the MMI, the Autotune was successful. Navigate to the Menu Level::Save Parameters and save your settings to SAVE TO MEMORY.

Key Stroke	Display	Description
	AC Motor Drive 4.0 KW 400V 5.1	
	Operator Menu Menu at Level 1	
	Menus Menu at Level 1	
	View Level Basic	Change the setting to Advanced
	Menus Menu at Level 1	
	Setup Parameters Menu at Level 1	Press three times to reach this menu.
	Quick Setup Menu at Level 2	
	Function Blocks Menu at Level 2	Press twice to reach this menu.
	Inputs & Outputs Menu at Level 3	
	Motor Control Menu at Level 3	Press three times to reach this menu.
	Setpoint Scale Menu at Level 4	
	Autotune Menu at Level 4	Press eight times to reach this menu.
	Autotune Mode Calc No Load I	Change to User No Load
	Autotune Enable False	Change to "TRUE", then press "Start"

Note: Once you have tabbed down to the necessary parameter, by pressing the button this allows the needed value of the parameter to be adjusted.

Note: The has to be pointing towards the parameter that needs to be adjusted.

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