





Company Introduction

Guangzhou WEIDE Electric Machinery Co., Ltd, found in 2008, is a company engaged in the research, manufacturing and sales of control, display, drive and system solutions&other related products and servies with the help its experiencrd engineers and skilled workers.

The company is engaged in the business of designing, producing and sales of high performance vector Variable-frequency Drivers. They are mainly used in equipment manufacturing, energy-saving and new energy industries. At present, their products have widely applied to machine tool, wooden machinery, printing machinery, weight-lifting devices, packing machinery, metallurgical engineering, textile machinery and other industries.

Company Culture

Vision: build the most competitive inverter brand in China! Create and share together!

Core values

Employee: Heart in heart to walk in the same way and share the growth and the flourish

Product: Do the brand sincerely and dedicate to the society with good virtue

Customer: Make service as the priority and share the value.

B100 Economical Inverter



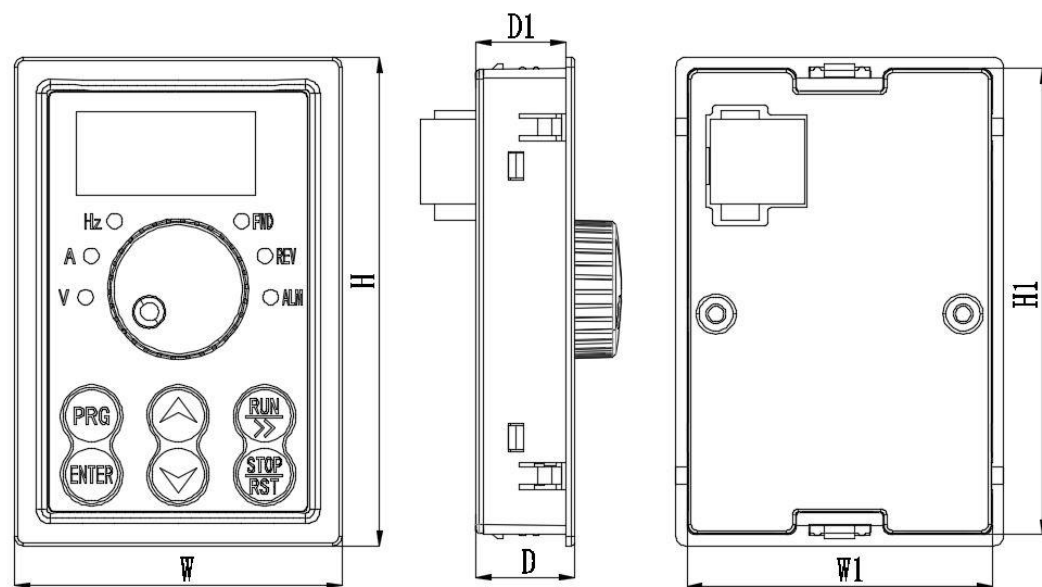
B100 Series Output Specification

Voltage(V)	Inverter Power	Brake Resistance Specification		Brake Torque	Output Current
	(KW)	W	Ω	10%ED	
3phase 220V series	B100-BS0.75kw	150	110	125	4
	B100-BS1.5kw	250	100	125	7
	B100-BS2.2kw	300	65	125	9.6
3phase 380V series	B100-BT0.75kw	100	750	125	2.1
	B100-BT1.5kw	300	400	125	3.8
	B100-BT2.2kw	300	250	125	5.1

Inverter Function Features

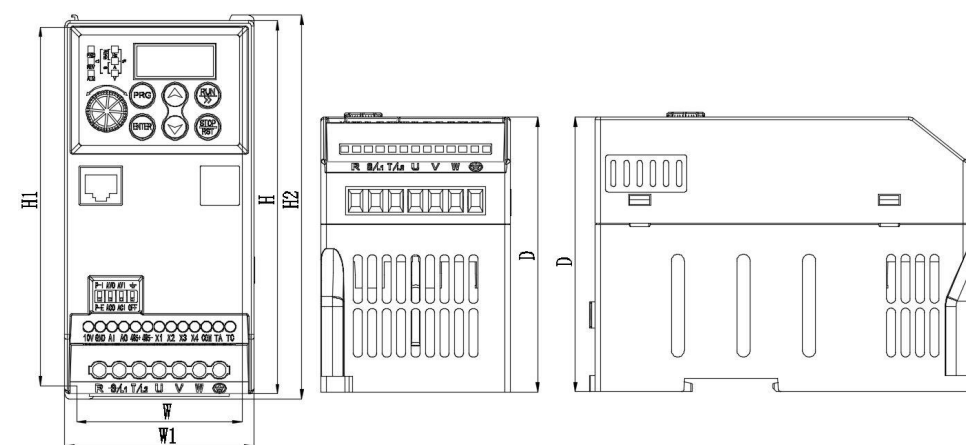
Input	Rated voltage/frequency	3phase(4T series)380V;50/60HZ 3phase(2T series)220V;50/60HZ	
	Allowable range of voltage	phase(4T series)320V~460V 3-phase(2T series) 190V~250V	
Output	Voltage	4T series:0~380V 2T series:0~220V	
	Frequency	V/F control;simple vector control:0~999.9HZAdvance vector control; torque control: 0.5~300.0HZ	
	Overload capacity	110% Long-term150% 1minute180% 5seconds	
Control mode		V/Fcontrol;Simple vectorcontrol; Advancevectorcontrol; Torque control	
Control Features	Frequency setting resolution	Analog terminal input	0.1% ofthe maximum output frequency
		Digital setting	0.1HZ
	accuracy	Analog Input	Within 0.2% of the maximum output frequency
		Digital Input	Set within 0.01% of the output frequency
	V/F control	V/F curve(Voltage frequency features)	There are three ways: the first is linear torque characteristic curve, the second is square torque characteristic curve, and the third is user-set V/F curve
		Torque Lift	Manual setting: 0.0~30.0% of rated output Automatic lifting: Automatically determine lifting torque according to output current and motor parameters
		Automatic current/voltageelim iting	Whether in the process of acceleration, deceleration or stable operation, the stator current and voltage of the motor is automatically measured, and it is suppressed within the permissible range according to the unique algorithm.Minimize the possibility of system failure tripping
	SLVC	Voltage frequency features	Automatically adjust the output voltage frequency ratio according to the motor parameters and unique algorithm
		Torque features	Starting torque: 100% rated torque at 5.0Hz (VF control) 150% rated torque at 1.0Hz (vector control)
		Current & Voltage limit	Full current closed-loop control, completely avoid current impact, with perfect over-current and over-current inhibition function
	Under-voltage suppression in operation	Especially for users with low grid voltage and grid voltage frequency fluctuations, the system can maintain the maximum possible operation time even if the voltage is lower than the allowed range, according to the unique algorithm and residual energy distribution strategy	
Typical Function	Multi-speed Operation	7 segments programmable multi-segment speed control, a variety of operating modes are optional	
	PID control RS485 communication	Built-in PID controller (preset frequency) . The RS485 communication function is standard, and multiple communication protocols are optional, providing linkage and synchronization control	
	Frequency setting	Analog Input	DCvoltage 0 to 10V DC current 0 to 20mA(upper and lower limits optional)
		Digital Input	Operation panel settings, RS485 interface Settings, UP/DW terminal control, can also be combined with analog input Settings
	Output signal	Relay Output	1 fault relay output (TATC) , up to 17 meaning options
		Analog Output	1 analog signal output, output range between 0~20mA or 0~10V flexible setting, can achieve the set frequency, output frequency and other physical quantity output
	Automatic voltage regulation operation	According to the need can choose dynamic voltage, static voltage, unstable voltage three ways, in order to obtain the most stable operation effect	
	Acceleration/deceleration time setting	0.15~999.9min continuous setting	
	Brake	Dynamic braking	The energy consumption braking starting voltage, back difference voltage and energy consumption braking rate can be adjusted continuously
		DC braking	DCbraking starting frequency :0.00~[F0.05] upper frequency Braking time :0.0~30.0s; Braking current :0.0%~50.0% rated voltage of motor
	operation	The carrier frequency is continuously adjustable from 2.0KHZ to 20.0KHZ to minimize motor noise	
	Counter	An internal counter facilitates system integration	
	Operation function	Upper and lower limit frequency setting, frequency jump operation, reversal operation limit, slip frequency compensation, RS485 communication, frequency increasing and decreasing control, fault recovery operation, etc	

»Installation Diemension



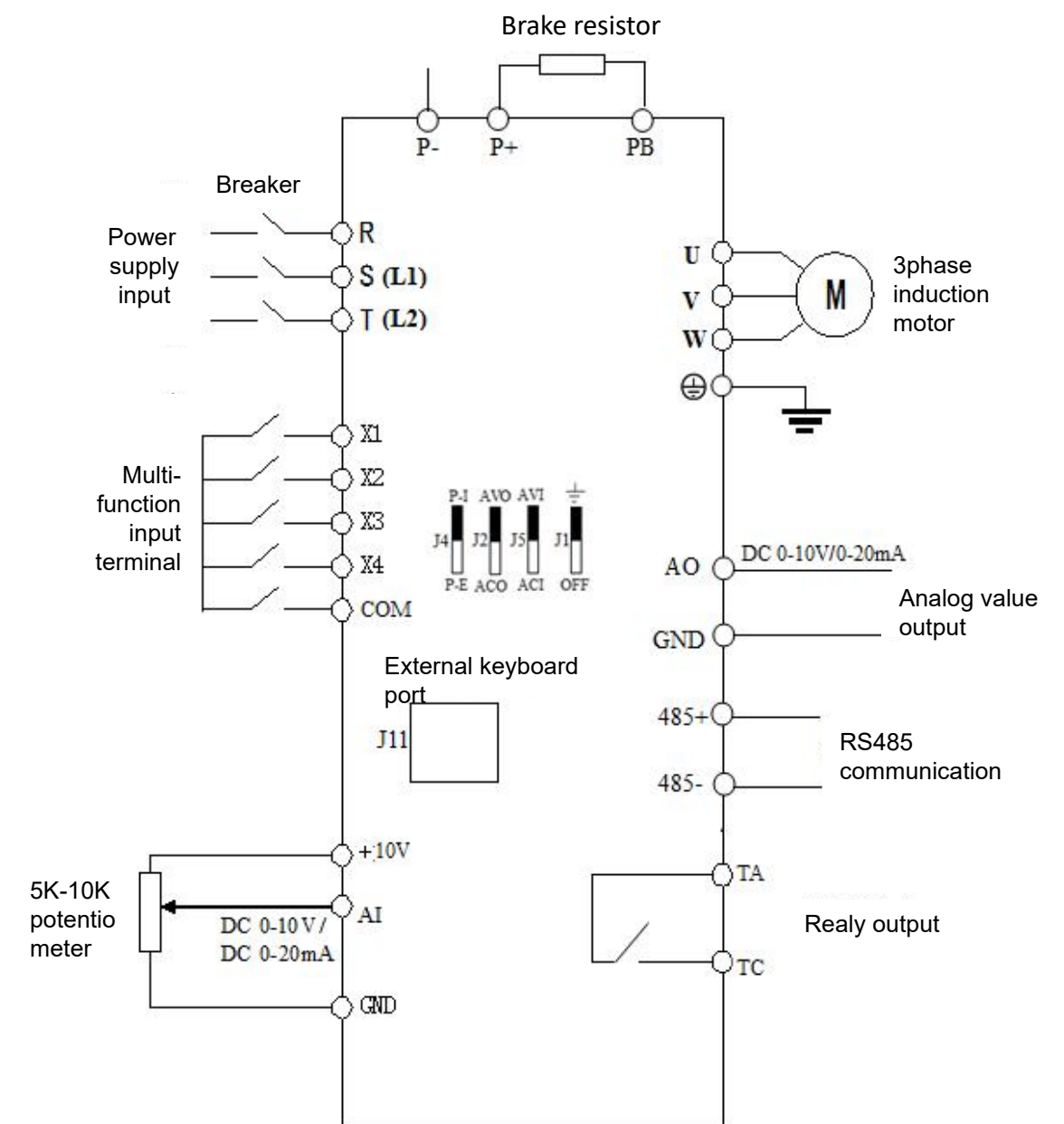
Holesdimensionsof keyboard base				Keyboard thickness	
W	W1	H	H1	D	D1
53mm	49.4mm	79mm	75.4mm	15.9mm	14.5mm

»Keyboard Dimension



Model	W(mm)	W1(mm)	H(mm)	H1(mm)	H2(mm)	D(mm)	Mounting Hole(mm)
	Dimension		Overall Dimension				
0.4KW-3KW	63	72	142	136.5	146	104.5	4
3.7KW-5.5KW	78	65	180	200	212	126.4	4

Basic Wiring



Control terminal

10V	GND	AI	A0	485 +	485-	X1	X2	X3	X4	COM	TA	TC
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Main loop terminal

R	S/L1	T/L2	U	V	W	⏏
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C200 Inverter Small Type Series



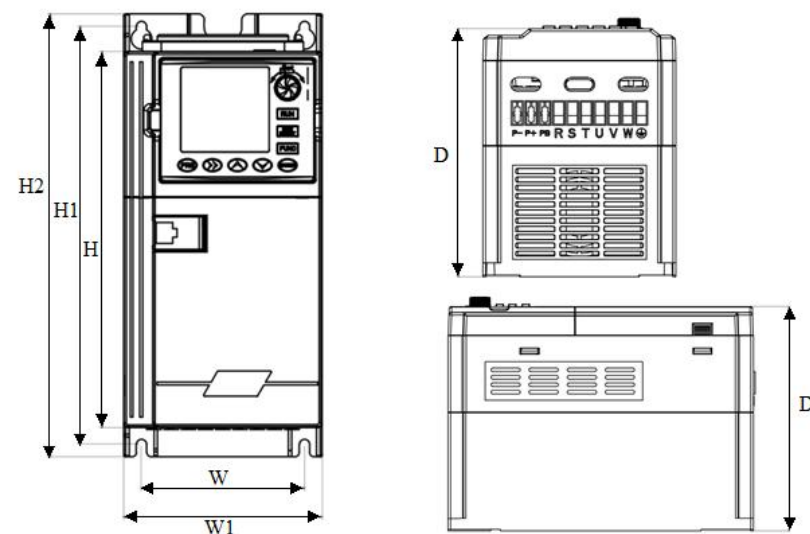
» C200 Series Output Specification

Voltage（V）	Inverter power	Brake resistance specification		Brake torque	Output current
	（KW）	W	Ω	10%ED	
3phase 220V series	C200-S0.75GB	150	110	125	4
	C200-S1.5GB	250	100	125	7
	C200-S2.2GB	300	65	125	9.6
3phase 380V series	C200-T0.75GB	100	750	125	2.1
	C200-T1.5GB	300	400	125	3.8
	C200-T2.2GB	300	250	125	5.1
	C200-T4GB/5.5PB	400	150	125	8.5
	C200-T5.5GB/7.5PB	500	100	125	13

Inverter Function Features

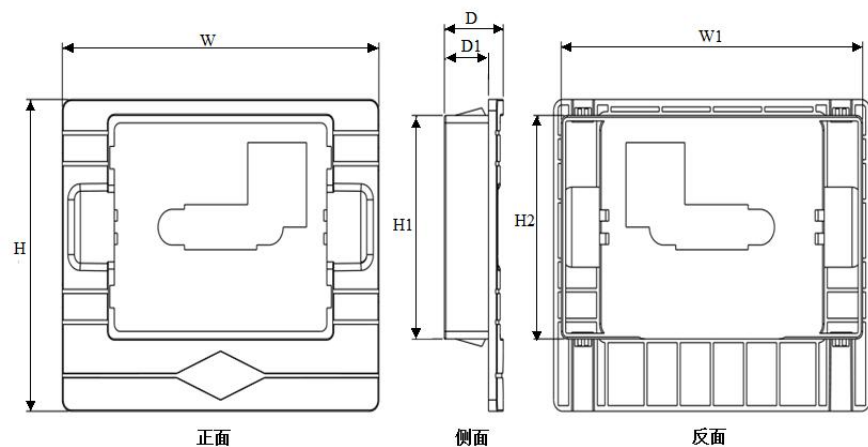
Input	Rated voltage/frequency	3phase(C200-BT series)380V;50/60HZ3pahse(C200-BS series)220V: 50/60HZ	
	Allowable range of voltage	3phase(C200-BTseries)320V~460V3phase(C200-BS series)190V~250V	
Output	Voltage	C200-BT series: 0~380V C200-BS series: 0~220V	
	Frequency	0~999.9HZ	
	Overload capacity	110% Long-term 150% 1min 180% 5s	
Control mode		V/Fcontrol;Simple vectorcontrol; Advancevectorcontrol; Torque control	
Control Features	Frequency setting resolution	Analog terminal input	0.1% ofthe maximum output frequency
		Digital setting	0.1HZ
	accuracy	Analog Input	Within 0.2% of the maximum output frequency
		Digital Input	Set within 0.01% of the output frequency
	V/F control	V/F curve(Voltage frequency features)	There are three ways: the first is linear torque characteristic curve, the second is square torque characteristic curve, and the third is user-set V/F curve
		Torque Lift	Manual setting: 0.0~30.0% of rated output Automatic lifting: Automatically determine lifting torque according to output current and motor parameters
		Automatic current/voltage limiting	Whether in the process of acceleration, deceleration or stable operation, the stator current and voltage of the motor is automatically measured, and it is suppressed within the permissible range according to the unique algorithm.Minimize the possibility of system failure tripping
	SLVC	Voltage frequency features	Automatically adjust the output voltage frequency ratio according to the motor parameters and unique algorithm
		Torque features	Starting torque:100% rated torque at 5.0Hz (VF control)150% rated torque at 1.5Hz (simple vector control)150% rated torque at 0.5Hz (advanced vector control
		Current & Voltage limit	Full current closed-loop control, completely avoid current impact, with perfect over-current and over-current inhibition function
	Under-voltage suppression in operation	Especially for users with low grid voltage and grid voltage frequency fluctuations, the system can maintain the maximum possible operation time even if the voltage is lower than the allowed range, according to the unique algorithm and residual energy distribution strategy	
Typical Function	Multispeed Operation optional	7 segments programmable multi-segment speed control, a variety of operating modes are optional	
	PID control RS485 communication	Built-in PID controller (preset frequency). The RS485 communication function is standard, and multiple communication protocols are optional, providing linkage and synchronization control	
	Frequency setting	Analog Input	DCvoltage 0 to 10V DC current 0 to 20mA(upper and lower limits optional)
		Digital Output	Operation panel settings,RS485 interface Settings, UP/DW terminal control, can also be combined with analog input Settings
	Output signal	Digital Output	1 OC output and 1 fault relay output (TATC), up to 17 meaning options
		Analog Output	1 analog signal output, output range between 0~20mA or 0~10V flexible setting, can achieve the set frequency, output frequency and other physical quantity output
	Automatic voltage regulation operation	According to the need can choose dynamic voltage, static voltage, unstable voltage three ways, in order to obtain the most stable operation effect	
	Acceleration/deceleration time setting	0.15~999.9min continuous setting	
	Brake	Dynamic braking	The energy consumption braking starting voltage, back difference voltage and energy consumption braking rate can be adjusted continuously
		DC braking	DCbraking starting frequency :0.00~[F0.05] upper frequency Braking time :0.0~30.0s; Braking current :0.0%~50.0% rated voltage of motor
	Operation function	The carrier frequency is continuously adjustable from 2.0KHZ to 20.0KHZ to minimize motor noise	
	Counter	An internal counter facilitates system integration	
	Operation function	Upper and lower limit frequency setting, frequency jump operation, reversal operation limit, slip frequency compensation, RS485 communication, frequency increasing and decreasing control, fault recovery operation, etc	

Installation Dimension



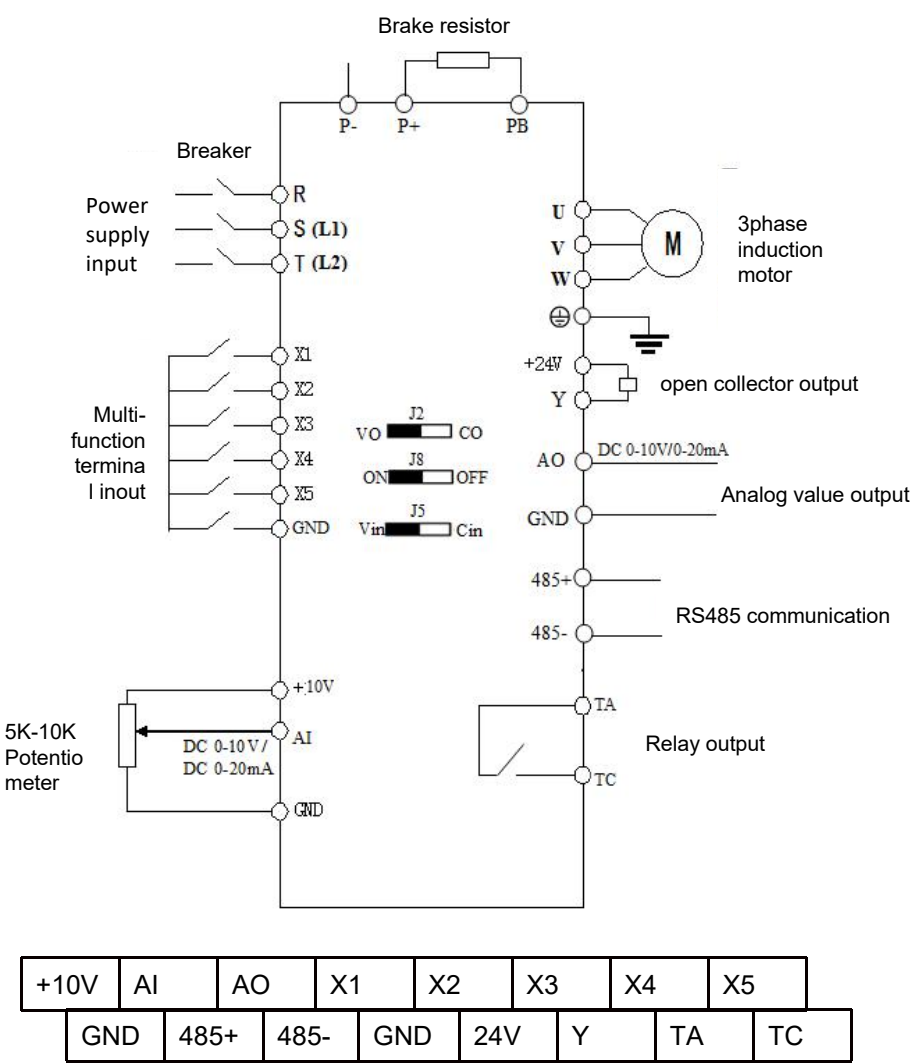
Model	W(mm)	W1(mm)	H(mm)	H1(mm)	H2(mm)	D(mm)
	Installation Dimension		Overall Dimension			
0.75KW-2.2KW	60	78	150	160	170	135
3.0KW-5.5KW	78	95	179	200	212	154

Keyboard Dimension



Holesdimensionsof keyboard base					Keyboard thickness	
W	W1	H	H1	H2	D	D1
105mm	100mm	83mm	59.5mm	59.5mm	19.54mm	14.64mm

»Wiring Terminal Diagram



Wiring Precautions

- ① When disassembling the motor, the input power of the Inverter must be cut off.
- ② When the Inverter stops output, the motor can be switched or the power supply can be switched.
- ③ In order to minimize the influence of electromagnetic interference, when the electromagnetic contactors and relays used are close to the Inverter, should considered installing surge absorber .
- ④ Do not connect the AC input power to the Inverter output terminal U, V, W.
- ⑤ The external control line of the Inverter shall be equipped with an isolation device or shielded wire.
- ⑥ In addition to shielding the input instruction signal wiring should be routed separately, preferably away from the main loop wiring.
- ⑦ When the carrier frequency is less than 4KHz, the maximum distance between the Inverter and the motor should be within 50 meters;when the carrier frequency is greater than 4KHz, the distance should be appropriately reduced. The best is wiring laid in the metal tube.
- ⑧ When the Inverter is installed with peripheral equipment (filter, reactor, etc.), it should first measure its insulation resistance to the ground with a 1000 volt MΩ meter to ensure that it is not lower than 4 volt MΩ.
- ⑨ The output terminal of U, V and W of the Inverter cannot be equipped with phase capacitance or resistance capacitance absorber.
- ⑩ If the Inverter needs to be startup frequently, do not turn off the power supply, and use the COM/RUN of the control terminal to start and stop operation, so as not to damage the rectifier bridge.
- ⑪ To prevent accidents, the ground terminal G must be grounded reliably (grounding impedance should be less than 100Ω), otherwise there will be leakage.
- ⑫ When wiring the main loop, the diameter of the wiring should be selected in accordance with the relevant provisions of the National electrical Engineering regulations.

C300 Universal Series Vector Inverter



»Product Feature

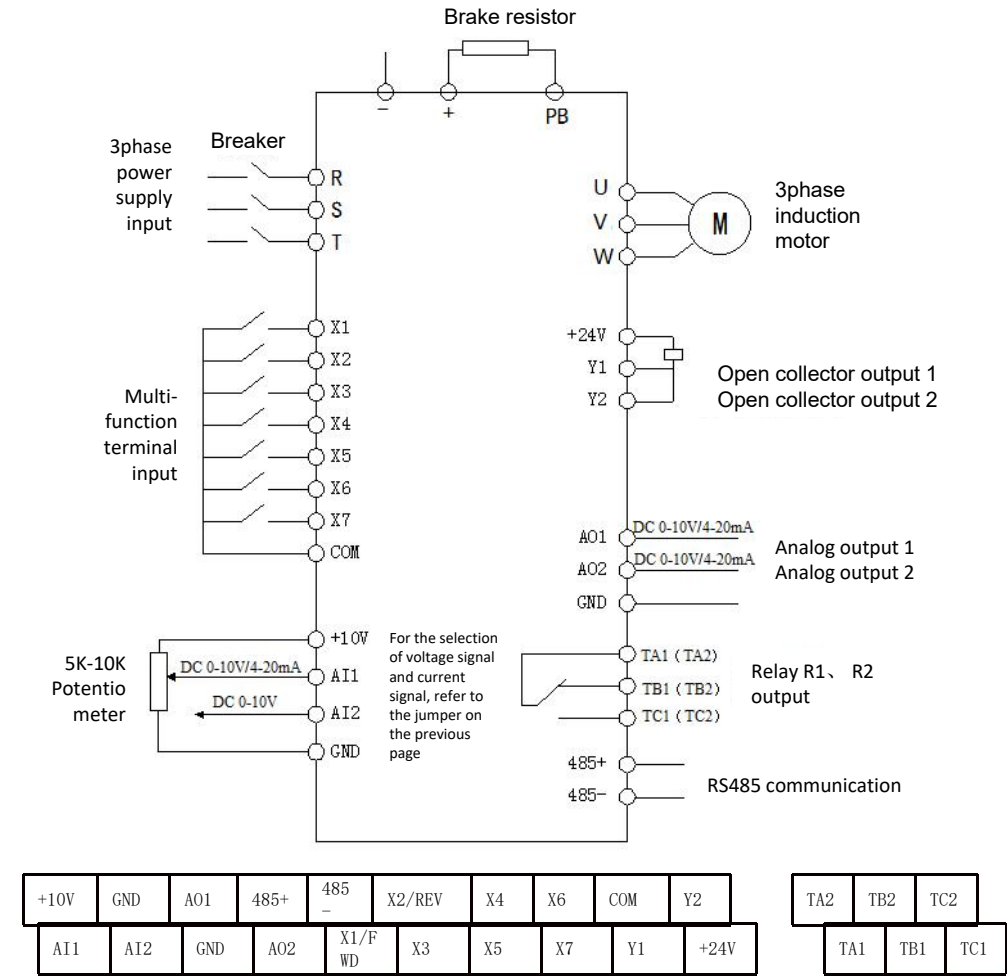
Input	Rated voltage/frequency	Three phaseAC380V;50/60HzSingle phaseAC220V;50/60Hz	
	Allowable voltage range	Three phaseAC360V~450VSingle phaseAC190V~250V	
Output	Voltage	0~460V0~260V	
	Frequency	Low frequency mode: 0~300Hz Highfrequency mode: 0~3000Hz	
	Overload capacity	Gmodel:110% long-term150% 1minute200% 4secondPmodel:105% long-term120% 1minute150% 1second	
Control mode		V/Fcontrol、advance V/Fcontrol、 V/Fseparation control、 No PG current vector control	
Control features	Frequency setting resolution	Analogterminal input	0.1% ofthe maximum output frequency
		Digital setting	0.01Hz
	Frequency accuracy	Analog input	Within 0.2% of the maximum output frequency
		Digital input	Set within 0.01% of the output frequency
	V/Fcontrol	V/Fcurve(Voltage frequency features)	The base frequency can be set arbitrarily from 0.5 to 3000Hz, the multi-point V/F curve can be set arbitrarily, and constant torque and reduced torque can also be selected 1, torque reduction 2, square torque and other fixed curves
		Torque lift	Manual setting: 0.0~30.0% of rated output Automatic lifting: Automatically determine lifting torque according to output current and motor parameters
		Automatic current/voltage limiting	Whether in the process of acceleration, deceleration or stable operation, it can automatically detect the motor stator current and voltage. According to the unique algorithm, it is suppressed within the allowable range, and the possibility of system fault tripping is minimized
	SLVC	Voltage frequency features	Automatically adjust the output voltage frequency ratio according to the motor parameters and unique algorithm
		Torque features	Starting torque:150% rated torque at 3.0Hz (VF control)150% rated torque at 1.0Hz(advance VFcontrol)150% rated torque at 0.5Hz)Running speed steady-state accuracy:≤±0.2%Rated synchronous speedSpeed fluctuation: ≤±0.5%Rated synchronous speedTorque response: ≤20ms (No PG current vector control)

Control features	SLVC	Motor parameters self-determination	Without any restrictions, the automatic detection of parameters can be completed under the static and dynamic conditions of the motor to obtain the best control effect
		Current & Voltage limit	Full current closed-loop control, completely avoid current impact, with perfect overcurrent and overcurrent inhibition function
	Under-voltage suppression in operation	Especially for users with low grid voltage and grid voltage frequency fluctuations, the system can maintain the maximum possible operation time even if the voltage is lower than the allowed range, according to the unique algorithm and residual energy distribution strategy	
Typical function	Multi-speed and swing frequency operation	16 segments programmable multi-segment speed control, a variety of operating modes are optional. Swing frequency operation: preset frequency, center frequency adjustable, state memory and recovery after power failure	
	PID control RS485 communication	Built-in PID controller (preset frequency). The RS485 communication function is standard, and multiple communication protocols are optional, providing linkage and synchronization control	
	Frequency setting	Analog input	DC voltage 0 to 10V DC current 0 to 20mA (upper and lower limits optional)
		Digital input	Operation panel settings RS485 interface settings, UP/DW terminal control, can also be combined with analog input settings
	Output signal	Digital input	2-way Y terminal open collector output and 2-way programmable relay output (TA, TB, TC), up to 61 kinds of meaning options
		Analog input	2-way analog signal output, the output range can be flexibly set between 0~20mA or 0~10V, which can realize the output of physical quantities such as set frequency and output frequency
	Automatic voltage control operation	According to the need can choose dynamic voltage, static voltage, unstable voltage three ways, in order to obtain the most stable operation effect	
	Acceleration/deceleration time setting	0.1s ~ 3600.0min continuous can be set, S-type, linear mode optional	
	Brake	Energy consumption braking	Dynamic braking initial voltage, backlash voltage and dynamic braking rate are continuously adjustable
		DC braking	Start frequency of DC braking at stop: 0.00~【F00.13】 upper limit frequency brake time: 0.0~100.0s; brake current: 0.0%~150.0% rated current
		Flux braking	0~100 0: invalid
	Low-noise operation	The carrier frequency is continuously adjustable from 1.0KHZ to 16.0KHZ to minimize motor noise	
	Speed tracking speed restart function	It can realize the smooth restart of the motor in operation and the function of restart after instantaneous power failure	
	Counter	An internal counter facilitates system integration	
	Operation function	Upper and lower limit frequency setting, frequency jump operation, reversal operation limit, slip frequency compensation, RS485 communication, frequency increasing and decreasing control, fault recovery operation, etc	
Display	Operation panel display	Running status	Output frequency, output current, output voltage, motor speed, set frequency, module temperature, PID setting, feedback, analog input/output, etc
		Alarm content	records of six operating parameters such as output frequency, set frequency, output current, output voltage, DC voltage, and module temperature when the latest fault occurs.
Protection function		Over current, over voltage, under voltage, module failure, electronic thermal relay, overheating, short circuit, internal memory failure, etc	
Environment	Temperature	-10℃~+40℃ (The environment temperature is 40℃~50℃, please derating use)	
	Humidity	5%~95%RH, no condensation	
	Surroundings	Indoor (no direct sunlight, no corrosion, flammable gas, no oil mist, dust, etc.)	
	Altitude	Derating for use above 1000 meters, 10% derating for every 1000 meter increase	
Structure	Installation Mode	IP20	
	Cooling Mode	Air cooling, with fan control	
Installation Mode		Wall mounted, cabinet type	

Slection Table

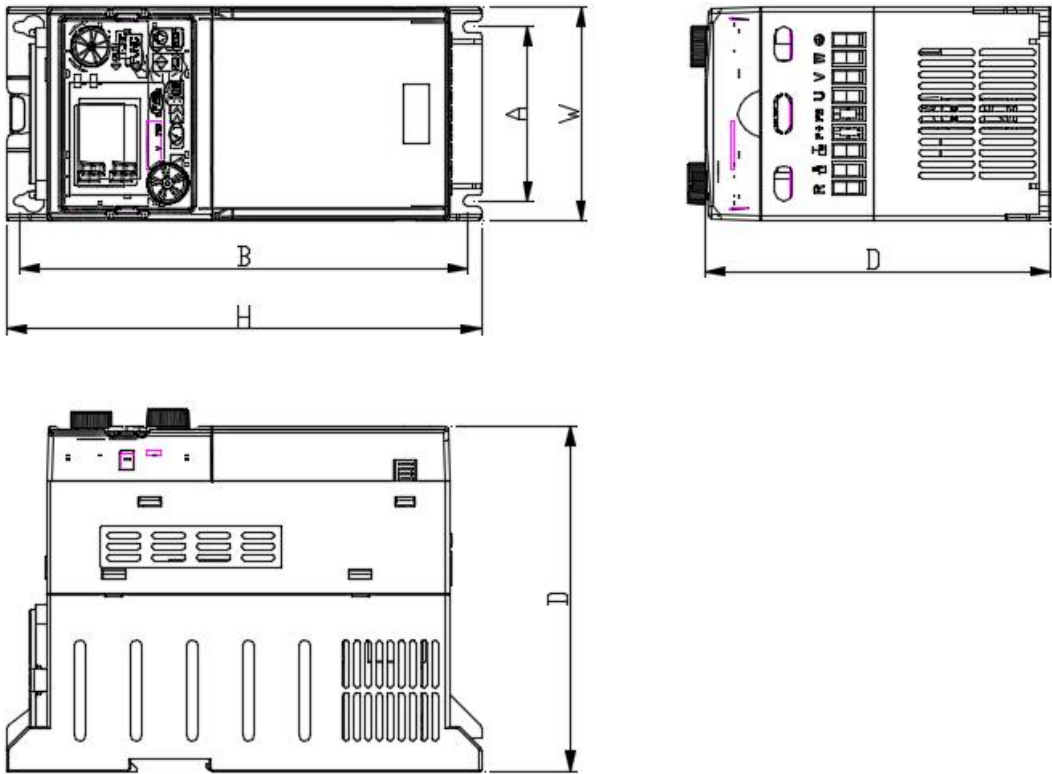
Inverter Model	Output current	Adaptable Motor G/P Note: P is general fan (eg. blower)		
C300-T0.75GB	2.1		0.75	
C300-T1.5GB	3.8		1.5	
C300-T2.2GB	5.1		2.2	
C300-T4GB/5.5PB	8.5		4	5.5
C300-T5.5GB/7.5PB	13		5.5	7.5
C300-T7.5GB/11PB	16		7.5	11
C300-T11GB/15PB	24		11	15
C300-T15GB/18.5PB	32		15	18.5
C300-T18.5GB/22PB	36		18.5	22
C300-T22GB/30PB	44		22	30
C300-T30GB/37PB	58		30	37
C300-T37GB/45PB	70		37	45
C300-T45GB/55PB	90		45	55

Terminal Wiring Diagram



Type	Terminal symbol	Terminal Name	Function Description
Power	+ 10V	External+ 10V power supply	Provide +10V power supply to the outside, the maximum output current: 50mA. Generally used as an external potentiometer working power supply, potentiometer resistance range: 1kΩ~5kΩ.
	+ 24V	External+ 24V power supply	Provide +24V power supply to the outside, generally used as digital input and output terminal working power supply and external sensor power supply. Maximum output current: 200mA.
Analog input	AI1-GND	Analog value input terminal 1	1、 Input voltage range: DC0V~10V 2、 Input resistance: 22kΩ
	AI2-GND	Analog value input terminal 2	1、 Input range: 4mA~20mA 2、 Input resistance: when voltage input is 22kΩ , when current input is 500kΩ.
Digital input	x1	Digital input 1	1、 Input resistance: 2.4kΩ 2、 Voltage range at level input: 9V~30V
	x2	Digital input 2	
	x3	Digital input 3	
	x4	Digital input 4	
	x5	Digital input 5	
	x6	Digital input 6	
	x7	Digital input 7	
Analog output	AO1-GND	Analog output 1	Output voltage range: 0V-10v
Digital output	AO1-GND	Digital output 1	Optocoupler isolation, Bipolar open collector output Output voltage range: 0V-24V Output current range: 0mA~50mA
Relay input	TA1-TC1 TA2-TC2	Normal open terminal	Contact drive capability: AC250V , 3A , COSφ = 0.4. DC 30V , 1A
Relay output	TA1-TB1 TA2-TB2	Normal close terminal	Contact drive capability: AC250V , 3A , COSφ = 0.4. DC 30V , 1A
Communication	485+ 485-	Rs485 communication terminal	Rs485 Communication

»Inverter Appearance Dimension



C300 Constant pressure water supply application



Constant pressure water supply is a water supply method of a water conservancy system. Water supply is an indispensable part of national production and life. The traditional water supply method occupies a large area, the water quality is easily polluted, and the investment in infrastructure is large. The main disadvantage is that the water pressure cannot be kept constant, resulting in some equipment not working properly.

Constant-pressure water supply can keep the water supply pressure constant, and can maintain a balance between water supply and water consumption, that is, when there is more water, there is more water supply, and when there is less water, there is less water supply, thus improving the quality of water supply.

The constant-pressure water supply mode of Wade inverter has advanced technology, constant water pressure, convenient operation, reliable operation, energy saving, and high degree of automation. It can complete the following functions in the water supply of pumping stations:

- (1) Maintain constant water pressure;
- (2) The control system can be operated manually or automatically;
- (3) Automatic switching operation of multiple pumps;
- (4) The system sleeps and wakes up. When the outside world stops using water, the system stays in a sleep state and wakes up automatically when there is a demand for water;
- (5) Pump group and line protection detection alarm, signal display, etc.

»Installation and Dimension Parameters

Model	A (mm)	B (mm)	H (mm)	w (mm)	D (mm)	Mounting hole
	Installation dimension		Overall dimension			(mm)
0.75KW-5.5KW	78	200	212	95	154	78
7.5KW-11KW	129	230	240	140	180.5	129
15KW-30KW	188	305	322	205	199	188
37KW-45KW	195	430	450	270	265	195
55KW	240	541	560	320	280	240
75KW-110KW	240	646	665	380	282	240