

VFD68 VARIABLE FREQUENCY DRIVES

VERSATILITY, VARIETY, EFFICIENCY



Electric motors in HVAC and refrigeration applications account for more than 50 percent of the energy usage. So the better you can control motor speed, the more energy you can save and the longer you can extend the life of your equipment.

The VFD68 Variable Frequency Drives from PENN® control three-phase motors up to ten horsepower for greater application flexibility. Designed primarily for condenser fan speed control, VFD68 drives will also control a wide range of pumps, blowers and fans.

Application setup simplified

The user-friendly interface makes the VFD68 easy to understand and operate. You can quickly and easily reconfigure it to control pumps in cooling and heating, or supply fans in VAV systems. Also, advanced end-user settings are available for custom applications.

No-hassle installation

The compact size simplifies installation in a variety of equipment. And because it is an RS485, RTU-compliant ModBus® slave device, you can seamlessly integrate the VFD68 into a control network, such as Verasys® or Facility Explorer®.



Control what's important.

VFD68 VARIABLE FREQUENCY DRIVES

VERSATILITY, VARIETY, EFFICIENCY

What will it do for you?

The VFD68 enables a system to:

- Maintain optimum condenser head pressure
- Operate in low ambient temperature conditions down to -40F (-40C)
- Reduce short-cycling
- Maintain stable evaporator temperatures
- Reduce electricity usage
- Optimize compressor operation and reduce wear
- Reduce motor replacement costs by eliminating short-cycling
- Extend refrigerated product life and provide more consistent comfort cooling

Operating features:

- Selectable input types for use with 0 to 5VDC, 0 to 10 VDC or 4 to 20 mA input signals from transducers, sensors and controllers
- High input signal selection for fan speed control of dual circuit condensing units
- Compact design for easy and flexible installation
- Three-phase 230, 460 or 575 VAC models control a wide variety three-phase motors ranging up to 20 hp

PENN delivers a combination of worry-free dependability, unrivaled quality, adaptable technology and industry-leading expertise in refrigeration control. A combination no other brand can match. The VFD68 Drives continue this tradition. Backed by Johnson Controls, VFD68 drives deliver peace-of-mind and the freedom to control what's important in your world.

VFD68 Variable Frequency Drive	
Input Power Voltage/Frequency	230 VAC, 50 HZ (208/230 VAC, 60 Hz); 400 VAC, 50 Hz (460 VAC, 60 Hz); 575 VAC, 50 Hz; Continuous Duty
Output Voltage/Frequency	230 VAC, 50 HZ (208/230 VAC, 60 Hz); 400 VAC, 50 Hz (460 VAC, 60 Hz); 575 VAC, 50 Hz; Continuous Duty
Input Devices	Johnson Controls/PENN® P499 Electronic Pressure Transducers
PWM Carrier Frequency	Adjustable 0.7 to 15 kHz
Motor Requirements	Three-phase NEMA Design B motors required; Inverter-rated motors recommended
Overload Capacity	150% of ampere rating for 1 minute
Start/Stop	Use STF input to start or stop the motor
Ambient Conditions	Storage: -40 to 65°C (-40 to 149°F), 0 to 95% RH noncondensing Operating: -40 to 50°C (-40 to 122°F), 0 to 95% RH noncondensing Altitude: 1,000 m (3,300 ft) maximum without derating
Enclosures	UL Type 1 (NEMA) fan cooled (230 VAC 1 hp and lower models do not have a fan)
Maximum High Voltage Wire Length	UL Type 1 (NEMA) fan cooled (230 VAC 1 hp and lower models do not have a fan)
Dimensions (H x W x D)	Minimum: 128 x 68 x 81 mm (5 x 2-11/16 x 3-3/16 in.) Maximum: 260 x 220 x 190 mm (10-1/4 x 8-11/16 x 7-1/2 in.)

