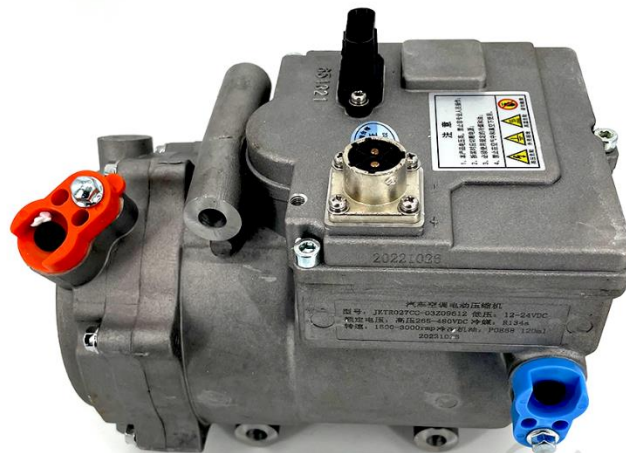




## 144 Volt A/C Compressor Kit



### Overview

The CanEV 144 Volt A/C Compressor Kit provides the necessary components to replace the traditional AC pump of an ICE vehicle. The kit comes with all the parts needed to complete the project including pump, controller, contactor and wiring harness.

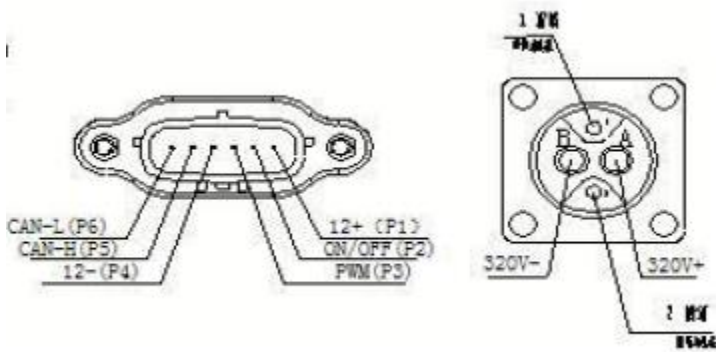
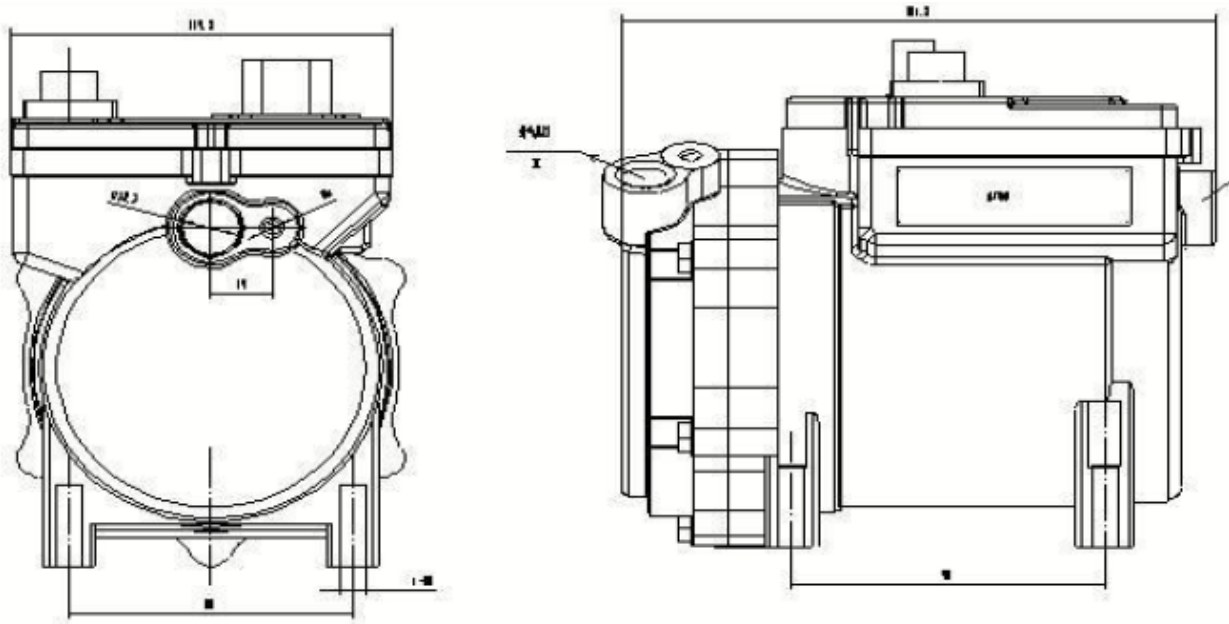
#### Quick Specs

|                          |                                    |
|--------------------------|------------------------------------|
| Compressor Type:         | Horizontal Scroll Compressor       |
| Min / Max Voltage Range: | 130 ~ 190 Volts DC                 |
| Refrigerant Type:        | R134a                              |
| Pump Weight:             | 6.1 kg                             |
| Pump Dimensions:         | 161.5mm (L) X 98mm (W) X 155mm (H) |

#### Kit Contents

- Compressor Pump
- Controller
- Contactor
- Wiring Harness

# Installation Requirements – 144V A/C Compressor Kit



108V AC Compressor Kit (90-130V)

144V AC Compressor Kit (120-180V)

400V AC Compressor Kit (260-450V)

## Precautions:

1. The compressor must not fall to the ground or be affected by it during transportation.
2. The compressor must be installed in the specified direction. The lubricating oil in the compressor must not leak during installation. It is recommended to install vibration isolators between the compressor and the mounting bracket.
4. After removing the compressor suction and discharge pressure plate and plug, it should be within 10 minutes. Connect the compressor to the system and draw a vacuum fill with 450-500g R134A.

# Specifications - 144V A/C Compressor

|                                       |                     |  |
|---------------------------------------|---------------------|--|
| Compressor type                       |                     | DLCP144-27Y3-2a                                    |
| Compressor mode                       |                     | Semi enclosed horizontal scroll compressor         |
| Using refrigerant                     |                     | R134a  |
| Exhaust volume                        |                     | 27cm <sup>3</sup> /rev                             |
| Driver                                |                     | Integrated type                                    |
| Motor cooling                         |                     | Suction refrigerant cooling                        |
| Common speed range                    |                     | 1500--4000rpm                                      |
| Maximum permissible rotational speed  |                     | -  |
| Evaporation temperature range         |                     | -10~15.6°C   |
| Condensation temperature range        |                     | 26.7~65.6°C  |
| pressurization                        | Seal pressure       | 30bar  |
|                                       | Damage pressure     | The suction side 5.2MPa<br>The exhaust side 8.3MPa |
| Pressure relief valve                 | Pressure relief     | 4.00.4MPa  |
|                                       | Recovery pressure   | 3.25MPa  |
| The amount of leakage of refrigerant  |                     | <14g/a   |
| Lubricating oil / oil                 |                     | POE-68/120ml                                       |
| Appearance                            |                     | Aluminum alloy surface shot peening                |
| Total mass (oil)                      |                     | 6.1kg(Containing refrigerant oil)                  |
| Installation method                   |                     | Through 3 holes on the bracket.                    |
| Installation dimensions               |                     | 132 X 82   |
| The suction pipe interface diameter   |                     | 18.3mm   |
| Exhaust pipe interface inner diameter |                     | 15.5mm   |
| Protection level                      |                     | IP67   |
| Electric parameter performance        | Motor type          | Permanent magnet synchronous motor                 |
|                                       | Voltage resistance  | 2000VAC, no abnormal after 1 minutes.              |
|                                       | Insulation property | 500VAC, insulation resistance >50M (20)            |

## Specifications - 144V A/C Compressor (cont.)

| Item                     |                                     | Specifications   |
|--------------------------|-------------------------------------|--|
| Model                    |                                     | Integral type DLCT144-1.6  |
| Cooling mode             |                                     | Compressor suction cooling   |
| Speed                    | Range                               | 4000r/min  |
|                          | Regulation speed                    | 1000r/min /s   |
|                          | Time of reaching Maximum speed      | within 5 seconds after starting  |
| Waterproof               |                                     | IP67   |
| Control mode             |                                     | Sine wave control  |
| Operating voltage range  |                                     | 130V-190   |
| Withstand voltage range  |                                     | Less than 200V   |
| Under voltage protection |                                     | 128V   |
| Under pressure recovery  |                                     | 130V   |
| Over voltage protection  |                                     | 190V   |
| Over voltage recovery    |                                     | 188V   |
| Working current          | Normal working maximum current      | 15A  |
|                          | Overload operation                  | The driver detects the load greater than 15A, and the compressor will be shut down |
|                          | Motor minimum operating speed       | When Motor speed is less than 1000 rpm, the compressor will be shut down           |
| Using environment        | Storage temperature                 | -20 Degree ~65 Degree  |
|                          | Using temperature                   | -10 Degree ~ 65 Degree   |
|                          | Drive belt work surface temperature | 30 degrees higher than the ambient temperature                                     |
| Insulation               |                                     | More than 50M  |