

VFD Core

VFD CORE



VFD CORE addresses the need to save time for installation and provides the lower total installed costs. VFD CORE is rated for constant torque for industrial applications and variable torque for HVAC applications.

Drive Family: VFD CORE

Acceleration time: 0.0 - 600 sec

Deceleration time: 0.0 - 6000 sec

Analog Current Input: 0 (4) - 20 mA, 250 ohm differential

Analog Voltage Input: 0 - 10 Vdc, 200K ohm

Analog Current Output: 0 (4) - 20 mA, max 500 ohm

Digital Output: Open collector, max. load 48V/50mA

Continuous Output Current: Full Amp 1.2

Relay Output: Max. switching load: 250Vac/2A or 250Vdc/0,4A

Reference Output Voltage: Maximum Load 10mA

Auxiliary Voltage: ± 20%, max. load 50 mA

Starting Torque: Depends on the Motor

Peak Current: 20% of rated current for 1 minute

Frequency (Hz): 0 Hz to 600 Hz

Operating Temperature: 14 to 104 F (10 to 40 C)

Type of Enclosure: NEMA1

Configuration: Drive alone

Product Number	Voltage	Horsepower ¹	Frame Type	Variable Torque ²	Constant Torque Current Ratings ³	Dimensions, Approximate		Weight	
						(inch)	(mm)	(lb)	(kg)
HCRDA0010A1000T/U	208 Vac/230 Vac	1 HP	A	5A	4.6A	5.1 x 9.8 x 6.7	130 x 250 x 170	6.16	2.8
HCRDA0020A1000T/U	208 Vac/230 Vac	2 HP	A	7.5A	5A	5.1 x 9.8 x 6.7	130 x 250 x 170	6.16	2.8
HCRDA0030A1000T/U	208 Vac/230 Vac	3 HP	A	10A	8A	5.1 x 9.8 x 6.7	130 x 250 x 170	6.16	2.8
HCRDA0050A1000T/U	208 Vac/230 Vac	5 HP	A	15A	11A	5.1 x 9.8 x 6.7	130 x 250 x 170	6.16	2.8
HCRDA0075A1000T/U	208 Vac/230 Vac	7.5 HP	A	21A	17A	5.1 x 9.8 x 6.7	130 x 250 x 170	6.16	2.8
HCRDA0100B1000T/U	208 Vac/230 Vac	10 HP	B	31A	25A	7.5 x 12.6 x 7.5	190 x 320 x 190	10.12	4.6
HCRDA0150B1000T/U	208 Vac/230 Vac	15 HP	B	46A	33A	7.5 x 12.6 x 7.5	190 x 320 x 190	10.12	4.6
HCRDA0200B1000T/U	208 Vac/230 Vac	20 HP	B	61A	49A	7.5 x 12.6 x 7.5	190 x 320 x 190	12.32	5.6
HCRDA0250C1000T/U	208 Vac/230 Vac	25 HP	C	75A	65A	9.8 x 15.7 x 8.2	250 x 400 x 210	23.1	10.5
HCRDA0300C1000T/U	208 Vac/230 Vac	30 HP	C	90A	75A	9.8 x 15.7 x 8.2	250 x 400 x 210	23.1	10.5
HCRDA0400C1000T/U	208 Vac/230 Vac	40 HP	C	105A	90A	9.8 x 15.7 x 8.2	250 x 400 x 210	23.1	10.5
HCRDA0500D1000T/U	208 Vac/230 Vac	50 HP	D	146A	120A	13 x 27 x 10.8	330 x 688 x 275	78.1	35.5
HCRDA0600D1000T/U	208 Vac/230 Vac	60 HP	D	180A	146A	13 x 27 x 10.8	330 x 688 x 275	78.1	35.5
HCRDA0750E1000T/U	208 Vac/230 Vac	75 HP	E	215A	180A	14.5 x 28.2 x 11.9	370 x 716 x 300	100.54	45.7
HCRDA1000E1000T/U	208 Vac/230 Vac	100 HP	E	276A	215A	14.5 x 28.2 x 11.9	370 x 716 x 300	101.64	46.2
HCRDA1250E1000T/U	208 Vac/230 Vac	125 HP	E	322A	255A	14.5 x 28.2 x 11.9	370 x 716 x 300	120.34	54.7
HCRDC0010A1000T/U	460 Vac	1 HP	A	3A	2.8A	5.1 x 9.8 x 6.7	130 x 250 x 170	6.16	2.8
HCRDC0020A1000T/U	460 Vac	2 HP	A	3.7A	3A	5.1 x 9.8 x 6.7	130 x 250 x 170	6.16	2.8
HCRDC0030A1000T/U	460 Vac	3 HP	A	5A	4A	5.1 x 9.8 x 6.7	130 x 250 x 170	6.16	2.8
HCRDC0050A1000T/U	460 Vac	5 HP	A	7.5A	6A	5.1 x 9.8 x 6.7	130 x 250 x 170	6.16	2.8
HCRDC0075A1000T/U	460 Vac	7.5 HP	A	12A	10.5A	5.1 x 9.8 x 6.7	130 x 250 x 170	6.16	2.8
HCRDC0100A1000T/U	460 Vac	10 HP	A	14A	12A	5.1 x 9.8 x 6.7	130 x 250 x 170	6.16	2.8
HCRDC0150B1000T/U	460 Vac	15 HP	B	22.5A	18A	7.5 x 12.6 x 7.5	190 x 320 x 190	9.68	4.4
HCRDC0200B1000T/U	460 Vac	20 HP	B	30A	24A	7.5 x 12.6 x 7.5	190 x 320 x 190	10.34	4.7
HCRDC0250B1000T/U	460 Vac	25 HP	B	36A	32A	7.5 x 12.6 x 7.5	190 x 320 x 190	12.54	5.7
HCRDC0300C1000T/U	460 Vac	30 HP	C	45A	38A	9.8 x 15.7 x 8.2	250 x 400 x 210	18.48	8.4
HCRDC0400C1000T/U	460 Vac	40 HP	C	56A	45A	9.8 x 15.7 x 8.2	250 x 400 x 210	19.14	8.7
HCRDC0500C1000T/U	460 Vac	50 HP	C	72A	60A	9.8 x 15.7 x 8.2	250 x 400 x 210	20.68	9.4
HCRDC0600D1000T/U	460 Vac	60 HP	D	91A	73A	13 x 27 x 10.8	330 x 688 x 275	78.1	35.5
HCRDC0750D1000T/U	460 Vac	75 HP	D	110A	91A	13 x 27 x 10.8	330 x 688 x 275	78.1	35.5
HCRDC1000D1000T/U	460 Vac	100 HP	D	144A	110A	13 x 27 x 10.8	330 x 688 x 275	89.1	40.5
HCRDC1250D1000T/U	460 Vac	125 HP	D	180A	150A	13 x 27 x 10.8	330 x 688 x 275	89.1	40.5

¹Drives should be selected so that the rated output current in Amps of the drive meets or exceeds the full load amps (FLA) of the motor and not based on the motor horsepower.

²Variable Torque loads are loads that drive a variable speed motor where the torque decreases as the speed decreases, i.e. centrifugal pumps, fans.

³Constant Torque loads are loads where as the speed changes the torque remains constant, i.e. conveyors, positive displacement pumps.

VFD CORE Bypass Assemblies



VFD CORE addresses the need to save time for installation and provides the lower total installed costs. VFD CORE is rated for constant torque for industrial applications and variable torque for HVAC applications.

Drive Family: VFD CORE
Acceleration time: 0.0 - 600 sec
Deceleration time: 0.0 - 6000 sec
Analog Current Input: 0 (4) - 20 mA, 250 ohm differential
Analog Voltage Input: 0 - 10 Vdc, 200K ohm
Analog Current Output: 0 (4) - 20 mA, max 500 ohm
Digital Output: Open collector, max. load 48V/50mA
Continuous Output Current: Full Amp 1.2
Relay Output: Max. switching load: 250Vac/2A or 250Vdc/0,4A
Reference Output Voltage: Maximum Load 10mA
Auxiliary Voltage: ± 20%, max. load 50 mA

Starting Torque: Depends on the Motor
Peak Current: 20% of rated current for 1 minute
Drive Input Disconnect: Yes
Disconnect Type: Fused
Drive Input Fuses: Yes
Pilot Lights: Yes
Frequency (Hz): 0 Hz to 600 Hz
Operating Temperature: 14 to 104 F (10 to 40 C)
Configuration: Drive with 3 contactor bypass
Type of Enclosure: NEMA1

NOTE: All VFD Core Drives with Bypass are configured with 3 contactors and a fused disconnect.

Product Number	Voltage	Horsepower ¹	Frame Type	Variable Torque ²	Constant Torque Current Ratings ³	Dimensions, Approximate		Weight	
						(inch)	(mm)	(lb)	(kg)
HCRBA0010A1300T/U	208 Vac	1 HP	A	5A	4.6A	8.9 x 35.2 x 10.6	226 x 894 x 270	37	17
HCRBA0020A1300T/U	208 Vac	2 HP	A	7.5A	5A	8.9 x 35.2 x 10.6	226 x 894 x 270	37	17
HCRBA0030A1300T/U	208 Vac	3 HP	A	10A	8A	8.9 x 35.2 x 10.6	226 x 894 x 270	37	17
HCRBA0050A1300T/U	208 Vac	5 HP	A	15A	11A	8.9 x 35.2 x 10.6	226 x 894 x 270	40	18
HCRBA0075A1300T/U	208 Vac	7.5 HP	A	21A	17A	8.9 x 35.2 x 10.6	226 x 894 x 270	63	29
HCRBA0100B1300T/U	208 Vac	10 HP	B	31A	25A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	67	30
HCRBA0150B1300T/U	208 Vac	15 HP	B	46A	33A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	75	34
HCRBA0200B1300T/U	208 Vac	20 HP	B	61A	49A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	79	36
HCRBA0250C1300T/U	208 Vac	25 HP	C	75A	65A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	83	38
HCRBA0300C1300T/U	208 Vac	30 HP	C	90A	75A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	166	75
HCRBA0400C1300T/U	208 Vac	40 HP	C	105A	90A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	176	80
HCRBA0500D1300T/U	208 Vac	50 HP	D	146A	120A	19.6 x 53.5 x 13.3	497.8 x 1359 x 337.8	193	88
HCRBA0600D1300T/U	208 Vac	60 HP	D	180A	146A	19.6 x 53.5 x 13.3	497.8 x 1359 x 337.8	255	116
HCRBA0750E1300T/U	208 Vac	75 HP	E	215A	180A	Contact Customer Care			
HCRBA1000E1300T/U	208 Vac	100 HP	E	276A	215A	Contact Customer Care			
HCRBA1250E1300T/U	208 Vac	125 HP	E	322A	255A	Contact Customer Care			
HCRBB0010A1300T/U	230 Vac	1 HP	A	5A	4.6A	8.9 x 35.2 x 10.6	226 x 894 x 270	37	17
HCRBB0020A1300T/U	230 Vac	2 HP	A	7.5A	5A	8.9 x 35.2 x 10.6	226 x 894 x 270	37	17
HCRBB0030A1300T/U	230 Vac	3 HP	A	10A	8A	8.9 x 35.2 x 10.6	226 x 894 x 270	37	17
HCRBB0050A1300T/U	230 Vac	5 HP	A	15A	11A	8.9 x 35.2 x 10.6	226 x 894 x 270	40	18
HCRBB0075A1300T/U	230 Vac	7.5 HP	A	21A	17A	8.9 x 35.2 x 10.6	226 x 894 x 270	63	29
HCRBB0100B1300T/U	230 Vac	10 HP	B	31A	25A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	67	30
HCRBB0150B1300T/U	230 Vac	15 HP	B	46A	33A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	75	34
HCRBB0200B1300T/U	230 Vac	20 HP	B	61A	49A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	79	36

¹Drives should be selected so that the rated output current in Amps of the drive meets or exceeds the full load amps (FLA) of the motor and not based on the motor horsepower.

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Commercial Components

VFD Core

Product Number	Voltage	Horsepower ¹	Frame Type	Variable Torque ²	Constant Torque Current Ratings ³	Dimensions, Approximate		Weight	
						(inch)	(mm)	(lb)	(kg)
HCRBB0250C1300T/U	230 Vac	25 HP	C	75A	65A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	83	38
HCRBB0300C1300T/U	230 Vac	30 HP	C	90A	75A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	166	75
HCRBB0400C1300T/U	230 Vac	40 HP	C	105A	90A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	176	80
HCRBB0500D1300T/U	230 Vac	50 HP	D	146A	120A	19.6 x 53.5 x 13.3	497.8 x 1359 x 337.8	193	88
HCRBB0600D1300T/U	230 Vac	60 HP	D	180A	146A	19.6 x 53.5 x 13.3	497.8 x 1359 x 337.8	255	116
HCRBB0750E1300T/U	230 Vac	75 HP	E	215A	180A	Contact Customer Care			
HCRBB1000E1300T/U	230 Vac	100 HP	E	276A	215A	Contact Customer Care			
HCRBB1250E1300T/U	230 Vac	125 HP	E	322A	255A	Contact Customer Care			
HCRBC0010A1300T/U	460 Vac	1 HP	A	3A	2.8A	8.9 x 35.2 x 10.6	226 x 894 x 270	37	17
HCRBC0020A1300T/U	460 Vac	2 HP	A	3.7A	3A	8.9 x 35.2 x 10.6	226 x 894 x 270	37	17
HCRBC0030A1300T/U	460 Vac	3 HP	A	5A	4A	8.9 x 35.2 x 10.6	226 x 894 x 270	37	17
HCRBC0050A1300T/U	460 Vac	5 HP	A	7.5A	6A	8.9 x 35.2 x 10.6	226 x 894 x 270	37	17
HCRBC0075A1300T/U	460 Vac	7.5 HP	A	12A	10A	8.9 x 35.2 x 10.6	226 x 894 x 270	37	17
HCRBC0100A1300T/U	460 Vac	10 HP	A	14A	12A	8.9 x 35.2 x 10.6	226 x 894 x 270	40	18
HCRBC0150B1300T/U	460 Vac	15 HP	B	22.5A	18A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	63	29
HCRBC0200B1300T/U	460 Vac	20 HP	B	30A	24A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	67	30
HCRBC0250B1300T/U	460 Vac	25 HP	B	36A	32A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	71	32
HCRBC0300C1300T/U	460 Vac	30 HP	C	45A	38A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	75	34
HCRBC0400C1300T/U	460 Vac	40 HP	C	56A	45A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	79	36
HCRBC0500C1300T/U	460 Vac	50 HP	C	72A	60A	12.4 x 49.1 x 11.5	315 x 1247 x 292.1	83	38
HCRBC0600D1300T/U	460 Vac	60 HP	D	91A	73A	19.6 x 53.5 x 13.3	497.8 x 1359 x 337.8	166	75
HCRBC0750D1300T/U	460 Vac	75 HP	D	110A	91A	19.6 x 53.5 x 13.3	497.8 x 1359 x 337.8	176	80
HCRBC1000D1300T/U	460 Vac	100 HP	D	144A	110A	19.6 x 53.5 x 13.3	497.8 x 1359 x 337.8	193	88
HCRBC1250D1300T/U	460 Vac	125 HP	D	180A	150A	19.6 x 53.5 x 13.3	497.8 x 1359 x 337.8	255	116

¹Drives should be selected so that the rated output current in Amps of the drive meets or exceeds the full load amps (FLA) of the motor and not based on the motor horsepower.

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VFD Core Accessories

Product Number	Drive Family	Description
HCRDFANFRA1H/U	VFD CORE	VFD CORE Replacement Fan Frame A (Heat Sink Cooling Fan for 3-7.5HP 208/ 230 V and 5-10 HP 460 V)
HCRDFANFRB1B/U	VFD CORE	VFD CORE Replacement Fan Frame B (Board Cooling Fan for 10-20 HP 208/230 V and 15-25 HP 460 V)
HCRDFANFRB1H/U	VFD CORE	VFD CORE Replacement Fan Frame B (Heat Sink Cooling Fan for 10 HP 208/230 V and 15 HP 460 V)
HCRDFANFRB2H/U	VFD CORE	VFD CORE Replacement Fan Frame B (Heat Sink Cooling Fan for 15-20 HP 208/230 V and 20-25 HP 460V)
HCRDFANFRC1B/U	VFD CORE	VFD CORE Replacement Fan Frame C (Board Cooling Fan for 25-40 HP 208/230 V)
HCRDFANFRC2B/U	VFD CORE	VFD CORE Replacement Fan Frame C (Board Cooling Fan for 30-50 HP 460 V)
HCRDFANFRD1B/U	VFD CORE	VFD CORE Replacement Fan Frame D (Board Cooling Fan for 50-60 HP 208/230 V and 60-125 HP 460V)
HCRDFANFRD1H/U	VFD CORE	VFD CORE Replacement Fan Frame D (Heat Sink Cooling Fan for 50-60 HP 208/230 V and 60-125 HP 460V)
HCRDFANFRE1B/U	VFD CORE	VFD CORE Replacement Fan Frame E (Board Cooling Fan for 75- 125 HP 208/230V)
HCRDFANFRE1H/U	VFD CORE	VFD CORE Replacement Fan Frame E (Heat Sink Cooling Fan for 75- 100 HP 208/230 V)
HCRDFANFRE2H/U	VFD CORE	VFD CORE Replacement Fan Frame E (Heat Sink Cooling Fan for 125 HP 208/230 V)
HCRDKEYPAD/U	VFD CORE	VFD CORE Replacement Keypad
HCRDMOUNTKIT/U	VFD CORE	VFD CORE Keypad Mounting Kit
HCRDTRAINER/U	VFD CORE	VFD CORE Training Demonstration Kit