



APPARENT POWER CONTROL SYSTEMS

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BENIFITS OF VFD

Since the primary purpose of a VFD is precise speed control so that motor speeds can be ramped up and ramped down and connected load can be maintained at the required speeds which only utilizes energy required. Knowing this, we wanted to breakdown the tangible and intangible benefits of installing a VFD.

Controlled Starting Current

When an AC motor started across the line it can take up to as much as seven-to-eight times the motor fullload current to start the motor and load. An VFD Drive starts a motor at zero frequency and voltage. As the frequency and voltage "build," it magnetizes the motor windings, which typically takes 50-70% of the motor full-load current.

Lower Power Demand on Start

If power is proportional to current - times - voltage, then power needed to start an AC motor across the line is a significantly higher than with a VFD. This will be true only at the start up the primary issue is a some electrical distribution systems might be at their limit during specific times of day.

Controlled accelration

A VFD starts at zero speed and accelerate smoothly on a customer adjustable ramp. AC motor started across the line triggers higher mechanical shocks load both for motor and mechanically connected load.



Adjustable Operating Speed

Unlike the traditional stop-and-go motor, the use of VFD enables optimizes process, by making changes in a process. This allows starting at reduced speed, and allows remote adjustment of speed by programmable controller or process controller. in a industrial sense, is always a big bonus for production

Reverse operation

Using a VFD eliminates the need for a reversing starter a VFD allows electronic ability reversing or an external switch added to VFD terminal control board, elimination of reversing starter eliminates its maintenance cost and reduce panel space.



Control stopping

Is just as important as controlled(ramped) acceleration, controlled (ramped) stopping can be important to reduce mechanical wear and tear due to shock to the process or loss of product due to breakage.

If you're ready to take advantage of installing a VFD for your application, contacts our

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