

Energy-Saving Effect of High Efficient Traction Motors in Electric Train

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Most of the traction motors of recent electric trains are composed of induction motors. High efficient induction motors can help railway operators reduce their electricity cost. However, the operators tend to focus on the product cost rather than the electricity cost. Consequently, there is some room to improve the efficiency of them. In this paper, the author compares a high efficient motor with a low cost one in a standard commuter train. The result indicates that the loss of the high efficient motor is lower by 28% than that of the low-cost one.