TDR-yymmddWrr

Type Name Model Number

| Tested by: | Date: | yyyy-mm-dc |
|--------------|-------|------------|
| Reviewed by: | Date: | yyyy-mm-do |

Assist CE Inc.

101, 1-7-9, Omorihoncho, Ota-ku, Tokyo 143-0011 Japan

tel: 03-4405-5112



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. Full or partial of this report shall not edit, shall prohibit unauthorised reproduction and not release in public. This report may be copyed in full, partial reproduction may only be made with the written consent of the writer.



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|----|---------------------------------------|----------|
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General notes on tests

Form A1 1 of 1

Equipment under test

Type name Model number Manufacturer name

Manufacturer address

EUT Specifications

Environments cc.c °C, hh %, aaaa hpa

Marked ratings AC 200V \pm 10% Single Phase, 50/60Hz, 120/100W

Operation mode A: Continuous, B: 60 Sec operating time/ 90 sec downtime

Protection class I

IP code IPXX

Pollution degree 2

Note

Test Conditions

Test location Assist CE Inc.

101, 1-9-7, Omorihoncho, Ota-ku, Tokyo 143-0011 Japan

Reference standard Accordance with Cl.18 in EN 60204-1:2006+A1:2009



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Form C1 **Safety function test** 1 of 2 Description Accordance with Cl.18 in EN 60204-1:2006+A1:2009 **EUT Specifications** AC 200V \pm 10% Single Phase, 50/60Hz, 120/100W Marked ratings A: Continuous, B: 60 Sec operating time/ 90 sec downtime Operation mode **Test Conditions** Environments cc.c ℃, hh %, aaaa hPa Input Voltage AC 200V, 50Hz Test Method Power Meter Test Points Following table Test time 1 min

| No. | Test Point | Result |
|-----|---|--|
| | Interlocking switch / Front door of processing room | When the door is open, the machine cannot activate power circuits relevant to moving parts. |
| | | During the machine activate, the door cannot be opened if the power source cut off. The machine cannot restart without initializing process by voluntary action. |
| | | [photo] |
| | | FAIL |
| | | The locking device releases immediately when the OFF button is pushed and the mode switch turned to maintenance, whether the spindle rotates still high. |
| | Mode change switch | FAIL |
| | / operation panel | AS soon as the mode select switch turn to manual |
| | | mode, it is possible that operator releases the interlock device on the door, whether the spindle rotetes still high. |
| | | [photo] |
| | EMO switch | All moving parts stop immediately. MCxx, MCxx are |
| | / operation panel, nearby front | opened. |
| | door of processing room | The machine cannot restart unless initializing with voluntary action. |
| | | [photo] |



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| Item | Equipment/Model, Manufacturer | | Serial No. | Calibration Due | | Note |
|------|-------------------------------|------|------------|-----------------|-------|--------|
| _ | _ | | _ | _ | | _ |
| | | Date | yyyy-mm-dd | Tested by | S. Wa | tanabe |





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Form D1 Sound pressure measurement 1 of 2 Description Accordance with Annex I of Machinery Directive **EUT Specifications** Marked ratings AC 200V \pm 10% Single Phase, 50/60Hz, 120/100W Operation mode A: Continuous, B: 60 Sec operating time/ 90 sec downtime **Test Conditions Environments** cc.c ℃, hh %, aaaa hPa Input Voltage AC 200V, 50Hz Test Method Sound level meter Measurement Points Following figure and table Measurement distance 1 m from surface of EUT Measurement height 1.6 m Measurement time 120 s

| No. | Measurement Point | Operation mode | Input Voltage [V] | Input Frequency [Hz] | L _A [dB(A)] | L _{Cpk} [dB] |
|-----|----------------------|-------------------|-------------------------|----------------------------|------------------------|-----------------------|
| 1 | Α | А | 220 | 60 | | |
| 2 | В | А | 220 | 60 | | |
| 3 | С | А | 220 | 60 | | |
| 4 | D | А | 220 | 60 | | |

Note:

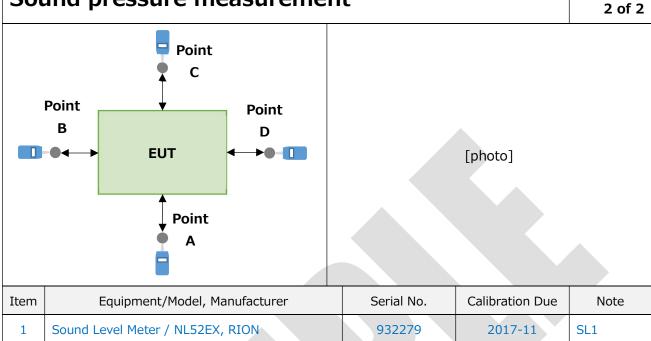
 $L_{\!\scriptscriptstyle A}\!\!:$ A-weighted emission sound pressure level

 L_{Cpk} : The peak C weighted instantaneous sound pressure level



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Form D1 **Sound pressure measurement**



yyyy-mm-dd

Date

Tested by

S. Watanabe



Measurement time

1 min

Test Data Report

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Form E1 Leakage current measurement 1 of 2 Description For Cl.8.2.8 in EN 60204-1:2006+A1:2009 **EUT Specifications** AC 200V \pm 10% Single Phase, 50/60Hz, 120/100W Marked ratings A: Continuous, B: 60 Sec operating time/ 90 sec downtime Operation mode **Test Conditions** cc.c ℃, hh %, aaaa hPa **Environments** Input Voltage **AC 200V** Input Frequency 50Hz L-N condition Normal / Reverse Abnormal condition —: (Normal), A: Open PE Leakage Current Meter / Current Clamp (ground current) Measurement Method Measurement Points Following table

| No. | Measurement Point | Input Voltage [V] | Input Frequency [Hz] | L-N Condition | Abnormal Condition | Measured [mA] |
|-----|-------------------|-------------------------|----------------------------|------------------|-----------------------|------------------|
| 1 | Mains earth | 220 | 60 | Normal | _ | |
| 2 | Mains earth | 220 | 60 | Reverse | _ | |
| 3 | Enclosure | 220 | 60 | Normal | _ | |
| 4 | Enclosure | 220 | 60 | Reverse | _ | |
| 5 | Enclosure | 220 | 60 | Normal | А | |
| 6 | Enclosure | 220 | 60 | Reverse | А | |
| | | | | | | |



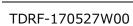
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Leakage current measurement

Form E1 2 of 2

[photo]

| Item | Equipment/Model, Manufacturer | | Serial No. | Calibration | Due | Note |
|------|--------------------------------------|------|------------|-------------|-------|--------|
| 1 | Leakage Crump Tester / ST5540, HIOKI | 1 | 170348488 | 2018-05 | | LT1 |
| 1 | Leakage Clamp Meter / 3293-50, HIOKI | | 17030057 | 2018-0 | 5 | LC1 |
| | | Date | yyyy-mm-dd | Tested by | S. Wa | tanabe |





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| Residual voltage measurement | | | | | | |
|------------------------------|--|--|--|--|--|--|
| Description | Accordance with Cl.18 in EN 60204-1:2006+A1:2009 | | | | | |
| EUT Specifications | | | | | | |
| Marked ratings | AC 200V ± 10% Single Phase, 50/60Hz, 120/100W | | | | | |
| Operation mode | A: Continuous, B: 60 Sec operating time/ 90 sec downtime | | | | | |
| Test Conditions | | | | | | |
| Environments | cc.c ℃, hh %, aaaa hPa | | | | | |
| Input Voltage | AC 200V, 50Hz | | | | | |
| Measurement Method | Oscilloscope, Probe | | | | | |
| Measurement Points | Following table | | | | | |
| Measurement time | 1 s, 5 s, 10 s | | | | | |

| | | Working | Measurement Voltage | | | | |
|-----|-------------------|----------------|---------------------|------------------|------------------|--|--|
| No. | Measurement Point | Voltage [V] | 10 s after [V] | 5 s after [V] | 1 s after [V] | | |
| 1 | L1 to PE / MAIN | 220 | _ | _ | | | |
| 2 | L2 to PE / MAIN | 220 | | _ | | | |
| 3 | L3 to PE / MAIN | 220 | | _ | | | |
| 4 | L1 to L2 / MAIN | 220 | _ | _ | | | |
| 5 | L2 to L3 / MAIN | 220 | _ | _ | | | |
| 6 | L3 to L1 / MAIN | 220 | _ | _ | | | |
| | | | | | | | |
| | | | | | | | |



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S. Watanabe

Tested by

Form F1 Residual voltage measurement 2 of 2 [photo] Equipment/Model, Manufacturer Serial No. Calibration Due Item Note 1 Digital Oscilloscope / TDS3014, TEKTRONIX B012142 2018-05 2 Probe (100:1) / 701947, YOKOGAWA 2018-05 ACE-P1 3 Probe (100:1) / 701947, YOKOGAWA 2018-05 ACE-P2 Probe (100:1) / 701947, YOKOGAWA 2018-05 ACE-P3

Date

yyyy-mm-dd



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| Continuity of protective circuit test | | | | |
|---|-------------------------|--|--|--|
| Description Accordance with Cl.18 in EN 60204-1:2006+A1:2009 | | | | |
| Test Conditions | | | | |
| Environments | cc.c ℃, hh %, aaaa hPa | | | |
| Test Method | Earth continuity tester | | | |
| Test Points | Following table | | | |
| Test Current | 25 A | | | |
| Test Frequency | 60 Hz | | | |
| Measurement time | 120 s | | | |

| No. | Test Point | Cross Section Size of PE Conductor | Max. Permitted Resistance [Ω] | Resistance [Ω] | Voltage [V] | Result Pass/Fail |
|-----|-----------------------------|------------------------------------|-------------------------------|-------------------|----------------|---------------------|
| 1 | Left door of control panel | - | | | _ | |
| 2 | Right door of control panel | - | | | _ | |
| 3 | Interconnection box 1 | _ | | | | |
| 4 | M1 | - | | | | |
| | | | | | | |

| Continuity of protective circuit test | | | | | | |
|---------------------------------------|--|--------------------------------------|--|--------|--------|-----|
| [photo] | | | | | | |
| Item | Equipment/Model, Manufacturer | Serial No. Calibration Due Note | | | Note | |
| 1 | Earth Continuity Tester / TOS6210, KIKUSUI | XD001323 | | 2018-0 | 5 | EC1 |
| | | Date yyyy-mm-dd Tested by S. Watanab | | | tanabe | |



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| Insulation resistance measurement | | | | |
|-----------------------------------|--|--|--|--|
| Description | Accordance with Cl.18 in EN 60204-1:2006+A1:2009 | | | |
| Test Conditions | | | | |
| Environments | cc.c ℃, hh %, aaaa hPa | | | |
| Test Voltage | Following Teble | | | |
| Test Time | 1 min | | | |
| Devices disconnected | Z1 for MAINS | | | |

| No. | Test Point | Test Voltage [Vdc] | Measured [MΩ] | Result Pass/Fail |
|-----|------------------------|--------------------------|------------------|---------------------|
| 1 | L1, L2, L3 / MAIN - PE | 500 | >100 | |
| 2 | U1, V1, W1 / MC1 - PE | 500 | >100 | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| [photo] | | | | | | | |
|---------|---------------------------------------|--|-----------|------------|-------------------|--|------|
| Item | Item Equipment/Model, Manufacturer | | | Serial No. | Calibration Due | | Note |
| 1 | Insulation Tester / IR4042-11, HIOKI | | 170324334 | | 170324334 2018-05 | | IT1 |
| | Date yyyy-mm-dd Tested by S. Watanabe | | tanabe | | | | |



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| Voltage withstanding test | | | |
|---------------------------|--|--|--|
| Description | Accordance with Cl.18 in EN 60204-1:2006+A1:2009 | | |
| Test Conditions | | | |
| Environments | cc.c ℃, hh %, aaaa hPa | | |
| Test Voltage | Following Table | | |
| Test Frequency | 60 Hz | | |
| Test Time | 1 s | | |
| Devices disconnected | Z1 for MAINS | | |

| No. | Test Point - Refer to Test Points Table for details | Test Voltage [V] | Result Pass/Fail |
|-----|---|------------------------|---------------------|
| 1 | L1, L2, L3 / MAIN - PE | | |
| 2 | U1, V1, W1 / MC1 - PE | | |
| | | | |
| | | * | |
| | | | |
| | | | |
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| | | | |
| | | | |

| [photo] | | | | | | |
|---------|--|---|------------|-----------|-------|--------|
| Item | Equipment/Model, Manufacturer | nent/Model, Manufacturer Serial No. Calibration Due N | | Note | | |
| 1 | Voltage Withstand Tester / TOS5301 , KIKUSUI |)1 , KIKUSUI V | | 2018-05 | | |
| | | Date | yyyy-mm-dd | Tested by | S. Wa | tanabe |