Variable Speed Electric Compressor - An Innovation of New Electric

Vehicle Air Conditioner

When it comes to electric vehicles, interior air conditioning is a tricky problem. The use of a Guchen EAC variable speed electric compressor is an ideal option.

Guchen EAC combines the electric motor, control technology and compressor unit into an integrated compact system. They can operate on both 48 volts and high voltage (HV) systems. The use of conventional chemical solutions as refrigerants is highly efficient, reducing pollutant emissions by up to four grams per kilometer. Furthermore, thanks to the <u>electric scroll</u> compressor, it delivers the refrigerant evenly and ensures silent operation.

The power battery of the BEVs allows the variable speed electric scroll compressor with higher efficiency & integration. Guchen EAC Electric compressors are with hermetic structures. The electric drive and the scroll pump body are installed in a casing, compact in structure, convenient in installation and reliable in efficiency. It is widely used in the air conditioning system of electric vehicles. Under fixed displacement, its cooling efficiency are the best among all other models, with a much lower noise level.



In the future, increasing pressure is the main development direction of <u>variable-speed electric</u> <u>compressors</u>. At the same time, the electric scroll compressor has more components, such as electric drive motor and inverter, than the traditional compressor, which improves the value of the vehicle.



In the future, electric compressors in BEVs can also be used as heat pumps (heat pump compressors). If carbon dioxide is used as a refrigerant, the interior space can be effectively heated under the premise of basically maintaining the original driving distance of the car. Therefore, <u>Guchen EAC compressors</u> will become a key technology serving electric vehicles.

The high-efficiency electric air conditioner heat pump compressor technology for automobiles will effectively solve the heating function of automobile air conditioners in the case of new energy vehicles without engine waste heat. This technology will greatly improve the energy efficiency ratio. Its essence is the transportation of heat between different spaces, which can realize the functions of cooling and heating. The reversing four-way valve and the two-way expansion valve are the key components of the integration of cold and heat. The 2013 Renault Zoe pure electric vehicle and the Nissan LEAF after 2013 use a heat pump air conditioning system from Denso, Japan. In addition, Honda EV electric vehicles and BMW I3 pure electric vehicles also use heat pump air conditioning systems. Are you interested in <u>800v compressor</u>? Please click the link to see its details.



320V Electric Car A/C Compressor



Model	DQ20A320
Refrigerant	R134a
Displacement (cc/rev)	20cc
Rated voltage / Power type	DC320aV / DC 230V~450V
Speed range (rpm)	1000~6500
Communication protocal	CAN 2.0b or PWM
Operation Environment Temperature (°C)	-40~90
Oil Type	RL68H/120ml
Rated cooling Capacity (W)	1700
Rated power (W)	1140



Author: Guchen EAC

Guchen EAC supplies the best solutions for electric AC compressors requirements. High voltage electric compressor and low voltage compressor are on hot sale at Guchen EAC. Top
Manufacturer of Electric Compressor for All kinds of Electric Vehicle Air Conditioning DC320V, DC350V, DC380V high voltage electric air conditioning compressor sold at ex-factory prices. we have been in manufacturing and exporting of compressor for more than 20 years.

