

## VFD (Variable Frequency Drive)

### What is a VFD?

A VFD (Variable Frequency Drive) is a type of motor controller that drives an electric motor by varying the frequency supplied to the electric motor. If an application does not require an electric motor to run at full speed, the VFD can be used to ramp down the frequency to meet the requirements of the application. As the application's motor speed requirements change, the VFD can simply turn up or down the motor speed to meet the speed requirement.

### Why should you use a VFD?

#### Reduce Energy Consumption and Energy Costs

If you have an application that does not need to be run at full speed, then you can reduce energy costs by controlling the motor with a variable frequency drive, which is one of the benefits of Variable Frequency Drives. VFDs allow you to match the speed of the motor-driven equipment to the load requirement.

Electric motor systems are responsible for more than 65% of the power consumption in industry today. Optimizing motor control systems by installing or upgrading to VFDs can reduce energy consumption in your facility by as much as 70%.

#### Extend Equipment Life and Reduce Maintenance

Your equipment will last longer and will have less downtime due to maintenance when it's controlled by a VFD ensuring optimal motor application speed. Because of the VFDs optimal control of the frequency sent to the motor, the VFD will offer better protection for your motor from issues such as thermal overloads, phase protection, under voltage, over voltage, etc.. When you start a load with a VFD you will not subject the motor or driven load to the "instant shock" of across the line starting, but can start smoothly, thereby minimizing belt, gear and bearing wear, while also reducing startup noise.

### Features

- Has signal isolator which allows a 0-10V or a 4-20 milliamp signal to be used to control or change the speed that the VFD is outputting to the motor
- Use to vary speed to match needs based on application and to improve efficiency
- Can be controlled manually or with 0-10V or a 4-20 milliamp signal from a controller
- Starts fan slowly to extend the life of the fan
- NEMA 4X enclosure with cooling fins to withstand the harshest environments
- Will not interfere with ear tags or other electronic devices that are susceptible to radio frequency interference due to its internal RF filter

Part#	HP	Volts	Amps	Hz	Ph
<b>Single Phase</b>					
VFD240V03013A*	2	190-240	6.7	50/60	1
<b>Three Phase</b>					
VFD240V03013A*	3	190-240	9.0	50/60	3
VFD480V03030B	3	380-480	5.5	50/60	3
<b>Accessories - Rigid Base Motor Isolation Kits</b>					
HK205	Hardware Kit for Motor Fastened with 5/16" Bolts				
HK209	Hardware Kit for Motor Fastened with 3/8" Bolts				
* This unit works with single or three phase input					



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