

A level Physics B

H557/01 Fundamentals of physics

Question Set 5

1. (a) The main bolt of a lightning strike flows through air already ionised by a “leader” strike.

State why air needs to be ionised to carry an electric current.

[1]

- (b) The current in a main strike is 30 kA and lasts for 250 μs .

Show that the charge delivered by this strike is less than 8 C.

[2]

Total Marks for Question Set: 3

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