

Modular Air-cooled Screw Chiller

It is a kind of air-cooled screw chillers that can be connected to all sorts of fan coil units to realize cooling/heating for civil or industrial buildings.



230kW



330kW



430kW



Display panel Z2F3M



600/760kW



Golden fin condenser



Inner groove copper



Modular structure



Comprehensive protection



Self-diagnosis



Long-distance monitoring



Memory function



24 hour timer



Intelligent defrosting

*: Photos are for reference only.

- The compressor adopts stepless capacity control, which matches perfectly with actual load.
- Throttling by electronic expansion valve with more accurate control and more rapid adjustment to ensure the best running status of the system.
- Unique extend performance: flexible combination in different models, 4 modules for each system and the cooling capacity can reach 1680kW.
- High efficient oil separator with the efficiency of 99.97%, which greatly improves the reliability of the unit.
- Oil supply is done with the oil pump for the heat pump unit, which can effectively prevent oil supply failure at the low pressure difference of the compressor or during defrosting and thus enhance the operation reliability of the unit.
- The heat pump's economizer design will help to remarkably enhance the heating capacity and EER at low ambient temperature.
- Equipped with perfect protection function to ensure safe running.
- With multiple freeze prevention, can prevent shell and tube heat exchanger from freezing up when the unit is running, powered off or in malfunction condition.



| Item | Water side (water temperature) | | | | Air side (outdoor temperature) | | |
|---------|--------------------------------|-----------|-----------------|-------------------|--------------------------------|-------|-----------------|
| | Nominal operating condition | | Operating range | | Nominal operating condition | | Operating range |
| | Inlet() | Outlet() | Outlet() | I/O difference() | DB() | WB() | DB() |
| Cooling | 12 | 7 | 5~15 | 2.5~8 | 35 | — | 18~52 |
| Heating | 40 | 45 | 40~50 | 2.5~8 | 7 | 6 | -15~24 |

| Model | Heat pump | | LSBLGRF230MT3/NbA-M ¹ | LSBLGRF330MT3/NbA-M ¹ | LSBLGRF430MT3/NbA-M ¹ | LSBLGRF600MT3/NbA-M | LSBLGRF760MT3/NbA-M |
|---------------------------|-----------------------|-------------------|----------------------------------|----------------------------------|----------------------------------|--------------------------|--------------------------|
| Capacity | Cooling | kW | 220 | 320 | 420 | 580 | 740 |
| | | RT | 63 | 91 | 119 | 165 | 210 |
| | Heating | kW | 245 | 355 | 450 | 585 | 745 |
| | | RT | 70 | 101 | 128 | 166 | 212 |
| Capacity steps | % | 25%,50%~100% | 25%,50%~100% | 25%,50%~100% | 12.5%, 25~100% | 12.5%, 25~100% | |
| EER/COP | W/W | 2.72/2.88 | 2.67/2.91 | 2.66/2.92 | 3.05/3.07 | 3.06/3.08 | |
| Power supply | Ph/V/Hz | 3/380/50 | 3/380/50 | 3/380/50 | 3/380/50 | 3/380/50 | |
| Power input | Cooling | kW | 81 | 120 | 158 | 190 | 242 |
| | Heating | kW | 85 | 122 | 154 | 190 | 242 |
| Compressor | Type | - | Semi-hermetic screw | Semi-hermetic screw | Semi-hermetic screw | Semi-hermetic screw | Semi-hermetic screw |
| | Starting mode | - | Star Delta Start | Star Delta Start | Star Delta Start | Star Delta Start | Star Delta Start |
| | Quantity | - | 1 | 1 | 1 | 2 | 2 |
| Water side heat exchanger | Type | - | Dry Expansion Evaporator | Dry Expansion Evaporator | Dry Expansion Evaporator | Dry Expansion Evaporator | Dry Expansion Evaporator |
| | Water flow volume | m ³ /h | 37.8 | 55.0 | 72.2 | 99.8 | 127.3 |
| | | GPM | 167 | 242 | 318 | 439 | 560 |
| | Pressure drop | kPa | ≤50 | ≤50 | ≤50 | ≤65 | ≤65 |
| | | ft.WG | ≤16.7 | ≤16.7 | ≤16.7 | ≤21.8 | ≤21.8 |
| Air side heat exchanger | Connection pipe | - | DN100 | DN100 | DN100 | DN150 | DN150 |
| | Type | - | flange connection | flange connection | flange connection | flange connection | flange connection |
| | Fan type and quantity | - | Aluminum Fin-copper Tube | Aluminum Fin-copper Tube | Aluminum Fin-copper Tube | Aluminum Fin-copper Tube | Aluminum Fin-copper Tube |
| | Total fan air flow | m ³ /h | 20000×6 | 20000×8 | 20000×10 | 22000×12 | 22000×12 |
| | | CFM | 11772×6 | 11772×8 | 11772×10 | 12949×12 | 12949×12 |
| Total fan motor power | kW | 1.5×6 | 1.5×8 | 1.5×10 | 2.2×12 | 2.2×12 | |
| Sound pressure level | dB(A) | 78 | 79 | 80 | 82 | 82 | |
| Dimension | Outline(W×D×H) | mm | 4000×2250×2550 | 5000×2250×2550 | 6000×2250×2550 | 7540×2250×2550 | 7540×2250×2550 |
| | Package(W×D×H) | mm | 4080×2330×2550 | 5080×2330×2550 | 6080×2330×2550 | 7620×2330×2550 | 7620×2330×2550 |
| | Heat pump | kg | 4020/4060/4422 | 5270/5310/5797 | 5950/5990/6545 | 8170/8210/8987 | 8700/8740/9570 |
| Loading quantity | 40'GP/40'HQ | set | 0/2 | 0/2 | 0/1 | 0/1 | 0/1 |

Note: EER/COP Applicable Standard Eurovent
 * Only available for heat pump model.
 *1: This series are certified by Eurovent and AHRI.
 2.Gree reserves the right to modify the specifications without prior notice. Please confirm the final specifications with sales representatives.