

Performance		SVC control mode	V/F control mode
Control performance	Speed control mode	Hybrid vector control mode	V/F control mode
		Speed Sensorless High Speed and Torque Control	
	Max rotate speed	Relate to 245Hz	400Hz
	Carrier frequency	1.0 ~ 10.0kHz (Power derating when the carrier frequency is higher than the default value)	
	Over load capacity	150% rated current for 1 minutes	
	Speed control range	1:100 (General motor)	Approximately 1 : 50
	Speed Frequency Accuracy	Digital input (-10℃ ~ 40℃)	±0.01% (Frequency accuracy)
		Analog input (25℃±10℃)	±0.2% (Frequency accuracy)
	Speed control mode	Robust control	/
	Speed control response	200rad/s (-3dB)	/
	Torque control accuracy	<±8% (General motor)	/
	Torque control response	2krad/s (-3dB)	/
	Constant power range	1:4	/
Main control& protection performance	Speedless control	/	/
	Start-up torque	More than 150%	
	Torque limit	Can be set within four quadrants of forward motoring,forward generating, reverse motoring and reverse generating. Setting range: 0~150% ( up to 200% due to different motors in the drive combination)	Available for motoring and generating states with 0~150% range
Operation keypad	Torque control, speed control / torque control switching operation, the default speed tracking fast start function, high efficiency operation, prohibit reverse mode selection, to prevent regenerative stall function, DC braking, energy braking, static and rotation self-learning , Torque boost, Suppress unstable function, Removable terminal block with parameter backup function, Droop control, Mechanical loss compensation setting, Speed deviation limit during acceleration / deceleration, Multi-speed program operation, Stop mode, Built-in PID function, Motor running, skip function, contact acceleration and deceleration function, cooling fan ON / OFF function, fault retry, timing control, S curve acceleration and deceleration, acceleration / deceleration time switching, speed / frequency hold function, Moment detection output, 2-wire and 3-wire control, forward and reverse switching, pre-excitation, torque / speed reached detection output, FCL over-current fault avoidance, MODBUS communication.		
	Input and output phase loss protection, motor and inverter overheat protection, capacitor over temperature protection, motor and inverter overload protection, IGBT module abnormalities, overcurrent protection, over voltage protection, under voltage protection, optional fault protection , external fault protection, Over speed and over torque protection, communication error, speed control error, speed detector abnormal, main contactor open protection.		
Operation keypad	LCD display	Parameters copy: quick copy of the parameter via the operation keypad Key lock: to achieve part or all of the key lock	
Environmental	Application site	Vertical installation indoor, avoid direct sunlight; no visible dust, corrosive gases, flammable gas, oil mist, water vapor, drip or salt and so on	
	Altitude	Under 1000 meter. ( Derate when higher than 1000 meters , output current reduce about 10% of rated current per 1000 meter height )	
	Enviroment temperature	-10℃ ~ +40℃. enviroment temperature between 40℃ ~ 50℃ need to lower output power	
	Enviroment humidity	Smaller than 95%RH, no drop condenses	
	Vibration	Smaller than 5.9m/s² (0.6g)	
	Storage temperature	-40℃ ~ +70℃	
	Protection grade	IP20	
Structure	Cooling method	Forced air cooling	
	Installation method	Wall hanging and cabinet installation	

# EN700 intelligent high performance frequency inverter



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# About us

## Company introduction

Shenzhen Encom Electric Technologies CO., LTD is a state-level high-tech enterprise with independent intellectual property rights, focusing on industrial automation products' development, production and sales. The main products include frequency inverter/ac drive, servo controller, PLC, new energy systems.

ENC company was established in 2004, has passed ISO9001: 2008 quality management system certification and the European Union CE certification, won the National Innovation Fund, the Shenzhen strategic emerging industries fund, product innovation award, the most investment value award and repeatedly won "China top ten low-voltage inverter domestic brands" title.



1. Won National Innovation Fund enterprise, China's high-tech enterprise
2. Repeatedly won "China top ten domestic brands" title
3. With more than 13 years of rich experience R&D team
4. With completely independent intellectual property rights, has dozens of patents
5. Master the world's leading asynchronous, synchronous vector control technology and torque control technology
6. ISO9001:2008 system certification unit, strict and standard information quality control system
7. Has more than 30 offices in China
8. ENC provide quality products and services for more than 30 countries' industrial user

## Company introduction



### EN700 intelligent high performance frequency inverter

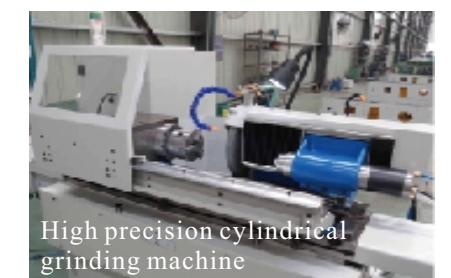
EN700 series frequency inverter is a new generation of motor driver. It is innovative on the basis of classical flux vector control. It can accurately measure and calculate various parameters of motor, monitor and compensate mechanical loss and motor temperature, etc. High speed and powerful computing capabilities enable efficient and complex drive control to meet the drive requirements of a wide range of high-end equipments.



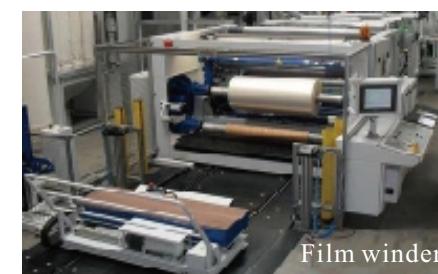
Gantry crane



Shore crane



High precision cylindrical grinding machine



Film winder



Paper making machine



Traction machine

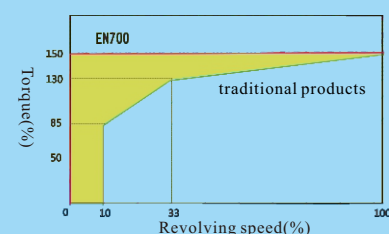


## Product advantages



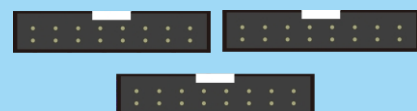
### Secondary Development: More possibilities for you to experience

Open applications to provide users with more opportunities for innovation, fully reserved for a variety of industrial application parameters of the secondary development.



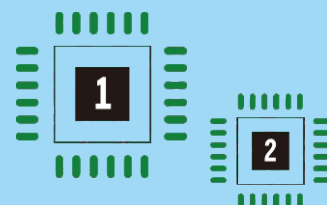
### Rich in function configuration: meeting various application requirements

Motor temperature detection, mechanical loss compensation, suppression of unstable function; power 4.0~55KW section is equipped with built-in braking unit, 30KW and above standard with built-in DC reactor.



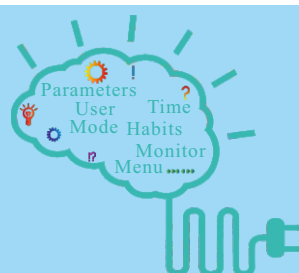
### Modular design: provides unprecedented convenience

Terminal can be removed and backup data, so no need to disassemble the control cables and reset parameters.



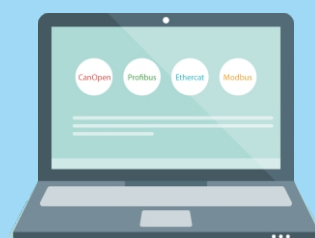
### Dual-core operation: faster than ever before

Dual CPU system operates faster and more responsive. Within 200mS to complete a smooth start for free high-speed rotating motor.



### Intelligent learning: no need to set more parameters

Intelligent induction user-set habits, self-identification user-set parameters, with the menu of check mode, can monitor multiple sets of parameters.



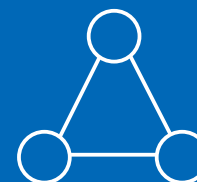
### A variety of protocols: the ultimate refreshing protocol experience

Powerful access to networking capabilities, support for Canopen, Modbus, Ethercat, Profibus-DP, and other protocols. Monitor and operate from your PC.

## Product features



### Speed preset



### Load balancing



### IoT



### Intelligent



### Dual motor switching



### Parallel expansion



### Speeding start

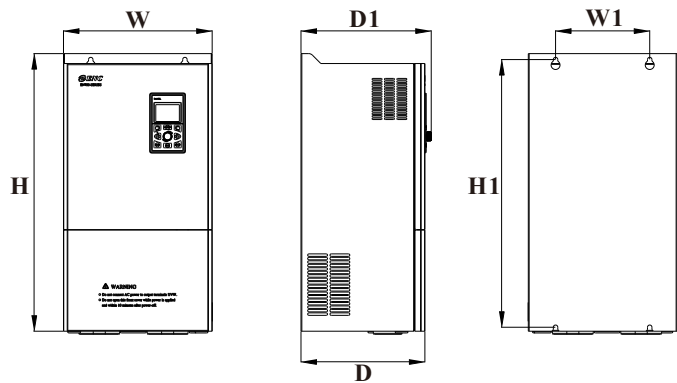
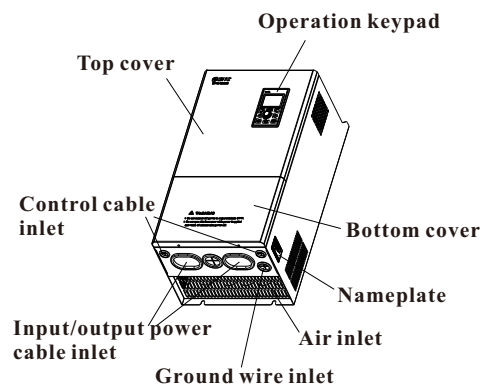


### Hardware

## Intelligent drive Precision motion

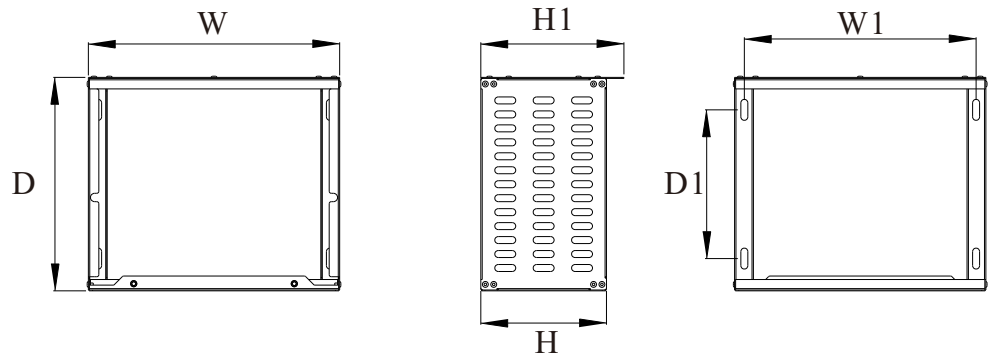
- New design concept
- First-class control algorithm
- Abundant application features
- Abundant scalability and more user-friendly operation
- Complete hardware configuration and high reliability
- Aesthetic body and scientific structure design

Installation size



Inverter model	W ( mm)	W1(mm)	H(mm)	H1(mm)	D(mm)	D1(mm)	Fix Hole (mm)	Packing size (cm)	Gross weight (kg)
EN700-4T0040	160	100	320	306	192	205	6	38.5*23.5*27	8
EN700-4T0055									
EN700-4T0075									
EN700-4T0110	210	150	365	349	200	213	7	42.5*28.5*28	11
EN700-4T0150									
EN700-4T0185	250	190	420	400	210	223	9	48*31.5*28.5	16
EN700-4T0220									
EN700-4T0300	300	220	560	540	260	263	9	62*37.5*43.5	37
EN700-4T0370									
EN700-4T0450	326	260	610	590	265	278	9	68.5*42*46	48
EN700-4T0550									
EN700-4T0750	360	250	605	575	325	348	13	69*46*53.5	68
EN700-4T0900									
EN700-4T1100	430	250	710	680	340	353	13	79*53*55	88
EN700-4T1320									89
EN700-4T1600	510	370	1069	1035	430	443	13	114*61*64	148
EN700-4T2000	560	420	1069	1035	430	443	13	114*66*64	170
EN700-4T2200									168

Optional base and base dimensions



Inverter model	Standard base	W(mm)	D(mm)	H(mm)	W1(mm)	D1(mm)	Mounting holes (mm)
EN700-4T0750	SP-BS7-0900	360	306	180	332	213	30*10
EN700-4T0900							
EN700-4T1100	SP-BS7-1320	430	320	180	402	228	30*10
EN700-4T1320							
EN700-4T1600	SP-BS7-1600	510	404	205	446	340	Φ10
EN700-4T2000	SP-BS7-2200	560	404	204	496	340	Φ10
EN700-4T2200							

The keyboard size (unit: mm)

