

**21** A crane is being used to lift containers off a ship. One container has a mass of 14 000 kg and is being lifted vertically with a speed of  $3.2\text{ m s}^{-1}$ .

The electric motor being used to supply the power to lift the container is using a current of 240 A at a potential difference of 2200 V.

What is the efficiency of the system?

**A** 8.1 %

**B** 8.5 %

**C** 48 %

**D** 83 %

**22** Trains supply coal to a power station. The table below gives quantities describing the operation of