Hopewind

HV300
General Purpose Drive

0.5HP-660HP (0.4kW-500kW)
200V-240V / 380V-480V / 500V-690V

Company Profile

Shenzhen Hopewind Electric Co., Ltd. (hereinafter referred to as Hopewind) is a high-tech enterprise which specializes in the research & development, manufacturing, marketing and service of new energy & electric control systems and has its own advanced development platform for high-power converters and monitoring systems. Keeping innovating technology and service, Hopewind continuously creates excess value for customers and now is the leading electric enterprise in china energy field.

In the field of new energy, Hopewind's products cover 850kW~7.0MW wind power converters, 50kW~1.0MW PV inverters and 1.0MW~2.0MW PV grid-tie conversion containers. In the field of electric control, Hopewind provides motor drives from 0.4kW~60MW, widely applied in metallurgy, petroleum, chemical, textile, machine tools, etc. In the field of improving power quality, Hopewind offers 30kVar~10MVar APF, SVG and special power supply, used in the industries of metro, broadcasting, metallurgy, petroleum, car-manufacturing, paper-making, machine room, etc.

China·Shenzhen Headquarters

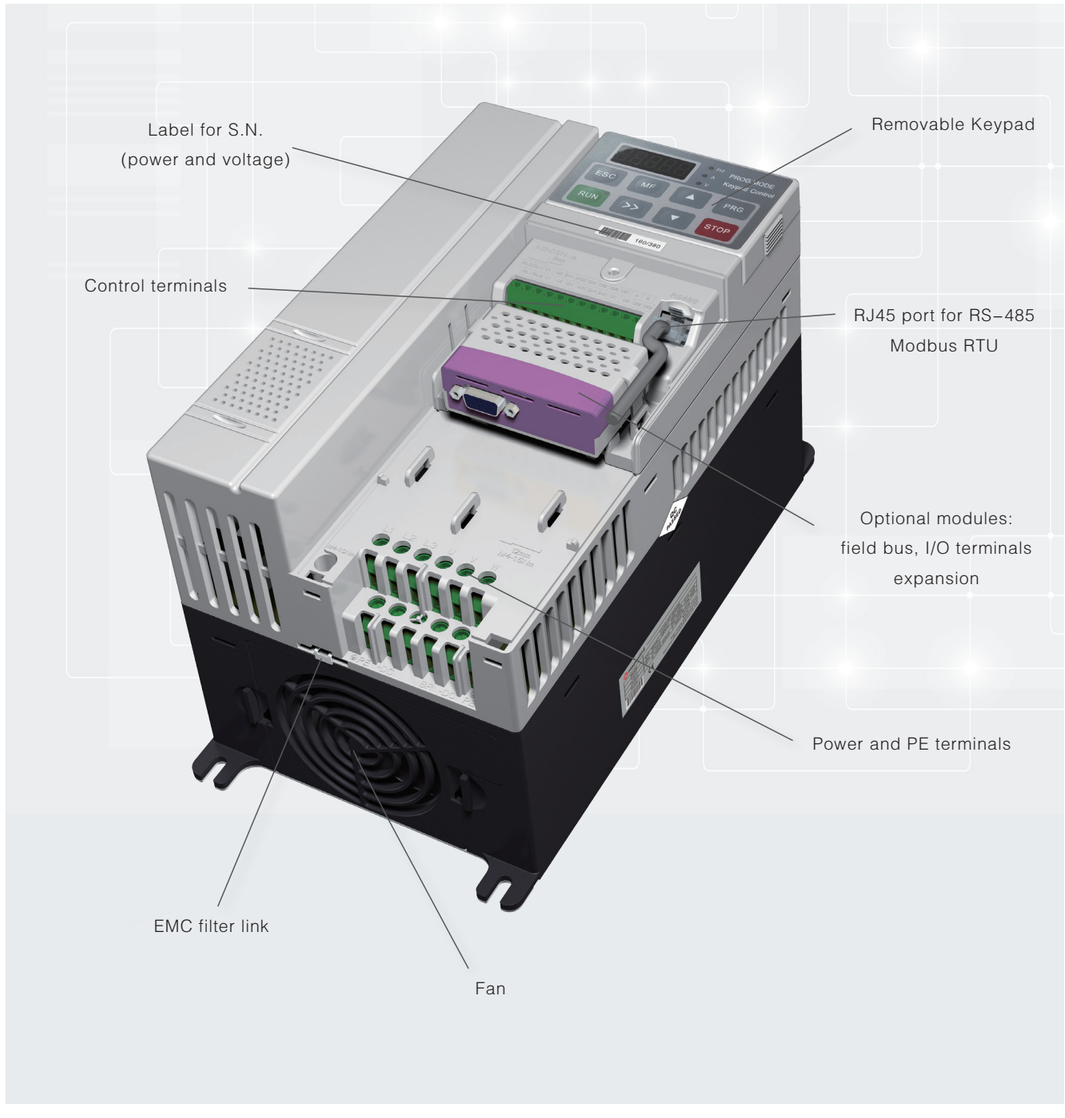
Headquarter and R&D Base: Shenzhen

Manufacturing Base: Shenzhen, Jiangsu

Branches: American Subsidiary, Beijing Sales & Service Center, Huadong Office & Xinjiang Office, Kunming Service Base, Zhangbei Service Base etc.

>> HV300 General Purpose Drive

Hopewind's HV300 series is a kind of general purpose AC drive with open-loop control (V/F and vector), HV300 can realize reference close-loop control by the built-in PID block, widely applied in fans and pumps, milling, compressors, centrifuges, CNC lathes, drilling, grinding, etc.



>> Hardware

1. EMC filter

- Internal C3 EMC filter for whole family.
- Reduce electromagnetic interference caused by incorrect selection and site installation.

*The filter can be fitted or unfitted by the link as shown left.

2. Cooling

- Independent airflow channel.
- Fan controlled refer to heatsink temperature and the load.
- 7.5kW and below models with wireless fan block design.

3. Internal brake unit

- Reduce the occupied space and decrease the cost.
- Standard on drives 22kW(30hp) and blow.
- Optional on drives 30kW(40hp) and higher.

4. Power module

- Integrated IGBT(max. junction temperature 175℃).
- Thermal model design, real-time IGBT junction temperature calculation to ensure reliability.
- Soft turn-off technology for IGBT shoot through.
- Overcurrent trip reset is controlled to avoid IGBT damage caused by frequent overcurrent.

5. DC reactor & AC reactor

- Reduce input harmonic current and improve power factor.
- Less grid fluctuation impact and protect the rectifier bridge.
- Fitted with DC reactor or AC reactor for 4kW(5hp) and higher.

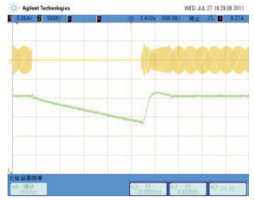
6. Multi-communication ports

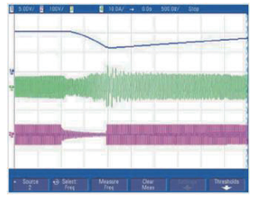
- Two RJ45 ports design:
  ①. one for standard keypad (max. 5 meters connecting cable)
  ②. another for remote keypad (max. 100 meters connecting cable)
- A&B terminal for RS485

>> Control Performance

1.Catch rotating motor and quick start

- In the event of a power interruption, the drive will detect the speed and rotational direction of the motor, and automatically match output frequency to restart normal operation smoothly.
- Reduced input transients on restart.





2. Fast response ramp control

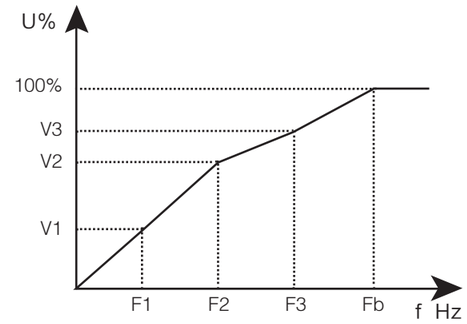
- Fast between forward / reverse and accelerate / decelerate modes without voltage spikes.

3. Advanced open loop vector control

- Low frequency torque: 0.5Hz:150% rated torque;
- Lower sensitivity to motor parameters. Higher adaptability.
- Advanced slip compensation technology for great speed control.
- Excellent dynamic response ability, torque response ＜20ms.

4. Multipoint V/F curve setting

- Programble V/F curve according to the torque characteristic to improve the start performance.
- 3 available settings：
  ①. Linear V/F curve applies to constant torque load.
  ②. Multipoint V/F curve applies to loads such as dewatering machine and centrifuge.
  ③. Square V/F curve applies to loads such as fans and pumps.



V1~V3: voltage preset point
FI~F3: frequency preset point

5. AVR function

- When supply voltage transients occur, the drive attempts to adjust output voltage into the normal range.

6. PMSM Soft-start Grid-tie Function

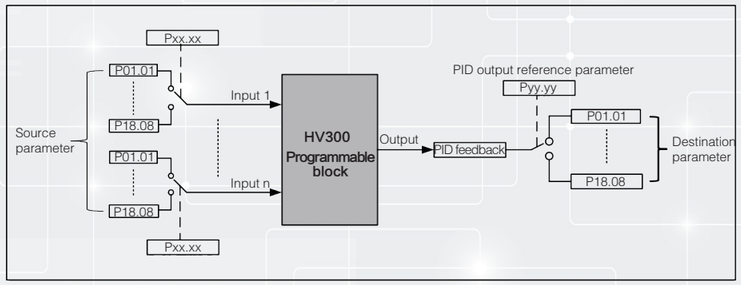
- Achieve the function that the converter drags the permanent magnet synchronous motor to the grid frequency, and then switch to the grid-connected operation through the contactor.
- Reduce system losses; improve power factor.
- The utilization ratio can be improved by the switching control of a plurality of motors.

NOTE: In order to achieve the desired control effect, please enter the correct motor parameters.

>> Functions

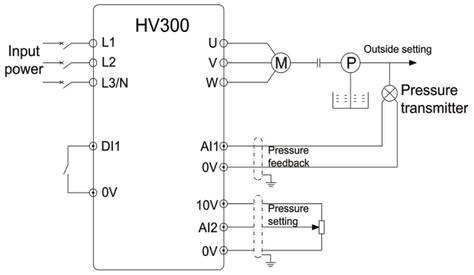
1. Programmable function blocks

- Internal function programming platform, convenient for expanding functions to meet special operational requirements.



2. PID Control

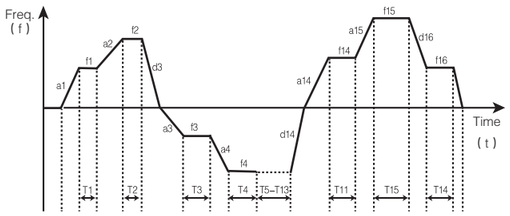
- Internal PID block supports reference close–loop control with various sensors, for signals like temperature, pressure, flowrate, etc.



(Constant Water Pressure Control)

3. Multi–speed Function

- Preset speeds(decided by internal PLC function or control terminals).
- Up to 16 preset speeds with I/O terminals.



4. Dual motors

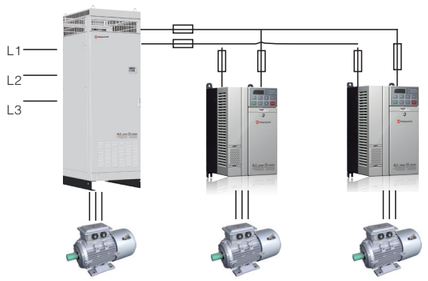
- Two motor parameters can be saved, supports to control two motors from a drive for space and cost reduction.

Simultaneously drive multiple motors at V/F control.

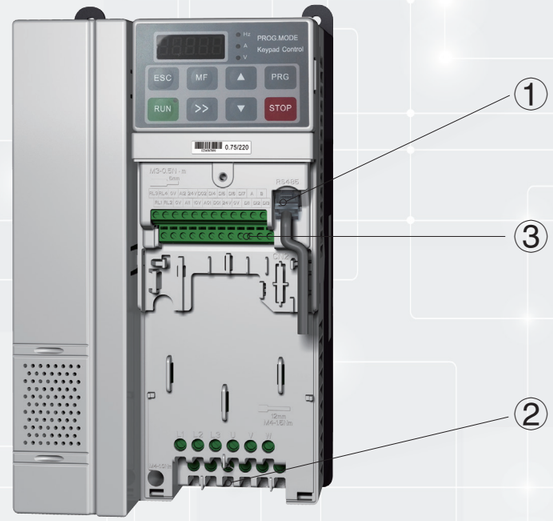
Seperately drive 2 motors under different setting at vector control.

5. Common DC–bus

- Supports common DC–bus application.
- Braking resistor sharing is possible.



>> Terminal Diagram

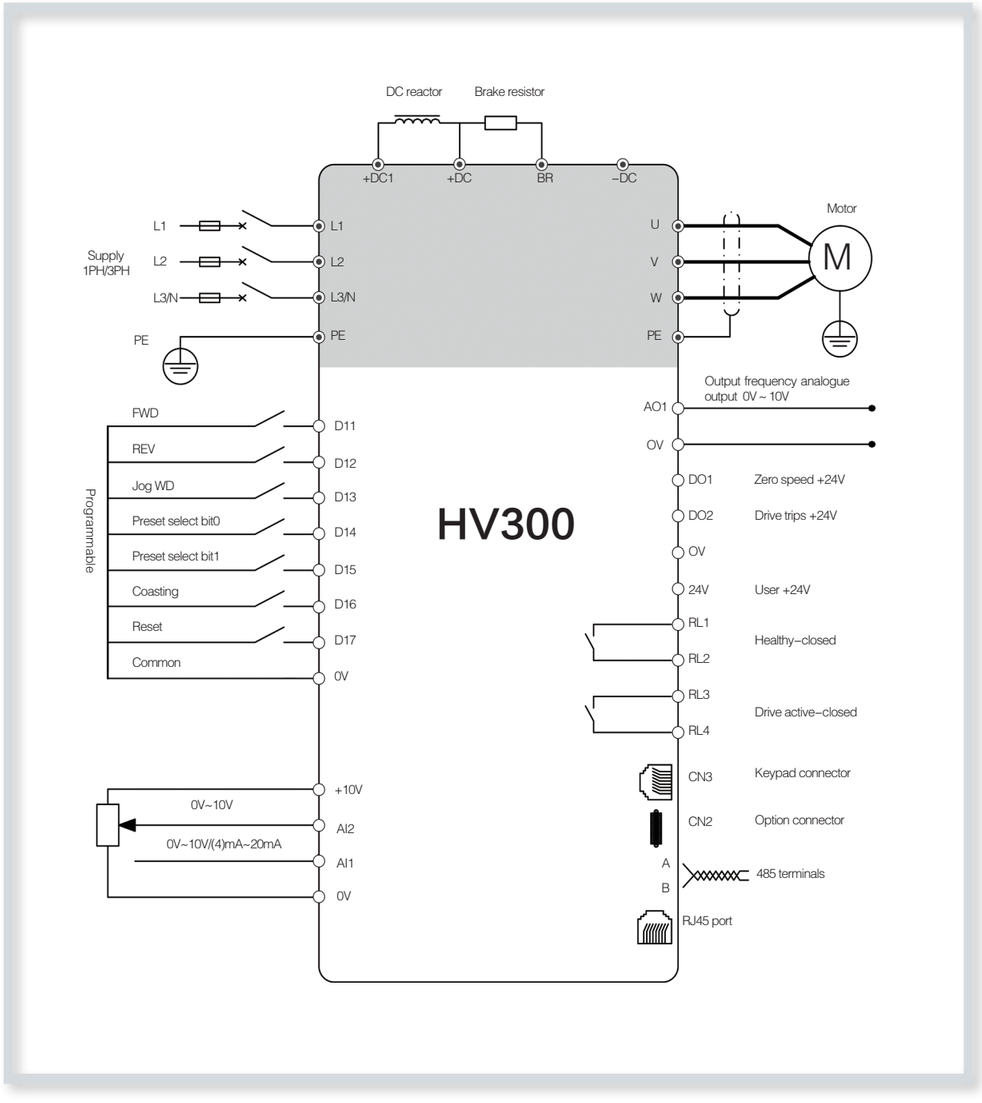


① RS485 port	
Pin No.	Function
1	NC
2	A (485+)
3	0V
4	24V
5	NC
6	Enable
7	B (485–)
8	B (485–)

② Power terminals	
Terminals	Function
L1, L2, L3	AC power supply. For single phase supply, suggest to use L1, L3
U, V, W	Output terminals (Motor terminals)
PE	Protective Earth terminal
+DC, +DC1	For DC reactor, linked by terminal
BR	Brake resistor, another end is +DC1
–DC	Negative DC bus

③ Control terminals	
RL1, RL2	Programmable relay1 output contactors
RL3, RL4	Programmable relay2 output contactors
0V	Common (3)
10V	Analogue reference rail
24V	User supply (2)
AI1	Programmable analogue input1 0V–10V, 0(4)mA–20mA
AI2	Programmable analogue input2 0V–10V
AO1	Programmable analogue output
DI1 ~ DI5	Programmable digital input terminals
DI6	Normal digital input Length counting Number counting
DI7	Normal digital input High frequency pulse input Motor thermister input
DO1	Programmable digital output terminal1
DO2	Programmable digital output terminal2
A	485 plus signal
B	485 minus signal

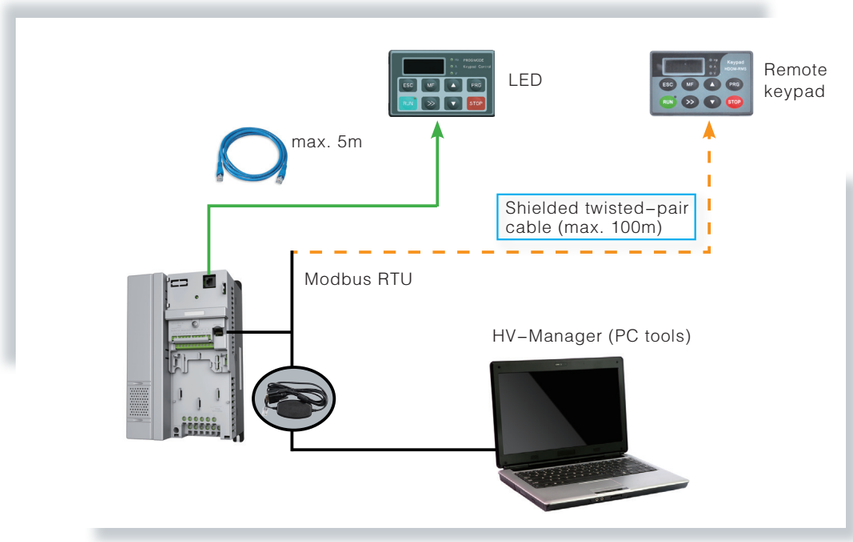
>>Typical Wiring



NOTE:

- All the programmable control terminal functions are factory default set.
- For control wire, recommend using unshielded twisted pair, shielded cable or shielded twisted pair.
- 5.5kW(7.5hp) ~ 280kW(370hp) models (including 220V/4kW(5hp), except size E1 and F1 models), internal DC reactor is fitted. 315kW(500hp) ~ 450kW(600hp) models with AC reactor fitted.

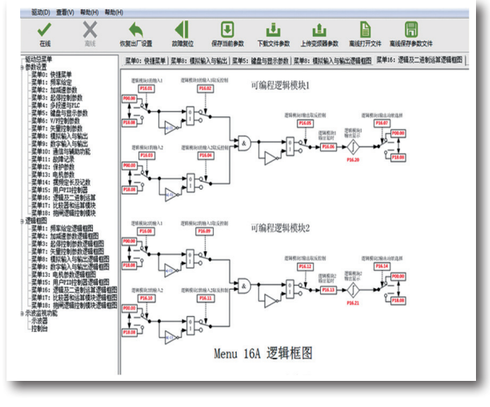
>> Programming Interface

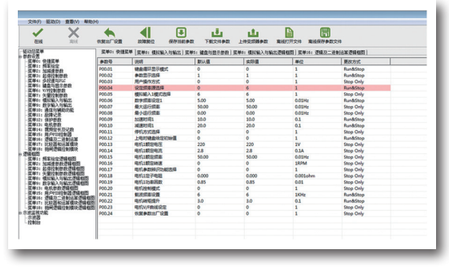


Drive commissioning can be set by LED keypad or remote keypad. Meanwhile, Hopewind's free software suite makes it easier to access the drive's full feature set. It allows you to optimize the drive tuning, back up the configuration and set up communications networks.

HV–Manager is a drive configuration tool for commissioning, optimizing and monitoring HV drives.
It allows you to:

- Use the configuration wizards to commission your drive.
- Read, save and load drive configuration settings.
- Remotely control the drive with simulated run, stop, reverse and jog push buttons.
- View and analyze changing values within the drive on a software based oscilloscope.





>> Model Description

HV300 — A0 2 T 00007 G B

1 **Family**
HV300: General purpose

2 **Supply voltage**
2: 200V (–10%)–240V (+10%)
4: 380V (–10%)–480V (+10%)
6: 500V (–10%)–690V (+10%)

Input phase
D: 1 PH or 3 PH, T: 3 PH

3 **Load type**
G: standard G type
E: small size G type
Blank: standard G type

4 **Operation mode and cooling**
A0: Two–quadrant,air–cooled W0: Two–quadrant,water–cooled
A1: Four–quadrant,air–cooled W1: Four–quadrant,water–cooled

5 **Power size**
00007: 0.7kW 00075: 7.5kW 00150: 15kW
01850: 185kW 20000: 2MW

6 **Brake unit**
B: Internal fitted
Blank: None or external

>>Technical Specifications

Function		Specification
Input Power	Input Voltage U_{in}	200V (–15%)–240V (+10%) 1PH/3PH, 380V (–15%)–480V (+10%) 3PH 500V (–15%)–690V (+10%) 3PH
	Input Frequency	50Hz /60Hz (± 5%)
	Maximum Supply Imbalance	⩽3%
Output Power	Output Voltage	0V–U_{in}
	Output Frequency	0Hz–300Hz
Main Performance Function	Voltage Control	V/F, Open loop Vector Control
	Switching Frequency	1kHz–15kHz
	Adjust Speed range	Open loop vector –1:100, V/F mode –1:50
	Start Torque	0.5Hz: 150% (In vector control mode)
	Torque Accuracy	5%
	Reference resolution	Digit– 0.01Hz, Analogue– 0.1% × Max. frequency
	Acce. & Dece. rate	0.1s–3600min
	Voltage Boost	0.1%–30.0%
	Overload	E, G type: 150% rated output current, 1 minute P type: 110% rated output current, 1 minute
	V/F	4 types: V/F (user can program) and ramp (2.0 power, 1.7 power, 1.2 power)
	DC Braking	Injection frequency: 0.0%–100.0% Max. frequency, Injection current: 0.0%–300.0% rated current Injection time: 0.00s–60.00s
	Dynamic Brake	Brake rate: 0.0% ~ 100.0%
	Jog	Jog frequency: 0.00Hz–maximum frequency, Jog acceleration rate: 0.1s–600.0s, Jog interval time: 0.1s–600.0s
	Preset	16 preset speeds (decided by control terminals)
	AVR	Maintain the output voltage of motor V/F when the input power supply voltage changed
Special Function	Simple PLC	Onboard PLC
	PID Control	Process control (reference close loop control)
	Advanced Function Blocks	2 logic control blocks, 1 binary selector, 2 threshold control blocks, 3 variable selectors
	PMSM Soft–start Grid–tie Function	When drives the PMSM (permanent magnet synchronous motor) to the grid frequency, the switch will act to get the power supply from the grid without current impact, and the VFD will stop running
Control Terminal	Reference Source	Digit: Keypad, motorized pot (E–Pot), preset speed, pulse, comms. Analogue: AI1: 0V–10V, 0(4) mA–20mA. AI2: 0V–10V
	Operating Mode	Keypad, Control terminal, Serial comms.
	Digital Input Terminals	DI1–DI7: Programmable terminals and DI6 can be set as pulse input, 0Hz ~ 60Hz. DI7 can be high frequency pulse input (1kHz–50.0kHz) or PTC thermistor input
	Digital output terminals	DO1–DO2: Programmable terminals, Max. output current: 50mA, DO2can be the terminal to output pulse (0.1kHz–50.0kHz), and output PWM
	Analogue output	AO1: programmable terminal, 0V–10V
	Status relay	2 programmable relays, contactor data:AC250V/2A(COS ϕ =1), AC250V/1A(COS ϕ =0.4), DC30V/1A
Comms.	Connector	2 terminals (A&B) and RJ45 Port
	Protocol	Modbus RTU
Environment	Altitude	1000m rated, 1000m–3000m, 1% rated current derating per 100m
	Operating Temperature	–20℃ ~ +40℃ (Operation with derating at 40℃~55℃)
	Max. Humidity	⩽95%RH, no–condensing
	Vibration	⩽5.9m/s^2 (0.6g)
	Storage Temperature	–40℃–+70℃
	Running Environment	Indoor, non–flammable, no corrosive gasses, no contamination with electrically conductive material, avoid dust which may restrict the fan
Optional Module		LCD keypad, HV–232, HV–USB, Profibus module, keypad pallet, HVSOFT (PC Tools), Three–phase voltage detection module, etc.
Protection		Output shortage, over current, over load, over voltage, under Voltage, Phase loss, over heat (heatsink and junction), external trip, etc.
Efficiency		1.5kW(2hp) and below: ⩾89%, 2.2kW(3hp)–22kW(30hp): ⩾93%, 30kW(40hp) and above: ⩾95%
Mounting Method		Through panel, surface mounting
Enclosure		IP20, IP21 (by adding optional device)
Cooling Method		220V/0.4kW(0.5hp) model is nature cool, others are forced air cool

200V–240V Rating Data

Power supply: 200Vac-240Vac, 50Hz/60Hz, 1 phase / 3 phase						
Model Name	Fdcf[3] (kHz)	Drive Power Size (kVA)	Rated Input Current (A) 1PH/3PH	Rated Output Current (A)	Motor Power kW(HP)	Size
HV300–A02D00004GB	6	1.1	7.1/4	2.8	0.4(0.5)	A
HV300–A02D00007GB	6	1.9	12.8/7.1	5	0.75(1)	A
HV300–A02D00015GB	6	3.0	20.5/11.3	8	1.5(2)	A
HV300–A02D00022GB	6	4.2	24/14.5	11	2.2(3)	B
HV300–A02D00040GB	6	6.7	29/16.5	17.6	4(5)	C

380V–480V Rating Data

Power supply: 380Vac–480Vac, 50Hz/60Hz, 3 phase										
Model Name	Fdcf[3] (kHz)	G[1]				P[2]				Size
		Drive Power Size (kVA)	Rated Input Current (A)	Rated Output Current (A)	Motor Power kW(HP)	Drive Power Size (kVA)	Rated Input Curr (A)	Rated Output Curr (A)	Motor Power kW(HP)	
HV300–A04T00007GB	6	1.7	3.6	2.5	0.75(1)	–	–	–	–	A
HV300–A04T00015GB	6	2.8	5.7	4.2	1.5(2)	–	–	–	–	A
HV300–A04T00022EB	6	3.4	6.1	5.2	2.2(3)	–	–	–	–	A
HV300–A04T00022GB	6	3.8	8.3	5.8	2.2(3)	–	–	–	–	B
HV300–A04T00040GB	6	6.3	13.2	9.5	3.7(5)	–	–	–	–	B
HV300–A04T00055EB	3	8.6	14.3	13	5.5(7.5)	–	–	–	–	B
HV300–A04T00055GB	6	8.6	12.4	13	5.5(7.5)	–	–	–	–	C
HV300–A04T00075GB	6	11	16.1	17	7.5(10)	–	–	–	–	C
HV300–A04T00110B	6	16.5	24	25	11(15)	21	31	32	15(20)	D
HV300–A04T00150B	6	21	31	32	15(20)	25	36	38	18.5(25)	D
HV300–A04T00185B	6	25	36	38	18.5(25)	30	44	46	22(30)	E
HV300–A04T00220B	6	30	44	46	22(30)	40	58	60	30(40)	E
HV300–A04T00300E(B)	3	40	58	60	30(40)	50	72	75	37(50)	E1
HV300–A04T00370E(B)	3	50	72	75	37(50)	–	–	–	–	E1
HV300–A04T00300(B)	3	40	58	60	30(40)	50	72	75	37(50)	F
HV300–A04T00370(B)	3	50	72	75	37(50)	63	93	96	45(60)	F
HV300–A04T00450(B)	3	63	93	96	45(60)	83	121	125	55(75)	F
HV300–A04T00450E(B)	3	63	93	96	45(60)	–	–	–	–	F1
HV300–A04T00550(B)	3	83	121	125	55(75)	103	151	156	75(100)	F
HV300–A04T00750(B)	3	103	151	156	75(100)	119	175	180	90(125)	F
HV300–A04T00900(B)	3	119	175	180	90(125)	139	204	210	110(150)	G
HV300–A04T01100(B)	3	139	204	210	110(150)	169	248	256	132(200)	G
HV300–A04T01320(B)	3	169	248	256	132(200)	205	301	310	160(250)	G
HV300–A04T01600(B)	3	205	301	310	160(250)	231	340	350	185(–)	J
HV300–A04T01850(B)	3	231	340	350	185(–)	255	375	387	200(300)	J
HV300–A04T02000(B)	3	255	375	387	200(300)	280	415	427	220(300)	J
HV300–A04T02500(B)	3	310	457	471	250(370)	343	505	520	280(370)	K
HV300–A04T02800(B)	3	343	505	520	280(400)	403	592	610	315(500)	K

>>Model Specifications

380V–480V Rating Data

Power supply: 380Vac–480Vac, 50Hz/60Hz, 3 phase										
Model Name	Fdcf[3] (kHz)	G[1]				P[2]				Size
		Drive Power Size (kVA)	Rated Input Current (A)	Rated Output Current (A)	Motor Power kW(HP)	Drive Power Size (kVA)	Rated Input Curr (A)	Rated Output Curr (A)	Motor Power kW(HP)	
HV300–A04T03150(B)	2	403	592	610	315(500)	444	653	673	355(520)	L
HV300–A04T03550(B)	2	444	653	673	355(520)	495	728	750	400(530)	L
HV300–A04T04000(B)	2	495	728	750	400(530)	551	810	835	450(600)	L
HV300–A04T04500(B)	2	551	810	835	450(600)	622	915	943	500(660)	L

500V–690V Rating Data

Power supply: 500Vac–690Vac, 50Hz/60Hz, 3 phase										
Model Name	Fdcf[3] (kHz)	G[1]				P[2]				Size
		Drive Power Size (kVA)	Rated Input Current (A)	Rated Output Current (A)	Motor Power kW(HP)	Drive Power Size (kVA)	Rated Input Curr (A)	Rated Output Curr (A)	Motor Power kW(HP)	
HV300–A06T00300(B)	3	43	36	36	30(40)	51	42	43	37(50)	F
HV300–A06T00370(B)	3	51	42	43	37(50)	65	52	54	45(60)	F
HV300–A06T00450(B)	3	65	52	54	45(60)	75	61	63	55(75)	F
HV300–A06T00550(B)	3	75	61	63	55(75)	103	83	86	75(100)	F
HV300–A06T00750(B)	3	103	83	86	75(100)	120	97	100	90(125)	F
HV300–A06T00900(B)	3	120	97	100	90(125)	157	127	131	110(150)	G
HV300–A06T01100(B)	3	157	127	131	110(150)	179	145	150	132(200)	G
HV300–A06T01320(B)	3	179	145	150	132(200)	209	170	175	160(250)	G
HV300–A06T01600(B)	3	209	170	175	160(250)	237	192	198	185(–)	J
HV300–A06T01850(B)	3	237	192	198	185(–)	276	224	231	200(300)	J
HV300–A06T02000(B)	3	276	224	231	200(300)	296	235	248	220(300)	J
HV300–A06T02500(B)	3	327	266	274	250(370)	350	285	293	280(370)	K
HV300–A06T02800(B)	3	350	285	293	280(400)	392	318	328	315(500)	K
HV300–A06T03150(B)	2	392	318	328	315(500)	462	375	387	355(520)	L
HV300–A06T03550(B)	2	462	375	387	355(520)	509	413	426	400(530)	L
HV300–A06T04000(B)	2	509	413	426	400(530)	576	468	482	450(600)	L
HV300–A06T04500(B)	2	576	468	482	450(600)	651	529	545	500(660)	L

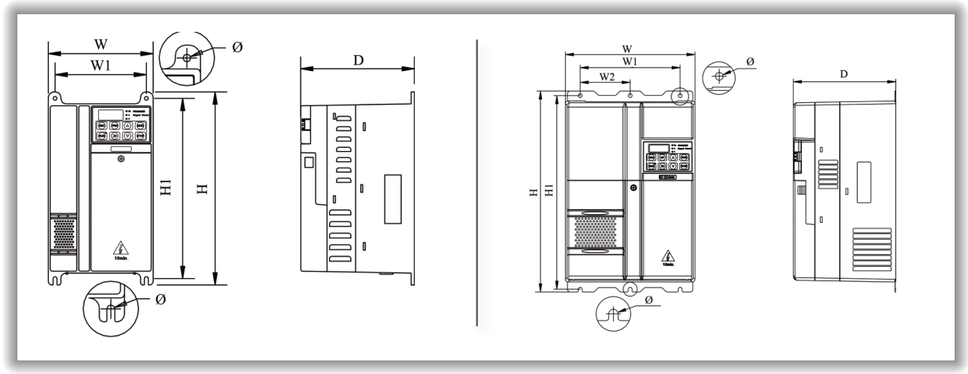
NOTE:

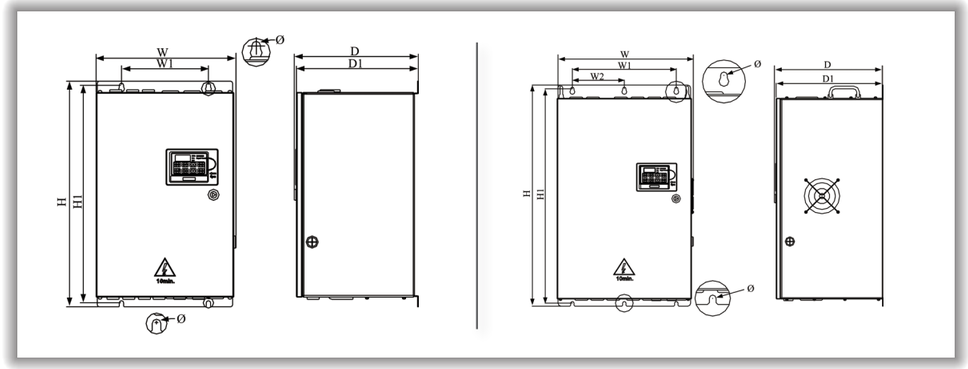
- Current rating of HV300 is refered to the standard 4 poles induction motor at rated voltage.
  - ①. G、E: constant torque applications; overload capacity: 150% rated output current, 1 minute
  - ②. P: variable torque applications like fans and pumps; overload capacity: 110% rated output current, 1 minute
  - ③. Fdcf: Default carrier frequency
- Only model numbers containing a "B" are fitted with inner brake unit. The brake feature is standard on drives 22kW and below, and optional on drives 30kW and higher.
- When HV300–A0xT01320 and HV300–A0xT03150 is used as P type, the default carrier frequency is 1kHz.
- 5.5kW(7.5hp)~280kW(370hp) models (including 220V/4kW(5hp), except Size E1 and F1 models) are fitted with DC reactor for standard
- 315kW(500hp)~450kW(600hp) models are fitted with input AC reactor for standard.

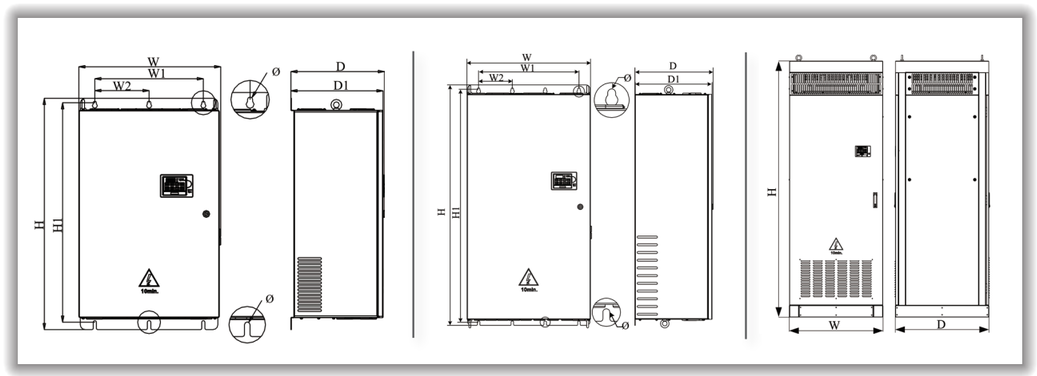
>>Mechanical Dimensions

Size	Model Name	W(mm) (in.)	W1(mm) (in.)	W2(mm) (in.)	H(mm) (in.)	H1(mm) (in.)	D(mm) (in.)	D1(mm) (in.)	Mounting Hole Φmm(in.)	Weight (kg)(lbs.)
A	HV300–A02D00004GB HV300–A02D00007GB HV300–A02D00015GB HV300–A04T00007GB HV300–A04T00015GB HV300–A04T00022EB	97.4 (3.83)	80 (3.15)	–	202.4 (7.97)	190 (7.48)	148.8 (5.86)	–	5 (0.20)	1.4 (3.1)
B	HV300–A02D00022GB HV300–A04T00022GB HV300–A04T00040GB HV300–A04T00055EB	142 (5.59)	123.5 (4.86)	–	220.4 (8.68)	208 (8.19)	155.5 (6.12)	–	5 (0.20)	5 (0.20)
C	HV300–A02D00040GB HV300–A04T00055GB HV300–A04T00075GB	163.1 (6.42)	142 (5.59)	–	300 (11.81)	280 (11.02)	176.8 (6.96)	–	6 (0.24)	4.5 (9.9)
D	HV300–A04T00110B HV300–A04T00150B	238.5 (9.39)	184 (7.24)	92 (3.62)	370 (14.57)	356.5 (14.04)	189 (7.44)	–	7 (0.28)	8.8 (19.4)
E	HV300–A04T00185B HV300–A04T00220B	238.5 (9.39)	184 (7.24)	92 (3.62)	435.5 (17.15)	422 (16.61)	200.3 (7.89)	–	7 (0.28)	12.1 (26.7)
E1	HV300–A04T00300E(B) HV300–A04T00370E(B)	320 (12.60)	210 (8.27)	–	510 (20.08)	490 (19.29)	226 (8.90)	222.5 (8.76)	8 (0.31)	20 (44.1)
F	HV300–A04T00300(B) HV300–A04T00370(B) HV300–A04T00450(B) HV300–A04T00550(B) HV300–A04T00750(B) HV300–A06T00300(B) HV300–A06T00370(B) HV300–A06T00450(B) HV300–A06T00550(B) HV300–A06T00750(B)	355.5 (14.00)	221 (8.70)	–	573 (22.56)	552.5 (21.75)	315.5 (12.42)	310 (12.20)	10 (0.39)	40 (88.3)
F1	HV300–A04T00450E(B)	355.5 (14.00)	221 (8.70)	–	573 (22.56)	552.5 (21.75)	296.9 (11.69)	280.7 (11.05)	10 (0.39)	33 (72.8)
G	HV300–A04T00900(B) HV300–A04T01100(B) HV300–A04T01320(B) HV300–A06T00900(B) HV300–A06T01100(B) HV300–A06T01320(B)	445.6 (17.54)	340 (13.39)	170 (6.69)	725 (28.54)	701.5 (27.62)	355 (13.98)	349.5 (13.76)	10 (0.39)	63 (139)
J	HV300–A04T01600(B) HV300–A04T01850(B) HV300–A04T02000(B) HV300–A06T01600(B) HV300–A06T01850(B) HV300–A06T02000(B)	575.5 (22.66)	440 (17.32)	220 (8.66)	937 (36.89)	889 (35.00)	379.3 (14.93)	373.8 (14.72)	13 (0.51)	104 (229.5)
K	HV300–A04T02500(B) HV300–A04T02800(B) HV300–A06T02500(B) HV300–A06T02800(B)	640 (25.20)	520 (20.47)	175 (6.89)	1246.5 (49.07)	1207.5 (47.54)	405.5 (15.96)	400 (15.75)	13 (0.51)	150 (331.0)
L	HV300–A04T03150(B) HV300–A04T03550(B) HV300–A04T04000(B) HV300–A04T04500(B) HV300–A06T03150(B) HV300–A06T03550(B) HV300–A06T04000(B) HV300–A06T04500(B)	804 (31.65)	–	–	2200 (86.61)	–	804 (31.65)	–	–	350 (772.3)

>> Mechanical Mounting







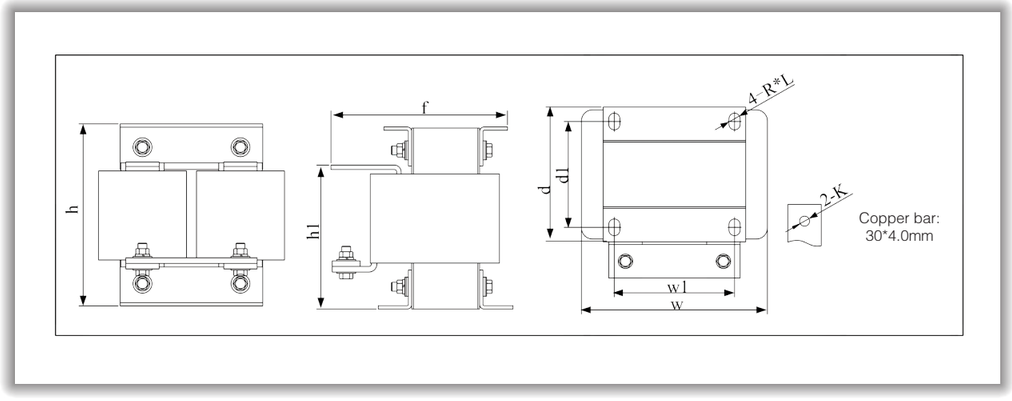
>> External DC Reactor Dimensions

380V~480V DC Reactor Dimensions (Unit: mm)

Model name	w (in.)	w1 (in.)	d (in.)	d1 (in.)	h (in.)	h1 (in.)	f (in.)	Mounting hole R*L(in.)	Copper bar mounting hole K(in.)	Reactor weight kg(lbs.)
HV300–A04T00550(B)	167 (6.57)	130 (5.12)	153.5 (6.04)	95 (3.74)	163.5 (6.44)	131 (5.16)	158.5 (6.24)	10*15 (0.39*0.59)	Φ9 (0.35)	10.3 (22.7)
HV300–A04T00750(B)										
HV300–A04T00900(B)	190 (7.48)	160 (6.30)	153 (6.02)	117 (4.61)	245 (9.65)	192 (7.56)	180 (7.09)	10*15 (0.39*0.59)	Φ12 (0.47)	20 (44.1)
HV300–A04T01100(B)										
HV300–A04T01320(B)										
HV300–A04T01600(B)	190 (7.48)	160 (6.30)	148 (5.83)	115 (4.53)	245 (9.65)	192 (7.56)	250 (9.84)	10*20 (0.39*0.79)	Φ13 (0.51)	25 (55.2)
HV300–A04T01850(B)										
HV300–A04T02000(B)										
HV300–A04T02500(B)	275 (10.83)	210 (8.27)	240 (9.45)	205 (8.07)	235 (9.25)	–	240 (9.45)	11*18 (0.43*0.71)	Φ14 (0.55)	38 (83.4)
HV300–A04T02800(B)										

500V~690V DC Reactor Dimensions (Unit: mm)

Model name	w (in.)	w1 (in.)	d (in.)	d1 (in.)	h (in.)	h1 (in.)	f (in.)	Mounting hole R*L(in.)	Copper bar mounting hole K(in.)	Reactor weight kg(lbs.)
HV300–A06T00550(B)	128 (5.04)	130 (5.12)	116 (4.57)	90 (3.54)	180 (7.09)	140 (5.51)	175 (6.89)	10*15 (0.39*0.59)	Φ9 (0.35)	10 (22.0)
HV300–A06T00750(B)										
HV300–A06T00900(B)	190 (7.48)	160 (6.30)	153 (6.02)	117 (4.61)	245 (9.65)	192 (7.56)	180 (7.09)	10*15 (0.39*0.59)	Φ12 (0.47)	20 (44.1)
HV300–A06T01100(B)										
HV300–A06T01320(B)										
HV300–A06T01600(B)	190 (7.48)	160 (6.30)	148 (5.83)	115 (4.53)	245 (9.65)	192 (7.56)	250 (9.84)	10*20 (0.39*0.79)	Φ13 (0.51)	25 (55.2)
HV300–A06T01850(B)										
HV300–A06T02000(B)										
HV300–A06T02500(B)	235 (9.25)	180 (7.09)	230 (9.06)	175 (6.89)	205 (8.07)	–	230 (9.06)	11*18 (0.43*0.71)	Φ14 (0.55)	27.5 (60.7)
HV300–A06T02800(B)										



>>Cable for DC Reactor

380V~480V DC Reactor Cable Data

Model name	Cable current (A)	Cable voltage(V)	Cable mm^2
HV300–A04T00550(B)	154	500VDC	70
HV300–A04T00750(B)	185	500VDC	120
HV300–A04T00900(B)	226	500VDC	150
HV300–A04T01100(B)	272	500VDC	185
HV300–A04T01320(B)	329	500VDC	120*2
HV300–A04T01600(B)	381	500VDC	120*2
HV300–A04T01850(B)	412	500VDC	120*2
HV300–A04T02000(B)	514	500VDC	150*2
HV300–A04T02500(B)	576	500VDC	150*2
HV300–A04T02800(B)	648	500VDC	150*3

500V~690V DC Reactor Cable Data

Model name	Cable current (A)	Cable voltage(V)	Cable mm^2
HV300–A06T00550(B)	85	1000VDC	25
HV300–A06T00750(B)	102	1000VDC	35
HV300–A06T00900(B)	125	1000VDC	50
HV300–A06T01100(B)	150	1000VDC	70
HV300–A06T01320(B)	182	1000VDC	50*2
HV300–A06T01600(B)	211	1000VDC	70*2
HV300–A06T01850(B)	228	1000VDC	70*2
HV300–A06T02000(B)	285	1000VDC	90*2
HV300–A06T02500(B)	319	1000VDC	120*2
HV300–A06T02800(B)	358	1000VDC	120*2

NOTE:

- The reactor can improve the power factor and avoid damage to the rectifier bridge caused by over–current and damage to the rectifier circuit by harmonic.
- 5.5kW(7.5hp)~280kW(370hp) models (including 220V/4kW(5hp), except Size E1 and F1 models) are fitted with DC reactor for standard, DC reactor on drives 5.5kW(7.5hp)~45kW(60hp) is internal, on drives 55kW(75hp) and higher is external.
- 315kW(500hp)~450kW(600hp) models are fitted with input AC reactor for standard.

>>Options

1. Remote keypad (HVRMS-S)

Used for remote operation, (maximum 100 meter connecting cable)

2. Keypad pallet (HVPFT-S)

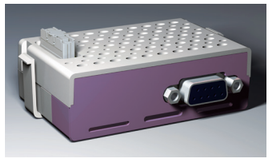
Used for keypad installation

3. I/O terminal expansion module (HVIOU)

Allows for input and output terminals expansion

4. Communication adapter (HVUSB)

Adapts the drive's RS-485 port to USB



5. Profibus module (HVPFB)

A field bus solution module that can be installed to the expansion slot to provide profibus-DP slave connectivity

6. Communication adapter (HV232)

Adapts the drive's RS-485 port to RS-232

7. Three-phase voltage detection module (HVVMU)

Detection of three-phase voltage, participation in control, can be used for permanent magnet synchronous motor soft-start grid-connection, speed tracking and other functions

>> Certifications

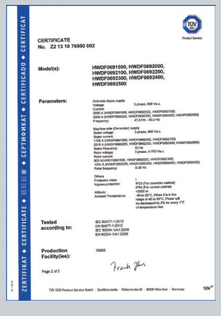
Full series pass **CE** and **ROHS** certification.

Laboratory establishes cooperative relationship with a number of third party testing institutions with professional qualifications, including **TÜV**, **Intertek**, **TTS**, **MORLAB**, **CCIS**, **CGC**, **CQC**, **SMQ**, etc.

UL certification (UL508C).

E471377

Hopewind drives pass **TÜV** certification.



TÜV (Technischer Überwachungs-Verein)

Laboratory is awarded the **ILAC – MAR/ CNAS** qualification certificate.

ILAC-MAR/CNAS (International Laboratory Accreditation Cooperation)

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If there is any change in product size and parameters, they shall be subject to the latest actual product

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