2.0 ELKTRISK STRØMKRETS

2.1 ELEKTRISK STRØM

2.1.1

$$Q = I \cdot t$$

$$I = \frac{Q}{t} = \frac{400\,C}{1 \cdot 60\,s} = \underline{\underline{6{,}67\,A}}$$

2.1.2

$$I = \frac{Q}{t} = \frac{200\,C}{1 \cdot 60\,s + 26\,s} = \underline{\underline{2{,}33\,A}}$$

2.1.3

$$J = \frac{I}{A} = \frac{10\,A}{1{,}5\,mm^2} = \underline{\underline{6{,}67\ A/mm^2}}$$

2.1.4

$$I = J \cdot A = 5\ A/mm^2 \cdot 1{,}5\,mm^2 = \underline{\underline{7{,}5\,A}}$$

2.1.8

$$Q = I \cdot t = 8A \cdot 5s = \underline{\underline{40\,C}}$$

2.1.9

$$t = \frac{Q}{I} = \frac{110\,C}{20\,A} = \underline{\underline{5{,}5\,s}}$$

2.1.10

$$I = \frac{Q}{t} = \frac{600\,C}{2 \cdot 60s} = \underline{\underline{5\,A}} \qquad A = \frac{I}{J} = \frac{5}{2} = \underline{\underline{2{,}5\,mm^2}}$$

2.1.11

$$I = J \cdot A = 18\ A/mm^2 \cdot 2{,}5\,mm^2 = \underline{\underline{45A}}$$

$$Q = I \cdot t = 45A \cdot \left(\tfrac{1}{2} \cdot 60s\right) = \underline{\underline{1350\,C}}$$