

## **Basic Characteristics of Rail Brake Systems Using Linear Motor Technology**

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The eddy current rail brake system is effective for the stabilization of the braking ability of the train, because braking force of the system does not depend on adhesion of the wheel and the rail. But when the existing rail brake system using DC electromagnet is used, it causes the rail temperature rise and there is a possibility of bending of the rail. So it isn't in practical use in Japan. We have applied AC electromagnet (the same as linear induction motor) to the rail brake system, which can reduce the rail temperature rise. We investigated the basic characteristics of this new rail brake system by using the rotary type test machine.