
ELECTRIC MOTORS AND TRANSFORMERS

Two new mandatory sections state that electrical transformers and electric motors must meet the minimum efficiency requirements of newly added tables. There is one table for transformers and four motor efficiency tables, separated by motor type (Table 10-3). Efficiencies must be tested and rated in accordance with the procedure in DOE 10 CFR 431, and ratings data are usually furnished by the motor manufacturer. [Ref. C405.8] Several exemptions for transformers exist including special-purpose transformers and those that meet exclusions in federal regulations. [Ref. C405.7]

Lighting zone	Description
Table C405.7	Low-voltage dry-type distribution transformers
Table C405.8(1)	60 Hz NEMA general purpose (subtype I) motors
Table C405.8(2)	General purpose (subtype II) and Design B > 200 hp motors
Table C405.8(3)	Polyphase motors
Table C405.8(4)	Capacitor-start capacitor-run and induction-run motors

ELEVATORS, ESCALATORS AND MOVING WALKS

Elevators, escalators and moving walks are regulated through a new section in the 2015 IECC. Luminaires in each elevator cab shall be not less than 35 lumens per watt, and ventilation fans in elevators that do not have their own air-conditioning system must not consume more than 1/3 watt per cubic foot per minute. Controls must be provided that will de-energize ventilation fans and lighting systems when the elevator is stopped, unoccupied and with its doors closed for over 15 minutes. [Ref. C405.9.1]

Escalators and moving walks are required to be equipped with automatic controls configured to reduce speed to a minimum when not conveying passengers. Reversible escalators or those designed for down operation must have a variable frequency regenerative drive that supplies electrical energy to the building electrical system when the escalator is loaded with passengers whose combined weight exceeds 750 pounds. **[Ref. C405.9.2]**