

PRODUCT CATALOGUE

New Generation Hi-Tech AC Inverter Series



CT3000 - G SERIES

The best drive ever, beyond your expectation!



The Ultimate Driving Machine
Power Range: 0.4kW ~ 400kW

Variable Speed Drive

FEATURES

• New Speed Sensorless Vector Control

- 1- Speed sensorless vector control, with locked-rotor Movement, 150% rated torque under 0.5Hz output;
- 2- With sensorless vector control, it reduce the sensibility of motor parameter and improve the existing applicability.
- 3- Be suitable for winding control and load distribution occasion with multi-motor.

• High starting torque characteristics and super responsiveness

- 1- 150% rated torque under 0.5Hz(sensorless vector control), 180% zero torque speed under 0Hz(vector control with sensor)
- 2- Under sensorless vector control, torque response<20ms.
Vector control with sensor, torque<5ms.



Technical Specification G-Series

	Item	Specification
Standard Function	Maximum frequency	Vector contro:0~300Hz;V/F control:0~3200Hz
	Carrier frequency	0.5kHz~16kHz (The carrier frequency is automatically adjusted based on the load features.)
	Input frequency resolution	Digital setting:0.01Hz;Analog setting:maximum frequency x 0.025%
	Control Mode	<ul style="list-style-type: none"> •Sensorless flux vector control(SFVC) •Closed-loop vector control(CLVC) •Voltage/Frequency(V/F)control
	Starting Torque	<ul style="list-style-type: none"> •G type:0.5Hz/150%(SFVC);0 Hz/180%(CLVC) •P type:0.5 Hz/100%
Basic Function	Overload Capacity	<ul style="list-style-type: none"> •G type:60s for 150% of the rated current,3s for 180% of the rated current •P type:60s for 120% of the rated current,3s for 150% of the rated current
	Torque Boost	<ul style="list-style-type: none"> •Fixed Boost •Customized boost 0.1%-30.0%
	V/F Curve	<ul style="list-style-type: none"> •Straight-line V/F curve •Multi-point V/F curve •N-power V/F curve (1.2-power,1.4-power,1.6-power,1.8-power,square)
	V/F Sepration	Two types:complete separation;half separation
	Acceleration/ deceleration curve	<ul style="list-style-type: none"> •Straight-line ramp •S-curve ramp Four groups of acceleration/deceleration time with the range of 0.0-6500.0s
	DC Breaking	DC braking frequency:0.00Hz~maximum frequency Braking time:0.0s~36.0s Braking action current value:0.0%-100%
	Simple PLC and multi-speed operation	It implements up to 16 speeds via the simple PLC function or combination of DI terminal states.
	Onboard PID	It realizes process-controlled closed loop control system easily.
	Automation voltage regulation(AVR)	It can keep constant output voltage automatically when the mains voltage changes.
	Overvoltage/ Over-current stall control	The current and voltage are limited automatically during the running process so as to avoid frequent tripping due to overvoltage/overcurrent.
	Quick current limiting	Maximize overcurrent failure and protect the frequency converter in normal operation.
	Torque limit & control	It can limit the torque automatically and prevent frequent over current tripping during the running process.Torque control can be implemented in the CLVC mode.

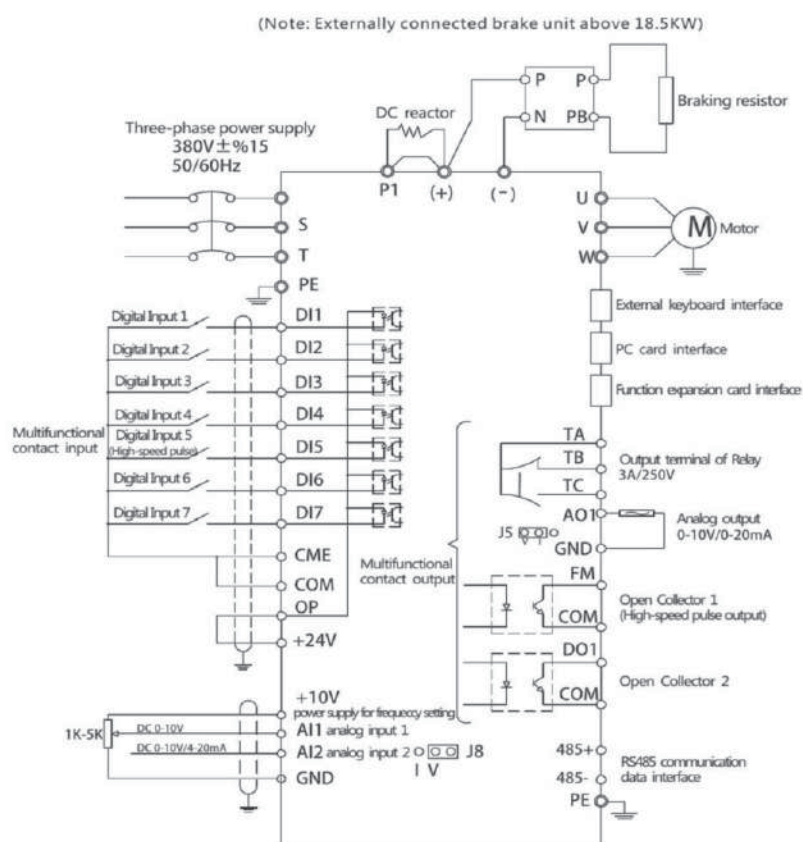
Variable Speed Drive

	Item	Specification
Individualized Function	High performance	Control of asynchronous motor and synchronous motor are implemented through the high-performance current vector control technology.
	Power dip ride through	The load feedback energy compensates the voltage reduction so that the AC drive can continue to run for a short time.
	Rapid Current Limit	It helps to avoid frequent overcurrent faults of the AC drive.
	Timing control	Time range: 0.0-6500.0 minutes
	Multi-motor switchover	Four motors can be switched over via four groups of motor parameters.
	Bus Support	Support field bus:Modbus
	Motor overheat protection	The optional I/O extension card enables AI3 to receive the motor temperature sensor input(PT100,PT1000) so as to realize motor overheat protection.
	Multiple encoder types	Support difference,open collector and rotary transformer
Operation	Command source	Operation panel,control terminal and serial communication port are given;Switch in various methods.
	Frequency source	Various frequency sources:digital reference,analog voltage reference,analog current reference, pulse reference and serial port reference.The switching can be conducted in various methods.
	Auxiliary frequency source	10 kinds of auxiliary frequency source.The auxiliary frequency jog and frequency synthesis can be achieved flexibly.
	Input terminal	Standards: 7 digital input terminals,among which one support maximum high-speed pulse input of 100kHz 2 analog input terminals,among which one only supports voltage input of 0~10V and the other supports voltage input of 0~10V or current input of 4~20mA Expansion capability: 3 digital input terminals 1 analog input terminal,which supports voltage input of -10V~10V and supports PT100/PT1000
	Output terminal	Standards: •1 high-speed pulse output terminal(The open collector type is optional),supporting 0~100kHz square signal output •1 digital output terminal •1 relay output terminal •1 analog output terminal ,supporting current output of 0~20mA or voltage output of 0~10V •Expansion capability: •1 digital output terminal •1 relay output terminal •1 analog output terminal,supporting current output of 0~20mA or voltage output of 0~10V
Operation	LED display	Display the parameter
	key lock & function	Realize partial or all key lock and define the action range of some keys to prevent misoperation
	Protection function	Short circuit test of electrified motor,input/output default phase protection,overcurrent protection, overvoltage protection,undervoltage protection,overheat protection,overload protection,etc.
Environment	Options	IO expansion card,differential input PG card,OC input PG card and rotary transformer PG card
	Altitude	Less than 1,000m
	Ambient temp	-10 ~ 50°C Please use the equipment by derating at ambient temperature of 40°C~60°C
	Humidity	Less than 95%RH,no water condensation
	Vibration	Less than 5.9m/s ² (0.6g)
	Storage temp	-20°C~+60°C
	IP grade	IP20
	Pollution leve	Pd2
	Power Distribution	TN,TT

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Variable Speed Drive

Wiring mode of control loop of frequency inverter



Main loop terminal	Description
R.S.T	Input terminal power supply
U.V.W	Output terminal for motor supply
(+) (P), PR	Terminal block for outside reactor
EG	Ground terminal
Control Terminal	Description
DI1	Digital Input 1
DI2	Digital Input 2
DI3	Digital Input 3
DI4	Digital Input 4
DI5	Digital Input 5
DI6	Digital Input 6
DI7	Digital Input 7
OP	Input terminal exteran power supply
+24V - COM	External connection +24V supply
+10V - GND	External connection +10V supply
AI1	Analog input terminal 1
AI2	Analog input terminal 2
AO1	Analog otput 1
FM	High speed pulse output
DO1 - CME	Digital output 1
TA TB TC	Relay output 1
485+ 485-	RS485 communication interface

CT3000-G Series Frequency Inverter Applications

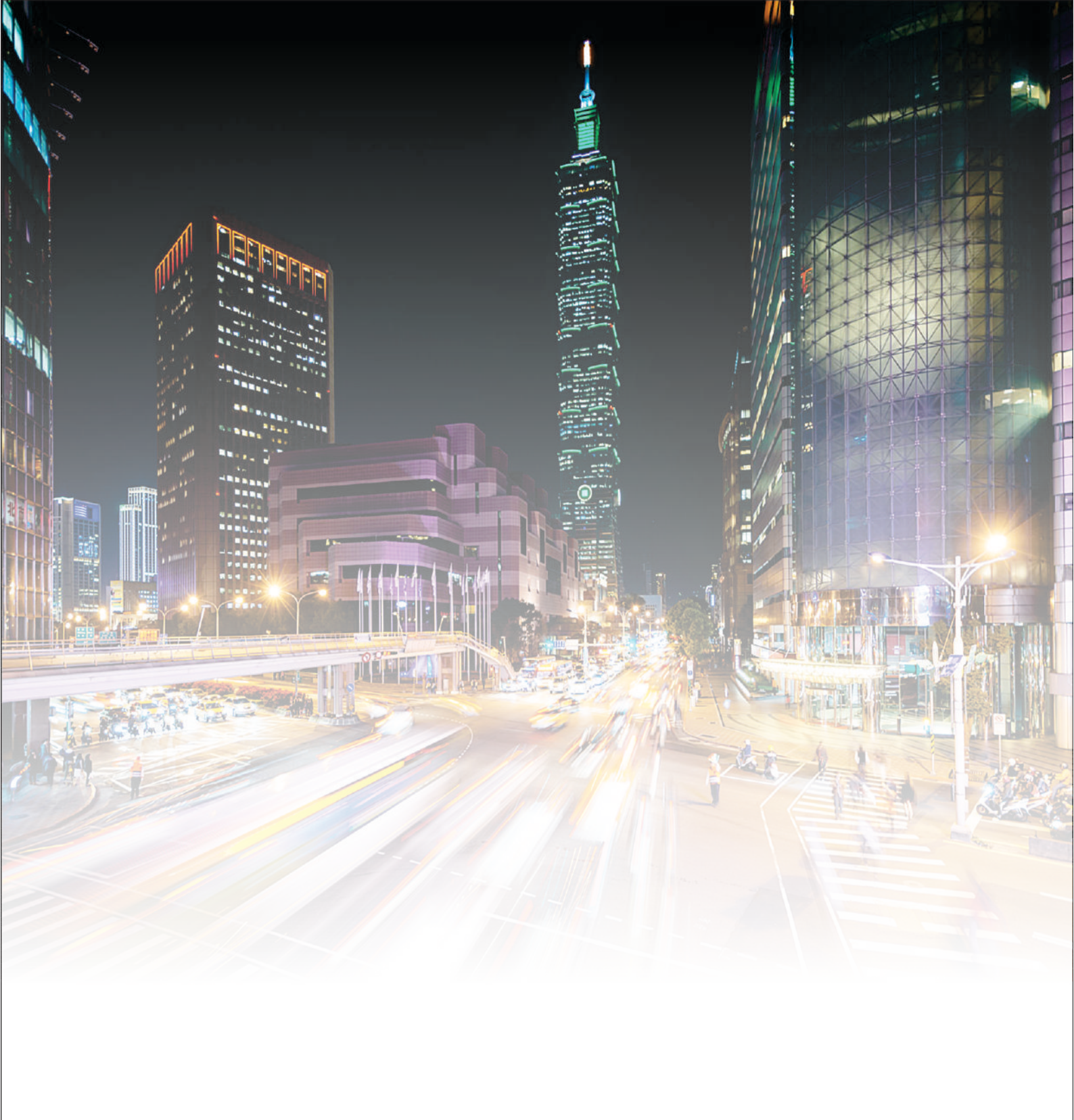


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Variable Speed Drive

Electrical specification of Frequency Inverter

Type / Model	Volt	Phase in/out	Rated	Applicable	Weight	Dimensions
			Current	Motor KW	(kg)	
CT3000-2S-D04G	220	1/3	2.3	0.4	2.3	265*185*225
CT3000-2S-D75G	220	1/3	4	0.75	2.3	265*185*225
CT3000-2S-1D5G	220	1/3	7	1.5	2.3	265*185*225
CT3000-2S-2D2G	220	1/3	9.6	2.2	2.3	265*185*225
CT3000-2T-D04G	220	3/3	2.1	0.4	2.3	265*185*225
CT3000-2T-D75G	220	3/3	3.8	0.75	2.3	265*185*225
CT3000-2T-1D5G	220	3/3	9	1.5	4.2	315*230*250
CT3000-2T-2D2G	220	3/3	13	2.2	4.2	315*230*250
CT3000-2T-004G	220	3/3	17	4	4.2	315*230*250
CT3000-4T-D75G	400	3/3	2.1	0.75	2.3	265*185*225
CT3000-4T-1D5G	400	3/3	3.8	1.5	2.3	265*185*225
CT3000-4T-2D2G	400	3/3	5.1	2.2	2.3	265*185*225
CT3000-4T-004G	400	3/3	9	4	4.2	315*230*250
CT3000-4T-5D5G	400	3/3	13	5.5	4.2	315*230*250
CT3000-4T-7D5G	400	3/3	17	7.5	4.2	315*230*250
CT3000-4T-011G	400	3/3	25	11	7.4	395*280*270
CT3000-4T-015G	400	3/3	32	15	7.4	395*280*270
CT3000-4T-018G	400	3/3	37	18	19	540*330*280
CT3000-4T-022G	400	3/3	45	22	19	540*330*280
CT3000-4T-030G	400	3/3	60	30	19	540*330*280
CT3000-4T-037G	400	3/3	75	37	52	696*385*450
CT3000-4T-045G	400	3/3	91	45	52	696*385*450
CT3000-4T-055G	400	3/3	112	55	52	696*385*450
CT3000-4T-075G	400	3/3	150	75	76	800*560*380
CT3000-4T-090G	400	3/3	176	90	76	800*560*380
CT3000-4T-110G	400	3/3	210	110	111	1050*660*460
CT3000-4T-132G	400	3/3	253	132	111	1050*660*460
CT3000-4T-160G	400	3/3	304	160	111	1050*660*460
CT3000-4T-200G	400	3/3	377	200	153	1140*730*460
CT3000-4T-220G	400	3/3	426	220	153	1140*730*460
CT3000-4T-250G	400	3/3	465	250	153	1140*730*460
CT3000-4T-280G	400	3/3	520	280	153	1140*730*460
CT3000-4T-315G	400	3/3	585	315	252	1440*880*460
CT3000-4T-355G	400	3/3	650	355	252	1440*880*460
CT3000-4T-400G	400	3/3	725	400	252	1440*880*460



Authorized Dealer

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