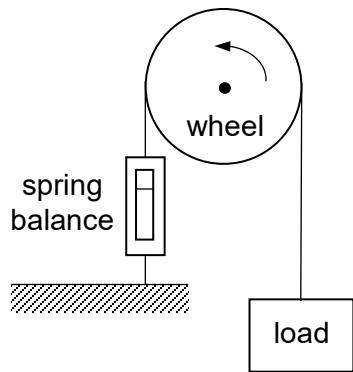


- 6 The diagram shows a wheel of circumference 0.30 m which is driven by an electric motor. A rope is fastened at one end of the spring balance. The rope passes over the wheel and supports a freely hanging load of 100 N. When the wheel makes 50 revolutions per second, the balance reading is constant at 20 N.



The efficiency of the motor is 20%.

What is the electrical power supplied to the motor?

A 240 W

B 360 W

C 6000 W

D 9000 W