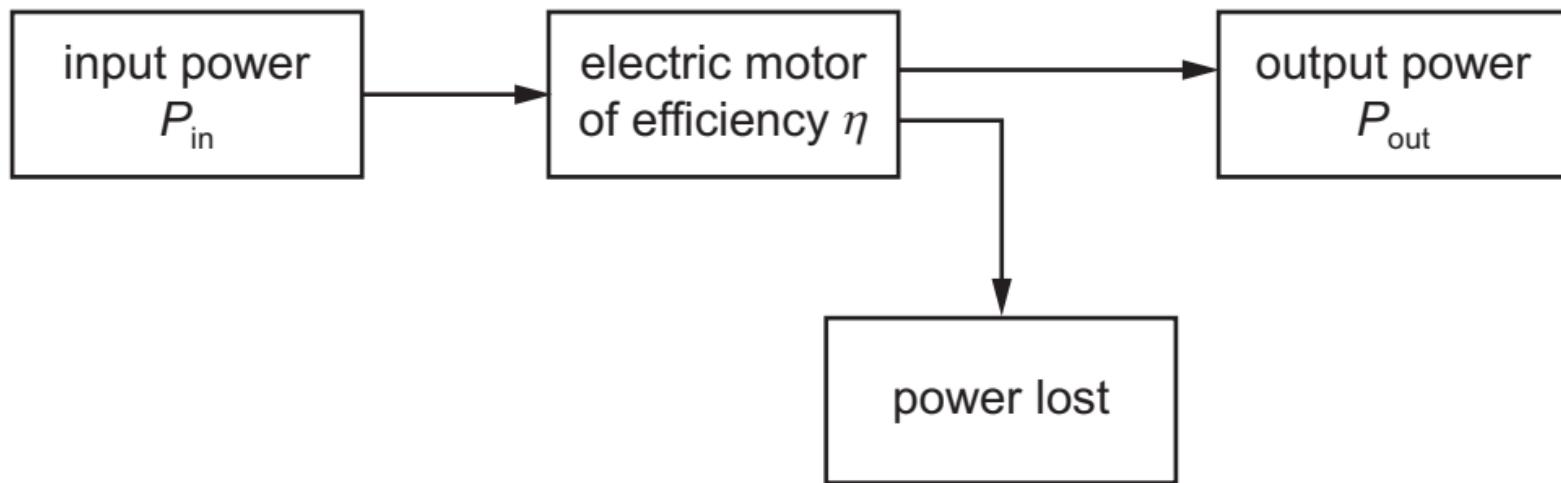**16** An electric motor has an input power P_{in}, useful output power P_{out} and efficiency η.

| input power P_{in} | → | electric motor of efficiency η | → | output power P_{out} |

power lost

How much power is lost by the motor?

A ηP_{in} **B** $\left(\dfrac{1}{\eta}-1\right)P_{in}$ **C** ηP_{out} **D** $\left(\dfrac{1}{\eta}-1\right)P_{out}$