



TEST REPORT

Product: MaxiCharger DC Fast

Model No.: EF120C3001

Applicant: Autel New Energy Co.,Ltd.

Manufacturer: Autel New Energy Co.,Ltd.

Issued by: Shenzhen Chengxin Technology Service Co., Ltd.

Lab Location: No. 13 North of Aiqun Road, Shiyan Street, Baoan District, Shenzhen, Guangdong, China

Tel: +86-755-21128889 **Fax:** +86-755-21138889

This test report consists of 33 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by CTS. The test results in the report only apply to the tested sample. The test report shall be invalid without all the signatures of testing engineers, reviewer and approver. Any objections must be raised to CTS within 15 days since the date when the report is received. It will not be taken into consideration beyond this limit

Test Report

Applicant.....: Autel New Energy Co.,Ltd.


Applicant Address.....: Room 101, Building 1,
Rainbow Technology Building No.36Gaoxin Sixth Road(N),
Nanshan District, Shenzhen, Guangdong P.R.China

Manufacturer.....: Autel New Energy Co.,Ltd.

Manufacturer Address.....: Room 101, Building 1,
Rainbow Technology Building No.36Gaoxin Sixth Road(N),
Nanshan District, Shenzhen, Guangdong P.R.China

Factory.....: Autel New Energy Co.,Ltd.

Factory Address.....: Room 101, Building 1,
Rainbow Technology Building No.36Gaoxin Sixth Road(N),
Nanshan District, Shenzhen, Guangdong P.R.China

Brand Name.....: 

Product.: MaxiCharger DC Fast


Model No.: EF120C3001


Rating.: Input: 400Vac 186A/130KVA 3p+N+PE 50HZ
Output:CCS1/CCS2 150-1000VDC 200A/120KW
EN 61851-23 IEC 61851 - 23: 2014 11.12 Electric vehicle
conduction charging system DC electric vehicle charging
equipment


Test Standards.....: Ambient temperature range 23-25℃,
Ambient humidity range 55-65%.

Test Environment.....: Ambient temperature range 23-25℃,
Ambient humidity range 55-65%.

Test Result.....: ☒Positive ☐Negative

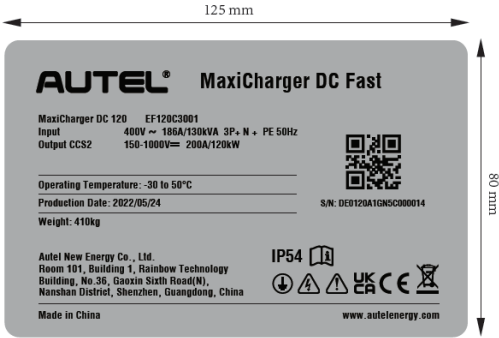
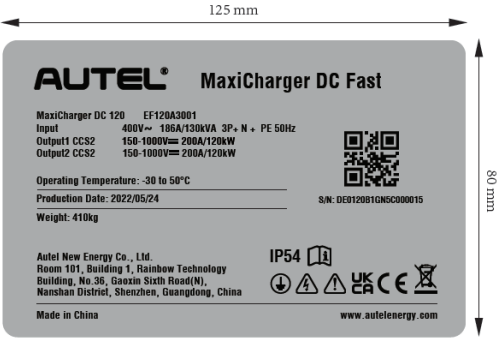
Tested by:  2022.7.11
Signature Date

Reviewed by.....:  2022.7.11
Signature Date

Approved by.....:  2022.7.11
Signature Date

The test results presented in this report relate only to the object tested.

Copy of marking plate:



Test directory

1. Product Description	4
2. Test Overview.....	4
3. Test environment.....	4
4. Initial detection	4
5. Test.	5
6. Product pictures	6
7. Equipment list.....	11

1. Product Description

In this test, harmonic voltage and harmonic current are tested on model EF120C3001, and the total harmonic current is required to be less than 5%. The total harmonic voltage is less than 3%.

2. Test Overview

Test Item	Test Conditions	Testing Data	Test conclusion	Date of testing
Harmonics Current	100% load: 1000V, 120A	A: THDI=1.40% B: THDI=1.69% C: THDI=1.78%	Pass	2022. 7. 10
	75% load: 1000V, 90A	A: THDI=2.09% B: THDI=2.35% C: THDI=2.12%	Pass	2022. 7. 10
	50% load: 1000V, 60A	A: THDI=4.37% B: THDI=4.27% C: THDI=3.26%	Pass	2022. 7. 10
Harmonic Voltage	100% load: 1000V, 120A	THDU _a =0.55% THDU _b =0.71% THDU _c =0.69%	Pass	2022. 7. 10
	75% load: 1000V, 90A	THDU _a =0.55% THDU _b =0.71% THDU _v =0.73%	Pass	2022. 7. 10
	50% load:	THDU _a =0.63%	Pass	2022. 7. 10

	1000V, 60A	THDU _b =0.76% THDU _c =0.76%		
--	------------	--	--	--

3. Test environment

Environmental temperature: 23°C–25°C

Relative humidity: 50%–60%

Atmospheric pressure: 100kPa–101kPa

4. Initial detection

Before the test, the prototype has complete appearance, normal structure and normal function.

5. Test

5.1 Testing Conditions

The machine is connected to the AC power grid simulator, and the output is connected to the resistance load. The load is adjusted according to the test requirements, and the harmonic voltage and harmonic current data are recorded.

5.2 Decide

The total harmonic current is less than 5%; The total harmonic voltage is less than 3%

5.3 Result

Working Conditions:

Output 1000V/120A, load=100%

U1 0.55% U2 0.71% U3 0.69%

I1 1.40% I2 1.69% I3 1.78%

Normal Mode		Uover: ■ ■ ■ ■		U4 : 1000Vrms Auto		YOKOGAWA ◆	
		Iover: ■ ■ ■ ■		Integ: Reset			
Voltage Current		Element1	Element2	Element3	Σ A(3P4W)	Element4	PAGE
		600Vrms 500mA rms	600Vrms 500mA rms	600Vrms 500mA rms		A 1000Vrms A 500mA rms	
U	[V]	229.821	230.278	229.899	229.999	1.00089k	1
I	[A]	181.570	181.049	183.107	181.909	0.11965k	2
P	[W]	41.685k	41.607k	42.040k	125.332k	0.11976M	3
S	[VA]	41.729k	41.692k	42.096k	125.516k	0.11976M	4
Q	[var]	1.914k	-2.652k	2.182k	1.444k	0.00050M	5
λ	[]	0.99895	0.99798	0.99866	0.99853	0.99999	6
φ	[°]	2.629	356.353	2.971	3.111	0.240	7
fU	[Hz]	50.003	50.003	50.003			8
fI	[Hz]						9
Time	[]						10
WP	[Wh]						11
WP+	[Wh]						12
WP-	[Wh]						13
q	[Ah]						14
q+	[Ah]						15
q-	[Ah]						16
WS	[VAh]						17
WQ	[varh]						18

Update 138

2022/07/10 18:01:14

A-phase harmonic current:

Normal Mode	Uover: ■ ■ ■ ■	U1-3 : 600Vrms	YOKOGAWA ◆
	Iover: ■ ■ ■ ■	Integ:Reset	
change items			
PLL U1	Or. I1 [A] hdf[%]	Or. I1 [A] hdf[%]	Σ A(3P4W)
Freq 49.995 Hz	1 180.671	dc 0.013 0.007	U1 600Vrms
	1 180.649 99.990	2 0.145 0.080	I1 500mA rms
Urms1 229.780 V	3 0.852 0.472	4 0.057 0.032	
Irms1 180.671 A	5 1.304 0.722	6 0.042 0.023	U2 600Vrms
P1 41.470kW	7 0.876 0.485	8 0.040 0.022	I2 500mA rms
S1 41.515kVA	9 0.318 0.176	10 0.037 0.021	
Q1 -1.930kvar	11 0.243 0.134	12 0.037 0.020	U3 600Vrms
λ1 0.99892	13 0.371 0.205	14 0.040 0.022	I3 500mA rms
φ1 357.336 °	15 0.072 0.040	16 0.023 0.013	
Uthd1 0.550 %	17 0.115 0.063	18 0.039 0.022	Element4
Ithd1 1.406 %	19 0.371 0.206	20 0.064 0.035	U4A1000Vrms
Pthd1 0.003 %	21 0.320 0.177	22 0.055 0.031	I4A500mA rms
Uthf1 0.384 %	23 0.242 0.134	24 0.077 0.042	
Ithf1 1.580 %	25 0.819 0.453	26 0.049 0.027	Integ:Reset
Utif1 15.777	27 0.290 0.161	28 0.029 0.016	Time
Itif1 69.941	29 0.088 0.049	30 0.070 0.038	-----:--:--
	31 0.539 0.298	32 0.059 0.032	
	33 0.517 0.286	34 0.074 0.041	
	35 0.120 0.067	36 0.023 0.013	
	37 0.550 0.304	38 0.009 0.005	
	39 0.540 0.299	40 0.054 0.030	

△PAGE ▾ 1/7

▲PAGE ▾ 1/3

Update 236	2022/07/10 18:02:36				YOKOGAWA ◆	
Normal Mode	Uover: ■ ■ ■ ■		U1-3 : 600Vrms		Integ:Reset	
	Iover: ■ ■ ■ ■					
change items						
PLL	U1	Or.	I1 [A]	hdf[%]		
Freq	49.995 Hz		180.671		Σ A(3P4W)	
		41	0.376	0.208	U1 600Vrms	
Urms1	229.780 V	43	0.399	0.221	I1 500mA rms	
Irms1	180.671 A	45	0.492	0.272		
P1	41.470kW	47	0.169	0.093	U2 600Vrms	
S1	41.515kVA	49	0.260	0.144	I2 500mA rms	
Q1	-1.930kvar	51	-----	-----		
λ1	0.99892	53	-----	-----	U3 600Vrms	
φ1	357.336 °	55	-----	-----	I3 500mA rms	
Uthd1	0.550 %	57	-----	-----		
Ithd1	1.406 %	59	-----	-----	Element4	
Pthd1	0.003 %	61	-----	-----	U4A1000Vrms	
Uthf1	0.384 %	63	-----	-----	I4A500mA rms	
Ithf1	1.580 %	65	-----	-----		
Utif1	15.777	67	-----	-----	Integ:Reset	
Itif1	69.941	69	-----	-----	Time	
		71	-----	-----	-----:--:--	
		73	-----	-----		
		75	-----	-----		
		77	-----	-----		
		79	-----	-----		

△PAGE ▾ 1/7

▲PAGE ▾ 2/3

Update 236 2022/07/10 18:02:39

B-phase harmonic current:

Normal Mode		Uover: ■ ■ ■ ■		U1-3 : 600Vrms		YOKOGAWA ◆	
		Iover: ■ ■ ■ ■		Integ:Reset			
change items							
PLL	U1	Or.	I2 [A]	hdf[%]	Or.	I2 [A]	hdf[%]
Freq	49.995 Hz	1	180.086		dc	-0.070	-0.039
Urms2	230.315 V	3	180.052	99.986	2	0.151	0.084
Irms2	180.086 A	5	0.494	0.274	4	0.026	0.014
P2	41.391kW	7	1.685	0.936	6	0.011	0.006
S2	41.477kVA	9	0.800	0.444	8	0.062	0.034
Q2	-2.660kvar	11	0.884	0.491	10	0.041	0.023
λ2	0.99794	13	0.315	0.175	12	0.031	0.017
φ2	356.323 °	15	0.396	0.220	14	0.035	0.019
Uthd2	0.660 %	17	0.310	0.172	16	0.022	0.012
Ithd2	1.691 %	19	0.127	0.071	18	0.034	0.019
Pthd2	0.003 %	21	0.612	0.340	20	0.022	0.012
Uthf2	0.438 %	23	0.466	0.259	22	0.024	0.013
Ithf2	1.934 %	25	0.100	0.056	24	0.095	0.053
Utif2	19.164	27	0.844	0.469	26	0.065	0.036
Itif2	84.692	29	0.472	0.262	28	0.021	0.012
		31	0.373	0.207	30	0.107	0.060
		33	0.716	0.398	32	0.042	0.023
		35	0.517	0.287	34	0.065	0.036
		37	0.454	0.252	36	0.071	0.039
		39	0.688	0.382	38	0.081	0.045
			0.493	0.274	40	0.053	0.029

Σ A(3P4W)
 U1 600Vrms
 I1 500mA
 U2 600Vrms
 I2 500mA
 U3 600Vrms
 I3 500mA

Element4
 U4A1000Vrms
 I4A500mA

Integ:Reset
 Time
 -----:--:--

△PAGE ▾ 2/7

▲PAGE ▾ 1/3

Update 236

Normal Mode

2022/07/10 18:02:54

Uover: ■ ■ ■ ■

Iover: ■ ■ ■ ■

U1-3 : 600Vrms

Integ:Reset

YOKOGAWA ◆

change items

PLL	U1	Or.	I2 [A]	hdf[%]	Or.	I2 [A]	hdf[%]
Freq	49.995 Hz	41	180.086		dc	-0.070	-0.039
Urms2	230.315 V	43	0.547	0.303	42	0.036	0.020
Irms2	180.086 A	45	0.523	0.291	44	0.065	0.036
P2	41.391kW	47	0.398	0.221	46	0.019	0.010
S2	41.477kVA	49	0.364	0.202	48	0.024	0.013
Q2	-2.660kvar	51	0.254	0.141	50	0.041	0.023
λ2	0.99794	53	-----	-----	52	-----	-----
φ2	356.323 °	55	-----	-----	54	-----	-----
Uthd2	0.660 %	57	-----	-----	56	-----	-----
Ithd2	1.691 %	59	-----	-----	58	-----	-----
Pthd2	0.003 %	61	-----	-----	60	-----	-----
Uthf2	0.438 %	63	-----	-----	62	-----	-----
Ithf2	1.934 %	65	-----	-----	64	-----	-----
Utif2	19.164	67	-----	-----	66	-----	-----
Itif2	84.692	69	-----	-----	68	-----	-----
		71	-----	-----	70	-----	-----
		73	-----	-----	72	-----	-----
		75	-----	-----	74	-----	-----
		77	-----	-----	76	-----	-----
		79	-----	-----	78	-----	-----
			-----	-----	80	-----	-----

Σ A(3P4W)

U1 600Vrms

I1 500mA rms

U2 600Vrms

I2 500mA rms

U3 600Vrms

I3 500mA rms

Element4

U4A1000Vrms

I4A500mA rms

Integ:Reset

Time

-----:-----:-----

Σ A(3P4W)
 U1 600Vrms
 I1 500mA
 U2 600Vrms
 I2 500mA
 U3 600Vrms
 I3 500mA

Element4
 U4A1000Vrms
 I4A500mA

Integ:Reset
 Time
 -----:--:--

△PAGE ▾ 2/7

▲PAGE ▾ 2/3

Update 236 2022/07/10 18:02:56

C-phase harmonic current:

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms3 229.902 V
Irms3 181.850 A
P3 41.751kW
S3 41.808kVA
Q3 2.181kvar
 λ_3 0.99864
 ϕ_3 2.991 °
Uthd3 0.694 %
Ithd3 1.784 %
Pthd3 0.007 %
Uthf3 0.313 %
Ithf3 0.850 %
Utif3 12.081
Itif3 35.361

Or.	I3 [A]	hdf[%]	Or.	I3 [A]	hdf[%]
1	181.850		dc	0.015	0.008
1	181.866	99.984	2	0.253	0.139
3	0.301	0.165	4	0.014	0.007
5	2.584	1.421	6	0.020	0.011
7	1.528	0.840	8	0.056	0.031
9	0.350	0.192	10	0.072	0.039
11	0.394	0.217	12	0.030	0.017
13	0.360	0.198	14	0.023	0.013
15	0.397	0.219	16	0.070	0.039
17	0.158	0.087	18	0.020	0.011
19	0.207	0.114	20	0.068	0.037
21	0.242	0.133	22	0.012	0.006
23	0.248	0.136	24	0.020	0.011
25	0.160	0.088	26	0.036	0.020
27	0.196	0.108	28	0.044	0.024
29	0.267	0.147	30	0.037	0.020
31	0.375	0.206	32	0.031	0.017
33	0.077	0.042	34	0.024	0.013
35	0.229	0.126	36	0.025	0.013
37	0.343	0.188	38	0.045	0.025
39	0.039	0.022	40	0.037	0.020

△PAGE ▾ 3/7

▲PAGE ▾ 1/3

Update 257
Normal Mode2022/07/10 18:03:20
U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms3 229.902 V
Irms3 181.850 A
P3 41.751kW
S3 41.808kVA
Q3 2.181kvar
 λ_3 0.99864
 ϕ_3 2.991 °
Uthd3 0.694 %
Ithd3 1.784 %
Pthd3 0.007 %
Uthf3 0.313 %
Ithf3 0.850 %
Utif3 12.081
Itif3 35.361

Or.	I3 [A]	hdf[%]	Or.	I3 [A]	hdf[%]
41	0.206	0.113	42	0.012	0.006
43	0.239	0.131	44	0.067	0.037
45	0.025	0.014	46	0.038	0.021
47	0.127	0.070	48	0.033	0.018
49	0.055	0.030	50	0.022	0.012
51	-----	-----	52	-----	-----
53	-----	-----	54	-----	-----
55	-----	-----	56	-----	-----
57	-----	-----	58	-----	-----
59	-----	-----	60	-----	-----
61	-----	-----	62	-----	-----
63	-----	-----	64	-----	-----
65	-----	-----	66	-----	-----
67	-----	-----	68	-----	-----
69	-----	-----	70	-----	-----
71	-----	-----	72	-----	-----
73	-----	-----	74	-----	-----
75	-----	-----	76	-----	-----
77	-----	-----	78	-----	-----
79	-----	-----	80	-----	-----

△PAGE ▾ 3/7

▲PAGE ▾ 2/3

Update 257

2022/07/10 18:03:25

A-phase harmonic voltage:

YOKOGAWA ◆

List Items

List Item No.

1

Function

I

Element/Σ

Element 3

Frequency Meas. Item

YOKOGAWA ◆

List Items

List Item No.

1

Function

I

Element/Σ

Element 3

Frequency Meas. Item

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.002 Hz

Urms1 229.864 V
Irms1 171.269 A
P1 39.318kW
S1 39.369kVA
Q1 -1.991kvar
 λ 1 0.99872
 ϕ 1 357.101 °
Uthd1 0.552 %
Ithd1 1.511 %
Pthd1 0.004 %
Uthf1 0.400 %
Ithf1 1.754 %
Utif1 16.641
Itif1 77.051

Or.	U1 [V]	hdf[%]	Or.	U1 [V]	hdf[%]
1	229.864	99.998	2	0.101	0.044
3	0.629	0.274	4	0.177	0.077
5	0.443	0.193	6	0.062	0.027
7	0.506	0.220	8	0.061	0.027
9	0.457	0.199	10	0.028	0.012
11	0.307	0.134	12	0.032	0.014
13	0.307	0.134	14	0.010	0.004
15	0.307	0.134	16	0.015	0.006
17	0.238	0.103	18	0.046	0.020
19	0.089	0.039	20	0.037	0.016
21	0.064	0.028	22	0.002	0.001
23	0.163	0.071	24	0.038	0.016
25	0.220	0.096	26	0.008	0.003
27	0.210	0.092	28	0.023	0.010
29	0.057	0.025	30	0.006	0.003
31	0.021	0.009	32	0.035	0.015
33	0.132	0.057	34	0.047	0.021
35	0.123	0.054	36	0.058	0.025
37	0.039	0.017	38	0.022	0.009
39	0.134	0.059	40	0.035	0.015
	0.125	0.054		0.007	0.003

△PAGE ▾ 1/7

▲PAGE ▾ 1/3

Update 263
Normal Mode2022/07/10 17:29:13
U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms1 229.938 V
Irms1 136.317 A
P1 31.264kW
S1 31.345kVA
Q1 -2.241kvar
 λ 1 0.99744
 ϕ 1 355.900 °
Uthd1 0.569 %
Ithd1 2.250 %
Pthd1 0.006 %
Uthf1 0.404 %
Ithf1 2.750 %
Utif1 17.322
Itif1 119.837

Or.	U1 [V]	hdf[%]	Or.	U1 [V]	hdf[%]
41	229.938	99.998	42	0.069	0.030
43	0.094	0.041	44	0.018	0.008
45	0.139	0.061	46	0.016	0.007
47	0.136	0.059	48	0.012	0.005
49	0.077	0.033	50	0.014	0.006
51	0.107	0.047	52	0.011	0.005
53	-----	-----	54	-----	-----
55	-----	-----	56	-----	-----
57	-----	-----	58	-----	-----
59	-----	-----	60	-----	-----
61	-----	-----	62	-----	-----
63	-----	-----	64	-----	-----
65	-----	-----	66	-----	-----
67	-----	-----	68	-----	-----
69	-----	-----	70	-----	-----
71	-----	-----	72	-----	-----
73	-----	-----	74	-----	-----
75	-----	-----	76	-----	-----
77	-----	-----	78	-----	-----
79	-----	-----	80	-----	-----

△PAGE ▾ 1/7

▲PAGE ▾ 2/3

Update 547

2022/07/10 17:32:39

B-phase harmonic voltage:

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 1

Frequency Meas. Item

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 1

Frequency Meas. Item

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms2 230.365 V
Irms2 135.839 A
P2 31.164kW
S2 31.293kVA
Q2 -2.833kvar
 λ_2 0.99589
 ϕ_2 354.805 °
Uthd2 0.714 %
Ithd2 2.481 %
Pthd2 0.004 %
Uthf2 0.454 %
Ithf2 3.068 %
Utif2 19.772
Itif2 134.512

Or.	U2 [V]	hdf[%]	Or.	U2 [V]	hdf[%]
1	230.365	99.997	dc	0.011	0.005
3	1.102	0.478	4	0.103	0.045
5	0.688	0.299	6	0.022	0.009
7	0.628	0.272	8	0.040	0.017
9	0.210	0.091	10	0.013	0.006
11	0.187	0.081	12	0.059	0.026
13	0.072	0.031	14	0.026	0.011
15	0.117	0.051	16	0.011	0.005
17	0.155	0.067	18	0.037	0.016
19	0.064	0.028	20	0.041	0.018
21	0.155	0.067	22	0.031	0.014
23	0.241	0.105	24	0.037	0.016
25	0.176	0.076	26	0.029	0.013
27	0.106	0.046	28	0.032	0.014
29	0.063	0.027	30	0.040	0.017
31	0.218	0.095	32	0.033	0.014
33	0.156	0.068	34	0.009	0.004
35	0.124	0.054	36	0.022	0.009
37	0.167	0.072	38	0.014	0.006
39	0.134	0.058	40	0.039	0.017

△PAGE ▾ 2/7

▲PAGE ▾ 1/3

Update 547
Normal Mode2022/07/10 17:33:22
U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms2 230.181 V
Irms2 170.755 A
P2 39.211kW
S2 39.304kVA
Q2 -2.706kvar
 λ_2 0.99763
 ϕ_2 356.052 °
Uthd2 0.659 %
Ithd2 1.734 %
Pthd2 0.004 %
Uthf2 0.388 %
Ithf2 1.949 %
Utif2 16.532
Itif2 86.628

Or.	U2 [V]	hdf[%]	Or.	U2 [V]	hdf[%]
41	0.136	0.059	42	0.043	0.019
43	0.140	0.061	44	0.017	0.007
45	0.100	0.044	46	0.022	0.009
47	0.096	0.042	48	0.027	0.012
49	0.044	0.019	50	0.016	0.007
51	-----	-----	52	-----	-----
53	-----	-----	54	-----	-----
55	-----	-----	56	-----	-----
57	-----	-----	58	-----	-----
59	-----	-----	60	-----	-----
61	-----	-----	62	-----	-----
63	-----	-----	64	-----	-----
65	-----	-----	66	-----	-----
67	-----	-----	68	-----	-----
69	-----	-----	70	-----	-----
71	-----	-----	72	-----	-----
73	-----	-----	74	-----	-----
75	-----	-----	76	-----	-----
77	-----	-----	78	-----	-----
79	-----	-----	80	-----	-----

△PAGE ▾ 2/7

▲PAGE ▾ 2/3

Update 349

2022/07/10 17:29:57

C-phase harmonic voltage:

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 2

Frequency Meas. Item

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 2

Frequency Meas. Item

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.002 Hz

Urms3 229.926 V
Irms3 172.620 A
P3 39.627kW
S3 39.690kVA
Q3 2.239kvar
λ3 0.99841
φ3 3.234 °
Uthd3 0.690 %
Ithd3 1.871 %
Pthd3 0.008 %
Uthf3 0.273 %
Ithf3 0.986 %
Utif3 10.753
Itif3 41.436

Or.	U3 [V]	hdf[%]	Or.	U3 [V]	hdf[%]
1	229.926	99.998	2	0.020	0.009
3	1.024	0.445	4	0.126	0.055
5	0.697	0.303	6	0.090	0.039
7	0.649	0.282	8	0.031	0.014
9	0.448	0.195	10	0.050	0.022
11	0.233	0.101	12	0.035	0.015
13	0.174	0.076	14	0.067	0.029
15	0.260	0.113	16	0.024	0.010
17	0.088	0.038	18	0.050	0.022
19	0.065	0.028	20	0.020	0.009
21	0.071	0.031	22	0.014	0.006
23	0.136	0.059	24	0.019	0.008
25	0.088	0.038	26	0.025	0.011
27	0.064	0.028	28	0.016	0.007
29	0.061	0.027	30	0.038	0.017
31	0.096	0.042	32	0.030	0.013
33	0.047	0.021	34	0.024	0.010
35	0.127	0.055	36	0.041	0.018
37	0.053	0.023	38	0.030	0.013
39	0.012	0.005	40	0.021	0.009

△PAGE ▾ 3/7

▲PAGE ▾ 1/3

Update 415
Normal Mode2022/07/10 17:30:47
U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.002 Hz

Urms3 229.926 V
Irms3 172.620 A
P3 39.627kW
S3 39.690kVA
Q3 2.239kvar
λ3 0.99841
φ3 3.234 °
Uthd3 0.690 %
Ithd3 1.871 %
Pthd3 0.008 %
Uthf3 0.273 %
Ithf3 0.986 %
Utif3 10.753
Itif3 41.436

Or.	U3 [V]	hdf[%]	Or.	U3 [V]	hdf[%]
41	0.043	0.019	42	0.038	0.016
43	0.068	0.029	44	0.060	0.026
45	0.038	0.017	46	0.031	0.013
47	0.015	0.007	48	0.041	0.018
49	0.016	0.007	50	0.023	0.010
51	-----	-----	52	-----	-----
53	-----	-----	54	-----	-----
55	-----	-----	56	-----	-----
57	-----	-----	58	-----	-----
59	-----	-----	60	-----	-----
61	-----	-----	62	-----	-----
63	-----	-----	64	-----	-----
65	-----	-----	66	-----	-----
67	-----	-----	68	-----	-----
69	-----	-----	70	-----	-----
71	-----	-----	72	-----	-----
73	-----	-----	74	-----	-----
75	-----	-----	76	-----	-----
77	-----	-----	78	-----	-----
79	-----	-----	80	-----	-----

△PAGE ▾ 3/7

▲PAGE ▾ 2/3

Update 415

2022/07/10 17:30:55

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 3

Frequency Meas. Item

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 3

Frequency Meas. Item

Working Conditions:

Output 1000V/90A, load=75%

U1 0.55% U2 0.71% U3 0.73%

I1 2.09% I2 2.35% I3 2.12%

Normal Mode		Uover: ■ ■ ■ ■		U1-3 : 600Vrms		YOKOGAWA ◆
		Iover: ■ ■ ■ ■		Integ:Reset		Numeric (ALL)
		Element1	Element2	Element3	Σ A(3P4W)	Element4
Voltage		600Vrms	600Vrms	600Vrms		A1000Vrms
Current		500mA rms	500mA rms	500mA rms		A500mA rms
U [V]	I	230.015	230.335	230.132	230.161	1.00147k
I [A]	P	136.099	135.638	137.163	136.300	0.08959k
P [W]	S	31.224k	31.116k	31.476k	93.816k	0.08972M
S [VA]	Q	31.305k	31.242k	31.566k	94.113k	0.08972M
Q [var]	λ	2.244k	-2.806k	2.376k	1.814k	0.00029M
λ []	φ	0.99743	0.99596	0.99716	0.99685	0.99999
φ [°]	fU	4.110	354.847	4.317	4.548	0.187
fU [Hz]	fI	50.003	50.003	50.003		
fI [Hz]	Time[]	-----	-----	-----	-----	-----
	WP [Wh]	-----	-----	-----	-----	-----
	WP+ [Wh]	-----	-----	-----	-----	-----
	WP- [Wh]	-----	-----	-----	-----	-----
	q [Ah]	-----	-----	-----	-----	-----
	q+ [Ah]	-----	-----	-----	-----	-----
	q- [Ah]	-----	-----	-----	-----	-----
	WS [VAh]	-----	-----	-----	-----	-----
	WQ [varh]	-----	-----	-----	-----	-----
						Frequency Meas. Item

Update 779

2022/07/10 18:24:35

A-phase harmonic current:

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms1 230.015 V
Irms1 136.099 A
P1 31.224kW
S1 31.305kVA
Q1 2.244kvar
λ1 0.99743
φ1 4.110 °
Uthd1 0.554 %
Ithd1 2.088 %
Pthd1 0.006 %
Uthf1 0.376 %
Ithf1 2.444 %
Utif1 16.052
Itif1 106.098

Or.	I1 [A]	hdf[%]	Or.	I1 [A]	hdf[%]
1	136.099		dc	0.037	0.027
1	136.077	99.978	2	0.041	0.030
3	0.901	0.662	4	0.031	0.022
5	1.298	0.954	6	0.022	0.016
7	0.639	0.469	8	0.007	0.005
9	0.653	0.480	10	0.040	0.030
11	0.429	0.315	12	0.026	0.019
13	0.534	0.392	14	0.067	0.049
15	0.210	0.154	16	0.076	0.056
17	0.566	0.416	18	0.038	0.028
19	0.771	0.566	20	0.071	0.052
21	0.490	0.360	22	0.027	0.020
23	0.490	0.360	24	0.008	0.006
25	0.277	0.204	26	0.035	0.026
27	0.439	0.323	28	0.035	0.026
29	0.233	0.171	30	0.020	0.014
31	0.707	0.519	32	0.034	0.025
33	0.601	0.442	34	0.031	0.023
35	0.249	0.183	36	0.022	0.017
37	0.715	0.525	38	0.008	0.006
39	0.587	0.432	40	0.010	0.008

△PAGE ▾ 1/7

▲PAGE ▾ 1/3

Update 779
Normal Mode2022/07/10 18:25:02
U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms1 230.015 V
Irms1 136.099 A
P1 31.224kW
S1 31.305kVA
Q1 2.244kvar
λ1 0.99743
φ1 4.110 °
Uthd1 0.554 %
Ithd1 2.088 %
Pthd1 0.006 %
Uthf1 0.376 %
Ithf1 2.444 %
Utif1 16.052
Itif1 106.098

Or.	I1 [A]	hdf[%]	Or.	I1 [A]	hdf[%]
41	0.371	0.273	42	0.025	0.019
43	0.431	0.317	44	0.088	0.065
45	0.504	0.370	46	0.032	0.023
47	0.185	0.136	48	0.009	0.007
49	0.297	0.218	50	0.026	0.019
51	-----	-----	52	-----	-----
53	-----	-----	54	-----	-----
55	-----	-----	56	-----	-----
57	-----	-----	58	-----	-----
59	-----	-----	60	-----	-----
61	-----	-----	62	-----	-----
63	-----	-----	64	-----	-----
65	-----	-----	66	-----	-----
67	-----	-----	68	-----	-----
69	-----	-----	70	-----	-----
71	-----	-----	72	-----	-----
73	-----	-----	74	-----	-----
75	-----	-----	76	-----	-----
77	-----	-----	78	-----	-----
79	-----	-----	80	-----	-----

△PAGE ▾ 1/7

▲PAGE ▾ 2/3

Update 779

2022/07/10 18:25:05

B-phase harmonic current:

YOKOGAWA ◆

List Items

List Item No.

1

Function

I

Element/Σ

Element 1

Frequency Meas. Item

YOKOGAWA ◆

List Items

List Item No.

1

Function

I

Element/Σ

Element 1

Frequency Meas. Item

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms2 230.335 V
Irms2 135.638 A
P2 31.116kW
S2 31.242kVA
Q2 -2.806kvar
 λ_2 0.99596
 ϕ_2 354.847 °
Uthd2 0.713 %
Ithd2 2.347 %
Pthd2 0.004 %
Uthf2 0.442 %
Ithf2 2.833 %
Utif2 19.565
Itif2 124.413

Or.	I2 [A]	hdf[%]	Or.	I2 [A]	hdf[%]
1	135.638		dc	0.080	0.059
1	135.622	99.972	2	0.030	0.022
3	0.528	0.389	4	0.032	0.023
5	1.542	1.137	6	0.063	0.046
7	0.876	0.646	8	0.068	0.050
9	0.901	0.664	10	0.050	0.037
11	0.068	0.050	12	0.050	0.037
13	0.646	0.476	14	0.058	0.043
15	0.458	0.338	16	0.082	0.060
17	0.322	0.237	18	0.014	0.010
19	0.641	0.473	20	0.048	0.036
21	0.617	0.455	22	0.053	0.039
23	0.227	0.167	24	0.016	0.012
25	0.554	0.408	26	0.013	0.009
27	0.473	0.349	28	0.033	0.024
29	0.419	0.309	30	0.003	0.002
31	0.841	0.620	32	0.008	0.006
33	0.579	0.427	34	0.042	0.031
35	0.503	0.371	36	0.048	0.035
37	0.926	0.683	38	0.023	0.017
39	0.532	0.392	40	0.040	0.030

△PAGE ▾ 2/7

▲PAGE ▾ 1/3

Update 779
Normal Mode2022/07/10 18:25:33
U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms2 230.335 V
Irms2 135.638 A
P2 31.116kW
S2 31.242kVA
Q2 -2.806kvar
 λ_2 0.99596
 ϕ_2 354.847 °
Uthd2 0.713 %
Ithd2 2.347 %
Pthd2 0.004 %
Uthf2 0.442 %
Ithf2 2.833 %
Utif2 19.565
Itif2 124.413

Or.	I2 [A]	hdf[%]	Or.	I2 [A]	hdf[%]
41	0.586	0.432	42	0.093	0.068
43	0.661	0.487	44	0.048	0.036
45	0.440	0.324	46	0.032	0.024
47	0.315	0.232	48	0.028	0.021
49	0.234	0.173	50	0.026	0.019
51	-----	-----	52	-----	-----
53	-----	-----	54	-----	-----
55	-----	-----	56	-----	-----
57	-----	-----	58	-----	-----
59	-----	-----	60	-----	-----
61	-----	-----	62	-----	-----
63	-----	-----	64	-----	-----
65	-----	-----	66	-----	-----
67	-----	-----	68	-----	-----
69	-----	-----	70	-----	-----
71	-----	-----	72	-----	-----
73	-----	-----	74	-----	-----
75	-----	-----	76	-----	-----
77	-----	-----	78	-----	-----
79	-----	-----	80	-----	-----

△PAGE ▾ 2/7

▲PAGE ▾ 2/3

Update 779

2022/07/10 18:25:35

C-phase harmonic current:

YOKOGAWA ◆

List Items

List Item No.

1

Function

I

Element/Σ

Element 2

Frequency Meas. Item

YOKOGAWA ◆

List Items

List Item No.

1

Function

I

Element/Σ

Element 2

Frequency Meas. Item

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms3 230.132 V
Irms3 137.163 A
P3 31.476kW
S3 31.566kVA
Q3 2.376kvar
 λ_3 0.99716
 ϕ_3 4.317 °
Uthd3 0.731 %
Ithd3 2.121 %
Pthd3 0.009 %
Uthf3 0.305 %
Ithf3 1.164 %
Utif3 11.943
Itif3 48.323

Or.	I3 [A]	hdf[%]	Or.	I3 [A]	hdf[%]
1	137.163		dc	0.025	0.018
1	137.126	99.978	2	0.084	0.061
3	0.373	0.272	4	0.036	0.026
5	2.317	1.689	6	0.030	0.022
7	1.291	0.941	8	0.050	0.037
9	0.154	0.113	10	0.050	0.037
11	0.319	0.232	12	0.022	0.016
13	0.202	0.147	14	0.040	0.029
15	0.324	0.236	16	0.049	0.036
17	0.385	0.280	18	0.033	0.024
19	0.368	0.268	20	0.014	0.010
21	0.121	0.088	22	0.016	0.012
23	0.300	0.219	24	0.037	0.027
25	0.430	0.313	26	0.016	0.012
27	0.150	0.110	28	0.040	0.029
29	0.182	0.132	30	0.070	0.051
31	0.221	0.161	32	0.027	0.020
33	0.093	0.068	34	0.011	0.008
35	0.254	0.185	36	0.028	0.021
37	0.287	0.209	38	0.061	0.045
39	0.031	0.023	40	0.054	0.039

△PAGE ▾ 3/7

▲PAGE ▾ 1/3

Update 779
Normal Mode2022/07/10 18:26:41
U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms3 230.132 V
Irms3 137.163 A
P3 31.476kW
S3 31.566kVA
Q3 2.376kvar
 λ_3 0.99716
 ϕ_3 4.317 °
Uthd3 0.731 %
Ithd3 2.121 %
Pthd3 0.009 %
Uthf3 0.305 %
Ithf3 1.164 %
Utif3 11.943
Itif3 48.323

Or.	I3 [A]	hdf[%]	Or.	I3 [A]	hdf[%]
41	0.225	0.164	42	0.033	0.024
43	0.250	0.183	44	0.003	0.003
45	0.024	0.017	46	0.020	0.014
47	0.177	0.129	48	0.038	0.028
49	0.037	0.027	50	0.018	0.013
51	-----	-----	52	-----	-----
53	-----	-----	54	-----	-----
55	-----	-----	56	-----	-----
57	-----	-----	58	-----	-----
59	-----	-----	60	-----	-----
61	-----	-----	62	-----	-----
63	-----	-----	64	-----	-----
65	-----	-----	66	-----	-----
67	-----	-----	68	-----	-----
69	-----	-----	70	-----	-----
71	-----	-----	72	-----	-----
73	-----	-----	74	-----	-----
75	-----	-----	76	-----	-----
77	-----	-----	78	-----	-----
79	-----	-----	80	-----	-----

△PAGE ▾ 3/7

▲PAGE ▾ 2/3

Update 779

2022/07/10 18:26:47

A-phase harmonic voltage:

YOKOGAWA ◆

List Items

List Item No.

1

Function

I

Element/Σ

Element 3

Frequency Meas. Item

YOKOGAWA ◆

List Items

List Item No.

1

Function

I

Element/Σ

Element 3

Frequency Meas. Item

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms1 230.015 V
Irms1 136.099 A
P1 31.224kW
S1 31.305kVA
Q1 2.244kvar
λ1 0.99743
φ1 4.110 °
Uthd1 0.554 %
Ithd1 2.088 %
Pthd1 0.006 %
Uthf1 0.376 %
Ithf1 2.444 %
Utif1 16.052
Itif1 106.098

Or.	U1 [V]	hdf[%]	Or.	U1 [V]	hdf[%]
1	230.015	99.998	2	0.024	0.010
3	0.737	0.320	4	0.165	0.072
5	0.497	0.216	6	0.046	0.020
7	0.476	0.207	8	0.036	0.016
9	0.438	0.190	10	0.010	0.005
11	0.214	0.093	12	0.005	0.002
13	0.209	0.091	14	0.026	0.011
15	0.231	0.100	16	0.031	0.013
17	0.093	0.041	18	0.022	0.009
19	0.092	0.040	20	0.012	0.005
21	0.154	0.067	22	0.028	0.012
23	0.064	0.028	24	0.043	0.018
25	0.064	0.028	26	0.016	0.007
27	0.174	0.076	28	0.018	0.008
29	0.103	0.045	30	0.026	0.011
31	0.006	0.003	32	0.032	0.014
33	0.175	0.076	34	0.035	0.015
35	0.128	0.056	36	0.008	0.004
37	0.052	0.023	38	0.014	0.006
39	0.161	0.070	40	0.014	0.006
	0.143	0.062		0.007	0.003

△PAGE ▾ 1/7

▲PAGE ▾ 1/3

Update 779
Normal Mode2022/07/10 18:24:53
U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms1 230.015 V
Irms1 136.099 A
P1 31.224kW
S1 31.305kVA
Q1 2.244kvar
λ1 0.99743
φ1 4.110 °
Uthd1 0.554 %
Ithd1 2.088 %
Pthd1 0.006 %
Uthf1 0.376 %
Ithf1 2.444 %
Utif1 16.052
Itif1 106.098

Or.	U1 [V]	hdf[%]	Or.	U1 [V]	hdf[%]
41	230.015	99.998	42	dc	0.024
43	0.094	0.041	44	0.027	0.012
45	0.126	0.055	46	0.010	0.004
47	0.114	0.050	48	0.019	0.008
49	0.061	0.026	50	0.008	0.004
51	0.089	0.039	52	0.012	0.005
53	-----	-----	54	-----	-----
55	-----	-----	56	-----	-----
57	-----	-----	58	-----	-----
59	-----	-----	60	-----	-----
61	-----	-----	62	-----	-----
63	-----	-----	64	-----	-----
65	-----	-----	66	-----	-----
67	-----	-----	68	-----	-----
69	-----	-----	70	-----	-----
71	-----	-----	72	-----	-----
73	-----	-----	74	-----	-----
75	-----	-----	76	-----	-----
77	-----	-----	78	-----	-----
79	-----	-----	80	-----	-----

△PAGE ▾ 1/7

▲PAGE ▾ 2/3

Update 779

2022/07/10 18:24:55

B-phase harmonic voltage:

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 1

Frequency Meas. Item

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 1

Frequency Meas. Item

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms2 230.335 V
Irms2 135.638 A
P2 31.116kW
S2 31.242kVA
Q2 -2.806kvar
 λ_2 0.99596
 ϕ_2 354.847 °
Uthd2 0.713 %
Ithd2 2.347 %
Pthd2 0.004 %
Uthf2 0.442 %
Ithf2 2.833 %
Utif2 19.565
Itif2 124.413

Or.	U2 [V]	hdf[%]	Or.	U2 [V]	hdf[%]
1	230.335	99.997	2	0.016	0.007
3	1.152	0.500	4	0.089	0.038
5	0.665	0.289	6	0.036	0.016
7	0.615	0.267	8	0.026	0.011
9	0.178	0.077	10	0.019	0.008
11	0.182	0.079	12	0.015	0.006
13	0.124	0.054	14	0.006	0.002
15	0.161	0.070	16	0.018	0.008
17	0.139	0.060	18	0.015	0.007
19	0.100	0.043	20	0.005	0.002
21	0.109	0.047	22	0.029	0.013
23	0.238	0.103	24	0.028	0.012
25	0.091	0.039	26	0.012	0.005
27	0.095	0.041	28	0.058	0.025
29	0.100	0.043	30	0.040	0.017
31	0.216	0.094	32	0.034	0.015
33	0.092	0.040	34	0.014	0.006
35	0.103	0.045	36	0.041	0.018
37	0.221	0.096	38	0.030	0.013
39	0.101	0.044	40	0.006	0.003

△PAGE ▾ 2/7

▲PAGE ▾ 1/3

Update 779
Normal Mode2022/07/10 18:25:18
U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms2 230.335 V
Irms2 135.638 A
P2 31.116kW
S2 31.242kVA
Q2 -2.806kvar
 λ_2 0.99596
 ϕ_2 354.847 °
Uthd2 0.713 %
Ithd2 2.347 %
Pthd2 0.004 %
Uthf2 0.442 %
Ithf2 2.833 %
Utif2 19.565
Itif2 124.413

Or.	U2 [V]	hdf[%]	Or.	U2 [V]	hdf[%]
41	0.157	0.068	42	0.025	0.011
43	0.172	0.075	44	0.037	0.016
45	0.129	0.056	46	0.006	0.003
47	0.139	0.060	48	0.007	0.003
49	0.095	0.041	50	0.020	0.009
51	-----	-----	52	-----	-----
53	-----	-----	54	-----	-----
55	-----	-----	56	-----	-----
57	-----	-----	58	-----	-----
59	-----	-----	60	-----	-----
61	-----	-----	62	-----	-----
63	-----	-----	64	-----	-----
65	-----	-----	66	-----	-----
67	-----	-----	68	-----	-----
69	-----	-----	70	-----	-----
71	-----	-----	72	-----	-----
73	-----	-----	74	-----	-----
75	-----	-----	76	-----	-----
77	-----	-----	78	-----	-----
79	-----	-----	80	-----	-----

△PAGE ▾ 2/7

▲PAGE ▾ 2/3

Update 779

2022/07/10 18:25:20

C-phase harmonic voltage:

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 2

Frequency Meas. Item

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 2

Frequency Meas. Item

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms3 230.132 V
Irms3 137.163 A
P3 31.476kW
S3 31.566kVA
Q3 2.376kvar
 λ_3 0.99716
 ϕ_3 4.317 °
Uthd3 0.731 %
Ithd3 2.121 %
Pthd3 0.009 %
Uthf3 0.305 %
Ithf3 1.164 %
Utif3 11.943
Itif3 48.323

Or.	U3 [V]	hdf[%]	Or.	U3 [V]	hdf[%]
1	230.132	99.997	2	0.015	0.007
3	1.165	0.506	4	0.189	0.082
5	0.764	0.332	6	0.095	0.041
7	0.618	0.269	8	0.049	0.021
9	0.401	0.174	10	0.069	0.030
11	0.232	0.101	12	0.009	0.004
13	0.108	0.047	14	0.014	0.006
15	0.108	0.047	16	0.028	0.012
17	0.260	0.113	18	0.058	0.025
19	0.046	0.020	20	0.023	0.010
21	0.075	0.033	22	0.040	0.017
23	0.106	0.046	24	0.036	0.016
25	0.204	0.089	26	0.035	0.015
27	0.213	0.092	28	0.019	0.008
29	0.042	0.018	30	0.068	0.030
31	0.068	0.029	32	0.035	0.015
33	0.041	0.018	34	0.062	0.027
35	0.031	0.014	36	0.022	0.010
37	0.067	0.029	38	0.032	0.014
39	0.055	0.024	40	0.032	0.014
	0.033	0.014		0.005	0.002

△PAGE ▾ 3/7

▲PAGE ▾ 1/3

Update 779
Normal Mode2022/07/10 18:26:23
U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms3 230.132 V
Irms3 137.163 A
P3 31.476kW
S3 31.566kVA
Q3 2.376kvar
 λ_3 0.99716
 ϕ_3 4.317 °
Uthd3 0.731 %
Ithd3 2.121 %
Pthd3 0.009 %
Uthf3 0.305 %
Ithf3 1.164 %
Utif3 11.943
Itif3 48.323

Or.	U3 [V]	hdf[%]	Or.	U3 [V]	hdf[%]
41	230.132	99.997	42	0.015	0.007
43	0.062	0.027	44	0.048	0.021
45	0.080	0.035	46	0.010	0.004
47	0.028	0.012	48	0.026	0.011
49	0.002	0.001	50	0.017	0.008
51	0.052	0.022	52	0.019	0.008
53	-----	-----	54	-----	-----
55	-----	-----	56	-----	-----
57	-----	-----	58	-----	-----
59	-----	-----	60	-----	-----
61	-----	-----	62	-----	-----
63	-----	-----	64	-----	-----
65	-----	-----	66	-----	-----
67	-----	-----	68	-----	-----
69	-----	-----	70	-----	-----
71	-----	-----	72	-----	-----
73	-----	-----	74	-----	-----
75	-----	-----	76	-----	-----
77	-----	-----	78	-----	-----
79	-----	-----	80	-----	-----

△PAGE ▾ 3/7

▲PAGE ▾ 2/3

Update 779

2022/07/10 18:26:27

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 3

Frequency Meas. Item

YOKOGAWA ◆

List Items

List Item No.

2

Function

U

Element/Σ

Element 2

Frequency Meas. Item

Working Conditions:

Output 1000V/60A, load=50%

U1 0.63% U2 0.76% U3 0.76%

I1 4.37% I2 4.27% I3 3.26%

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

YOKOGAWA ◆

	Element1	Element2	Element3	Σ A(3P4W)	Element4
Voltage	600Vrms	600Vrms	600Vrms		A1000Vrms
Current	500mA rms	500mA rms	500mA rms		A500mA rms
U [V]	230.210	230.548	230.257	230.339	1.00178k
I [A]	91.537	91.064	92.248	91.616	0.05976k
P [W]	20.953k	20.830k	21.125k	62.907k	0.05987M
S [VA]	21.073k	20.995k	21.241k	63.308k	0.05987M
Q [var]	2.244k	-2.628k	2.219k	1.836k	0.00000M
λ	0.99431	0.99213	0.99453	0.99366	1.00000
φ [°]	6.114	352.809	5.998	6.455	0.000
fU [Hz]	50.003	50.002	50.002		
fI [Hz]					
Time []					
WP [Wh]					
WP+ [Wh]					
WP- [Wh]					
q [Ah]					
q+ [Ah]					
q- [Ah]					
WS [VAh]					
WQ [varh]					

PAGE

 1
2
3
4
5
6
7
8
9
10

Update 329

2022/07/10 18:10:35

A-phase harmonic current:

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms1 230.210 V
Irms1 91.537 A
P1 20.953kW
S1 21.073kVA
Q1 2.244kvar
 λ 1 0.99431
 ϕ 1 6.114 °
Uthd1 0.632 %
Ithd1 4.369 %
Pthd1 0.008 %
Uthf1 0.510 %
Ithf1 5.082 %
Utif1 21.855
Itif1 219.339

Or.	I1 [A]	hdf[%]	Or.	I1 [A]	hdf[%]
1	91.537	99.904	dc	0.058	0.063
3	1.000	1.091	2	0.030	0.032
5	1.664	1.817	4	0.078	0.085
7	0.401	0.438	6	0.059	0.065
9	0.821	0.897	8	0.058	0.063
11	1.147	1.252	10	0.025	0.028
13	1.246	1.360	12	0.044	0.048
15	0.422	0.460	14	0.057	0.062
17	1.312	1.433	16	0.044	0.048
19	0.800	0.873	18	0.016	0.018
21	0.659	0.719	20	0.026	0.028
23	0.551	0.602	22	0.039	0.042
25	0.355	0.387	24	0.021	0.023
27	0.555	0.606	26	0.021	0.023
29	0.266	0.290	28	0.011	0.012
31	0.905	0.988	30	0.038	0.042
33	0.844	0.922	32	0.032	0.035
35	0.430	0.470	34	0.040	0.044
37	0.909	0.992	36	0.036	0.039
39	0.833	0.910	38	0.035	0.038
			40	0.042	0.046

△PAGE ▾ 1/7

▲PAGE ▾ 1/3

Update 329
Normal Mode2022/07/10 18:11:12
U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms1 230.210 V
Irms1 91.537 A
P1 20.953kW
S1 21.073kVA
Q1 2.244kvar
 λ 1 0.99431
 ϕ 1 6.114 °
Uthd1 0.632 %
Ithd1 4.369 %
Pthd1 0.008 %
Uthf1 0.510 %
Ithf1 5.082 %
Utif1 21.855
Itif1 219.339

Or.	I1 [A]	hdf[%]	Or.	I1 [A]	hdf[%]
41	0.648	0.708	42	0.058	0.063
43	0.598	0.653	44	0.038	0.041
45	0.614	0.670	46	0.006	0.007
47	0.440	0.480	48	0.041	0.044
49	0.365	0.399	50	0.046	0.050
51	-----	-----	52	-----	-----
53	-----	-----	54	-----	-----
55	-----	-----	56	-----	-----
57	-----	-----	58	-----	-----
59	-----	-----	60	-----	-----
61	-----	-----	62	-----	-----
63	-----	-----	64	-----	-----
65	-----	-----	66	-----	-----
67	-----	-----	68	-----	-----
69	-----	-----	70	-----	-----
71	-----	-----	72	-----	-----
73	-----	-----	74	-----	-----
75	-----	-----	76	-----	-----
77	-----	-----	78	-----	-----
79	-----	-----	80	-----	-----

△PAGE ▾ 1/7

▲PAGE ▾ 2/3

Update 329

2022/07/10 18:18:16

B-phase harmonic current:

YOKOGAWA ◆

List Items

List Item No.

1

Function

I

Element/Σ

Element 1

Frequency Meas. Item

YOKOGAWA ◆

List Items

List Item No.

1

Function

I

Element/Σ

Element 1

Frequency Meas. Item

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms2 230.548 V
Irms2 91.064 A
P2 20.830kW
S2 20.995kVA
Q2 -2.628kvar
λ2 0.99213
φ2 352.809 °
Uthd2 0.755 %
Ithd2 4.268 %
Pthd2 0.002 %
Uthf2 0.537 %
Ithf2 5.246 %
Utif2 23.365
Itif2 229.377

Or.	I2 [A]	hdf[%]	Or.	I2 [A]	hdf[%]
1	91.064		dc	0.073	0.080
1	90.991	99.909	2	0.019	0.021
3	0.696	0.764	4	0.061	0.067
5	1.136	1.247	6	0.080	0.088
7	1.132	1.243	8	0.095	0.104
9	1.041	1.143	10	0.073	0.080
11	1.086	1.192	12	0.058	0.064
13	1.066	1.171	14	0.051	0.056
15	0.528	0.580	16	0.028	0.031
17	1.107	1.215	18	0.025	0.027
19	0.361	0.397	20	0.028	0.030
21	0.622	0.683	22	0.014	0.016
23	0.507	0.556	24	0.002	0.003
25	0.746	0.820	26	0.040	0.044
27	0.626	0.687	28	0.039	0.043
29	0.450	0.494	30	0.089	0.098
31	1.034	1.135	32	0.063	0.069
33	0.752	0.826	34	0.026	0.029
35	0.456	0.501	36	0.046	0.050
37	0.947	1.040	38	0.054	0.059
39	0.758	0.832	40	0.040	0.044

△PAGE ▾ 2/7

▲PAGE ▾ 1/3

Update 329
Normal Mode2022/07/10 18:13:04
U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms2 230.548 V
Irms2 91.064 A
P2 20.830kW
S2 20.995kVA
Q2 -2.628kvar
λ2 0.99213
φ2 352.809 °
Uthd2 0.755 %
Ithd2 4.268 %
Pthd2 0.002 %
Uthf2 0.537 %
Ithf2 5.246 %
Utif2 23.365
Itif2 229.377

Or.	I2 [A]	hdf[%]	Or.	I2 [A]	hdf[%]
41	0.775	0.851	42	0.046	0.050
43	0.745	0.817	44	0.028	0.030
45	0.576	0.633	46	0.036	0.039
47	0.403	0.443	48	0.078	0.086
49	0.438	0.481	50	0.022	0.024
51	-----	-----	52	-----	-----
53	-----	-----	54	-----	-----
55	-----	-----	56	-----	-----
57	-----	-----	58	-----	-----
59	-----	-----	60	-----	-----
61	-----	-----	62	-----	-----
63	-----	-----	64	-----	-----
65	-----	-----	66	-----	-----
67	-----	-----	68	-----	-----
69	-----	-----	70	-----	-----
71	-----	-----	72	-----	-----
73	-----	-----	74	-----	-----
75	-----	-----	76	-----	-----
77	-----	-----	78	-----	-----
79	-----	-----	80	-----	-----

△PAGE ▾ 2/7

▲PAGE ▾ 2/3

Update 329

2022/07/10 18:13:08

C-phase harmonic current:

YOKOGAWA ◆

List Items

List Item No.

1

Function

I

Element/Σ

Element 2

Frequency Meas. Item

YOKOGAWA ◆

List Items

List Item No.

1

Function

I

Element/Σ

Element 2

Frequency Meas. Item

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms3 230.257 V
Irms3 92.248 A
P3 21.125kW
S3 21.241kVA
Q3 2.219kvar
 λ_3 0.99453
 ϕ_3 5.998 °
Uthd3 0.762 %
Ithd3 3.257 %
Pthd3 0.009 %
Uthf3 0.315 %
Ithf3 2.190 %
Utif3 12.092
Itif3 83.235

Or.	I3 [A]	hdf[%]	Or.	I3 [A]	hdf[%]
1	92.248	99.947	2	0.021	0.023
3	0.374	0.405	4	0.077	0.083
5	2.131	2.307	6	0.056	0.061
7	0.836	0.905	8	0.038	0.041
9	0.158	0.171	10	0.013	0.014
11	0.917	0.993	12	0.038	0.041
13	0.926	1.003	14	0.018	0.020
15	0.151	0.164	16	0.016	0.018
17	0.925	1.002	18	0.017	0.019
19	0.675	0.731	20	0.028	0.030
21	0.027	0.029	22	0.017	0.018
23	0.165	0.178	24	0.034	0.037
25	0.458	0.496	26	0.022	0.023
27	0.099	0.107	28	0.027	0.029
29	0.233	0.253	30	0.030	0.032
31	0.313	0.339	32	0.053	0.057
33	0.176	0.191	34	0.023	0.025
35	0.177	0.191	36	0.014	0.015
37	0.130	0.141	38	0.062	0.067
39	0.107	0.115	40	0.018	0.020
				0.016	0.017

△PAGE ▾ 3/7

▲PAGE ▾ 1/3

Update 329
Normal Mode2022/07/10 18:13:32
U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms3 230.257 V
Irms3 92.248 A
P3 21.125kW
S3 21.241kVA
Q3 2.219kvar
 λ_3 0.99453
 ϕ_3 5.998 °
Uthd3 0.762 %
Ithd3 3.257 %
Pthd3 0.009 %
Uthf3 0.315 %
Ithf3 2.190 %
Utif3 12.092
Itif3 83.235

Or.	I3 [A]	hdf[%]	Or.	I3 [A]	hdf[%]
41	0.112	0.122	42	0.021	0.023
43	0.205	0.221	44	0.032	0.035
45	0.096	0.103	46	0.009	0.010
47	0.098	0.106	48	0.054	0.058
49	0.107	0.116	50	0.043	0.047
51	-----	-----	52	0.040	0.044
53	-----	-----	54	-----	-----
55	-----	-----	56	-----	-----
57	-----	-----	58	-----	-----
59	-----	-----	60	-----	-----
61	-----	-----	62	-----	-----
63	-----	-----	64	-----	-----
65	-----	-----	66	-----	-----
67	-----	-----	68	-----	-----
69	-----	-----	70	-----	-----
71	-----	-----	72	-----	-----
73	-----	-----	74	-----	-----
75	-----	-----	76	-----	-----
77	-----	-----	78	-----	-----
79	-----	-----	80	-----	-----

△PAGE ▾ 3/7

▲PAGE ▾ 2/3

Update 329

2022/07/10 18:13:36

A-phase harmonic voltage:

YOKOGAWA ◆

List Items

List Item No.

1

Function

I

Element/Σ

Element 3

Frequency Meas. Item

YOKOGAWA ◆

List Items

List Item No.

1

Function

I

Element/Σ

Element 3

Frequency Meas. Item

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms1 230.210 V
Irms1 91.537 A
P1 20.953kW
S1 21.073kVA
Q1 2.244kvar
λ1 0.99431
φ1 6.114 °
Uthd1 0.632 %
Ithd1 4.369 %
Pthd1 0.008 %
Uthf1 0.510 %
Ithf1 5.082 %
Utif1 21.855
Itif1 219.339

Or.	U1 [V]	hdf[%]	Or.	U1 [V]	hdf[%]
1	230.210	99.998	dc	0.049	0.021
3	0.907	0.394	2	0.124	0.054
5	0.489	0.213	4	0.051	0.022
7	0.357	0.155	6	0.033	0.015
9	0.488	0.212	8	0.036	0.016
11	0.170	0.074	10	0.007	0.003
13	0.223	0.097	12	0.024	0.010
15	0.225	0.098	14	0.008	0.004
17	0.359	0.156	16	0.038	0.016
19	0.156	0.068	18	0.010	0.004
21	0.237	0.103	20	0.015	0.006
23	0.169	0.074	22	0.013	0.006
25	0.128	0.056	24	0.010	0.004
27	0.123	0.053	26	0.012	0.005
29	0.040	0.018	28	0.026	0.011
31	0.189	0.082	30	0.013	0.005
33	0.166	0.072	32	0.018	0.008
35	0.072	0.031	34	0.028	0.012
37	0.262	0.114	36	0.008	0.003
39	0.172	0.075	38	0.024	0.010
			40	0.006	0.002

△PAGE ▾ 1/7

▲PAGE ▾ 1/3

Update 329
Normal Mode2022/07/10 18:12:40
U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms1 230.210 V
Irms1 91.537 A
P1 20.953kW
S1 21.073kVA
Q1 2.244kvar
λ1 0.99431
φ1 6.114 °
Uthd1 0.632 %
Ithd1 4.369 %
Pthd1 0.008 %
Uthf1 0.510 %
Ithf1 5.082 %
Utif1 21.855
Itif1 219.339

Or.	U1 [V]	hdf[%]	Or.	U1 [V]	hdf[%]
41	0.138	0.060	42	0.017	0.007
43	0.163	0.071	44	0.009	0.004
45	0.150	0.065	46	0.024	0.010
47	0.099	0.043	48	0.012	0.005
49	0.132	0.057	50	0.008	0.004
51	-----	-----	52	-----	-----
53	-----	-----	54	-----	-----
55	-----	-----	56	-----	-----
57	-----	-----	58	-----	-----
59	-----	-----	60	-----	-----
61	-----	-----	62	-----	-----
63	-----	-----	64	-----	-----
65	-----	-----	66	-----	-----
67	-----	-----	68	-----	-----
69	-----	-----	70	-----	-----
71	-----	-----	72	-----	-----
73	-----	-----	74	-----	-----
75	-----	-----	76	-----	-----
77	-----	-----	78	-----	-----
79	-----	-----	80	-----	-----

△PAGE ▾ 1/7

▲PAGE ▾ 2/3

Update 329

2022/07/10 18:12:36

B-phase harmonic voltage:

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 1

Frequency Meas. Item

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 1

Frequency Meas. Item

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms2 230.548 V
Irms2 91.064 A
P2 20.830kW
S2 20.995kVA
Q2 -2.628kvar
λ2 0.99213
φ2 352.809 °
Uthd2 0.755 %
Ithd2 4.268 %
Pthd2 0.002 %
Uthf2 0.537 %
Ithf2 5.246 %
Utif2 23.365
Itif2 229.377

Or.	U2 [V]	hdf[%]	Or.	U2 [V]	hdf[%]
1	230.548	99.997	2	0.055	0.024
3	1.284	0.557	4	0.098	0.043
5	0.611	0.265	6	0.023	0.010
7	0.467	0.202	8	0.062	0.027
9	0.217	0.094	10	0.017	0.008
11	0.129	0.056	12	0.014	0.006
13	0.093	0.040	14	0.034	0.015
15	0.135	0.058	16	0.058	0.025
17	0.305	0.132	18	0.009	0.004
19	0.167	0.072	20	0.018	0.008
21	0.119	0.052	22	0.039	0.017
23	0.302	0.131	24	0.010	0.004
25	0.055	0.024	26	0.015	0.007
27	0.111	0.048	28	0.037	0.016
29	0.143	0.062	30	0.009	0.004
31	0.269	0.117	32	0.043	0.019
33	0.185	0.080	34	0.019	0.008
35	0.140	0.061	36	0.020	0.009
37	0.207	0.090	38	0.009	0.004
39	0.196	0.085	40	0.015	0.006

△PAGE ▾ 2/7

▲PAGE ▾ 1/3

Update 329
Normal Mode2022/07/10 18:12:51
U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms2 230.548 V
Irms2 91.064 A
P2 20.830kW
S2 20.995kVA
Q2 -2.628kvar
λ2 0.99213
φ2 352.809 °
Uthd2 0.755 %
Ithd2 4.268 %
Pthd2 0.002 %
Uthf2 0.537 %
Ithf2 5.246 %
Utif2 23.365
Itif2 229.377

Or.	U2 [V]	hdf[%]	Or.	U2 [V]	hdf[%]
41	0.186	0.081	42	0.028	0.012
43	0.178	0.077	44	0.013	0.006
45	0.151	0.065	46	0.031	0.014
47	0.130	0.057	48	0.016	0.007
49	0.102	0.044	50	0.016	0.007
51	-----	-----	52	-----	-----
53	-----	-----	54	-----	-----
55	-----	-----	56	-----	-----
57	-----	-----	58	-----	-----
59	-----	-----	60	-----	-----
61	-----	-----	62	-----	-----
63	-----	-----	64	-----	-----
65	-----	-----	66	-----	-----
67	-----	-----	68	-----	-----
69	-----	-----	70	-----	-----
71	-----	-----	72	-----	-----
73	-----	-----	74	-----	-----
75	-----	-----	76	-----	-----
77	-----	-----	78	-----	-----
79	-----	-----	80	-----	-----

△PAGE ▾ 2/7

▲PAGE ▾ 2/3

Update 329

2022/07/10 18:12:54

C-phase harmonic voltage:

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 2

Frequency Meas. Item

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 2

Frequency Meas. Item

Normal Mode

Uover: ■ ■ ■ ■
Iover: ■ ■ ■ ■U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms3 230.257 V
Irms3 92.248 A
P3 21.125kW
S3 21.241kVA
Q3 2.219kvar
 λ_3 0.99453
 ϕ_3 5.998 °
Uthd3 0.762 %
Ithd3 3.257 %
Pthd3 0.009 %
Uthf3 0.315 %
Ithf3 2.190 %
Utif3 12.092
Itif3 83.235

Or.	U3 [V]	hdf[%]	Or.	U3 [V]	hdf[%]
1	230.257	99.997	dc	0.066	0.029
3	230.265	0.553	2	0.274	0.119
5	0.794	0.345	4	0.144	0.062
7	0.484	0.210	6	0.068	0.029
9	0.390	0.170	8	0.039	0.017
11	0.106	0.046	10	0.011	0.005
13	0.216	0.094	12	0.008	0.004
15	0.205	0.089	14	0.021	0.009
17	0.298	0.130	16	0.033	0.014
19	0.200	0.087	18	0.018	0.008
21	0.090	0.039	20	0.019	0.008
23	0.105	0.046	22	0.041	0.018
25	0.219	0.095	24	0.018	0.008
27	0.055	0.024	26	0.014	0.006
29	0.031	0.014	28	0.042	0.018
31	0.085	0.037	30	0.031	0.013
33	0.035	0.015	32	0.024	0.010
35	0.032	0.014	34	0.037	0.016
37	0.027	0.012	36	0.012	0.005
39	0.061	0.027	38	0.028	0.012
			40	0.007	0.003

△PAGE ▾ 3/7

▲PAGE ▾ 1/3

Update 329
Normal Mode2022/07/10 18:13:21
U1-3 : 600Vrms
Integ:Reset

PLL U1
Freq 50.003 Hz

Urms3 230.257 V
Irms3 92.248 A
P3 21.125kW
S3 21.241kVA
Q3 2.219kvar
 λ_3 0.99453
 ϕ_3 5.998 °
Uthd3 0.762 %
Ithd3 3.257 %
Pthd3 0.009 %
Uthf3 0.315 %
Ithf3 2.190 %
Utif3 12.092
Itif3 83.235

Or.	U3 [V]	hdf[%]	Or.	U3 [V]	hdf[%]
41	0.017	0.008	42	0.005	0.002
43	0.048	0.021	44	0.014	0.006
45	0.028	0.012	46	0.038	0.016
47	0.055	0.024	48	0.007	0.003
49	0.055	0.024	50	0.020	0.009
51	-----	-----	52	-----	-----
53	-----	-----	54	-----	-----
55	-----	-----	56	-----	-----
57	-----	-----	58	-----	-----
59	-----	-----	60	-----	-----
61	-----	-----	62	-----	-----
63	-----	-----	64	-----	-----
65	-----	-----	66	-----	-----
67	-----	-----	68	-----	-----
69	-----	-----	70	-----	-----
71	-----	-----	72	-----	-----
73	-----	-----	74	-----	-----
75	-----	-----	76	-----	-----
77	-----	-----	78	-----	-----
79	-----	-----	80	-----	-----

△PAGE ▾ 3/7

▲PAGE ▾ 2/3

Update 329

2022/07/10 18:13:24

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 3

Frequency Meas. Item

YOKOGAWA ◆

List Items

List Item No.

1

Function

U

Element/Σ

Element 3

Frequency Meas. Item

5.4 Result

Pass

6 Product pictures



front view



back view



right view



left view

8. Equipment list

Equipment	Model	Equipment Number	Type	calibration date
Precision power analyzer	WT3000	TS18070017	15-1000 [V] Sensor input 0-10V Direct input 0-30A, accuracy: $\pm (0.02\% \text{ of reading} + 0.04\% \text{ of range})$ "	2022/12/15
hal	205-S	TS18080148	200A 1:2000 accuracy $\pm 0.5\%$	2022/9/17
Clamp type current probe	751552	TS18080070	1000Arms 30Hz~5kHz	2022/9/14
Clamp type current probe	751552	TS18080071	1000Arms 30Hz~5kHz	2022/9/14
Clamp type current probe	751552	TS18080072	1000Arms 30Hz~5kHz	2023/4/22

STATEMENT

1. The test report is invalid without stamp of laboratory.
2. The test report is invalid without signature of person(s) testing and authorizing.
3. The test report is invalid if erased and corrected.
4. Test results of the report are valid to the test samples if sampling by client.
5. “▷”item to be outside the scope of authorized by CNAS.
6. The test report shall not be reproduced except in full, without written approval of the laboratory.
7. If there is any objection to report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

SHENZHEN CHENGXIN TECHNOLOGY SERVICE CO., LTD.

Address: No. 13 North of Aiqun Road, Shiyan Street, Baoan District, Shenzhen,
Guangdong, China

Post Code: 518108

Tel: +86-755-21128889

http: www.ctsco.cn

Fax: +86-755-21138889

E-Mail: manager@ctsco.cn