

Automotive HVAC Actuator

This actuator controls air dampers and deflectors in automotive HVAC systems. It manages fresh air, mode, and temperature within the vehicle's air conditioning.



ADDITIONAL IMAGES



Overview

Automotive HVAC Actuator Solutions

These versatile actuators are designed for precise control of air dampers and deflectors within automotive air conditioning systems, managing fresh air intake, mode selection, and temperature regulation. Available in both DC and stepping motor configurations, they offer reliable performance for complex climate control requirements. The compact design ensures easy integration into modern vehicle HVAC modules while maintaining high accuracy and low noise operation.

Key Performance Metrics

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40 dB

Maximum Noise Level

110 N.cm

Rated Torque

0.05 °

Step Angle

General Specifications

Primary Applications

- Fresh air control
- Mode switching
- Temperature regulation

Driving Modes

DC Motor, Step Motor

DC Motor Actuator Technical Data

产品特点 FEATURES of DC motor actuator

- | | |
|--|--|
| 01 工作电压:DC12V DC24V
Operating voltage: DC12V DC24V | 04 反馈电阻分为电位器及碳膜电阻
Feedback resistance is divided into potentiometer and carbon film resistance |
| 02 停电位置角度精度:±2°
Power off position angle accuracy: ± 2 ° | 05 噪音:≤40dB
Noise: ≤ 40dB |
| 03 反馈电阻线性度: ±1%, ±2%
Feedback resistance linearity: ± 1%, ± 2% | 06 驱动模式: 直流电机、步进电机
Driving mode: DC motor, step motor |

Detailed features for the DC motor variant, including feedback resistance linearity and operating voltage options.

Feedback Resistance Types

- Potentiometer
- Carbon film resistance

Operating Voltage	DC 12V, DC 24V
Power-off Position Accuracy	±2°
Feedback Resistance Linearity	±1% to ±2%

Stepping Motor Actuator Technical Data

产品特点 FEATURES of stepping motor actuator

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|--|---|
| 01 额定电压:12V/24V
Rated voltage: 12V / 24V | 06 步进角:0.05°
Step angle: 0.05 ° |
| 02 额定频率:200Hz
Rated frequency: 200Hz | 07 输出轴旋转步数:7200
Output shaft rotation steps: 7200 |
| 03 额定电流:≤200mA
Rated current: ≤ 200mA | 08 齿轮间隙:<2°
Gear clearance: < 2 ° |
| 04 额定牵出力矩:≥110N.cm
Rated torque: ≥ 110n.cm | 09 供给电压:8~16V
Supply voltage: 8 ~ 16V |
| 05 最大牵出力矩:+23°C, 16V, fN Mmax , ≤260N.cm
Maximal torque:+23°C, 16V, fN Mmax , ≤260N.cm | 10 噪音:≤40dB
Noise: ≤ 40dB |

Technical parameters for the stepping motor variant, highlighting torque, frequency, and step precision.

Rated Voltage	12V / 24V
Supply Voltage Range	8V ~ 16V
Rated Frequency	200 Hz
Rated Current	d200mA
Maximal Torque (+23°C, 16V)	d260N.cm
Output Shaft Rotation	7200 steps
Gear Clearance	<2°