## Compact Variable Frequency Drives

# Honeywell



**Control. Capabilities. Performance. At Your Fingertips** 

## Optimize Capability, Minimize Waste

You already know the energy savings variable frequency drives (VFDs) deliver. Most VFDs are loaded with features that you don't need or do not fit your application. With Honeywell compact VFDs, you select the capabilities you need. Our compact line lets you customize the drive features to the application, eliminating waste.



### Not Too Many, Not Too Few

Compact VFDs aren't overloaded with features you won't use. Nor are you limited to just a few. Instead, compact VFDs provide the perfect balance, with essential features like a standard PI Controller and the ability to program without the need for line voltage. From there, you can choose only the options you need to meet your application:

• Interface

• Filter

- Enclosure
- Inputs

### Maximize Space

The compact VFD lets you make the most of the available space in your application. It's a true micro drive — is among the smallest, most streamlined VFDs on the market, which saves space in your equipment cabinet.

FRAME SIZE	FRAME HEIGHT	FRAME WIDTH	FRAME DEPTH
MI1	6.2"	2.6"	3.9"
MI2	7.7"	3.5"	4.0"
MI3	10.2"	3.9"	4.3"

## Minimize Expense

Because you choose only the options you need, you save money to keep your installed cost low. Along with the compact size for installation ease, the intuitive user interface makes commissioning a breeze. In short, the compact VFD is built to save you time.

- Easy commissioning
  - Intuitive user interface
  - PID controller included, standard
  - Program without the need for a main power supply
- Easy installation

• Outputs

- The most streamlined VFDs on the market
- DIN rail or screw mounting
- Side-by-side mounting

- Easy communication
  - Up to seven programming control inputs
  - Up to three programmable control outputs
  - Several fieldbus options available

## Programming At Your Fingertips

The compact VFD architecture is created with ease of use and speed in mind. With the touch wheel as the central feature of the API (application interface) you can configure the drive to your specific application.

#### Standard API

Honeywell offers a set of APIs as standard, which are available from the shelf.

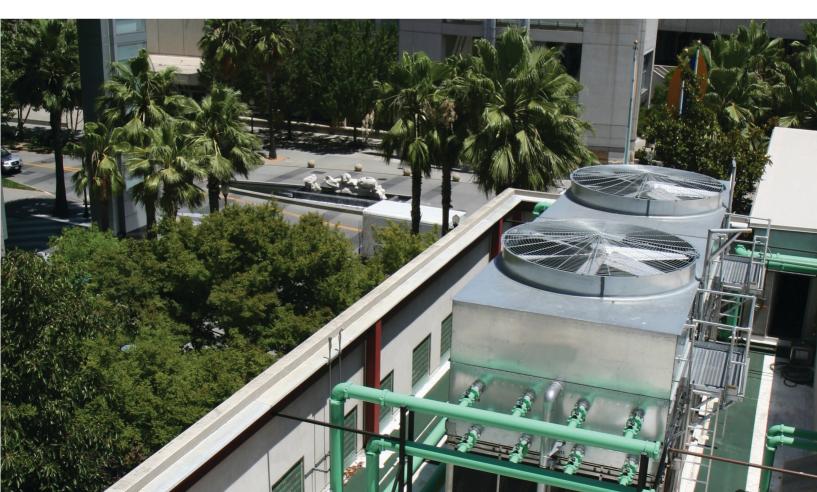
- API Full
- API Limited

#### **API LIMITED**

	TERMINAL	SIGNAL, DEFAULT SETTINGS
1	+10Vref	Reference voltage
2	AI1	Analog input 0-10V (0/4-20 mA)
3	GND	I/O ground
6	+24Volt	24V auxiliary voltage
7	GND	I/O ground
8	DIN1	Start forward
9	DIN2	Start reverse
10	DIN3	Fault reset
А	А	Serial bus (Modbus RTU)
В	В	Serial bus
21	RO11	Relay output, FAULT, NC
22	R012	Relay output, FAULT, NC

+10Vref	SIGNAL, DEFAULT SETTINGS Reference voltage
	Reference voltage
	noronolo voltage
Al1	Analog input 0/4-20 mA
GND	I/O ground
+24Volt	24 V auxiliary voltage
GND	I/O ground
DIN1	Start forward
DIN2	Start reverse
DIN3	Fault reset
А	Serial bus (Modbus RTU)
В	Serial bus
R011	Relay output 1, FAULT, Change over
RO12	Relay output 1, FAULT, NC
A12	Analog input 0-10V
GND	I/O ground
GND	I/O ground
DIN4	Preset speed 1
DIN5	Preset speed 2
DIN6	Preset speed 3
AO	Analog output, output frequency
DO	Ready
RO21	Relay output 2, RUN, NO
R022	Relay output 2, RUN, NO
RO13	Relay output 1, FAULT, NO
	+24Volt GND DIN1 DIN2 DIN3 A B RO11 RO12 A12 GND A12 GND DIN4 DIN5 DIN6 AO DO RO21 RO22

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## Easy To Select Model Numbers

Honeywell compact VFD model numbers follow the same conventions. Use the figure below to select the appropriate drive for your application.

#### Frame Size: MI1 Dimensions: 6.2" H x 2.6" W x 3.9" D

HVFDCD <u>3</u> <u>C</u> 000	0 <u>F</u> 0 0 	
		EMC Filter 0 = No Filter 1 = Filter included
		Enclosure 0 = Open Chassis (IP20) 1 = NEMA 1 (IP21)
		Control IO F = Full IO (6DI, 1A2, 3DO, 1AO) L = Limited IO (3DI, 1AI, 1DO)
		Nominal Horsepower 0007 = .75 HP 0010 = 1HP 0100 = 10HP
		Nominal Voltage A = 110v B = 208v-230v C = 480v D = 575v
		Phases 1 = Single Phase (1~in, 3~out) 3 = Triple Phase (3~in, 3~out)
		Product Family HVFDCD = Honeywell VFD Compact Drive

Nominal Voltage	Nom. HP (Nom. Current)	EMC Filter	Control I/O	Part Number
			Full	HVFDCD3C0005F00/U
	0.5 HP	No	Limited	HVFDCD3C0005L00/U
	(1.3 A)	FMO	Full	HVFDCD3C0005F01/U
		EMC	Limited	HVFDCD3C0005L01/U
		No	Full	HVFDCD3C0007F00/U
	0.75 HP	NO	Limited	HVFDCD3C0007L00/U
	(1.9 A)	5140	Full	HVFDCD3C0007F01/U
460		EMC	Limited	HVFDCD3C0007L01/U
3~in 3~out		No	Full	HVFDCD3C0010F00/U
	1 HP (2.4 A)		Limited	HVFDCD3C0010L00/U
		EMC	Full	HVFDCD3C0010F01/U
		LIVIO	Limited	HVFDCD3C0010L01/U
	1.5 HP	No	Full	HVFDCD3C0015F00/U
			Limited	HVFDCD3C0015L00/U
	(3.3 A)	EMC	Full	HVFDCD3C0015F01/U
		Emo	Limited	HVFDCD3C0015L01/U
		No	Full	HVFDCD1B0003F00/U
	0.25 HP		Limited	HVFDCD1B0003L00/U
	(1.7 A)	EMC	Full	HVFDCD1B0003F01/U
			Limited	HVFDCD1B0003L01/U
		No	Full	HVFDCD1B0005F00/U
	0.5 HP		Limited	HVFDCD1B0005L00/U
	(2.4 A)	EMC	Full	HVFDCD1B0005F01/U
208/230		Emo	Limited	HVFDCD1B0005L01/U
1~in 3~out		No	Full	HVFDCD1B0007F00/U
	0.75 HP		Limited	HVFDCD1B0007L00/U
	(2.8 A)	EMC	Full	HVFDCD1B0007F01/U
		20	Limited	HVFDCD1B0007L01/U
		No	Full	HVFDCD1B0010F00/U
	1 HP	110	Limited	HVFDCD1B0010L00/U
	(3.7A)	EMC	Full	HVFDCD1B0010F01/U
			Limited	HVFDCD1B0010L01/U
Frame Size: MI	2 Dimensions: 7	.7" H x 3.5'	" W x 4.0" D	
Nominal Voltage	Nom. HP (Nom. Current)	EMC Filter	Control I/O	Part Number
		No	Full	HVFDCD3C0020F00/U
	2 HP	NO	Limited	HVFDCD3C0020L00/U
	(4.3 A)	EMC	Full	HVFDCD3C0020F01/U
460		LIVIC	Limited	HVFDCD3C0020L01/U
3~in 3~out		No	Full	HVFDCD3C0030F00/U
	3 HP	NO	Limited	HVFDCD3C0030L00/U
	(5.6 A)	EMC	Full	HVFDCD3C0030F01/U
			Limited	HVFDCD3C0030L01/U
		No		
	1.5 HP		Full	HVFDCD1B0015F00/U
	(4.8 A)	NO	Limited	HVFDCD1B0015L00/U
	(4.8 A)		Limited Full	HVFDCD1B0015L00/U HVFDCD1B0015F01/U
208/230	(4.8 A)	EMC	Limited Full Limited	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0015L01/U
208/230 1~in 3~out	· · ·	EMC	Limited Full Limited Full	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0015L01/U HVFDCD1B0020F00/U
	2 HP		Limited Full Limited Full Limited	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0015L01/U HVFDCD1B0020F00/U HVFDCD1B0020L00/U
	· · ·	EMC	Limited Full Limited Full Limited Full	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0015L01/U HVFDCD1B0020F00/U HVFDCD1B0020L00/U HVFDCD1B0020F01/U
1~in 3~out	2 HP (7 A)	EMC No EMC	Limited Full Limited Full Limited Full Limited	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0015L01/U HVFDCD1B0020F00/U HVFDCD1B0020L00/U HVFDCD1B0020F01/U HVFDCD1B0020L01/U
1~in 3~out Frame Size: MI	2 HP (7 A) 3 Dimensions: 1	EMC No EMC 0.2" H × 3.4	Limited Full Limited Full Limited Full Limited 9" W x 4.3"	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0015L01/U HVFDCD1B0020F00/U HVFDCD1B0020L00/U HVFDCD1B0020F01/U HVFDCD1B0020L01/U D
1~in 3~out Frame Size: MI	2 HP (7 A)	EMC No EMC 0.2" H × 3.4	Limited Full Limited Full Limited Full Limited 9" W x 4.3" Control I/O	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0015L01/U HVFDCD1B0020F00/U HVFDCD1B0020F00/U HVFDCD1B0020F01/U HVFDCD1B0020L01/U D Part Number
1~in 3~out Frame Size: MI	2 HP (7 A) 3 Dimensions: 1 Nom. HP (Nom. Current)	EMC No EMC 0.2" H x 3. EMC Filter	Limited Full Limited Full Limited 9" W x 4.3" Control I/O Full	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0015L01/U HVFDCD1B0020F00/U HVFDCD1B0020F00/U HVFDCD1B0020F01/U HVFDCD1B0020L01/U D Part Number HVFDCD3C0040F00/U
1~in 3~out Frame Size: MI	2 HP (7 A) 3 Dimensions: 1 Nom. HP (Nom. Current) 4 HP	EMC No EMC 0.2" H × 3.4	Limited Full Limited Full Limited 9" W x 4.3" Control I/O Full Limited	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0015L01/U HVFDCD1B0020F00/U HVFDCD1B0020F01/U HVFDCD1B0020F01/U HVFDCD1B0020L01/U D Part Number HVFDCD3C0040F00/U HVFDCD3C0040L00/U
1~in 3~out Frame Size: MI	2 HP (7 A) 3 Dimensions: 1 Nom. HP (Nom. Current)	EMC No EMC 0.2" H x 3. EMC Filter No	Limited Full Limited Full Limited Full Limited 9" W x 4.3" Control I/O Full Limited Full	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0020F00/U HVFDCD1B0020L00/U HVFDCD1B0020F01/U HVFDCD1B0020F01/U HVFDCD1B0020F01/U Part Number HVFDCD3C0040F00/U HVFDCD3C0040F00/U HVFDCD3C0040F01/U
1~in 3~out Frame Size: MI	2 HP (7 A) 3 Dimensions: 1 Nom. HP (Nom. Current) 4 HP	EMC No EMC 0.2" H x 3. EMC Filter	Limited Full Limited Full Limited 9" W x 4.3" Control I/O Full Limited Full Limited	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0020F00/U HVFDCD1B0020F00/U HVFDCD1B0020F01/U HVFDCD1B0020F01/U HVFDCD1B0020L01/U Part Number HVFDCD3C0040F00/U HVFDCD3C0040F00/U HVFDCD3C0040F01/U HVFDCD3C0040L01/U
1~in 3~out Frame Size: MI	2 HP (7 A) 3 Dimensions: 1 Nom. HP (Nom. Current) 4 HP	EMC No EMC 0.2" H x 3. EMC Filter No EMC	Limited Full Limited Full Limited 9" W x 4.3" Control I/O Full Limited Full Limited Full	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0020F00/U HVFDCD1B0020F00/U HVFDCD1B0020F01/U HVFDCD1B0020L01/U D Part Number HVFDCD3C0040F00/U HVFDCD3C0040F00/U HVFDCD3C0040F01/U HVFDCD3C0040F01/U HVFDCD3C0040F01/U
1~in 3~out Frame Size: MI Nominal Voltage 460	2 HP (7 A) 3 Dimensions: 1 Nom. HP (Nom. Current) 4 HP (7.6 A) 5 HP	EMC No EMC 0.2" H x 3. EMC Filter No	Limited Full Limited Full Limited 9" W x 4.3" Control I/O Full Limited Full Limited Full Limited	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0020F00/U HVFDCD1B0020F00/U HVFDCD1B0020F01/U HVFDCD1B0020L01/U D Part Number HVFDCD3C0040F00/U HVFDCD3C0040F00/U HVFDCD3C0040F01/U HVFDCD3C0040F01/U HVFDCD3C0050F00/U HVFDCD3C0050L00/U
1~in 3~out Frame Size: MI3 Nominal Voltage	2 HP (7 A) 3 Dimensions: 1 Nom. HP (Nom. Current) 4 HP (7.6 A)	EMC No EMC 0.2" H x 3.3 EMC Filter No EMC No	Limited Full Limited Full Limited Full Limited 9" W x 4.3" Control I/O Full Limited Full Limited Full Limited Full	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0020F00/U HVFDCD1B0020F00/U HVFDCD1B0020F01/U HVFDCD1B0020L01/U Part Number HVFDCD3C0040F00/U HVFDCD3C0040F00/U HVFDCD3C0040F01/U HVFDCD3C0040F01/U HVFDCD3C0050F00/U HVFDCD3C0050F00/U
1~in 3~out Frame Size: MI Nominal Voltage 460	2 HP (7 A) 3 Dimensions: 1 Nom. HP (Nom. Current) 4 HP (7.6 A) 5 HP	EMC No EMC 0.2" H x 3. EMC Filter No EMC	Limited Full Limited Full Limited 9" W x 4.3" Control I/O Full Limited Full Limited Full Limited Full Limited Full Limited	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0020F00/U HVFDCD1B0020F00/U HVFDCD1B0020L01/U HVFDCD1B0020L01/U Part Number HVFDCD3C0040F00/U HVFDCD3C0040F00/U HVFDCD3C0040F01/U HVFDCD3C0040F01/U HVFDCD3C0040L01/U HVFDCD3C0050F00/U HVFDCD3C0050F00/U HVFDCD3C0050F01/U HVFDCD3C0050F01/U
1~in 3~out Frame Size: MI Nominal Voltage 460	2 HP (7 A) 3 Dimensions: 1 Nom. HP (Nom. Current) 4 HP (7.6 A) 5 HP (9 A)	EMC No EMC 0.2" H x 3. EMC Filter No EMC No EMC	Limited Full Limited Full Limited Full Control I/O Full Limited Full Limited Full Limited Full Limited Full Limited Full	HVFDCD180015L00/U           HVFDCD180015F01/U           HVFDCD180020F00/U           HVFDCD180020F01/U           HVFDCD180020L00/U           HVFDCD180020F01/U           HVFDCD180020F01/U           HVFDCD180020F01/U           HVFDCD180020L01/U           HVFDCD3C0040F00/U           HVFDCD3C0040F01/U           HVFDCD3C0040F01/U           HVFDCD3C0040F01/U           HVFDCD3C0040L00/U           HVFDCD3C0040F01/U           HVFDCD3C0050F00/U           HVFDCD3C0050F00/U           HVFDCD3C0050L00/U           HVFDCD3C0050L00/U           HVFDCD3C0050L00/U           HVFDCD3C0050L00/U           HVFDCD3C0050L00/U           HVFDCD3C0050L00/U           HVFDCD3C0050L00/U           HVFDCD3C0050L00/U           HVFDCD3C0050L00/U           HVFDCD3C0050L00/U
1~in 3~out Frame Size: MI Nominal Voltage 460	2 HP (7 A) 3 Dimensions: 1 Nom. HP (Nom. Current) 4 HP (7.6 A) 5 HP (9 A) 7.5 HP	EMC No EMC 0.2" H x 3.3 EMC Filter No EMC No	Limited Full Limited Full Limited Full Control I/O Full Limited Full Limited Full Limited Full Limited Full Limited Full Limited Full Limited	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0020F00/U HVFDCD1B0020F00/U HVFDCD1B0020F00/U HVFDCD1B0020F01/U HVFDCD1B0020F01/U HVFDCD3C0040F00/U HVFDCD3C0040F00/U HVFDCD3C0040F01/U HVFDCD3C0050F00/U HVFDCD3C0050F00/U HVFDCD3C0050F01/U HVFDCD3C0050F01/U HVFDCD3C0050F01/U HVFDCD3C0050F01/U HVFDCD3C0050F01/U HVFDCD3C0075F00/U
1~in 3~out Frame Size: MI Nominal Voltage 460	2 HP (7 A) 3 Dimensions: 1 Nom. HP (Nom. Current) 4 HP (7.6 A) 5 HP (9 A)	EMC No EMC 0.2" H x 3. EMC Filter No EMC No EMC No	Limited Full Limited Full Limited 9" W x 4.3" Control I/O Full Limited Full Limited Full Limited Full Limited Full Limited Full Limited Full	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0020F00/U HVFDCD1B0020F00/U HVFDCD1B0020F01/U HVFDCD1B0020F01/U HVFDCD1B0020F01/U HVFDCD3C0040F00/U HVFDCD3C0040F00/U HVFDCD3C0040F01/U HVFDCD3C0050F00/U HVFDCD3C0050F01/U HVFDCD3C0050F01/U HVFDCD3C005F01/U HVFDCD3C0075F00/U HVFDCD3C0075F00/U
1~in 3~out Frame Size: MI Nominal Voltage 460	2 HP (7 A) 3 Dimensions: 1 Nom. HP (Nom. Current) 4 HP (7.6 A) 5 HP (9 A) 7.5 HP	EMC No EMC 0.2" H x 3. EMC Filter No EMC No EMC	Limited Full Limited Full Limited 9" W x 4.3" Control I/O Full Limited Full Limited Full Limited Full Limited Full Limited Full Limited Full Limited Full Limited	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0020F00/U HVFDCD1B0020F00/U HVFDCD1B0020F01/U HVFDCD1B0020F01/U HVFDCD1B0020L01/U Part Number HVFDCD3C0040F00/U HVFDCD3C0040F00/U HVFDCD3C0040F01/U HVFDCD3C0050F01/U HVFDCD3C0050F01/U HVFDCD3C005F00/U HVFDCD3C0075F00/U HVFDCD3C0075F01/U HVFDCD3C0075F01/U
1~in 3~out Frame Size: MI Nominal Voltage 460	2 HP (7 A) 3 Dimensions: 1 Nom. HP (Nom. Current) 4 HP (7.6 A) 5 HP (9 A) 7.5 HP	EMC No EMC 0.2" H x 3.3 EMC Filter No EMC No EMC No EMC	Limited Full Limited Full Limited 9" W x 4.3" Control I/O Full Limited Full Limited Full Limited Full Limited Full Limited Full Limited Full Limited Full Limited Full	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0020F00/U HVFDCD1B0020F00/U HVFDCD1B0020F01/U HVFDCD1B0020L01/U D Part Number HVFDCD3C0040F00/U HVFDCD3C0040F00/U HVFDCD3C0040F01/U HVFDCD3C0050F00/U HVFDCD3C0050F01/U HVFDCD3C0050F01/U HVFDCD3C0075F00/U HVFDCD3C0075F01/U HVFDCD3C0075F01/U HVFDCD3C0075F01/U HVFDCD3C0075F01/U
1~in 3~out Frame Size: MI Nominal Voltage 460 3~in 3~out 208/230	2 HP (7 A) 3 Dimensions: 1 Nom. HP (Nom. Current) 4 HP (7.6 A) 5 HP (9 A) 7.5 HP (12 A) 3 HP	EMC No EMC 0.2" H x 3. EMC Filter No EMC No EMC No	Limited Full Limited Full Limited 9" W x 4.3" Control I/O Full Limited Full Limited Full Limited Full Limited Full Limited Full Limited Full Limited Full Limited Full Limited Full	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0020F00/U HVFDCD1B0020F00/U HVFDCD1B0020F01/U HVFDCD1B0020L01/U D Part Number HVFDCD3C0040F00/U HVFDCD3C0040F00/U HVFDCD3C0040F01/U HVFDCD3C0050F00/U HVFDCD3C0050F01/U HVFDCD3C0050F01/U HVFDCD3C005F00/U HVFDCD3C0075F00/U HVFDCD3C0075F01/U HVFDCD3C0075F01/U HVFDCD3C0075F01/U HVFDCD3C0075F01/U HVFDCD3C0075F01/U HVFDCD3C0075F01/U HVFDCD3C0075F01/U
1~in 3~out Frame Size: MI3 Nominal Voltage 460 3~in 3~out	2 HP (7 A) 3 Dimensions: 1 Nom. HP (Nom. Current) 4 HP (7.6 A) 5 HP (9 A) 7.5 HP (12 A)	EMC No EMC 0.2" H x 3.3 EMC Filter No EMC No EMC No EMC	Limited Full Limited Full Limited 9" W x 4.3" Control I/O Full Limited Full Limited Full Limited Full Limited Full Limited Full Limited Full Limited Full Limited Full	HVFDCD1B0015L00/U HVFDCD1B0015F01/U HVFDCD1B0020F00/U HVFDCD1B0020F00/U HVFDCD1B0020F01/U HVFDCD1B0020L01/U D Part Number HVFDCD3C0040F00/U HVFDCD3C0040F00/U HVFDCD3C0040F01/U HVFDCD3C0050F00/U HVFDCD3C0050F01/U HVFDCD3C0050F01/U HVFDCD3C0075F00/U HVFDCD3C0075F01/U HVFDCD3C0075F01/U HVFDCD3C0075F01/U HVFDCD3C0075F01/U

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850 Town Center Drive Langhorne, PA 19047

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