

AC/DC – K-A

DC/DC

– K-D

([1].

SM, KN, KR, KL, KP, KD



.1 KD1200 K-A, K-D

.2 50, 50

- K-D 1.

1.

- , K-D.

| | | U , | U , | I . , | - | | |
|--------------------------|----------|---|---|-------|---------|-------------|-------|
| SM20(30)-CL ¹ | 20,30 | ~115; ~220; 24; 27; 48; 60; 110; 220 | 3,3; 5; 9; 12; 15; 24; 27; 48; 60 ² | 6 | 1, 2 | 102 51 19 | 0,465 |
| KN50(60)-CL | 50,60 | | | 8 | 1, 2, 3 | 126 57 22 | 0,62 |
| KR100(150)-CL | 100,150 | | | 20 | 1, 2, 3 | 133 94 37,5 | 0,79 |
| KL300(400)-CL | 300,400 | | | 40 | 1, 2, 3 | 192 102 41 | 1,22 |
| KP600(800)-CL | 600,800 | | | 40 | 1, 2 | 238 128 43 | 1,87 |
| KD900(1200)-CL | 900,1200 | | | 40 | 1, 2 | 280 170 58 | 3,45 |

¹ - ;
² - 3,3...60 .

20 1,2 .

KD1200

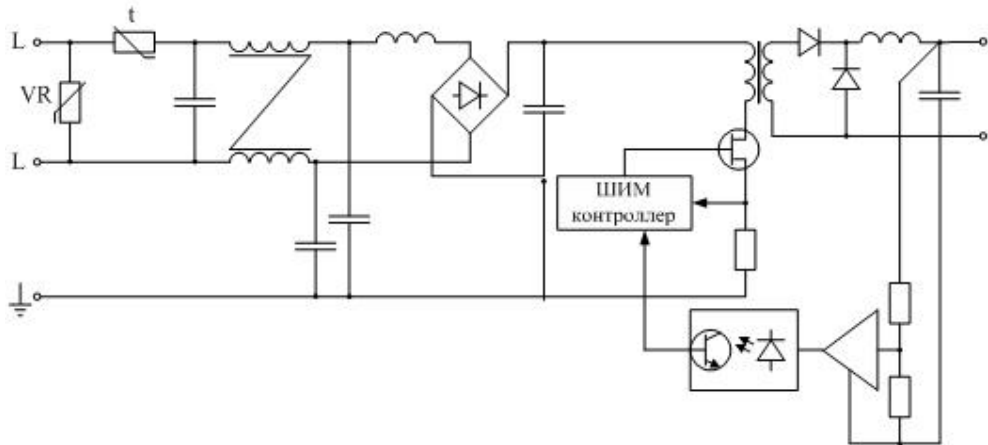
2.

2.

| | | U , | U , | I . , | | | |
|------|------------------|-----|----------|-------|---------|------------|------------|
| 20- | () ¹ | 20 | ~115; | 4 | 1, 2 | 102 51 19 | 0,4 (0,4) |
| 50- | () | 50 | ~220; | 8 | 1, 2, 3 | 126 57 22 | 0,6 (0,55) |
| 100- | () | 100 | 24; 27; | 20 | 1, 2, 3 | 133 94 38 | 0,7 (0,7) |
| 200- | () | 200 | 48; | 40 | 1, 2, 3 | 192 102 41 | 1,5 (1,2) |
| 300- | () | 300 | 60; 110; | 40 | 1, 2, 3 | 192 102 41 | 1,5 (1,2) |
| 600- | () | 600 | 220 | 40 | 1, 2 | 238 128 43 | 2,5 (1,9) |
| 900- | () | 900 | | 40 | 1, 2 | 280 170 58 | 4,3 (3,1) |

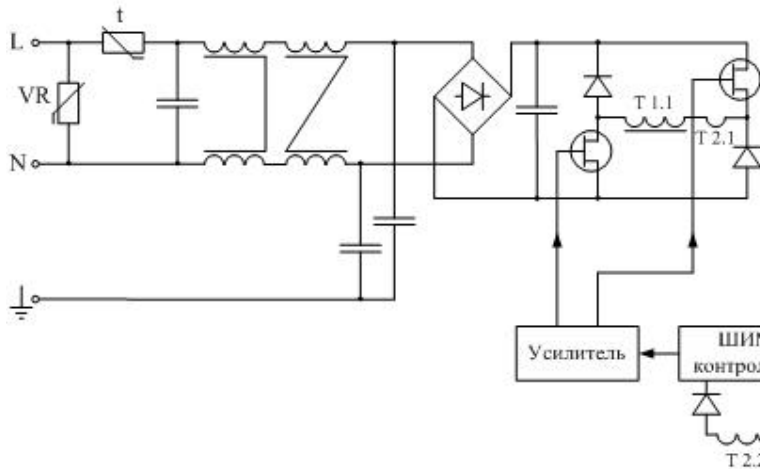
¹ - DC/DC

2 -



3,3...60 .

.3



(.3, 4).
20-60

.4

100-1200

3.

3.

| | U . , I . | 50 | | 125 |
|--|--|------|--|-----|
| | 50 , - AC/DC DC/DC (U = 220) - DC/DC (U = 110) | 1500 | | 500 |

| | | | | | |
|--|-------------------|------------|--|---------------|--------|
| | / . 50 , . | 500 | | | |
| | 500 / , / , / | 20 | | | |
| | U . . , I . . - , | -10 -40 | | +70 +85 | ° ° |
| | =25° - , | | | 93...95 98 | % |
| | =70° - , | 50 100 | | | . |
| | ; | | | | |

| | | | | | |
|---------|-------------------|-----------------------------------|----------------------------|----------------------------|--|
| | | . | . | . | |
| | I I . . , | ~80 ~187 82 175 (126) | ~115 ~220 110 220 | ~138 ~242 160 350 | |
| (AC/DC) | U . . , I . . | 45 | | 440 | |

| | | | | | |
|-------|---|----------|---|-----------|--------|
| | | . | . | . | |
| | I I . . , U U . . , / , 1- 2, 3- / | | | ±2 ±10 | % % |
| | U U . . / | 10 30 | | | % % |
| | I I . . , U U . . , / , 1- 2, 3- / | | | ±3 ±13 | % % |
| (-) | I I . . , U U . . , U . . , I . . | | | 2 85 | % % |

| | | | | | |
|---|-------------------------------|--|--|--|--|
| * | « . » | | | | |
| - | « » 3,5...4,5 40 . | | | | |
| | ±10% U + 1, . - 1. | | | | |
| | 12 200 | | | | |
| | 95° , | | | | |
| | 1,15*U . . . | | | | |
| | 1,05...1,35*I . . . | | | | |

*_

600 -1200

(.5). - , K-D, MAA,

()900 ()600. KD1200 KP800 - , K-D,

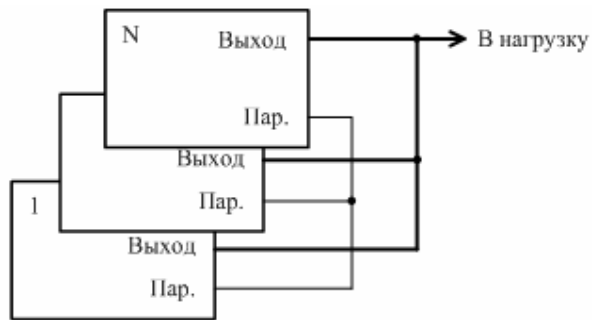


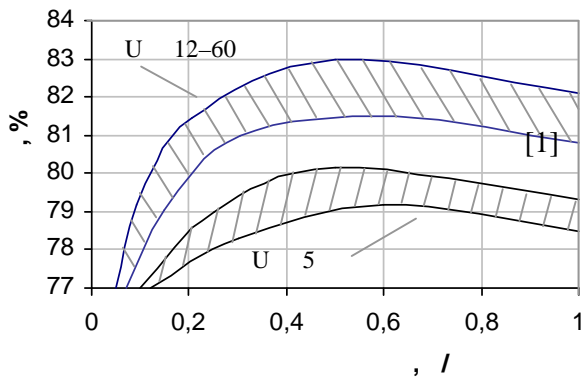
Рис.5 Наравивание мощности (до 10 кВт и болес).

[1]

70 ° - , K-D 85 °
 = (1/ - 1), (1)

.6. KN, ()20
 KR, ()100,150. SM, ()200,300,
 ()50 6%, KL, KP, KD, ()
 ()600, ()900 8%.

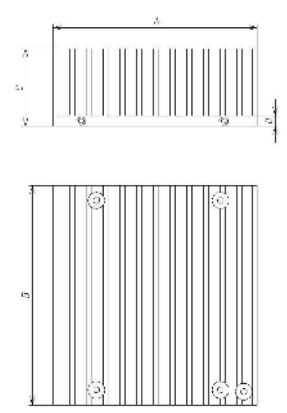
S
 $S = n/ \times (t_{max} - t - t)$,
 $= 0,0005 - 0,003 / ^2$,
 $t_{max} = 70^\circ$, - , K-D
 $t_{max} = 85^\circ$. t -
 , t -



t 2...3° .

4. 26 46

| | | | A*B*C*D () | S, ² | - |
|---------------|-----------------------------|---|-------------------------------|------|---------|
| 26 | | | | | |
| DN400 | .752695.400 | KL, ()200,300 | 102*190*26*6 | 1070 | 0,0009 |
| DG800, DB1200 | .752695.401 | KP, ()600, KD, ()900 | 122*238*26*6 | 1385 | |
| 46 | | | | | |
| VS300 | .752695.267, .752695.268 | KL, ()200,300 | 87*106*46*6, 122*106*46*6 | 2155 | 0,00067 |
| VB400 | .752695.402, .752695.403 | KP, ()600 | 122*131*46*6, 122*131*46*6 | 3125 | |
| | .752695.006 | KL, ()200,300, KP, ()600, KD, ()900 | 122*165*46*6 | 3925 | |



.7

.8

A*B*C*D

900,

700 ,

50° .

1. $\Delta t = (1/\alpha - 1) \cdot 700(1/0,9 - 1) = 73,5$;
2. $t = t_{max} - t = 85 - 50 = 35$ °C;
3. $S = \Delta t / t$

26 =0,0009

$S = \Delta t / t = 73,5 / 35 = 2,1$;

46 =0,00067

$S = \Delta t / t = 73,5 / 35 = 2,1$;

4,

.752695.006

46 .

50°

5.

| | | |
|--------|------|---|
| | 50° | |
| ()20 | 195 | 4 |
| ()50 | 355 | 4 |
| ()100 | 590 | 6 |
| ()150 | 880 | 6 |
| ()200 | 910 | 8 |
| ()300 | 1365 | 8 |
| ()600 | 2145 | 8 |
| ()900 | 3275 | 8 |

(.6)

=0,001.

- , MAA K-D
() [2] .9.

[1]

AC/DC

.10.

VN50, VR100, VS300, VB400
VZ1200 [3].

VN50, VR100, VS300, VB400

DN400, DG600, DB1200,

VS300, VB400, DN400, DG600, DB1200

4.

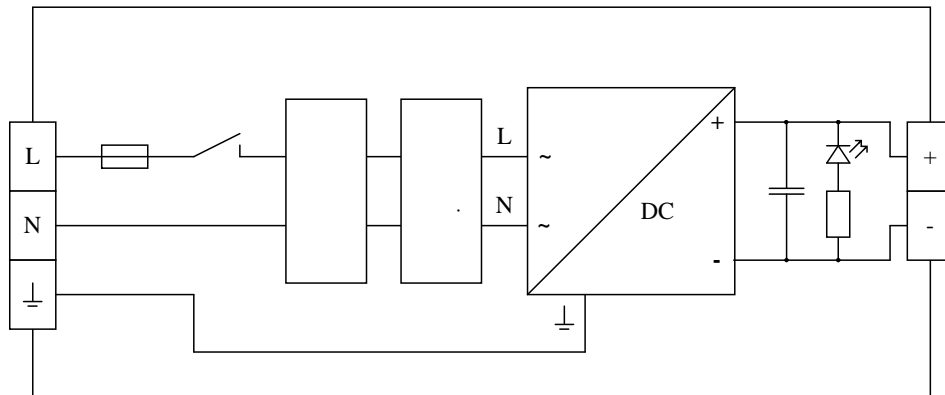


.9

VS300

DB1200

600 ().

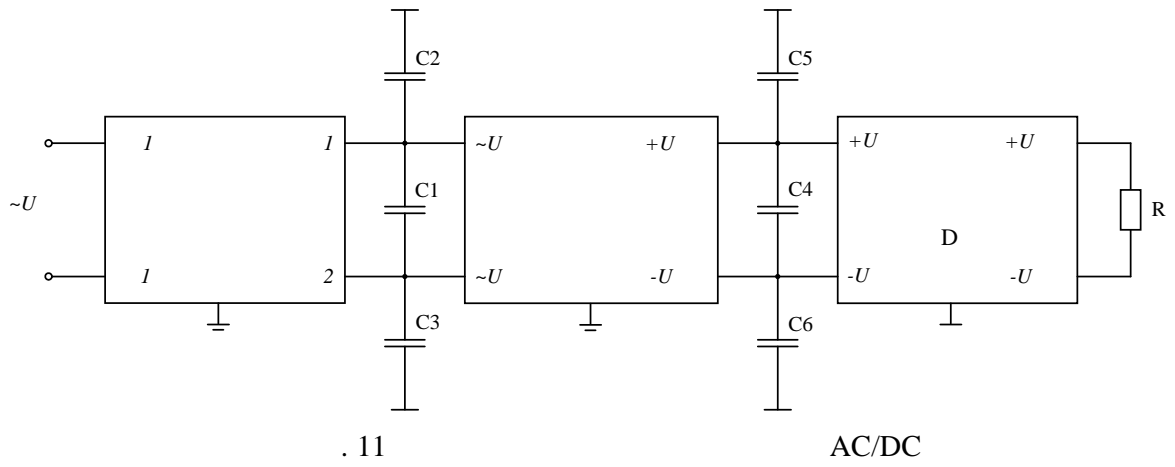


.10

[4,5],

.11.

DC/DC



«5»

«

1, 2, 3-

20...900

500 ,

1500

»,

« -98».

«5»

.436610.007 .

«5»

2000 »,

2007 .

«

».