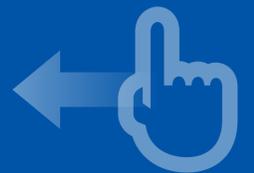


ESBG27

Car Air-Conditioning Electric Compressor with Gas-injection Function

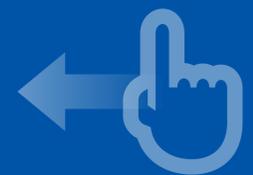




Used on the Toyota Prius PHV

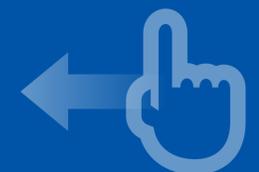
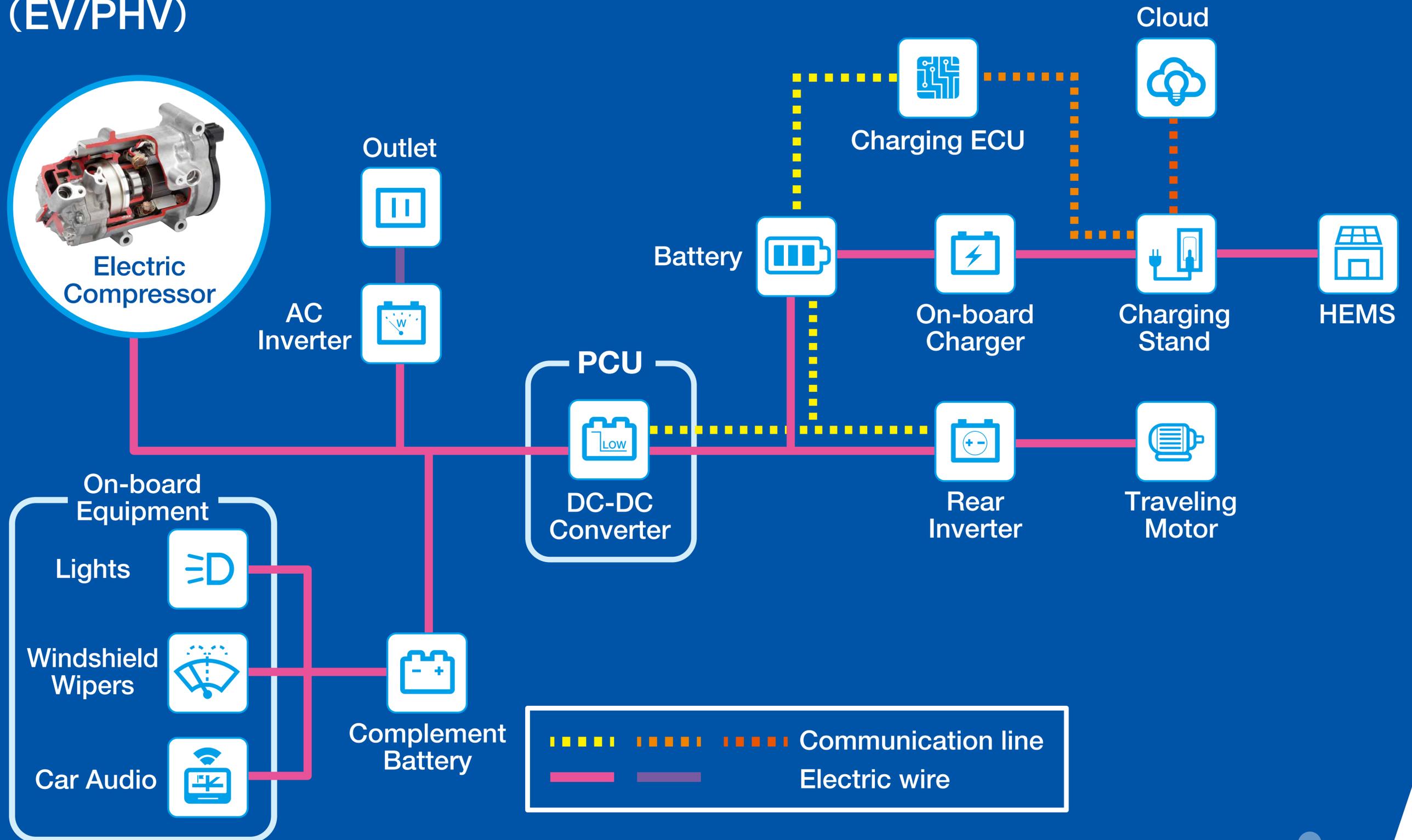


ESBG27



System Diagram

(EV/PHV)

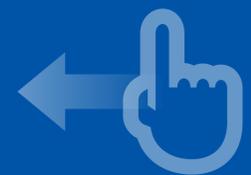


ESBG27





- World's first mass production vehicle electric compressor with gas injection function.
- Heat pump heating is possible without operating the engine even when below the freezing point, extending electric vehicle cruising range.

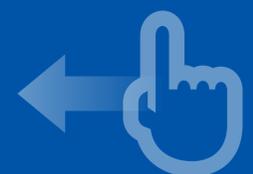




Specifications

Size (diameter×length)	$\phi 109 \times 226\text{mm}$
Weight	5.5kg
Discharge capacity	27cc

ESBG27





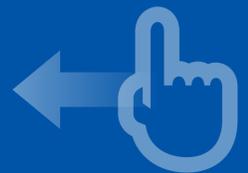
Even Below the Freezing Point

Heat Pump Heating is Possible

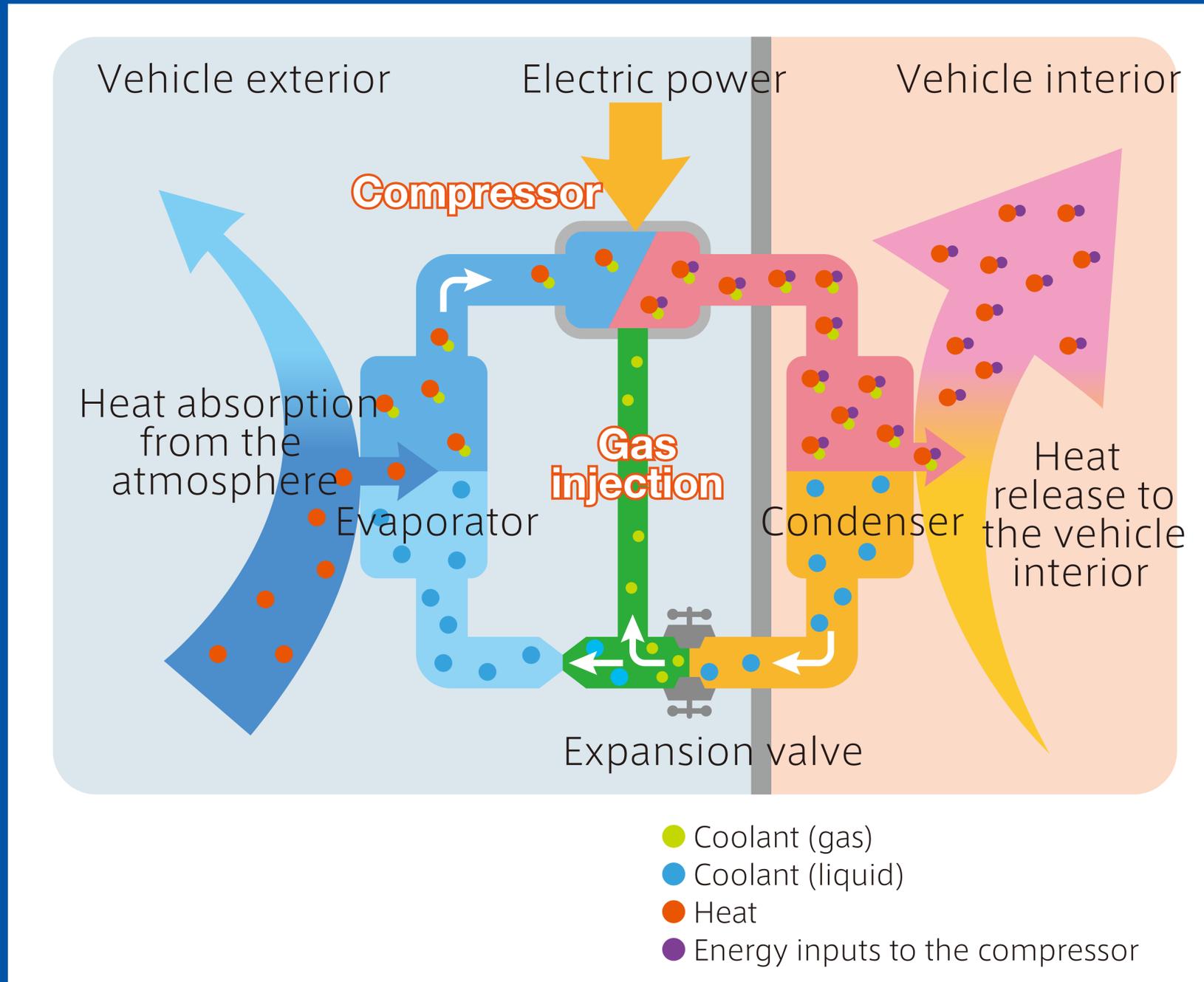


- The heating efficiency of heat pump heating decreases when the temperature is low, but the gas injection function expands the heat pump heating use range.

ESBG27



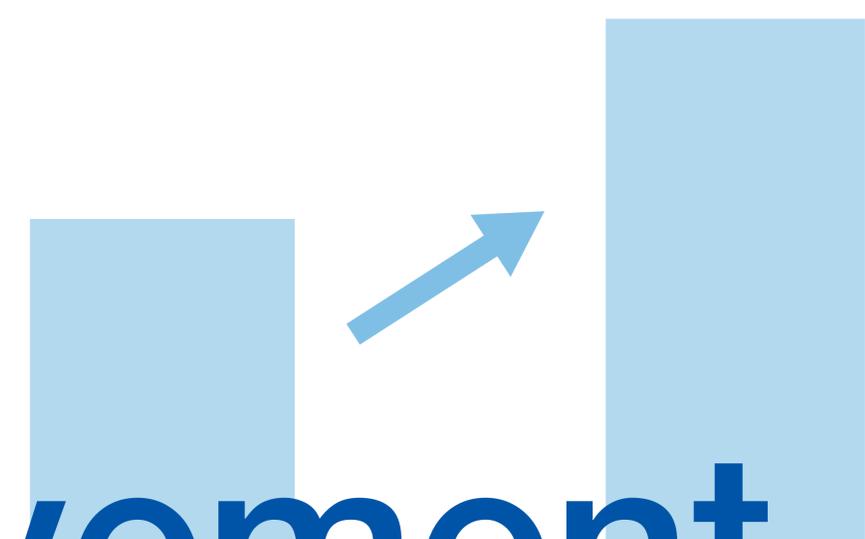
Explanation drawing of Heat Pump Heating with Gas Injection Function





Approximately

30% improvement

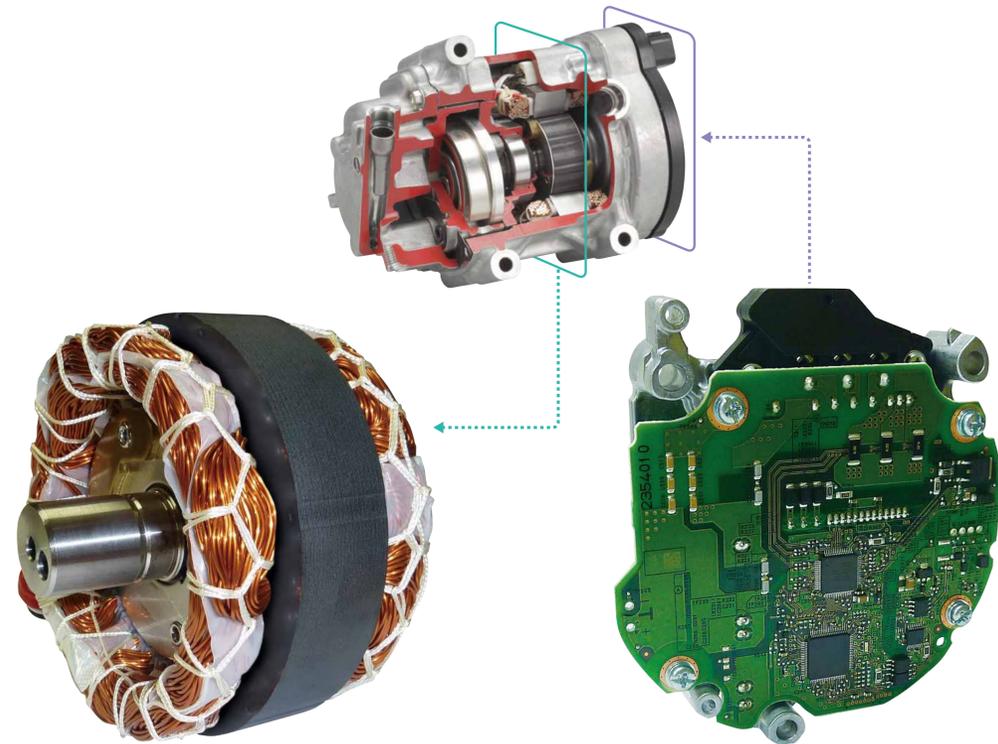
A bar chart with two light blue bars of increasing height from left to right. A blue arrow points from the top of the first bar to the top of the second bar, indicating an upward trend or improvement.

- By optimizing the injection design for automobiles, heating capacity at cold temperatures was improved by approximately 30% from normal heat pump heating.

ESBG27



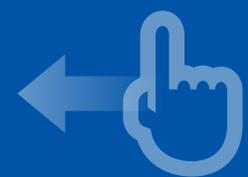
Toyota Industries Functional Parts used



Motor for electric compressor

Inverter for electric compressor

- All of the functional parts of the Toyota Industries electric compressor were developed and are manufactured in-house, responding to the diverse needs of customers.



Extensive Compressor Lineup of Toyota Industries

High Efficient Fixed Displacement Compressor 10SRE13



■ Specifications

Size(diameter×length) : $\phi 92 \times 180$ mm

Weight : 4.0kg

Discharge capacity : 125cc

Installed in : SUZUKI SX4
FORD KA etc.

New Scroll Type Fixed Displacement Compressor SCSE06



■ Specifications

Size(diameter×length) : $\phi 104 \times 167$ mm

Weight : 4.0kg

Discharge capacity : 60cc

Installed in : DAIHATSU MOVE,
GM SPARK etc.

High Efficient Variable Displacement Compressor 6SES14



■ Specifications

Size(diameter×length) : $\phi 112 \times 195$ mm

Weight : 4.3kg

Discharge capacity : 0~141cc

Installed in : TOYOTA COROLLA,
VW Golf, Audi A6,
Mercedes-Benz A-Class
etc.

High Efficient Electric Compressor ESB27



■ Specifications

Size(diameter×length) : $\phi 109 \times 198$ mm

Weight : 5.2kg

Discharge capacity : 27cc

Installed in : TOYOTA CAMRY,
NISSAN LEAF etc.

ESBG27

