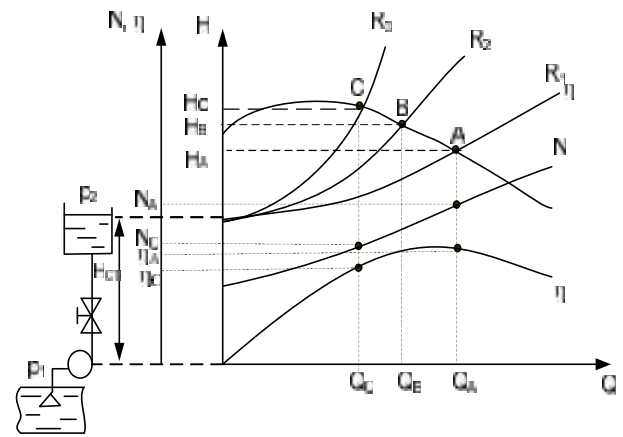


621.398.96

C. . , . .

60%

- 1)
- 2)



. 1.

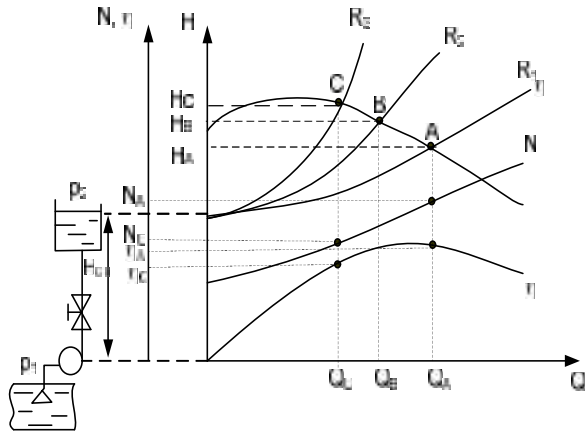
Q , Q .

[3].

- 1)
- 2)
- 3)
- 4)

. 2

$n_1 > n_2 > n_3$.



. 2.

(1,5 ~ 2) : 1.

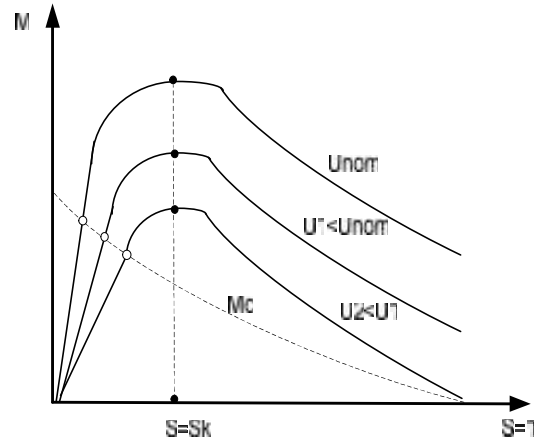
(3 ~ 5) : 1.

Q-H,

[4].

0,4

$$M_{dop} \approx M_{nom} \cdot \sqrt{\frac{\omega}{\omega_{nom}}} \quad (1)$$



. 3.

1)

2)

3)

)

().

[7].

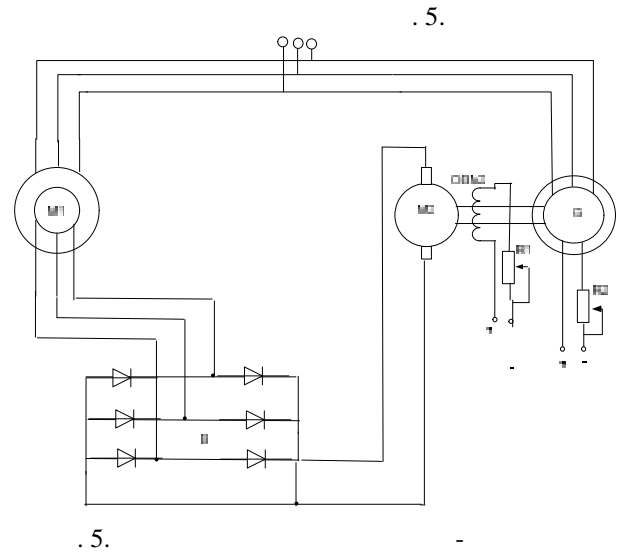
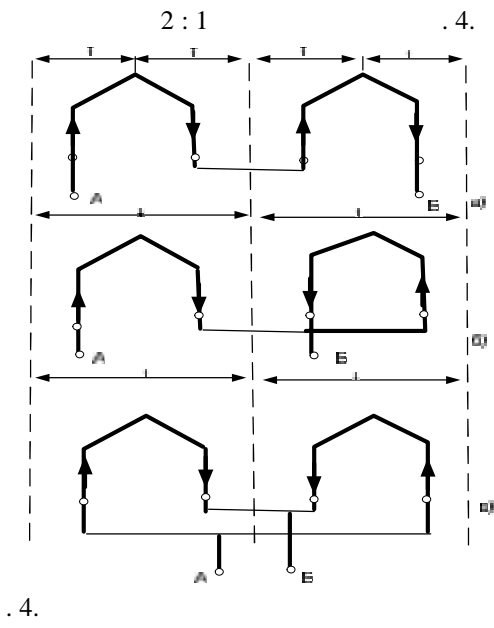
)

$$\omega = \omega_0 \cdot (1-S) = \frac{2\pi f_1 (1-S)}{p} \quad (2)$$

[2].

f_1

s.



2 : 1

D = 2 : 1.

- 0,03,

- 0,05,

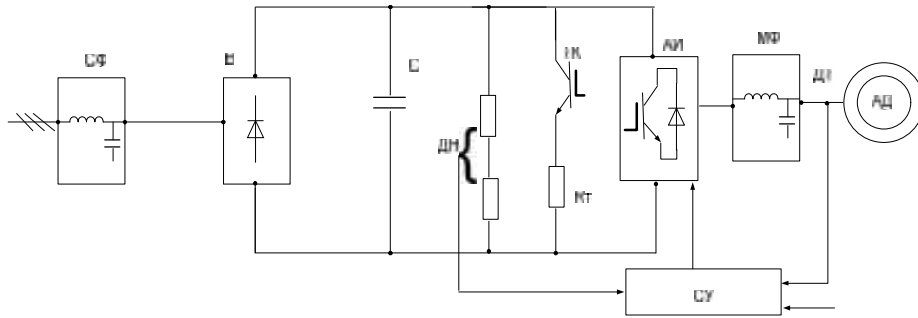
6 : 1 (3000:500 /).

0,82-0,85

0,7-0,75

[7].

[5].



. 6.

. 7.

(U_{irp} = Const, / = 0)
 (U₂ (V = Var, f₂ = 0).

F = 50
 (220),
 (U_{2cp} = Var, f₂ = 0).

(U₁ – Const, F = 0),

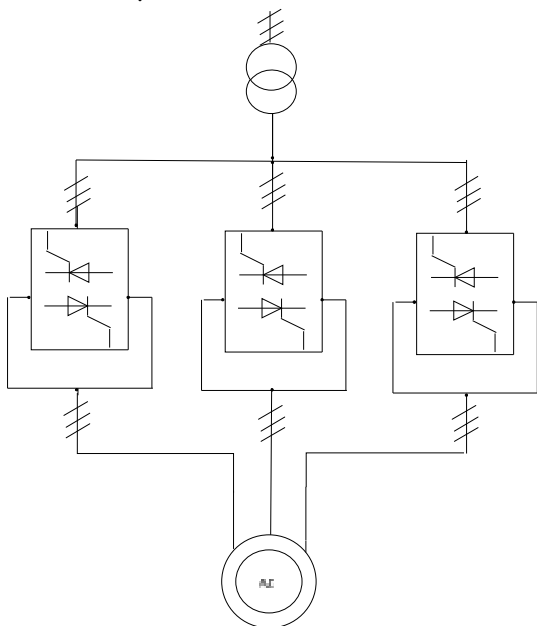
(U₂ = Var, F₂ = VAR).

I . I₁ ; (3)

U . U₁ ; (4)

f₁ = 50
 (220)

(U₂ = Var, f₂ = Var) .



1. . .

2. .- : « » , 2007. – 576 .
 3. .- : « » , 2006. – 265 .
 4. .- : « » , 2005. – 208 .
 5. .- : « » , 2005. – 208 .
 6. .- : « » , 2005. – 208 .
 7. .- : « » , 2005. – 208 .
2005. 12.12.2012
3. .- : « » , 1982.
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5. .- : « » , 2007. – 39 .

RATIONALE OF FREQUENCY CONTROLLERS IN YELEKTROPYVODAH PUMPS

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The article describes the possible regulatory pump drive, identifying weaknesses of these systems and the optimal control system water supply system.

Keywords: energy, speed control, throttling, power semiconductor converters of principle scheme.