

## **EDS1000/1100/1300 frequency inverter**

### **1 Features of EDS1000/1100/1300**

- Small volume, be suitable for all kinds of spot.
- 150% of rated torque at 1 Hz frequency.
- Built-in PID controller, can realize constant pressure (flux etc.)  
“One drives multiple devices”  
control (function in option)
- 16 (maximum) section speed control
- 0-20KHz pulse input output interface
- Spinning traverse function.
- Bears automatic voltage regulation (AVR) and automatic current limiting function,
- RS485 communication interface (part in option)
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### **2 Application**

#### **Application of EDS1000:**

Used for common speed regulation field, such as: transportation machine, china machine, baccy machine, metallurgy machine etc.

Used in field where need long-distance control to start/stop of the motor such as blower, food, chemical machine, packing machine, transportation machine etc.

Applied in field where need frequent multi-speed adjustment to motor speed such as toughened glass, weaving, paper making, chemical etc..

Applied in field where need stable system, pressure, flux such as blower pump, constant pressure water supply, air compressor, air conditioner, freezer cooling tower, music fountain, heat supply etc.

Applied in Consecutive action running field such as conveyer belt, coiler, factory production line, food chemistry etc.

**Application of EDS1100:** drawing machine unwinding and winding

**Application of EDS1300:**CNC machine tool required freq. range:0Hz-1000Hz

### 3 Type Selection table

#### (1) supply voltage: 1AC 220V ± 15%

Inverter type (G: general; P: special)	Rated Power(KVA)	Rated Output Current (A)	Adaptable Motor power(KW)	size W*H*D1 (mm)	Packging size W*H*D (mm)	G.W. (kg)
EDS1000/1100/1300-2S0004	1.1	3	0.4	125*170*135.5		1.5
EDS1000/1100/1300-2S0007	1.8	4.7	0.75	125*170*135.5		
EDS1000/1100/1300-2S0015	2.8	7.5	1.5	125*170*135.5		
EDS1000-2S0022	3.8	10	2.2	155*230*164		
EDS1000-2S0037	5.6	17	3.7	155*230*164		

#### (2) supply voltage: 3AC 3800V ± 15%

Inverter type (G: general; P: special)	Rated Power(KVA)	Rated Output Current (A)	Adaptable Motor power(KW)	size W*H*D1 (mm)	Packging size W*H*D (mm)	G.W. (kg)
EDS1000/1100/1300-4T0007G/0015P	1.5/2.4	2.3/3.7	0.75/1.5	125*170*135.5		
EDS1000/1100/1300-4T0015G/0022P	2.4/3.3	3.7/5	1.5/2.2	125*170*135.5		
EDS1000/1100/1300-4T0022G/0037P	3.3/5.6	5/8.5	2.2/3.7	155*230*164		
EDS1000/1100/1300-4T0037G/0055P	5.6/8.6	8.5/13	3.7/5.5	155*230*164		
EDS1000/1100/1300-4T0055G/0075P	8.6/11	13/17	5.5/7.5	155*230*164		
EDS1000/1100/1300-4T0075G/0110P	11/17	17/25	7.5/11	200*290*187		6.1
EDS1000/1100/1300-4T0110G/0150P	17/21.7	25/33	11/15			
EDS1000/1100/1300-4T0150G/0185P	21.7/25.7	33/39	15/18.5	218*345*221		10
EDS1000/1100/1300-4T0185G/0220P	25.7/29.6	39/45	18.5/22	260*430*261		17
EDS1000/1100/1300-4T0220G/0300P	29.6/39.5	45/60	22/30			
EDS1000/1100/1300-4T0300G/0370P	39.5/49.4	60/75	30/37	280*505*261		22
EDS1000/1100/1300-4T0370G/0450P	49.4/60	75/91	37/45			
EDS1000-4T0450G/0550P	60/73.7	91/112	45/55	300*535*261		26
EDS1000-4T0550G/0750P	73.7/99	112/150	55/75	370*645*267		50

#### (3) supply voltage: 3AC 690V ± 15%

Inverter type	Rated Power(KVA)	Rated Output Current (A)	Adaptable Motor power(KW)	size W*H*D (mm)	Packging size W*H*D (mm)	G.W. (kg)
EDS1000-7T0110G/0150P	17/21.7	15/18	11/15	284*570*252.7		
EDS1000-7T0150G/0185P	21.7/25.7	18/22	15/18.5	284*570*252.7		

EDS1000-7T0185G/0220P	25.7/29.6	22/28	18.5/22	420*650*300		
EDS1000-7T0220G/0300P	29.6/39.5	28/35	22/30	420*650*300		
EDS1000-7T0300G/0370P	39.5/49.4	35/45	30/37	420*650*300		
EDS1000-7T0370G/0450P	49.4/60	45/52	37/45	420*650*300		
EDS1000-7T0450G/0550P	60/73.7	52/63	45/55	500*750*300		
EDS1000-7T0550G/0750P	73.7/99	63/86	55/75	500*750*300		
EDS1000-7T0750G/0900P	99/116	86/98	75/90	590*820*372		
EDS1000-7T0900G/1100P	116/138	98/121	90/110	590*820*372		
EDS1000-7T1100G/1320P	138/167	121/150	110/132	590*820*372		
EDS1000-7T1320G/1600P	167/200	150/175	132/160	590*820*372		
EDS1000-7T1600G/2000P	200/250	175/215	160/200	630*1200*500		
EDS1000-7T2000G/2200P	250/280	215/235	200/220	630*1200*500		

## 4 Specification

item		Item description
Input	Rating volt., frequency	3 phase 690V grade, 3 phase 690V ,50Hz/60Hz; 3 phase 380V grade, 3 phase 380V ,50Hz/60Hz; 1 phase 220V grade, 1 phase 220V ,50Hz/60Hz
	Allowed work volt. range	3 phase 690 V grade: 586V~760V; 3 phase 380 V grade: 320V~460V 1 phase 220V grade: 200V~260V
output	Voltage	690V grade: 0~690V; 380V grade: 0~380V; 200V grade: 0~220V
	Frequency	0Hz-400Hz EDS1300: 0Hz-1000Hz
	Over loading capacity	G type: 150% of rating current for 1 minute, 200% of rating current for 0.5 second; P type: 120% of rating current for 1 minute;
Control Performanc e	Control mode	Speed sensorless slip vector control, open loop V/F control
	Speed regulation range	1: 100
	Start-up torque	150% of rating torque at 1 Hz frequency
	Running speed stable state precision	$\leq \pm 0.5\%$ of rating synchronous speed

	Frequency precision	Digital setting: max. frequency $\times \pm 0.01\%$ ; analog setting: max.frequency $\times \pm 0.5\%$
Frequency resolution	Analog setting	0.1% of max. frequency
	Digital setting	precision : <100Hz 0.01Hz; $\geq 100\text{hz}$ : 0.1Hz
	Exterior impulse	0.5% of max. frequency
	Torque boost	Automatic torque boost, manual torque boost 0.1%~12.0%
	V/F curve (volt. frequency characteristic)	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 in total 5 kinds of curve
	Accelerating decelerating curve	2 modes: straight line accelerating decelerating and S curve accelerating decelerating; 7 kinds of accelerating decelerating time (unit minute/second can be optioned), max. time 6000 minutes.
brake	Power consumption brake	Interior or exterior brake resistance. 690 V grade haven't build-in brake unit .
	DC brake	Optional start-up and stop, action frequency 0~15Hz, action volt. 0~15%, action time 0~20.0 s
	Jog	Jog frequency range: 0.50Hz~50.00Hz; jog accelerating decelerating time 0.1~60.0s can be set
	Multisection speed running	Realized by interior PLC or control terminal
	Interior PID controller	Be convenient to make closed-loop system
	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	Key pad specified, control terminal specified, serial port specified
	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 0~20KHz, can realize output of physical parameter such as setting frequency, output frequency etc.
	Analog output channel	2 channel of analog signal output, thereinto AO1 channel can be 4~20mA or 0~10V and AO2 channel is 0~10V; through them the inverter can realize output of physical parameter such as setting frequency, output frequency etc.

Keypad	LED display	Can display setting frequency, output frequency, output voltage, output current etc.
	Lock the button	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.
Fitting parts		brake subassembly, remote-control keypad, connecting cable for remote-control keypad etc.
ambient	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 ,if higher than 1000m ,need to reduce amount to use.
	Ambient temperature	-10 ℃~+40 ℃(under ambient temperature 40 ℃ ~50 ℃, please reduce the volume or strengthen heat sink)
	Ambient humidity	Smaller than 95%RH, no condensation water
	vibration	Smaller than 5.9m/s <sup>2</sup> {0.6g}
	Storage temperature	-40 ℃~+70 ℃
configuration	Defending grade	IP20
	Cooling mode	By fan with automatic temperature control
Mounting mode		Wall hanging