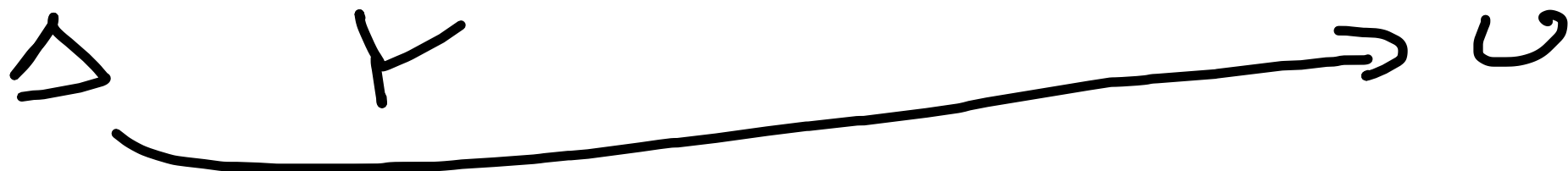


400V / 630V

~~400V~~ 400V



Δ !

$$\textcircled{97} / 56 \text{ A} \Rightarrow 97 \text{ A} = \bar{I}_n$$

$$\begin{aligned} P_{\text{an}} &= \sqrt{3} U \bar{I} \cos \varphi \\ &= \sqrt{3} \times 400 \times 97 \times 0,87 \\ &= 58,5 \text{ kW} \end{aligned}$$

$$P_{ew} = \eta P_{an} = 58,5 \times 0,94$$

$$= 55 \text{ kW}$$

$$Q_{22} \rightarrow 50 \text{ H}_2 \rightarrow \begin{array}{r} 3000 \\ \hline 1500 \end{array} = n_s$$

$$n_n = 1480 \rightarrow 1000$$

$$P = \frac{f}{n_s} = \frac{50}{\frac{1500}{60}} = \frac{3000}{1500} = 2 \text{ pairs}$$

(4, poles)

$$T_{en} = \frac{P_{en}}{s_n} = \frac{55 \cdot 10^3}{\frac{1480 \times 2\pi}{60}} = 355 \text{ Nm}$$

$$Q_{25} \quad T_{\text{avg}} = 240 \text{ Nm}$$

$$n_{\text{av}} = 1490 \text{ rev}^{-1}$$

$$\begin{aligned} Q_{26} \quad P_{\text{avg}} &= T_{\text{avg}} \times \Omega_{\text{av}} \\ &= 240 \times \frac{1490 \times 2\pi}{60} = 410.3 \text{ kW} \end{aligned}$$

$$Q_{27} \quad T_{\text{apv}} = 140 \text{ Nm}$$

$$n_{\text{pv}} = 1120 \text{ rev}^{-1}$$

$$Q_{28} \quad n_{\text{sp}} = 1125 \text{ rev}^{-1}$$

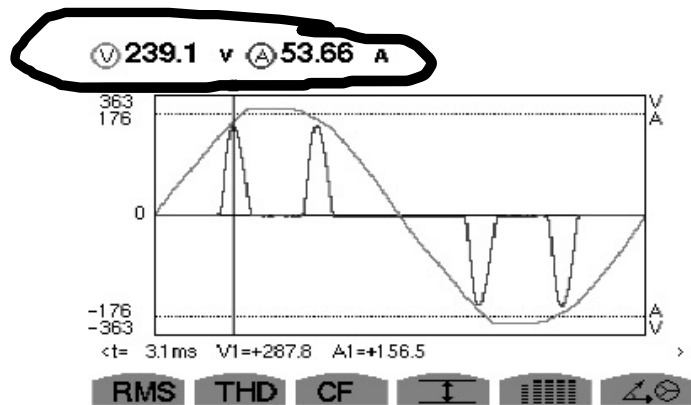
$$f = n_s \times p = \frac{1152}{60} \times 2 = 37,5 \text{ Hz}$$

$$\begin{aligned} \frac{U_{\text{pv}}}{f_{\text{pv}}} &= \frac{U_{\text{av}}}{f_{\text{av}}} \Rightarrow U_{\text{pv}} = \frac{U_{\text{av}}}{f_{\text{av}}} \times f_{\text{pv}} \\ &= \frac{4100}{500} \times 37,5 = 300 \text{ V} \end{aligned}$$

$$Q_{30} = \frac{16,3}{0,92} = 17,7 \text{ kW}$$

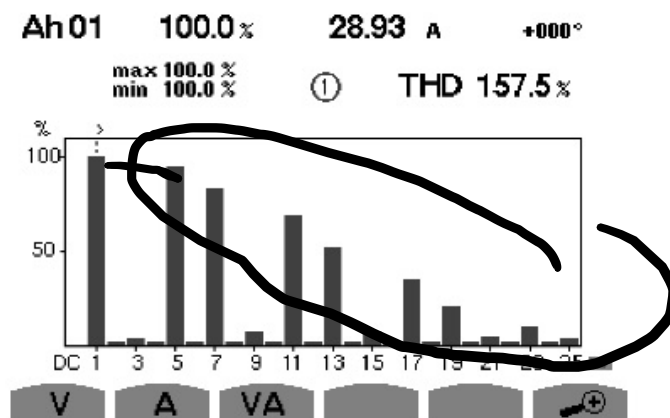
$$\frac{17,7}{40,3} = 0,44 \quad 44\%$$

Q31

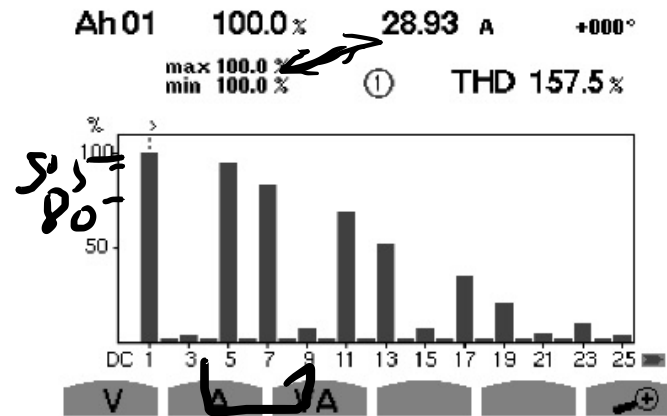


Écran 1

Q32



Q33



5

er

7

250 Hz

$0,95 \times 28,93$

27,8

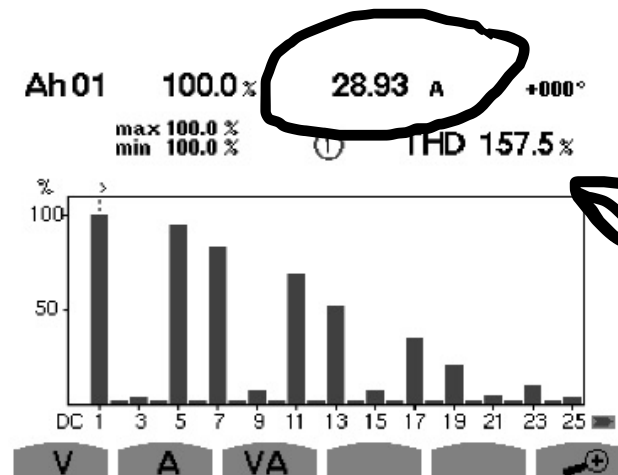
350 Hz

$0,8 \times 28,93$

23 A.

$$T_{HD} = \frac{\sqrt{I^2 - I_1^2}}{I_1}$$

$$= \frac{\sqrt{53,66^2 - 28,93^2}}{28,93}$$



= 1.54
 154%

Q35 F. l'he

Q36

$$S = UI = 239,1 \times 53,16$$

$$= 12,83 \Rightarrow 12,75$$

$$P = S \times PF = 12,83 \times 0,541 = 6,94$$

$\sim 6,9$

W	+6.90k	PF	+0.541
Wh	0000000		
VAR	+ 10.72k	cos ϕ	+0.998
VARh	0000000		
	+0000000	tan ϕ	0.067
VA	12.75k	ϕ_{VA}	004°
VAh	0000000		

Écran 2

637

$$\text{par}_v = 3 \times 6,9$$

= 20,7 kw