

KDE PRODUCT CATALOGUE





Brief introduction

KDE is a high-tech enterprise which has been specializing in researching, manufacturing and trading high, medium and low voltage inverter, providing our clients with integrated system solutions. We have professional R&D and devoted management team with more than 20 years' experience of theoretical research, product development and quality management. KDE also is one of the first independent AC drives company in China. We adopt SPWM, sensorless vector control and vector and torque control technology in our VFD series inverters, which has reached the international advanced standard. The products can directly replace and be equivalent of Europe and the United States, Japan and other brands, providing customers with a powerful technical support. We have achieved popularity and qualification in VFD industry.

Quality is the life of enterprise. KDE drives keep following ISO9001 standard to manage and supervise quality. Our products have passed CE certification and other technical approval. To better meet customer requirements and market needs, KDE drives keep on upgrading new technologies and new products.

The customer is the source of enterprise. We are honored to put top priority on customers' requirements as well as achieving their requirements. Our products have been widely used in petroleum, chemical, melting, hoisting, electric power, building materials, water supply, plastics, textiles, printing, packing and other industries to create value for customers.



Model reference



KDE300A

KDE300A series Features

- 1 Excellent control performance for motor at 0.25hz with 150% output torque;With Sensorless vector control for reliable start and precise control in different kinds of loads.
- 2 Excellent torque control in open loop and close loop in winding and rewinding
- 3 simple PLC and 16 phase multiple speed control
- 4 Programmable delay relay function
- 5 Variable selector and logic control for programming
- 6 Multiple functional counter.
- 7,Support 2 analog input 0-10V 4-20MA and two analog output as well as support IO expansion card
- 8,Protections:Over-voltage stall,under-voltage,current limit,overload,overheat,over speed,over-voltag,etc.
- 9,Support Rj45 cables and standard keypad support 100m control.



KDE200

KDE200 Series Features

- SVPWM control mode
- Natural cooling,suitable for the situations with a lot of cotton and dust
- Compact design,saving installation space
- Standard potentiometer and external LED keypad
- Various functions for application needs
- Various interface:standard RS-485 communication interface;multiple input and output terminals;external keypad interface,meeting application requirements.
- Multifunctional and easy to sue:simple PLC,multi-step speed control,built-in PID,torque control,multi-dot V/F curve,various control modes,continuous running at sudden power loss and so on.



VFD200A

KDE200A Series Features

- 1,Support Applicable motors: AC induction motor, permanent magnet synchronous motor (PMSM)
- 2 High performance open loop and close loop vector control (support different kinds of encoders)
- 3.High torque control in low frequency 0.5Hz/150%(SVC), and 0Hz/180%(FVC)
real vector control with three hall sensor current detecting
- 4.Support 2 analog input 0-10v 4-20MA and two analog output as well as support IO expansion card
- 5. Protections: Over-voltage stall, under-voltage, current limit, overload, overheat, over speed, over-voltage, etc.
- 6.Support PID with fastest response
- 7 Support RJ45 Cables and standard keypad support 100m control
- 8 fast auto tuning less than 1 minutes

Model reference

KDE300A series is real vector control, high performance general used inverter, widely used for various of general purpose

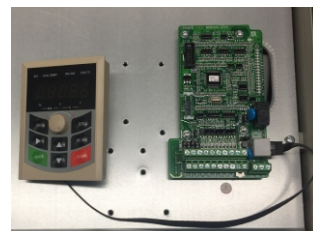
Key advantages

- 1 Excellent control performance for motor at 0.25hz with 150% output torque; With Sensorless vector control for reliable start and precise control in different kinds of load.
- 2 Excellent torque control in open loop and close loop in winding and rewinding
- 3 simple PLC and 16 phase multiple speed control
- 4 Programmable delay relay function
- 5 Variable selector and logic control for programming
- 6 Multiple functional counter.
- 7, Support 2 analog input 0-10V 4-20MA and two analog output as well as support IO expansion card
- 8, Protections: Over-voltage stall, under-voltage, current limit, overload, overheat, over speed, over-voltage, etc.
- 9, Support RJ45 cables and standard keypad support 100m control.



Humanized design keyboard

Potentiometer speed control
Easy operated
Reasonable layout
LED display
RJ45 Port and support 100m remote control



Product detailed label

Including model type, input/output current, power, voltage and protection level instructions

Intelligent fan control

Through software using the intelligent fan start-stop control
When the inverter is up and running, to start the fan cooling
When the inverter dormancy or downtime, a cooling fan to enter
Delay stop state, later will automatically stop running
Save electricity and prolong the service life of fan



Control Circuit and Main Circuit Wiring

Infinion PIM integrated power module

integrated power devices
Integrated all parts and circuits
small size ,large
power
Low loss,more stable



Function of automatic voltage regulator (AVR)

Three-phase high precision automatic
ac voltage stabilizer
With functions of automatic voltage
regulation,when the
grid voltage
Plus or minus 15% change,can
automatically maintain a
constant output voltage

High speed high performance control DSP

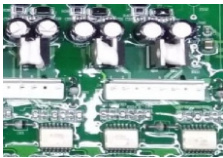
core control unit

Simple PLC
Parameter auto-tuning
Low frequency high torque strong
performance of vector control



Anti-corrosion paint protection circuit Anti-corrosion paint processing Prolong the service life

Superior insulation
moisture-proof
Prevent electric leakage
shock-proof dust- proof



Avago photoelectric coupler

Adopted USA Avago
company
Photoelectric coupler that
was not in the
power of optical coupling
isolation with high
stability ,high reliability



Multistage speed operation function

Through the user-
defined control
terminal can realize
simple function of
PLC
Through control
terminal it can

Steady speed precision high speed range

Steady speed precision:plus or minus
0.5% (open loop),plus or
minus 0.02% (closed loop).
Speed range:1:100 (open loop),1:1000
(closed loop)

The torque response<40ms(open loop)

Automatic torque increase function,the
realization of V/F
control mode and low frequency
(1Hz)with large output torque
control:110%rated stable
operation,1min 150%rated

General Technical Data

Designation Rules

KDE300A - 3R7G/5R5P T4

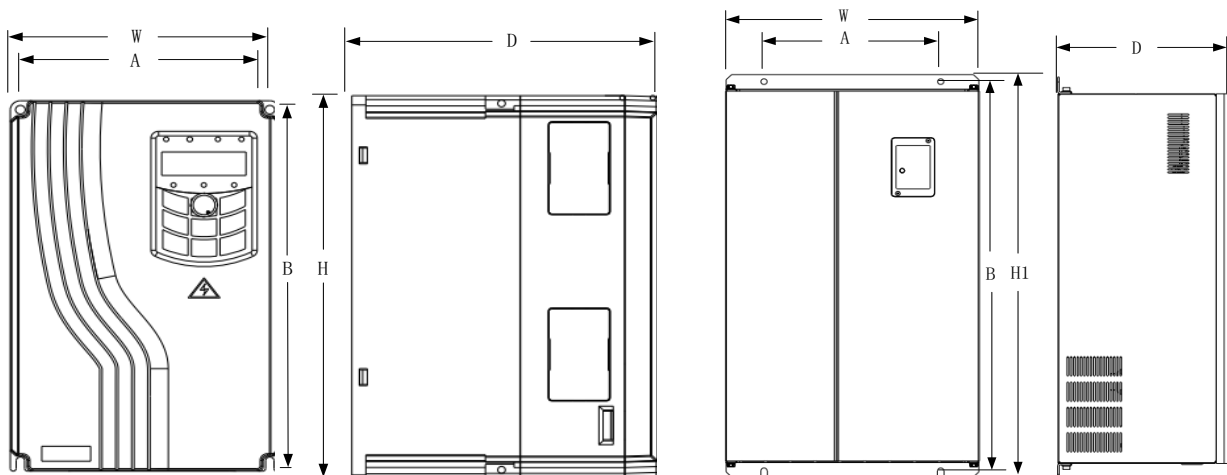
Voltage Class(2-220V,4-380V,6-690V)

Phase(T-Three Phase,S-Single Phase)

Model Type and power rating
(G-General Type,P-Fan and Pupm Type)

Product Series

Appearance and Mounting Hole Dimension



SIZE	Appearance and installation dimension (mm)								WEIGHT (KG)
	A	B	H	H1	W	D	Φd	Mounting screws	
SIZE A	113	172	186	/	125	164	ø5.0	M4×16	2.0
SIZE B	148	236	248	/	160	183	ø5.0	M4×16	3.5
SIZE C	190	305	322	/	208	192	ø6.0	M5×16	6.2
SIZE D	230	440	/	455	290	218	ø7.0	M6×16	16.2
SIZE E	230	540	/	555	320	240	ø10	M8×20	30
SIZE F	320	610	/	635	410	239	ø12	M10×25	45
SIZE G	320	630	/	654	460	340	ø12	M10×25	65
SIZE H	320	770	/	795	460	320	ø13	M12×30	82
SIZE I	320	856	/	886	520	385	ø13	M12×30	105
SIZE J	500	1313	/	1350	750	432	ø13	M12×30	240
SIZE K	500	1410	/	1450	850	432	ø13	M12×30	300
SIZE L	cabinet: 1800*1050*460						ø13	M12×30	430






General Technical Data

Model	Power capacity (KVA)	Input current (A)	Output current(A)		Adaptable Motor (KW)	SIZE	Brake Unit	
			Heavy load	Light load				
Single phase: 200-240V, 50/60Hz								
KDE300A-R75GS2	1.5	8.2	4.0	7.0	0.75	SIZE A	Inbuilt	
KDE300A-1R5GS2	3	14	7.0	9.6	1.5			
KDE300A-2R2GS2	4	23	9.6	17.0	2.2			
Three phase: 380 -480V, 50/60Hz								
KDE300A-R75GT4	1.5	3.4	2.1	4.0	0.75	SIZE A	Inbuilt	
KDE300A-1R5GT4	3	5	3.8	5.6	1.5			
KDE300A-2R2GT4	4	5.8	5.1	9.0	2.2			
KDE300A-3R7G/5R5PT4	5.9	10.5	9.0	13.0	3.7	SIZE B		
KDE300A-5R5G/7R5PT4	8.9	14.6	13.0	17.0	5.5			
KDE300A-7R5G/011PT4	11	20.5	17.0	25.0	7.5			
KDE300A-011G/015PT4	17	26.0	25.0	32.0	11	SIZE C		
KDE300A-015G/018PT4	21	35.0	32.0	37.0	15			
KDE300A-018G/022PT4	24	38.5	37.0	45.0	18.5			
KDE300A-022G/030PT4	30	46.5	45.0	60.0	22	SIZE D		option
KDE300A-030G/037PT4	40	62.0	60.0	75.0	30			
KDE300A-037G/045PT4	57	76.0	75.0	90.0	37			
KDE300A-045G/055PT4	69	92.0	91.0	110.0	45	SIZE E		
KDE300A-055G/075PT4	85	113.0	112.0	152.0	55			
KDE300A-075G/090PT4	114	157.0	150.0	176.0	75			
KDE300A-090G/110PT4	134	180.0	176.0	210.0	90	SIEZ G		
KDE300A-110G/132PT4	160	214.0	210.0	253.0	110			
KDE300A-132G/160PT4	192	256.0	253.0	304.0	132			
KDE300A-160G/200PT4	231	307.0	304.0	357.0	160	SIZE I		
KDE300A-200G/220PT4	250	385.0	377.0	426.0	200			
KDE300A-220G/250PT4	280	430.0	426.0	465.0	220			
KDE300A-250G/280PT4	355	468.0	465.0	520.0	250	SIZE J	External	
KDE300A-280G/315PT4	396	525.0	520.0	585.0	280			
KDE300A-315G/355PT4	445	590.0	585.0	650.0	315			
KDE300A-355G/400PT4	500	665.0	650.0	725.0	355	SIZE K		
KDE300A-400G/450PT4	565	785.0	725.0	820.0	400			
KDE300A-450G/500PT4	630	790.0	820.0	860.0	450			
KDE300A-500G/560PT4	700	835.0	860.0	950.0	500			
KDE300A-560G/630PT4	784	920.0	950.0	1100.0	560	SIZE L	external	

General Technical Data

Item		Specification
Input	Input Voltage	1phase/3phase 220V: 200V~240V 3 phase 380V-480V: 380V~480V
	Allowed Voltage fluctuation range	-15%~10%
	Input frequency	50Hz / 60Hz, fluctuation less than 5%
Output	Output Voltage	3phase: 0~input voltage
	Overload capacity	General purpose application: 60S for 150% of the rated current Light load application: 60S for 180% of the rated current
Control	Control mode	V/f control Sensorless flux vector control without PG card (SVC) Sensor speed flux vector control with PG card (VC)
	Operating mode	Speed control、Torque control (SVC and VC)
	Speed range	1:100 (V/f) 1:200(SVC) 1:1000 (VC)
	Speed control accuracy	±0.5% (V/f) ±0.2% (SVC) ±0.02% (VC)
	Speed response	5Hz(V/f) 20Hz(SVC) 50Hz(VC)
	frequency range	0.00~600.00Hz(V/f) 0.00~200.00Hz(SVC) 0.00~400.00Hz(VC)
	Input frequency resolution	Digital setting: 0.01 Hz Analog setting: maximum frequency x 0.1%
	Startup torque	150%/0.5Hz(V/f) 150%/0.25Hz(SVC) 150%/0Hz(VC)
	Torque control accuracy	SVC: within 5Hz10%, above 5Hz5% VC:3.0%
	V/f curve	V / f curve type: straight line, multipoint, power function, V / f separation; Torque boost support: Automatic torque boost (factory setting), manual torque boost
	Frequency giving ramp	Support linear and S curve acceleration and deceleration; 4 groups of acceleration and deceleration time, setting range 0.00s ~ 60000s
	DC bus voltage control	VdcMax Control: Limit the amount of power generated by the motor by adjusting the output frequency to avoid over-voltage trip; VdcMin control: Control the power consumption of the motor by adjusting the output frequency, to avoid jump undervoltage fault
	Carrier frequency	1kHz~12kHz(Varies depending on the type)
	Startup method	Direct start (can be superimposed DC brake); speed tracking start
	Stop method	Deceleration stop (can be superimposed DC braking); free to stop

KDE300A Option Parts

PHOTO	MODEL	DESCRIPTION
	Open collector PG card	1,A+/A-,B+/B-,Z+/Z- Pluse input 2,Max input Frequency:100KHz 3,PG power output:+15V
	Rotary PG card	1,10KHz 7V Rms output,DB9 port,no frequency division output,resolution 12 digits
	Incremental or Differential PG card	1.A+/A-.B+/B-,Z+/Z- Pulse input 2,Max input Frequency;500KHz 3,PG power Output;+5v
	injection moulding machine signal conveting Card	Support 2 channels analog input,current input range:0-1A and 0-2A optional
	removable keypad	removable and remote keypad extendable and 100m romote control

VFD200 series small power drives

SMART

S Simper **M** Maintenance friendly **A** Affordable **R** Robust **T** Time to market

Product positioning

KDE200 series inverter is economical inverter specially for small scale processing and manufacturing automation control



Performance introduction

KDE200 series inverter is a high-quality and simple VF control inverter. It can run a wide range of speed and torque control in high precision by decoupling control of motor magnetic flux current and torque current torque: fast and accurately, High end hardware platforms, scientific production technology and complete testing equipment make the product more stable and reliable.

Capacity range

Power range: 0.4-3.7kw power range

Frequency range: 0.00-400.00HZ

Voltage level: single phase 220V/ three phase 380V

Technical features

- 1, Using DSP as the core of control unit to achieve high-speed and high-performance control
- 2, Motor parameter self-learning, intelligent setting to the optimal control model
- 3, High performance IPM module, protection function such as under voltage, overcurrent, overtemperature, over the ground short circuit etc.
- 4, The unique EMC design minimizing the pollution to power.

Application industry

Medicine, food, packaging, engraving, washing and other industries

Machinery equipment, a variety of small-scale machinery equipment.

Model and data of KDE200

Model	Power Capacity (KVA)	Input Current (A)	Output Current (A)	Adaptable Motor	
				KW	HP
Single-phase 220V, 50/60Hz					
KDE200-0R4GS2	1	5.4	2.3	0.4	0.5
KDE200-R75GS2	1.5	8.2	4	0.75	1
KDE200-1R5GS2	3	14	7	1.5	2
KDE200-2R2GS2	4	23	9.6	2.2	3
Three-phase 380V, 50/60Hz					
KDE200-R75GT4	1.5	3.4	2.1	0.75	1
KDE200-1R5GT4	3	5	3.8	1.5	2
KDE200-2R2GT4	4	5.8	5.1	2.2	3
KDE200-3R7GT4	5.9	10.5	9	3.7	5

Structure description

Shuttle keypad

- Shuttle keypad-high precision rotary encoder
- Spin around increasing and decreasing by degrees
- Highlight LED display information

Remote control interface

- Support RJ45 port
- Support Remote control within 100m
- Support standard Rs485 communication

Independent air duct structure

- Separating the radiator and the drive control module
- Capacitance isolation is installed on the duct
- Forced air cooling

Wire-in terminal entry

- Cover removable
- Wiring is simple, top down out
- Enhanced ABS flame retardant material

Control cable entry

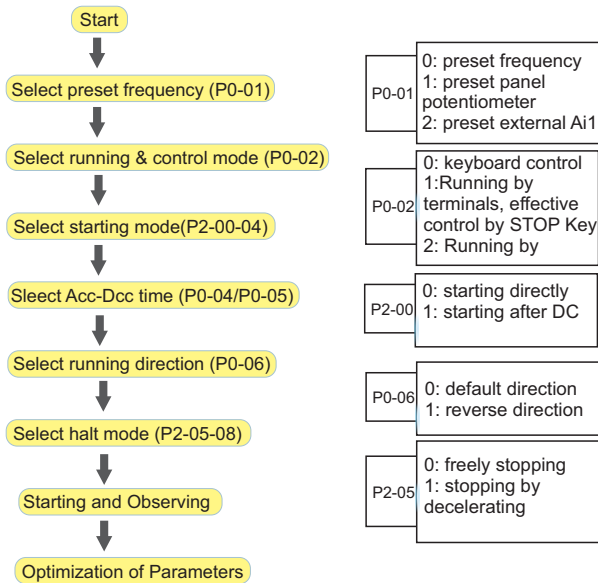
- Compliance with the safety standards of mechanical equipment and electrical facility standard
- Connecting the main loop terminal and controlling circuit terminal
- Shorten the cable connection and installation time

Capacitance isolation installation area

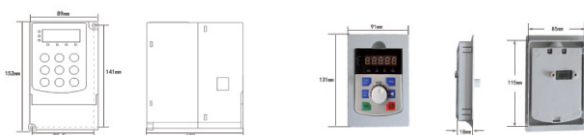
- Enhanced ABS flame retardant material
- Separating the capacitance from the other control panels
- Natural air cooling in air duct



Quick Debugging/Quick set up instructions

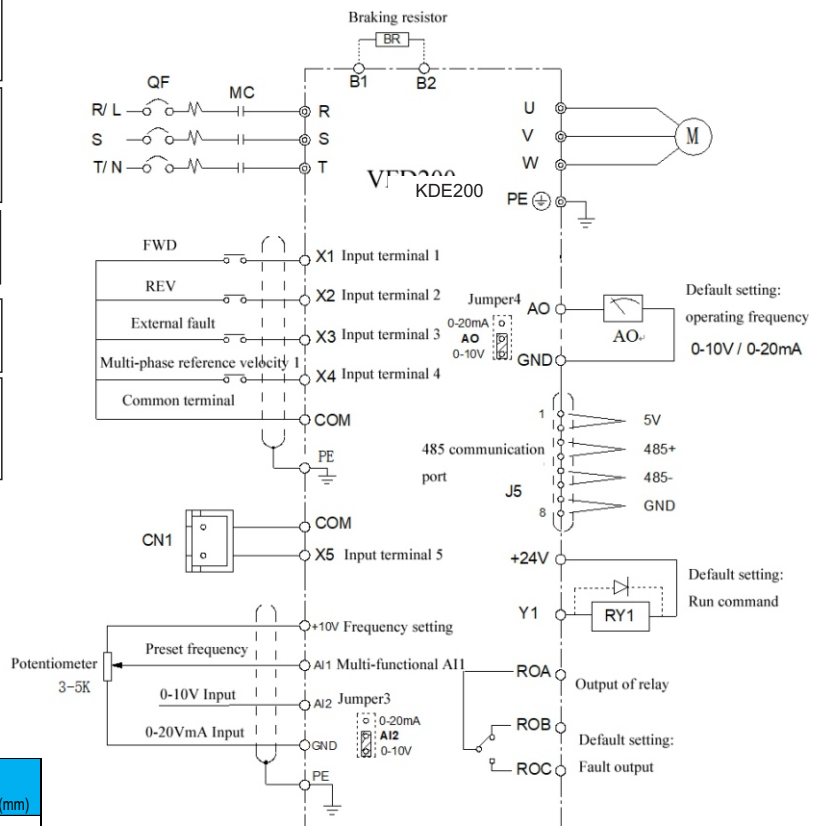


Dimension



Model	Mounting Dimension		Dimension			Pore Diameter(mm)
	length(mm)	wide(mm)	length(mm)	wide(mm)	high(mm)	
0.75kw-3.7kw	141	80.5	152	89	123	5.2
0.75kw-3.7kw keyboard installation dimension: length=115mm width=115mm						

Control Circuit and Main Circuit Wiring





Innovation/Technology/High Quality

CÔNG TY TNHH ĐIỆN VÀ TỰ ĐỘNG HOÁ HÙNG LONG

☎ 0948 956 835

✉ lelong.aec@gmail.com

🏠 Số 66, ngõ 282 Kim Giang, Phường Đại kim, Quận Hoàng Mai, Thành Phố Hà Nội