

## **E-Zee Milking Equipment, LLC**

Gordonville, PA. 17529 "Vacuum Pump & Motor Division"

Vacuum Pump Packages New & Rebuilt Blower & Vane Type Variable Speed Drives Custom Rebuilding Nationwide

Phone (717)-768-8544 1-888-304-6276 Fax (717)-768-8444

# **World Drive 4X**

# **Motor Speed Control/Phase Converter**

This Nema 4X Moister Proof Inverter can withstand most conditions found on the dairy when properly installed. With the main power knob on the front cover, it makes turning power On/Off easy to do. You can configure this Inverter to do 1 or 2 speeds with an external switch Inputs (Must be a Dry Contact) from manual Switches, Relays, Contactors or Probes.

## Wiring instructions

Connect L1 & L3 to a 220-volt single phase power

Connect U, V & W to the 3-phase motor - To reverse rotation switch any 2 of these wires

**LLC Control-**A dry contact signal must be sent to "CM" & "P1" in the terminal strip – This signal can be taken directly off the LLC board or thru the existing contactor – If using the contactor take all power wires off and make a loop on one side and run the other side to these 2 screws on the terminal strip. This can be a light gauge wire. supply – This needs to be powered up whenever the system starts up, both in milk or wash. When in Main Display press ENT to Ramp the Frequency to run at. *NOTE - The inverter will run continuously but will only apply power to motor when the LLC board sends a signal to run* 

**Other Controls Up to 2 Speeds -** Put a jumper wire to connect CM" & "P1" in the terminal strip to connect the Run Command. Ramp the main Display Frequency using the Keypad from "60 HZ" down to "0 HZ". Use Inputs "P3 or P5" to wire to the device with the Dry Contacts that you wish to command the Inverter to run at a set speed in HZ. See the Parameter list below for their setup. *NOTE - Some Settings will not change with the P1 & CM Jumper connected.* 

## Parameter Settings

### See Inverter manual for instructions on the main parameter settings

The Accel & Decel time can be adjusted. Go to ACC and adjust the ramp up time (no less than 5 seconds) Go to dEC and adjust the decel time

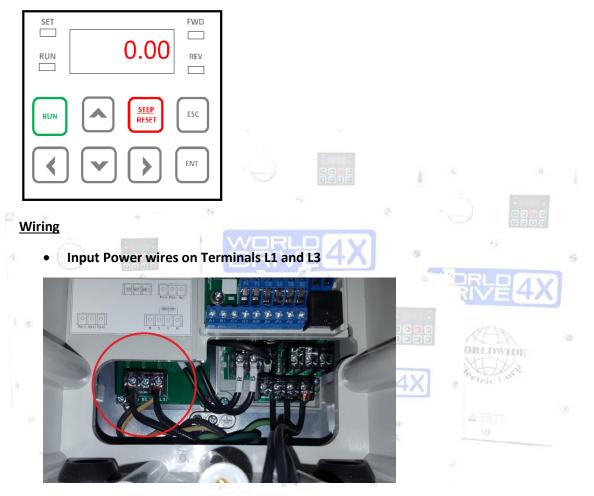
Other Controls Settings ST.1 - Set for desired Frequency Input P5 ST.2- Set for desired Frequency Input P3 Ad.10 – Set for 1 to allow Run command jumper to work after power loss. Dru - Set for 1 Ad.64 – Set for 2 for Auto Fan on Heat Sink Temp. IN.67 - Set for 8 Optional: Noise level can be adjusted – Go to CN 0, arrow up to 4, change to 5 For Tech Support or questions call John at 1-888-304-6276



Date: 7/13/18

### Model: WD4X

### Frequency Setting (Keypad) and Operation (Terminal Input)



### Keystrokes (Setting the frequency from keypad)

- Power Up VFD
- Display Reads 0.00
- Press Enter (Right zero begins to flash)
- Press the left arrow key to desired decimal location
- Press the up arrow to change the value
- Press Enter
- Display will flash the desired frequency setting

#### WD4X SINGLE PHASE POWER INPUT

Frequency Setting (Keypad) and Operation (Terminal Input)

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Press Enter

### Keystrokes (Operating Source is defaulted to input terminal)

• Close the contact between CM and P1 to run unit

### Keystrokes (Auto Tune)

- Press right arrow key
- dr.0 will display
- Enter
- Arrow up to dr.14
- Enter
- kW rating of the expected motor will be displayed
- Arrow down to correct motor size (see chart below)
- Enter
- Enter
- Press escape
- Press the right arrow key twice
- Display reads bA.0
- Arrow up to bA.11
- Press Enter
- Arrow up or down to set the number of poles (1800 RPM= 4 pole / 3600 RPM = 2 pole)
- Enter worldwill
- Enter
- Arrow up to bA.13
- Press Enter
- Arrow up or down to set the motor amperage
- Enter
- Enter
- Arrow Up to bA.14
- Press Enter
- Arrow up or down to set the no load current (Motor amps x .30/ Example: 5 amps x .30 = 1.5)
- Enter
- Enter
- Arrow up to bA.15
- Enter
- Arrow up or down to the Motor voltage (This can only be 220 Volts)

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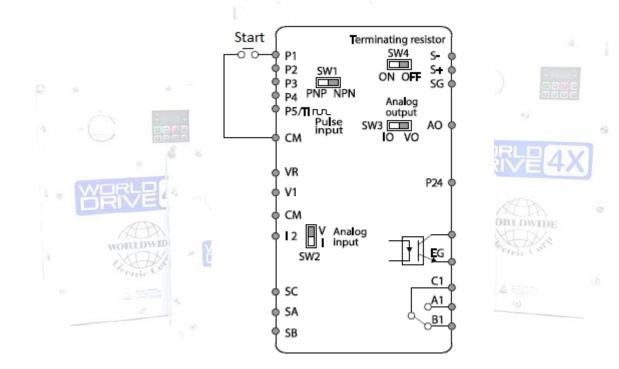
- Enter
- Enter
- Arrow up to bA.20
- Enter
- Arrow up to #2 (static auto tune)
- Auto tune will begin (This may take several minutes)
- When complete the display will return to the main screen
- Motor is ready to operate

	Drive Model		Motor kW	Motor HP		
	WD4X004-2		004 kW	.5 HP		
	WD4X008-2		008 kW	1 HP		
	WD4X015-2		01.5 kW	2 HP	0.00	
Q = 4 - 4 -	WD4X022-2		2.2 kW	3 HP		
ò III	WD4X037-2	RLD	3.7 kW	5 HP	65	
	WD4X055-2	IVE	5.5 kW	7.5 HP		9
4	WD4X075-2	1	7.5 kW	10 HP	RLDINV	
10	WD4X110-2	0	11 kW	15 HP	IVEHA	
	WD4X150-2		15 kW	20 HP	APA.	0
AFB	30	4			ORLDWIDE	
WORLDWI	Number of X Poles	RPM's		× .	Pertric of	
19	2 wonter Device	3600	ABA		4	
	4. 2/2	1800	-XEV's		0	
190	6	1200	Contract Of			
	8	900				
	10	720				
	12	600				

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