Answer on Question #52262-Physics-Other

A 28 horse power (hp) electric motor draws a current of 16 A when connected to the mains. Calculate the voltage requirement to drive the motor (1 hp = 746 W)

1.3kV

2.1kV

3.3kV

1.7kV

Solution

$$U = \frac{P}{I} = \frac{28 \cdot 746\ \text{W}}{16\ \text{A}} = 1.3kV.$$

Answer: 1.3kV.

12 Which of these is a suitable rating for domestic power cable?

1.5 mm squared

2.5 mm squared

4.1 6mm squared

1.5 mm squared

Answer: 1.5 mm squared.

13 Which of these is NOT applicable?

The rating of flex must be equal to fuse protecting it

The rating of flex must be less than the fuse protecting it

The rating of flex must be greater than the fuse protecting it

None of the above

Answer: The rating of flex must be greater than the fuse protecting it.

14 the rating of a cable in terms of its cross-sectional area is an expression of its ----------

current-carrying capacity

ductility

eletrical insulating capacity

earthing capacity

Answer: current-carrying capacity.

15 Which of these is the correct color code for flexes?

green for live

red for neutral

black for earth

red for live

Answer: red for live.