

EMC EMISSION - TEST REPORT

Report Number : **64.712.17.01557.03 – (E)** Date of Issue: 2018-04-25

Model : RM12D, RM12A/BGEF, RM12A/BGEF(BZ)

Product Type : Remote Controller

Applicant/ Manufacturer/
License holder : GD Midea Heating & Ventilating Equipment CO.,LTD.

Trade Name : Midea, MDV

Address : Penglai Industry Road, Beijiao, Shunde, Foshan, Guangdong, P. R. China

Test Result : ☒ **Positive** ☐ **Negative**



Total pages including
Appendices : 19

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China

EMISSIONS TEST REGULATIONS :

The emissions tests were performed according to the following regulations:

■ - EMC - Directive 2014/30/EU and its amendments

■ - EN 61000-6-3:2007+A1:2011

■ -Refer to report:64.712.17.01557.02 for complete details.

Note: For undated references, the latest edition of the publication at the time of testing (including amendments) was applied.

Environmental Conditions In The Laboratory:

	<u>Actual</u>
Temperature:	: 22°C
Relative Humidity:	: 47 %
Atmospheric Pressure:	: 100.7 kPa

Rated of EUT:

Rated voltage: DC 3.0V (AAA 1.5V*2)

STATEMENT OF MEASUREMENT UNCERTAINTY

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities that can account for a nominal measurement error (please refer to each test item). Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Symbol Definitions:

- - Applicable
- - Not Applicable

■ - Foshan Shunde Guoce testing Technology Co.,Ltd.(IQTC)
Add: No.3, Desheng East Road, Shunde Daliang, Foshan, Guangdong, China

□ - TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
Add: Building 12 & 13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2, Nanshan District, Shenzhen 518052, P.R. China



China

Emissions Test Conditions: CONDUCTED EMISSIONS (Interference Voltage)

The **CONDUCTED EMISSIONS (INTERFERENCE VOLTAGE)** measurements were performed at the following test location:

■ - Test not applicable

□- Test Area (TÜV SÜD) – shielded room

Test Equipment Used:

	Model Number	Manufacturer	Description	Serial Number	Cal. Due
□ -	ESCI	Rohde & Schwarz	EMI Test Receiver	100727	2017-11-14
□ -	ENV216	Rohde & Schwarz	AMN	3506.6550.05	2017-11-14
□ -	ESH2-Z3	Rohde & Schwarz	Passive voltage probe	0299.7810.56	2017-11-14
□ -	RSU-M314-N	Compliance Direction Systems Inc.	RF Switch Box	08042801	2017-11-14
□ -	LS16	AFJ	16A V-Network	16011030241	2017-11-14
□ -	CL55C	AFJ	Click Meter	55041047172	2017-11-14

Measurement Uncertainty: ± 3.10 dB

Remarks: All test equipments used are calibrated on a regular basis.



China

Emissions Test Conditions: RADIATED EMISSIONS (Electric Field)

The *RADIATED EMISSIONS (ELECTRIC FIELD)* measurements, in the frequency range of 30 MHz-6000 MHz, were tested in a horizontal and vertical polarization at the following test location :

☐ - Test not applicable

■ - Test Area (IQTC) – Anechoic ferrite lined shielded room

Testing was performed at a test distance of:

☐ - 3 meters

■ - 10 meters

Test Equipment Used:

Model Number	Manufacturer	Description	Serial Number	Cal. Due
■ - ESU40	ROHDE&SCHWARZ	EMI Test Receiver(20Hz-40GHz)	100298	2018-08-14
■ - PAP-0203-30	Compliance Direction System	Pre-amplifier	22027	2019-01-10
■ - CBL6112D	TESEQ	Bilog Antenna(30MHz-2.0GHz)	25225	2019-01-10
■ - FC02	FRANKONIA	Turntable And Antenna Controller	N/A	N/A

Measurement Uncertainty: Horizontal: $\pm 4.83\text{dB}$; Vertical: $\pm 4.91\text{dB}$; (30MHz-1000MHz);

Remarks: All test equipments used are calibrated on a regular basis.



China

Emissions Test Conditions: CONDUCTED EMISSIONS (Harmonics and Flicker)

The *Harmonic Current Emissions and Voltage Fluctuations and Flicker* measurements were performed at the following test location :

☒ - Test not applicable

☐ - Test Area (TÜV SÜD Shenzhen) –Laboratory open area

Test Equipment Used :

Model Number	Manufacturer	Description	Serial Number	Cal. Due
<input type="checkbox"/> - PCR6000LA	Kikusui	Multi purpose power supply	MG002890	2017-03-12
<input type="checkbox"/> - PM6000-1	Voltech	Power analyser	100006700229	2017-03-12
<input type="checkbox"/> - IMP555	Voltech	Impedance network	1494	2017-03-12

Remarks: All test equipments used are calibrated on a regular basis.

Equipment Under Test (EUT) Test Operation Mode - Emissions Tests :

The equipment under test was operated under the following conditions during emissions testing:

- ☐ - Standby
- ☐ - Test Program (H - Pattern)
- ☐ - Test Program (Color Bar)
- ☐ - Test Program (Customer Specified)
- ☒ - Normal Operating Mode

☒ - ON

Configuration of the equipment under test:

- ☒ - See Constructional Data Form in Appendix B
- ☒ - See Product Information Form(s) in Appendix B

The following peripheral devices and interface cables were connected during the testing:

<input type="checkbox"/> - _____	Type : _____
<input type="checkbox"/> - _____	Type : _____
<input type="checkbox"/> - _____	Type : _____
<input type="checkbox"/> - _____	Type : _____
<input type="checkbox"/> - _____	Type : _____
<input type="checkbox"/> - _____	Type : _____
<input type="checkbox"/> - _____	Type : _____
<input type="checkbox"/> - _____	Type : _____

☒ - unshielded power cable

☐ - unshielded cables

☐ - shielded cables

TUVPS.No.: _____

☐ - customer specific cables

☐ - _____

☐ - _____



China

Emissions Test Results:

Conducted Emissions, 150 kHz - 30 MHz

☐ - PASS

☐ - FAIL

☒ - NOT APPLICABLE

Minimum limit margin _____ dB at _____ MHz

Maximum limit exceeding _____ dB at _____ MHz

Remarks: _____

Radiated Emissions (Electric Field), 30 MHz - 1000 MHz

☒ - PASS

☐ - FAIL

☐ - NOT APPLICABLE

Minimum limit margin _____ dB at _____ MHz

Maximum limit exceeding _____ dB at _____ MHz

Remarks: The highest internal frequency of the EUT is less than 108 MHz, the measurement was made up to 1 GHz

Harmonic Current Emissions and Voltage Changes and Flicker

☐ - PASS

☐ - FAIL

☒ - NOT APPLICABLE

Harmonic measurement exceeding limit _____ Above at _____ Harmonic

Flicker measurement exceeding limit _____ Above the _____ Requirement

Remarks: _____

GENERAL REMARKS:

Applicant wants to add model RM12D in this report. Model RM12D is different with RM12A/BGEF in appearance, LCD and software, but the same in all circuits. Therefore, RM12D was selected for the final test.

SUMMARY:

All tests according to the regulations cited on page 3 were

■ - Performed

□ - Not Performed

The Equipment Under Test

■ - **Fulfills** the general approval requirements cited on page 3.


□ - **Does not** fulfill the general approval requirements cited on page 3.

Testing Start Date: 2018-01-11

Testing End Date: 2018-01-11


- TÜV SÜD CERTIFICATION AND TESTING (CHINA) CO., LTD. GUANGZHOU BRANCH -

Reviewed by:



Tony Liu

Prepared by:



Damon Leung





China

Appendix A

Test Setup Photos

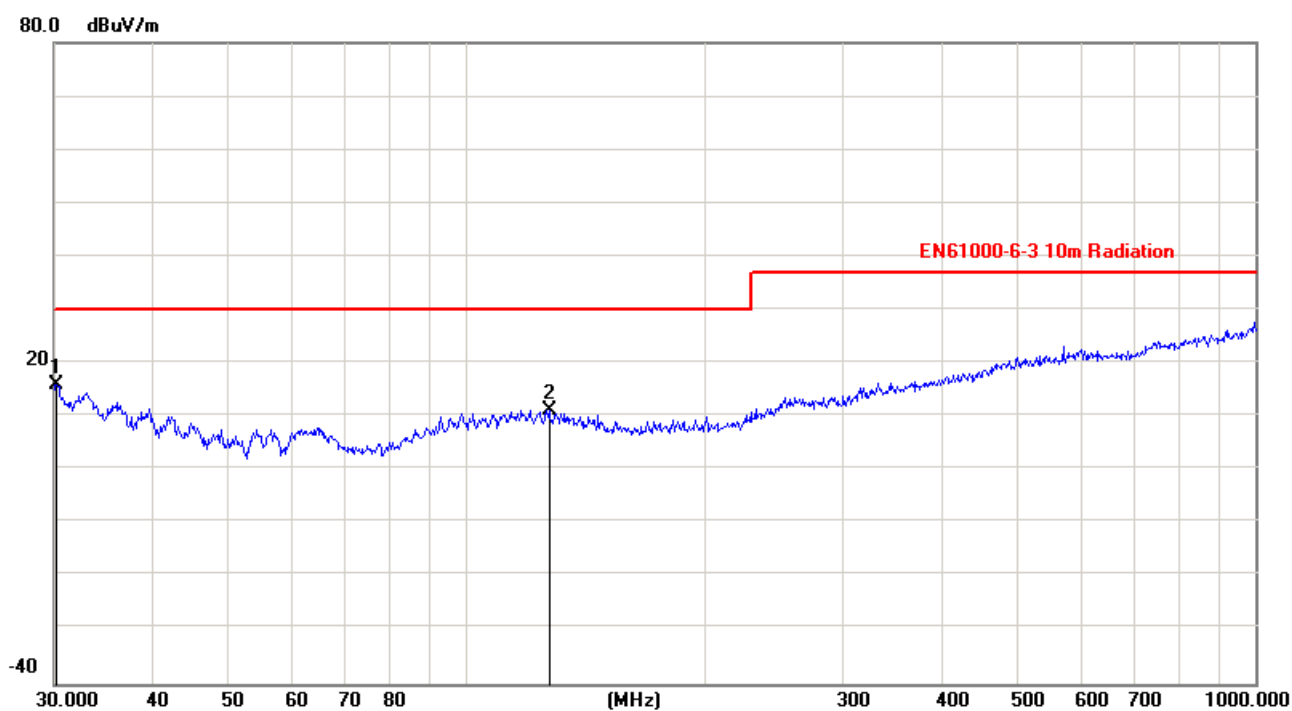
and

Test Data Sheets

Test Setup Photo of Radiated Emission



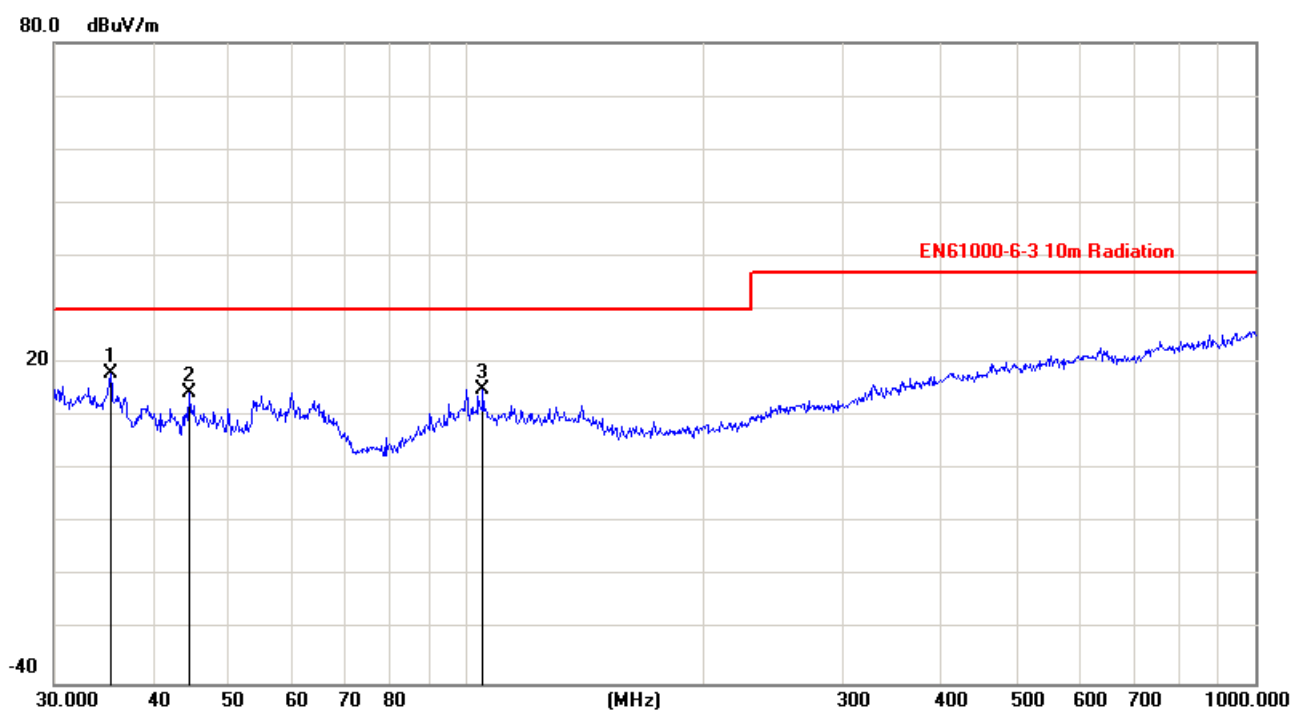
Radiated Emission(30-1000MHz)



No significant emission was detected within 10 dB to limit.

Model : RM12D
 Test Mode : ON
 Antenna Polarity : Horizontal
 Test By : Damon Leung
 Test Date : 2018-01-11

Radiated Emission(30-1000MHz)



No significant emission was detected within 10 dB to limit.

Model	:	RM12D
Test Mode	:	ON
Antenna Polarity	:	Vertical
Test By	:	Damon Leung
Test Date	:	2018-01-11

Appendix B

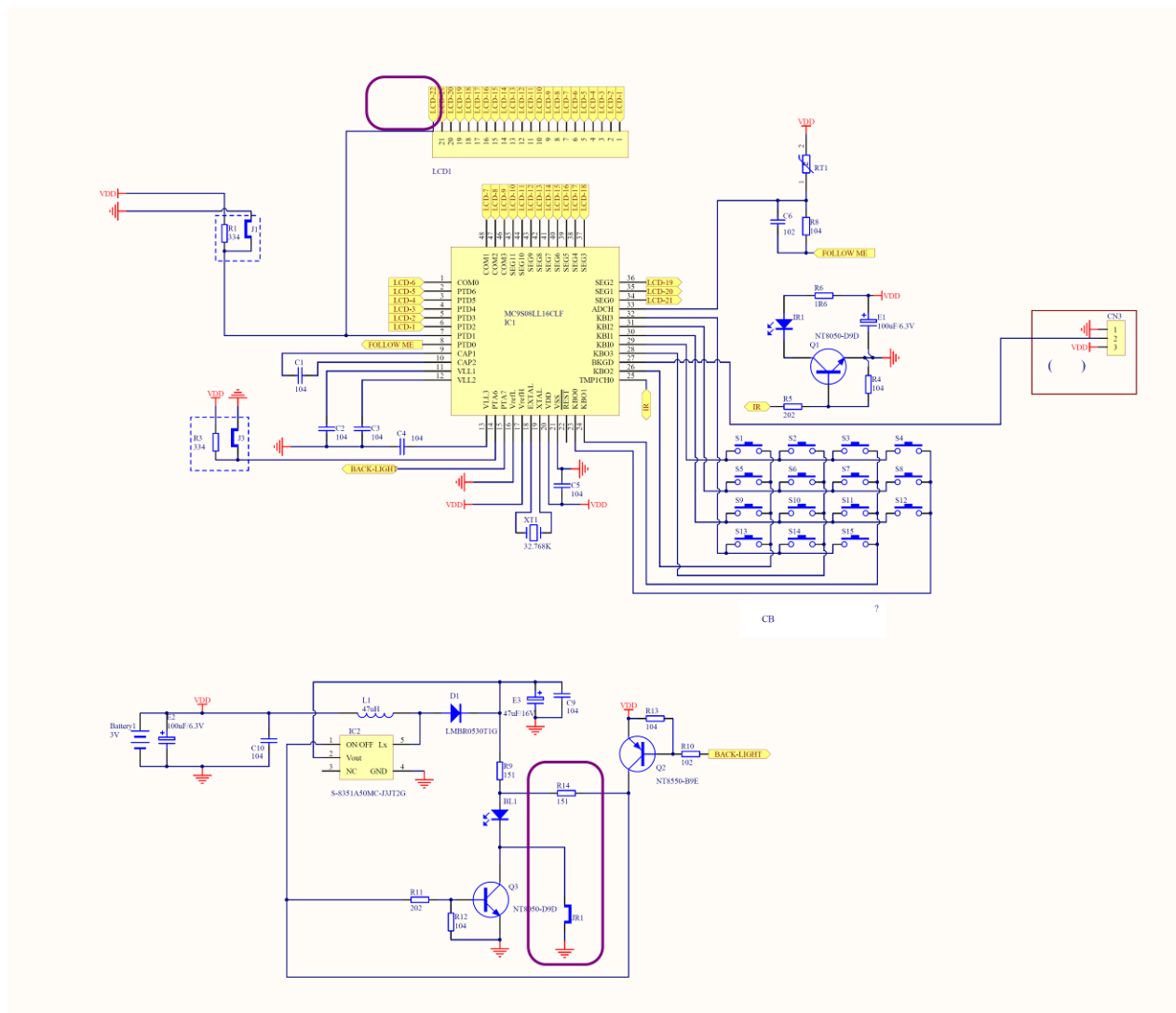
Constructional Data Form
and
Product Information Form(s)

Any safety relevant information or constructional aspect concerning the sample or equipment under test as submitted by the applicant / report holder / certificate holder or any authorized agent is deemed to have no adverse effect on the electromagnetic compatibility (EMC) performance. Insofar as safety or compliance with Low Voltage Directive (LVD) or any relevant directive is concerned, the applicant / report holder / certificate holder or any authorized agent is required, by virtue of the relevant EU Directive provisions, to have satisfied that the product concerned (for which a sample was tested) meets with LVD or other relevant directives before placing it on the market.

Where applicable, changes or modifications made to the original sample submitted for testing are documented herein. The applicant or manufacturer shall ensure that such changes or modifications are applied to the production units. Any further changes or modifications made to the production units may void the validity of this test report unless such changes or modifications have been formally assessed by TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch through technical evaluations or other means as appropriate and it has been confirmed that the EMC performance of such units is not adversely affected.

The enclosed, if any, circuit diagram / parts list / printed circuit board diagram / component layout / user manual are strictly for reference only. TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch shall not be held responsible for any error or omission in such documents. It is the manufacturer's responsibility to ensure that production units conform to the tested sample.

Electric diagram for RM12D





China

Appendix C

Constructional Photographs
of

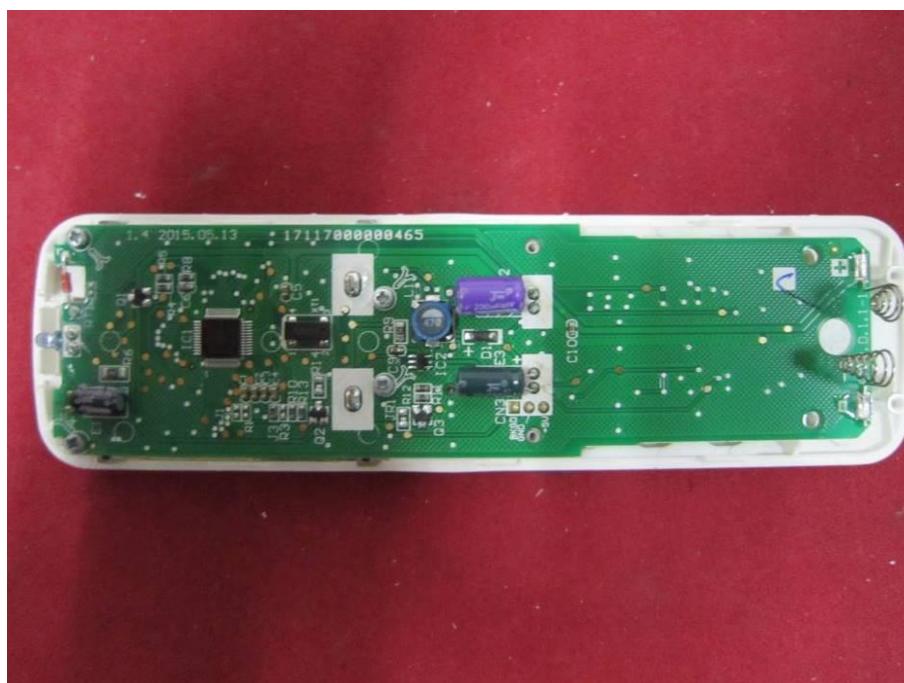
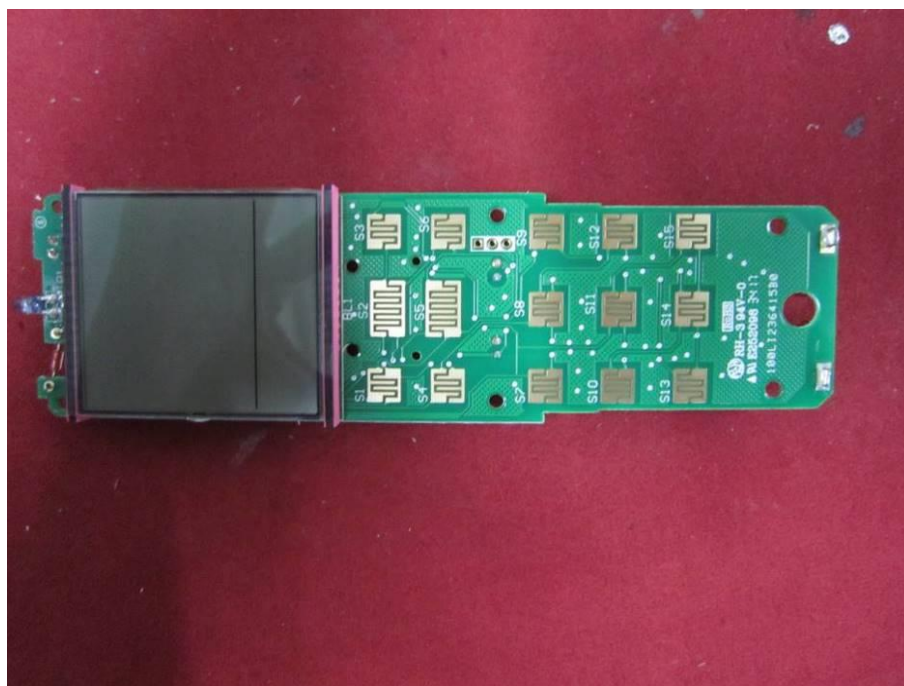
Equipment under test (EUT)

Any safety relevant information or constructional aspect concerning the sample or equipment under test as submitted by the applicant / report holder / certificate holder or any authorized agent is deemed to have no adverse effect on the electromagnetic compatibility (EMC) performance. Insofar as safety or compliance with Low Voltage Directive (LVD) or any relevant directive is concerned, the applicant / report holder / certificate holder or any authorized agent is required, by virtue of the relevant EU Directive provisions, to have satisfied that the product concerned (for which a sample was tested) meets with LVD or other relevant directives before placing it on the market.

Constructional Photographs



Constructional Photographs



EMC IMMUNITY - TEST REPORT

Report Number : 64.712.17.01557.03 – (I)

Date of Issue: 2018-04-25

Model : RM12D, RM12A/BGEF, RM12A/BGEF(BZ)

Product Type : Remote Controller

Applicant/ Manufacturer/
License holder : GD Midea Heating & Ventilating Equipment CO.,LTD.

Trade Name : Midea, MDV

Address : Penglai Industry Road, Beijiao, Shunde, Foshan, Guangdong, P. R. China

Test Result

: ☒ Positive ☐ Negative



Total pages including
Appendices

: 14

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TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch reports apply only to the specific samples tested under stated test conditions. Construction of the actual test samples has been documented. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. The manufacturer/importer is responsible to the Competent Authorities in Europe for any modifications made to the production units which result in non-compliance with the relevant regulations. TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch shall have no liability for any deductions, inferences or generalizations drawn by the client or others from TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch issued reports.

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IMMUNITY TEST REGULATIONS :

The immunity tests were performed according to the following regulations :

■ - EMC - Directive 2014/30/EU and its amendments

■ - EN 61000-6-1:2017

■ - EN 61000-6-1:2007

■ - IEC 61000-4-2:2008

■ - IEC 61000-4-3:2006+A1:2007+A2:2010

□ - IEC 61000-4-4:2012

□ - IEC 61000-4-5:2014

□ - IEC 61000-4-6:2013

□ - IEC 61000-4-8:2009

□ - IEC 61000-4-11:2004

■ -Refer to report:64.712.17.01557.02 for complete details.

Note: For undated references, the latest edition of the publication at the time of testing (including amendments) was applied.

Environmental Conditions In The laboratory :

	Actual
Temperature	: 25°C
Relative Humidity	: 50~53%
Atmospheric Pressure	: 101.2~101.8 kPa

Rated of EUT:

Rated voltage: DC 3.0V (AAA 1.5V*2)

STATEMENT OF MEASUREMENT UNCERTAINTY

The tolerances for each tests are reduced by the uncertainty reported on the calibration certificate for the measurement, all the parameters are within the tolerances required by the relevant standard, reduced by the uncertainty reported on the calibration certificate, so the laboratory has confidence that all the tests compliant with the relevant standards with a 95% confidence level.

Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Symbol Definitions:

- - Applicable
- - Not Applicable

Test laboratory:

■ - Foshan Shunde Guoce testing Technology Co.,Ltd.(IQTC)
Add: No.3, Desheng East Road, Shunde Daliang, Foshan, Guangdong, China

□ - TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
Add: Building 12 & 13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2, Nanshan District, Shenzhen 518052, P.R. China

Immunity Test Conditions: ELECTROSTATIC DISCHARGE (ESD)

The immunity against *ELECTROSTATIC DISCHARGE (ESD)* events was performed in the following location:

☐ - Test not applicable

■ - Test Area (IQTC) – Laboratory open area

Test Equipment Used :

Model Number	Manufacturer	Description	Serial Number	Cal. due date
■ - EMS61000-2A_V1	ENERFINE	ESD Generator	906002T	2019-01-20
■ - ---	---	H/V Coupling Plane	/	/

Test Specification:

Discharge Voltage (Air):

☐ - 2 kV

■ - 8 kV

☐ - 6 kV

☐ - 4 kV

☐ - 15 kV

☐ - _ kV

Discharge Voltage (Contact):

☐ - 2 kV

☐ - 6 kV

☐ - _ kV

■ - 4 kV

☐ - 8 kV

Discharge Impedance:

■ - 330 Ω / 150 pF

☐ - 150 Ω / 150 pF

Discharge Repetition Rate:

■ - ≥ 1 sec.

Number of Discharges:

■ - ≥ 10 at all locations

Kind of Discharges:

■ - Air discharge

■ - Conducted discharge (relay)

■ - Direct

■ - Indirect

Polarity:

■ - Positive

■ - Negative

Location of Discharge:

■ - HCVP & VCP

■ - Each location on the surface touchable by hand

☐ - _____

Result :

Result :

■ - No degradation of function

- Met Criterion A

☐ - Distortion of function

- Met Criterion B

☐ - Error of function

- Met Criterion C

☐ - Loss of function

- Unrecoverable Failure

Remarks: _____

Immunity Test Conditions: RADIATED ELECTROMAGNETIC FIELDS

The immunity against *RADIATED ELECTROMAGNETIC FIELDS* exposure was performed in the following location:

☐ - Test not applicable

■ - Test Area (IQTC) – Anechoic ferrite lined shielded room

Test Equipment Used :

Model Number	Manufacturer	Description	Serial Number	Cal. Due
■ - SMF100A	RS	Signal Generator	1167.0000k02-101828-xu	2018-08-15
■ - PM2002	AR	Power Meter	324169	2018-08-15
■ - AT1080	AR	Log-Periodic Antenna(80MHz-1000MHz)	0325160	N/A
■ - NTWPAS-00810500E	Rflight	Power Amplifier(80MHz-1000MHz 500W)	16113272	2019-01-12
■ - EP601	PMM	FIELD PROBE	511WX21270	2018-09-12
■ - BBHA 9120E	Schwarzbeck	Double Ridge Broadband Horn Antenna(0.5GHz-6GHz)	701	N/A
■ - NTWPAS-1025100	Rflight	Power Amplifier(1000-2500MHz 100W)	16043079	2019-01-12
■ - NTWPAS-2560100	Rflight	Power Amplifier(2000-6000MHz 100W)	17039022	2019-01-12

Remarks: All test equipments used are calibrated on a regular basis.

Test Specification:

Frequency Range/ Field Strength: ■ - 3 V/m (80 MHz - 1000 MHz and 1.4 GHz - 6 GHz)
☐ - 10 V/m ☐ - _ V/m

Distance Antenna - EUT: ☐ - 1 m ■ - 3 m

Test Specification (continued):

Modulation: ■ - AM : 80% 1kHz
☐ - FM : _ kHz dev. _ kHz
■ - sine wave:
☐ - unmodulated
☐ - Pulse ON/OFF Duty Cycle: _ %

Step: ☐ - ≤ 0.015 decades / sec ■ - 1%

Polarization of Antenna: ■ - Horizontal ■ - Vertical

Result :

■ - No degradation of function - Met Criterion A
☐ - Distortion of function - Met Criterion B
☐ - Error of function - Met Criterion C
☐ - Loss of function - Unrecoverable Failure

Remarks: _____

Immunity Test Conditions: FAST TRANSIENTS (BURST)

The immunity against *FAST TRANSIENTS (BURST)* events was performed in the following test location:

☒ - Test not applicable

☐ - Test Area (TÜV SÜD) – Laboratory open area

Test Equipment Used :

Model Number	Manufacturer	Description	Serial Number	Cal. due date
□- MODULA6150	Teseq	Immunity test system	34595	2017-11-14

Test Specification:

Pulse Amplitude - AC Power Port: ☐ - 1,0 kV ☐ - 2,0 kV
☐ - 4,0 kV ☐ - ____ kV

Pulse Amplitude - DC Power Port: ☐ - 1,0 kV ☐ - 2,0 kV
☐ - 4,0 kV ☐ - ____ kV

Pulse Amplitude - Signal/Data Non control Port: ☐ - 0,5 kV ☐ - 1,0 kV
☐ - 2,0 kV ☐ - ____ kV

Pulse Amplitude - Process: Measurement & Control Port ☐ - 0,5 kV ☐ - 1,0 kV
☐ - 2,0 kV ☐ - ____ kV

Burst Frequency: ☐ - 2,5 kHz ☐ - 5,0 kHz ☐ - ____ kHz

Time of Coupling: ☐ - 60 seconds ☐ - 120 seconds ☐ - ____ seconds

Coupling Method: ☐ - Coupling/decoupling network ☐ - Coupling clamp

Polarity: ☐ - Positive ☐ - Negative

Location of Coupling:

name of lines: AC POWER CORD
type of lines: ☐ - shielded ☐ - unshielded
status of lines: ☐ - Passive ☐ - active
kind of transmission: ☐ - analog ☐ - digital
length of lines: _____

Result :

☐ - No degradation of function - Met Criterion A
☐ - Distortion of function - Met Criterion B
☐ - Error of function - Met Criterion C
☐ - Loss of function - Unrecoverable Failure

Remarks: _____

Immunity Test Conditions: SURGE TRANSIENTS

The immunity against *SURGE TRANSIENTS* events was performed in the following test location:

☒ - Test not applicable

☐ - Test Area (TÜV SÜD) – Laboratory open area

Test Equipment Used :

Model Number	Manufacturer	Description	Serial Number	Cal. due date
<input type="checkbox"/> - MODULA6150	Teseq	Immunity test system	34595	2017-11-14

Test Specification:

Pulse Amplitude - AC Power Port: ☐ - 1,0 kV ☐ - 2,0 kV
☐ - 4,0 kV ☐ - 0.5 kV

Pulse Amplitude - DC Power Port: ☐ - 1,0 kV ☐ - 2,0 kV
☐ - 4,0 kV ☐ - ____ kV

Pulse Amplitude - Signal/Data Non control Port: ☐ - 0,5 kV ☐ - 1,0 kV
☐ - 2,0 kV ☐ - ____ kV

Pulse Amplitude - Process: Measurement & Control Port ☐ - 0,5 kV ☐ - 1,0 kV
☐ - 2,0 kV ☐ - ____ kV

Source Impedance: ☐ - 2 Ω + 18 μ F ☐ - 12 Ω + 9 μ F
☐ - 42 Ω + 0,1 μ F ☐ - 42 Ω + 0,5 μ F

Number of Surges: ☐ - 5 surges/angle ☐ - ____ surges /angle

Angle: ☐ - 0 ° ☐ - 90 °
☐ - 180 ° ☐ - 270 °

Repetition Rate: ☐ - 60 sec. ☐ - ____ sec.

Polarity: ☐ - Positive ☐ - Negative

Location of Coupling:

name of lines: _____

type of lines: ☐ - shielded ☐ - unshielded

status of lines: ☐ - Passive ☐ - active

kind of transmission: ☐ - analog ☐ - digital

length of lines: _____

Result:

☐ - No degradation of function - Met Criterion A
☐ - Distortion of function - Met Criterion B
☐ - Error of function - Met Criterion C
☐ - Loss of function - Unrecoverable Failure

Remarks: _____

Immunity Test Conditions: CONDUCTED DISTURBANCE

The immunity against *CONDUCTED DISTURBANCE* events, induced by radio frequency fields above 9 kHz, was performed in the following test location:

☒ - Test not applicable

☐ - Test Area(TÜV SÜD) –Laboratory open area

Test Equipment Used :

Model Number	Manufacturer	Description	Serial Number	Cal. due date
<input type="checkbox"/> - CIT-10/75	Frankonia	C/S test generator	102D1319	2017-11-14
<input type="checkbox"/> - 75-A-MFN-06	BIRD	6dB attenuator	0638	2017-11-14
<input type="checkbox"/> - M2+M3-801	Frankonia	CDN	A3011123	2017-11-14

Test Specification:

Frequency Range: ☐ - 0,15 MHz - 80 MHz

Voltage Level (EMF):

☐ - 1 V
☐ - 10 V

☐ - 3 V
☐ - ___ V

Modulation:

☐ - AM : 80 % 1 kHz
☐ - FM : ___ kHz dev. ___ kHz
☐ - sine wave:
☐ - unmodulated
☐ - Pulse ON/OFF Duty Cycle: ___ %

Step:

☐ - ≤ 0.015 decades / sec

Location of Coupling:

name of lines: _____

type of lines: _____

status of lines: _____

kind of transmission: _____

length of lines: _____

☐ - shielded

☐ - unshielded

☐ - Passive

☐ - active

☐ - analog

☐ - digital

Result :

☐ - No degradation of function - Met Criterion A
☐ - Distortion of function - Met Criterion B
☐ - Error of function - Met Criterion C
☐ - Loss of function - Unrecoverable Failure

Remarks: _____

Immunity Test Conditions: VOLTAGE DIPS and INTERRUPTIONS

The immunity against *VOLTAGE DIPS AND INTERRUPTIONS* were performed in the following test location:

☒ - Test not applicable

☐ - Test Area (TÜV SÜD) – Laboratory open area

Test Equipment Used :

Model Number	Manufacturer	Description	Serial Number	Cal. due date
<input type="checkbox"/> - MODULA6150	Teseq	Immunity test system	34595	2017-11-14
<input type="checkbox"/> - INA6501	Teseq	Step power supply	159	2017-11-14

Test Specification:

Nominal Mains Voltage (V_{NOM}): ☐ - 230 Vac ☐ - 100 Vac ☐ - ____ Vdc

Level of Reduction (dip):

- ☐ - 0.5 cycle at 0% of V_{NOM}
- ☐ - 1 cycle at 0% of V_{NOM}
- ☐ - 25 cycle at 30% of V_{NOM} (50Hz)
- ☐ - 30 cycle at 30% of V_{NOM} (60Hz)

Interruptions:

- ☐ - 250 cycle at 0% of V_{NOM} (50Hz)
- ☐ - 300 cycle at 0% of V_{NOM} (60Hz)

Result :

- ☐ - No degradation of function - Met Criterion A
- ☐ - Distortion of function - Met Criterion B
- ☐ - Error of function - Met Criterion C
- ☐ - Loss of function - Unrecoverable Failure

Remarks: _____

Immunity Test Conditions: Power FREQUENCY MAGNETIC FIELD

The immunity against *POWER FREQUENCY MAGNETIC FIELD* exposure, induced by radio frequency fields above 9 kHz, was performed in the following test location:

☒ - Test not applicable

☐ - Test Area (GRGT) - Laboratory open area

Test Equipment Used:

Model Number	Manufacturer	Description	Serial Number	Cal. Due
<input type="checkbox"/> - TRA2000	EMC PARTNER	Main Interference Simulator	851	2017-04-16
<input type="checkbox"/> - MF1000-1	EMC PARTNER	Induction coil	150	2017-07-06

Test Specification:

Frequency Range: ☐ - 50 Hz ☐ - 60 Hz ☐ - 400 Hz

Field level (EMF): ☐ - 1 A/m ☐ - 3 A/m ☐ - 10 A/m
☐ - 30 A/m ☐ - 100 A/m ☐ - ____ A/m

Short Field (1-3 sec): ☐ - 300 A/m ☐ - 1000 A/m ☐ - ____ A/m

Duration: ☐ - 60 seconds

Axis of Orientation: ☐ - X-axis ☐ - Y-axis ☐ - Z-axis

Result:

<input type="checkbox"/> - No degradation of function	- Met Criterion A
<input type="checkbox"/> - Distortion of function	- Met Criterion B
<input type="checkbox"/> - Error of function	- Met Criterion C
<input type="checkbox"/> - Loss of function	- Unrecoverable Failure

Remarks: _____

Equipment Under Test (EUT) Test Operation Mode - Immunity Tests:

The equipment under test was operated under the following conditions during immunity testing :

- ☐ - Standby
- ☐ - Test Program (H - Pattern)
- ☐ - Test Program (Color Bar)
- ☐ - Test Program (Customer Specified)
- ☒ - Normal Operating Mode

☒ - ON

Configuration of the equipment under test:

- ☐ - See Constructional Data Form in Appendix B
- ☐ - See Product Information Form(s) in Appendix C

The following peripheral devices and interface cables were connected during the testing:

- | | |
|----------------------------------|--------------|
| <input type="checkbox"/> - _____ | Type : _____ |
| <input type="checkbox"/> - _____ | Type : _____ |
| <input type="checkbox"/> - _____ | Type : _____ |
| <input type="checkbox"/> - _____ | Type : _____ |
| <input type="checkbox"/> - _____ | Type : _____ |
| <input type="checkbox"/> - _____ | Type : _____ |
| <input type="checkbox"/> - _____ | Type : _____ |
| <input type="checkbox"/> - _____ | Type : _____ |

☒ - unshielded power cable

☐ - unshielded cables

☐ - shielded cables

TÜVPS. No.:

☐ - customer specific cables

☐ - _____

☐ - _____

GENERAL REMARKS:

Applicant wants to update relevant standards and add model RM12D in this report. Model RM12D is different with RM12A/BGEF in appearance, LCD and software, but the same in all circuits. Therefore, RM12D was selected for the final test.

SUMMARY:

All tests according to the regulations cited on page 3 were

- - Performed
- - **Not** Performed

The Equipment Under Test


- - **Fulfills** the general approval requirements cited on page 3.
- - **Does not** fulfill the general approval requirements cited on page 3.

Testing Start Date: 2018-01-11

Testing End Date: 2018-01-11


- TÜV SÜD CERTIFICATION AND TESTING (CHINA) CO., LTD. GUANGZHOU BRANCH -

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Appendix A

Setup Photo of Electrostatic Discharge



Setup Photo of RS

