Answer on Question 66100, Physics, Electric Circuits

Question:

A current of 15 A flows through a circuit for 200 s. What charge does it have?

Solution:

By the definition of the electric current we have:

$$I = \frac{\Delta Q}{\Delta t}.$$

Then, from this formula we can find the charge that passes through the circuit:

$$\Delta Q = I \cdot \Delta t = 15\ A \cdot 200\ s = 3000\ C.$$

Answer:

$\Delta Q = 3000\ C.$