Technical Specifications

Control System Square Mode	V/F control,Speed sensorless vector control (SVC)		
Control System Special	Frequency setting resolution	Analog input	Maximum frequency × 0.025%
		Digital settings	0.01Hz
	V/F control Sensorless vector control	V/F curve	Three types: linear type; multi-point type; N-power type V/F curve (1.2 power, 1.4 power, 1.6 power, 1.8 power, 2 power)
		V/F separation	2 methods: full separation, semi-separation
		Torque boost	Manual setting: 0.0~30.0% of rated outputAutomatic boost: Automatically determine the boost torque based on the output current and motor parameters
		Automatic current and voltage limiting	Whether in acceleration, deceleration or stable operation, it can automatically detect the motor stator current and voltage.Based on a unique algorithm, it is suppressed within the allowable range to minimize the possibility of system fault tripping.
		Voltage-frequency characteristics	Automatically adjust the output voltage-frequency ratio according to motor parameters and unique algorithm
		Torque characteristic	Starting torque: 150% rated torque at 1.0 Hz (V/F control) 150% rated torque at 0.25 Hz (SVC) Operating speed steady-state accuracy: ≤±0.2% rated synchronous speed Speed fluctuation: ±0.5% rated synchronous speed Torque response: ≤20 ms (SVC)
		Motor parameter selfdetermination	Without any restrictions, the automatic detection of parameters can be completed in both static and dynamic states of the motor to obtain the best control effect
		Current and voltage suppression	Full current closed-loop control, completely avoiding current shock, with perfect over-current and over-voltage suppression function
	Undervoltage suppression during operation	Especially for users with low grid voltage or frequent grid voltage fluctuations, even if the voltage is below the allowable range, The system can also maintain the longest possible operating time based on unique algorithms and residual energy allocation strategies	
Typical Functions	Multi-speed and swing frequency operation	16-segment programmable multi-speed control, multiple operating modes optional. Swing frequency operation: preset frequency, center frequency adjustable, state memory and recovery after power failure	
	PID RS485communc	Built-in PID controller (preset frequency) standard configuration RS485 communication function	
	Frequency setting	Analog input	DC voltage 0~10V, DC current 0~20 mA (upper and lower limits optional)
		Digital Input	Operation panel setting, RS485 interface setting, UP/DOWN terminal control, and multiple combination settings with analog input
	Output signal	Digital output	One relay output
		Analog output	One analog output, 4~20mA/0~10V free switching
	utomatic voltage stabilization operation	According to the needs, you can choose dynamic voltage stabilization, static voltage stabilization and non-stabilization to obtain the most stable operation effect.	
	Acceleration and deceleration time setting	0.0s~6500.05 continuously adjustable, S-shaped and linear modes optional	
	brake	Dynamic braking	Dynamic braking starting voltage, hysteresis voltage and dynamic braking rate are continuously adjustable
		DC braking	DC braking start frequency at shutdown: 0.00~[F00.10] maximum frequency Braking time: 0.0~100.0s; Braking current: 0%~100% rated current
	Low noise operation	The carrier frequency is continuously adjustable from 0.5KHz to 16.0KHz to minimize motor noise	
	Speed tracking speed Restart function	It can realize the smooth restart and instantaneous stop restart function of the running motor	
Counter	One internal counter for easy system integration		
Run function	Upper and lower frequency limit setting, frequency jump operation, reverse operation limit, slip frequency compensation, RS485 communication, frequency increase and decrease control, fault self-recovery operation, etc.		
Display	Operation panel display	Running status	Output frequency, output current, output voltage, motor speed, set frequency, module temperature, PID setting,feedback amount, analog input and output , etc
		DC braking	Output frequency, output current, bus voltage, input terminal status, output terminal status, inverter status, power-on time when there are three fault trips , running time and other 8 operating parameters record
Protection Function	Overcurrent, overvoltage, undervoltage, module failure, electronic thermal relay, overheating, short circuit, input and output phase loss, abnormal motor parameter tuning, internal memory failure, etc.		
Environment	Ambient temperature	-10°C~+40°C (When the ambient temperature is 40°C~50°C, please derate the power supply)	
	Ambient humidity	5%~95%RH, no condensation	
	Surrounding environment	Indoors (no direct sunlight, no corrosion, no flammable gas, no oil mist, dust, etc.)	
	Altitude	Derate for use above 1000 meters, and derate by 10% for every 1000 meters increase	
Structure	Protection level	IP20	
	Cooling method	Air cooling	
Installation method	Wall-mounted		

Version number: V1.00

Due to continuous product upgrades, the content is subject to change without prior notice.

KDC
BIẾN TẦN BÁN SỈ

KD300 SERIES

High-performance vector inverter



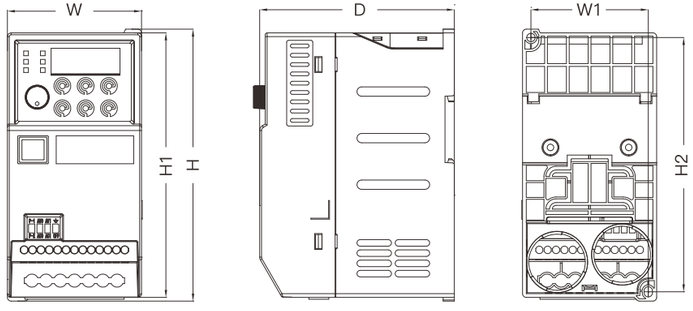
NAMING AND SIZES

KD300 - 021 - 1.5K

① 1 VFD SERIES	② 2 VOLTAGE / PHASE	③ 3 MOTOR POWER
KD300 series inverter	021: Single-phase 220V 043: Three-phase 380V	0.75K: suitable for 0.75KW ..... 15K: suitable for 15KW

Inverter model	Inputvoltage (V)	Outputcurrent (A)	Power (KW)
Single-phase power supply: 220V 50/60HZ			
KD300-021-0.75K	220	4.5	0.75
KD300-021-1.5K		7	1.5
KD300-021-2.2K		10	2.2
Three-phase power supply: 380V 50/60HZ			
KD300-043-0.75K	380	2.1	0.75
KD300-043-1.5K		3.8	1.5
KD300-043-2.2K		5.1	2.2
KD300-043-4.0K		9	4
KD300-043-5.5K		13	5.5
KD300-043-7.5K		17	7.5
KD300-043-11K		25	11
KD300-043-15K		32	15

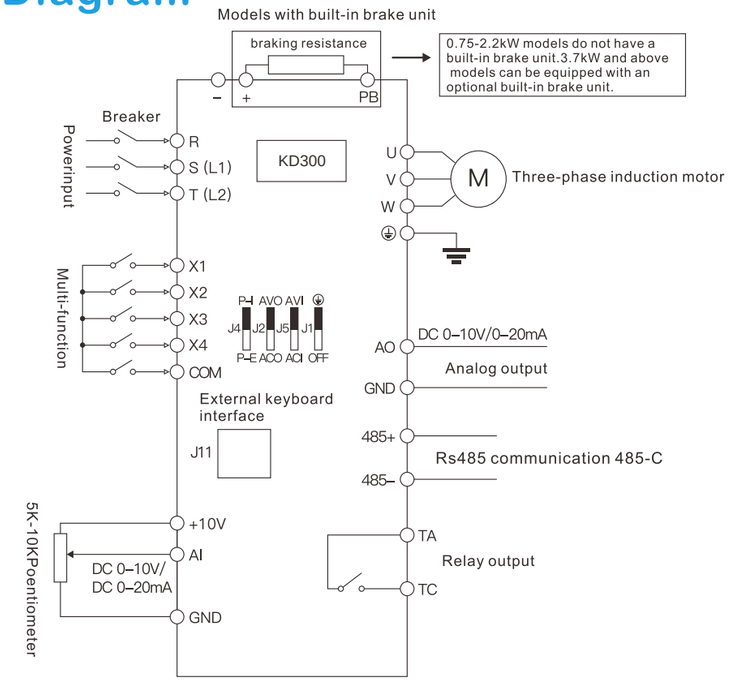
Installation dimensions



Model	Installation dimensions		External dimensions				Mounting holes	Frame number
	H2 (mm)	W1 (mm)	H (mm)	H1 (mm)	W (mm)	D (mm)	(mm)	
KD300-021-0.75K	136.5	63	146	142	72	104.5	4.5	K1
KD300-021-1.5K								
KD300-021-2.2K								
KD300-043-0.75K								
KD300-043-1.5K								
KD300-043-2.2K								
KD300-043-4.0K	172.5	78	185	182	87	132	4.5	K2
KD300-043-5.5K								
KD300-043-7.5K	229	106	243.2	243.2	118	155.5	5.6	K3
KD300-043-11K								
KD300-043-15K								

KD300 Series high performance vector inverter
Make industry quality products and create national brands

Wiring Diagram



Arrangement diagram of control terminals and main circuit terminals

Main circuit wiring diagram

Power supply: Please pay attention to whether the voltage levels are consistent to avoid damaging the inverter

Electromagnetic contactor:
Note: Please do not use the electromagnetic contactor as the power switch of the inverter

Switch without fuse:
Please refer to the corresponding table.
Leakage circuit breaker: Please use a leakage circuit breaker that can protect against high-order harmonics.

Frequency Converter:
Please make sure to connect the inverter main circuit line and control signal line correctly. Please be sure to set the inverter parameters correctly.

Control circuit terminals

10V	GND	AI	AO	485+	485-	X1	X2	X3	X4	COM	TA	TC

Main circuit terminals

0.75KW-2.2KW	R	S/L1		T/L2		U	V	W	⏚
4KW-15KW	R	S	T	P+	PB	U	V	W	⏚

Main control board jumper instructions

J1	⏚ auspiciou	Indicates that the main control board is grounded.
	OFF	Indicates that the main control board is grounded (disconnected by default)