

- 17** In 'normal driving conditions', an electric car has a range of 150 km. This uses all of the 200 MJ energy stored in its batteries.

With the batteries initially fully charged, the car is driven 100 km in 'normal driving conditions'. The batteries are then recharged from a household electrical supply delivering a constant current of 13.0 A at a potential difference (p.d.) of 230 V.

What is the minimum time required to recharge the batteries?

- A** 0.95 hours
- B** 12.4 hours
- C** 18.6 hours
- D** 27.9 hours

- 18** A fixed amount of gas is reduced in volume at a constant temperature