

- 15** Water from a reservoir is fed to the turbine of a hydroelectric system at a rate of  $510\text{ kg s}^{-1}$ . The reservoir is 280 m above the level of the turbine.

The electrical output from the generator driven by the turbine is a current of 205 A at a potential difference of 5800 V.

What is the efficiency of the system?

**A** 8.3%

**B** 12%

**C** 83%

**D** 85%