## Low Voltage 42V AC Motor Control Programmable Variable Frequency Drive

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\*\* This new innovative product's programming technique will force others to follow it from Date 10/10/2010 \*\*

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It is only one in it's kind of AC Drives, a unique Programmable Variable Frequency drive for Controlling Low Voltage 42V AC Induction Motor which itself is PLC - Programmable Logic Controller. Highly used for Barrel Plating in Metal Finishing Plant.

## Operating Mode:

O Programmed / Not Programmed.

### Key Features:

- Only unique feature to run motor forward for time set and as well as reverse mode after the particular time with programmable feature of step acceleration and deceleration in speed till you want to reach your desired speed from very slow speed to high speed or vice-versa in case of stopping the motor.
- Installing our VFD will save you minimum 30% 50% power even without changing the RPM of the barrel guaranteed...
- O Lower the RPM lower the current of motor and lower the Power consumed...
- O Some process which does not use rectifier like Phosphating, Pickling, blackning, etc you can reduce the RPM from 12 to as low as 3-6 RPM without affecting product quality thus the current in reduced by further 50%-75% so you save actually about 75%-85% of power which currently you are saving none by not using this product...
- O You get Power factor exactly one
- O Installing this VFD that you can change the RPM for different process to different different RPM's with help of 8 optional I/P's
- With help of VFD's the Life of barrel and Gearbox is increased by almost double since our VFD can be programmed to
  give slow acceleration and deceleration thus avoiding immediate jerk movement when motor starts and stops and thus
  improving life...
- O Installing VFD rectifies Motor burning problem and never let your motor burn this is because ideally if barrel has JAMMED then still motor takes more and more current to rotate the barrel and works but within month or two the motors burns while VFD does not allow motor to take surge current and instead give you fault indication with RED LED to let you know that barrel is not functioning optimally and needs maintenance and still further saves the unnecessary power too...
- O You can run motor from as slow as 1 Hz to maximum speed
- O You can program this variable frequency drive with help of Laptop or PC.

# • Technical Specification :

- O Optional 8 Digital Inputs.
- O Optional 2 Digital Input + 5 Analog Inputs
- O Optional 2 Digital Outputs
- O RS 232-C Serial Port
- O 4 Programmable timers
- O 8 Counters, 8 Booleans + System Counter
- O Input Volt: Single Phase 38 VAC To 50 VAC
- O Motor Output: 3 Phase 42 VAC For 0.25HP / 0.5HP
- O Under Volt Protected
- O Selectable/Programmable Over Current Protected
- O Selectable/Programmable Auto-Torque
- O Selectable/Programmable Voltage Boost
- O Selectable/Programmable Acceleration Rate 0 To 102.1 Hz
- O Selectable/Programmable Decelerate Rate 0 To 102.1 Hz
- O Selectable/Programmable Speed 0 To 102.1 Hz
- O Selectable/Programmable Direction Control Forward/ Reverse
- O Power On Indication via Green LED Light
- O Fault Indication via RED LED light

It can be programmed through RS232-C Serial Port, in Basic Programming Language with help of Mouse only with instruction easily available with complete help on PC.

Programmable Digital/ Analog-In Inputs + Outputs, which can be used the change the frequency (Speed)/ Direction/ Acceleration/ Deceleration / Auto-Torque/ Voltage Boost on time basis.

Different Type of Programs is possible with help of VgMotor42 compiler. For Wiring/Installing Help please <u>click here</u> For Programming Help please <u>click here</u> If you need further programming training you can <u>Contact Us</u>

### Wiring Diagram:

