

# SCREW REFRIGERATION COMPRESSOR UNIT

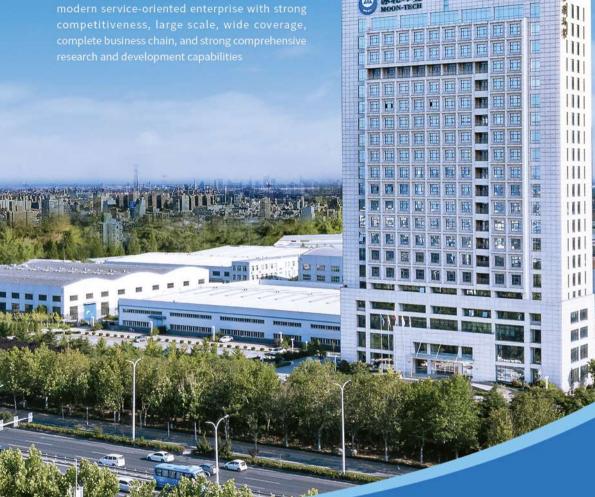
Single-Stage Screw Refrigeration Compressor Unit

Compound Two-Stage Screw Refrigeration Compressor Unit

Skid-Mounted Separate Two-Stage Screw Compressor Unit



冰轮环境技术股份有限公司 MOON ENVIRONMENT TECHNOLOGY CO.,LTD. With continuous technological and manage has promoted the continuous optimization of resource allocation and reconstruction of core competencies, Moon-TECH accelerated international expansion transformation. We have transformed from a traditional manufacturing enterprise to a modern service-oriented enterprise with strong competitiveness, large scale, wide coverage, complete business chain, and strong comprehensive research and development capabilities







Industrial Park in the US



Malaysian Industrial Park



Industrial Park in the UK



Vietnam Industrial Park



Baoding Industrial Park



Guxian Industrial Park



Laishan Industrial Park



Jinan Center



Low-temperature refrigeration



Central airconditioning



Environmentally friendly heating



Energy and chemical equipment



Precision Casting



Hydrogen Energy Development



**Smart Services** 



Intelligent Packing Machinery and Warehouse Storage System

With devoting to improving the quality of human life as the enterprise mission, MOON-TECH continuously build and enhance competitive advantages in the field of comprehensive energy utilization and accelerate the process of globalization, taking the revitalization of national industry and achievement of customer value as its responsibility, continuously creates and improves its competitive advantage, striving to become an evergreen enterprise with core competitiveness, loved by employees and respected by industrial partners.















## MOON-TECH

## (Stock Code of 000811)

Founded in 1956, Moon Environment Technology Co., Ltd (Stock Code: 000811). is a diversified and international comprehensive equipment industrial enterprise. The main business covers low-temperature refrigeration, central air conditioning, environmental protection heating, energy and chemical equipment, precision castings, smart services, hydrogen energy development, etc. In recent years, MOON-TECH has successively won the titles of Top 30 Enterprises with Core Competitiveness in China's Machinery Industry, Top 100 Enterprises of National Machinery Industry, Meritorious Enterprise of Equipment in China, and Demonstration Enterprise for Ozone Layer Protection.

For a longtime, with continuous technological and manage has promoted the continuous optimization of resource allocation and reconstruction of core competencies, accelerated international expansion transformation. We have transformed from a traditional manufacturing enterprise to a modern service-oriented enterprise with strong competitiveness, large scale, wide coverage, complete business chain, and strong comprehensive research and development capabilities

With the synchronous development of refrigeration and heat treatment, and actively expanding energy-saving and environmental protection industry as developing strategy, MOON-TECH is engaged in the technical research and development of low-temperature environment, waste heat recovery, gas compression, industrial heat exchange, urban clean emission and other fields, as well as the production and sales of related complete sets of equipment, and specializes in food refrigeration, chemical process cooling, comfortable environment air conditioning, research temperature control, process gas compression, building aggregated cooling, comprehensive application of heat energy, permafrost drilling, waste treatment, tec. MOON-TECH has production bases, scientific research centers and marketing& service organizations in more than 40 countries around the world. With safe, environmentally friendly, energy-saving, intelligent and Butler-style system integration capabilities, MOON-TECH is providing products with entire product life cycle to users in more than 120 countries and regions around the world.

MOON-TECH has 6 national scientific and technological innovation platforms including the National-Recognized Enterprise Technology Center and 16 provincial scientific and technological innovation platforms including the Shandong Provincial Key Laboratory of Energy Saving and Environmental Protection of Refrigeration Equipment. MOON-TECH has been recognized as a key high-tech enterprise of the China Torch Program, with 326 national patented technologies, and has hosted and participated in the formulation of 25 national standards and 37 industry standards. MOON-TECH has won two national awards, the National Science & Technology Progress Award and the National Technology Invention Award, and has successively won 213 provincial and ministerial scientific and technological achievements awards such as the Special Prize for Scientific and Technological Progress of the Chinese Association of Refrigeration and the First Prize for Scientific and Technological Progress of Shandong Province.

Following the requirements of the environmental policy of harmonious coexistence between human and nature, MOON-TECH is committed to the innovation of artificial environment control technology and comprehensive energy utilization technology to promote a simple, moderate, green and low-carbon mode of social production and operating system, actively building an interconnected and complementary system, including refrigeration, heating, water, gas, electricity, sewage, waste within the -271 °C -200 °C temperature and 0-90Mpa pressure range, aiming to achieve an energy ecological link between industrial parks and living spaces, and become an intelligent green energy system solution service provider. MOON-TECH also dedicates to develop the utilizations of NH3、CO2、HC、He、H2O and other environmentally friendly substances application technologies, striving to provide professional, high value-added intelligent energy comprehensive utilization solutions.

In recent years, MOON-TECH actively actualized the green and low-carbon developing concept, accelerating the transformation of traditional industries around the dual-carbon goal and energy revolution, promoting the upgrading of the industrial structure to a low-carbon and high-quality level, and set six goals of "low-carbon industry, low-carbon technology, low-carbon manufacturing, low-carbon chain, low-carbon services, low-carbon culture", so as to ultimately realize the industrial structure of high-end, low-carbon consumption of energy, utilization of resources recycling, cleanliness of the production process, and to contribute to the realization of dual-carbon target.



## **Product Description**

With more than 60 years of manufacturing experience in refrigeration and air-conditioning equipment and continuous technical research and development capabilities, MOON Environment Technology Co., Ltd., after years of joint research on production, teaching and research, has carried out innovative experimental studies on the theoretical research of thermal and dynamic performance of compressors and the visualization of practical work process, pressure pulsation, rotor force and oil distribution, which accurately revealed the internal laws between the design parameters such as rotor profile and orifice position and the thermal and dynamic performance of the screw compressor, forming a complete screw compressor design theory. On this basis, MOON-TECH developed a series of new efficient screw compressor units with more than 10 independent intellectual property rights and core technology.

MOON-TECH screw refrigeration compressor series products are widely used in the fields requiring artificial low temperature environments such as food freezing and refrigeration, chemical process cooling, gas pressurization and liquefaction, building aggregate cooling, temperature control of scientific research, exploration of frozen soil, sports venues, mine heat treatment, etc.



















Since the advent of the LG series of high-efficiency screw compressors, they have been well-received by users at home and abroad for their great performance and reliability. The series products have won the First Prize for Scientific and Technological Progress of Shandong Province, First Prize for Scientific and Technological Progress of Ministry of Education, Special Award of Scientific and Technological Progress of Chinese Association of Refrigeration and Second Prize for National Scientific and Technological in 2006. MOON-TECH continues to carry out scientific research, and has made key breakthroughs in working media, operating conditions, energy efficiency indicators, etc., and successfully achieved the transformation and upgrading of screw compressor manufacturing and application. The project of "Key Technologies R&D and Application of Screw Compressor with Special Medium under Extreme Working Conditions" won the First Prize for Scientific and Technological Progress of Year 2019 China Machinery Industry.

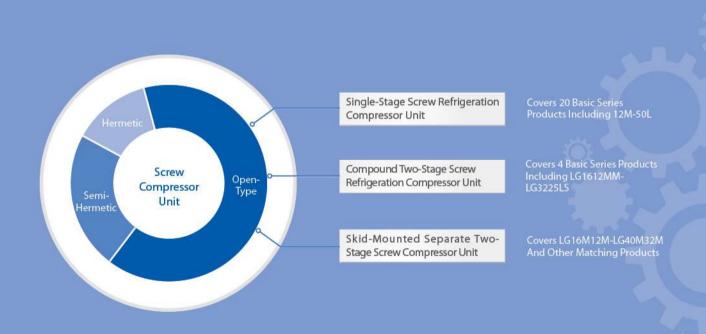














## High-Grade, Precision and Advanced Machining and Testing Equipment



Flexible Machining Center



Flexible Machining Center



Rotor Machining and Production Line



Rotor Finishing Center



Comprehensive Performance Test Center



Trilinear Coordinates Measuring Instrument

## New Design





## Variable Frequency and Variable Capacitance

During part load operation, it is controlled by frequency conversion, which can realize stepless automatic adjustment of the internal volume ratio according to the operating conditions, so that the compressor operates efficiently.

#### **Lubrication System**

The oil circulation system combining forced oil supply and differential pressure oil supply has excellent lubrication, sealing, cooling and noise reduction performance.

## Material

Select the best materials for the housing and rotor based on the use conditions and design standards.

#### Rotor

- •The mature and stable profile design with independent intellectual property rights (bilateral asymmetric full arc envelope profile) is more suitable for grinding processing, and the line seal is changed to a belt seal to effectively control the meshing gap;
- •Optimize the number of teeth combination according to the rotor diameter, the tooth height coefficient, peak height coefficient, diameter and draw ratio, lead and torsion angle form a reasonable tooth matching;
- •It is machined by high-precision British and German CNC grinding machines.

## Suction and Exhaust

The suction and exhaust ports are processed by national patented irregular corrugated mechanical noise reduction technology, which has lower resistance, less pressure loss and significantly reduces noise.

#### **Energy Regulating**

- •The patented spool valve is used to ensure the design of best area of thrust surface ratio, and the adjustment is rapid and sensitive;
- Achieve energy regulation in the maximum range of 10-100%.

## Oil Separation

The national patented oil and gas separator is used to achieve multiple impact separation, gravity separation, replaceable accumulation filter element separation and other means, and the gas oil content is lower than 5PPM.

## Oil Cooling

The oil cooler adopts the refrigerant cooling method, applying the national patented high-efficiency heat exchange tube, integrated high-precision baffle plate, reasonable oil flow rate design and other technologies, which greatly improves the heat exchange efficiency, small in size and light in weight. The heat exchange is stable and reliable.



## High Quality Components Ensures Quality

#### Housing

The brand-new metal mold has higher casting accuracy; the 3D technology is used to print the mold, and the production is more flexible and faster; the key parts are processed by advanced Japanese and German machining centers to ensure the machining accuracy.



## **Shaft Seal**

Adopt specialized mechanical seal for refrigeration, hydraulic balance design on the end face, reliable driving mechanism, computer finite element analysis auxiliary seal cooling structure design, silicon carbide seal material, simple structure, convenient installation, excellent sealing, more suitable for changing working conditions.



## Bearing

The thrust bearing used is imported high-precision and low-temperature special bearing, which is non-corrosive, anti-aging, high temperature resistant and high precision, which ensures the accurate positioning of the rotor for a long time; the radial support uses sliding bearings (also known as hydrodynamic bearings), and the shaft runs on the oil film. There is no mechanical wear, and the theoretical bearing life is unlimited. There is unique advantage, especially in large screw compressors or large differential pressure working conditions.



## **Sealing Element**

The original imported seals are used and the sealing materials are determined by the refrigerant. The sealing of each component is more reliable.



## Motor

- Professionally customized high-efficiency three-phase asynchronous motors comply with national standards and save energy and reduce consumption. The structure is reasonable, the efficiency is high, and the noise is low. The voltage and frequency can be customized according to user needs.
- •Relying on the data accumulation of the national-level test center for many years, the motor power is accurately selected, and the complete motor power spectrum keeps the motor efficiency running at the optimal value and reduces energy consumption.



#### Coupling

With advanced diaphragm coupling, the vibration can be eliminated and isolated. It has the function of automatic centering and long service life.



#### Oil Filter

The high precision and washable stainless-steel filter element are used to achieve high precision filtration, ensure the lubricating oil is clean, and improve the reliability of oil pump and compressor.



#### Oil Pump

The specialized oil pump is used, which has advanced structure, a certain pumping capacity, stable oil volume and oil pressure; the mechanical seal of oil pump shaft seal is resistant to high temperature, working medium corrosion and has long service life.



## **Automatic Control System**

It is equipped with multiple protections such as early warning of load limit, over-limit alarm and over-limit shutdown to ensure the safe and stable operation of the compressor;

- •PID energy adjustment is adopted based on the change of load, which is featured with fast load tracking and low steady-state error and minimizes equipment energy consumption;
- •It can collect operation data, monitor and store etc., and the key data is presented in graph with the visual change trend, and it also can store historical alarm and query them;
- •The human-computer interface is color LCD touch screen and supports multi-language selections such as Chinese and English; the functions are universal, and users can configure functions according to the type of equipment;
- $\bullet$  The Modbus RTU/RS485 communication interface is reserved for remote monitoring and control of the compressor with the host computer.





## **Optional Configuration**

## Electrical Heater

Maintain lubricating oil at a certain temperature to ensure that the unit can start up normally at a lower ambient temperature.

Double Oil Filter It can be equipped with double oil filter as needed, one for use and one for standby, and it can be switched without shutdown.

Water-Cooling Type Oil Cooler Water-cooling type oil cooler can be selected according to the site conditions, and the materials of shell and heat exchange tube can be flexibly selected on the basis of different water quality conditions.

Instrument

The pressure and temperature sensors and transmitters supplied by internationally renowned brands such as Rosemount/EJA can be configured as required.

Oil Temperature Control The oil temperature control valves supplied by internationally renowned brands can be configured as required, which can accurately control the temperature of the lubricating oil and ensure the reliable operation of the unit.

Anti-Explosion The explosion-proof equipment can be customized according to the requirements of the use condition. The instruments, valves, and electrical components can meet the requirements of the explosion-proof standards, and can also meet the requirements of different explosion-proof systems such as ATEX/IEC.

For industrial refrigeration and other special applications, heavy-duty oil cooler and stainless steel oil cooler can be provided. The oil cooler may adopt refrigerant direct cooling, refrigerant throttling cooling and water cooling.







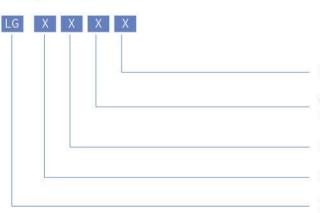




## **Features**

- •The compressor has a full type spectrum and the displacement range is  $285 \text{ m}^3/\text{h} \sim 14000 \text{m}^3/\text{h}$ ;
- It is widely used and can be operated under high temperature, moderate temperature and low temperature conditions;
- •The unit is suitable for R717, R507A, R404A and other working mediums;
- •The unit can be customized according to the special needs of users;
- $\bullet$  The standard configuration control mode is automatic.

## Single-Stage Screw Refrigeration Compressor Model



## **Applicable Conditions**

Refrigerant	R717A	R507A	
Discharge Pressure (MPa)	≤1.67	≤1.95	
Suction Pressure (MPa)	-0.03 ~	~ 0.586	
Oil Pressure (MPa)	0.1 ~ 0.3 Higher Than Discharge Pressure		
Oil Temperature (°C )	30 ^	~ 65	
Cooling Water Inlet Temperature (°C )	15 ~ 33		
Cooling Water Flow Deviation	±10%		

Note: If it is out of the conditions above, please contact MOON-TECH for making non-standard order.

Unit type: J refers to built-in economizer; others don't mean so.

Cooling Method of Oil Cooler: Y means liquid cooling; Z means water cooling

Rotor Lead: S, D, M, K, L and T leads are lengthened in turn

Rotor Nominal Diameter: expressed in Arabic numerals in cm

LG stands for screw



	lter	n	Unit	Series 12 M	Series 16S	Series 16M	Series 20S		
	Refrige	erant	Category		R717/	R507A			
The	eoretical Displacen	nent of Compressor	m³/h	285	385	598	806		
		High Temperature Conditions	kW	316/239	440/333	692/526	1001/711		
Refrigera	ting Capacity	Moderate Temperature Conditions	kW	175/161	244/224	384/355	555/480		
		Low Temperature Conditions	kW	62/63	88/89	138/141	201/194		
		High Temperature Conditions	kW	65/75	90/110	132/160	185/220		
Motor F	Rated Power	Moderate Temperature Conditions	kW	65/75	90/110	132/160	185/220		
		Low Temperature Conditions	kW	55/65	75/90	110/132	160/185		
	Electrical	System			3P 50HZ 380V				
	Rated Speed			2960					
C	harging Volume of	Refrigeration Oil	L	~ 160	~ 240 ~ 380		~ 380		
	inlet and Outlet	Pipe Diameter	mm	DN80/ DN65	DN125/ DN80 DI		DN150/ DN100		
Inlet	and Outlet Pipe Dia	ameter of Economizer	mm	DN50	DN50	DN50	DN65		
	Safety Valve	Diameter	mm	DN20	DI	N25	DN32		
		Туре		Shell and Tube					
		Inlet and Outlet Pipe Diameter	mm	DN32	DI	N40	DN65		
Oil Cooler	Water Cooling	Cooling Water Flow	m³/h	~ 10	$\sim$ 15	~ 15	~ 20		
Oli Coolei		Water Quality Standard		GB50050 "Code fo		ustrial Recirculat ment"	ing Cooling Water		
	Lieuld Cooling	Liquid Inlet Pipe Diameter	mm	DN25	Di	N32	DN40		
	Liquid Cooling  Discharge Pipe Diameter		mm	DN40	DI	N50	DN65		
Oi	Model Oil Pump			ZHB80P6	ZHB	125P4	ZHB125P4 or ZHB150P6*		
		Motor Power	kW	1.5	2	2.2	2.2 or 3*		
	Dimensions	s (L*W*H)	mm	2620X1370x1780	3060X14	470x2030	3180X1640x2260		
	Net Weigh	t of Unit	kg	~ 2000	~ 2450	~ 2750	~ 4450		

<sup>1.</sup> High temperature working condition is +40/+5°C, moderate temperature working condition is +40/-10°C, low temperature working condition is +40/-35°C; the corresponding high temperature working condition of R507A is +40/+0°C; With economizer, the liquid outlet temperature is 5°C higher than the saturation temperature of the air make-up pressure. The cooling water inlet

temperature of the oil cooler is  $+33^{\circ}\text{C}$  , and the temperature difference between the inlet and outlet water is  $5^{\circ}\text{C}$  .

<sup>2. \*</sup>For series LG20S, the motor power is 3kW when used in R507A.

		ltem	Unit	Series 20M	Series 20L	Series 20T	Series 25S	
	Ref	rigerant	Category		R717/	R507A		
Theor	etical Displa	cement of Compressor	m³/h	1120	1486	1670	1825	
		High Temperature Conditions	kW	1339/1007	1756/1320	1872/1411	2172/1642	
Refrigeratir	g Capacity	Moderate Temperature Conditions	kW	743/680	975/892	1040/954	1207/1110	
		Low Temperature Conditions	kW	269/272	353/357	385/382	443/453	
		High Temperature Conditions	kW	250/315	315/400	400/450	450/500	
Motor Rat	ed Power	Moderate Temperature Conditions	kW	250/315	315/400	400/450	400/500	
		Low Temperature Conditions	kW	200/250	250/355	280/400	315/450	
	Electrical System			3P 50HZ 380V	3P 50HZ 380V 3P 50HZ10kV (or6kV)	0HZ10kV 3P 50HZ 10kV (or 6kV)		
	Rated Speed		r/min		29	60		
Cha	rging Volum	e of Refrigeration Oil	L	~ 380	~ 450	~ 650	~ 700	
I	nlet and Out	tlet Pipe Diameter	mm	DN150/ DN100	DN200/ DN150	DN200/ DN150	DN200/ DN150	
Inlet an	d Outlet Pipe	Diameter of Economizer	mm	DN65	DN65	DN65	DN80	
	Safety Va	alve Diameter	mm	DN32	DN50	DN50	DN50	
		Туре			Shell ar	nd Tube		
		Inlet and Outlet Pipe Diameter	mm	DN65	DN65	DN65	DN65	
011.5	Water Cooling	Cooling Water Flow	m³/h	~ 25	~ 30	~ 35	~ 35	
Oil Cooler	9	Water Quality Standard		GB50050 "Cod	e for Design of Indu Treatr		Cooling Water	
	Liquid	Liquid Inlet Pipe Diameter	mm	DN40	DN40	DN40	DN50	
	Cooling	Discharge Pipe Diameter	mm	DN65	DN65	DN65	DN80	
		Model		ZHB125P4 o	r ZHB150P6*	ZHB150P6	ZHB220P4	
Oil P	ump	Motor Power	kW	2.2 or 3*		3	4	
	Dimens	ions (L*W*H)	mm	3180X1610x2260	3610X1760x2540	4300X2140x3070	4600X2140x3150	
	NetWe	eight of Unit	kg	~ 4660	~ 5900	~ 10000	11000 ~ 12000	

#### Note

<sup>1.</sup> High temperature working condition is  $+40/+5^{\circ}$ C, moderate temperature working condition is  $+40/-10^{\circ}$ C, low temperature working condition is  $+40/-35^{\circ}$ C; the corresponding high temperature working condition of R507A is  $+40/+0^{\circ}$ C;

With economizer, the liquid outlet temperature is  $5^{\circ}$ C higher than the saturation temperature of the air make-up pressure. The cooling water inlet temperature of the oil cooler is  $+33^{\circ}$ C, and the temperature difference between the inlet and outlet water is  $5^{\circ}$ C.

<sup>2.</sup> When the high-voltage motor is selected for the unit LG20L, the oil charge is 700kg, and the external dimensions and quality refer to the series LG20T.

<sup>3. \*</sup> For series LG20M/LG20L, the motor power is 3kW when used in R507A.





		Item	Unit	Series 25M	Series 25K	Series 25L	Series 25T		
	Re	frigerant	Category		R717/	R507A			
Theore	tical Displa	acement of Compressor	m³/h	2289	2564	2840	3208		
		High Temperature Conditions	kW	2731/2069	2906/2275	3393/2579	3691/2890		
Refrigerating	Capacity	Moderate Temperature Conditions	kW	1518/1400	1618/1540	1889/1746	2055/1956		
		Low Temperature Conditions	kW	557/567	594/622	694/705	755/790		
		High Temperature Conditions	kW	500/630	560/710	630/800	710/900		
Motor Rate	d Power	Moderate Temperature Conditions	kW	500/630	560/710	560/800	710/900		
		Low Temperature Conditions	kW	400/560	400/630	500/710	500/800		
	Electrical System			3P 50HZ 10kV (or 6kV)					
	Rated Speed		r/min		29	960			
Char	ging Volun	ne of Refrigeration Oil	L	~ 700	~ 700	~ 700	~ 1000		
In	let and Ou	tlet Pipe Diameter	mm	DN200/ DN150	DN250/ DN150	DN250/ DN150	DN350/ DN150		
Inlet and	Outlet Pip	e Diameter of Economizer	mm	DN80	DN80	DN80	DN125		
	Safety V	alve Diameter	mm	DN50	DN50	DN50	2XDN50		
		Туре			Shell a	nd Tube			
		Inlet and Outlet Pipe Diameter	mm		Dn65		Dn100		
Oil Carles	Water Cooling	Cooling Water Flow	m³/h		∼ 55		~ 90		
Oil Cooler		Water Quality Standard		Gb50050 "Cod		ustrial Recirculating ment"	Cooling Water		
	Liquid	Liquid Inlet Pipe Diameter			DN50		DN65		
	Cooling Discharge Pipe Diameter		mm		DN80		DN125		
Oil Do	Model			ZHB220P4 ZHE					
Oli Pu	Oil Pump Motor Power		kW	4			5.5		
	Dimens	sions (L*W*H)	mm	4600X2140x3150			7990X2930x3650		
	Net W	eight of Unit	kg		11000 ~ 12000		~ 19000		

#### Note:

 $<sup>1. \</sup> High temperature working condition is +40/+5^{\circ}C \ , moderate temperature working condition is +40/-10^{\circ}C \ , low temperature working condition is$ 

<sup>35°</sup>C; the corresponding high temperature working condition of R507A is +40/+0°C; 2. With economizer, the liquid outlet temperature is 5°C higher than the saturation temperature of the air make-up pressure. The cooling water inlet  $temperature\ of\ the\ oil\ cooler\ is\ +33°C\ ,\ and\ the\ temperature\ difference\ between\ the\ inlet\ and\ outlet\ water\ is\ 5°C\ .$ 

	į.	ltem	Unit	Series 32S	Series 32D	Series 32M	Series 32L	
	Ref	rigerant	Category		R717/	R507A		
Theore	Theoretical Displacement of Compressor			3500	3920	4341	5182	
	High Temperature Conditions		kW	4118/3130	4118/3130 4395/3442 5167/3930		6178/4696	
Refrigerating (	Capacity	Moderate Temperature Conditions	kW	kW 2292/2119 24		2877/2659	3439/3178	
		Low Temperature Conditions	kW	844/861	901/946	1060/1080	1268/1287	
		High Temperature Conditions	kW	800/1000	900/1120	1000/1120	1120/1400	
Motor Rated	Power	Moderate Temperature Conditions	kW	710/1000	800/1000	900/1120	1000/1400	
		Low Temperature Conditions	kW	560/800	630/900	710/1000	900/1250	
	Electri	cal System			3P 50HZ 10kV (o	r 6kV)		
	Rated Speed			2960				
Charg	Charging Volume of Refrigeration Oil			∼ 1250				
In	let and Out	let Pipe Diameter	mm	DN350/ DN200				
Inlet and	Outlet Pipe	Diameter of Economizer	mm	DN125				
	Safety Va	alve Diameter	mm	2XDN50				
		Туре		Shell and Tube				
		Inlet and Outlet Pipe Diameter	mm		DN	100		
	Water	Cooling Water Flow	m³/h		~	90		
Oil Cooler	Cooling	Water Quality Standard		GB50050 "Code	e for Design of Indu Treatr		g Cooling Water	
	Liquid	Liquid Inlet Pipe Diameter	mm		DN	65		
	Cooling Discharge Pipe Diameter		mm	DN125				
01.5		Model		ZZB400P6				
Oil Pum	ip	Motor Power	kW	7.5				
	Dimensi	ions (L*W*H)	mm	~ 7990x2930x3650				
	Net We	eight of Unit	kg		~ 2	1700		

#### Note

<sup>1.</sup> High temperature working condition is  $+40/+5^{\circ}$ C, moderate temperature working condition is  $+40/-10^{\circ}$ C, low temperature working condition is  $+40/-35^{\circ}$ C; the corresponding high temperature working condition of R507A is  $+40/+0^{\circ}$ C;

<sup>2.</sup> With economizer, the liquid outlet temperature is  $S^{\circ}C$  higher than the saturation temperature of the air make-up pressure. The cooling water inlet temperature of the oil cooler is +33°C, and the temperature difference between the inlet and outlet water is  $S^{\circ}C$ .





		Item	Unit	Series 32T	Series 40S	Series 40M	Series 40L
		Refrigerant	Category		R717/F	3507A	
The	Theoretical Displacement of Compressor			5890	6514	7539	9500
		High Temperature Conditions	kW	6660/5215	7362/5711	8415/6548	10112/7958
Refrigeratin	g Capacity	Moderate Temperature Conditions	kW	3708/3530	4099/3868	4760/4471	5586/5274
		Low Temperature Conditions	kW	1367/1430	1494/1530	1757/1763	2013/2134
		High Temperature Conditions	kW	1250/1600	1600/1800	1800/2240	2200/2500
Motor Rate	ed Power	Moderate Temperature Conditions	kW	1120/1500	1400/1800	1600/2240	2200/2500
		Low Temperature Conditions	kW	1000/1400	1120/1500	1250/2000	1600/2200
	Ele	ectrical System		3P 50H	Z 10kV (or 6kV	<b>'</b> )	
	3	Rated Speed	r/min		2960		
Charging Volume of Refrigeration Oil			L	~ 1250	~ 1	800	~ 2600
	Inlet and	Outlet Pipe Diameter	mm	DN350/ DN250		DN400/ DN	300
Inlet	and Outlet I	Pipe Diameter of Economizer	mm	DN125	DN	150	DN200
	Safet	y Valve Diameter	mm	2XDN50	2XD	N50	2xDN80
		Туре			Shell an	d Tube	
		Inlet and Outlet Pipe Diameter	mm	DN100	DN	125	DN150
	Water Cooling	Cooling Water Flow	m³/h	~ 90	~	150	~ 210
Oil Cooler	Cooling	Water Quality Standard		GB50050 "Code for De Cooling V	sign of Industri Water Treatmen	STATE OF THE PARTY	1
	Liquid	Liquid Inlet Pipe Diameter	mm	DN65	DN	125	DN150
	Cooling	Discharge Pipe Diameter	mm	DN125	DN	150	DN200
Oil D	Iman.	Model		ZZB400P6	ZZB8	00P6	ZZB1200P4
Oil Pu	шр	Motor Power	kW	7.5	1	5	22
	Dim	ensions (L*W*H)	mm	~ 7990x2930x3650	∼ 9920×3	500×4550	12000X4420X490
	Net	t Weight of Unit	kg	~ 26000	~ 37	7000	~ 41000

#### Note

<sup>2.</sup> With economizer, the liquid outlet temperature is 5°C higher than the saturation temperature of the air make-up pressure. The cooling water inlet temperature of the oil cooler is +33°C, and the temperature difference between the inlet and outlet water is 5°C.



MOON-TECH advocates the use of ODP=0, low-GWP environmentally-friendly working medium, independently research and develop green and efficient compressor products, and actively promotes the process of working medium substitution.

Due to the limited space, the sample book cannot list detailed compressor performance parameters, outline drawings of unit, work flow charts and foundation drawings, etc. If necessary, please contact our staff.

<sup>1.</sup> High temperature working condition is  $+40/+5^{\circ}$ C, moderate temperature working condition is  $+40/-10^{\circ}$ C, low temperature working condition is  $+40/-35^{\circ}$ C; the corresponding high temperature working condition of R507A is  $+40/+0^{\circ}$ C;



## **Features**

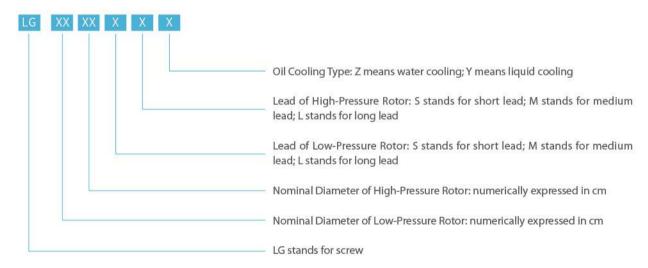
- •It is suitable for low temperature refrigeration under evaporating temperature below -25°C, and the efficiency is significantly higher than that of single-stage compressor unit with economizer;
- •There are four types of single-machine two-stage screw units, of which high and low pressure stages of LG2016MS, LG2520MS, LG3225LS compressor have energy adjustment devices, which can ensure the unit is always efficient and economical under low temperature working conditions;
- •The unit can be customized according to the special needs of users:
- •The standard configuration control method is automatic.

## **Applicable Conditions**

Refrigerant	R717
Discharge Pressure (MPa)	≤1.67
Suction Pressure (MPa)	-0.05 ~ 0.052
Oil Pressure (MPa)	0.05 ~ 0.3 Higher Than Discharge Pressure
Oil Temperature (°C )	30 ~ 65
Cooling Water Inlet Temperature (°C )	15 ~ 33
Cooling Water Flow Deviation	±10%

Note: If it is out of the conditions above, please contact MOON-TECH for making non-standard order.

## Model of Single Machine Two-Stage Screw Refrigeration Compressor Unit





			Unit	LG1612MMZ(Y)	LG2016MSZ(Y)	LG2520MSZ(Y)	LG3225LSZ(Y)
Me	odel of Con	npressor		LG1612MM	LG2016MS	LG2520MS	LG3225LS
		Low Pressure Stage	m³/h	598	1120	2289	5182
Theoretical Displ	acement	High Pressure Stage	m³/h	213	385	806	1825
N	Nominal Conditions				+40	)/-35	
Nomina	al Refrigera	ting Capacity	kW	139	270	561	1262
Rateo	Power of N	Main Motor	kW	110	185	355	800
	Electrical S	ystem		3N 50H	IZ 380V	3N 50H	HZ 10kV
	Rated Sp	eed	r/min		29	060	
	Refrigerant				R7	17	
Charging 1	Volume of F	Refrigeration Oil	L	~ 240	~ 380	~ 700	~ 1100
Dia	Diameter of Intake Pipe		mm	DN125	DN150	DN200	DN350
Dian	neter of Ou	ttake Pipe	mm	DN65	DN80	DN100	DN150
Pipe Diameter	of Inlet and	Outlet of Intercooler	mm	DN50	DN65	DN80	DN125
Dia	meter of Sa	fety Valve	mm	DN25	DN32	DN50	DN50*2
		Туре					
	Inlet and	Outlet Pipe Diameter	mm	DN40	DN65	DN65	DN100
Water Cooler/Oil Cooler	Cod	oling Water Flow	m³/h	~ 20	~ 25	~ 45	~75
	Wate	r Quality Standard		GB50050 "Cod	le for Design of Indu Treat	ustrial Recirculating ment"	Cooling Water
		Type			Shell ar	nd Tube	
Liquid/Oil Cooler	Liguid	Inlet Pipe Diameter	mm	DN32	DN40	DN50	DN65
	Discharge Pipe Diameter		mm	DN50	DN65	DN80	DN125
Oil Durses		Model		ZH125P4	ZH220P4	ZZB300P8	ZZB600P4
Oil Pump		Motor Power	kW	2.2	4	5.5	11
D	imensions (	L*W*H)	mm	3100x1390x2030	3460x1650x2230	5070x2380x3150	8890x2840x3900
N	let Weight	of Unit	kg	~ 3300	~ 4500	~ 11000	~ 22285

#### Note:

<sup>2.</sup> Due to the difference in the working conditions of the unit, the power and protection level of the main motor may be different. The shape and foundation dimensions will also vary with the main motor, which are not listed one by one in the table.



MOON-TECH advocates the use of ODP=0, low-GWP environmentally-friendly working medium, independently research and develop green and efficient compressor products, and actively promotes the process of working medium substitution. Due to the limited space, the sample book cannot list detailed compressor performance parameters, outline drawings of unit, work flow charts and foundation drawings, etc. If necessary, please contact our staff.

<sup>1.</sup> The main motor of the unit is configured according to the nominal working condition. Under this configuration, the unit can be put into operation at full load under the evaporation temperature of -25°C or below.



## Features

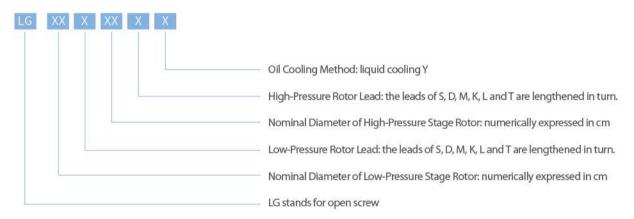
- •It is suitable for low temperature refrigeration under evaporating temperature below -25°C, and the efficiency is significantly higher than that of single-stage compressor unit with economizer;
- •The mixing ratio is diverse. The optimum ratio can be selected according to different working conditions and medium of users. The ratio of high and low pressure of R717 is between 3 and 4, and that of R507A is between 2 and 3.
- •The high and low pressure stages are equipped with energy adjustment devices to ensure that the unit is always efficient and economical under low temperature conditions;
- •The compressor of high and low pressure stages starts in different stages with low starting current.
- •The oil supply mode of low pressure stage compressor is pressure difference;
- •The high-pressure stage can be operated independently to achieve rapid cooling and high efficiency.
- •The unit is applicable to R717, R507A, R404A and other working
- •The unit can be configured as required by users.
- The control mode is automatic.

## **Applicable Conditions**

Refrigerant	R717	R507a	
Discharge Pressure (MPa)	≤1.67	≤1.95	
Suction Pressure (MPa)	-0.05 ~	~ 0.005	
Oil Pressure	0.1 ∼ 0.3 Higher Than Discharge Pressure		
Oil Temperature (°C )	30 ~	<b>-</b> 65	
Cooling Water Inlet Temperature (°C )	15 ~ 33		
Cooling Water Flow Deviation	±1	0%	

Note: If it is out of the conditions above, please contact MOON-TECH for making non-standard order.

## Model of Dual-Machine Two-Stage Screw Skid Block Unit







				LG16M12M	LG20M12M	LG20L16S	LG20T16M		
	Refrigera	ant	Туре		R7	717			
	Low Pressure	Model		LG16M	LG20M	LG20L	LG20T		
C	Stage	Theoretical Displacement	m³/h	598	1120	1486	1672		
Compressor	High Pressure	Model		LG12M	LG12M	LG16S	LG16M		
	Level	Theoretical Displacement	m³/h	285	285	385	598		
	Nominal Con	ditions	°C		+40	)/-40			
N	ominal Refrigerat	ing Capacity	kW	117	207	278	329		
Pated Dayer	of Main Motor	Low Pressure Stage	kW	55	110	132	160		
Rated Power	or main Motor	High Pressure Stage	kW	65	65	90	132		
Fleeten	Low Pressure Stage				3N 50HZ 380V				
Electrica	al System	High Pressure Stage			3N 50F	HZ 380V			
Char	rging Volume of R	Refrigeration Oil	L	~ 240	~ 360	~ 360	~ 500		
	Diameter of Int	take Pipe	mm	DN125	DN150	DN200	DN200		
	Diameter of Ou	ttake Pipe	mm	DN65	DN65	DN80	DN80		
Inlet and	l Outlet Pipe Dian	neter of Economizer	mm	DN50	DN65	DN65	DN65		
	Diameter of Sat	fety Valve	mm	DN25	DN25	DN50	DN50		
		Туре			Shell a	nd Tube			
Liquid/C	il Cooler	Liquid Inlet Pipe Diameter	mm	DN32	DN40	DN40	DN40		
		Discharge Pipe Diameter	mm	DN50	DN65	DN65	DN65		
	Oil Pump Motor Power			ZHB	80P6	ZHB	125P4		
Oil P			kW	1	1.5		2.2		
	Dimensions (	L*W*H)	mm	5400x1640x2340	5400x1640x2460	6040x1940x2780	6260x1940x283		
	Net Weight	of Unit	kg	~ 3300	~ 4650	~ 6300	~ 7700		

#### Note:

<sup>1.</sup> The main motor of the unit is configured according to the nominal working condition. Under this configuration, the unit can be put into operation at full load under the evaporation temperature of -40°C or below.

<sup>2.</sup> Due to the difference in the working conditions of the unit, the power of the main motor may be different, and the outline dimensions will also vary with the main motor, which are not listed one by one in the table.

<sup>3.</sup> This table shows a long structure, if other forms are needed, it can be customized.

				LG25S16M	LG25M16M	LG25K20S	LG25L20\$		
	Refriger	ant	Type		R71	7			
	Low Pressure	Model		LG25S	LG25M	LG25K	LG25L		
C	Stage	Theoretical Displacement	m³/h	1825	2289	2570	2840		
Compressor	High Pressure	Model		LG16M	LG16M	LG20S	LG20S		
	Level	Theoretical Displacement	m³/h	598	598	806	806		
	Nominal Cor	nditions	°C		+40/	-40			
N	Nominal Refrigera	ting Capacity	kW	354	429	502	551		
Date of Davis		Low Pressure Stage	kW	185	200	220	220		
Kated Power	r of Main Motor	High Pressure Stage	kW	132	132	185	185		
Florida	Low Pressure Stage			3N 50HZ 380V					
Electric	cal System	High Pressure Stage		3N 50HZ 380V					
Cha	arging Volume of	Refrigeration Oil	L	~ 600	~ 600	~ 600	~ 600		
	Diameter of In	take Pipe	mm	DN200	DN200	DN250	DN250		
	Diameter of Ou	ttake Pipe	mm	DN80	DN80	DN100	DN100		
Inlet and	d Outlet Pipe Diar	meter of Economizer	mm	DN65	DN65	DN80	DN80		
	Diameter of Sa	fety Valve	mm	DN50	DN50	DN50	DN50		
		Туре			Shell and	d Tube			
Liquid/	'Oil Cooler	Liquid Inlet Pipe Diameter	mm	DN50	DN50	DN50	DN50		
		Discharge Pipe Diameter	mm	DN80	DN80	DN80	DN80		
920	Туре				ZHB12	25P4			
Oil	Pump	Motor Power	kW	2.2					
	Dimensions	(L*W*H)	mm	6260X1940x2970	6260X1940x2970	6650X1940x3000	6650X1940x300		
	Net Weight	of Unit	kg	~ 8000	~ 9000	~ 11000	~ 12000		

## Note:

<sup>1.</sup> The main motor of the unit is configured according to the nominal working condition. Under this configuration, the unit can be put into operation at full load under the evaporation temperature of -40°C or below.

<sup>2.</sup> Due to the difference in the working conditions of the unit, the power of the main motor may be different, and the outline dimensions will also vary with the main motor, which are not listed one by one in the table.

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	Item		Unit	LG25T20S	LG32\$20\$	LG32M20M	
	Refrigera	nt	Туре		R717		
	Low Pressure	Model		LG25T	LG32S	LG32M	
<i>C</i>	Stage	Theoretical Displacement	m³/h	3208	3500	4341	
Compressor	High Pressure	Model		LG20S	LG20S	LG20M	
	Level	Theoretical Displacement	m³/h	806	806	1120	
	Nominal Cond	ditions	°C	+40/-40			
N	lominal Refrigerati	ng Capacity	kW	607	653	820	
D ID		Low Pressure Stage	kW	250	280	315*	
Rated Power	of Main Motor	High Pressure Stage	kW	185	185	250	
FI	Low Pressure Stage				3N 50HZ 380V		
Electric	Electrical System High Pressure Stage				3N 50HZ 380V		
Cha	rging Volume of R	efrigeration Oil	L	~ 900	~ 900	~ 900	
	Diameter of Int	ake Pipe	mm	DN350	DN350	DN350	
	Diameter of Out	take Pipe	mm	DN100	DN100	DN100	
Inlet and	d Outlet Pipe Diam	eter of Economizer	mm	DN80	DN80	DN80	
	Diameter of Safe	ety Valve	mm	DN50	DN50	DN50	
		Туре			Shell and Tube		
Liquid/0	Oil Cooler	Liquid Inlet Pipe Diameter	mm	DN65	DN65	DN65	
		Discharge Pipe Diameter	mm	DN125	DN125	DN125	
ngun.		Туре			ZHB125P4		
Oil i	Pump	Motor Power	kW		2.2		
	Dimensions (L	*W*H)	mm	7870x2450x3480	8090x2450x3550	8300x2450x3550	
	Net Weight o	fUnit	kg	~ 17000	~ 18000	~ 20000	

#### Note

<sup>1.</sup> The main motor of the unit is configured according to the nominal working condition. Under this configuration, the unit can be put into operation at full load under the evaporation temperature of  $-40^{\circ}$ C or below.

<sup>2.</sup> Due to the difference in the working conditions of the unit, the power of the main motor may be different, and the outline dimensions will also vary with the main motor, which are not listed one by one in the table.

<sup>3. \*</sup>Electrical system is 3N 50HZ 10kV.

<sup>4.</sup> The table shows a long structure, if other forms are needed, it can be customized.

Item			Unit	LG32L20L	LG40S25M	LG40M25L		
Refrigerant			Type	R717				
	Low Pressure Stage	Model		LG32L	LG40S	LG40M		
<i>C</i>		Theoretical Displacement	m³/h	5182	6514	7539		
Compressor	High Pressure Level	Model		LG20L	LG25M	LG25L		
		Theoretical Displacement	m³/h	1486	2289	2840		
	Nominal Con	ditions	°C	+40/-40				
1	Nominal Refrigerat	ting Capacity	kW	974	1255	1450		
Dated Dower	r of Main Motor	Low Pressure Stage	kW	355	400	450		
nateu Power	OF MAIN MOTO	High Pressure Stage	kW	355	500	630		
Electric	Low Pressure Stage Electrical System High Pressure Stage			3N 50HZ 10KV				
Electric				3N 50HZ 10KV				
Cha	Charging Volume of Refrigeration Oil		L	~ 900	~ 1500	~ 1500		
	Diameter of Intake Pipe		mm	DN350	DN400	DN400		
	Diameter of Outtake Pipe		mm	DN100	DN150	DN150		
Inlet an	Inlet and Outlet Pipe Diameter of Economizer		mm	DN80	DN150	DN150		
	Diameter of Sal	fety Valve	mm	DN50	DN50X2 DN50X2			
		Туре		Shell and Tube				
Liquid/	Oil Cooler	Liquid Inlet Pipe Diameter	mm	DN65	DN125	DN125		
		Discharge Pipe Diameter	mm	DN125	DN150	DN150		
67	Dumm	Туре		ZHB125P4	ZHB220P4	ZHB220P4		
Oil	Pump	Motor Power	kW	2.2	4	4		
	Dimensions (L*W*H)		mm	9020x2450x3550	10600X3740X4050	10600X3740X4050		
	Net Weight of Unit		kg	~ 22000	~ 32000	~ 34000		

#### Note:

<sup>1.</sup> The main motor of the unit is configured according to the nominal working condition. Under this configuration, the unit can be put into operation at full load under the evaporation temperature of -40°C or below.

<sup>2.</sup> Due to the difference in the working conditions of the unit, the power of the main motor may be different, and the outline dimensions will also vary with the main motor, which are not listed one by one in the table.

<sup>3.</sup> This table shows a long structure, if other forms are needed, it can be customized.





	ltem		Unit	LG16M12M	LG20M16M	LG20L16M	LG20T20S		
	Refrigerant		Туре	R507A					
	Low Pressure	Model		LG16M	LG20M	LG20L	LG20T		
	Stage	Theoretical Displacement	m³/h	598	1120	1486	1672		
Compressor	High Pressure Level	Model		LG12M	LG16M	LG16M	LG20S		
		Theoretical Displacement	m³/h	285	598	598	806		
	Nominal Cor	ditions	°C	+40/-40					
1	Nominal Refrigera	ting Capacity	kW	157	314	396	462		
B IB		Low Pressure Stage	kW	65	132	160	185		
Rated Powe	r of Main Motor	High Pressure Stage	kW	75	160	160	220		
Flanti	Low Pressure Stage			3N 50HZ 380V					
Electric	cal System	High Pressure Stage		3N 50HZ 380V					
Cha	Charging Volume of Refrigeration Oil		L	~ 240	~ 360	~ 360	~ 550		
	Diameter of Intake Pipe		mm	DN125	DN150	DN200	DN200		
	Diameter of Outtake Pipe		mm	DN65	DN80	DN80	DN100		
Inlet an	Inlet and Outlet Pipe Diameter of Economizer		mm	DN50	DN65	DN65	DN80		
	Diameter of Safety Valve		mm	DN25	DN25	DN25	DN50		
		Туре		Shell and Tube					
Liquid/	'Oil Cooler	Liquid Inlet Pipe Diameter	mm	DN32	DN40	DN40	DN40		
		Discharge Pipe Diameter	mm	DN50	DN65	DN65	DN65		
0200		Туре		ZHB80P6 ZHB125P4 ZH		ZHB150P6			
Oil	Pump	Motor Power		1.5	2	.2	3		
	Dimensions (L*W*H)		mm	5400x1640x2340	5400x1640x2460	6040x1940x2780	6260x1940x2830		
	Net Weight	of Unit	kg	~ 3300	~ 4650	~ 6300	~ 7700		

#### Note:

<sup>1.</sup> The main motor of the unit is configured according to the nominal working condition. Under this configuration, the unit can be put into operation at full load under the evaporation temperature of -40°C or below.

<sup>2.</sup> Due to the difference in the working conditions of the unit, the power of the main motor may be different, and the outline dimensions will also vary with the main motor, which are not listed one by one in the table.

<sup>3.</sup> This table shows a long structure, if other forms are needed, it can be customized.

ltem		Unit	LG25S20S	LG25M20M	LG25K20M	LG25L20L		
	Refrigerant			R507A				
	Low Pressure	Model		LG25S	LG25M	LG25K	LG25L	
Co	Stage	Theoretical Displacement	m³/h	1825	2289	2570	2840	
Compressor	High Pressure	Model		LG20S	LG20M	LG20M	LG20L	
	Level	Theoretical Displacement	m³/h	806	1120	1120	1486	
	Nominal Con	ditions	°C	+40/-40				
N	lominal Refrigerat	ing Capacity	kW	496	644	703	820	
Date of Danies	of Main Motor	Low Pressure Stage	kW	200	220	250	250	
Rated Power	or Main Motor	High Pressure Stage	kW	220	315	315	400*	
Floatric	al Funtam	Low Pressure Stage		3N 50HZ 380V				
Electric	al System	High Pressure Stage			3N 50F	IZ 380V		
Cha	rging Volume of R	efrigeration Oil	L	~ 550	~ 550	~ 550	~ 550	
	Diameter of Intake Pipe		mm	DN200	DN200	DN250	DN250	
	Diameter of Out	ttake Pipe	mm	DN100	DN100	DN100	DN100	
Inlet and	d Outlet Pipe Dian	neter of Economizer	mm	DN80	DN80	DN80	DN80	
	Diameter of Safety Valve		mm	DN50	DN50	DN50	DN50	
		Туре		Shell and Tube				
Liquid/	Oil Cooler	Liquid Inlet Pipe Diameter	mm	DN50	DN50	DN50	DN50	
		Discharge Pipe Diameter	mm	DN80	DN80	DN80	DN80	
0.11	Pump	Туре			ZHB	150P6		
Oil	rump	Motor Power	kW			3		
	Dimensions (L*W*H)		mm	6260x1940x2970	6650x1940x2970	6650x1940x3000	6900x1940x3000	
	Net Weight	of Unit	kg	~ 8000	~ 9000	~ 10000	~ 12000	

#### Note

<sup>1.</sup> The main motor of the unit is configured according to the nominal working condition. Under this configuration, the unit can be put into operation at full load under the evaporation temperature of -40°C or below.

<sup>2.</sup> Due to the difference in the working conditions of the unit, the power of the main motor may be different, and the outline dimensions will also vary with the main motor, which are not listed one by one in the table.

<sup>3. \*</sup>Electrical system is 3N 50HZ 10kV.

<sup>4.</sup> The table shows a long structure, if other forms are needed, it can be customized.





				LG25T20L	LG32S25S	LG32M25M	LG32L25M	
Refrigerant			Type	R507A				
	Low Pressure	Model		LG25T	LG32S	LG32M	LG32L	
	Stage	Theoretical Displacement	m³/h	3208	3500	4341	5182	
Compressor	High Pressure	Model		LG20L	LG25S	LG25M	LG25M	
	Level	Theoretical Displacement	m³/h	1486	1825	2289	2289	
	Nominal Co	nditions	°C	+40/-40				
N	lominal Refrigera	ating Capacity	kW	886	998	1244	1409	
Date of Danier	of Main Motor	Low Pressure Stage	kW	280	315	400	450	
Rated Power	or Main Motor	High Pressure Stage	kW	400	500	630	630	
Low Pressure Stage			3N 50HZ 10kV					
Electric	Electrical System High Pressure Stage			3N 50HZ 10kV				
Cha	rging Volume of	Refrigeration Oil	L	~ 900	~ 900	~ 900	~ 900	
	Diameter of Intake Pipe		mm	DN350	DN350	DN350	DN350	
Diameter of Outtake Pipe		mm	DN100	DN150	DN150	DN150		
Inlet and	d Outlet Pipe Dia	meter of Economizer	mm	DN80	DN80	DN80	DN80	
Diameter of Safety Valve		mm	DN50	DN50	DN50	DN50		
		Туре		Shell and Tube				
Liquid/	Oil Cooler	Liquid Inlet Pipe Diameter	mm	DN65	DN65	DN65	DN65	
		Discharge Pipe Diameter	mm	DN125	DN125	DN125	DN125	
Oil Pump		Туре		ZHB150P6	ZHB150P6 ZHB220P4			
		Motor Power	kW	3	4			
Dimensions (L*W*H)		mm	7870x2450x3480	8090x2450x3580	8300x2450x3550	8300x2450x3550		
	Net Weight	of Unit	kg	~ 17000	~ 18000	~ 19000	~ 20000	

#### Note

<sup>1.</sup> The main motor of the unit is configured according to the nominal working condition. Under this configuration, the unit can be put into operation at full load under the evaporation temperature of -40°C or below.

<sup>2.</sup> Due to the difference in the working conditions of the unit, the power of the main motor may be different, and the outline dimensions will also vary with the main motor, which are not listed one by one in the table.

<sup>3.</sup> This table shows a long structure, if other forms are needed, it can be customized.

				LG40\$32\$	LG40M32M	
Refrigerant			Туре	R507A		
Compressor	Low Pressure	Model		LG40S	LG40M	
	Stage	Theoretical Displacement	m³/h 6514		7539	
	High Pressure	Model		LG32S	LG32M	
	Level	Theoretical Displacement	m³/h	3500	4341	
	Nominal Cor	nditions	°C	+40/-40		
N	Nominal Refrigera	ting Capacity	kW	1833	2142	
Low Pressure Stage		kW	560	630		
Rated Power	of Main Motor	High Pressure Stage	kW	900	1120	
Low Pressure Stage Electrical System High Pressure Stage			3N 50HZ 10kV			
			3N 50HZ 10kV			
Charging Volume of Refrigeration Oil		L	~ 1500	~ 1500		
Diameter of Intake Pipe		mm	DN400	DN400		
	Diameter of Ou	ittake Pipe	mm	DN200	DN200	
Inlet and Outlet Pipe Diameter of Economizer			mm	DN150	DN150	
	Diameter of Sa	fety Valve	mm	DN50X2 DN50X2		
		Туре		Shell and Tube		
Liquid/0	Oil Cooler	Liquid Inlet Pipe Diameter	mm	DN125	DN125	
		Discharge Pipe Diameter	mm	DN150	DN150	
202		Туре		ZZB400P6		
Oil	Pump	Motor Power	kW	7.	.5	
Dimensions (L*W*H)		mm	10600X3740x4050	11000X3740x4050		
	Net Weight	of Unit	kg	~ 33000	~ 35000	

#### Note:

- 1. The main motor of the unit is configured according to the nominal working condition. Under this configuration, the unit can be put into operation at full load under the evaporation temperature of  $-40^{\circ}\text{C}$  or below.
- 2. Due to the difference in the working conditions of the unit, the power of the main motor may be different, and the outline dimensions will also vary with the main motor, which are not listed one by one in the table.
- 3. This table shows a long structure, if other forms are needed, it can be customized.



MOON-TECH advocates the use of ODP=0, low-GWP environmentally-friendly working medium, independently research and develop green and efficient compressor products, and actively promotes the process of working medium substitution. Due to the limited space, the sample book cannot list detailed compressor performance parameters, outline drawings of unit, worl flow charts and foundation drawings, etc. If necessary, please contact our staff.

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