CTE Series

• High Quality

✧ The hardware design and components selection are more optimized and reasonable;

• High Power Density

✧ The structure design layout is more compact;

• High Performance

✧ The software upgrade is more compatible with the end user, industrial control is more flexible, accurate, and the performance is stronger, and it is more suitable for precision control occasions with higher requirements for torque, control accuracy, and response speed;

• Optimize Products User Experience

✧ Easy operation, maintainability, environmental protection, scalability and convenience of Int-ernet of Things access.

CT10M:Power Rate	**1 phase & 3 phase Input** **3 phase output**	220V (+-20%) 0.4KW~4.0KW	380V (+-20%) 0.4KW~400KW

SPECIFICATION

Input & Output

Input voltage	1AC 220~240V(± 15%) 3AC 220~240V(± 15%) 3AC 380~460V(± 15%)
Input frequency	50Hz/60Hz ±5%
Output voltage	0~input voltage, deviation <±3%
Output frequency	0~600Hz

Control Characteristics

Control mode	v/f control Sensor-less vector control Torque control
Speed accuracy	±0,5% (V/f) ±0,2% (SVC)
Speed fluctuation	±0,3% (SVC)
torque response	< 10ms (SVC)
Starting torque	0,5Hz: 150% (V/f) 0,25Hz: 180% (SVC)
Overload capability	150% Rated current -60s 180% Rated current -10s 200% Rated current -1s
Simple PLC Multi-step speed	16 speed External digital signal control Internal clock
PID function	Standard build-in
Communication	Modbus

Featured functions

Featured functions	Input &Output delay Flexible parameters display AVR (Automatic Voltage Regulation) Timing control, fixed length control, etc. Simple PLC, 16-steps speed control Torque control build-in S curve acceleration/deceleration Multi-functional programmable keypad V/f separated control

Environment Limitation

Installation location	Without direct sunlight,free from dust,corrosive gases, oil mist, flammable gases, water vapor, water drop and salt,etc.
Altitude	0~2000m Derated 1% for every 1000m when the altitude is above 1000meters
Ambient temperature	-10°C~50°C (Output derated while the temperature is higher than 40°C)
Storage temperature	-20°C~+70°C
Relative Humidity	5-95% no condensation

ADVANCED DESIGN

C3

◆ EMC Filter

C3 Level Filter Build-In Standardly
Better EMC Performance

IGBT

◆ IGBT Selection

Selection Of Large Margin
Current>2 Times of VFD Current

200%

◆ Overload Capacity

120% long time running without trip.
150% for 60 seconds
180% for 10 seconds

±15%

◆ Voltage Range

Compatible with ±15% input voltage
fluctuation, output voltage s table.

S Curve

◆ S Curve

S Curve Acceleration/Deceleration
Better Start /Stop Performance

Flying Start

◆ Flying Start Function

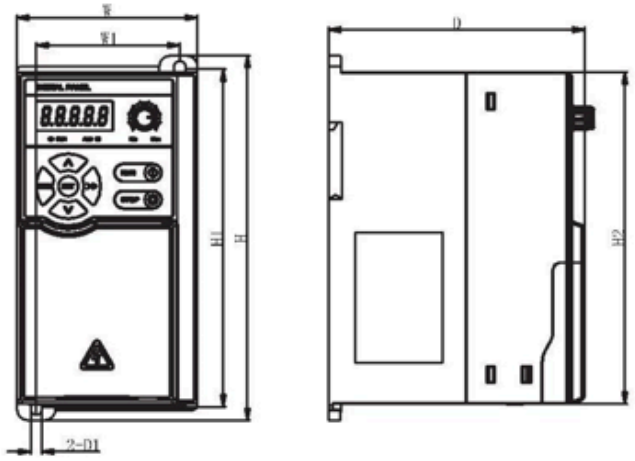
Restart The Running Motor Smoothly
No Current Surge
High Accuracy

Prote Ction

◆ Protection

Overcurrent、Overvoltage、PID feedback failure、Overheat、Undervoltage、The main contactor is abnormal、Motor overload、Fast protection、Unbalanced output、Frequency conversion overload、System abnormal、Motor detection abnormalOutput phase loss、Input phase loss、Short circuit protection of control board power supply.

TECHNICAL SPECIFICAT



Model	Outer Dimensions (mm)						Fixing hole	weight (kg)
	W1	H1	H	H2	W	D		
CTE-2S-0.4B	67.5	160	170	/	84.5	129	ø4.5	1.0
CTE-2S-0.75B								
CTE-2S-1.5B								
CTE-2S-2.2B								
CTE-4T-0.75B								
CTE-4T-1.5B								
CTE-4T-2.2B								
CTE-2S-2.0B	85	185	194	/	97	143.5	ø5.5	1.4
CTE-2S-4.0B								
CTE-4T-4.0B								
CTE-4T-5.5B								

Category	Terminal symbol	Terminal name	Function Description
Power supply	+10V-GND	External +10V power supply	Provides +10V power to the outside, maximum output current: 10mA Used as a working power supply for external potentiometer, resistance range: 1kΩ~50kΩ
Analog input	AI1-GND	Analog input terminal 1	Input voltage: DC 0V~10V/4mA~20mA, input impedance 100K.
Digital input	Xi- GND	Digital input I (i=1-5)	1. Optical coupling isolation, compatible with bipolar input 2. Input impedance: 4.7kΩ 3. Voltage range for level input: 9V~30V
Analog output	AO1-GND	Analog output	The voltage or current output is determined by the AO1 jumper selection on the control board. Output voltage range: 0V~10V, output current range: 0mA~20mA
Digital output	Y/DO-GND	Digital output (compatible with high-speed output out)	Optocoupled isolation, bipolar open collector output Output voltage range: 0V~24V, output current range: 0mA~50Ma
Relay output	RA-RB	Normally closed terminal	Contact actuation capability: AC250V, 3A; DC 30V, 3A。
	RA-RC	Always open	