

실험적 방법을 통한 에어컨 실내기의 소음원 검출에 관한 연구

A Study on Noise Identification of Indoor Air-conditioner Using Experimental Methods

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ABSTRACT

An air-conditioner has various noise sources such as a fan noise, a motor noise, and a vibration induced noise. To reduce these noise effectively, noise sources must be identified. Especially in this paper, the structure borne sound radiated from the motor bracket of the indoor air-conditioner is considered. To do this, the operational deflection shape, which is used for understanding of the behavior of the motor bracket at a particular frequency, is obtained and compared with the sound intensity, which is used for the noise identification. Through this study, the noise sources of indoor air-conditioner are defined and the effective noise reduction method is proposed.

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