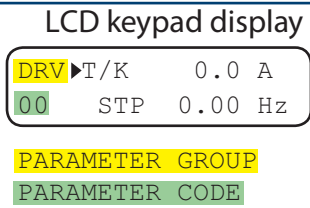
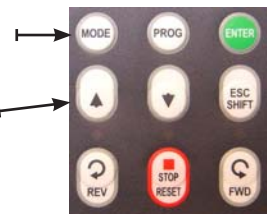


**CERUS INDUSTRIAL**  
*Excellence in Motor Controls*  
 3101 SW 153rd Drive, Beaverton, OR 97006  
**P Series VFD V0.4**  
**Quick Start Guide**



The Mode Button moves you through the five program groups: DRV > FU1 > FU2 > I/O > APP > DRV

Use the ↑ (Up) & ↓ (Down) keys to cycle through the parameters within each group and to adjust settings within parameters.



Parameter	Description	Fan & Pump - Recommended Settings
DRV-00	Frequency Command / Reference	Local Speed Control: Set target speed in Hz (*PID see below)
DRV-03	Drive Start / Stop Control Method	Local Control: Keypad Remote Control: Fx/Rx-1
DRV-04	Frequency Setting Method	Local: KeyPad-2 Remote: V1 for 0-10V or PID Control: KeyPad-1 I for 4-20mA
FU1-01	Forward / Reverse Run Disable	Rev. Prevention
FU1-33	High / Low Frequency Limit Enable	If Needed: Yes (Do not use for PID control)
FU1-34	Minimum Frequency Limit. (Only visible if FU1-33 = Yes)	Set desired low limit in Hz (Do not use for PID control)
FU1-49	For P4 VFD base input voltage is 440VAC. In the USA it should be set to 109.1% 480VAC. For P2 VFD base voltage is 220VAC at 100%.	109.1% for 480V power / 104.5% for 230V power / 94.5% for 208V power
FU1-50	Motor Rated Voltage	230V or 480V
FU1-66	Overload Trip	Yes
FU1-68	Overload Trip Delay Time	30.0sec.
FU1-69	Input/Output Phase Loss Protection	111 - not needed for 1Ø input
FU1-70	Stall Prevention (for high starting torque motors set FU1-71 to 105-110%)	111
FU2-20	Power on Start (VFD will start if remote start contact is closed at drive power-up)	Yes
FU2-21	VFD will Restart After a Fault was Reset	Yes
FU2-22	Speed Search (VFD will start on the fly if motor is still spinning)	1110
FU2-25	Number of Auto Restart Attempts	3
FU2-26	Restart Delay (Set as maximum as possible for your application)	60.0sec.
FU2-40	Motor Size: kW=HP x 0.75	Kilowatt rating of motor
FU2-41	Number of Motor Poles: # of Poles=7200 ÷ max RPM of motor	Number of motor poles
FU2-43	Motor Full Load Current = Full Load Amps x Service Factor	Motor Full Load Current

**Additional Parameters for Proportional Integral Derivative (PID) Control in Single Motor Applications**  
 (Typically used when VFD needs to maintain a desired pressure or temperature based on direct sensor feedback to VFD)

*DRV-00	PID Set Point (DRV-04 must be set to Keypad-1 or Keypad-2)	Set Point=(Desired press or temp) x 60Hz ÷ (Max Range of sensor)
APP-02	Select Yes for Using Internal PID Control with Analog Sensor	Yes
APP-06	Feedback for PID control: select I for 4-20mA or V1 for 0-10V	I for 4-20mA feedback or V1 for 0-10V feedback
APP-07	Proportional Gain for PID Control Response	Higher percentage = greater speed change at same feedback value
APP-08	Integral Time for PID Control Response	Higher number = longer response time at same feedback value
APP-11	Minimum Frequency Limit for PID Control	Set desired low limit in Hz
APP-15	Select Yes to Invert PID Control Output (If VFD should increase speed if feedback value is higher than set-point)	Yes = Inverted PID Control No = Standard PID Control
APP-63	Sleep Mode Delay Time (Sleep Mode parameters only visible if APP-01 is set to MMC and APP-43 must be set to 0)	Desired sleep mode delay time in seconds
APP-64	Sleep Mode Frequency (VFD enters sleep mode when VFD speed decreases below frequency entered here for time set on APP-63)	Desired sleep frequency in Hz (If minimum frequency is entered on APP-11, set APP-64 to .5-1Hz. higher than APP-11)
APP-65	Sleep Mode Wake Up Level (Differential percentage of Set Point value for wake up level)	Usually set to 2-5%

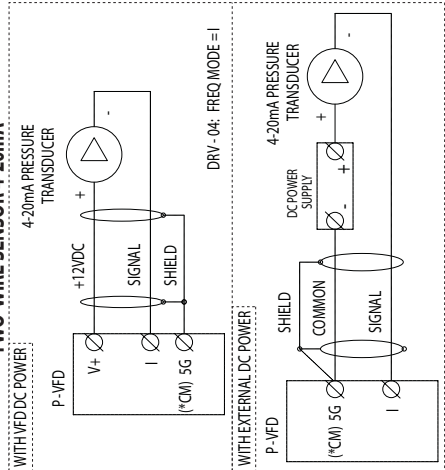
**Save/Upload, Download, & Reset Parameters**

FU2-91	Save all Parameters to Keypad (Use this parameter to Read and Save all settings from the VFD into the Keypad and permanently Save changes)	Save Parameters: Yes (Will return to No when done)
FU2-92	Download Parameters from Keypad to VFD (Use to program any P-Series VFD with Settings that have been Saved to the Keypad)	Load Parameters: Yes (Will return to No when done)
FU2-93	If Needed, Use this Parameter to Reset all Settings to Default	Reset all Settings: All Groups (Will return to No when done)

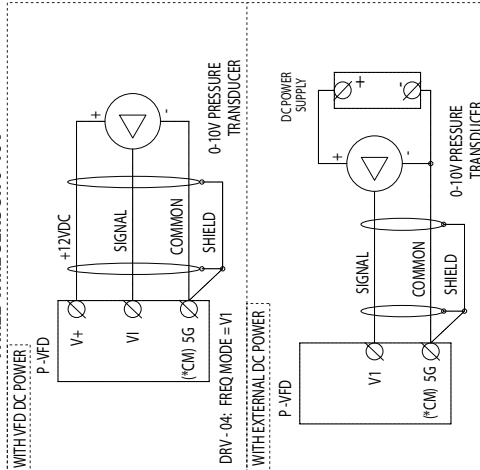
See reverse for generic and optional wiring diagrams.

**Call 800-962-3787 or visit cerusind.com**

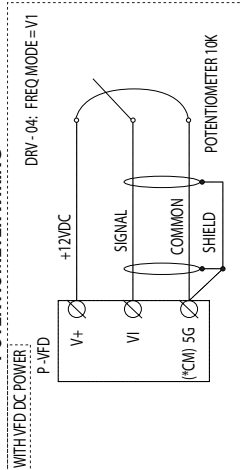
### TWO-WIRE SENSOR 4-20mA



### THREE-WIRE SENSOR 0-10V

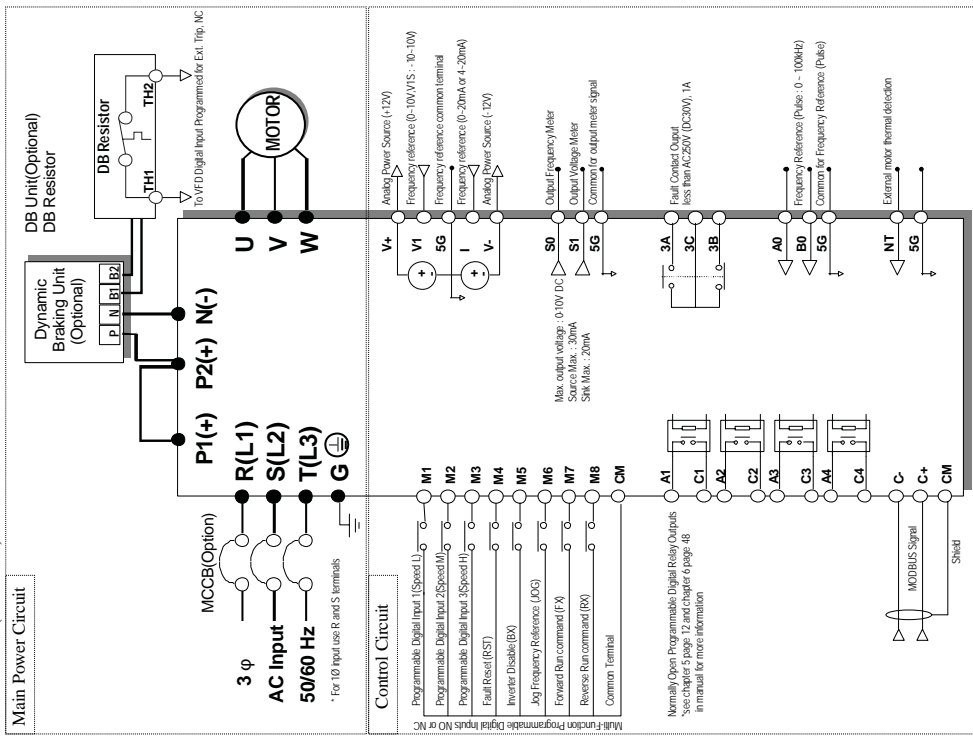


### POTENTIOMETER WIRING



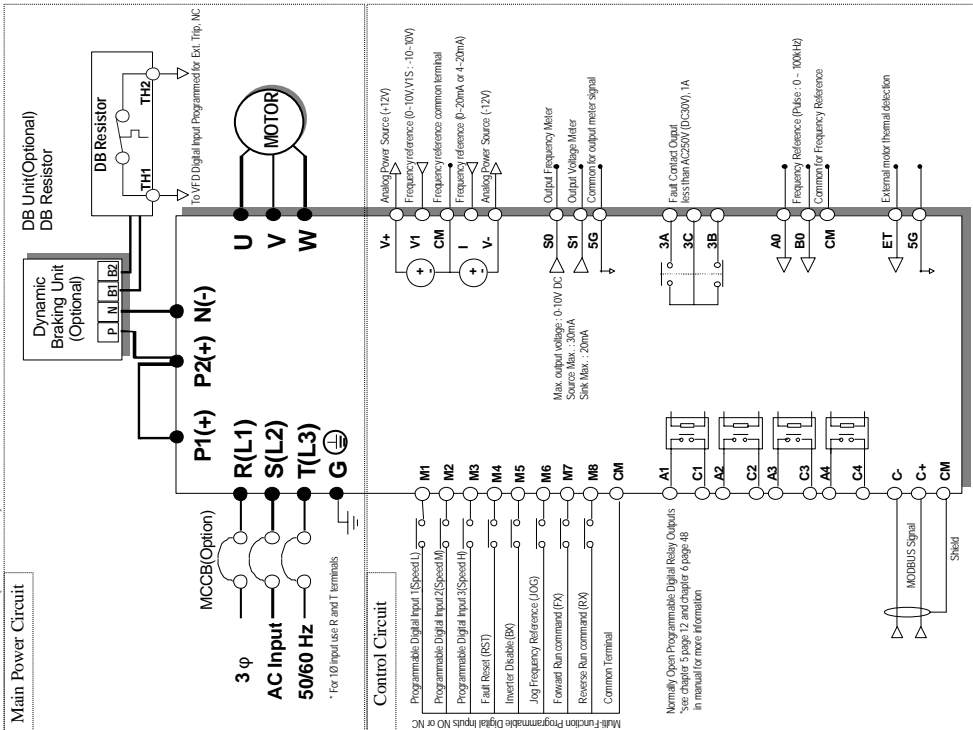
\*NOTE: USE '5G' FOR 7.5-40HP VFDs and 'CM' FOR OVER 40HP VFDs.

For 5.5~30kW (7.5~40HP)



Note : 1) 5G is Common Ground for Analog Input/Output.  
2) Use terminal V1 for V1, V1S (0-10V, -10 - 10V) input.

For 37~90kW (50~125HP)



Note : 1) CM is Common Ground for Analog Input.  
2) 5G is Common Ground for Analog Meter Output(SG S1) and External motor thermal detection(ET).  
3) Use terminal V1 for V1, V1S (0-10V, -10 - 10V) input.