

## Technical Report No.: 64.181.21.05013.01 Rev.00

**Date: 2021-10-28**

**Client:** Report holder's name: Dongguan JHS Electrical Co., Ltd.  
Report holder's Address: Dongping Avenue, No. 3 Industrial Park, Changping Area, Dongguan Eastern Industrial District, 523558, Dongguan City, Guangdong, PEOPLE'S REPUBLIC OF CHINA  
Contact person of report holder: Mr. Zhou Shangjin  
Manufacturer's name: same as client  
Manufacturer's address: same as client

**Factory:** Factory's name: same as client  
Factory's address: same as client

**Test subject:** Product: Mobile type air conditioner (Local air conditioner)  
Model: JHS-A016-09KR2/x, JHS-A016-09KR2H/x; JHS-A016-09KR2/x-W, JHS-A016-09KR2H/x-W (x=A, B, C, D, E, F, G, A1, B1, C1, D1, E1, G1, H)  
Trade mark (if any): JHS

**Test specification:** (EU) No 206/2012  
(EU) No 2282/2016  
(EU) No 626/2011  
(EU) No 2017/254  
Test method: EN 14511-2:2018; EN 14511-3:2018; EN 50564:2011; EN 12102-1:2017

**Purpose of examination:** Test according to the test specification (Details see page 4, summary of testing)

**Test result:** The test result show that the presented product is in compliance with the specific requirements. (Test results details on page 3)

*Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question. It does not imply a general statement regarding the quality of products from regular production. For further details please see testing and certification regulation, chapter A-3.4.*

## 1. Description of the test object

### 1.1 Function

Manufacturer's specification for intended use:  
*The appliances are Mobile type air conditioner (Local air conditioner).*

Manufacturer's specification for predictive use:  
*According to the user manual.*

### 1.2 Consideration of the foreseeable use

- Not applicable
- Covered through the applied standard
- Covered by the following comment
- Covered by attached risk analysis

### 1.3 Technical Data

Model	:	JHS-A016-09KR2/x, JHS-A016-09KR2H/x; JHS-A016-09KR2/x-W, JHS-A016-09KR2H/x-W (x=A, B, C, D, E, F, G, A1, B1, C1, D1, E1, G1, H)
Rated Voltage (V)	:	220-240V~
Rated Frequency (Hz)	:	50
Rated Power (W)	:	1010W (Cooling); 850W (Heating)
Rated Current (A)	:	--
Auxiliary heater power (kW)	:	N/A
Protection Class	:	<input checked="" type="checkbox"/> Class I; <input type="checkbox"/> Class II; <input type="checkbox"/> Class III
Degree of Protection	:	IP X0
Construction	:	<input type="checkbox"/> Stationary <input checked="" type="checkbox"/> Portable <input type="checkbox"/> Hand-held <input type="checkbox"/> Open-frame
Supply connection	:	<input checked="" type="checkbox"/> Non detachable cord <input type="checkbox"/> Permanent connection to fixed wiring <input type="checkbox"/> Appliance inlet
Operation mode	:	<input checked="" type="checkbox"/> Continuous operation; <input type="checkbox"/> Intermittent operation; <input type="checkbox"/> Short time operation;
Rated capacity (kW), if any	:	2.66kW (Cooling); 2.05kW (Heating)
Net Weight (kg)	:	--
Refrigerant	:	R290, 195g
Noise (dB(A))	:	65

## 2. Order

### 2.1 Date of Purchase Order, Customer's Reference

2021-08-30, Mr. Zhou Shangjin

### 2.2 Receipt of Test Sample, Condition, Location

2021-09-20

For energy tests & standby tests & noise tests:

Foshan shunde guoce testing technology Co.,LTD.

Address: No.3 East Desheng Road, Shunde Daliang, Foshan, Guangdong, China

### 2.3 Date of Testing 2021-09-20 to 2021-10-27

### 2.4 Location of Testing Same as 2.2

## 3. Test Results

Item	Rated value	Measured value	Requirements for minimum energy efficiency	Energy Efficiency Class (According to table 2 of EU 626/2011)	Verdict
Rated capacity for cooling (kW)	2.64	2.642	-	-	Pass
Power input for cooling (kW)	1.010	0.992	-	-	Pass
EER <sub>rated</sub>	2.60	2.66	≥ 2.34	A	Pass
Rated capacity for heating (kW)	2.05	2.054	-	-	Pass
Power input for heating (kW)	0.850	0.800	-	-	Pass
COP <sub>rated</sub>	2.30	2.57	≥ 1.84	A	Pass
Standby Mode Power (W) (According to (EU) No 206/2012)	1.00	0.36	≤ 1.00	-	Pass
Networked Standby Mode Power (W) (According to (EC) No 1275/2008 & (EU) No 801/2013 )	2.00	0.74	≤ 2.00	-	Pass
Off Mode Power (W)	N/A	N/A	≤ -	-	N/A
Sound Power, indoor (dB(A))	65	64.04	≤ 65	-	Pass
Sound Power, outdoor (dB(A))	N/A	N/A	≤ -	-	N/A

## 4. Remark

- 4.1 The user manual has been examined according to the minimum requirements described in the product standard. The manufacturer is responsible for the accuracy of further particulars as well as of the composition and layout.
- 4.2 When the product is placed on the market, it must be accompanied with safety Instructions written in official language of the country. The instructions shall give information regarding safe operation, installation and maintenance.

## 5. Documentation

- Appendix No.1: Format of test results
- Appendix No.2: Marking plate
- Appendix No.3: Photo documentations
- Appendix No.4: Construction data form
- Appendix No.5: Test equipment list

## 6. Summary

1. The appliances are Mobile type air conditioner (Local air conditioner).
2. The appliances are supplied by a 3-pole supply cable with plug which supplied by manufactory.
3. The models JHS-A016-09KR2/x (x=A, B, C, D, E, F, G, A1, B1, C1, D1, E1, G1, H) are for cooling mode only and without Networked.
4. The models JHS-A016-09KR2H/x (x=A, B, C, D, E, F, G, A1, B1, C1, D1, E1, G1, H) are for cooling mode and heating mode and without Networked.
5. The models JHS-A016-09KR2/x-W (x=A, B, C, D, E, F, G, A1, B1, C1, D1, E1, G1, H) are for cooling mode only and with Networked.
6. The models JHS-A016-09KR2H/x-W (x=A, B, C, D, E, F, G, A1, B1, C1, D1, E1, G1, H) are for cooling mode and heating mode and with Networked.
7. The models JHS-A016-09KR2/x, JHS-A016-09KR2H/x (x=A, B, C, D, E, F, G, A1, B1, C1, D1, E1, G1, H) are the same except for appearance and display controller.
8. The models JHS-A016-09KR2/x-W, JHS-A016-09KR2H/x-W (x=A, B, C, D, E, F, G, A1, B1, C1, D1, E1, G1, H) are the same except for appearance and display controller.
9. The models JHS-A016-09KR2H/x, JHS-A016-09KR2H/x-W (x=A, B, C, D, E, F, G, A1, B1, C1, D1, E1, G1, H) are the same as the models JHS-A016-09KR2/x, JHS-A016-09KR2/x-W (x=A, B, C, D, E, F, G, A1, B1, C1, D1, E1, G1, H) except they have a 4-way valve for heating function.
10. The cooling and heating capacity tests and noise tests and stanby test were carried out on model JHS-A016-09KR2H/A1-W as a representative.
11. The appliance was installed according to user manual with outlet duct length of 50cm without bend.
12. Calorimeter test method was adopted for cooling capacity test and heating capacity test in this report.
13. Test standard EN 14511-2:2018, EN 14511-3:2018, EN 50564:2011, EN 12102-1:2017 was considered in this report.
14. (EU) No 2282/2016 was considered in this report.



**TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch**  
**TÜV SÜD Group**

Tested by:

William Liang, Project Handler

*printed name, function & signature*

*William Liang*  
A blue circular stamp with the text 'CERTIFICATION TESTING (CHINA) CO., LTD. GUANGZHOU' around the perimeter and 'TUV SUD' in the center. A signature is written over the stamp.

Approved by:

Tony Xie, Designated Reviewer

*printed name, function & signature*

*Tony Xie*

Appendix No.1: Format of test results

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict

COMMISSION REGULATION (EU) No 206/2012			
Article	Subject matter and scope		P
1	This Regulation establishes ecodesign requirements for the placing on the market of electric mains-operated air conditioners with a rated capacity of ≤ 12 kW for cooling, or heating if the product has no cooling function.		P
2	This Regulation shall not apply to:		N/A
	(a) appliances that use non-electric energy sources;		N/A
	(b) air conditioners of which the condenser-side or evaporator- side, or both, do not use air for heat transfer medium.		N/A

Annex I	Ecodesign requirements		P									
1	Definitions applicable for the purpose of this Annex		P									
2.	REQUIREMENTS FOR MINIMUM ENERGY EFFICIENCY, MAXIMUM POWER CONSUMPTION IN OFF-MODE AND STANDBY MODE AND FOR MAXIMUM SOUND POWER LEVEL		P									
2.1	From <b>1 January 2013, single duct and double duct air conditioners</b> shall correspond to requirements:		P									
2.1.1	Requirements for minimum energy efficiency		P									
	Double duct air conditioners		N/A									
	<table border="1"> <thead> <tr> <th></th> <th>EER<sub>rated min</sub></th> <th>COP<sub>rated min</sub></th> </tr> </thead> <tbody> <tr> <td>If GWP of refrigerant &gt; 150</td> <td>2,40</td> <td>2,36</td> </tr> <tr> <td>If GWP of refrigerant ≤ 150</td> <td>2,16</td> <td>2,12</td> </tr> </tbody> </table>		EER <sub>rated min</sub>	COP <sub>rated min</sub>	If GWP of refrigerant > 150	2,40	2,36	If GWP of refrigerant ≤ 150	2,16	2,12	GWP of refrigerant: Product rating: - EER <sub>rated</sub> : - COP <sub>rated</sub> : Tested data see table 1	--
	EER <sub>rated min</sub>	COP <sub>rated min</sub>										
If GWP of refrigerant > 150	2,40	2,36										
If GWP of refrigerant ≤ 150	2,16	2,12										
	Evaluation: EER <sub>rated min</sub> ≤ EER <sub>rated</sub>		N/A									
	Single duct air conditioners		P									

Appendix No.1: Format of test results

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011													
Clause	Requirement - Test		Result - Remark	Verdict									
	<table border="1"> <thead> <tr> <th></th> <th>EER<sub>rated</sub></th> <th>COP<sub>rated</sub></th> </tr> </thead> <tbody> <tr> <td>If GWP of refrigerant &gt; 150</td> <td>2,40</td> <td>1,80</td> </tr> <tr> <td>If GWP of refrigerant ≤ 150</td> <td>2,16</td> <td>1,62</td> </tr> </tbody> </table>			EER <sub>rated</sub>	COP <sub>rated</sub>	If GWP of refrigerant > 150	2,40	1,80	If GWP of refrigerant ≤ 150	2,16	1,62	GWP of refrigerant: 3 Product rating: - EER <sub>rated</sub> : 2.60 - COP <sub>rated</sub> : 2.30 Tested data see table 1	--
	EER <sub>rated</sub>	COP <sub>rated</sub>											
If GWP of refrigerant > 150	2,40	1,80											
If GWP of refrigerant ≤ 150	2,16	1,62											
	Evaluation: EER <sub>rated min</sub> ≤ EER <sub>rated</sub>			P									
2.1.2	Requirements for maximum power consumption in off-mode and standby mode			P									
	Power consumption of equipment in any off-mode condition shall not exceed 1,00 W. (P <sub>OFF</sub> )		Tested data see table 1	--									
	Evaluation: P <sub>OFF</sub> ≤ 1,00W			N/A									
	The power consumption of equipment in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function, shall not exceed 1,00 W. (P <sub>SB</sub> )		Tested data see table 1	--									
	Evaluation: P <sub>SB</sub> ≤ 1,00W			P									
	The power consumption of equipment in any condition providing only information or status display, or providing only a combination of reactivation function and information or status display, shall not exceed 2,00 W. (P <sub>SB</sub> )		Tested data see table 1	--									
	Evaluation: P <sub>SB</sub> ≤ 2,00W			N/A									
	Availability of standby and/or off mode			P									
	Inappropriate for intended use to provide Standby and/or OFF-mode		Standby mode	P									
	Standby-mode available			P									
	Off-mode available			N/A									
	another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode available			P									
2.1.3	Requirements for maximum sound power level (L <sub>WA</sub> )			P									

Appendix No.1: Format of test results

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011																		
Clause	Requirement - Test	Result - Remark	Verdict															
	Indoor sound power level in dB(A): $\leq 65$	Measured: Indoor: 64.04 dB(A)	--															
	Evaluation: $L_{WA} \leq 65\text{dB(A)}$		P															
2.2	From <b>1 January 2014, single duct and double duct air conditioners</b> shall correspond to requirements:		P															
2.2.1	Requirements for minimum energy efficiency		P															
	Double duct air conditioners		N/A															
	<table border="1"> <thead> <tr> <th>GWP of refrigerant and rated capacity</th> <th>EER<sub>rated</sub></th> <th>COP<sub>rated</sub></th> </tr> </thead> <tbody> <tr> <td>&gt; 150 for &lt; 6 kW</td> <td>2,60</td> <td>2,60</td> </tr> <tr> <td><math>\leq 150</math> for &lt; 6 kW</td> <td>2,34</td> <td>2,34</td> </tr> <tr> <td>&gt; 150 for 6-12 kW</td> <td>2,60</td> <td>2,60</td> </tr> <tr> <td><math>\leq 150</math> for 6-12 kW</td> <td>2,34</td> <td>2,34</td> </tr> </tbody> </table>	GWP of refrigerant and rated capacity	EER <sub>rated</sub>	COP <sub>rated</sub>	> 150 for < 6 kW	2,60	2,60	$\leq 150$ for < 6 kW	2,34	2,34	> 150 for 6-12 kW	2,60	2,60	$\leq 150$ for 6-12 kW	2,34	2,34	GWP of refrigerant: Cooling capacity: Product rating: - EER <sub>rated</sub> : - COP <sub>rated</sub> : Tested data see table 1	--
GWP of refrigerant and rated capacity	EER <sub>rated</sub>	COP <sub>rated</sub>																
> 150 for < 6 kW	2,60	2,60																
$\leq 150$ for < 6 kW	2,34	2,34																
> 150 for 6-12 kW	2,60	2,60																
$\leq 150$ for 6-12 kW	2,34	2,34																
	Evaluation: $EER_{rated\ min} \leq EER_{rated}$		N/A															
	Single duct air conditioners		P															
	<table border="1"> <thead> <tr> <th>GWP of refrigerant and rated capacity</th> <th>EER<sub>rated</sub></th> <th>COP<sub>rated</sub></th> </tr> </thead> <tbody> <tr> <td>&gt; 150 for &lt; 6 kW</td> <td>2,60</td> <td>2,04</td> </tr> <tr> <td><math>\leq 150</math> for &lt; 6 kW</td> <td>2,34</td> <td>1,84</td> </tr> <tr> <td>&gt; 150 for 6-12 kW</td> <td>2,60</td> <td>2,04</td> </tr> <tr> <td><math>\leq 150</math> for 6-12 kW</td> <td>2,34</td> <td>1,84</td> </tr> </tbody> </table>	GWP of refrigerant and rated capacity	EER <sub>rated</sub>	COP <sub>rated</sub>	> 150 for < 6 kW	2,60	2,04	$\leq 150$ for < 6 kW	2,34	1,84	> 150 for 6-12 kW	2,60	2,04	$\leq 150$ for 6-12 kW	2,34	1,84	GWP of refrigerant: 3 Rated Cooling capacity: 2.64 kW; Rated Heating capacity: 2.05 kW Product rating: - EER <sub>rated</sub> : 2.60 - COP <sub>rated</sub> : 2.30 Tested data see table 1	--
GWP of refrigerant and rated capacity	EER <sub>rated</sub>	COP <sub>rated</sub>																
> 150 for < 6 kW	2,60	2,04																
$\leq 150$ for < 6 kW	2,34	1,84																
> 150 for 6-12 kW	2,60	2,04																
$\leq 150$ for 6-12 kW	2,34	1,84																
	Evaluation: $EER_{rated\ min} \leq EER_{rated}$		P															
2.2.2	Requirements for maximum power consumption in off-mode and standby mode		P															
	Power consumption of equipment in any off-mode condition shall not exceed 0,50 W. ( $P_{OFF}$ )	Tested data see table 1	--															
	Evaluation: $P_{OFF} \leq 0,50\text{W}$		N/A															

Appendix No.1: Format of test results

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict
	The power consumption of equipment in any condition providing only a reactivation function, or providing only a reactivation function and a mere indication of enabled reactivation function, shall not exceed 0,50 W. ( $P_{SB}$ )	Tested data see table 1	--
	Evaluation: $P_{SB} \leq 0,50W$		N/A
	The power consumption of equipment in any condition providing only information or status display, or providing only a combination of reactivation function and information or status display, shall not exceed 1,00 W. ( $P_{SB}$ )	Tested data see table 1	--
	Evaluation: $P_{SB} \leq 1,00W$	For standby mode	P
	Availability of standby and/or off mode		P
	Inappropriate for intended use to provide Standby and/or OFF-mode		P
	Standby-mode available		P
	Off-mode available		N/A
	another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode available		P
	Power management		--
	Inappropriate for intended use to provide Power management for Standby and or off-mode		--
	Switch to standby mode	t: -- min (Time off, Time on)	--
	Switch to off mode	t: -- min/s	--
	Another condition meeting to Standby or Off-mode:	t: -- min (Water full protection (WF))	--
	- The power management function shall be activated before delivery.		--
2.3	<b>From 1 January 2013, air conditioners, except</b> single duct and double duct air conditioners shall correspond to requirements:		N/A
2.3.1	Requirements for minimum energy efficiency		N/A

## Appendix No.1: Format of test results

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011																		
Clause	Requirement - Test	Result - Remark	Verdict															
	<table border="1"> <thead> <tr> <th>GWP of refrigerant</th> <th>SEER<sub>min</sub></th> <th>SCOP<sub>min</sub></th> </tr> </thead> <tbody> <tr> <td>&gt; 150</td> <td>3,60</td> <td>3,40</td> </tr> <tr> <td>≤ 150</td> <td>3,24</td> <td>3,06</td> </tr> </tbody> </table> <p>SCOP: <b>Average heating season</b></p>	GWP of refrigerant	SEER <sub>min</sub>	SCOP <sub>min</sub>	> 150	3,60	3,40	≤ 150	3,24	3,06	GWP of refrigerant: Product rating: - SEER : - SCOP : Tested data see table 3&4	--						
GWP of refrigerant	SEER <sub>min</sub>	SCOP <sub>min</sub>																
> 150	3,60	3,40																
≤ 150	3,24	3,06																
	Evaluation: SEER <sub>min</sub> ≤ SEER		N/A															
	Evaluation: SCOP <sub>min</sub> ≤ SCOP		N/A															
2.3.2	Requirements for maximum sound power level (L <sub>WA</sub> )		N/A															
	<table border="1"> <thead> <tr> <th></th> <th>L<sub>WAmax</sub> Indoor (dB(A))</th> <th>L<sub>WAmax</sub> Outdoor (dB(A))</th> </tr> </thead> <tbody> <tr> <td>Rated capacity ≤6kW</td> <td>≤ 60</td> <td>≤ 65</td> </tr> <tr> <td>6&lt; Rated capacity ≤12kW</td> <td>≤ 65</td> <td>≤ 70</td> </tr> </tbody> </table>		L <sub>WAmax</sub> Indoor (dB(A))	L <sub>WAmax</sub> Outdoor (dB(A))	Rated capacity ≤6kW	≤ 60	≤ 65	6< Rated capacity ≤12kW	≤ 65	≤ 70	Measured: Indoor: dB(A) Outdoor: dB(A)	--						
	L <sub>WAmax</sub> Indoor (dB(A))	L <sub>WAmax</sub> Outdoor (dB(A))																
Rated capacity ≤6kW	≤ 60	≤ 65																
6< Rated capacity ≤12kW	≤ 65	≤ 70																
	Evaluation - indoor: L <sub>WA</sub> ≤ L <sub>WAmax</sub> Indoor		N/A															
	Evaluation - outdoor: L <sub>WA</sub> ≤ L <sub>WAmax</sub> Outdoor		N/A															
2.4	From <b>1 January 2014, air conditioners, except</b> single duct and double duct air conditioners shall correspond to requirements:		N/A															
2.4.1	Requirements for minimum energy efficiency		N/A															
	<table border="1"> <thead> <tr> <th>GWP of refrigerant and rated capacity</th> <th>SEER<sub>min</sub></th> <th>SCOP<sub>min</sub></th> </tr> </thead> <tbody> <tr> <td>&gt; 150 for &lt; 6 kW</td> <td>4,60</td> <td>3,80</td> </tr> <tr> <td>≤ 150 for &lt; 6 kW</td> <td>4,14</td> <td>3,42</td> </tr> <tr> <td>&gt; 150 for 6-12 kW</td> <td>4,30</td> <td>3,80</td> </tr> <tr> <td>≤ 150 for 6-12 kW</td> <td>3,87</td> <td>3,42</td> </tr> </tbody> </table> <p>SCOP: <b>Average heating season</b></p>	GWP of refrigerant and rated capacity	SEER <sub>min</sub>	SCOP <sub>min</sub>	> 150 for < 6 kW	4,60	3,80	≤ 150 for < 6 kW	4,14	3,42	> 150 for 6-12 kW	4,30	3,80	≤ 150 for 6-12 kW	3,87	3,42	GWP of refrigerant: Product rating: - SEER : - SCOP : Tested data see table 3&4	--
GWP of refrigerant and rated capacity	SEER <sub>min</sub>	SCOP <sub>min</sub>																
> 150 for < 6 kW	4,60	3,80																
≤ 150 for < 6 kW	4,14	3,42																
> 150 for 6-12 kW	4,30	3,80																
≤ 150 for 6-12 kW	3,87	3,42																

Appendix No.1: Format of test results

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict
	Evaluation: $SEER_{min} \leq SEER$		N/A
	Evaluation: $SCOP_{min} \leq SCOP$		N/A
3	Product Information Requirements		N/A
3.1	<b>From 1 January 2013</b> , the information set out in points below and calculated in accordance with Annex II shall be provided on:		P
	(i) the technical documentation of the product;		P
	(ii) free access websites of manufacturers of air conditioners;		P
3.2	The manufacturer of air conditioners shall provide laboratories performing market surveillance checks, upon request, the necessary information on the setting of the unit as applied for the establishment of declared capacities, SEER/EER, SCOP/COP values and provide contact information for obtaining such information.	Stated in the manual	P
3.3	Information <b>requirements for air conditioners except</b> single duct and double duct air conditioners as detailed in table 1 of (EU) 206/2012 Annex 1 point 3		N/A
3.4	Information requirements <b>for single duct and double duct air conditioners</b>		P
	<b>Single duct air conditioners</b> shall be named 'local air conditioners' in packaging, product documentation and in any advertisement material, whether electronic or in paper.	Stated in the manual, nameplates and packaging	P
	Manufacturer shall provide information as detailed in table 2 of (EU) 206/2012 Annex 1 point 3		P

Appendix No.1: Format of test results

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict
<b>Annex II</b>	<b>Measurements and Calculation</b>		<b>P</b>
1	For the purposes of compliance and verification of compliance with the requirements of this Regulation, measurements and calculations shall be made using harmonised standards the reference numbers of which have been published in the Official Journal of European Union, or other reliable, accurate and reproducible method, which takes into account the generally recognised state of the art methods, and whose results are deemed to be of low uncertainty. They shall fulfil all of the following technical parameters.		P
	Commission communication in the framework of the implementation of Commission Regulation (EU) No 206/2012 of 6 March 2012 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for air conditioners and comfort fans and of Commission Delegated Regulation (EU) No 626/2011 of 4 May 2011 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of air conditioners (2014/C 110/01)		P
2	The determination of the seasonal energy consumption and efficiency for seasonal energy efficiency ratio (SEER) and seasonal coefficient of performance (SCOP) shall take into account:		N/A
	(a) European cooling and heating season(s) as defined		N/A
	(b) reference design conditions, as defined		N/A
	Part load test conditions, as defined		N/A
	(c) electric energy consumption for all relevant modes of operation, using time periods as defined		N/A
	(d) effects of the degradation of the energy efficiency caused by on/off cycling (if applicable) depending on the type of control of the cooling and/or heating capacity;		N/A
	(e) corrections on the seasonal coefficients of performance in conditions where the heating load can not be met by the heating capacity;		N/A
	(f) the contribution of a back-up heater (if applicable) in the calculation of the seasonal efficiency of a unit in heating mode.		N/A
3	Where the information relating to a specific model, being a combination of indoor and outdoor unit(s), has been obtained by calculation on the basis of design, and/or extrapolation from other combinations, the		N/A

Appendix No.1: Format of test results

COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Clause	Requirement - Test	Result - Remark	Verdict
	documentation should include details of such calculations and/or extrapolations,		
	<b>and of tests undertaken to verify the accuracy of the calculations undertaken</b> (including details of the mathematical model for calculating performance of such combinations, <b>and of measurements taken to verify this model</b> ).		N/A
4	The rated energy efficiency ratio (EER <sub>rated</sub> ) and, when applicable, rated coefficient of performance (COP <sub>rated</sub> ) shall be established at the standard rating conditions as defined.		P
5	The calculation of seasonal electricity consumption for cooling (and/or heating) shall take into account electric energy consumption of all relevant modes of operation and operational hour as defined.		N/A

COMMISSION DELEGATED REGULATION (EU) No 626/2011			
Annex II	Energy efficiency classes		P
1	The energy efficiency of air conditioners shall be determined on the basis of measurements and calculations set out Annex VII.		P
	Both the SEER and SCOP shall take into account the reference design conditions and the operational hours per relevant mode of operation, and the SCOP shall relate to the heating season 'average', as laid down in Annex VII. The rated energy efficiency ratio (EER <sub>rated</sub> ) and the rated coefficient of performance (COP <sub>rated</sub> ) shall relate to standard rating conditions, as laid down in Annex VII.		P

Appendix No.1: Format of test results

Table 1: Data for Single duct				P
Model :	JHS-A016-09KR2H/A1			
Description	Unit	Rated value	Measured value	
<b>Data</b>				
Rated capacity for cooling	$P_{rated}$	kW	2.64	2.642
Rated capacity for heating	$P_{rated}$	kW	2.05	2.054
Power input for cooling	$P_{EER}$	kW	1.010	0.992
Power input for heating	$P_{COP}$	kW	0.850	0.800
Thermostat-off mode power consumption	$P_{TO}$	W	N/A	N/A
Standby mode power consumption without WIFI	$P_{SB}$	W	1.00	0.36
Standby mode power consumption with WIFI	$P_{SB}$	W	2.00	0.74
OFF mode power consumption	$P_{OFF}$	W	N/A	N/A
Crankcase heater mode power consumption	$P_{CK}$	W	N/A	N/A
<b>Calculated data</b>				
Energy efficiency ratio	$EER_{rated}$		2.60	2.66
Coefficient of performance	$COP_{rated}$		2.30	2.57
Electricity consumption of single duct appliance	$Q_{SD}$	kWh/h	SD: 1.010(cooling); SD: 0.850(heating)	SD: 0.992(cooling); SD: 0.800(heating)
Electricity consumption of double ducts appliance	$Q_{DD}$	kWh/a	N/A	N/A
Remark: 1. See more detail information for the test result in the attachments. 2. Both Measured value and Rated value are correspond to the requirements. 3. Energy Efficiency Class of $EER_{rated}$ (According to table 2 of EU 626/2011): A 4. Energy Efficiency Class of $COP_{rated}$ (According to table 2 of EU 626/2011): A				
<b>Sound power level (indoor)</b>				
$L_{WA}$		dB(A)	65	64.04
Remark: 1. Measured data derived from report: 01082000009153				

# Technical Report



Product Service

## Appendix No.1: Format of test results

Table 2: Test result of cooling capacity			P
Model :	JHS-A016-09KR2H/A1-W		
Compressor built-in :	DSM155V01UCZC		
Mode	Cooling		
Test method	<input checked="" type="checkbox"/> Calorimeter test method <input type="checkbox"/> Indoor air enthalpy test method <input type="checkbox"/> Water enthalpy method		
Test condition	DB/WB indoor (°C)	35.00/24.00	
	DB/WB outdoor (°C)	35.00/24.00	
Measured ambient temperature	DB/WB indoor (°C)	35.01/24.00	
	DB/WB outdoor (°C)	35.01/24.00	
Atmospheric pressure	kPa	100.38	
Test Voltage	V	230.61	
Test frequency	Hz	50.0	
Total current	A	4.377	
Total power input (P <sub>T</sub> )	W	991.9	
Effective power input (P <sub>E</sub> )	W	991.9	
Air inlet evaporator temperature, DB/WB	°C	35.01/24.00	
Air outlet evaporator temperature, DB/WB	°C	--	
Air inlet condenser temperature, DB/WB	°C	35.01/24.00	
Air outlet condenser temperature, DB/WB	°C	--	
For duct connection	External/internal static pressure difference	Pa	--
	Volume flow rate	m <sup>3</sup> /h	--
Indoor water inlet temperature	°C	--	
Indoor water outlet temperature	°C	--	
Indoor water volume flow	m <sup>3</sup> /s	--	
Pressure difference	kPa	--	
Outdoor water inlet temperature	°C	--	
Outdoor water outlet temperature	°C	--	
Outdoor water volume flow	m <sup>3</sup> /s	--	
Pressure difference	kPa	--	
Total cooling capacity (P <sub>C</sub> )	W	2641.6	
Latent cooling capacity (P <sub>L</sub> )	W	666.3	
Sensible cooling capacity (P <sub>S</sub> )	W	1975.3	
Energy efficiency ratio (EER)	W/W	2.66	

Doc No.: ITC-TTW0902.02E - Rev. 10

Report No.: 64.181.21.05013.01  
 Rev.00  
 Date: 2021-10-28  
 Page 15 of 25

Telephone : +86 20 38320668  
 Telefax : +86 20 38320478  
<http://www.tuv-sud.cn>

TUV SUD Certification and Testing (China) Co., Ltd. Guangzhou Branch,  
 TUV SUD Group  
 5F, Communication Building, 163 Pingyun Rd, Huangpu Ave.  
 West, Guangzhou, 510656, P.R.China

# Technical Report



Product Service

## Appendix No.1: Format of test results

Sensible heat ratio (SHR)	W/W	0.75
Heat balance	-	0.7%
<p>Remark:</p> <ul style="list-style-type: none"> <li>- Set-up: The appliance was installed according to user manual with outlet duct length of 50cm without bend</li> <li>- Refrigerant load (g): 195 g</li> <li>- Settings: high fan motor setting</li> <li>- Connection tube length: 500 mm</li> <li>- Duct diameters: 150 mm</li> <li>- heat balance calculated with formula : (outdoor capacity-indoor capacity)/indoor capacity</li> </ul>		

Table 3: Test result of heating capacity			P
Model :	JHS-A016-09KR2H/A1-W		
Compressor built-in :	DSM155V01UCZC		
Mode	Heating		
Test method	<input checked="" type="checkbox"/> Calorimeter test method <input type="checkbox"/> Indoor air enthalpy test method <input type="checkbox"/> Water enthalpy method		
Test condition	DB/WB indoor (°C)	20.00/12.00	
	DB/WB outdoor (°C)	20.00/12.00	
Measured ambient temperature	DB/WB indoor (°C)	20.00/12.00	
	DB/WB outdoor (°C)	20.00/12.00	
Atmospheric pressure	kPa	100.20	
Test Voltage	V	230.67	
Test frequency	Hz	50.0	
Total current	A	3.580	
Total power input (P <sub>T</sub> )	W	800.0	
Effective power input (P <sub>E</sub> )	W	800.0	
Air inlet evaporator temperature, DB/WB	°C	20.00/12.00	
Air outlet evaporator temperature, DB/WB	°C	--	
Air inlet condenser temperature, DB/WB	°C	20.00/12.00	
Air outlet condenser temperature, DB/WB	°C	--	
For duct connection	External/internal static pressure difference	Pa	--
	Volume flow rate	m <sup>3</sup> /h	--
Indoor water inlet temperature	°C	--	
Indoor water outlet temperature	°C	--	

Doc No.: ITC-TTW0902.02E - Rev. 10

Report No.: 64.181.21.05013.01  
 Rev.00  
 Date: 2021-10-28  
 Page 16 of 25

Telephone : +86 20 38320668  
 Telefax : +86 20 38320478  
<http://www.tuv-sud.cn>

TUV SUD Certification and Testing (China) Co., Ltd. Guangzhou Branch,  
 TUV SUD Group  
 5F, Communication Building, 163 Pingyun Rd, Huangpu Ave.  
 West, Guangzhou, 510656, P.R.China

# Technical Report



Product Service

## Appendix No.1: Format of test results

Indoor water volume flow	m <sup>3</sup> /s	--
Pressure difference	kPa	--
Outdoor water inlet temperture	°C	--
Outdoor water outlet temperture	°C	--
Outdoor water volume flow	m <sup>3</sup> /s	--
Total heating capacity (P <sub>H</sub> )	W	2053.5
Energy efficiency ratio (COP)	W/W	2.57
Heat balance	-	2.0%
Remark: <ul style="list-style-type: none"><li>- Set-up: The appliance was installed according to user manual with outlet duct length of 50cm without bend</li><li>- Refrigerant load (g): 195 g</li><li>- Settings: high fan motor setting</li><li>- Connection tube length: 500 mm</li><li>- Duct diameters: 150 mm</li><li>- heat balance calculated with formula : (outdoor capacity-indoor capacity)/indoor capacity</li></ul>		






**Appendix No.1: Format of test results**




Table 4		Low Power measurement					P
Voltage (230V ±1%) (V):		229.9		Frequency(Hz):		49.993	
T ambient (°C):		35.00/24.00		THD (%):		0.046%	
Air speed (m/s):		0.1		illuminance (lux):		-	
Operation condition	Current (mA)	Real power (W)	Apparent power (VA)	Power factor	Current crest factor	Remark	
Model: JHS-A016-09KR2H/A1							
Off mode	-	-	-	-	-	No off mode for the appliance	
Standby	9.86	0.36	2.27	0.157	7.76	-	
Model: JHS-A016-09KR2H/A1-W							
Off mode	-	-	-	-	-	No off mode for the appliance	
Standby	30.07	0.74	6.92	0.107	4.78	-	
supplementary information:							
a) Setting: - standby: power on and timer on; - Others mode: power on. b) In the condition providing networked standby the equipment shall not exceed a power consumption of 2 Watts on 1 Jan 2019, according to (EC) No 1275/2008 & (EU) No 801/2013.							
Maximum consumption power W in networked (max. 20 min.)	power W in standby	Tier 1 (1 Jan 2015)	Tier 2 (1 Jan 2017)	Tier 3 (1 Jan 2019) Subject to review in 2016			
HiNA equipment and equipment with HiNA functionalities		12	8	8			
Other equipment		6	3	2			






Appendix No.2: Marking plate




Copy of marking plate:

Model: JHS-A016-09KR2/A; JHS-A016-09KR2H/A; JHS-A016-09KR2/A-W; JHS-A016-09KR2H/A-W

MOBILETYPE AIR CONDITIONER LOCAL AIR CONDITIONER		
Model	JHS-A016-09KR2/A	
Power Supply	220-240V~ 50Hz	
Cooling Capacity	9000Btu/h(2.64kW)	
Refrigerant/Charge	R290/195g	
Rated Input	1010W	
Permissible Excessive Operating Pressure	Suction	0.6MPa
	Discharge	1.8MPa
Max Allowable Pressure	3.0MPa	
Air Flow	350m³/h	
Imported by:xxxxx		
Address:xxxxx		
Manufacturers:Dongguan JHS Electrical Co.,Ltd		
Address:Dongping Avenue,No.3 Industrial Park,Changping Area, Dongguan Eastern Industrial District,Dongguan City, Guangdong P.R. China		
    		

MOBILETYPE AIR CONDITIONER LOCAL AIR CONDITIONER		
Model	JHS-A016-09KR2H/A	
Power Supply	220-240V~ 50Hz	
Cooling Capacity	9000Btu/h(2.64kW)	
Heating Capacity	7000Btu/h(2.05kW)	
Refrigerant/Charge	R290/195g	
Rated Input	Cooling	1010W
	Heating	850W
Permissible Excessive Operating Pressure	Suction	0.6MPa
	Discharge	1.8MPa
Max Allowable Pressure	3.0MPa	
Air Flow	350m³/h	
Imported by:xxxxx		
Address:xxxxx		
Manufacturers:Dongguan JHS Electrical Co.,Ltd		
Address:Dongping Avenue,No.3 Industrial Park,Changping Area, Dongguan Eastern Industrial District,Dongguan City, Guangdong P.R. China		
    		

MOBILETYPE AIR CONDITIONER LOCAL AIR CONDITIONER		
Model	JHS-A016-09KR2/A-W	
Power Supply	220-240V~ 50Hz	
Cooling Capacity	9000Btu/h(2.64kW)	
Refrigerant/Charge	R290/195g	
Rated Input	1010W	
Permissible Excessive Operating Pressure	Suction	0.6MPa
	Discharge	1.8MPa
Max Allowable Pressure	3.0MPa	
Air Flow	350m³/h	
Imported by:xxxxx		
Address:xxxxx		
Manufacturers:Dongguan JHS Electrical Co.,Ltd		
Address:Dongping Avenue,No.3 Industrial Park,Changping Area, Dongguan Eastern Industrial District,Dongguan City, Guangdong P.R. China		
    		

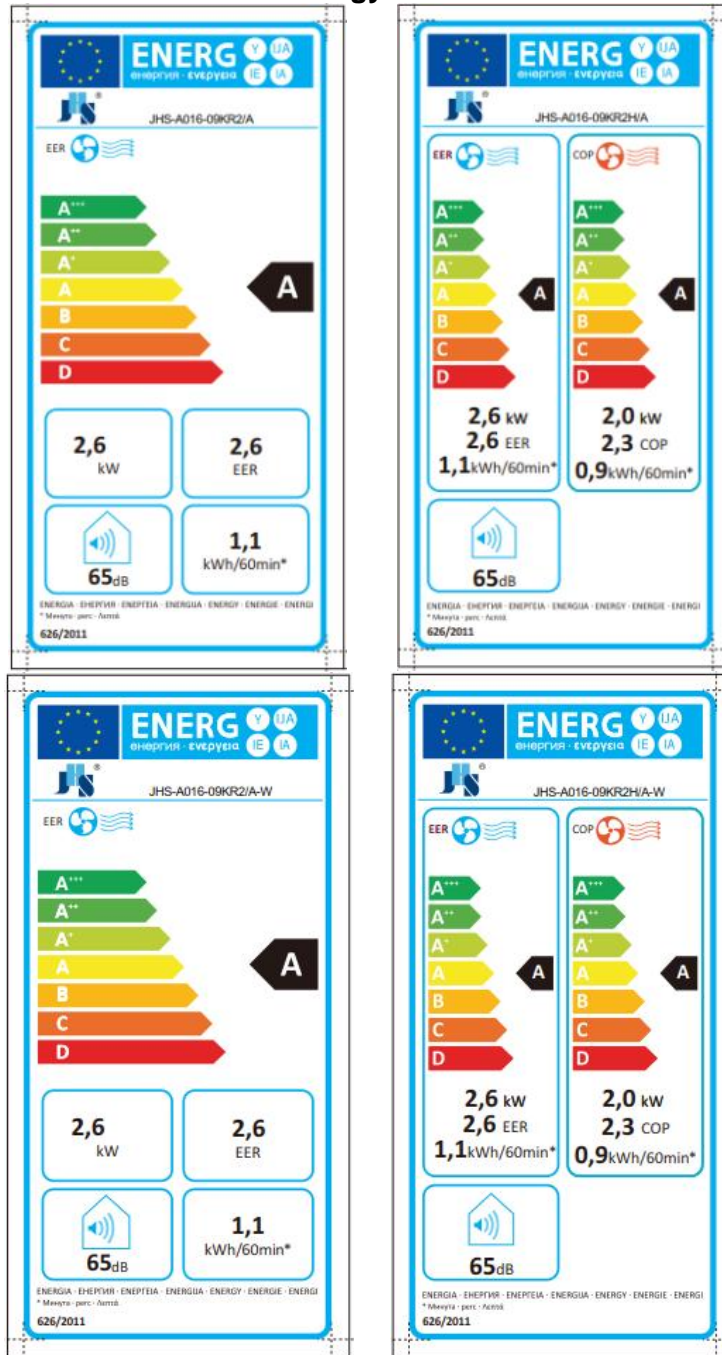
MOBILETYPE AIR CONDITIONER LOCAL AIR CONDITIONER		
Model	JHS-A016-09KR2H/A-W	
Power Supply	220-240V~ 50Hz	
Cooling Capacity	9000Btu/h(2.64kW)	
Heating Capacity	7000Btu/h(2.05kW)	
Refrigerant/Charge	R290/195g	
Rated Input	Cooling	1010W
	Heating	850W
Permissible Excessive Operating Pressure	Suction	0.6MPa
	Discharge	1.8MPa
Max Allowable Pressure	3.0MPa	
Air Flow	350m³/h	
Imported by:xxxxx		
Address:xxxxx		
Manufacturers:Dongguan JHS Electrical Co.,Ltd		
Address:Dongping Avenue,No.3 Industrial Park,Changping Area, Dongguan Eastern Industrial District,Dongguan City, Guangdong P.R. China		
    		

Remark:

1. The rating labels for models JHS-A016-09KR2/x, JHS-A016-09KR2H/x; JHS-A016-09KR2/x-W, JHS-A016-09KR2H/x-W (x=B, C, D, E, F, G, A1, B1, C1, D1, E1, G1, H) are the same as the rating label for JHS-A016-09KR2/A; JHS-A016-09KR2H/A; JHS-A016-09KR2/A-W; JHS-A016-09KR2H/A-W, except for model no. difference.
2. The height of CE marking shall be higher than 5mm and the height of WEEE marking shall be higher than 7mm.

Appendix No.2: Marking plate


Energy label



Remark:

1. The energy labels for models JHS-A016-09KR2/x, JHS-A016-09KR2H/x; JHS-A016-09KR2/x-W, JHS-A016-09KR2H/x-W (x=B, C, D, E, F, G, A1, B1, C1, D1, E1, G1, H) are the same as the energy labels for JHS-A016-09KR2/A; JHS-A016-09KR2H/A; JHS-A016-09KR2/A-W; JHS-A016-09KR2H/A-W, except for model no. difference.

Appendix No.3: Photo documentations

Details of:	Appearance view for Testing
<p><b>View:</b></p> <p><input type="checkbox"/> General</p> <p><input checked="" type="checkbox"/> Front</p> <p><input type="checkbox"/> Rear</p> <p><input type="checkbox"/> Right</p> <p><input type="checkbox"/> Left</p> <p><input type="checkbox"/> Top</p> <p><input type="checkbox"/> Bottom</p>	

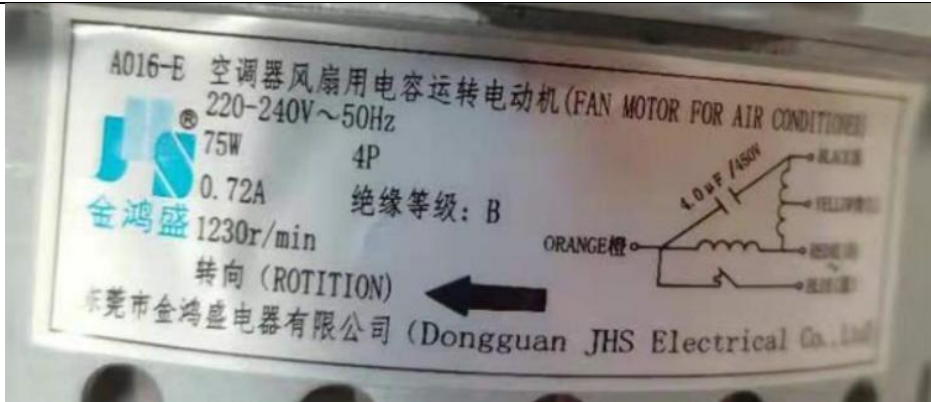
Details of:	Appearance view for Testing
<p><b>View:</b></p> <p><input type="checkbox"/> General</p> <p><input checked="" type="checkbox"/> Front</p> <p><input type="checkbox"/> Rear</p> <p><input type="checkbox"/> Right</p> <p><input type="checkbox"/> Left</p> <p><input type="checkbox"/> Top</p> <p><input type="checkbox"/> Bottom</p>	

Appendix No.3: Photo documentations

Details of:	Appearance view for Testing
<p><b>View:</b></p> <p><input type="checkbox"/> General</p> <p><input checked="" type="checkbox"/> Front</p> <p><input type="checkbox"/> Rear</p> <p><input type="checkbox"/> Right</p> <p><input type="checkbox"/> Left</p> <p><input type="checkbox"/> Top</p> <p><input type="checkbox"/> Bottom</p>	

Details of:	Compressor for all models
<p><b>View:</b></p> <p><input type="checkbox"/> General</p> <p><input checked="" type="checkbox"/> Front</p> <p><input type="checkbox"/> Rear</p> <p><input type="checkbox"/> Right</p> <p><input type="checkbox"/> Left</p> <p><input type="checkbox"/> Top</p> <p><input type="checkbox"/> Bottom</p>	

Appendix No.3: Photo documentations

Details of:	Fan motor for all models
<p><b>View:</b></p> <p><input type="checkbox"/> General</p> <p><input checked="" type="checkbox"/> Front</p> <p><input type="checkbox"/> Rear</p> <p><input type="checkbox"/> Right</p> <p><input type="checkbox"/> Left</p> <p><input type="checkbox"/> Top</p> <p><input type="checkbox"/> Bottom</p>	 <p>The photograph shows a label for a fan motor. The text on the label includes: 'A016-E 空调器风扇用电容运转电动机 (FAN MOTOR FOR AIR CONDITIONER)', '220-240V~50Hz', '75W 4P', '0.72A', '绝缘等级: B', '1230r/min', '转向 (ROTATION)' with an arrow pointing left, and '东莞市金鸿盛电器有限公司 (Dongguan JHS Electrical Co., Ltd)'. A wiring diagram on the right shows a capacitor labeled '4.0uF / 450V' connected to terminals labeled 'BLACK', 'YELLOW', 'RED', and 'BLUE'. An 'ORANGE' terminal is also indicated.</p>

## Appendix No.4: Construction data form

Part		Technical data
1. Compressor		
	Manufacture:	GMCC
	Type:	DSM155V01UCZC
	Rated capacity:	R290; 220-240VAC; 50Hz
	Serial-number:	ZS2107310000
2. Fan motor		
	Manufacture:	Dongguan JHS Electrical Co., Ltd.
	Type:	A016-E
	Rated capacity:	220-240VAC; 50Hz; 75W; CLASS B
	Serial-number:	N/A

Appendix No.5: Test equipment list

Equipment	ID No.	Model	Brand/Manufacturer	Calibration due date
Balanced Ambient Room-Type Calorimeter Laboratory	200844CK0124	/	GZ-Lans	2022-02-09
Band Tape	201444CK0026SD	0-3M	/	2022-09-24
Hygrometer	201444CK0004SD	UT332	UNI-T	2022-01-15
Big barometer	200944BK0273	DYM3	Feng Yang	2022-08-31
AC source Supply	64-1-09-07-001*	AFC-500W	ACPOWER	-
Multi-function digital power meter	64-1-32-14-008	WT310-H-C2/C7/G5	Japan Yokogawa	2021-10-14
Temperature and humidity meter	64-1-53-10-001	TT-492	Tanita	2022-04-24
Anemometer	64-1-26-12-001	417	Testo	2021-11-02
Hemi-anechoic Rooms(A)	NC-036-2	5.2mx4.7mx4.6m	Guangzhou Kinte	2021-10-09
Hemi-anechoic Rooms(B)	NC-036-3	5.2mx4.4mx4.6m	Guangzhou Kinte	2021-10-09
PULSE system	VGDY-0184	3660C	Bruel & Kjaer	2022-04-12
Microphone	HJ-000123	4189	Bruel & Kjaer	2022-04-12
Microphone	HJ-000110	4189	Bruel & Kjaer	2022-04-12
Microphone	HJ-000122	4189	Bruel & Kjaer	2022-04-12
Microphone	HJ-000107	4189	Bruel & Kjaer	2022-04-12
Microphone	HJ-000121	4189	Bruel & Kjaer	2022-04-12
Microphone	HJ-000120	4189	Bruel & Kjaer	2022-04-12
Microphone	HJ-000104	4189	Bruel & Kjaer	2022-04-12
Microphone	HJ-000103	4189	Bruel & Kjaer	2022-04-12
Microphone	HJ-000102	4189	Bruel & Kjaer	2022-04-12
Microphone	HJ-000119	4189	Bruel & Kjaer	2022-04-12
Calibrator	HJ-000095	4231	Bruel & Kjaer	2022-06-25
Power meter	KA-0008	8705B	Qingdao Qinzhi	2022-01-04
Long steel tape	HJ-000062	5m	STANLEY	2022-09-09
Temperature measurement system	NC-036-1	-	Guangzhou Kinte	2022-08-01
Atmospheric pressure meter	HJ-000165	-	Sportstar	2022-09-21
Windscreen	-	WS002-5	BSWA TECH	-

--- End of Report ---