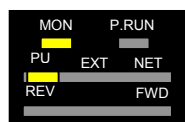


**PROGRAMMING THE MODEL F700 MITSUBISHI DRIVE.**



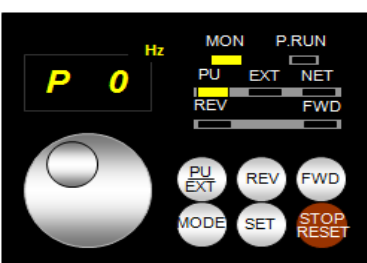
Make sure drive is not running.

1 Push PU/EXT Button until PU Light is lit.

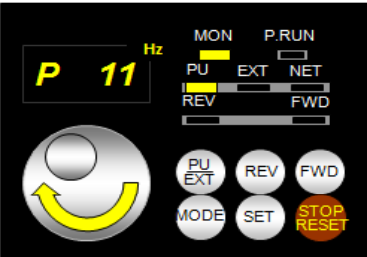


2 Push MODE Button until 1st letter of display is (P) or some other P number.

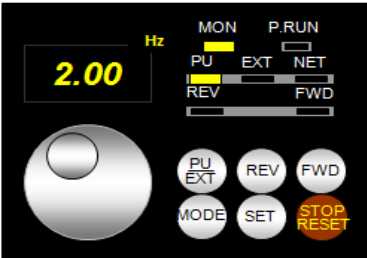
This is how it will look after Pushing MODE Button.



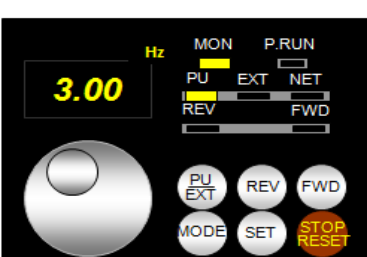
3 With Dial scroll thru the Parameters until you get to the one you want to change.



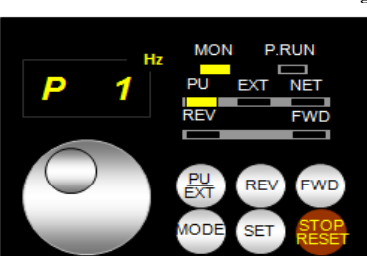
4 Push the SET Button. The number you see now is the value stored in that Parameter.



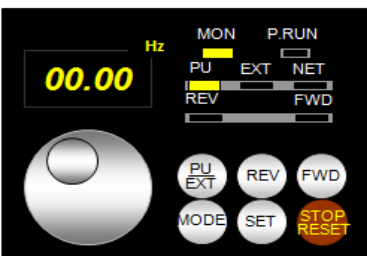
5 With Dial scroll UP or DOWN to change to the value you want.



6 Push the SET Button. This stores the change you have just made. The display will now flash between the P number and the new setting.



7 You can now continue the rest of the programming using the listed Parameters below.



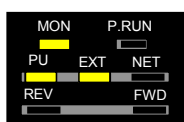
8 Programming is complete.

Push the MODE Button twice to get back to the Frequency Screen. It will say 0.00.

**VFD PROGRAM SETTINGS FOR TYPICAL PUMP INSTALLATION**

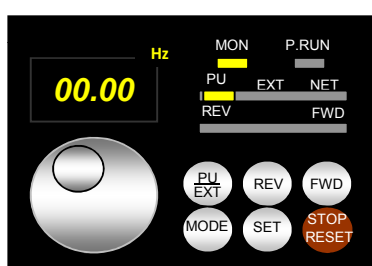
- PARAMETER SETTINGS
- P1 = 60Hz ( Maximum Speed Setting )
- P2 = 30Hz ( MINIMUM OUTPUT SPEED ) ( Unless you are told otherwise set to at least 20HZ )
- P7 = 30 Seconds ( Accel Time )
- P8 = 30 Seconds ( Decel Time )
- P9 = FLA of Motor ( Typically set at Motor Nameplate Amps x Service Factor )
- P67= 5 ( Auto Restarts on Fault ) ( Set at 5 unless told otherwise )
- P77 = 2 ( Write to VFD when it is running )
- P79 = 1 ( If Start/Stop and Speed Control from Keypad )
- 2 ( If Start/Stop and Speed Control from Terminal Strip )
- 3 ( If Start/Stop from Terminal Strip and Speed Control from Dial on Keypad )

\* P79 is usually set to 3 ( Start/Stop from a switch or the pivot control and the speed from the Dial on the Keypad. The following lights will be on when this is your setting.

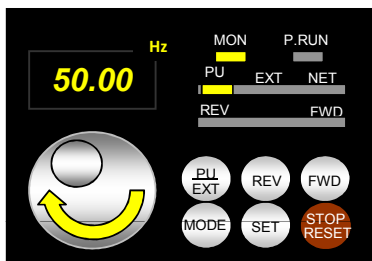


**CHANGING THE SPEED FROM THE KEYPAD.**

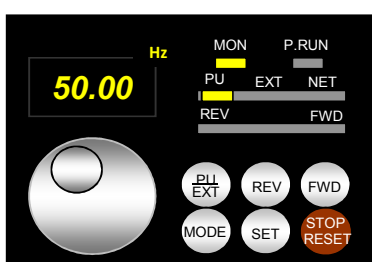
1. Push the Dial in.



2. Turn Dial to desired Speed. ( 60 Hz is equal to Full Speed of Motor )



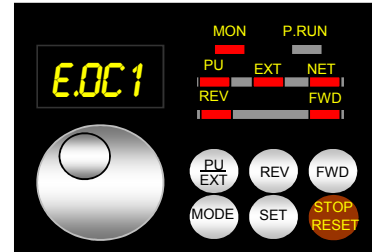
3. Push the SET Button to store.



That's it.

**ALARMS**

Alarms are just that, Alarms. It very seldom means there is anything wrong with the unit, rather there is something wrong in the programming or something is going on with the motor. **DON'T PANIC, CALL US.**

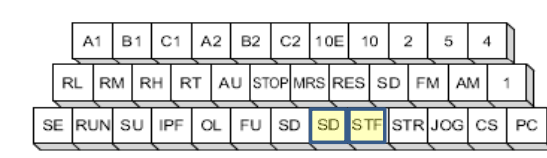


**4.1 List of alarm display**

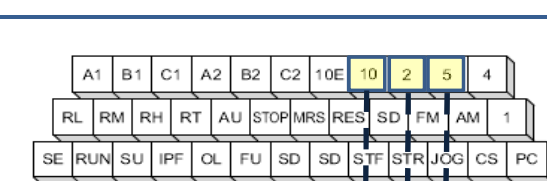
Operation Panel Indication	Name	Refer to	Operation Panel Indication	Name	Refer to
HOLD	HOLD	213	E.L.F	E.L.F	219
Er 1	Er 1 to 4	213	E.O.L	E.O.L	219
Er 2	Er 2 to 4	213	E.G.F	E.G.F	219
Er 3	Er 3 to 4	213	E.L.F	E.L.F	219
Err	Err	214	E.O.H	E.O.H	220
OL	OL	215	E.P.T	E.P.T	220
oL	oL	215	E.O.P	E.O.P	220
TH	TH	216	E.O.P	E.O.P	220
PS	PS	215	E. 1	E. 1	220
MT	MT	216	E. PE	E. PE	221
FN	FN	216	E.PUE	E.PUE	221
E.O.C.1	E.O.C.1	217	E. RET	E. RET	221
E.O.C.2	E.O.C.2	217	E. PE2	E. PE2	221
E.O.C.3	E.O.C.3	217	E. 6 / E. 7 / E. CPU	E. CPU	221
E.O.V.1	E.O.V.1	217	E.CTE	E.CTE	221
E.O.V.2	E.O.V.2	218	E.P24	E.P24	222
E.O.V.3	E.O.V.3	218	E.CDO	E.CDO	222
E.THT	E.THT	218	E.IOH	E.IOH	222
E.THM	E.THM	218	E.SER	E.SER	222
E.FIN	E.FIN	218	E.AIE	E.AIE	222
E.IPF	E.IPF	219	E. 13 / E. BE	E. BE	222
E.UVT	E.UVT	219			

\* If an error occurs when using the FR-PU04, "Fault 14" is displayed on the FR-PU04.

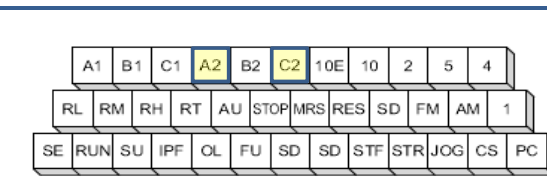
**CONTROL WIRE TO THE TERMINAL STRIP**



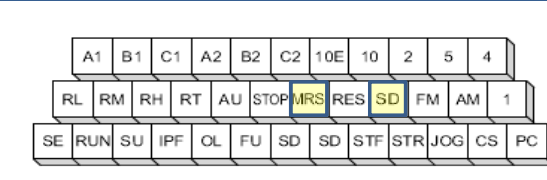
**START OR RUN INPUT SIGNAL ( STARTS THE PUMP )**  
Dry contact to STF and SD  
This Input could come from the ( Pivot Control - WELL KILL ) output.



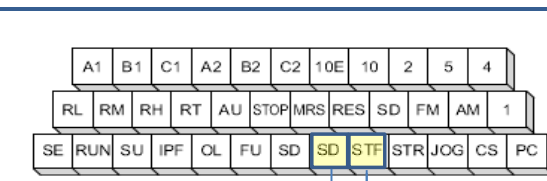
**POTENTIOMETER ( 1K Ohm )**  
TERMINAL 1 ( Positive 5VDC )  
TERMINAL 2 ( Wiper )  
TERMINAL 5 ( Negative )



**NITROGEN PUMP**  
A2 to C2 N.O. Contact. Closes on Start  
B2 to C2 N.C. Contact. Opens on Start  
\* Must Program P196 = 0  
Relay Rated for 230V, 3 Amps



**PEAK DEMAND INPUT FOR SHUTDOWN OF PUMP**  
INPUT STOP VFD ( N.O. )  
INPUT STOP VFD ( N.C. )  
For N.C. Contact Program P17 = 2

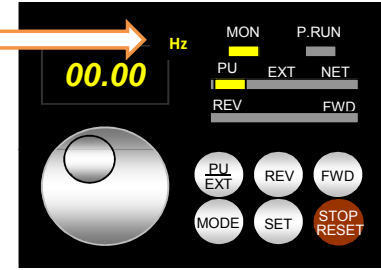


**HAND/OFF/AUTO ( STARTS THE PUMP )**  
Dry contact to STF and SD  
This Input could come from the ( Pivot Control - WELL KILL ) output.  
In Hand Pump Starts right away.

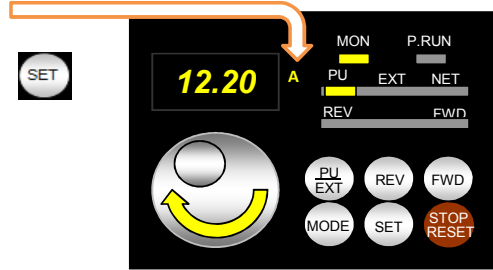


**VIEWING SPEED ( HZ ), AMPS AND VOLTAGE or USER SELECTABLE**

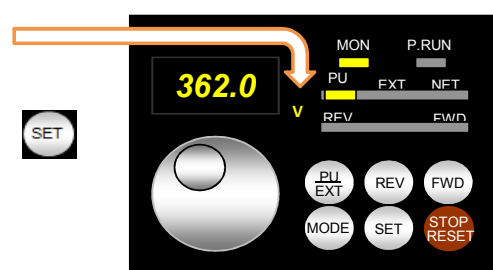
By Default you view HZ. 60 HZ is equal to full speed of motor.



Pressing the "SET" Button changes this to "AMPS"

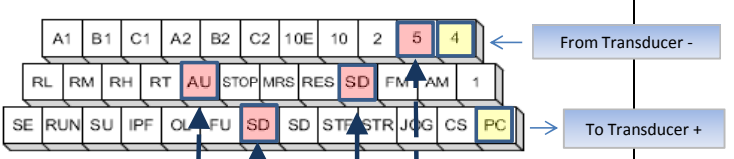


Pressing the "SET" Button again, changes this to either Voltage or whatever you choose in Parameter P52.



PRESSING THE "SET" BUTTON AGAIN RETURNS YOU TO "HZ".

**CONTROLLING PRESSURE WITH A TRANSDUCER**



**PRESSURE TRANSDUCER ( PID PRESSURE CONTROL )**  
TERMINAL "PC" to + POSITIVE SIDE OF TRANSDUCER  
TERMINAL "4" to - NEGATIVE SIDE OF TRANSDUCER  
Jumper TERMINAL 5 & SD  
Jumper TERMINAL AU & SD  
\* Must Program P184 = 14  
\* Must Program P128 = 20

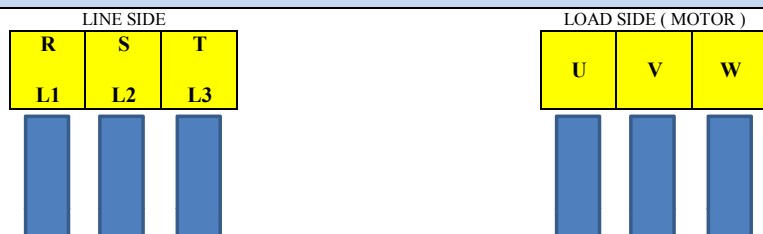
**ENTERING YOUR DESIRED PRESSURE SETTING**

The pressure setting is entered in Parameter "P133".  
It is entered as a percentage of the range of the transducer.  
\* Must Program P133 = Percentage of range of transducer.  
If you have a 0 - 100 psi transducer and you want to run at 60 psi, set "P133" to 60  
If you have a 0 - 150 psi transducer and you want to run at 60 psi, set "P133" to 40

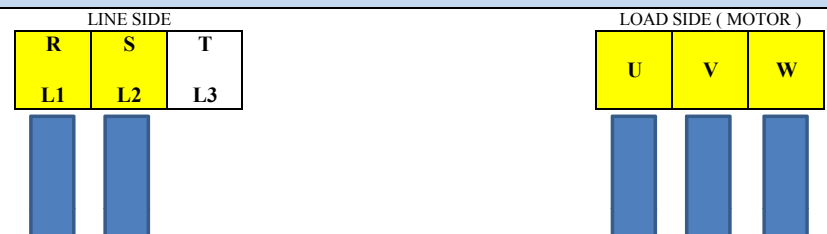
Formula ( Desired Pressure / Range of Transducer = Setting for "P133"  
Formula ( 65 PSI / 150PSI = 43 or 43%)

Your Feedback from Transducer can be viewed by changing parameter P52 = 53  
After doing this, you will see your Transducer Feedback rather than the Voltage.  
If you see 0.0 when you do this, there is a problem with the setup or wiring. Call us.

**HIGH VOLTAGE - LINE/LOAD - 3 PHASE**



**HIGH VOLTAGE - LINE/LOAD - SINGLE PHASE**



IF THE MOTOR IS RUNNING IN REVERSE, TWO LEADS MUST BE SWITCHED ON THE LOAD ( MOTOR ) SIDE OF VFD.

**ELECTRO POWER - TECH SUPPORT**

MINNESOTA	WISCONSIN	WISCONSIN
RICK STARCK	MIKE JESKE	JEFF STARCK
651-308-2181	414-476-6446	414-476-6446

For Manuals Drawings or anything else, check out our website: www.electropowerllc.com