

Air Conditioning System

The automotive air conditioning system is designed to regulate the temperature, humidity, and air quality inside a vehicle, providing a comfortable environment for drivers and passengers. It typically consists of compressor, condenser, expansion valve, evaporator, blowers and air distribution system, control system and refrigerant.



Our offerings

| Cooling Capacity (kcal/h) | Heating Capacity (kcal/h) | Evaporator Airflow (m ³ /h) | Condenser Airflow (m ³ /h) | Refrigerant | Size (mm) LxWxH |
|---------------------------|---------------------------|--|---------------------------------------|-------------------------|---------------------|
| 26000 | 30000 | 6000 (4pcs) | 8000 (4pcs) | R744 (CO ₂) | 50% Glycol solution |
| 28000 | 32000 | 6000 (6pcs) | 10000 (5pcs) | R744 (CO ₂) | 50% Glycol solution |
| 24000 | 22000 | 4000 (4pcs) | 8000 (4pcs) | R410A | 50% Glycol solution |
| 32000 | 30000 | 6000 (6pcs) | 10000 (5pcs) | R410A | 50% Glycol solution |
| 24000 | 22000 | 4000 (4pcs) | 8000 (4pcs) | R410A | 50% Glycol solution |
| 32000 | 30000 | 6000 (6pcs) | 10000 (5pcs) | R410A | 50% Glycol solution |

• Fine Control of Electronic Expansion Valve

By precisely modulating the refrigerant flow rate in response to temperature variations between the interior and exterior of the vehicle, we achieve optimal energy conservation

- **Fan Noise Reduction**

Utilizing advanced evaporator and condenser fan motor and blade design, we've developed fans that operate quietly, thereby diminishing noise and enhancing comfort levels.

- **Strict Environmental Protection Requirements**

All components are meticulously selected in accordance with stringent environmental protection criteria and undergo rigorous testing that surpasses industry environmental standards.

- **Low Voltage Power Supply Protection Technology**

The DC-DC module ensures reliable operation even at 65°C by transforming the vehicle's high-voltage power supply into a low-voltage one, safeguarding against over-voltage, over-current, and short-circuit conditions.

- **All DC Variable-Frequency Technology**

The system's weight has been significantly reduced, with the compressor now weighing just 7.5 kg and the frequency converter down from 44 kg to 15 kg, resulting in a more than 30% decrease in the overall weight of the air conditioning system compared to traditional AC products.