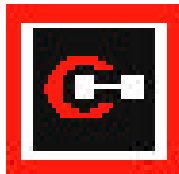
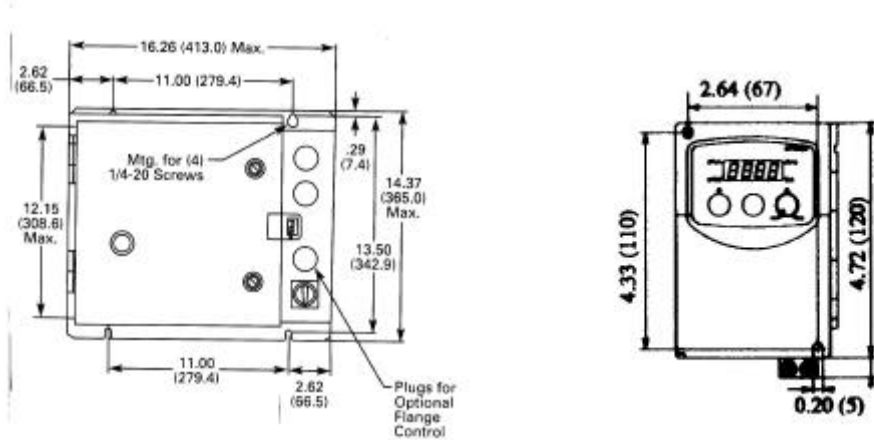


Tri-Tech Tip

Subject:

We often see two-speed motor starter applications for small fractional horsepower exhaust fans. Although the two speeds of operation provides for greater control of building pressure, it is not very practical from an economic and wall space point of view. A two-speed magnetic starter costs nearly twice as much and the enclosure is about twice the size of a single speed starter. Plus there is also more wiring involved with the two speed motor, which can really add up on projects with several exhaust fans.

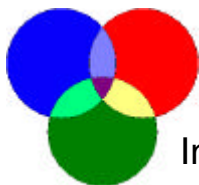


Tip:

With the compact and inexpensive Model AF91 Variable Frequency Drive from Cutler-Hammer, you can still have the benefit of two-speed control without the premium associated with two-speed starters. Because the drive can be programmed to operate at multiple preset speeds, you are not limited to a specific high and low speed RPM. This provides greater control of the exhaust air volume and more convenience in balancing without the need to adjust pulleys.

Historically, using a VFD meant that you had to have 3-phase input power which meant either using up more poles in the panelboard or modifying the electrical system if only 1-phase power is available. Because the AF91 can accept 120V, 208V or 240V 1-phase input power, this will no longer be a problem. The drive will convert this to 3-phase power for a standard single speed motor.

As you can see on the diagrams above, the AF91 uses up considerably less wall space. And more importantly, the AF91 costs only 25% more than a typical single speed magnetic starter.



Tri-Tech Inc.

Innovative Solutions in Environment Comfort Technology