

Easy

Assistant Engineer (Electrical), Class 2025

Building Department

The AC voltage controllers are used in _____ applications.

A

Power generation

B

Electric heating

Correct

C

Conveyor belt motion

D

Power transmission

Correct Answer: B

Full Detailed Explanation

Concept & Reasoning An AC voltage controller uses bidirectional semiconductor switches such as anti-parallel SCRs or a triac. By controlling the conduction interval, it changes the load rms voltage and therefore load power. Heating and lighting control are common applications; power generation/transmission are not the normal role of such controllers.

How to Solve It in the Exam Variable AC rms voltage at same frequency → heating/lighting control.

Important Exam Point For induction-motor applications, distinguish voltage control from variable-frequency drives.

Related Revision Path This question sits in the revision path Power Electronics → AC Voltage Controllers → Applications .

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