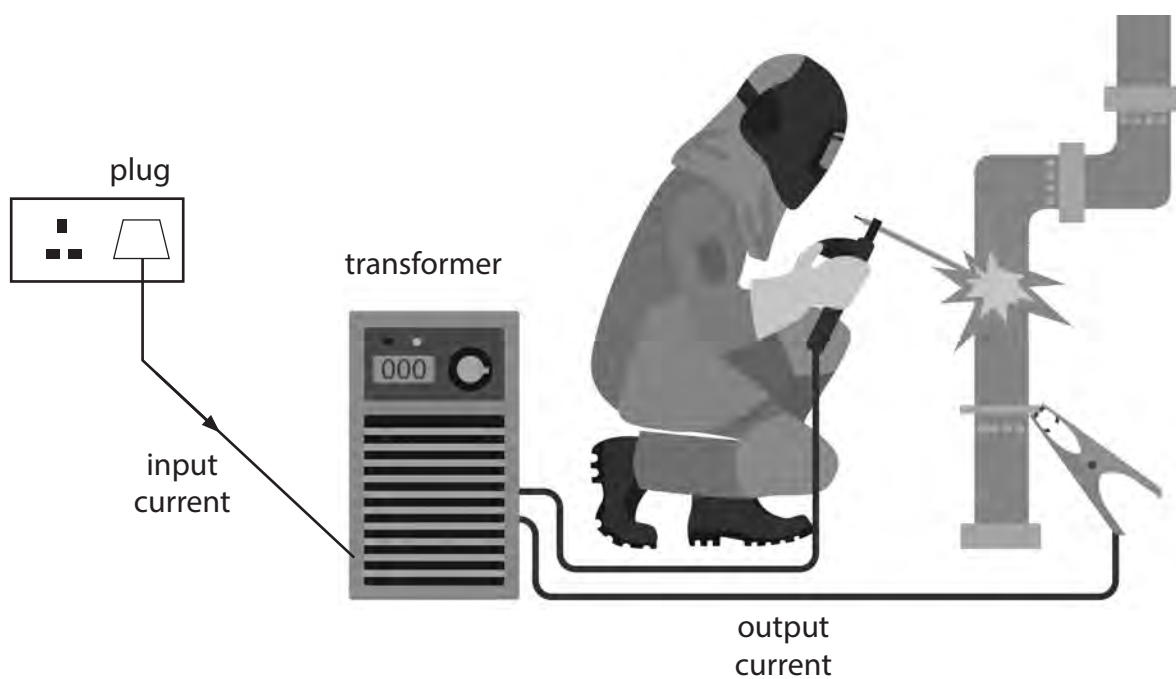


- 8 Welding is a process where pieces of metal are melted and then joined together.

The diagram shows apparatus used for welding.



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The welding apparatus uses the transformer to decrease the voltage from 230V.

- (a) State the name of this type of transformer.

(1)

- (b) State the formula linking the turns ratio, the input voltage and the output voltage for a transformer.

(1)



(c) The table gives some information about the transformer.

input voltage in V	230
number of turns on input coil	16
number of turns on output coil	4
input current in A	11

- (i) Use information from the table to calculate the output current of the transformer.  
Assume that the transformer is 100% efficient.

(5)

current = ..... A

- (ii) A fuse is installed in the plug which supplies the input current.

Which fuse should be used in this plug?

(1)

- ☐ **A** 3 A  
☐ **B** 5 A  
☐ **C** 10 A  
☐ **D** 13 A

(Total for Question 8 = 8 marks)

**TOTAL FOR PAPER = 70 MARKS**

