

DRIVE DOWN OPERATING COSTS FOR HVAC

As the global demand on buildings continues to increase, energy-optimized HVAC systems are vital to maintaining comfort and safety while reducing energy consumption. From climate extremes and isolated locations, to multisite portfolios, the need for more efficient HVAC operation goes straight to the bottom line.

The Honeywell 3G SmartVFD



Honeywell

DRIVE FOR HIGHER ENERGY EFFICIENCY AND RELIABILITY

The third generation of SmartVFD drives from Honeywell combines flexibility and efficiency in a single package designed to lower total system and lifecycle costs for HVAC applications.

DESIGNED FOR OPERATIONAL EFFICIENCY

New motor technologies are driving an increase in operating efficiency, especially in HVAC applications. To get the most out of these permanent magnet (PM) and synchronous reluctance (SynRM) motors, you need an AC drive equipped with the algorithms to most optimally control these motors.

BUILT FOR WHATEVER CONDITIONS THROW AT IT

The SmartVFD HVAC 3G drive series is designed with ruggedized enclosures to resist harsh conditions including temperature and humidity extremes. Consistently high-quality components means you can expect reliable performance.

EASY TO CHOOSE, EASY TO CONFIGURE

All Honeywell 3G SmartVFD models follow the same basic design and operating principles, making choosing and configuring the drive for any HVAC application easy.

INTELLIGENT HVAC CONTROL

Dedicated for HVAC

The 3G SmartVFD includes intelligent functions for pumps fans and compressors.

SmartStart and automatic motor adaptation

Make commissioning easy for all motor types, enter nominal information and let the drive measure motor characteristics to optimize performance.

Embedded communications

Standard BACnet, Modbus, FLN and N2 allow monitoring and control of serial communications, reducing installation cost.

Built-in logic

Smart logic controller and four auto-tuning PID controllers can control HVAC functions reducing the need for control tasks in the building management system.

DESIGNED TO PROTECT ITSELF

Belt Monitoring

No-Flow Detection

End-of-Curve Protection

Automated Vibration Avoidance

Drive Protection

Motor Protection

Harmonic Mitigation

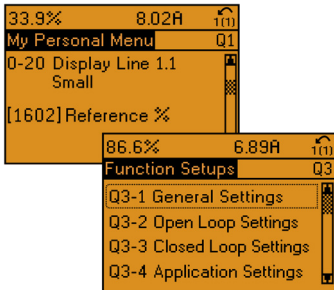


SMALL INVESTMENT. BIG RETURN.

With new energy efficiency regulations focusing on ways to reduce consumption and CO2 emissions, adding an AC drive is now a necessity. The 3G SmartVFD drive provides a low total cost of ownership. Installation and commissioning take less time, and operating efficiency is higher.

SETUP AND DISPLAY

The 3G SmartVFD drive makes setup and operation easy. With a remarkably user-friendly interface, intuitive menu structures and powerful tools that streamline installation and troubleshooting, the 3G SmartVFD drive saves valuable time, resulting in a lower overall cost of ownership.



GRAPHICAL DISPLAY

Up to five parameters can be displayed simultaneously



USER-FRIENDLY KEYPAD

Hot-pluggable with upload and download capability

INFO key provides easy access to help information in the onboard manual

Status lights provide visual confirmation of operating mode

EASY, FLEXIBLE MENU

The **HVAC applications menu** provides easy access to the parameters for the most common applications

A **personal menu** contains up to 20 user selected parameters for customized access

A **quick setup menu** allows input of motor nameplate data for rapid and easy commissioning

The **Changes Made menu** provides easy access to previously modified parameters

All drive parameters are accessible through the keypad. The Quick Menu key offers fast access to startup parameters, including motor power, motor voltage, motor nominal speed, ramp up/down time, and minimum/maximum frequency.

TRANSFER OF PARAMETERS

Parameters can be programmed into one drive and downloaded to other drives via the keypad or PC software.

REMOTE MOUNTING KIT AVAILABLE

An optional kit allows remote mounting of the 3G SmartVFD drive keypad up to 10 feet away.

CONTINUOUS MONITORING WITH OR WITHOUT THE KEYPAD

With or without a keypad, the 3G SmartVFD drive's ON, WARNING, and ALARM status lights are always visible.

PLAIN LANGUAGE ALARMS AND WARNINGS

Alarms and warnings are displayed in easy-to-understand form, eliminating the need for decoding or referring to long tables in manuals.

COMPLETE PROGRAMMABILITY OF DISPLAY

The keypad's four line, backlit, alphanumeric display can be programmed to display up to 5 different measurements at a time.

ORDERING INFORMATION

	HP	AMPS	FRAME	NEMA1 DRIVE ALONE	NEMA12 DRIVE ALONE
208/230 Vac	1.5	6.6	A2/A5	HVFD3D3A0015G100B	HVFD3D3A0015G200B
	2	7.5	A2/A5	HVFD3D3A0020G100B	HVFD3D3A0020G200B
	3	10.6	A2/A5	HVFD3D3A0030G100B	HVFD3D3A0030G200B
	5	16.7	A3/A5	HVFD3D3A0050G100B	HVFD3D3A0050G200B
	7.5	24.2	B1	HVFD3D3A0075G100B	HVFD3D3A0075G200B
	10	30.8	B1	HVFD3D3A0100G100B	HVFD3D3A0100G200B
	15	46.2	B1	HVFD3D3A0150G100B	HVFD3D3A0150G200B
	20	59.4	B2	HVFD3D3A0200G100B	HVFD3D3A0200G200B
	25	74.8	C1	HVFD3D3A0250G100B	HVFD3D3A0250G200B
	30	88	C1	HVFD3D3A0300G100B	HVFD3D3A0300G200B
	40	115	C1	HVFD3D3A0400G100B	HVFD3D3A0400G200B
	50	143	C2	HVFD3D3A0500G100B	HVFD3D3A0500G200B
	60	170	C2	HVFD3D3A0600G100B	HVFD3D3A0600G200B
	75	190	D1	HVFD3D3A0750G100B	HVFD3D3A0750G200B
100	240	D1	HVFD3D3A1000G100B	HVFD3D3A1000G200B	
125	302	D2	HVFD3D3A1250G100B	HVFD3D3A1250G200B	
	HP	AMPS	FRAME	NEMA1 DRIVE ALONE	NEMA12 DRIVE ALONE
460 Vac	1.5	2.7	A2/A5	HVFD3D3C0015G100B	HVFD3D3C0015G200B
	2	3.4	A2/A5	HVFD3D3C0020G100B	HVFD3D3C0020G200B
	3	4.8	A2/A5	HVFD3D3C0030G100B	HVFD3D3C0030G200B
	5	8.2	A2/A5	HVFD3D3C0050G100B	HVFD3D3C0050G200B
	7.5	11	A3/A5	HVFD3D3C0075G100B	HVFD3D3C0075G200B
	10	14.5	A3/A5	HVFD3D3C0100G100B	HVFD3D3C0100G200B
	15	21	B1	HVFD3D3C0150G100B	HVFD3D3C0150G200B
	20	27	B1	HVFD3D3C0200G100B	HVFD3D3C0200G200B
	25	34	B1	HVFD3D3C0250G100B	HVFD3D3C0250G200B
	30	40	B2	HVFD3D3C0300G100B	HVFD3D3C0300G200B
	40	52	B2	HVFD3D3C0400G100B	HVFD3D3C0400G200B
	50	65	C1	HVFD3D3C0500G100B	HVFD3D3C0500G200B
	60	80	C1	HVFD3D3C0600G100B	HVFD3D3C0600G200B
	75	105	C1	HVFD3D3C0750G100B	HVFD3D3C0750G200B
	100	130	C2	HVFD3D3C1000G100B	HVFD3D3C1000G200B
	125	160	C2	HVFD3D3C1250G100B	HVFD3D3C1250G200B
	150	190	D1	HVFD3D3C1500G100B	HVFD3D3C1500G200B
200	240	D1	HVFD3D3C2000G100B	HVFD3D3C2000G200B	
250	302	D1	HVFD3D3C2500G100B	HVFD3D3C2500G200B	
	HP	AMPS	FRAME	NEMA1 DRIVE ALONE	NEMA12 DRIVE ALONE
600 Vac	3	3.9	A3/A5	HVFD3D3D0030G100B	HVFD3D3D0030G200B
	5	6.1	A3/A5	HVFD3D3D0050G100B	HVFD3D3D0050G200B
	7.5	9	A3/A5	HVFD3D3D0075G100B	HVFD3D3D0075G200B
	10	11	A3/A5	HVFD3D3D0100G100B	HVFD3D3D0100G200B
	15	18	B1	HVFD3D3D0150G100B	HVFD3D3D0150G200B
	20	22	B1	HVFD3D3D0200G100B	HVFD3D3D0200G200B
	25	27	B1	HVFD3D3D0250G100B	HVFD3D3D0250G200B
	30	34	B2	HVFD3D3D0300G100B	HVFD3D3D0300G200B
	40	41	B2	HVFD3D3D0400G100B	HVFD3D3D0400G200B
	50	52	C1	HVFD3D3D0500G100B	HVFD3D3D0500G200B
	60	62	C1	HVFD3D3D0600G100B	HVFD3D3D0600G200B
	75	83	C1	HVFD3D3D0750G100B	HVFD3D3D0750G200B
	100	100	C2	HVFD3D3D1000G100B	HVFD3D3D1000G200B
	125	131	C2	HVFD3D3D1250G100B	HVFD3D3D1250G200B
150	155	D1	HVFD3D3D1500G100B	HVFD3D3D1500G200B	
200	192	D1	HVFD3D3D2000G100B	HVFD3D3D2000G200B	

Note: Frame A2 and A3 are used for NEMA 1, Frame A5 is used for NEMA 12

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