MAGLEV AFRICA

PRODUCT MANUAL OF THE MAGLEV ENERGY SAVING EQUIPMENT

MAGLEV SA VAT 4460316443 REG. NO 2024/098743/07

Maglev Industrial Park Phase II

CATALOGUE

COMPANY INTRODUCTION

The Secretariat of “Basis and Application of Maglev Power Technology”

Maglev Africa Supply Co., Ltd., a high-tech enterprise specialize in R&D and manufacture of maglev power equipment, is the the National Enterprise Technology Center, the National Industrial Design Center, the National Maglev Power Technology Foundation and Application Standardization Working Group Secretariat Unit, the Chain Leader of energy saving and environmental protection equipment industry chain in Shandong Provinee, China leading enterprise in maglev power technology,successfully breaks through a series of "bottleneck" key technologies and develops a series of highefficiency and energy-saving maglev power equipment such as maglev turbo blower, maglev turbo vacuum pump, magley air compressor, magley centrifugal water chiller (heat pump), magley lowtemperature waste heat generators, maglev flywheel energy storage, maglev steam compressor and other efficient energy-saving equipment widely used in cement, paper, chemical, steel and other industries with average energy-saving 30% and the noise decreased fom 120 to 80 decibels. It has become an important technical support for the national strategy of carbon peaking and carbon neutrality goals.

We have won 14 scientific and technological awards at the provincial and ministerial levels, such as the First Prize for Technological Invention in Shandong Province, the First prize of China National Light Industry Federation Science and Technology Progress, and more than 500 intellectual properties.

Our supply company was selected as the winning project (the highest award) of the National Disruptive Technology Innovation Competition and selected into the national product catalog of "Energy Efficiency Star'", National recommended catalog of industrial energy saving technology and equipment, National Green Technology Promotion Catalogue. Advocating the establishment of a national working group on the standardization of maglev power technology and promoting the state to include the maglev power equipment in the Guiding Catalogue for Product Structure Adjustment (encouraged category).

Our supply company has become a leading enterprise of maglev power industry in China with relevant technologies and equipment entered the world's advanced ranks to build a well-known brand of maglev energy-saving equipment and become a respected world-renowned enterprise.

INNOVATIVE PLATFORM

[National Innovation Platform]

National Maglev Power Technology Foundation and
Application Standardization Working Group Secretariat Unit

National Enterprise Technology Center
National Industrial Design Center

[Provincial Innovation Platform]

Shandong Maglev Industry Technology Research Institute

Shandong Maglev Power Equipment (green) Technology Innovation Center

Shandong Maglev Technology Research and Development Center

Shandong Engineering Laboratory

Shandong Ocean Engineering Technology Collaborative Innovation Center

Industrial Design Center of Shandong Province

Shandong Engineering Technology Research Center

Academician Workstation of Shandong Province

HONORS AND AWARDS

500 Intellectual Property Rights

14 Ministerial and Provincial-Level Science and Technology Awards

Presided over or participated in the revision of a series of standards, such as national standards, industry standards, local standards and team standards.

[Achievements]

The Final Winner of the National Disruptive Technology Innovation Competition (the highest award)

The National Guiding Catalogue for Product Structure Adjustment (encouraged category)

National "Energy Efficiency Star" Product Catalog (2020,2021)

Green Technology Promotion Catalogue (2020)

Recommended Catalogue of National Industrial Energy-saving Technology and Equipment (2021)

Typical Cases of Key Energy-saving Technology Application of National Energy Conservation Center

2021 "Sci-Tech China" Pioneer Technology List

Shandong "Top Ten Scientific and Technological Achievements"

The First Batch of "Good Quality Shandong" High-end Brand List

MAGLEV POWER EQUIPMENT

The maglev power equipment is a new generation of energy-efficient and eco-friendly equipment based on five core technologies such as active maglev bearing (AMB), high-speed permanent magnet synchronous motor(PMSM), 3d-flowimpeller, high-efficiency converter and intelligent control systems, which are independently developed by Tianrui. Compared with traditional equipment, the energy saving rate is more than 30%, noise reduction under 80dB, design life of up to 20 years, with "energy saving, low noise, oil-free, intelligent, maintenance-free, long life" and other characteristics, widely used in cement, paper, sewage treatment, chemical, thermal power, glass products, steel, pharmaceutical, food, textile and other energy-intensive industries. It has become an important technical support for the national strategy of carbon peaking and carbon neutrality goals.

ENERGY SAVING	LOW NOISE	OIL-FREE	INTELLIGENT	MAINTENANCE -FREE	LONG LIFE
≥30%	≤80dB	100% oil-free lubrication	PLC/HMI	No oil pollution	Design life of 20 years

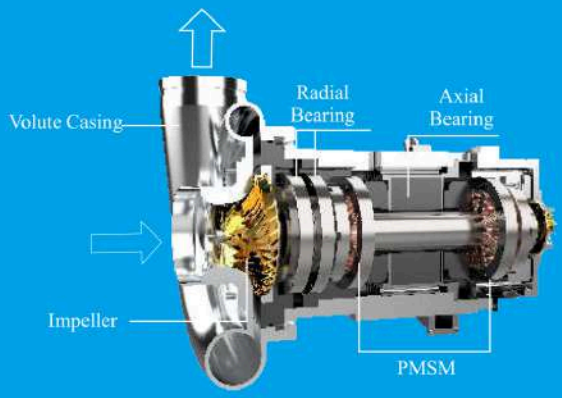
MAGLEV TURBO BLOW

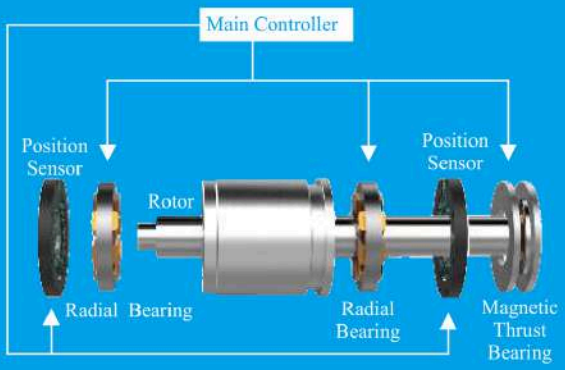
MAGLEV CENTRIFUGAL WATER CHILLER UNIT

MAGLEV AIR COMPR

Working Principle

Active magnetic bearing system is the core system. The motor rotor is fixed between two radial bearings and two axial ones. The position of the rotor is detected by position sensor, conveying the position signal to the actuator controller in real time. If the rotor is offset, the controller will adjust the magnetic force of the degree of freedom of the magnetic bearing according to the offset of the rotor, so that the rotor can return to the correct position.





MAGLEV VACUUM PUMP

MAGLEV LOW-TEMPERATURE WASTE HEAT GENERATOR SET

MAGLEV TURBO BLOWER

The maglev turbo blower is high-tech product of energy conservation and environmental protection. Compared with traditional roots blower, it can save energy more than 30%, with noise low to below 80 decibels and lifetime up to 20 years, which can reduce the overall cost of sewage treatment plant by 20%, widely used in various industries such as cement, paper making, sewage treatment, chemical industry, thermal electricity as well as other energy-intensive industries.

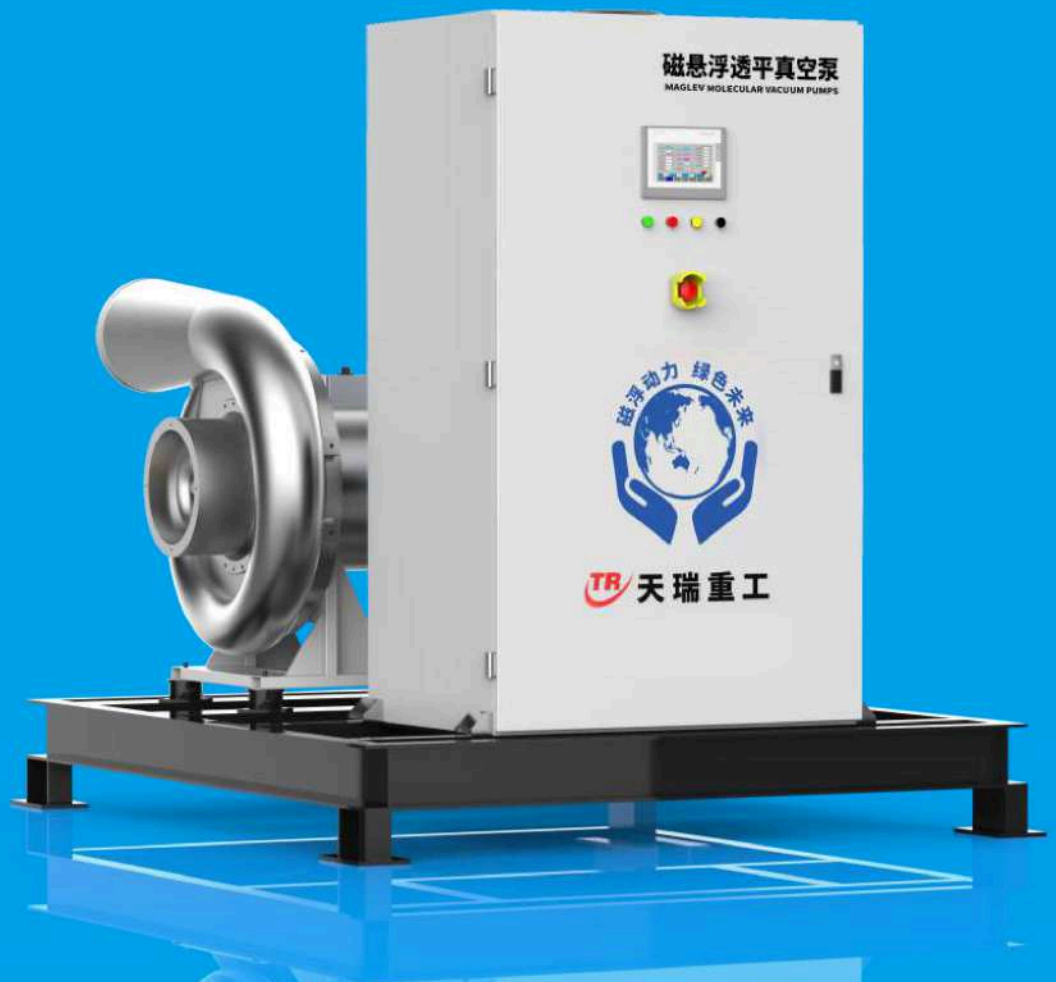
Performance Comparison

Item	Roots Blower	Single Stage Centrifugal Blower	Air Suspension Blower	Maglev Turbo Blower
Air volume	Adjustable if frequency converter is added	50-100%	65-100%	30-100%
Friction	Yes	Yes	Yes	No
Frequent start-up	Yes	Yes	No	Yes
Noise	⩾100 dB	90-100 dB	75-85 dB	75-85 dB
Vibration	Very large	Medium and small	Very small	Very small
Lubrication	Yes	Complex lubrication systems are required	No	No
Maintenance Mode	Regular Maintenance	Regular Maintenance by Special Personnel	Regular Replacement of Filters	Regular Replacement of Filters
Service Life	5-8 years	10years	10 years(2 years later, frequent faults)	≥20 years
Size	Larger	Larger	Small	Small
Installation Requirements	Fixed to the ground and sound insulation measures required	Fixed to the ground and sound insulation measures required	No need of fixation and sound insulation measures	No need of fixation and sound insulation measures
Efficiency	Low	High		

Specification Types

Model	PRODUCT SPECIFICATION			
	Flow (m^3/min)	Pressure (kPa)	Motor Power (kW)	Type of cooling
TR037 SERIES	15~55	20~80	37	AC
TR055 SERIES	25~70	20~80	55	AC
TR075 SERIES	25~75	20~80	75	AC
TR090 SERIES	25~100	20~80	90	AC
TR110 SERIES	40~100	20~80	110	AC
TR150 SERIES	30~180	20~80	150	AC
TR185 SERIES	30~190	20~80	185	AC
TR220 SERIES	70~200	20~80	220	AC
TR300 SERIES	150~300	20~80	300	AC
TR350 SERIES	175~355	20~80	350	AC
TR400 SERIES	190~410	20~80	400	AC
Remarks	1. Model meaning: Brand-Power (kW). Example: TR055 series, TR is brand, power 55kW. 2. The pressure is in the range of 90 ~ 140KPa, which is an unconventional model, and the delivery cycle is extended.			

MAGLEV TURBO VACUUM PUMP



Maglev turbo vacuum pump is a high-tech product with the characteristics of "energy saving, low noise, oil-free, intelligent, maintenance-free and long life", widely used in paper making, electric power, chemical industry, food, pharmaceutical and other energy-intensive industries. Compared with traditional equipment, maglev turbo vacuum pump can save 40%-70% energy, oil-free and water-free. With noise less than 80 dB, it can provide important technical support for the quality and efficiency improvement and green development of enterprises.

Performance Comparison

Item	Water Ring Vacuum Pump	Roots Vacuum Pump	Domestic Turbo Vacuum Pump	Maglev Turbo Vacuum Pump
Bearing	Domestic Ball Bearing	Domestic Ball Bearing	Tilting Pad Bearing	Maglev Bearing
Startup Friction	Have Friction	Have Friction	Have Friction	Frictionless
Impeller Form	Welded Impeller	Type 8 Impeller	Open/closed Impeller	Three-dimensional Flow Impeller
Impeller Efficiency	Low	Low	Higher	High
Type of Motor	Low Speed Induction	Low Speed Induction	Asynchronous Ac	PMSM
Overall Efficiency	45%	52%	62%	⩾79%
Monitoring Mode	No	No	No	24 hour monitoring
Lubricating Oil	Add Regularly	Add Regularly	Add Regularly	No lubrication
Maintenance Cost	High	high	Low	Maintenance-free
After-sales Maintenance	High cost, high failure rate	High cost, high failure rate	Long cycle, high cost,high frequency	Short cycle, free maintenance.low cost

Specification Types

Model	PRODUCT SPECIFICATION		
	Flow (m^3/min)	Vacuum Degree (kPa)	Motor Power (kW)
TRV055 SERIES	90~60	10~70	55
TRV075 SERIES	120~85	10~70	75
TRV132 SERIES	210~140	10~70	132
TRV150 SERIES	245~165	10~70	150
TRV200 SERIES	330~225	10~70	200
TRV300 SERIES	490~335	10~70	300
TRV400 SERIES	660~435	10~70	400
TRV500 SERIES	780~525	10~70	500
TRV600 SERIES	980~650	10~70	600
Remarks	The data in this table are the standard parameters and the main scope of work, the specific selection of professional consultation personnel.		

MAGLEV AIR COMPRESSOR

The maglev air compressor is a new type of energy saving and high-efficiency oil-free air compressor, which has the characteristics of "energy-saving, low noise, oil-free, intelligent, maintenance-free and long life" compared with the traditional air compressor, and can be widely used in the fields of glass, textile, fermentation, chemical industry, mining, electric power, food, pharmaceutical, paper making and automobile.

Performance Comparison

Items	Piston Air compressor	Screw Air Compressor	Maglev Air Compressor
Compress Mode	Volumetric	Volumetric	Centrifugal
Bearing Life	Short	50000-100000 hours	Over 20 years
Reliability	Quick wearing	Rotor need lubricants	No friction, no lubricants
Product Performance	Attenuation due to piston wear	Attenuation due to screw wear	No attenuation in full life
Motor	Power frequency, Start-delta starting	Variable Frequency Starting	High speed permanent motor, Variable Frequency Starting
Energy Consumption	High	Medium	Low
Noise	100-120dB	80-100dB	⩽75dB
Air Quality	Many	less-oil	No lubricantion oil, achieve ISO8753-1 class 0
Rotate Speed	⩽2000rpm	⩽3000rpm	25000-50000rpm
Lubrication	Change lubricants regularly	Change lubricants regularly	No lubricantion oil
Vibration	Heavy	Heavy	Light

Specifications and Models

Model	PRODUCTS SPECIFICATION		
	Flow Rate (m^3/min)	Pressure (bar)	Power (kW)
TRA110 SERIES	23~42	2~5	110
TRA150 SERIES	44~58	2~3	150
TRA200 SERIES	60~78	2~3	200
TRA250 SERIES	75~98	2~3	250
TRA300 SERIES	90~120	2~3	300
TRA350 SERIES	105~140	2~3	350
TRA400 SERIES	120~158	2~3	400
Remarks	Remark Model meaning: Brand- abbreviation of equipment-power(kW). For example: Set-TRA110, Brand-TR, A-air compressor, 110-power 110 kW		

MAGLEV CENTRIFUGAL WATER CHILLER UNIT

The maglev centrifugal water chiller (heat pump) is one high-tech product of energy saving and environmental protection. Compared with traditional water chiller, maglev centrifugal water chiller (heat pump) is of higher energy efficiency ratio to 30-50% , low noise to less than 80 dB, 100% no oil, with advantages of small volume, light weight, big energy density etc., which could supply stable, high efficiency, energy saving and environmental protection power heart for cooling (heat pump), which is iteratively upgrade product in industry of central air conditioning, industrial cooling and HVAC etc.

Product Presentation

Maglev Water Chiller			TRC-100	TRC-200	TRC-300	TRC-400	TRC-500	TRC-600	TRC-700	TRC-800
Basic Parameters	Rated Refrigeration Volume	kW	380	780	1060	1405	1750	2100	2450	2810
	Interiorinput Power	kW	64	125	170	216	269	318	371	400
	COP	kW/kW	5.93	6.24	6.24	6.5	6.5	6.6	6.6	7.03
Compression Engine	Form	/	Maglev Compressor							
	Drive Way	/	Variable Frequency Start							
	Energy Regulation Mode	/	Stepless Regulation							
Evaporator	Type	/	Falling Film Shell and Tube Heat Exchanger							
	Water Inlet Temperature	℃	12							
	Outlet Temperature	℃	7							
	Circulating Water Flow	m^3/h	66	135	182	242	301	362	422	483
	Pressure Drop	kPa	≤60							
	Frozen Water Pipe Pipe Diameter	mm	DN125	DN150	DN200	DN200	DN250	DN250	DN250	DN300
Condenser	Type	/	Shell and Tube Heat Exchanger							
	Water Inlet Temperature	℃	30							
	Outlet Temperature	℃	—							
	Circulating Water Flow	m^3/h	82	167	228	302	376	451	526	604
	Pressure Drop	kPa	≤80							
	Frozen Water Pipe Pipe Diameter	mm	DN125	DN150	DN200	DN200	DN250	DN250	DN250	DN300
Electrical Parameters	Source	/	Three-phase 380V 50Hz							
	Security Guard	/	High and low voltage, overload, phase loss, water flow protection, antifreeze protection, and low temperature protection							
Refrigerant	Refrigerant Name	/	R134a							
	Refrigerant Injection Volume	kg	135	225	360	440	520	640	750	860
	The Throttling Form	/	Electronic Expansion Valve							
Weight	Hauled Weight	kg	3000	4000	5100	5800	6500	7300	7800	8800
	Running Weight	kg	3600	4800	6100	6900	7500	8100	8600	9900
Overall Dimensions	Length	mm	3500	3900	4600	5200	5300	5800	6000	6500
	Width	mm	1600	1780	1800	1980	1980	1980	2000	2000
	Altitude	mm	2150	2260	2270	2390	2390	2430	2430	2500

Remarks: 1. Model meaning: Brand-Equipment abbreviation-Cooling Capacity, TRC-100 as example, TR represents Tianrui, CC represents centrifugal chiller, cooling capacity is 100RT.
2. Maglev water chiller design and manufacturing standards refer to GB/T18430.1 "Steam compression cycle cold water (heat pump) units - Part 1: Cold water (heat pump) units for industrial or commercial and similar purposes".
3. The above content is subject to change due to product improvement and other reasons, and is subject to change without prior notice.

Product Presentation

Maglev Ground Source Heat Pump Unit				TRRG-100	TRRG-200	TRRG-400	TRRG-800
Basic Parameters	Rated Refrigeration Volume		kW	368	745	1350	2710
	Refrigeration Input Power		kW	46.8	94.5	171	342
	Rated Heat		kW	450	910	1645	3290
	Thermal Input Power		kW	89	180	322	644
Compression Engine	form		/	Maglev Compressor			
	Drive Way		/	Variable Frequency Start			
	Energy Regulation Mode		/	Stepless Regulation			
Evaporator	form		/	Falling Film Shell and Tube Heat Exchanger			
	Heating	Water Temperature in and out	℃	The inlet temperature of chilled water is 12 ℃, and the outlet temperature is 7 ℃			
		Water Flow	m^3/h	63	128	233	467
	Refrigeration	Water Temperature in and out	℃	Heat source water inlet temperature 10 ℃, outlet temperature 6.1 ℃			
		Water Flow	m^3/h	79	160	291	583
	Pressure Drop		kPa	⩽80			
	Frozen Water Pipe Pipe Diameter		mm	DN125	DN200	DN200	DN300
Condenser	Type		/	Shell and Tube Heat Exchanger			
	Refrigeration	Water Temperature in and out	℃	Cooling Water: inlet temperature 25 ℃, outlet temperature 29.5 ℃			
		Circulating Water Flow	m^3/h	79	160	291	583
	Heating	Water Temperature in and out	℃	Hot Water: inlet temperature 38.9 ℃, outlet temperature 45 ℃			
		Circulating Water Flow	m^3/h	63	128	233	467
	Pressure Drop		kPa	⩽80			
	Refrigerant Injection Volume		mm	DN125	DN200	DN200	DN300
Electrical Parameters	Source		/	Three-phase 380V 50Hz			
	Security Guard		/	High and low voltage, overload, phase loss, water flow protection, antifreeze protection, and low temperature protection			
Refrigerant	Refrigerant Name		/	R134a			
	Refrigerant Injection Volume		kg	120	210	440	880
	The Throttling Form		/	Electronic Expansion Valve		Electronic Expansion Valve	
Weight	Hauled Weigh		kg	3000	4100	5800	7800
	Running Weight		kg	3600	5000	6900	9000
Overall Dimensions	Length		mm	3500	3900	6000	6500
	Width		mm	1500	1780	1800	2000
	Altitude		mm	2000	2360	2390	2500

Remarks: 1.Model meaning:Brand-Equipment abbreviation-Cooling Capacity, TRRG-100 as example, TR represents Tianrui, RG represent resource of ground heat pump, cooling capacity is 100RT.
2. Maglev water source heat pump unit design and manufacturing standards refer to GB/T19409 "Water (ground) source heat pump Unit".
3. The above content is subject to change due to product improvement and other reasons, and is subject to change without prior notice.

Product Presentation

Maglev Water Source Heat Pump Unit				TRRW-100	TRRW-200	TRRW-400	TRRW-800
Basic parameters	Rated Refrigeration Volume		kW	360	729	1315	2635
	Refrigeration Input Power		kW	44.5	90	162	324
	Rated Heat		kW	462	935	1685	3380
	Thermal Input Power		kW	86	174	312	622
Compression Engine	Form		/	Maglev Compressor			
	Drive Way		/	Variable Frequency Start			
	Energy Regulation Mode		/	Stepless Regulation			
Evaporator	Form		/	Falling Film Shell and Tube Heat Exchanger			
	Heating	Water Temperature in and out	℃	The inlet temperature of chilled water is 12 ℃, and the outlet temperature is 7 ℃			
		Water Flow	m^3/h	62	126	226	453
	Refrigeration	Water Temperature in and out	℃	Heat source water inlet temperature 15 ℃, outlet temperature 6.3 ℃			
		Water Flow	m^3/h	37	75	136	272
	Pressure Drop		kPa	⩽80			
	Frozen Water Pipe Pipe Diameter		mm	DN125	DN150	DN200	DN250
Condenser	Type		/	Shell and Tube Heat Exchanger			
	Refrigeration	Water Temperature in and out	℃	Cooling Water : inlet temperature 18 ℃, outlet temperature 27.4 ℃			
		Circulating Water Flow	m^3/h	37	75	136	272
	Heating	Water Temperature in and out	℃	Hot Water : inlet temperature 38.6 ℃, outlet temperature 45 ℃			
		Circulating Water Flow	m^3/h	62	126	226	453
	Pressure Drop		kPa	⩽80			
	Refrigerant Injection Volume		mm	DN125	DN150	DN200	DN250
Electrical Parameters	Source		/	Three-phase 380V 50Hz			
	Security Guard		/	High and low voltage, overload, phase loss, water flow protection, antifreeze protection, and low temperature protection			
Refrigerant	Refrigerant Name		/	R134a			
	Refrigerant Injection Volume		kg	120	210	440	880
	The Throttling Form		/	Electronic Expansion Valve		Electronic Expansion Valve	
Weight	Hauled Weigh		kg	3000	4100	5800	7800
	Running Weight		kg	3600	5000	6900	9000
Overall Dimensions	Length		mm	3500	3900	6000	6500
	Width		mm	1500	1780	1800	2000
	Altitude		mm	2000	2360	2390	2500

Remarks: 1.Model meaning:Brand-Equipment abbreviation-Cooling Capacity, TRRW-100 as example, TR represents Tianrui, RW represents resource of water heat pump, cooling capacity is 100RT.
2. Maglev water source heat pump unit design and manufacturing standards refer to GB/T19409 "Water (ground) source heat pump Unit".
3. The above content is subject to change due to product improvement and other reasons, and is subject to change without prior notice.

MAGLEV LOW-TEMPERATURE WASTE HEAT GENERATOR SET

The maglev low-temperature waste heat generator set can convert over 80°C of heat source energy into electric energy, realizing the recovery of industrial low-temperature waste heat, and effectively improving the comprehensive utilization rate of energy. Compared with the traditional equipment, it has lots of advantages such as efficiency increased by 25%, 30% lower weight, volume decreased by 40%, design service life up to 20 years. It can be widely used in cement building materials, iron and steel smelting, petrochemical, chemical fertilizer, alumina, titanium dioxide, glass, ocean temperature difference, solar energy, geothermal and biomass energy, ships, and other fields. It is an iterative upgrade equipment leading the industrial waste heat power generation industry to the direction of industrialization, green and intelligent development.

Product Parameters

Model	Generated Power(kW)	Speed(r/min)	Self Consumption	External Dimensions(mm)	Condenser Cooling Mode
TROG-100	20-100	30000-40000	5%-10%	4150×2055×2150	Water Cooling
					Air Cooling
TROG-200	100-200	18000-22000	4%-9%	5200×2300×2350	Water Cooling
					Air Cooling
TROG-350	200-350	18000-22000	4%-9%	6000×2300×2550	Water Cooling
					Air Cooling
TROG-500	350-500	15000-18000	3%-7%	8000×2450×2750	Water Cooling
					Air Cooling
Remarks:	Model Meaning: Brand-Equipment Abbreviation-Power(kW). TROG100W as example, TR is the brand, OG represents the low-temperature waste heat generator set, 100kw represents the power.				

Heat Source Type	Heat Source Type	Heat Source Conditions	Application Industry
Hydrotherm	Condensate Water, Wastewater, Materiel Liquid	Temperature> 95 ℃ Flow > 15t / h	Petrochemical, Chemical, Chemical Fiber Textile Printing and Dyeing, Chemical Fertilizer, Salt Chemical Coal Chemical Industry, Paper, Thermal Electricity
Hot Air	Saturated Steam, Drained and Wet Steam	Temperature> 95 ℃ Flow > 2t / h	Petrochemical, Chemical, Chemical Fiber Textile Printing and Dyeing, Chemical Fertilizer, Salt Chemical Coal Chemical Industry, Paper, Thermal Electricity
Flue Gas, Hot Air	Flue Gas and Hot Air Produced in Various Combustion and Production Processes	Temperature> 170 ℃ Volume flow> 40000 m3/h (STP)	Steel Making, Cement, Glass Lime, Ceramics, Internal Combustion Engine, Gas Engine and Other Industries or Equipment

1、The maglev generator set adopts integrated skid structure, compact layout, small space, easy for local installation and saving building space.

2、The evaporator, preheater and condenser are arranged in horizontal layout with simple pipe connection .

3、Large Capacity Gas-liquid Separation Device to Ensure the Dry Intake Air.

4、Wide Control Range, 30-110% Load Continuous Long-term Stable Operation.

5、With the high-speed direct connection design of generator and expander, high-speed operation mode and frequency conversion control, it greatly reduces the weight of the core machine and facilitates equipment installation and transfer.

SCREW COMPRESSOR

The permanent magnet variable frequency twin-screw air compressor developed by Tianrui Heavy Industry is an efficient and energy-saving product, which adopts the new permanent magnet variable frequency technology to improve the starting and running mode of the motor to reduce equipment wear and energy loss. Compared with traditional air compressor, it has the characteristics of energy saving, low noise and intelligent control. It can be widely used in automobile manufacturing, machinery manufacturing, electronic manufacturing, chemical industry, textile, cement, sewage treatment, food processing and other energy-intensive industries.

Specification and Model

Series	Model	Discharge Pressure (bar)	Discharge Volume (m^3/min)	Power (kW)
TRS90V	TRS90V-3	3	27.9	90
	TRS90V-4	4	25.6	
	TRS90V-6	6	21.5	
	TRS90V-8	8	20	
TRS110V	TRS110V-3	3	34.1	110
	TRS110V-4	4	29.7	
	TRS110V-6	6	23.4	
	TRS110V-8	8	23	
TRS132V	TRS132V-3	3	40.9	132
	TRS132V-4	4	38.5	
	TRS132V-6	6	28	
	TRS132V-8	8	25	
TRS160V	TRS160V-3	3	49.6	160
	TRS160V-4	4	44.1	
	TRS160V-6	6	34	
	TRS160V-8	8	32	
TRS185V	TRS185V-3	3	57.3	185
	TRS185V-4	4	48.3	
	TRS185V-6	6	39.3	
	TRS185V-8	8	33.5	
TRS200V	TRS200V-3	3	62	200
	TRS200V-4	4	54	
	TRS200V-6	6	42.5	
	TRS200V-8	8	40	
TRS250V	TRS250V-3	3	65	250
	TRS250V-4	4	64	
	TRS250V-6	6	53	
	TRS250V-8	8	46	
Remarks	Taking TRS250V-8 as an example, the rated power is 250kW and the pressure is 8 kg. For other pressure selection, please consult technical personnel.			

PERMANENT MAGNET SYNCHRONOUS DIRECT DRIVE MOTOR

PMSM combines frequency conversion vector, permanent magnet direct drive, microelectronics control technology, removing the traditional deceleration device. Connected with the load rotating shaft, it can drive load directly and simplify the transmission system structure, with the higher efficiency, noise reduction, convenient installation, without manual daily maintenance. Thus we can save a lot of manpower cost and reduce the environmental pollution in the production process, effectively reducing carbon emissions.

Performance Contrast

Performance	Tianrui PMSM	Ordinary Asynchronous Motor
Energy Efficiency Level and Energy Saving Effect	All products meet or exceed the domestic level 1 energy efficiency (IE 5), with a comprehensive efficiency of 90%~97%, or even higher.	At present, most three-phase induction motors are the three-level energy efficiency (IE 1) standard, with a comprehensive efficiency of 65%~95%.
Stability Capacity and Overload Capacity	Strong large load unloading capacity, overload capacity no less than 1.5 times with good stable operation performance.	The instantaneous overload capacity is relatively weak.
Shock Noise	Small Vibration, Low Noise.	High vibration, High Noise.
Maintenance Period	Relative Asynchronous Motor with Speed Reducer System Simple Maintenance, Long Period.	Frequent Maintenance with Short Period,Complex Maintenance and Heavy Work.
Impact on the Grid	High power factor, close to 1, improve the power grid quality factor.	A low power factor, with only 0.85-0.92, Reduce the power grid quality and increase the apparent power.

Product Presentation

	TRYC	TR-YD	TRYG	TR-YDG
Rated Voltage(V)	380		6000/10000	
Rated Frequency(Hz)	50			
Power Range(kW)	5.5~280	50~315	185~8000/280~2800	250~1400
Axis Center Height(mm)	132~355		355~1000	
Maximum Torque Multiple	2.2			
Speed(r/min)	500~3000	50~600	750~1500	60~90
Power Factor	0.97	0.97	0.96	0.96
Insulation Level	F			
Protection Level	IP54			
Operation Mode	S1			
Cooling Method	Air-cooled			
Installation Method	B3/B5/B35			
Usage Conditions	Between -20 ℃ and 60 ℃, when the operating ambient temperature is exceeded, the bearing lubricating grease model should be adjusted			
Model Description	Low Pressure Conventional Direct Drive	Low Pressure, Low Speed, High Torque Direct Drive	High Pressure Conventional Direct Drive	High Pressure, Low Speed, High Torque Direct Drive

Energy Saving and Efficient

Reduce Transmission

The traditional reducer and hydraulic coupler are removed to reduce the power transmission loss.

High efficiency and low energy consumption

The efficiency of PMSM reaches the international IE 5 (national first-level energy consumption standard).

Soft Start

PMSM is controlled by a special frequency converter to realize the synchronous soft start and reduce the impact on the power grid.

Power Factor Compensation

The power factor of PMSM can reach 0.98, less reactive power loss of power grid.

Real-time Monitoring

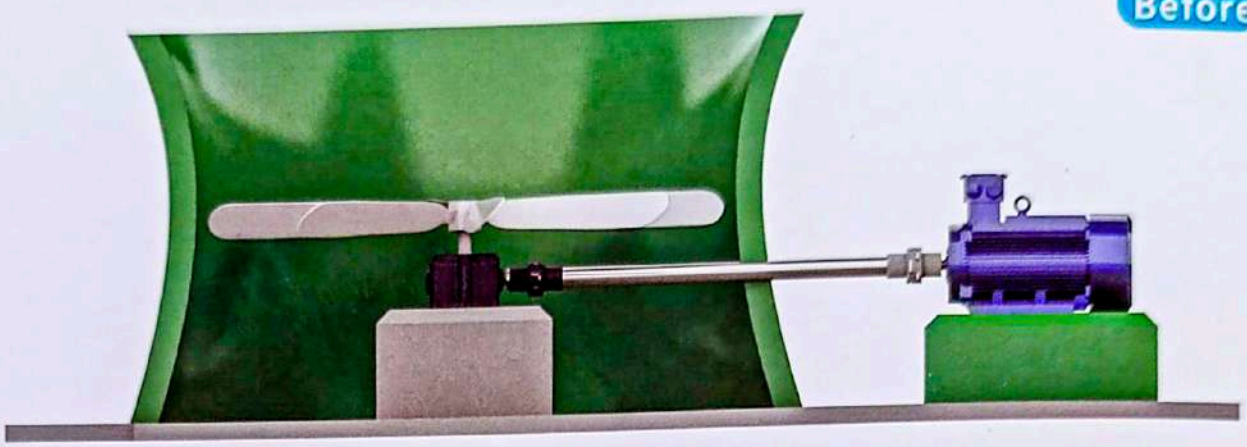
Real-time state detection: real-time monitoring of the running state and data of PMSM. Through data analysis, accurate maintenance reminder.

Real-time fault warning to avoid abnormal shutdown and avoid accidents.

Large Start Torque Strong Overload Ability

PMSM matches the intelligent synchronous frequency converter, which can consistently output 1.1 times the rated torque, instantaneous overload capacity 1.5 times the rated torque, the starting torque 2.2 times the rated torque, completely solve the problem of heavy starting difficulties, and avoid the phenomenon of "big horse trolley" of assynchronous motor.

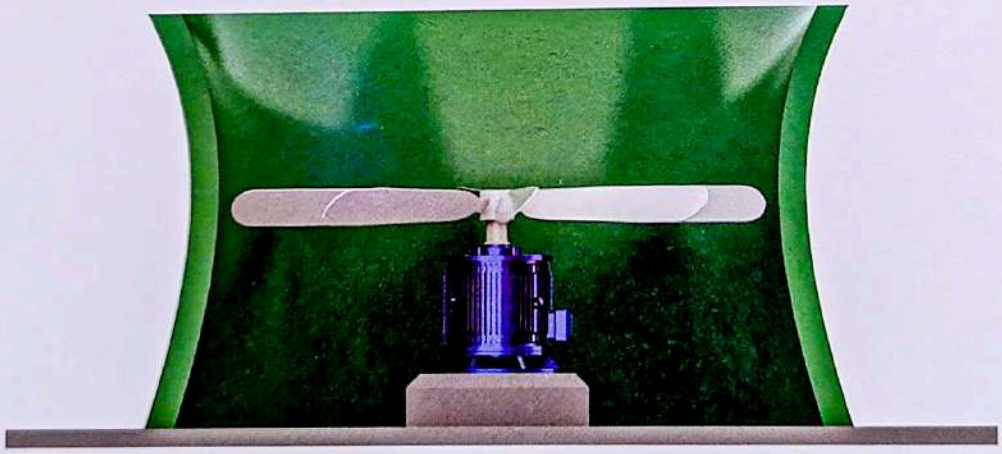
Before



Trouble:

1. The transmission shaft is long, the installation and debugging are troublesome, and the power transmission loss is large.
2, the reducer heat generating rate, weak heat dissipation capacity, reducer seal failure, serious oil leakage.
3. Large maintenance capacity and high cost.
4. The Angle of the fan should be adjusted to reduce the speed requirements, and the operation is cumbersome.

After



Advantages After Modification:

1. PMSM direct drive fan, improve the system efficiency.
2. Reduce the later maintenance volume and reduce the operating costs.
3. Configure a special frequency converter to reduce the starting current and reduce the impact on the power grid.
4. The system vibration is small with high equipment stability.
5. Adjust the speed of the motor in real time according to the ambient temperature.

TRYC315-3000-110	110	3000	350	96.7	0.97	172.3	94.9
TRYC315-3000-132	132	3000	420	96.8	0.97	206.8	113.9
TRYC315-3000-160	160	3000	509	96.8	0.97	250.6	138.0
TRYC315-3000-185	185	3000	589	96.9	0.97	289.8	159.6
TRYC315-3000-200	200	3000	637	96.9	0.97	313.3	172.5
TRYC315-3000-220	220	3000	700	96.7	0.97	344.6	189.8
TRYC355-3000-250	250	3000	796	97.1	0.97	391.6	215.7
TRYC355-3000-280	280	3000	891	97.1	0.97	438.6	241.5
TRYC355-3000-315	315	3000	1003	97.2	0.97	493.4	271.7
TRYC132-1500-5.5	5.5	1500	35	92.2	0.97	8.6	4.7
TRYC132-1500-7.5	7.5	1500	48	92.7	0.97	11.7	6.5
TRYC160-1500-11	11	1500	70	93.7	0.97	17.2	9.5
TRYC160-1500-15	15	1500	96	94.1	0.97	23.5	12.9
TRYC180-1500-18.5	18.5	1500	118	94.4	0.97	29.0	16.0
TRYC180-1500-22	22	1500	140	94.8	0.97	34.5	19.0
TRYC200-1500-30	30	1500	191	95.1	0.97	47.0	25.9
TRYC225-1500-37	37	1500	236	95.4	0.97	58.0	31.9
TRYC225-1500-45	45	1500	287	95.7	0.97	70.5	38.8
TRYC250-1500-55	55	1500	350	95.9	0.97	86.2	47.4
TRYC280-1500-75	75	1500	478	96.1	0.97	117.5	64.7
TRYC280-1500-90	90	1500	573	96.3	0.97	141.0	77.6
TRYC315-1500-110	110	1500	700	96.4	0.97	172.3	94.9
TRYC315-1500-132	132	1500	840	96.5	0.97	206.8	113.9
TRYC315-1500-160	160	1500	1019	96.5	0.97	250.6	138.0
TRYC315-1500-185	185	1500	1178	96.6	0.97	289.8	159.6
TRYC315-1500-200	200	1500	1273	96.6	0.97	313.3	172.5
TRYC315-1500-220	220	1500	1401	96.7	0.97	344.6	189.8
TRYC355-1500-250	250	1500	1592	97.1	0.97	391.6	215.7
TRYC355-1500-280	280	1500	1783	97.1	0.97	438.6	241.5
TRYC355-1500-315	315	1500	2006	97.2	0.97	493.4	271.7
TRYC355-1500-355	355	1500	2260	97.2	0.97	556.1	306.2
TRYC132-1000-5.5	5.5	1000	53	93.5	0.97	8.6	4.7
TRYC160-1000-7.5	7.5	1000	72	94.1	0.97	11.7	6.5
TRYC160-1000-11	11	1000	105	94.6	0.97	17.2	9.5
TRYC180-1000-15	15	1000	143	95	0.97	23.5	12.9
TRYC200-1000-18.5	18.5	1000	177	95.4	0.97	29.0	16.0
TRYC200-1000-22	22	1000	210	95.7	0.97	34.5	19.0
TRYC225-1000-30	30	1000	287	95.9	0.97	47.0	25.9
TRYC250-1000-37	37	1000	353	96.1	0.97	58.0	31.9
TRYC280-1000-45	45	1000	430	96.3	0.97	70.5	38.8
TRYC280-1000-55	55	1000	525	96.4	0.97	86.2	47.4
TRYC315-1000-75	75	1000	716	96.5	0.97	117.5	64.7
TRYC315-1000-90	90	1000	860	96.6	0.97	141.0	77.6
TRYC315-1000-110	110	1000	1051	96.6	0.97	172.3	94.9
TRYC315-1000-132	132	1000	1261	96.7	0.97	206.8	113.9
TRYC315-1000-160	160	1000	1528	96.7	0.97	250.6	138.0

TRYC355-1000-160	160	1000	1528	97.1	0.97	250.6	138.0
TRYC355-1000-200	200	1000	1910	97.1	0.97	313.3	172.5
TRYC355-1000-250	250	1000	2388	97.2	0.97	391.6	215.7
TRYC355-1000-280	280	1000	2674	97.2	0.97	438.6	241.5
TRYC132-500-5.5	5.5	500	105	88.5	0.97	8.6	4.7
TRYC160-500-7.5	7.5	500	143	89	0.97	11.7	6.5
TRYC160-500-11	11	500	210	91	0.97	17.2	9.5
TRYC180-500-15	15	500	287	91.7	0.97	23.5	12.9
TRYC200-500-18.5	18.5	500	353	92.8	0.97	29.0	16.0
TRYC200-500-22	22	500	420	93.4	0.97	34.5	19.0
TRYC225-500-30	30	500	573	93.7	0.97	47.0	25.9
TRYC250-500-37	37	500	707	94	0.97	58.0	31.9
TRYC280-500-45	45	500	860	94.3	0.97	70.5	38.8
TRYC280-500-55	55	500	1051	94.6	0.97	86.2	47.4
TRYC315-500-75	75	500	1433	94.8	0.97	117.5	64.7
TRYC315-500-90	90	500	1719	94.8	0.97	141.0	77.6
TRYC315-500-110	110	500	2101	95	0.97	172.3	94.9
TRYC315-500-132	132	500	2521	95	0.97	206.8	113.9
TRYC315-500-160	160	500	3056	95.2	0.97	250.6	138.0
TRYC355-500-160	160	500	3056	95.5	0.97	250.6	138.0
TRYC355-500-200	200	500	3820	95.8	0.97	313.3	172.5
TRYC355-500-250	250	500	4775	95.8	0.97	391.6	215.7
TRYC355-500-280	280	500	5348	96.1	0.97	438.6	241.5
Note	TRYCXXX-XXX-XXX means Tianrui Permanent Magnet Common Specification-Device Number-Speed-Power						

Low-voltage Low Speed Large Torque Direct-drive Three-phase PMSM

Model	Rated Power	Speed	Rated Torque	Efficiency	Power Factor	Rated Current A	
	KW	r/min	N·m	%	cos Φ	Rated Voltage 380V	Rated Voltage 690V
TR-YD15-50	15	50	2865	88.8	0.97	23.5	12.9
TR-YD15-75	15	75	1910	89	0.97	23.5	12.9
TR-YD15-90	15	90	1592	89.3	0.97	23.5	12.9
TR-YD15-110	15	110	1302	89.5	0.97	23.5	12.9
TR-YD15-130	15	130	1102	89.8	0.97	23.5	12.9
TR-YD15-150	15	150	955	90	0.97	23.5	12.9
TR-YD15-170	15	170	843	90.3	0.97	23.5	12.9
TR-YD15-200	15	200	716	90.5	0.97	23.5	12.9
TR-YD15-300	15	300	478	90.8	0.97	23.5	12.9
TR-YD15-400	15	400	358	91.5	0.97	23.5	12.9
TR-YD15-500	15	500	287	92	0.97	23.5	12.9
TR-YD15-600	15	600	239	92.5	0.97	23.5	12.9
TR-YD18.5-50	18.5	50	3534	90	0.97	29.0	16.0
TR-YD18.5-75	18.5	75	2356	90.3	0.97	29.0	16.0

TR-YD18.5-90	18.5	90	1963	90.5	0.97	29.0	16.0
TR-YD18.5-110	18.5	110	1606	90.8	0.97	29.0	16.0
TR-YD18.5-130	18.5	130	1359	91	0.97	29.0	16.0
TR-YD18.5-150	18.5	150	1178	91.3	0.97	29.0	16.0
TR-YD18.5-170	18.5	170	1039	91.5	0.97	29.0	16.0
TR-YD18.5-200	18.5	200	883	91.8	0.97	29.0	16.0
TR-YD18.5-300	18.5	300	589	92	0.97	29.0	16.0
TR-YD18.5-400	18.5	400	442	92.5	0.97	29.0	16.0
TR-YD18.5-500	18.5	500	353	93	0.97	29.0	16.0
TR-YD18.5-600	18.5	600	294	93.5	0.97	29.0	16.0
TR-YD22-50	22	50	4202	90.5	0.97	34.5	19.0
TR-YD22-75	22	75	2801	90.8	0.97	34.5	19.0
TR-YD22-90	22	90	2334	91	0.97	34.5	19.0
TR-YD22-110	22	110	1910	91.3	0.97	34.5	19.0
TR-YD22-130	22	130	1616	91.5	0.97	34.5	19.0
TR-YD22-150	22	150	1401	91.8	0.97	34.5	19.0
TR-YD22-170	22	170	1236	92	0.97	34.5	19.0
TR-YD22-200	22	200	1051	92.3	0.97	34.5	19.0
TR-YD22-300	22	300	700	92.5	0.97	34.5	19.0
TR-YD22-400	22	400	525	93	0.97	34.5	19.0
TR-YD22-500	22	500	420	93.5	0.97	34.5	19.0
TR-YD22-600	22	600	350	93.8	0.97	34.5	19.0
TR-YD30-50	30	50	5730	91	0.97	47.0	25.9
TR-YD30-75	30	75	3820	91.3	0.97	47.0	25.9
TR-YD30-90	30	90	3183	91.5	0.97	47.0	25.9
TR-YD30-110	30	110	2605	91.8	0.97	47.0	25.9
TR-YD30-130	30	130	2204	92	0.97	47.0	25.9
TR-YD30-150	30	150	1910	92.3	0.97	47.0	25.9
TR-YD30-170	30	170	1685	92.5	0.97	47.0	25.9
TR-YD30-200	30	200	1433	92.8	0.97	47.0	25.9
TR-YD30-300	30	300	955	93	0.97	47.0	25.9
TR-YD30-400	30	400	716	93.5	0.97	47.0	25.9
TR-YD30-500	30	500	573	93.8	0.97	47.0	25.9
TR-YD30-600	30	600	478	94	0.97	47.0	25.9
TR-YD37-50	37	50	7067	91.5	0.97	58.0	31.9
TR-YD37-75	37	75	4711	91.8	0.97	58.0	31.9
TR-YD37-90	37	90	3926	92	0.97	58.0	31.9
TR-YD37-110	37	110	3212	92.3	0.97	58.0	31.9
TR-YD37-130	37	130	2718	92.5	0.97	58.0	31.9
TR-YD37-150	37	150	2356	92.8	0.97	58.0	31.9
TR-YD37-170	37	170	2079	93	0.97	58.0	31.9
TR-YD37-200	37	200	1767	93.3	0.97	58.0	31.9
TR-YD37-300	37	300	1178	93.5	0.97	58.0	31.9
TR-YD37-400	37	400	883	93.8	0.97	58.0	31.9
TR-YD37-500	37	500	707	94	0.97	58.0	31.9
TR-YD37-600	37	600	589	94.2	0.97	58.0	31.9

TR-YD45-50	45	50	8595	91.5	0.97	70.5	38.8
TR-YD45-75	45	75	5730	91.8	0.97	70.5	38.8
TR-YD45-90	45	90	4775	92	0.97	70.5	38.8
TR-YD45-110	45	110	3907	92.5	0.97	70.5	38.8
TR-YD45-130	45	130	3306	92.8	0.97	70.5	38.8
TR-YD45-150	45	150	2865	93	0.97	70.5	38.8
TR-YD45-170	45	170	2528	93	0.97	70.5	38.8
TR-YD45-200	45	200	2149	93.5	0.97	70.5	38.8
TR-YD45-300	45	300	1433	94	0.97	70.5	38.8
TR-YD45-400	45	400	1074	94.2	0.97	70.5	38.8
TR-YD45-500	45	500	860	94.5	0.97	70.5	38.8
TR-YD45-600	45	600	716	94.7	0.97	70.5	38.8
TR-YD55-50	55	50	10505	91.8	0.97	86.2	47.4
TR-YD55-75	55	75	7003	92	0.97	86.2	47.4
TR-YD55-90	55	90	5836	92.5	0.97	86.2	47.4
TR-YD55-110	55	110	4775	92.8	0.97	86.2	47.4
TR-YD55-130	55	130	4040	93	0.97	86.2	47.4
TR-YD55-150	55	150	3502	93.5	0.97	86.2	47.4
TR-YD55-170	55	170	3090	93.5	0.97	86.2	47.4
TR-YD55-200	55	200	2626	94	0.97	86.2	47.4
TR-YD55-300	55	300	1751	94.5	0.97	86.2	47.4
TR-YD55-400	55	400	1313	94.6	0.97	86.2	47.4
TR-YD55-500	55	500	1051	94.7	0.97	86.2	47.4
TR-YD55-600	55	600	875	94.8	0.97	86.2	47.4
TR-YD75-50	75	50	14325	92.5	0.97	117.5	64.7
TR-YD75-75	75	75	9550	92.8	0.97	117.5	64.7
TR-YD75-90	75	90	7958	93	0.97	117.5	64.7
TR-YD75-110	75	110	6511	93.5	0.97	117.5	64.7
TR-YD75-130	75	130	5510	93.8	0.97	117.5	64.7
TR-YD75-150	75	150	4775	94	0.97	117.5	64.7
TR-YD75-170	75	170	4213	94	0.97	117.5	64.7
TR-YD75-200	75	200	3581	94.3	0.97	117.5	64.7
TR-YD75-300	75	300	2388	94.5	0.97	117.5	64.7
TR-YD75-400	75	400	1791	94.6	0.97	117.5	64.7
TR-YD75-500	75	500	1433	94.8	0.97	117.5	64.7
TR-YD75-600	75	600	1194	94.9	0.97	117.5	64.7
TR-YD90-50	90	50	17190	92.8	0.97	141.0	77.6
TR-YD90-75	90	75	11460	93	0.97	141.0	77.6
TR-YD90-90	90	90	9550	93.3	0.97	141.0	77.6
TR-YD90-110	90	110	7814	93.5	0.97	141.0	77.6
TR-YD90-130	90	130	6612	93.8	0.97	141.0	77.6
TR-YD90-150	90	150	5730	94	0.97	141.0	77.6
TR-YD90-170	90	170	5056	94.3	0.97	141.0	77.6
TR-YD90-200	90	200	4298	94.6	0.97	141.0	77.6
TR-YD90-300	90	300	2865	94.7	0.97	141.0	77.6
TR-YD90-400	90	400	2149	94.8	0.97	141.0	77.6

TR-YD90-500	90	500	1719	94.9	0.97	141.0	77.6
TR-YD90-600	90	600	1433	95	0.97	141.0	77.6
TR-YD110-50	110	50	21010	93	0.97	172.3	94.9
TR-YD110-75	110	75	14007	93.3	0.97	172.3	94.9
TR-YD110-90	110	90	11672	93.5	0.97	172.3	94.9
TR-YD110-110	110	110	9550	93.8	0.97	172.3	94.9
TR-YD110-130	110	130	8081	94	0.97	172.3	94.9
TR-YD110-150	110	150	7003	94.3	0.97	172.3	94.9
TR-YD110-170	110	170	6179	94.5	0.97	172.3	94.9
TR-YD110-200	110	200	5253	94.7	0.97	172.3	94.9
TR-YD110-300	110	300	3502	95	0.97	172.3	94.9
TR-YD132-50	132	50	25212	93.1	0.97	206.8	113.9
TR-YD132-75	132	75	16808	93.4	0.97	206.8	113.9
TR-YD132-90	132	90	14007	93.6	0.97	206.8	113.9
TR-YD132-110	132	110	11460	93.9	0.97	206.8	113.9
TR-YD132-130	132	130	9697	94.1	0.97	206.8	113.9
TR-YD132-150	132	150	8404	94.4	0.97	206.8	113.9
TR-YD132-170	132	170	7415	94.6	0.97	206.8	113.9
TR-YD132-200	132	200	6303	94.8	0.97	206.8	113.9
TR-YD132-300	132	300	4202	95.1	0.97	206.8	113.9
TR-YD160-50	160	50	30560	93.3	0.97	250.6	138.0
TR-YD160-75	160	75	20373	93.5	0.97	250.6	138.0
TR-YD160-90	160	90	16978	93.8	0.97	250.6	138.0
TR-YD160-110	160	110	13891	94	0.97	250.6	138.0
TR-YD160-130	160	130	11754	94.3	0.97	250.6	138.0
TR-YD160-150	160	150	10187	94.5	0.97	250.6	138.0
TR-YD160-170	160	170	8988	94.8	0.97	250.6	138.0
TR-YD160-200	160	200	7640	95	0.97	250.6	138.0
TR-YD160-300	160	300	5093	95.3	0.97	250.6	138.0
TR-YD200-50	200	50	38200	93.5	0.97	313.3	172.5
TR-YD200-75	200	75	25467	93.8	0.97	313.3	172.5
TR-YD200-90	200	90	21222	94	0.97	313.3	172.5
TR-YD200-110	200	110	17364	94.3	0.97	313.3	172.5
TR-YD200-130	200	130	14692	94.5	0.97	313.3	172.5
TR-YD200-150	200	150	12733	94.8	0.97	313.3	172.5
TR-YD200-170	200	170	11235	95	0.97	313.3	172.5
TR-YD200-200	200	200	9550	95.2	0.97	313.3	172.5
TR-YD200-300	200	300	6367	95.5	0.97	313.3	172.5
TR-YD250-50	250	50	47750	93.8	0.97	391.6	215.7
TR-YD250-75	250	75	31833	94	0.97	391.6	215.7
TR-YD250-90	250	90	26528	94.3	0.97	391.6	215.7
TR-YD250-110	250	110	21705	94.5	0.97	391.6	215.7
TR-YD250-130	250	130	18365	94.8	0.97	391.6	215.7
TR-YD250-150	250	150	15917	95	0.97	391.6	215.7
TR-YD250-170	250	170	14044	95.3	0.97	391.6	215.7
TR-YD250-200	250	200	11938	95.5	0.97	391.6	215.7

TR-YD250-300	250	300	7958	95.8	0.97	391.6	215.7
TR-YD315-50	315	50	60165	94	0.97	493.4	271.7
TR-YD315-75	315	75	40110	94.3	0.97	493.4	271.7
TR-YD315-90	315	90	33425	94.5	0.97	493.4	271.7
TR-YD315-110	315	110	27348	94.8	0.97	493.4	271.7
TR-YD315-130	315	130	23140	95	0.97	493.4	271.7
TR-YD315-150	315	150	20055	95.3	0.97	493.4	271.7
TR-YD315-170	315	170	17696	95.5	0.97	493.4	271.7
TR-YD315-200	315	200	15041	95.8	0.97	493.4	271.7
TR-YD315-300	315	300	10028	.96	0.97	493.4	271.7
Note	TR-YDXXX-X means Tianrui Permanent Magnet Large torque-Rated Power-Rated Speed						

High-voltage Conventional Direct-drive Three-phase PMSM

Model	Rated Power	Speed	Rated Torque	Efficiency	Power Factor	Rated Current	
						Rated Voltage	
	kW	r/min	N·m	%	cosΦ	6000V	10000V
TRYG355-1500-185	185	1500	1178	94.1	0.96	18.5	11.1
TRYG355-1500-200	200	1500	1273	94.2	0.96	20.0	12.0
TRYG355-1500-220	220	1500	1401	94.3	0.96	22.1	13.2
TRYG355-1500-250	250	1500	1592	94.4	0.96	25.1	15.0
TRYG400-1500-280	280	1500	1783	94.5	0.96	28.1	16.8
TRYG400-1500-315	315	1500	2006	94.6	0.96	31.6	18.9
TRYG400-1500-355	355	1500	2260	94.8	0.96	35.6	21.4
TRYG400-1500-400	400	1500	2547	94.9	0.96	40.1	24.1
TRYG400-1500-450	450	1500	2865	95.1	0.96	45.1	27.1
TRYG450-1500-500	500	1500	3183	95.2	0.96	50.1	30.1
TRYG450-1500-560	560	1500	3565	95.4	0.96	56.1	33.7
TRYG450-1500-630	630	1500	4011	95.6	0.96	63.1	37.9
TRYG450-1500-710	710	1500	4520	95.8	0.96	71.2	42.7
TRYG500-1500-800	800	1500	5093	95.8	0.96	80.2	48.1
TRYG500-1500-900	900	1500	5730	95.9	0.96	90.2	54.1
TRYG500-1500-1000	1000	1500	6367	96	0.96	100.2	60.1
TRYG500-1500-1120	1120	1500	7131	96.1	0.96	112.3	67.4
TRYG560-1500-1250	1250	1500	7958	96.2	0.96	125.3	75.2
TRYG560-1500-1400	1400	1500	8913	96.3	0.96	140.3	84.2
TRYG560-1500-1600	1600	1500	10187	96.4	0.96	160.4	96.2
TRYG630-1500-1800	1800	1500	11460	96.5	0.96	180.4	108.3
TRYG630-1500-2000	2000	1500	12733	96.6	0.96	200.5	120.3
TRYG630-1500-2240	2240	1500	14261	96.7	0.96	224.5	134.7
TRYG630-1500-2500	2500	1500	15917	96.8	0.96	250.6	150.4
TRYG710-1500-2800	2800	1500	17827	96.8	0.96	280.7	168.4
TRYG710-1500-3150	3150	1500	20055	96.9	0.96	315.7	189.4
TRYG710-1500-3550	3550	1500	22602	97	0.96	355.8	213.5
TRYG710-1500-4000	4000	1500	25467	97.1	0.96	400.9	240.6

TRYG800-1500-4500	4500	1500	28650	97.1	0.96	451.1	270.6
TRYG800-1500-5000	5000	1500	31833	97.2	0.96	501.2	300.7
TRYG800-1500-5600	5600	1500	35653	97.2	0.96	561.3	336.8
TRYG355-1000-185	185	1000	1767	94	0.96	18.5	11.1
TRYG355-1000-200	200	1000	1910	94.1	0.96	20.0	12.0
TRYG400-1000-220	220	1000	2101	94.2	0.96	22.1	13.2
TRYG400-1000-250	250	1000	2388	94.4	0.96	25.1	15.0
TRYG400-1000-280	280	1000	2674	94.5	0.96	28.1	16.8
TRYG400-1000-315	315	1000	3008	94.7	0.96	31.6	18.9
TRYG450-1000-355	355	1000	3390	94.9	0.96	35.6	21.4
TRYG450-1000-400	400	1000	3820	94.9	0.96	40.1	24.1
TRYG450-1000-450	450	1000	4298	95.2	0.96	45.1	27.1
TRYG450-1000-500	500	1000	4775	95.4	0.96	50.1	30.1
TRYG500-1000-560	560	1000	5348	95.5	0.96	56.1	33.7
TRYG500-1000-630	630	1000	6017	95.6	0.96	63.1	37.9
TRYG500-1000-710	710	1000	6781	95.8	0.96	71.2	42.7
TRYG500-1000-800	800	1000	7640	95.8	0.96	80.2	48.1
TRYG560-1000-900	900	1000	8595	95.9	0.96	90.2	54.1
TRYG560-1000-1000	1000	1000	9550	96	0.96	100.2	60.1
TRYG560-1000-1120	1120	1000	10696	96.1	0.96	112.3	67.4
TRYG560-1000-1250	1250	1000	11938	96.2	0.96	125.3	75.2
TRYG630-1000-1400	1400	1000	13370	96.3	0.96	140.3	84.2
TRYG630-1000-1600	1600	1000	15280	96.4	0.96	160.4	96.2
TRYG630-1000-1800	1800	1000	17190	96.5	0.96	180.4	108.3
TRYG710-1000-2000	2000	1000	19100	96.6	0.96	200.5	120.3
TRYG710-1000-2240	2240	1000	21392	96.6	0.96	224.5	134.7
TRYG710-1000-2500	2500	1000	23875	96.7	0.96	250.6	150.4
TRYG710-1000-2800	2800	1000	26740	96.8	0.96	280.7	168.4
TRYG800-1000-3150	3150	1000	30083	96.9	0.96	315.7	189.4
TRYG800-1000-3550	3550	1000	33903	96.9	0.96	355.8	213.5
TRYG800-1000-4000	4000	1000	38200	97	0.96	400.9	240.6
TRYG400-750-185	185	750	2356	93.9	0.96	18.5	11.1
TRYG400-750-200	200	750	2547	94	0.96	20.0	12.0
TRYG400-750-220	220	750	2801	94.1	0.96	22.1	13.2
TRYG450-750-250	250	750	3183	94.2	0.96	25.1	15.0
TRYG450-750-280	280	750	3565	94.4	0.96	28.1	16.8
TRYG450-750-315	315	750	4011	94.5	0.96	31.6	18.9
TRYG450-750-355	355	750	4520	94.6	0.96	35.6	21.4
TRYG500-750-400	400	750	5093	94.8	0.96	40.1	24.1
TRYG500-750-450	450	750	5730	94.9	0.96	45.1	27.1
TRYG500-750-500	500	750	6367	95.2	0.96	50.1	30.1
TRYG500-750-560	560	750	7131	95.3	0.96	56.1	33.7
TRYG500-750-630	630	750	8022	95.4	0.96	63.1	37.9
TRYG560-750-710	710	750	9041	95.5	0.96	71.2	42.7
TRYG560-750-800	800	750	10187	95.6	0.96	80.2	48.1
TRYG560-750-900	900	750	11460	95.7	0.96	90.2	54.1

TRYG560-1500-1600	1600	1500	10187	96.4	0.96	160.4	96.2
TRYG630-1500-1800	1800	1500	11460	96.5	0.96	180.4	108.3
TRYG630-1500-2000	2000	1500	12733	96.6	0.96	200.5	120.3
TRYG630-1500-2240	2240	1500	14261	96.7	0.96	224.5	134.7
TRYG630-1500-2500	2500	1500	15917	96.8	0.96	250.6	150.4
TRYG710-1500-2800	2800	1500	17827	96.8	0.96	280.7	168.4
TRYG710-1500-3150	3150	1500	20055	96.9	0.96	315.7	189.4
TRYG710-1500-3550	3550	1500	22602	97	0.96	355.8	213.5
TRYG710-1500-4000	4000	1500	25467	97.1	0.96	400.9	240.6
TRYG800-1500-4500	4500	1500	28650	97.1	0.96	451.1	270.6
TRYG800-1500-5000	5000	1500	31833	97.2	0.96	501.2	300.7
TRYG800-1500-5600	5600	1500	35653	97.2	0.96	561.3	336.8
TRYG355-1000-185	185	1000	1767	94	0.96	18.5	11.1
TRYG355-1000-200	200	1000	1910	94.1	0.96	20.0	12.0
TRYG400-1000-220	220	1000	2101	94.2	0.96	22.1	13.2
TRYG400-1000-250	250	1000	2388	94.4	0.96	25.1	15.0
TRYG400-1000-280	280	1000	2674	94.5	0.96	28.1	16.8
TRYG400-1000-315	315	1000	3008	94.7	0.96	31.6	18.9
TRYG450-1000-355	355	1000	3390	94.9	0.96	35.6	21.4
TRYG450-1000-400	400	1000	3820	94.9	0.96	40.1	24.1
TRYG450-1000-450	450	1000	4298	95.2	0.96	45.1	27.1
TRYG450-1000-500	500	1000	4775	95.4	0.96	50.1	30.1
TRYG500-1000-560	560	1000	5348	95.5	0.96	56.1	33.7
TRYG500-1000-630	630	1000	6017	95.6	0.96	63.1	37.9
TRYG500-1000-710	710	1000	6781	95.8	0.96	71.2	42.7
TRYG500-1000-800	800	1000	7640	95.8	0.96	80.2	48.1
TRYG560-1000-900	900	1000	8595	95.9	0.96	90.2	54.1
TRYG560-1000-1000	1000	1000	9550	96	0.96	100.2	60.1
TRYG560-1000-1120	1120	1000	10696	96.1	0.96	112.3	67.4
TRYG560-1000-1250	1250	1000	11938	96.2	0.96	125.3	75.2
TRYG630-1000-1400	1400	1000	13370	96.3	0.96	140.3	84.2
TRYG630-1000-1600	1600	1000	15280	96.4	0.96	160.4	96.2
TRYG630-1000-1800	1800	1000	17190	96.5	0.96	180.4	108.3
TRYG710-1000-2000	2000	1000	19100	96.6	0.96	200.5	120.3
TRYG710-1000-2240	2240	1000	21392	96.6	0.96	224.5	134.7
TRYG710-1000-2500	2500	1000	23875	96.7	0.96	250.6	150.4
TRYG710-1000-2800	2800	1000	26740	96.8	0.96	280.7	168.4
TRYG800-1000-3150	3150	1000	30083	96.9	0.96	315.7	189.4
TRYG800-1000-3550	3550	1000	33903	96.9	0.96	355.8	213.5
TRYG800-1000-4000	4000	1000	38200	97	0.96	400.9	240.6
TRYG400-750-185	185	750	2356	93.9	0.96	18.5	11.1
TRYG400-750-200	200	750	2547	94	0.96	20.0	12.0
TRYG400-750-220	220	750	2801	94.1	0.96	22.1	13.2
TRYG450-750-250	250	750	3183	94.2	0.96	25.1	15.0
TRYG450-750-280	280	750	3565	94.4	0.96	28.1	16.8

TRYG450-750-315	315	750	4011	94.5	0.96	31.6	18.9
TRYG450-750-355	355	750	4520	94.6	0.96	35.6	21.4
TRYG500-750-400	400	750	5093	94.8	0.96	40.1	24.1
TRYG500-750-450	450	750	5730	94.9	0.96	45.1	27.1
TRYG500-750-500	500	750	6367	95.2	0.96	50.1	30.1
TRYG500-750-560	560	750	7131	95.3	0.96	56.1	33.7
TRYG500-750-630	630	750	8022	95.4	0.96	63.1	37.9
TRYG560-750-710	710	750	9041	95.5	0.96	71.2	42.7
TRYG560-750-800	800	750	10187	95.6	0.96	80.2	48.1
TRYG560-750-900	900	750	11460	95.7	0.96	90.2	54.1
TRYG560-750-1000	1000	750	12733	95.8	0.96	100.2	60.1
TRYG630-750-1120	1120	750	14261	95.9	0.96	112.3	67.4
TRYG630-750-1250	1250	750	15917	95.9	0.96	125.3	75.2
TRYG630-750-1400	1400	750	17827	96	0.96	140.3	84.2
TRYG710-750-1600	1600	750	20373	96.1	0.96	160.4	96.2
TRYG710-750-1800	1800	750	22920	96.2	0.96	180.4	108.3
TRYG710-750-2000	2000	750	25467	96.3	0.96	200.5	120.3
TRYG710-750-2240	2240	750	28523	96.4	0.96	224.5	134.7
TRYG800-750-2500	2500	750	31833	96.5	0.96	250.6	150.4
TRYG800-750-2800	2800	750	35653	96.6	0.96	280.7	168.4
TRYG800-750-3150	3150	750	40110	96.6	0.96	315.7	189.4
TRYG900-750-3550	3550	750	45203	96.7	0.96	355.8	213.5
TRYG900-750-4000	4000	750	50933	96.8	0.96	400.9	240.6
TRYG900-750-4500	4500	750	57300	96.9	0.96	451.1	270.6
TRYG1000-750-5000	5000	750	63667	97	0.96	501.2	300.7
TRYG1000-750-5600	5600	750	71307	97	0.96	561.3	336.8
TRYG1000-750-6300	6300	750	80220	97.1	0.96	631.5	378.9
TRYG1000-750-7100	7100	750	90407	97.2	0.96	711.7	427.0
TRYG1000-750-8000	8000	750	101867	97.2	0.96	801.9	481.1
Note	TRYGXXX-XXX-XXX means Tianrui Permanent Magnet High Voltage-Device Number-Speed-Power						

APPLICABLE INDUSTRIES

Sewage Treatment

Cement

Paper Making

Spinning and Weaving

Glassware and Ceramics

Pyroelectricity

Chemical Industry

Biological Fermentation

Pharmacy

Iron and Steel, Metallurgy

Calcium Carbide

Electroplating

Hotels/Office Buildings

Rail Transit

Hospital

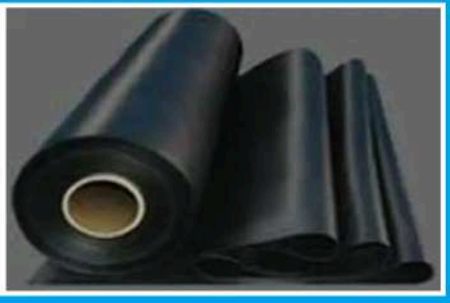
Commercial Center

Cold Store

Data Center

School Residential Community

Industrial Plant



Plastic Rubber

Mechanical Processing

Electroplating

Leather Manufacturing

APPLICATION CASES

Cases of Maglev Turbo Blower Sewage Treatment Plant/Cement Plant








Cases of Maglev Vaccum Pump Paper Mill








Cases of Maglev Air Compressor


Chemical Plant


Galvanizing Plant


Cement Plant


Textile Factory


Textile Factory


Textile Factory

Cases of Maglev Centrifugal Water Chiller Unit


In Chemical Plants


In Chemical Plants


In Workshop


In Office Buildings

Cases of Maglev Low-temperature Waste Heat Generator Set

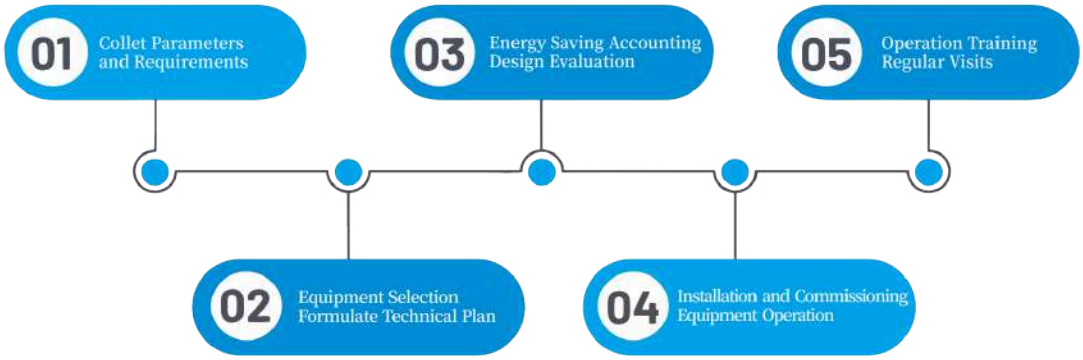

Cement Plant


Steel Plant


Shipyard

PRODUCTION

SERVICE SYSTEM



Phone: +27 72 068 0486
E-mail: mark@maglevafrica.com