

PROGRAMMING THE MODEL F700 MITSUBISHI DRIVE.





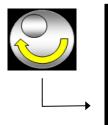


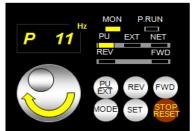
2 Push MODE Button until 1st letter of display is ($P\ 0$) or some other P number. This is how it will look after Pushing MODE Button.



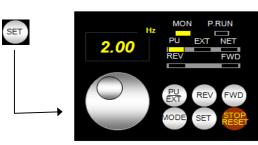


3 With Dial scroll thru the Parameters until you get to the one you want to change.





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



 ${\bf 5}$ 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 Programing is complete.

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

 $\underline{\textbf{VFD PROGRAM SETTINGS FOR TYPICAL PUMP INSTALLATION}}$ PARAMTER 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)

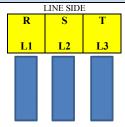
P79= 1 (If Start/Stop and Speed Control from Keypad)

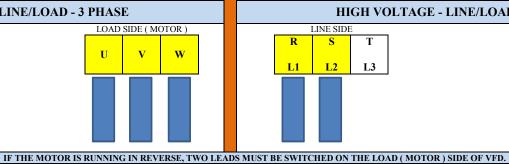
2 (If Start/Stop and Speed Control from Terminal Strip) 3 (If Start/Stop from Terminal Strip and Speed Control from Dial on Keypad)

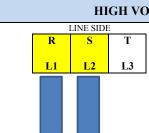
* P79 is usually set to 3 (Start/Stop from a switch or the pivot control and the speed from the Dial on the Keypad. The following lights will be on when this is your setting.

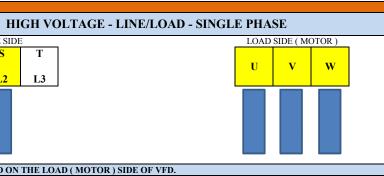


HIGH VOLTAGE - LINE/LOAD - 3 PHASE







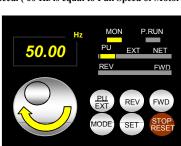


CHANGING THE SPEED FROM THE KEYPAD.

1. Push the Dial in.



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







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.**

	MON P.RUN
E.OC 1	PU EXT NET
	PU EXT FWD MODE SET STOP RESET

4.1 List of alarm display

Operation Panel Indication			Name	Refer to		Operation Panel Indication			Name	Refer to
	HOLd	HOLD	Operation panel lock	213		ELLE	E.	ILF*	Input phase failure	219
Error message	Er 1 to	Er1 to 4	Parameter write error	213		E.DLT	E.	OLT	Stall Prevention	219
	Er4					E. GP	E	.GF	Output side earth (ground) fault overcurrent protection	219
	-€ to -E4	rE1 to 4	Copy operation error	213		E. LF	E	.LF	Output phase failure protection	219
	Err.	Err.	Error	214		E.0H1	E.(ОНТ	External thermal relay operation*2	220
s	OL	OL	Stall Prevention (overcurrent)	215		EPCC	E.F	PTC*	PTC thermistor operation	220
Wamings	οĹ	oL	Stall prevention (overvoltage)	215		E.0P1	E.	OPT	Option alarm	220
Wa	ſH	TH	Electronic thermal relay function prealarm	216		E.DP	; E.	OP1	Option slot alarm	220
	ρς	PS	PU Stop	215		€.	; E	E. 1	Option alarm	220
	חר	MT	Maintenance signal output	216		E. PE	E	.PE	Parameter storage device alarm	221
Minor fault	Fn	FN Fan fault				EPUE	E.I	PUE	PU disconnection	221
			Fan fault	216	res	ErEl	E.	RET	Retry count excess	221
			0		Major failures	<i>ЕРЕ</i> 8	? E.I	PE2*	Parameter storage device alarm	221
	E.DC 1	E.OC1	Overcurrent shut-off during acceleration	217	Major	ε. ε	5/ _	E. 6 /	CPU error	221
	5.002	E.OC2	Overcurrent cut-off during constant speed	217	-	€. 7	7/ E	.7/		
	E.DC 3	E.OC3	Overcurrent shutoff during deceleration or stop	217		E.C.P.L	<i>j</i> E.O	.CPU		
	E.Du 1	E.OV1	Regenerative overvoltage cut-off during acceleration	217		ECCE	- E	E.CTE	Operation panel power supply short circuit RS-485 terminal power supply short circuit	221
res	E.D2	E.OV2	Regenerative overvoltage cut-off during constant speed	218		C.C. C				
Majorfailures	E.D 3	E.OV3	Regenerative overvoltage shut-off during	218		<i>EP2</i> 4		P24	24VDC power output short circuit Output current detection	222
Majo	ESHS	E.THT	deceleration or stop Inverter overload shutoff	218		2.5 3.3		CDO*	value exceeded	222
	EC HO	E.THM	(electronic thermal relay function) Motor overload shutoff	218		EJ OF	# E.I	IOH*	Inrush resistor overheat	222
	•		(electronic thermal relay function)			E.SEr	- E	SER*	Communication error (inverter)	222
	EFI n	E.FIN	Fin overheat Instantaneous power	218		E.RI E	Ε.	AIE*	Analog input error	222
	EJ PF	E.IPF	failure protection	219		E. 13	3/ E	E.13* /		222
Ш	EUur	E.UVT	Undervoltage protection	219		Е. ЬЕ	E.	BE	Internal circuit error	222

CONTROLLING PRESSURE WITH A TRANSDUCER

SE RUN SU IPF OLAFU SD SD STEATR JOG CS PC

 $\stackrel{-}{\mathsf{PRESSURE}} \stackrel{-}{\mathsf{TRANSDUCER}} (\, \mathsf{PID} \, \mathsf{PRESSURE} \, \mathsf{CONTROL} \,)$

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.

A1 B1 C1 A2 B2 C2 10E

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

From Transducer -

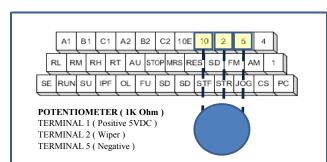
To Transducer +

CONTROL WIRE TO THE TERMINAL STRIP

A1 B1 C1 A2 B2 C2 10E 10 2 5 4 RL RM RH RT AU STOP MRS RES SD FM AM

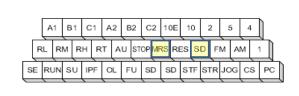
START OR RUN INPUT SIGNAL (STARTS THE PUMP)

Dry contact to STF and SD This Input could come from the ($Pivot\ Control$ - $WELL\ KILL$) output.

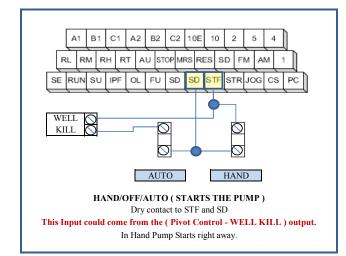


A1 B1 C1 A2 B2 C2 10E 10 2 5 4 RL RM RH RT AU STOP MRS RES SD FM AM SE RUN SU IPF OL FU SD SD STF STR JOG CS PC

> 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

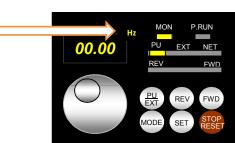






VIEWING SPEED (HZ), AMPS AND VOLTAGE or USER SELECTABLE

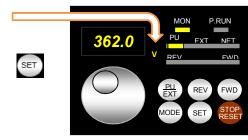
By Default you view HZ. 60 HZ is equal to full speed of motor.



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.



RICK STARCK

651-308-2181

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

	ELECTRO POWER - TECH SUPPORT	
MINNESOTA	WISCONSIN	WISCONSIN

MIKE JESKE

414-476-6446

JEFF STARCK

414-476-6446

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