

32 A power cable has length 2000 m. The cable is made of twelve parallel strands of copper wire, each with diameter 0.51 mm.

What is the resistance of the cable? (resistivity of copper = $1.7 \times 10^{-8} \Omega\text{m}$)

A 0.014Ω

B 3.5Ω

C 14Ω

D 166Ω

33 A low voltage supply with an e.m.f. of 20 V and an internal resistance of 1.5Ω is used to supply