



EATON M-MAX SERIES VFD QUICK REFERENCE PROGRAM MANUAL GUIDE.

This manual will help you maneuver thru the different screens to change and/or verify the parameters in this drive for the different pieces of Motor City Wash Works equipment used with this Eaton vfd.

BACK/RESET: This button is used to go back to previous screen. Pushing this button multiple times will take you back to the screen that causes the arrows on the left to blink. This is when you can push the arrow button up or down to toggle to REF, MON, PAR and FLT.

OK: this will save any changes or go to new screen wanted.

UP OR DOWN ARROWS: Will toggle up one or toggle down one.

RIGHT OR LEFT ARROWS: will toggle right one or left one.

LOC/REM: This is pushed when changing the arrow to I/O

PAR: This is the parameters section arrow needs to be in front of PAR.

MON: This is the monitoring section arrow needs to be in front of MON.

REF: This is the reference section arrow needs to be in front of REF.

To start press back reset button (pic. 1) until arrows on left of screen are blinking.

Press up or down arrow to maneuver arrow to PAR red arrows illustrate (PIC. 2).

When arrow is in front of PAR press the OK button (pic. 3)

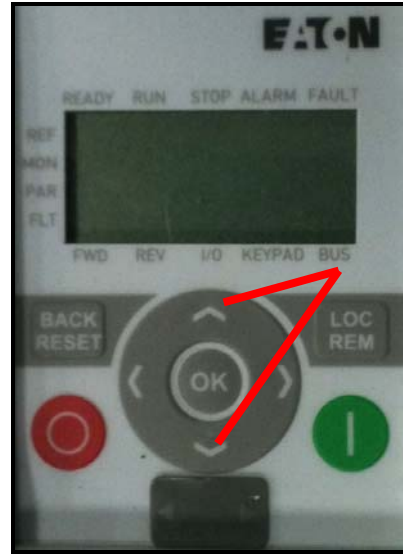
Now pressing the right arrow will toggle between P 1.1, P 2.1,P 3.1 and so on.

When you stay on P 1.1 for instance you can press the up arrow to toggle to the next parameter P 1.2, P 1.3 ect....

When you get to the parameter you want to change press the OK button (pic. 3) this will cause the value to blink use the arrow keys to change the value when done press the OK button. This will save the change to that parameter.



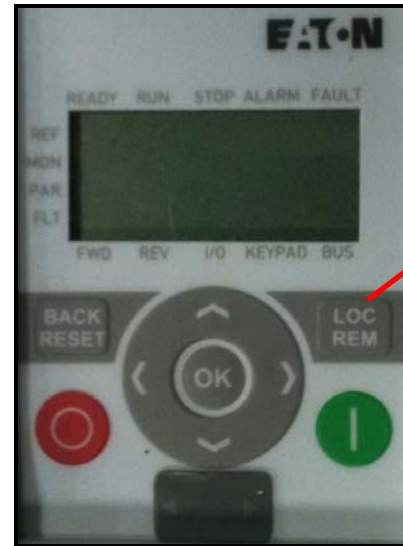
VFD SCREEN PIC. 1



VFD SCREEN PIC. 2



VFD SCREEN PIC. 3



VFD SCREEN PIC. 4

Follow all the parameters that need to be changed in the grid starting after page 3 of this document. Now press the back reset button until the arrows are flashing.

Press the LOC REM button to move the arrow to the I/O setting on the bottom of the display screen. (Pic. 4)

Press the BACK RESET button until arrows on left blink. Press up arrow until you get to REF. press OK then OK again change value to Hz desired for the type of equipment used.

Press BACK RESET until arrow blinks. Press down arrow get to MON press OK display is M 1.1 then OK again.

This will stay on this screen to display Hertz when drive is running.

HOW TO CHANGE THE SPEED OF A MOTOR AFTER PARAMETERS ARE SET:

If you need to change the speed of a motor you can do this by using REF screen and change the value higher or lower depending on end result wanted. This is the easiest way to change the speed value. CHANGING THE MAX. OR MIN TO ANY OTHER VALUE THAN SUGGESTED BY MOTOR CITY WASH WORKS WOULD BE AT YOUR OWN RISK.

1. Press "BACK/RESET" button. Confirm that the HMI left CURSOR flashes ON and OFF.
2. Using the arrows, move the CURSOR up from MON to REF.
3. Press OK. The output HZ is now displayed.
4. Press OK again. The last digit of the output HZ is now flashing.
5. Using the LEFT and RIGHT arrows, move the cursor to the digit you want to change.
6. Using the Up and DOWN arrows, increase or decrease the digit value. Press OK when done.
7. Press "BACK/RESET" button again and move the left CURSOR down to MON.
8. Press OK. Start the motor and confirm that the drive display the desired frequency when the motor is running.

NOTE: you can ONLY go as high as the maximum setting of P6.4 and ONLY as low as setting of P6.3 CHANGING THE MAX. OR MIN TO ANY OTHER VALUE THAN SUGGESTED BY MOTOR CITY WASH WORKS WOULD BE AT YOUR OWN RISK.

NOTE:

IN THE DISPLAY YOU NEED TO HAVE THE ARROW ON I/O FOR YOUR CONTROLLER TO BE ABLE TO RUN THE DRIVE. IF YOU ARE STILL ON KEYPAD THE DRIVE WILL NOT WORK FROM YOU CAR WASH CONTROLLER.

208 VAC EATON MMX32 VFD PARAMETERS FOR ALL MOTOR CITY WASH WORKS EQUIPMENT

PARAMETERS	CONVEYOR	WRAP	F2B & S2S MITTER	LO & HI BOY OR ROCKER	BULLDOG	TOP WHEEL	PARAMETERS DESCRIPTION
P 1.1	0	0	0	0	0	0	USING ALL PARAMETERS
P 1.3	1	1	1	1	1	1	60 HERTZ
P 5.1	F/S = 2	7	F/S = 2	F/S = 2	F/S = 2	7	7= REF. Hz REACHED 2= OPERATION RUN
P 5.4	F/S = 0	1	F/S = 0	F/S = 0	F/S = 0	1	1= FREQ. MONITOR MINIMUM 0= DEACTIVATED
P 6.1	F/S = 1	F/S = 1	F/S = 1	F/S = 1	F/S = 1	F/S = 1	CONTROL SIGNAL I/O
P 6.2	F/S = 1	F/S = 1	F/S = 1	F/S = 1	F/S = 1	F/S = 1	REMOTE REFERANCE = KEYPAD
P 6.3	30	30	30	30	30	30	MINIMUM FREQUENCY
P 6.4	80	60	80	80	80	80	MAXIMUM FREQUENCY
P 6.5	2	2	2	2	2	2	ACCELERATION TIME
P 6.13	1	1	1	1	1	1	AUTO RESTART ENABLED
P 6.16	0	0	0	0	0	0	STOP BUTTON ACTIVE 0= NO
P 7.1	3H.P. = 11 5H.P. = 17.5	14	7	10	14	7	MOTOR RATED CURRENT
P 7.5	208	208	208	208	208	208	MOTOR RATED OPERATING VOLTAGE
P 7.6	F/S = 60	F/S = 60	F/S = 60	F/S = 60	F/S = 60	F/S = 60	MOTOR RATED FREQUENCY
P 11.9	1.5	1.5	1.5	1.5	1.5	1.5	PULSE FREQUENCY
F/S = FACTORY SETTING SHOULD BE VERIFIED							

460 VAC EATON MMX34 VFD PARAMETERS FOR ALL MOTOR CITY WASH WORKS EQUIPMENT

PARAMETERS	CONVEYOR	WRAP	F2B & S2S MITTER	LO & HI BOY OR ROCKER	BULLDOG	TOP WHEEL	PARAMETERS DESCRIPTION
P 1.1	0	0	0	0	0	0	USING ALL PARAMETERS
P 1.3	1	1	1	1	1	1	60 HERTZ
P 5.1	F/S = 2	7	F/S = 2	F/S = 2	F/S = 2	7	7= REF. Hz REACHED 2= OPERATION RUN
P 5.4	F/S = 0	1	F/S = 0	F/S = 0	F/S = 0	1	1= FREQ. MONITOR MINIMUM 0= DEACTIVATED
P 6.1	F/S = 1	F/S = 1	F/S = 1	F/S = 1	F/S = 1	F/S = 1	CONTROL SIGNAL I/O
P 6.2	F/S = 1	F/S = 1	F/S = 1	F/S = 1	F/S = 1	F/S = 1	REMOTE REFERANCE = KEYPAD
P 6.3	30	30	30	30	30	30	MINIMUM FREQUENCY
P 6.4	80	60	80	80	80	80	MAXIMUM FREQUENCY
P 6.5	2	2	2	2	2	2	ACCELERATION TIME
P 6.13	1	1	1	1	1	1	AUTO RESTART ENABLED
P 6.16	0	0	0	0	0	0	STOP BUTTON ACTIVE 0= NO
P 7.1	3H.P.=4.8 5H.P.=7.6	6	3	4.5	6	3	MOTOR RATED CURRENT
P 7.5	460 (480)	460 (480)	460 (480)	460 (480)	460 (480)	460 (480)	MOTOR RATED OPERATING VOLTAGE
P 7.6	F/S = 60	F/S = 60	F/S = 60	F/S = 60	F/S = 60	F/S = 60	MOTOR RATED FREQUENCY
P 11.9	1.5	1.5	1.5	1.5	1.5	1.5	PULSE FREQUENCY
F/S = FACTORY SETTING SHOULD BE VERIFIED							