

300 CL

30032A   
30031A   
CL

1

CE



30032A



30031A



CL

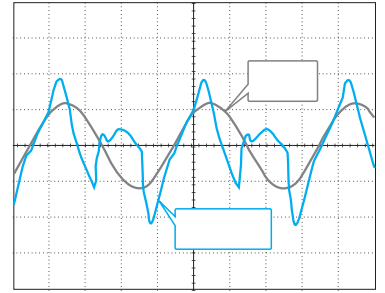
Yokogawa Meters & Instruments Corporation

Бюллетень CL-R



# Описание функций гармонического фильтра

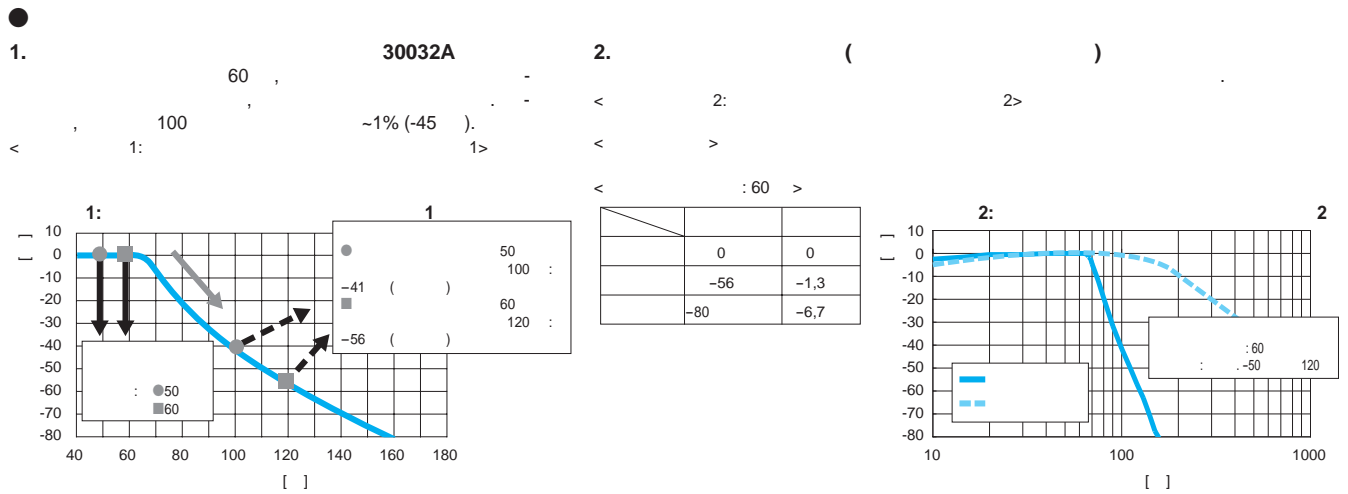
- 1. ? ( ) 30032A
- 2. )? ( )
- 3. 30032A



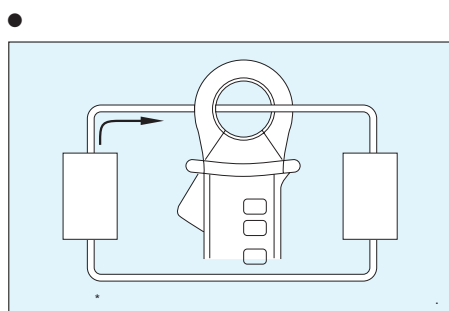
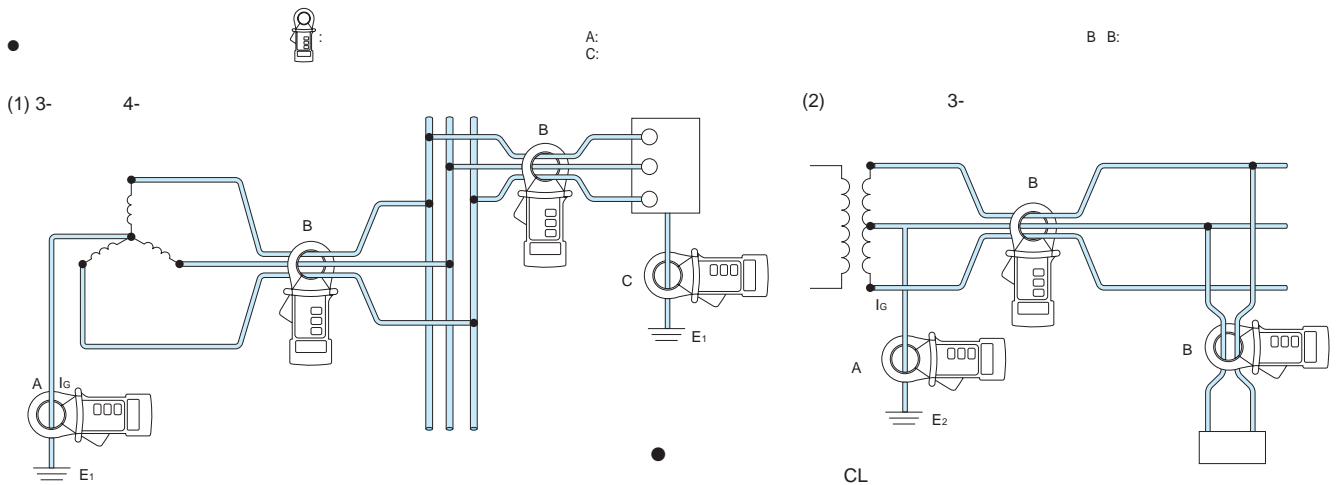
Yokogawa Meters & Instruments

Yokogawa Meters & Instruments

30032A,



# Пример измерения



# Клещи для измерения токов утечки

30032A



- 
- $\varnothing 40$
- /3 ~60A
- 

30031A



- 
- $\varnothing 40$
- /3 ~60A
- 

## 30032A

- 1
- 2-
- /

: ± (%) + )

3	0,001	0,010 < I ≤ 32,70	: 3,270
30	0,01	1,0% + 5	32,70
30 A	0,01A	0,05 < I ≤ 50,0 A: 1,0% + 5	32,70 A
60 A	0,1A	50,0 < I ≤ 60,6 A: 5,0% + 5	60,6 A

3	0,001	0,010 < I ≤ 32,70	: 3,270
30	0,01	1,5% + 5	32,70
30 A	0,01A	0,05 < I ≤ 50,0 A: 1,5% + 5	32,70 A
60 A	0,1A	50,0 < I ≤ 60,6 A: 5,5% + 5	60,6 A

2-  
 150 3 /30  
 62 A 30 A/60 A  
 ( 3 -30 30 A-60 A)  
 100 : -38 (1,26%) ( : -41 )  
 120 : -53 (0,22%) ( : -56 )  
 3 : 0,000 ( ) 0,010 < I  
 30 A: 0,00 A ( ) 0,05 A < I

	( 3200 )
	(32 )
	:
	0...50°C, 80% ( )
	0...18°C 28...50°C
	0 ≤ I ≤ 50,0A: ±(0,08% /°C + 0,5 /°C) 50,0 < I ≤ 60,6A: ±(0,3% /°C + 0,5 /°C)
	0,0005% ( )
	EN 61010-1, EN 61010-2-032
	CAT. III 300
	300
	3,7
	CR2032 × 1
	6
	.90
	.10
	.70 ( ) × 178 ( ) × 25 ( ) ( )
	.200 ( )
	(RB057)

## 30031A

- 1
- 

: ± (%) + )

3	0,001	0,010 < I ≤ 32,70	: 3,270
30	0,01	1,0% + 5	32,70
30 A	0,01A	0,05 < I ≤ 50,0 A: 1,0% + 5	32,70 A
60 A	0,1 A	50,0 < I ≤ 60,6 A: 5,0% + 5	60,6 A

3 : 0,000 ( ) 0,010 < I  
 30 A: 0,00 A ( ) 0,05 A < I

	( 3200 )
	(32 )
	:
	0...50°C, 80% ( )
	0...18°C 28...50°C
	0 ≤ I ≤ 50,0A: ±(0,08% /°C + 0,5 /°C) 50,0 < I ≤ 60,6A: ±(0,3% /°C + 0,5 /°C)
	0,0005% ( )
	EN 61010-1, EN 61010-2-032
	CAT. III 300
	300
	3,7
	CR2032 × 1
	6
	.90
	.10
	.70 ( ) × 178 ( ) × 25 ( ) ( )
	.200 ( )
	(RB057)

# Токовые измерительные клещи



CL120  
CE

- . A
- ∅ 24
- . /20~200A



CL130  
CE

- . A
- ∅ 30
- . /200~600A
- . , /

## CL120

- 
- 
- 
- EN61010-1, EN61010-2-032 (CAT. III 300 )

	23° ±5° ,	75%
	: ± (%)	+
20 A	2,0 + 7 (50~1 )	
200 A	2,0 + 5 (50/60 )	
	3,0 + 10 (40~1 )	

	( : 1999 )	
	. 2	
0~40° ,	85% ( )	
	—	
	0,8A 400A/	
	±2%	
	EN 61010-1, EN61010-2-032	
	300	
3,7		
	LR-44 × 2 (3 ) SR-44 × 2	
	. 100 ( )	
	. 1	
	. 10	
	. 24 .	
	. 59( ) × 148( ) × 26( )	
	. 100	
	, , (93033)	

## CL130

- 
- 
- EN61010-1, EN61010-2-031, EN61010-2-032 (CAT. III 600 )

	23° ±5° ,	75%
	: ± (%)	+
200 A	1,5 + 6 (50/60 )	
	2,0 + 5 (40~1 )	
600 A	1,0 + 3 (50/60 )	
	2,0 + 5 (40~1 )	
200 /600	1,0 + 2 (50/60 )	
	1,5 + 4 (40~1 )	
200	1,2 + 4, 30 ( )	

	( : 1999 )	
	( . 2 )	
	-10~50° , ( )	
	30° , 90%	
	40° , 75%	
	50° , 45%	
	—	
	2A 400A/	
	±2%	
	EN 61010-1, EN61010-2-031, EN61010-2-032	
	600	
5,55		
	6F22(006P)9 × 1 6LR61 × 2	
	. 200 ( )	
	. 2	
	. 10	
	. 30	
	. 93( ) × 210( ) × 40( )	
	. 400	
	, , (93032)	







# Токовые измерительные клещи

CL235



- A/
- Ø33
- /400-600A
- /400-1000A
- /

CL250



- A/
- Ø55
- /400-2000A
- /400-2000
- /

## CL235

- EN61010-1,
- EN61010-2-031, EN61010-2-032 (CAT. III 600 )

	23° ±5° ,	± (% + )	
			75%
400/600 A		1,5 + 5 (50/60 ) 3,5 + 5 (40~1 )	
400/1000		1,0 + 5	
40/400/600		1,5 + 5 (50/60 )	
		3,5 + 5 (20~1 )	
40/400/600		1,0 + 5	
		≤3	
400/4000		1,0 + 5,	
		20 ( )	
10~3000		1,5 + 5	

	( : 3999 )		
	.2		
	/		
	-		
0-40° ,	85% ( )		
	-		
	-		
	±2,0%		
	EN 61010-1,		
	EN61010-2-031, EN61010-2-032		
	600		
5,55			
6F22(006P)9 × 1	6LR61 × 1		
.15 ( )			
.15			
	30		
	33		
.91( ) × 210( ) × 40( )			
.450			
	(93032)		

## CL250

- EN61010-1,
- EN61010-2-031, EN61010-2-032 (CAT. I 600 , CAT. III 1000 )

	23° ±5° ,	± (% + )	
			75%
400/2000		1,5 + 2	
400 A/2000 A(0~1000A)		1,5 + 2 (50/60 )	
		3,0 + 4 (40~500 )	
		5,0 + 4 (500~1 )	
2000 A (1001~2000 A)		3,0 + 2 (50/60 )	
40/1000		1,0 + 2	
400/750		1,5 + 2 (50/60 )	
		1,5 + 4 (20~1 )	
400/4000		1,0 + 5,	
		50±35 ( )	
400 A . . (0~400 )		± 1,5%	± 3
2000 A . . (0~200 )		± 1,5%	± 3
400 A . . (0~400 )		± 1,5%	± 3 (50/60 )
2000 A . . (0~100 /0~1000A)		± 3,0%	± 3 (40~500 )
		± 5,0%	± 3 (500~1 )
2000 A . . (100,1~200 /1001~2000A)		± 3,0%	± 3 (50/60 )

	( : 3999 )		
	.2		
	( )		
	/ ( )		
	0-40° ,	85% ( )	
	-		
	4A 400A/		
	± (1,5% + 3 )		
	EN 61010-1,		
	EN61010-2-031, EN61010-2-032		
	1000		
5,55			
R6P(SUM-3) × 2	LR6 × 2		
.100 ( )			
.9			
	10		
	55		
.105( ) × 250( ) × 49( )			
.530			
	(98011),		
	(98012),		(93034)



## Токовые измерительные клещи

## Клещи для измерения токов утечки

CL255



• A/

• Ø55

• /400-2000A

• /400-2000A

• /

• /

CL320



• A/

• Ø24

• /20 ~200A

### CL255

• EN61010-1, EN61010-2-031, EN61010-2-032 (CAT. III 600 V, CAT. II 1000 V)

■ 23° ± 5° , ± (%) + 75%

	400/2000	1,5 + 2
	400/2000 A (150~1700 A)	1,5 + 3 (50/60 ) 3,0 + 4 (40~1 )
	2000 A (1701~2000 A)	3,5 + 3 (50/60 )
	40/400/1000	1,0 + 2
	40/400/750	1,5 + 3 (50/60 ) 2,0 + 4 (30~1 )
		≤ 3
	400/4000	1,5 + 2, 20 ( )
	10~3999	1,5 + 5
	400 A (0~400 )	± 1,5% ± 3
	2000 A (0~200 )	± 1,5% ± 3
	400 A (0~400 )	± 1,5% ± 3 (50/60 )
	/2000 A (15~170 /150~1700 A)	± 3,0% ± 3 (40~1 )
	2000 A (170,1~200 /1701~2000A)	± 3,5% ± 3 (50/60 )

	( : 3999 )
	.1 .( / )
	.2 .( / , )
	( )
	/
	/
	0~40° , 85% ( )
	—
	4A 400A/
	± (1,5% + 3 )
	EN 61010-1, EN61010-2-031, EN61010-2-032
	1000
	5,55
	6F22(006P)9 × 1 6LR61 × 1
	.15 ( )
	.15
	10
	55
	.105( ) × 250( ) × 49( )
	.540
	(98011),
	(98012), (93034)

### CL320

• EN61010-1, EN61010-2-032 (CAT. III 300 V)

■ 23° ± 5° , ± (%) + 75%

		40~400	50/60
	20 /200	2,0 + 4 (50/60 )	5,0 + 5 (50/60 )
	200 A (0~100 A)	5,0 + 6 (40~400 )	
	200 A (100,1~200 A)	5,0 + 4 (50/60 )	3,0 + 5 (50/60 )

	( : 1999 )
	.2
	0~40° , 85% ( )
	—
	10
	14,4 100A
	5 0...50 A, 2% 50...200A
	( 10 )
	10
	10 50A
	EN61010-1, EN61010-2-032
	300
	3,7
	LR-44 × 2(3 ) SR-44 × 2
	.15 ( )
	.5
	.10
	.24
	.60( ) × 149( ) × 26( )
	.120
	(93033)

# Клеци для измерения токов утечки

CL340



- 
- Ø 40
- . /40 ~400A

CL345



- 
- Ø 40
- . /40 ~400A
- 

## CL340

- 
- 
- 
- 

EN61010-2-032 (CAT. III 300 )

EN61010-1,

23° ±5° , ± (% ) 75%

		40~400		50/60
		2,5 + 10 (20~1 )	1,0 + 5 (50/60 )	1,0 + 5 (50/60 )
40 /400				
400 A(0~350A)		2,5 + 10 (40~1 )	1,0 + 5 (50/60 )	
400 A(350~400A)		5,0 (40~1 )	2,0 (50/60 )	

	( : 3999 )*			
	. 2			
	0~40° , . 85% ( )			
	10	14,4	100A	
	40/400 :	5	400A,	
	0...250 A:	±0,5%		
	±5			
	12	10	100 A	
	EN61010-1, EN61010-2-032			
	. . 300			
	3,7			
	R0-3(UM-4) × 2 LR03 × 2			
	. 40 ( )			
	. 13			
	. 10			
	40			
	. 81( ) × 185( ) × 40( )			
	. 270			
	, , (93030)			
	*6000 ( 40/400 )			

## CL345

- 
- 
- 
- 

EN61010-2-032 (CAT. III 300 )

EN61010-1,

23° ±5° , ± (% ) 75%

		40~400		50/60
		2,5 + 10 (20~1 )	1,0 + 5 (50/60 )	1,0 + 5 (50/60 )
40 /400				
400 A (0~350A)		2,5 + 10 (40~1 )	1,0 + 5 (50/60 )	
400 A (350~400A)		5,0 (40~1 )	2,0 (50/60 )	

	( : 4200 )*			
	. 2			
	0~40° , . 85% ( )			
	10	14,4	100A	
	40/400 :	5	400A,	
	0...250 A:	±0,5%		
	±5			
	12	10	100 A	
	EN61010-1, EN61010-2-032			
	. . 300			
	3,7			
	R0-3(UM-4) × 2 LR03 × 2			
	. 24 ( )			
	. 21			
	. 10			
	40			
	.. 81( ) × 185( ) × 32( )			
	. 270			
	, , (93030)			
	*6000 ( 40/400 )			

## Клещи для измерения токов утечки

CL360



- 20 ~20
- ∅ 68
- 200 ~1000A

**CL360**

EN 61010-1, EN 61010-2-032 (CAT. III 300, CAT. II 600)

## Токовые измерительные клещи

96001



- 20 ~20
- . A
- ∅ 33

**96001**

20 20

		23° ±5° , ± (%)	
		40-400	50/60
200 /2A/20A	1,0 + 2 (50/60)	1,5 + 2	
	3,0 + 2 (40-1)		
	1,5 + 2 (50/60)	2,0 + 2	
	3,5 + 2 (40-1)		
1000A (0-500A)	1,5 + 2 (50/60)	2,0 + 2	
	3,5 + 2 (40-1)		
1000A (501-1000A)*	5,0 (50/60)	5,5	
	10,0 (40-1)		
200 /2A/20A (0-200)	2,0	2,0	
	200A (0-200)	2,5	2,5
	1000A/(0-50 /0-500A)	3,0	3,0
	1000A/(50-100 /501-1000A)	5,0	5,0
200 /2A/20A (0-200)	3,0	3,5	
	200A (0-200)	3,5	4,0
	1000A/ (0-50 /0-500A)	5,0	5,5
	1000A/ (50-100 /501-1000A)	7,0	7,5

\* 501 1000A 10

	( : 1999 )		
	. 1		
	-10...50° , 80% ( )		
	15		
	10 100 A		
	2%		
	10		
	10 100A		
	EN61010-1, EN61010-2-032		
	600		
	3,7		
	6F22(006P)9 × 1 6LR61 × 1		
	. 60 ( )		
	. 5		
	68		
	. 129( ) × 248( ) × 55( )		
	. 570		
	(93031)		

		0.. 400 A ( 600 A)	
		0 ... 4 (10 /A)	
( 23° ±5° , ( ) )	( )	± 1,5%	± 0,4 (20 ... 40 )
		± 1,0%	± 0,2 (40 ... 1 )
		± (0,8 + 0,2 × . )%	
	( )	± (0,2 + 0,04 × . ) (1 ... 20 )	
		± 3,0; (40 ... 1 )	
		0,05%	/°
		0 18° , 28 50° ;	
		30	
		100 //100	
		2 (0,2 A) 400A/	
		600	
		33	
		0...50° , 80% ( )	
		-20 60° , ( )	
		3,7	
		( )	
		EN61010-1, EN61010-2-032	
		. 73( ) × 130( ) × 30( )	
		. 220	
		. 2,5 ( " ")	

