for a greener tomorrow

MITSUBISHI ELECTRIC
Changes for the Better

FR-A800 SERIES VARIABLE FREQUENCY DRIVE

Product Overview

The FR-A800 Series variable frequency drive is Mitsubishi Electric's most advanced and capable VFD solution. Whether your needs call for a simple component style solution or large capacity motor control centers, the FR-A800 is designed to be flexible and offers a wealth of embedded functionality to simplify your application and implementation. Ideal for many simple tasks like fan and pump control, the FR-A800 also excels in performing more complex and demanding applications like multi-axis coordinated motion, load sharing conveyors, and gantry hoisting systems. Similar to other inverter products manufactured by Mitsubishi Electric, the 800 Series continues the tradition of maintenance free operation and long lasting service life. Mitsubishi Electric VFDs are world renowned for their high level of performance, efficiency and outstanding reliability – start using solutions that give you the competitive edge.

KEY BENEFITS:

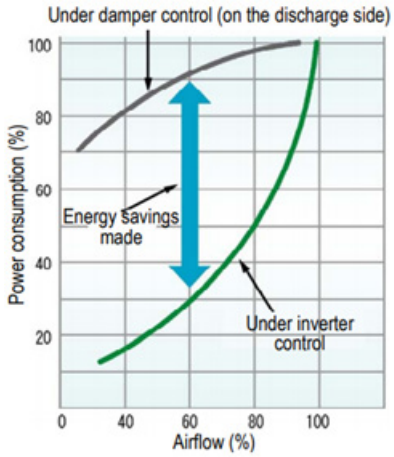
- High speed processing and response to control larger, more complex systems with better precision and accuracy
- Hardware architecture that will mitigate radical torque demands with up to 200% overload protection
- Comprehensive control algorithms including Real Sensorless Vector (RSV) control for unmatched control across a wider speed range
- Superior AC motor control technology for both standard induction motors and interior permanent magnet motors (IPM)
- Built-in functionality for flexibility
  - Applies across a broad range of applications to simplify specifications and inventory
  - Eliminates the need to specify additional products and reduce system costs
- Capacity ranging from ½ to 1,500 horsepower provides flexibility to address the changing needs of both machine builders and facility installations
- Optimum excitation control for reducing energy consumption

ADVANCED DRIVE CONFIGURATIONS

- **FR-A800 Standard Series –** This family of products is ideal for all applications requiring an all in one component style solution. Machine builders and facilities across the world have depended on this familiar architecture as their motor control solution, whether open air plenum style or enclosed in a panel, there are flexible configurations to meet your requirements.
- **FR-A802 Series –** This family of products is ideal for any application requiring a large capacity drive systems. The independent converter and inverter component architecture enables you to design a wide range of system solutions to address everything from driving large capacity motors, regenerative braking, and also low harmonics solutions.
- **FR-A806 Series –** This family of products is ideal for motor control applications in harsh environments. The enclosed NEMA12(IP55) structure simplifies engineering, operation and system design. This design includes embedded hardware, such as DC Choke and EMC filters, to reduce electrical noise and provide protection from imperfections with incoming power.

INTELLIGENT ENERGY OPTIMIZATION

As a result of the enhanced optimum excitation control in Mitsubishi Electric variable frequency drives, over current is no longer generated during steep acceleration/deceleration even without limiting the amount of voltage compensation during these operations, which ultimately provides improved energy savings.



DRIVES FOR EVERY INDUSTRY

Rating	SLD Super Light Duty	LD Light Duty	ND Normal Duty	HD Heavy Duty
Application	Fan and Pump	Fan and Pump	Fan and Pump	
		Shield Machines, Winding and Unwinding, Printing Machines	Shield Machines, Winding and Unwinding, Printing Machines	
			Cranes, Press	Cranes, Press
		Conveyor	Conveyor	Conveyor
Pr.570 (E301) Setting	0	1	2 (Initial value)	3
Overload Current Rating (Inverse-Time Characteristics)	110% 60 s, 120% 3 s	120% 60 s, 150% 3 s	150% 60 s, 200% 3 s	200% 60 s, 250% 3 s
Surrounding Air Temperature	40°C	50°C	50°C	50°C

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