

① Bestem I_B

$$I_B = \frac{P}{U} = \frac{2100}{230} = 9,1A$$

② Valg af sikring

$$I_B \leq I_n = 9,1A \leq 10A$$

③ Valg af graf b.

1 poler + N

④ Valg af S_1

$$I_n \leq I_z$$

Billede: 8/9 Ref: B2 Tabel: A.52.3

Tabel B.52.1 $\Rightarrow$ tabel B.52.3 Kol: 5

$$S_1 = 1,5 \text{ mm}^2 \quad I_{z_1} = 22 \text{ A}$$

⑤ Valg af S_2 (tilledning)

Tabel 46

$$S_2 = 1^\circ \quad I_{Z_2} = 10A$$

⑥ Kontrol af OB = OverstrømBeskyttelse.

$$S_1 = I_B \leq I_n \leq I_{Z_1} \Rightarrow 9,1A \leq 10A \leq 22A$$

$$S_2 = I_B \leq I_n \leq I_{Z_2} \Rightarrow 9,1A \leq 10A \leq 10A$$

⑦ Kontrol a f $\Delta U = \text{spendings fald}$.

$$R_{l_1} = \frac{I_1 \times L \times 2}{S_1 / q_1} = \frac{0,0175 \times 19 \times 2}{1,5^2} = 0,443 \Omega$$

$$R_{l_2} = \frac{I_2 \times L \times 2}{S_2 / q_2} = \frac{0,0175 \times 2 \times 2}{1} = 0,07 \Omega$$

$$R_{l_{\text{tot}}} = R_{l_1} + R_{l_2} = 0,443 + 0,07 = 0,513 \Omega$$

$$\Delta U = I_B \times R_{l_{\text{tot}}} \times 1,25 = 9,1 \times 0,513 \times 1,25 = 5,8 \text{ V}$$

$$\Delta U, \% = \frac{\Delta U \times 100}{U} = \frac{5,8 \times 100}{230} = 2,54\%$$