

20 (30, 40, 50) KLOM

.....	2
.....	4
.....	5
.....	5
.....	7
.....	8
.....	9
.....	9
.....	10
.....	11
.....	11
.....	12
.....	14
.....	15
.....	16
.....	18
.....	18
.....	20
.....	21
.....	23
.....	24
.....	24
.....	25
.....	26

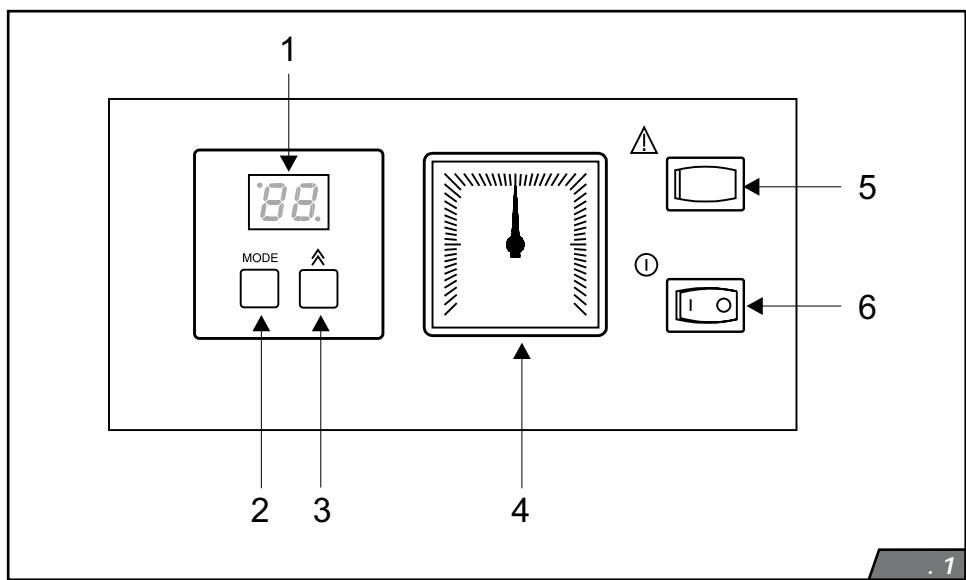
PROTHERM 50(40,30,20)

KLOM

1. (),
2.
3. Protherm
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.
14.
15.
()

20, 30, 40, 50").

» Protherm PT



(.1, .6)

1. MODE -
2.

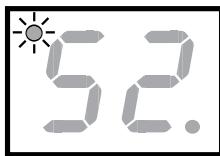
3. ^ -

4. -

5. RESET -

6.

Protherm



▲



MODE 1
2).

MODE 2



1
MODE.

▲

85 °C.
")
).
MODE.

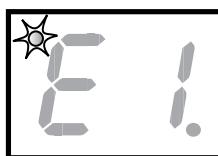
70 °C.

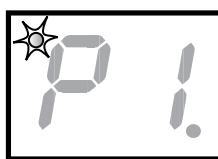
: --, 40, 44, 48, 52, 56, 60, 64, 68,

"--"

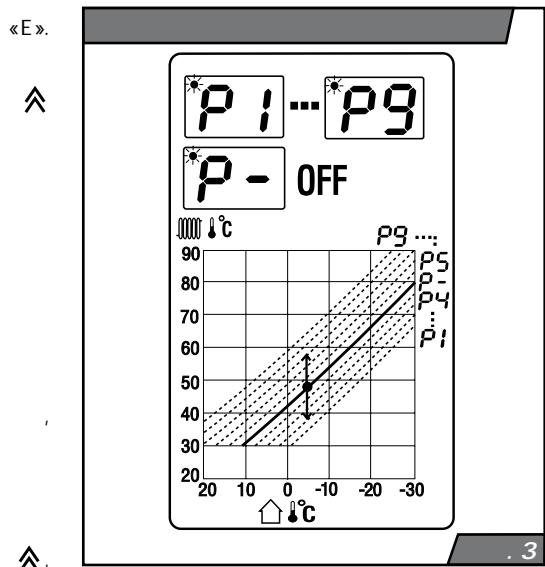
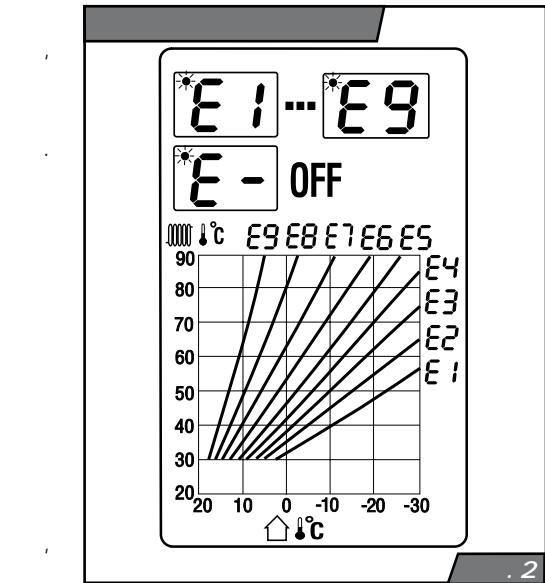
MODE

„E“
 „P“
 («)
 „--“
 («)
 „--“


E1 E9
 MODE

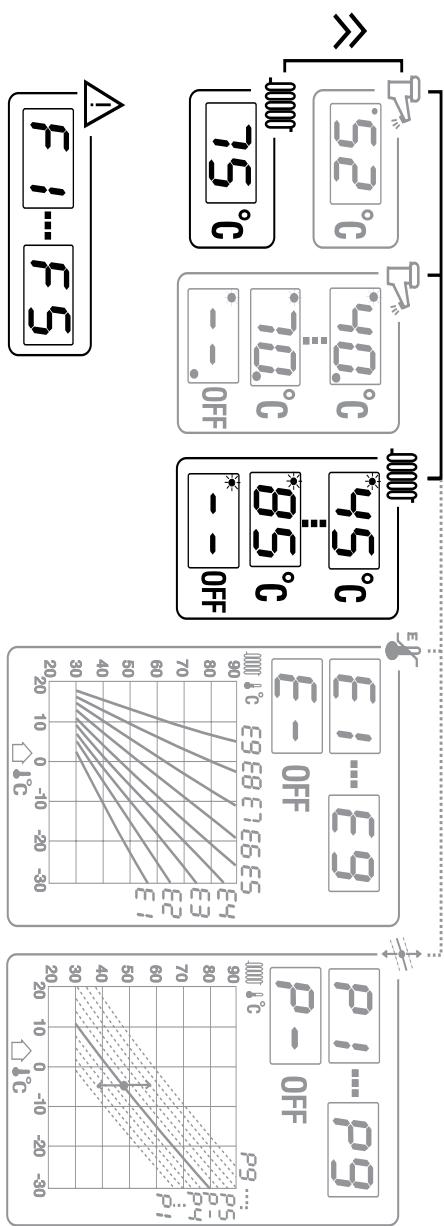

P1 P9
 MODE.
 „P“
 («)
 „--“
 («)
 „--“

P1 - -15 °C
P2 - -9 °C



P3 -	-6 °C
P4 -	-3 °C
P5 -	+3 °C
P6 -	+6 °C
P7 -	+9 °C
P8 -	+15 °C
P9 -	+21 °C

MODE



Действительно только при наличии
наружного датчика температуры

P--
T

(P5 - P9)

(P1 - P4)

(P-).

F1		
	F1.	
F2		3 °C. 3 °C
F3		95 °C. 95 °C
F4		
F5		" 5).

RESET (1, 5)

Protherm

1.

2.
3.

4.

1 - 2
(1,
6) (0).

).

().

XT5 5 6
().

PROTHERM

5 6,

XT5

Protherm

6

Protherm

Protherm

85°C.

90°C

(F 3).

8°C

().

().

1

8°C.

RESET

RESET

40 °C (

).

20 (30, 40, 50) PROTHERM KL

« » « »

20 (30) KLOM

	20KLOM	30KLOM
	$\text{H}_{2\text{H3P}}$ $\text{B}_{11\text{BS}}$	
	G 20 / G 31	G 20 / G 31
[]	19 / 18	28 / 27
[]	13,5 / 12	20 / 19
[]	17 / 16	26 / 24,5
[]	12 / 11	18 / 17
[%]	90 - 92 / 89 - 91	90 - 92 / 89 - 91
[]	13-20 / 30	13-20 / 30
[]	2,65 / 1,7	2,65 / 1,7
[]	10,5 / 27,0	12,5 / 27,0
[]	5,5 / 13	5,5 / 13
(Q)	2,0 [3/] / 1,6 [/] 3,0 [3/] / 2,0 [/]	
[]	4	
[]	1	
[]	1 - 2	
[°C]	45 - 85	
[]	9,1	11,6
[/]	230/50	
[]	15	
		IP 40
[A]	0,1	
[]	130	130
[°C]	~ 100 / ~ 95	
[/]	13,3	19,8
[]	2	
(1 / , / 1,5)	55	
[]	880 / 335 / 600	880 / 420 / 600
[]	90	110

40 (50) KLOM

40 KLOM

II_{CH3P}
 $\text{B}_{11\text{BS}}$

[]	G 20 / G 31	G 20 / G 31
[]	38,5 / 36,5	49 / 46,6
[]	27 / 25,5	34,2 / 32
[]	35 / 33	44,5 / 42
[]	24,5 / 23	31 / 29
[%]	90 - 92 / 89 - 91	90 - 92 / 89 - 91

[]	13-20 / 30	13-20 / 30
[]	2,65 / 1,7	2,65 / 1,7
[]	12,5 / 27,0	12,5 / 27,0
[]	5 5 / 13	7 / 12 7

(Q) 4,1 [3/] / 3,3 [/] 5,2 [3/] / - [/]

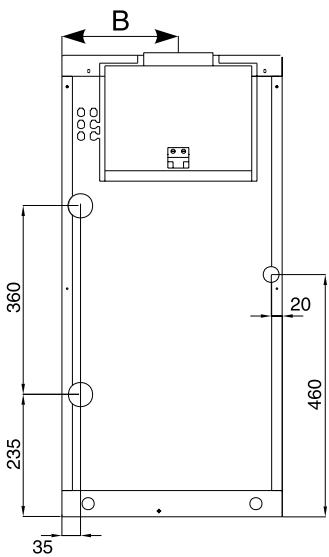
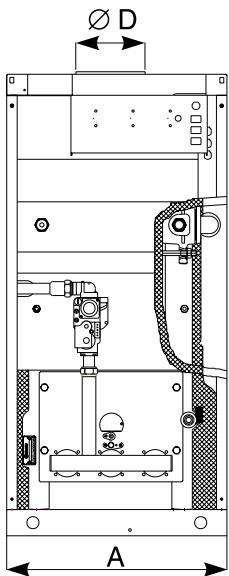
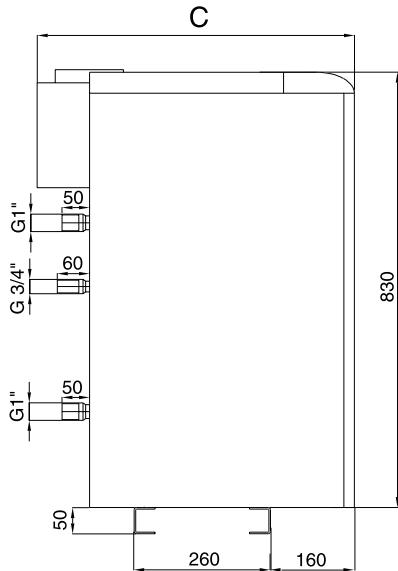
[]	4	
[]	1	
[]	1 - 2	
[°C]	45 - 85	
[]	14,1	16,6

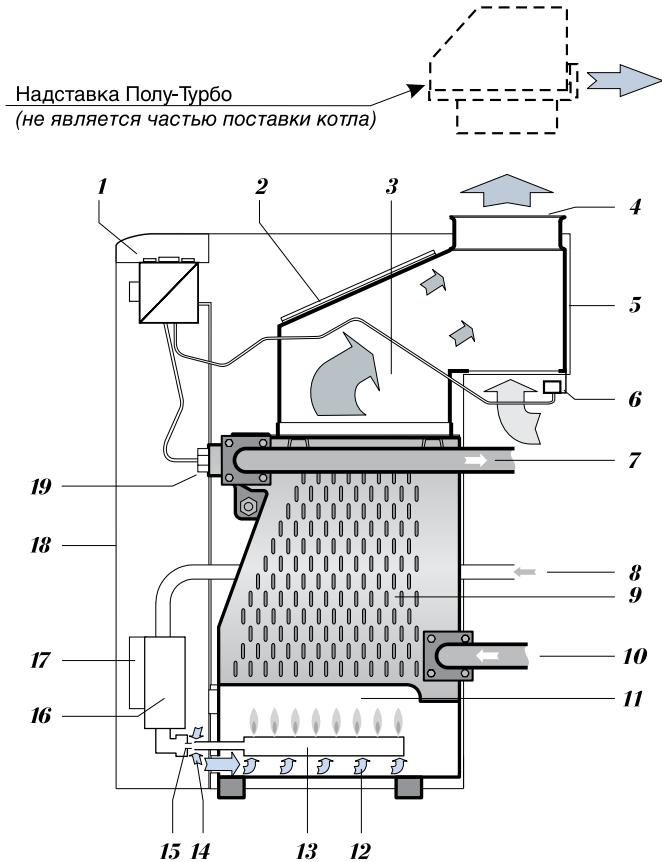
[/]	230/50	
[]	15	
	IP 40	
[A]	0,1	

[]	150	180	
[°C]	~ 100 / ~ 95		
[/]	26,6	33,8	
[]	2		
(1 / / 1,5) []	55		
[]	880 / 505 / 600	880 / 590 / 620	
[]	130	150	

20 (30, 40, 50) KLOM

	A	B	C	$\varnothing D$
20 KLOM	335	180	600	130
30 KLOM	420	222	600	130
40 KLOM	505	265	600	150
50 KLOM	590	307	620	180





- | | |
|-----|-----|
| 1. | 11. |
| 2. | 12. |
| 3. | 13. |
| 4. | 14. |
| 5. | 15. |
| 6. | 16. |
| 7. | 17. |
| 8. | 18. |
| 9. | 19. |
| 10. | |

PROTHERM
40, 50) KL

20 (30,

KLOM
PROTHERM
Protherm

(6,0 - \ , 16,8 dH),
3,0
600

(
300
600

2

PROTHERM 20,30 KL - Ø 130
PROTHERM 40 KL - Ø

150
Ø 180

PROTHERM 50 KL -

(
).

300 (4).

pH > 7

).

11 3 1 3

PROTHERM 20, 30, 40, 50 KL

PROTHERM PT 20 (30,
40, " 50)

(
).

Protherm

10 (1
= 1 90°
).

PROTHERM
PT 20 (30, 40, 50)

(
).

PT 20 (30, 40, 50)

Protherm

(
).

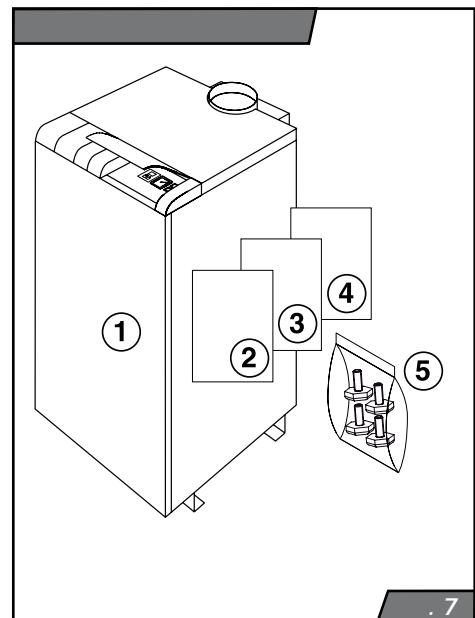
(
).

 60°C (
).

(
),

 40°C ,

PROTHERM
KL
(. . 7):
1.
2.
3.
4.
5.
1.
2. 0020034022
PROTHERM „ “ PT
20 (30-50)
3. PROTHERM



PROTHERM 20 (30, 40, 50) KL

(

).

(

"

).

"

(

(

)

«

».

«

»

(

).

(

).

10

- 30 (0,1 - 0,3)

();

- 105 °C.

- 0

0

();

0

$$pO_2 [] = H [m] \cdot 10 + 0,2$$

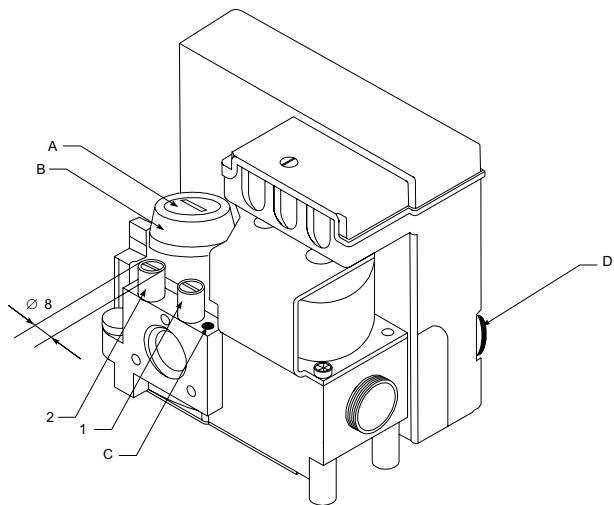
$$H [m] =$$

$$p [] pO_2$$

pO₂

-
- () () ();
- () () ();
"t" (B)
- () () ();
• 125 (105) : 20 KLOM
- () () ();
• 270
- () () ();
100
- () () ();
(C), (D),
- () () ();
• 55
- () () ();
• 130
- 8). U- (A) (2)
- (A);
- (2) U- ()

().



1 -

2 -

A -

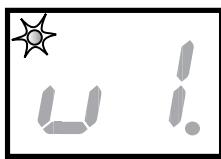
B -

C -

D -

()

()



"u":

MODE

10

▲
MODE

"t":

t1 = 40 °C	t6 = 54 °C
t2 = 45 °C	t7 = 56 °C*
t3 = 48 °C	t8 = 58 °C
t4 = 50 °C	t9 = 60 °C
t5 = 52 °C	t- - **

**

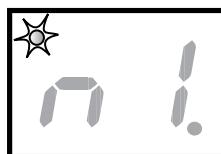
▲
MODE

"t":

"u":

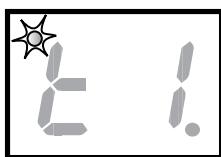
u1 -	u6 -	15 °C
u2 - 3 °C	u7 -	18 °C
u3 - 6 °C	u8 -	21 °C
u4 - 9 °C	u9 -	24 °C
u5 - 12 °C	u- -	

38 58 °C.



"n":

()



"t":

("n6"
).

"n-"

▲
MODE

XT5 (5, 6)

220

50

) « » (N - « (L -).

()

(1, 2).

XT5

Protherm

(2,5)

(T 1,6 A / 250
).

0,5 2

24 / 0,1 A.

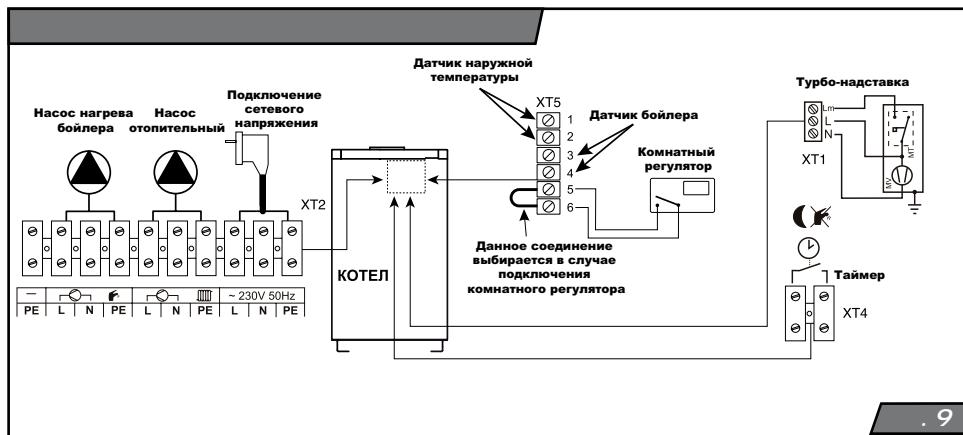
30

- 1,5 2

230

230

180



Protherm

(n)

7

- 1.
- 2.
- 3.
- 4.

35

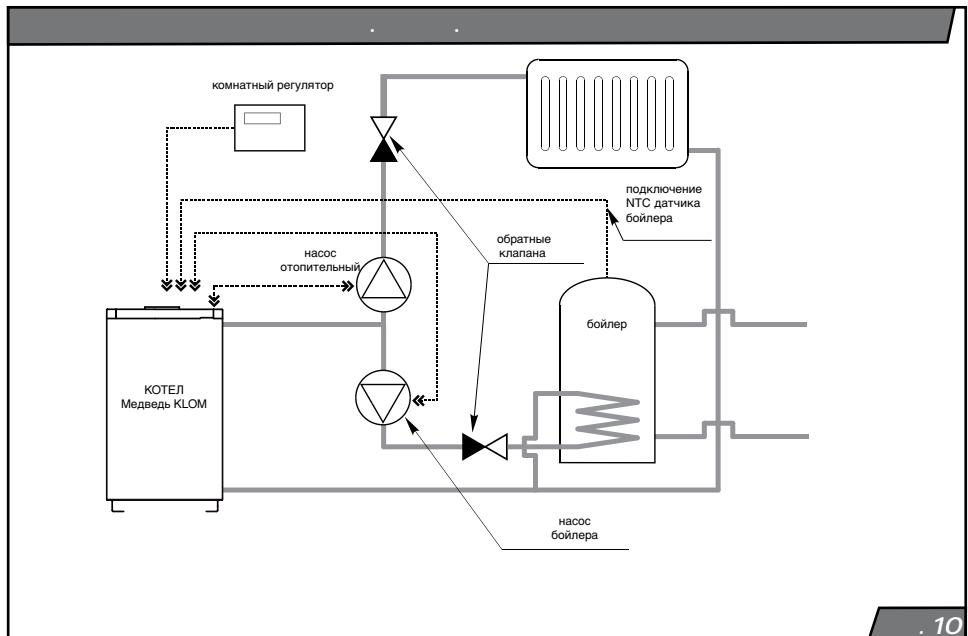
Protherm

- 5.
- 6.
- ").
- " n)
- " n6"
- " n-"

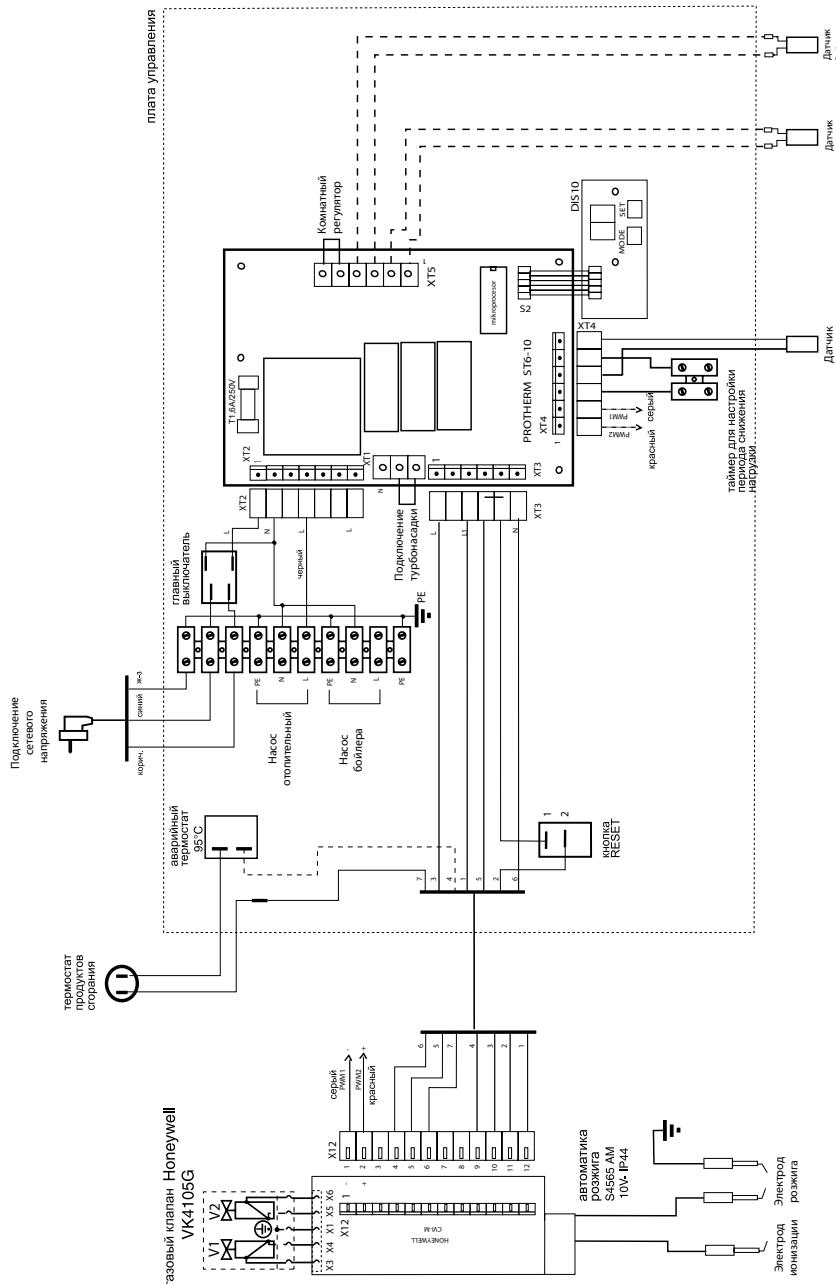
KLOM
Protherm
B100MS, B100Z, B120S, B200Z B200S.

NTC
(0010006491). NTC (0010006491).
NTC
10.

(. . .), (. . + . .)
(. . .).



PROTHERM 20(3Q, 4Q, 5Q) KL0M



www.protherm-ru.ru

PROTHERM

123424,

34

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: (495) 788-45-65

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