

## AC MOTOR VARIABLE FREQUENCY DRIVES

When you add a Variable Frequency Drive (aka VFD) to an electric driven pump, you can increase its functionality and ease of use. A VFD can be used in place of a magnetic starter on three phase applications. Most VFDs can be programmed for soft starting, amperage monitoring, speed control, forward and reverse switching, and ramp-down. Also useful is their ability to accept standard control signals like 4-20 milliamps or 0-10 vdc to automate the operation of the pump within a system. You can add a VFD to a positive displacement pump and get metering pump-type results! Or, add it to a centrifugal pump to dial in the most electrically energy efficient operating point! A large portion of the AC electric driven pumps in this catalog can be fitted with a VFD, whether our shop wires it for you or we ship it loose with the pump for remote operation.



## BALDOR SERIES 5 MICRO-INVERTERS

- Fully loaded programmable vector drive with feedback
- Can operate under closed loop vector, sensorless vector or as standard VFD
- Motor Power range - 1 to 250 hp
- Input Voltage range - 115/230 vac, 1ph and 230, 460 or 575 vac, 3ph, 50 or 60 hz
- Output Voltage - 115/230 vac, 1ph and 230, 460 or 575 vac, 3ph
- Speed range - 1000:1
- Operator Interface - various analog or digital inputs
- Signal outputs - various analog or digital outputs
- LCD graphical display
- Enclosures available - NEMA 1 or NEMA 4X



## LEESON - MICRO SERIES

- Economical unit with more features and options
- Features - stop/start, forward/reverse, ramp-up/ramp-down
- Motor Power range - 1/2 to 60 hp
- Input Voltage range -115/230 vac, 1ph and 230 or 460 vac, 3ph
- Output Voltage - 230 or 460 vac, 3ph
- Speed range - 20:1
- Operator Interface - Local digital control, remote 0-10 VDC or 4-20 mA input
- Analog output signal 0-10 VDC
- Enclosures available -NEMA 4, NEMA 4X or NEMA 12



## RELIANCE SERIES VS1SP INVERTER

- Can be used for conventional VFD or encoderless vector control (see next page for vector controls)
- Features - stop/start, forward/reverse, ramp-up/ramp-down
- Motor Power range - 1 to 250 hp
- Input Voltage range - 115/230 vac, 1ph and 230, 460 or 575 vac, 3ph
- Output Voltage - 230 or 460 vac, 3ph
- Speed range - 90:1
- Operator Interface - Local digital control, remote +/-5 vdc, +/-10 vdc, 4-20 mA input
- Analog output signal - 0-5 VDC, 0-10 VDC, 1-20 mA, 4-20 mA
- Enclosures available -NEMA 1, Nema 12 or NEMA 4X

