



for a greener tomorrow

FR-F800-E SERIES FOR HVAC APPLICATIONS

Product Overview



FR-F800-E is a dedicated energy-saving VFD, optimized for the control of pumps, fans or compressors in HVAC applications. Available for use as a stand-alone drive or as part of a PowerGate Bypass Controller solution.

KEY BENEFITS:

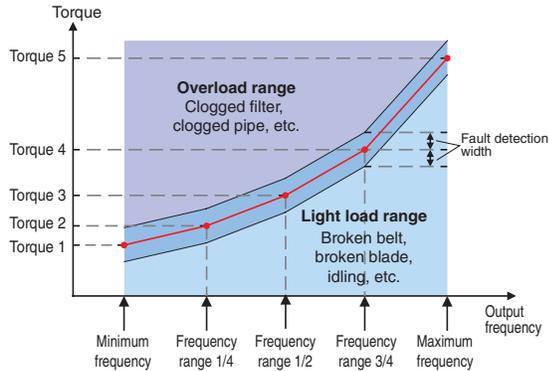
- **Reinforced UL-1 stand-alone design up to 40HP** – Allows the drive to be installed where you need it, without having to mount it in an enclosure. A conduit mounting box is included for easy power cable termination.
- **Plenum rating** – Means that FR-F800-E is safe to use in an air conditioning plenum
- **Easy set-up** – Using the FR-PU07BB keypad, FR-F800-E can be programmed without having to power up the drive first, speeding up the onsite commissioning process
- **Real time clock** – Allows time-based control and time stamping of trip messages
- **Anti-Windmill feature** – FR-F800-E effortlessly determines both the speed and direction of a spinning motor shaft before start up. The 'Coasting Motor Restart' system ensures a smooth and trip free control of windmilling fans or back-spinning pumps.
- **IPM motor capability** – The FR-F800-E provides up to 50% energy savings when combined with IPM based technology. Our embedded auto-tuning system allows plug and play optimization with many 3rd party IPM motors. This provides quick and easy setup and commissioning without time-consuming 'tuning' or the need for on-site support.
- **Direct entry of PID control variables** – PID variables such as pressure and temperature can be entered directly into the drive keypad during operation – no need to change drive settings.
- **Built-in BACnet (MS/TP or IP) communications** – Seamless connections to BMS systems using embedded protocols. Flexible options are available for other popular networks.



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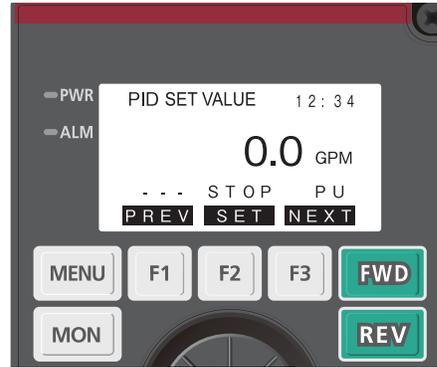
BROKEN BELT DETECTION (LOAD MEMORY)

The FR-F800-E 'load memory' system quickly detects load anomalies such as broken motor drive belts or jammed pumps.



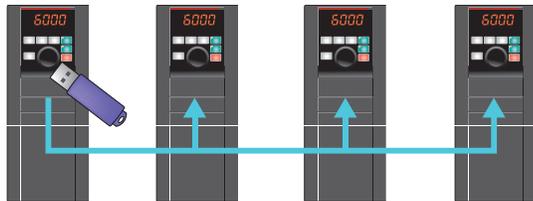
ALPHANUMERIC KEYPAD / REAL-TIME CLOCK

The FR-LU08-01 keypad has a 4 line LCD display with alphanumeric text display of parameters and drive status, ensuring quick and simple operation or diagnostics.



EASY SET-UP

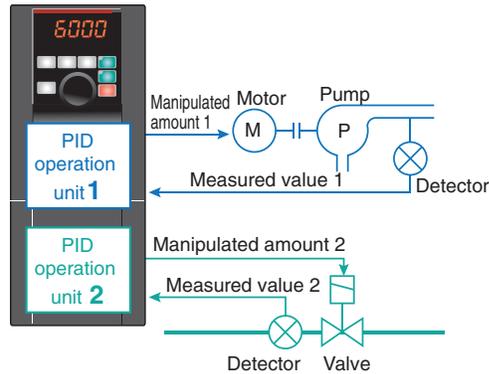
FR-F800-E offers USB support for easy connection to external devices and memory sticks. Quickly copy, store and reuse VFD parameters, historical trend data and other helpful data without the need for a PC or dedicated device. This saves time and reduces the effort to service and commission multiple systems



USB 2.0 supported (full speed)

2 INDEPENDENT PID CONTROL LOOPS

Allows simultaneous control of water pressure or air flow and a separate variable, such as the position of a valve or damper vane.



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