

***Yolico***

# YD1000

## High-voltage inverter regulation system

( 3kV~11kV )  
( 400kW~20000kW )



ISO9001 CE

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## / Company

Wuxi Yolico Electric Co., Ltd. is a high-tech enterprise specializing in the design, development, production and sales of frequency converters and servo drivers, and is committed to providing electrical drive control solutions.

Company develops and produces commercial industrial control products such as servo motor controllers with commercial performance, and is committed to improving the industrial automation level of thousands of industrial machines.

Company regards the cost performance of industrial control products from Yudian as an important goal, and expects to provide excellent products with more cost performance while the new technology of Yudian continues to improve.

The provision of system solutions is a vital service. The company has organized a group of experienced applied technical engineers to devote themselves to this research, which will have outstanding performance in some advantageous fields. Product quality is an important symbol of enterprise credibility.

Yolico regards pre-sale, in-sale and after-sale services as a part of product quality, and the international service network is our advantage. Honesty, pragmatism and harmonious innovation are the principles that the company insists on

## / Introduction of YD1000 series vector Inverter

YD1000 series high voltage inverter is independently developed by Wuxi Yolico Electric Co., Ltd.

The design and production of the second generation of commercial voltage variable frequency speed regulation equipment, the system adopts the most mainstream power unit series technology, and takes the DSP+ARM+FPGA 3-core processor as the control core, which has become the most advanced motor vector control algorithm at present.

It has the characteristics of high control accuracy, fast response speed, low frequency and large torque, and is very suitable for energy-saving speed regulation and process improvement of commercial voltage asynchronous motors and synchronous motors. It has been widely used in thousands of fans, pumps and compressors.

# 01 APPLICATION

## Power

Induced draft fan, blower, primary fan, secondary fan, feed pump, circulating pump, condensate pump, mortar pump, etc.



## Mine

Main ventilator, compressor, exhaust fan, air compressor, gas drainage pump, medium pump, drainage pump, belt conveyor, kiln press, main and auxiliary shaft hoists, etc.



## Metallurgy

Exhaust fan, blower, dust removal fan, annular cooling fan, circulating water pump, slag flushing pump, phosphorus removal pump, pulp pump, rolling mill, etc.



## Oil and gas

Oil transfer pump, water injection pump, submersible pump, LNG booster pump, etc.



## Cement

High temperature fan, kiln exhaust fan, coal mill circulating fan, cement mill circulating fan, ball mill



## Municipal

Fresh water pump, sewage pump, purification pump, mixed-flow pump, oxygen blower, etc.



## Chemical

Dust removal fan, roots blower, desulfurization fan, gas compressor, circulating water pump, etc.



## Other

Pharmaceutical paper industry: fans, pumps, etc. Sugar industry: feeder, press, etc. Rubber and plastic industry: Mixer, etc.



# 02 Product Composition (air cooling mode)



## A Integrated cabinet

- 6kV/315~630kW
- 10kV/400~1000kW

## B Integrated cabinet

- 6kV/800~1250kW
- 10kV/1250~2000kW

## Split cabinet

- 6kV/1400~12500kW
- 10kV/1000~20000kW

## A Integrated cabinet

- 6kV/315~630kW
- 10kV/400~1000kW



A

control cabinet

B

Transformer (back)

B

Power unit cabinet

## B Integrated cabinet

- 6kV/800~1250kW
- 10kV/1250~2000kW



A

control cabinet

B

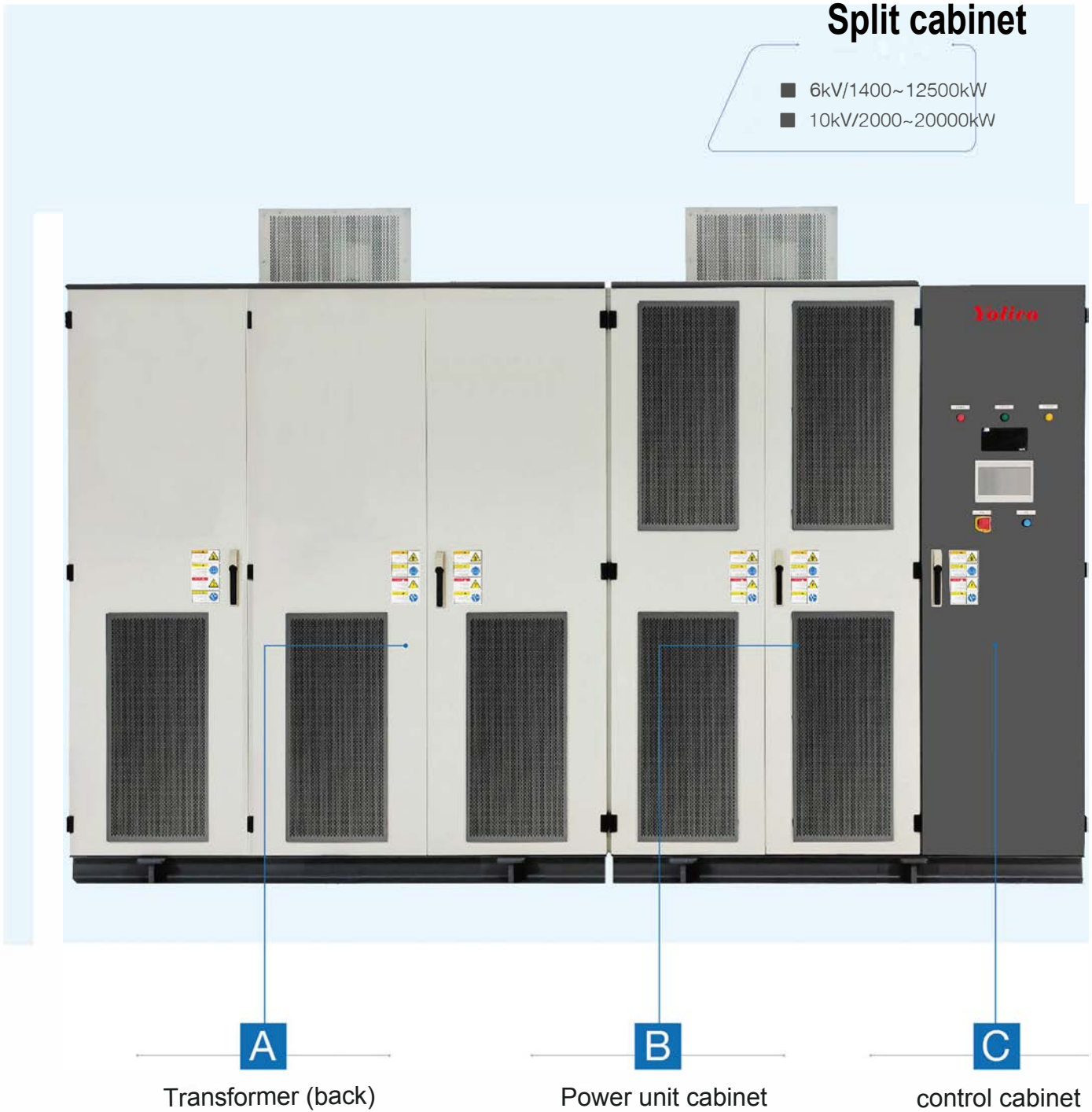
Transformer (back)

B

Power unit cabinet

## Split cabinet

- 6kV/1400~12500kW
- 10kV/2000~20000kW



A

Transformer (back)

B

Power unit cabinet

C

control cabinet



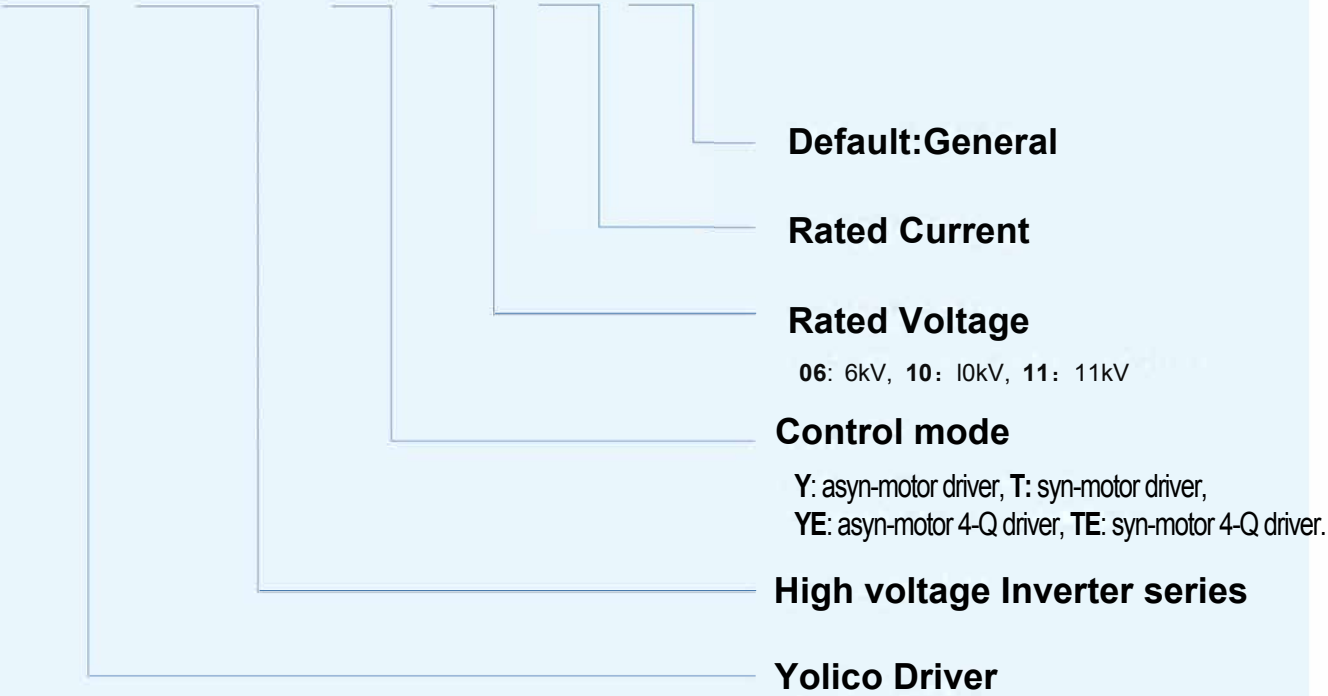
# 03 Specification

Specification	General
Rated Capacity/Adapted Motor Power	400-25000kVA / 315-20000kW
Rated Voltage	6kV/10kV (-20%~+5%) Can withstand 20% grid voltage drop and derated continuous operation.
Rated Frequency	50Hz/60Hz (-10%~+10%)
Control Mode	Open-loop and closed-loop vector, V/F, Constant torque, VF separation.
Control Power	380VAC, Not less than 5kVA (depending on power level)
Input power factor	>0.95 (More than 10% load)
Output frequency range	0.5Hz -120Hz
Frequency resolution	0.5%(Open-loop Vector,VF)、0.1% (Close-loop Vector)
Instantaneous over-current protection	150%
Overload capacity	120%@ 120s
Current limiting protection	10%-150% be set
Analog input	4~20mA by 2 channel
Analog output	4~20mA by 2 channel
Upper communication	RS485(isolated), ModBus RTU; Profibus DP; Profinet. Industrial Ethernet (optional)
Acceleration and deceleration time	5s~3200s
Digital input and output	12 input / 13 output
Operating ambient temperature	-5 ~ +40 °C
Storage/transport temperature	-40 ~ +70 °C
Cooling mode	Air cooling or water cooling
Ambient humidity	<95%, No condensation
Installation altitude	<1000m. Increase by 100m, Rated decrease by 1%
Dust	Non-conductive, non-corrosive, < 6.5mg/dm3.
Protection level	IP30/IP31
Cabinet color	RAL7035 RAL7032

# 04 Naming rule

> Description of model and selection

YD 1000- □□ / □□



# 05 Outline Dimension(air-cooling)

> 6kV Air-Cooled series

Cabinet type	Power of motor	Output capacity (KVA)	Model	Weight (kg)	Cabinet size (LxWxH)	
<b>A Integrated cabinet</b>	6/315	400	YD1000-Y 06/040	2590	2600×1400×2400	
	6/630	800	YD1000-Y 06/077	2650		
	6/400	500	YD1000-Y 06/048	2740		
	6/500	630	YD1000-Y 06/061	2940		
<b>B Integrated cabinet</b>	6/800	1000	YD1000-Y 06/096		2800×1600×2400	
	6/1000	1250	YD1000-Y 06/130			
	6/1250	1600	YD1000-Y 06/154			
<b>Split cabinet</b>	6/1400	1800	YD1000-Y 06/173		3400×1600×2200	
	6/1600	2000	YD1000-Y 06/192			
	6/1800	2250	YD1000-Y 06/220			
	6/2000	2500	YD1000-Y 06/243			
		6/2250	2800	YD1000-Y 06/275	8420	5400×1400×2400 6000×1400×2400
		6/2500	3200	YD1000-Y 06/304	8770	
		6/2800	3500	YD1000-Y 06/340	9270	
		6/3200	4000	YD1000-Y 06/400	9870	
		6/3600	4500	YD1000-Y 06/425	11650	
		6/4000	5000	YD1000-Y 06/500	12150	
		6/5000	6300	YD1000-Y 06/600	13600	
		6/5600	7000	YD1000-Y 06/660	16800	
		6/6300	8000	YD1000-Y 06/750	17600	

Note: Contact the manufacturer for the final size, which is more than 6300kW.

> 10kV Air-Cooled series

Cabinet type	Power of motor	Output capacity (KVA)	Model 型号	Weight (kg)	Cabinet size (LxWxH)
<b>A Integrated cabinet</b>	10/400	500	YD1000-Y 10/031	2850	3000×1400×2400
	10/500	630	YD1000-Y 10/040	3000	
	10/630	800	YD1000-Y 10/048	3500	
	10/800	1000	YD1000-Y 10/061	4000	
	10/1000	1250	YD1000-Y 10/077	4975	
<b>B Integrated cabinet</b>	10/1250	1600	YD1000-Y 10/096	5285	3200×1600×2400
	10/1400	1800	YD1000-Y 10/104	5455	
	10/1600	2000	YD1000-Y 10/115	5620	
	10/1800	2250	YD1000-Y 10/130	5755	
	10/2000	2500	YD1000-Y 10/154	5855	
<b>Split cabinet</b>	10/2250	2800	YD1000-Y 10/165		3000×1600×2400
	10/2500	3200	YD1000-Y 10/192		
	10/2800	3500	YD1000-Y 10/205		
	10/3200	4000	YD1000-Y 10/243		7550×1600/1400×2400
	10/3600	4500	YD1000-Y 10/260	12820	
	10/4000	5000	YD1000-Y 10/304	13420	
	10/4500	5650	YD1000-Y 10/325	14120	
	10/5000	6300	YD1000-Y 10/364	14620	
	10/5500	7000	YD1000-Y 10/400	14720	9950×1600/1400×2400
	10/6300	8000	YD1000-Y 10/462	20400	
	10/7100	9000	YD1000-Y 10/500	22400	
	10/8000	10000	YD1000-Y 10/600	22400 24400	9400×1400/1600×2400/2800
	10/10000	12500	YD1000-Y 10/800	45400	13950×1600×2400/2600

注: 最终尺寸请直接与厂家联系, 大于6300kW定制

## 06

## Outline Dimension(4-Q vector)

## &gt; 6kV Synchronous vector

Cabinet type	Power of motor	Output capacity (KVA)	Model	Weight (kg)	Cabinet size (LxWxH)
Split cabinet	6/1400	2100	YD1000- TE06/220	11030	7275×1610/14102200/2400
	6/1600	2500	YD1000- TE06/243	11580	
	6/1800	2700	YD1000- TE06/273	12980	7825×1610/1410×2400
	6/2000	3000	YD1000- TE06/304	13460	
	6/2500	3750	YD1000- TE06/400	14140	
	6/3200	5000	YD1000- TE06/500	15230	
	6/3600	5500	YD1000- TE06/550	21770	8850×1800/16102400/2800

## &gt; 6kV Asynchronous vector

Cabinet type	Power of motor	Output capacity (KVA)	Model 型号	Weight (kg)	(LxWxH)
Split cabinet	6/315	400	YD1000- YE06/048	3150	2100×1400×2300
	6/400	500	YD1000- YE06/061	3400	
	6/500	630	YD1000- YE06/077	5625	5100×1200×2100
	6/630	800	YD1000- YE06/096	6185	
	6/800	1000	YD1000- YE06/130	6700	
	6/1000	1250	YD1000- YE06/154	7470	
	6/1250	1600	YD1000- YE06/192	8060	5900×1400×2300
	6/1400	1800	YD1000- YE06/220	8570	
	6/1600	2000	YD1000- YE06/243	9270	
	6/1800	2250	YD1000- YE06/273	9455	
	6/2000	2500	YD1000- YE06/304	9640	
	6/2500	3150	YD1000- YE06/400	17200	7825×1400/1600×2400

Note: Contact the manufacturer for the final size, which is more than 6300kW.

> 10kV Asynchronous vector

Cabinet type	Power of motor	Output capacity (KVA)	Model 型号	Weight (kg)	柜体尺寸 (L×W×H)
<b>Split cabinet</b>	10/400	500	YD1000- YE10/040	4060	2400×1600×2400
	10/500	630	YD1000- YE10/048	4260	
	10/630	800	YD1000- YE10/061	8085	5850×1200×2100
	10/800	1000	YD1000- YE10/077	8260	
	10/1000	1250	YD1000- YE10/096	8850	
	10/1250	1600	YD1000- YE10/115	9635	
	10/1600	2000	YD1000- YE10/130	9595	7400×1400×2300
	10/1800	2250	YD1000- YE10/154	10855	
	10/2000	2500	YD1000- YE10/192	12115	
	10/2500	3150	YD1000- YE10/243	13205	
	10/3200	4000	YD1000- YE10/304	14035	

Note: Contact the manufacturer for the final size.

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# Application Cases

1. A mine of Hebi Mining Bureau of Henan Energy Group  
Voltage: 6kV Power : 2000kW Num : 2 PCS



·YD1000 is used in coal mine hoisting system, 4-Q operation, low frequency and high torque, and significant power saving.

2. A steel limited company in Chengde  
Voltage : 10kV Power : 800kW Num : 4 PCS



YD1000 high-voltage inverter is used in secondary dust removal transformation equipment to achieve good energy-saving and environmental protection effects.

3. An environmental protection industrial limited company in Qian'an  
Voltage : 6kV Power : 1250kW Num : 1 PCS



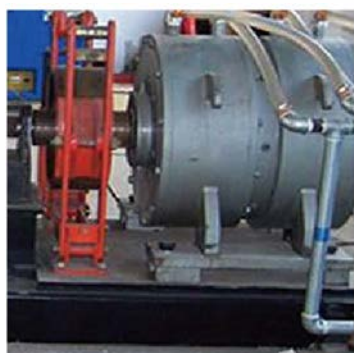
YD1000 high-voltage inverter is applied to the Qiandeju fan to change the energy-saving effect and reduce the power consumption rate of the plant.

4. Tonghua Heating Co., Ltd  
Voltage : 10kV Power : 800kW Num : 6 PCS



YD1000 high-pressure inverter is connected in parallel with thousands of external network circulating pumps, which improves the heating efficiency and makes the control more accurate.

5. A transportation and rail company  
Voltage : 1440V Power : 280kW



Customized products, can test the performance of two motors at the same time, and improve the efficiency of testing.

6. A well-known air-conditioning company  
Voltage : 10kV Power : 1000kW



·Long-term supporting customers, compressor frequency conversion control, energy-saving effect is remarkable.

# ***Yolico***

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