

CT200 Series High Performance Vector Control Inverter



- Various optional power:0.75~1250kW,customization acceptable.
- Three control modes:V/F control, sensorless vector control 0 (for synchronous motor),sensorless vector control 1(for asynchronous motor).
- Various frequency setting methods:UP/DOWN setup,digital setup,analog quantity setting,pulse frequency setting,multi-step speed setting, PID setting,MODBUS communication setting,PROFIBUS communication setting,etc.
- The drive motor type is compatible with asynchronous motor and permanent magnet synchronous motor.The CT200 inverter supports two sets of motor parameter setting, which can realize the switching control of different motors.
- The CT200 inverters of 18.5kW~37kW have a built-in DC reactor which can avoid the rectifier circuit damage caused by the sudden change of the grid voltage or the harmonics of phase control load.
- The CT200 inverters of 37kW (including) and below are equipped with built-in braking units to consume the feedback energy during braking.
- Equipped with intelligent expansion port which supports the simultaneous access to two expansion cards to meet the needs of industry special control.
- Accurate and reliable speed tracking allows rotating machinery to be started smoothly and without any shocks.
- Parameter backup can be set and it is convenient for users to backup,debug and recover parameter.

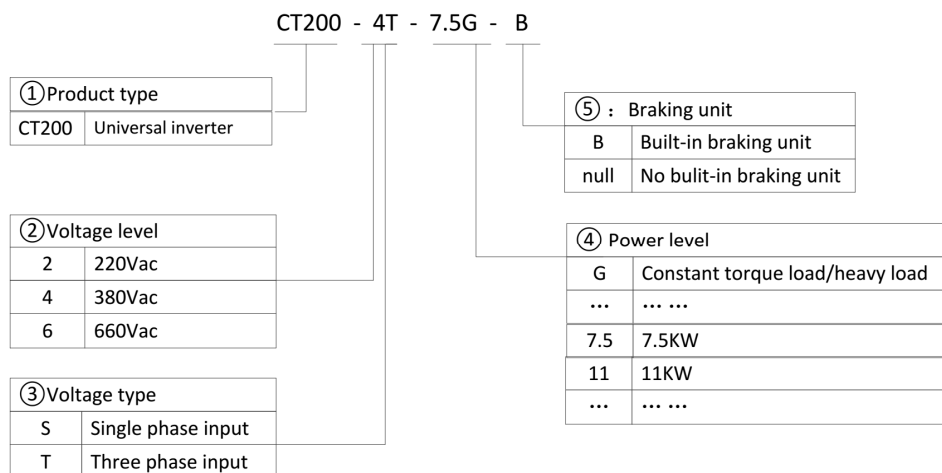
- Offering a variety of fault protection functions: over-current, over-voltage, under-voltage, over-temperature, phase-failure, overload, etc.

□ Tech table

Input and output parameters	Input voltage	Single-phase 220VAC±15%, three-phase 380VAC±15%, three-phase 660VAC±15%.
	Input frequency	50~60Hz±5%
	Output voltage	0~Rated input voltage
	Output frequency	0~600Hz
	Output overload capacity	150% of rated current: 60s; 180% of rated current: 10s; 200% of rated current: 1s
Running control features	Control mode	V/F control,sensorless vector control 0(applicable for synchronous motors), sensorless vector control 1(applicable for asynchronous motors)
	Adjustable-speed ratio	Asynchronous motor 1:200(V/F,sensorless vector control 1) Synchronous motor 1: 20(sensorless vector control 0)
	Speed control accuracy	±0.5%(V/F),±0.2%(sensorless vector control)
	Speed fluctuation	±0.3%(sensorless vector control)
	Torque response	<20ms(sensorless vector control)
	Torque control accuracy	10%(sensorless vector control)
	Starting torque	Asynchronous motor:0.25Hz/150%(sensorless vector control 1) Synchronous motor:2.5Hz/150%(sensorless vector control 0)
Basic function	Starting frequency	0.00~10.00Hz
	ACC and DEC time	0.1~3000.0s
	Carrier frequency	1.0KHz~16.0KHz
	Frequency setting	UP/DOWN setup,digital setup,analog quantity setting,pulse frequency setting,multi-step speed setting, PID setting,MODBUS communication setting,PROFIBUS communication setting,etc.
	Starting mode	Start with starting frequency,start after DC brake,speed tracking starting
	Stop mode	Deceleration stop,free stop,deceleration stop with DC brake or magnetic flux brake
	Motor type	Asynchronous motor,permanent magnet synchronous motor
	Energy braking capacity	Operating voltage of braking unit: 320~750V

	DC braking capability	DC braking frequency: 0~300Hz; DC braking waiting time: 0~50s; DC braking current: 0.0~100.0%; DC braking time: 0.0~50.0s;
	Auto voltage adjustment	Keep a stable output voltage automatically when the grid voltage transients
	Instantaneous frequency down	Reduce frequency instantly to keep bus voltage stable when grid voltage is under-voltage.
Control terminals	Digital input	Standard 10-channel inputs, one of which can be high-speed pulse input (HDI)
	Analog input	Standard 3-channel inputs, AI1: 0~10V or 0~20mA input optional, AI2: 0~10V or 0~20mA input optional, AI3: -10V~+10V input.
	Digital output	Standard 2-channel multi-function collector outputs, one of which can be high-speed pulse output (HDO).
	Analog output	Standard 2-channel outputs AO1, AO2 (0~10V or 4~20mA optional)
	Relay output	Standard 2-channel relay outputs
Communication interface	RS485 communication	RS485 communication interface for external RS485 communication, Modbus protocol (RTU mode)
Extended communication port	Various communication ports for expansion	Support for Profibus, CANopen, Ethernet communication.
Fault protection	ACC overcurrent, DEC overcurrent, constant speed overcurrent, ACC overvoltage, DEC overvoltage, constant speed overvoltage, busbar under voltage, motor overload, inverter overload, input power failure, output phase loss, rectifier module overheating, inverter module overheating, external fault, communication fault, current detection fault, etc.	
Keypad display	LED display	Highlight LED digital tube displays the inverter information.
	LCD display	LCD displays inverter information.
Others	Running environment	Indoors, less than 1km above sea level, without dust, corrosive gases or direct sunlight
	Ambient temperature	-10~+40°C, derate 1% for every additional 1°C when the ambient temperature is between 40~50°C
	Humidity	5~95% (no condensation)
	Altitude	0~2000m, derate 1% for every additional 100m when the sea level is above 1000m
	Vibration	Less than 0.5g
	Storage temperature	-40~+70°C

Description of Name Plate



Models table

Inverter model	Power (kW)	Input current (A)	Output current (A)	Applicable motor power (kW)
Single-phase 220Vac 50/60Hz				
CT200-2S-0.7-B	0.7	8.2	4.0	0.75
CT200-2S-1.5-B	1.5	14.0	7.0	1.5
CT200-2S-2.2-B	2.2	23.0	9.6	2.2
Three-phase 380Vac 50/60Hz				
CT200-4T-0.7-B	0.7	3.4	2.5	0.7
CT200-4T-1.5-B	1.5	5.0	3.7	1.5
CT200-4T-2.2-B	2.2	5.8	5.3	2.2
CT200-4T-4.0-B	4.0	12.0	9.5	4.0
CT200-4T-5.5-B	5.5	18.5	14	5.5
CT200-4T-7.5-B	7.5	22.5	18.5	7.5
CT200-4T-11-B	11	30.0	25.0	11
CT200-4T-15-B	15	39.0	32.0	15
CT200-4T-18.5-B	18.5	45.0	38.0	18.5
CT200-4T-22-B	22	54.0	45.0	22
CT200-4T-30-B	30	68.0	60.0	30
CT200-4T-37-B	37	84.0	75.0	37
CT200-4T-45	45	98.0	92.0	45
CT200-4T-55	55	123.0	115.0	55
CT200-4T-75	75	157.0	150.0	75
CT200-4T-90	90	188.0	180.0	90

CT200-4T-110	110	221.0	215.0	110
CT200-4T-132	132	267.0	260.0	132
CT200-4T-160	160	309.0	305.0	160
CT200-4T-185	185	344.0	340.0	185
CT200-4T-200	200	384.0	380.0	200
CT200-4T-220	220	429.0	425.0	220
CT200-4T-250	250	484.0	480.0	250
CT200-4T-280	280	539.0	530.0	280
CT200-4T-315	315	612.0	600.0	315
CT200-4T-350	350	665.0	650.0	350
CT200-4T-400	400	715.0	720.0	400
CT200-4T-500	500	890.0	860.0	500

Parts Description

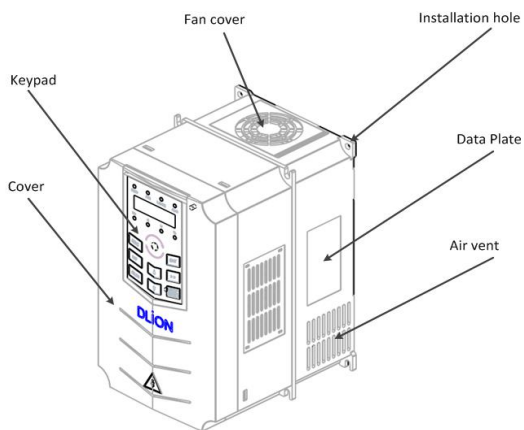


Figure 1.2 Parts of inverter (15kw and below).

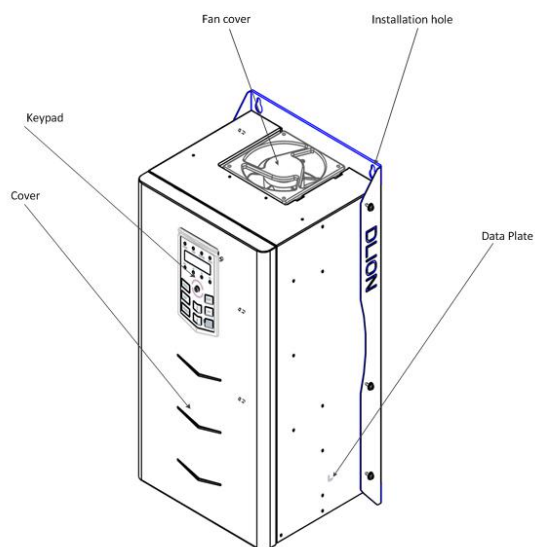


Figure 1.3 Parts of inverters(18.5KW and above).

External Dimension

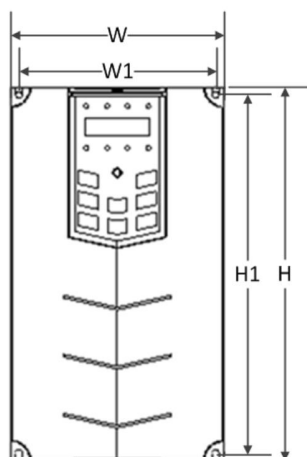


Figure1.4 Dimensions(11kW and below).

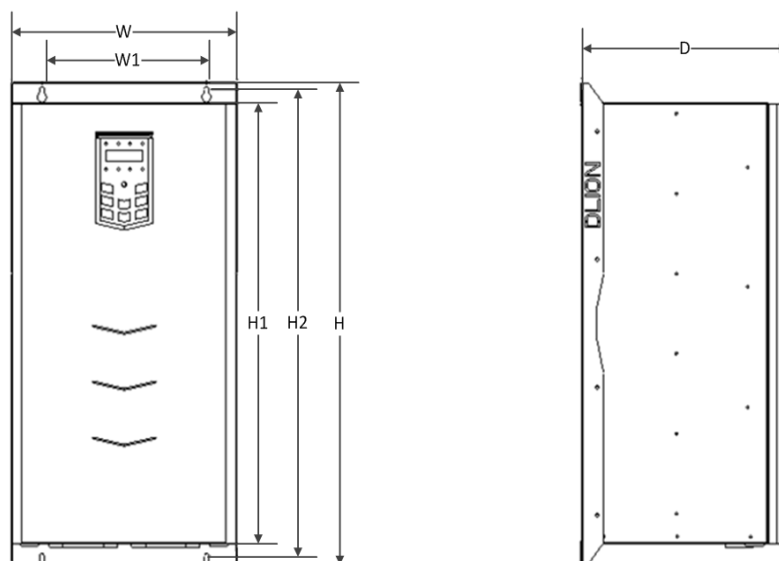
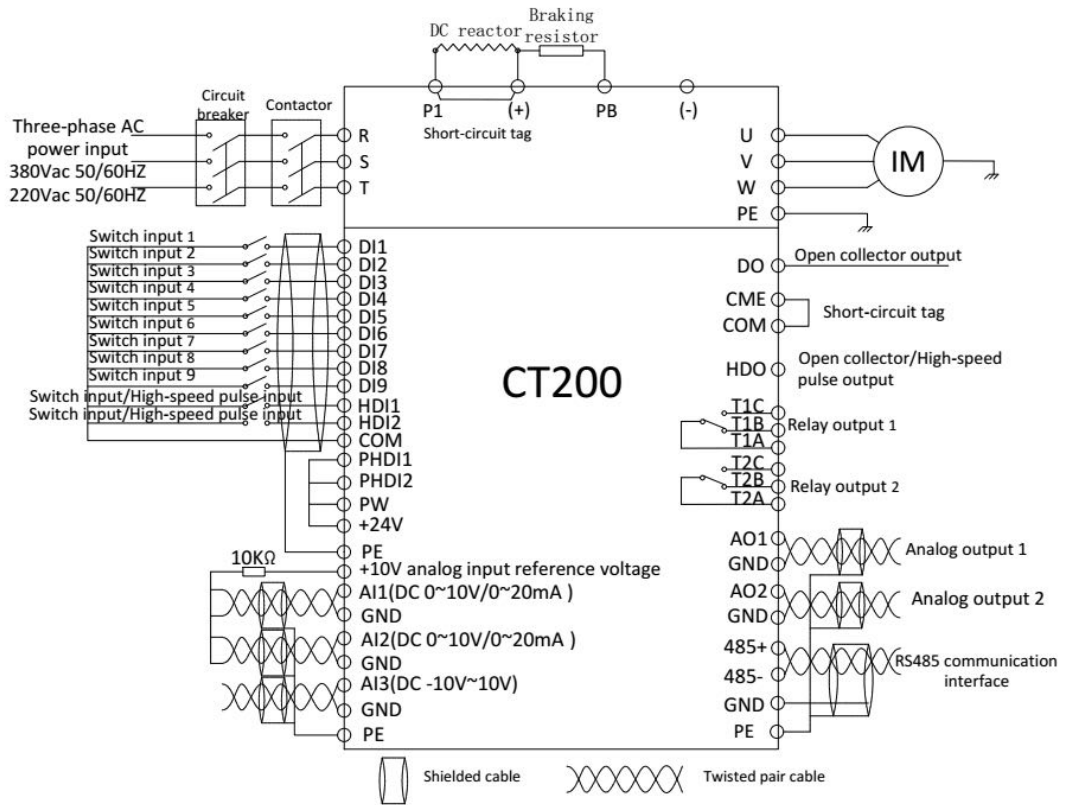


Figure 1.5 Dimensions (15~110kW).

Power (kW)	Size (mm)						Installation Hole (mm)	Weight (kg)	Shape of inverter
	W	H	D	W1	H1	H2			
CT200-2S-0.7G-B	140	230	172	128	218	---	5.5		C1
CT200-2S-1.5G-B									
CT200-2S-2.2G-B									
CT200-4T-0.7G-B									
CT200-4T-1.5G-B									
CT200-4T-2.2G-B									
CT200-4T-4.0G/5.5P-B									
CT200-4T-5.5G/7.5P-B									
CT200-4T-7.5G/11P-B	165	285	200	153	273		5.5		C2
CT200-4T-11G/15P-B									
CT200-4T-15G/18.5P-B	214	360	203	184	385	410	6.5		C3
CT200-4T-18.5G/22P-B									
CT200-4T-22G/30P-B									
CT200-4T-30G/37P-B	250	450	230	220	400	425	6.5		C4
CT200-4T-37G/45P-B									
CT200-4T-45G/55P	300	600	280	240	540	580	8.5		C5

CT200-4T-55G/75P									
CT200-4T-75G/90P	330	660	330	250	600	640	8.5		C6
CT200-4T-90G/110P									
CT200-4T-110G/132P									

Standard wiring diagram



	COM	+24V power supply or external power ground	Internal isolation from GND
Switch output	DO	Open collector output, common CME terminal	External voltage range: 0~24V
	CME	Common terminal of open collector output	Short circuit with COM by default
	HDO	High speed pulse output or open collector output, common COM terminal	Pulse output frequency range: 0~50kHz
	COM	HDO common terminal	Internal isolation from GND
Analog input	+10V	The local supplies +10V power output	Output current range: 0~50mA (If the potentiometer is connected between +10V and GND, the resistance should not be less than 2kΩ.)
	AI1	Analog input terminal 1	Input voltage and current are optional Input voltage range: 0~10V Input current range: 0~20mA
	AI2	Analog input terminal 2	Input voltage and current are optional Input voltage range: 0~10V Input current range: 0~20mA
	AI3	Analog input terminal 3	Input voltage range: -10~10V
	GND	Analog ground	Internal isolation from COM
Analog output	AO1~AO2	Analog output terminal	Output voltage and current are optional Output voltage range: 0~10V Output current range: 0~20mA
	GND	Analog ground	Internal isolation from COM
Relay output	T1A/T1B/T1C	Relay output	T1A-T1B: normally closed T1A-T1C: normally open Contact capacity: 250VAC/3A, 30VDC/1A
	T2A/T2B/T2C	Relay output	T2A-T2B: normally closed T2A-T2C: normally open Contact capacity: 250VAC/3A, 30VDC/1A
Communication interface	485+/485-	RS485 communication interface	RS485 communication interface
Extended Communication port	Various communication ports for expansion	PROFIBUS,CAN,Ethernet interface	Support PROFIBUS,CAN,Ethernet communication expansion

Shenzhen Dolycon Technology Co.,LTD is a professional inverter factory who are focus on solution and service supplying in time. We have a world top class R&D team with all members who worked as key members in big companies as INVT or HUAWEI for more than 10years. Welcome customers who need any kinds of service such as OEM , ODM service to find us for cooperation.

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Thanks very much for your reading and support!

Best regarding and wishes for you and your families for ever!