



**EDS800 Universal Mini Inverter** 

#### Shenzhen Encom Electric Technologies CO.,LTD.

- 5-6F, Bldg.4, Minqi Technology Park, Lishan Rd., Nanshan Area, Shenzhen 518055, China
- +86-755-26984485
- +86-755-26985120
- encvfd@encvfd.com
- www.encvfd.com
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### About us

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#### **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



compact and convenient



1.Small size (124.7\*89\*148.5mm), high cost performance;

- 2.Can make up of inverter network independently and can set to be mainframe or sub-device;
- 3. With potentiometer, keyboard can be pulled outside;
- 4. With RS485 communication port;
- 5. Pulse/analog input output channels;
- 6.16 segments speed control;
- 7. Multiple running frequency/command specified channels;
- 8. Space voltage vector control SVPWM;
- 9.Hi-performance isolating OC output, AC or DC load of 220V/0.5A can be connected;
- 10. Traversal function can be widely applied to all kinds of spinning devices;
- 11.Built-in Braking unit;
- 12.Built-in user's timer/counter.

Power range: 1 phase 220V 0.2kw~2.2kw; 3 phase 380V 0.75kw~3.7kw.



#### Typical application industry









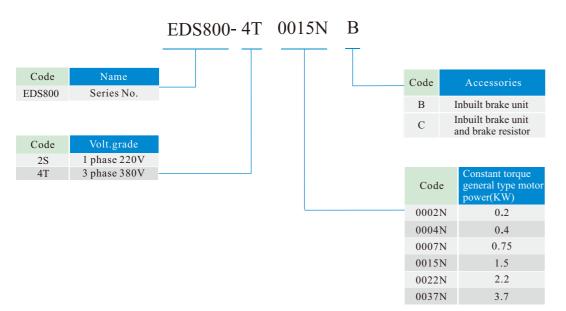








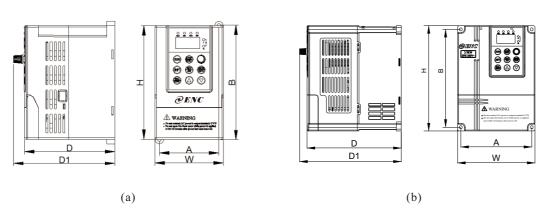




## **Model Description**

Inverter type	Rated Power (KVA)	Rated output current (A)	Adapted motor(KW)
EDS800-2S0002N	0.6	1.6	0.2
EDS800-2S0004N	1.1	3	0.4
EDS800-2S0007N	1.8	4.7	0.75
EDS800-2S0015N	2.8	7.5	1.5
EDS800-2S0022N	3.8	10	2.2
EDS800-4T0007N	1.5	2.3	0.75
EDS800-4T0015N	2.4	3.7	1.5
EDS800-4T0022N	3.3	5	2.2
EDS800-4T0037N	5.6	8.5	3.7

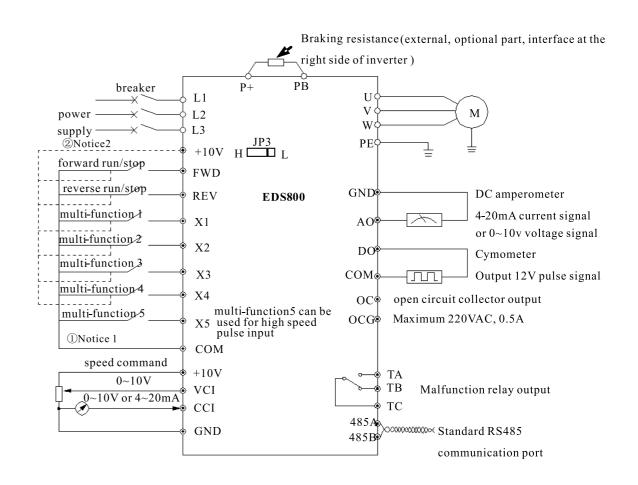
## Outer size and gross weight



#### EDS800-2S0002 ~EDS800-4T0037 mouting size

Inverter type	W (mm)	H (mm)	D (mm)	D1 (mm)	A (mm)	B (mm)	Fixing aperture (mm)	Packing Size (cm)	Gross weight (kg)	Graph.
EDS800-2S0002N	89	148.5	112. 5	124. 7	74	138	5	17*19*18	1.5	Graph a
EDS800-2S0004N	89	148.5	112.5	124. 7	74	138	5	17*19*18	1.5	Graph a
EDS800-2S0007N	89	148. 5	112.5	124. 7	74	138	5	17*19*18	1.5	Graph a
EDS800-2S0015N	89	148. 5	112. 5	124. 7	74	138	5	17*19*18	1.5	Graph a
EDS800-2S0022N	125	170	152. 1	164. 1	114. 5	158	5	22*18*20	2. 5	Graph b
EDS800-4T0007N	89	148.5	112.5	124. 7	74	138	5	17*19*18	1.5	Graph a
EDS800-4T0015N	89	148.5	112.5	124. 7	74	138	5	17*19*18	1.5	Graph a
EDS800-4T0022N	125	170	152. 1	164. 1	114. 5	158	5	22*18*20	2. 5	Graph b
EDS800-4T0037N	125	170	152. 1	164. 1	114. 5	158	5	22*18*20	2. 5	Graph b

# Wiring diagram



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### Product technic index and spec

Item		m	Item description			
Ir	Rated volt., frequency		3 phase 380V, 50HZ/60HZ; single phase 220V, 50HZ/60HZ			
Input	Allowed work volt. range		3 phase 380V, 320V~460V; single phase 220V, 200V~260V			
	Voltage		380V grade: 0~380V; 220Vgrade:0~220V			
output	Frequency		0HZ~400HZ			
+	Over loading capacity		150% of rated current for 1 minute; 200% of rated current for 0.5s			
	Control mode		Optimal space voltage vector SVPWM constant voltage frequency ratio V/F control			
	Speed re	gulation range	1:100			
	Start	-up torque	100% of rating torque at low frequency			
	Runnin state pr	g speed stable ecision	≤±0.5% of rating synchronous speed			
	Frequency precision		Digital setting: max. frequency×±0.01%; analog setting: max. frequency×±0.5%			
	Frequency resolution	Analog setting	0.1% of max. frequency			
		Digital setting	0.01HZ			
Со		Exterior pulse	0.5% of max. frequency			
ntrol pe	Torque boost		Automatic torque boost, manual torque boost 0.1%~20.0%			
Control performance	V/F curv	e (volt. ycharacteristic)	Set rating frequency randomly at range of 5~400Hz, can choose constant torque, degressive torque 1, degressive torque 2, degressive torque 3 and user defined V/F curve in total 4			
O	Accelerating decelerating curve		Two modes: straight line accelerating decelerating, and S curve accelerating Decelerating; 7 kinds of accelerating decelerating time (unit of minute/second can be optioned), max is 6000 minutes.			
	Brake	Power consumption brake	Built-in braking unit, exterior braking resistance			
		DC brake	Optional start up and stop, action frequency $0\sim15$ Hz, action volt. $0\sim15\%$ , action time $0\sim20.0$ s			
	Jog		Jog frequency range: 0.50Hz $\sim$ 50.00Hz; jog accelerating decelerating time 0.1 $\sim$ 60.0s can be set			
	Multi-section speed running		Realized by interior PLC or control terminal			
	Interior PID controller		Be convenient to make closed-loop system			

Item		Item description			
Control performance	Automatic energy save running	Optimize V/F curve automatically based on the load to realize power save running			
	Automatic volt. regulation (AVR)	Can keep constant output volt. When power source voltage varies.			
	Automatic current limiting	Limit running current automatically to avoid frequent over-current which will cause trip			
Running function	Running order specified channel	Keypad provision, control terminal provision, serial port provision			
	Running frequency specified channel	Digital provision, analog provision, impulse provision, serial port provision, combined provision, can be switched at any time by kinds of method			
	Pulse output channel	Impulse square wave signal output of $0\sim20 KHz$ realize output of physical parameter such as setting frequency, output frequency and etc.			
on	Analog output channel	1 channel of analog signal output, AO channel can be 4~20mA or 0~10V, through them the inverter can realize output of physical parameter such as setting frequency, output frequency and etc.			
Keypad	LED display	Can display setting frequency, output frequency, output voltage, output current etc. in total 14 kinds of parameter			
pad	Button lock	Lock all or part of the buttons (analog potentiometer can't be locked)			
	Protection function	Over current protection, over voltage protection, lack voltage protection, over heat protection, over load protection etc.			
	Optional parts	Brake subassembly, remote control keypad, connecting cable for remote-control keypad etc.			
	Use ambient	Indoor, not bare to sunlight, no dust, no corrosive gas, no flammable gas, no oil fog, no vapor, no water drop or salt etc.			
	Altitude	Lower than 1000m			
≥	Ambient temperature	-10°C $\sim$ +40°C(If ambient temperature 40°C $\sim$ 50°C, please derate or strengthen heat sink			
Ambient	Ambient humidity	Smaller than 95%RH, no condensation water			
	Vibration	Smaller than 5.9m/s <sup>2</sup> (0.6g)			
	Storage temperature	-40°C~+70°C			
Structure	Defending grade	IP20			
Installation mode		Wall hanging and cabinet installation			

(Actual specification shall be a bit different from above depending on different types, please refer to user's manual or consult with us when you choose our products)