

TEST REPORT

检测报告

Test item: 测试对象	Split Air Conditioner 分体式空调
Model 型号名称	AS12TADHRA+AS12TADHRA 2U18MEFFRA AS12TADHRA+AS12TADHRA 2U18MEFFRA
Manufacturer 制造商名称	Qingdao Haier Air Conditioner General Co., Ltd. 青岛海尔空调器有限总公司

Haier Air Conditioner Calibration & testing center
海尔空调计量测试中心

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1. Essential information

1. 基本信息

Report No 报告编号		HR20191123231A31001	
Test Result: 测试结果		The test items passed the test specification(s). 测试项目合格	
Test item: 测试对象		Split Air Conditioner 分体式空调	
Type of unit 机组类型		Split - Air/Air High wall 挂机	
Manufacturer 制造商名称		Qingdao Haier Air Conditioner General Co., Ltd. 青岛海尔空调器有限总公司	
Address 制造商地址		No.1 Haier Road, Hi-tech Zone, Qingdao, 266107, P.R. China 中国青岛市高科园海尔路1号	
Unit reception date 样机接收日期		2019.11.23	
Testing Laboratory: 测试机构		Qingdao Haier Air Conditioner General Corp.Ltd calibration & testing center 青岛海尔空调器有限总公司计量测试中心	
Place of test: 测试地点		No.1 Haier Road, Hi-tech Zone, Qingdao, 266107, P.R. China 中国青岛市高科园海尔路1号	
Test method 测试方法		Balanced ambient double room type calorimeter 平衡型量热计法	
Test Supervisor 测试主管			
Test dates 测试日期	Starting: 开始	2019.11.23	
	Ending: 结束	2019.11.28	
Type 类型	Model 型号	Serial number 序列号	
Outdoor 室外机	2U18MEFFRA	AAB0T0E0900N2KAB0007	
Indoor 室内机	AS12TADHRA	AAANW1E0000N5KA70001	
	AS12TADHRA	AAANW1E0000N5KA70005	
Test specification: 测试标准:	EN 14825:2018		
	COMMISSION DELEGATED REGULATION (EU) No 626/2011		
	COMMISSION REGULATION (EU) No 206/2012		
	COMMISSION REGULATION (EU) No 2016/2282		
	COMMISSION DELEGATED REGULATION (EU) No 2017/254		
EN 14511-1,2,3,4:2018			
tested by: 主检:		reviewed by: 审核:	
Date Signature 签字日期:		Date Signature 签字日期:	
		approved by: 批准:	
		Date Signature 签字日期:	

1.1 Detail description:

1.1 详细描述

Type of refrigerant 制冷剂类型		R32
Mass of refrigerant 制冷剂加注量	(Kg)	1.4
GWP		675
Refrigerant charge 制冷剂加注量	(Kg)	0
IP class 外壳防护等级		IPX0 for indoor and IPX4 for outdoor 室内机: IPX0; 室外机: IPX4
Capacity control 变频/定频/其他		variable 变频
Function 功能		Cooling and heating mode 制冷模式和制热模式
Rating voltage 额定电压	(V)	230
Rating frequency 额定频率	(Hz)	50
Connecting pipe length 连机管长度	(m)	5
Test performed on a new unit (no previous installation, except 在新装置上进行的试验 (除试验目的外, 无先前安装)	(Yes/No)	Yes

1.2. List of Major Parts and Components

1.2 主要零部件信息

NAME 名称	Special Number 专用号	Model 型号	manufacturer 厂家
Compressor 压缩机	0010725980	GTD130UKQA8JT6	Hitachi
Indoor fan motor 内电机	0010403317G	SIC-310-30-1	NIDEC SHIBAURA
Outdoor fan motor 外电机	0010403322A	SIC-310-40-2	NIDEC SHIBAURA

1.3 Declared

1.3 宣称参数

APPLICATION 类型	Cooling 制冷	Heating (Average) 制热 (平均)	Heating (Warmer) 制热 (温暖)	Heating (Colder) 制热 (寒冷)
Design load(kW) 设计负载	5	4.7	4.4	-
Declared SEER 宣称 SEER	6.5	-	-	-
Declared SCOP 宣称 SCOP	-	4.0	5.1	-
Energy class 能效等级	A++	A+	A+++	-

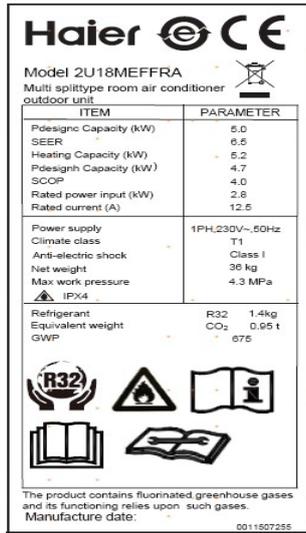
1.4 Copy of Rating labels and energy label

1.4 铭牌、能耗贴、内外机照片

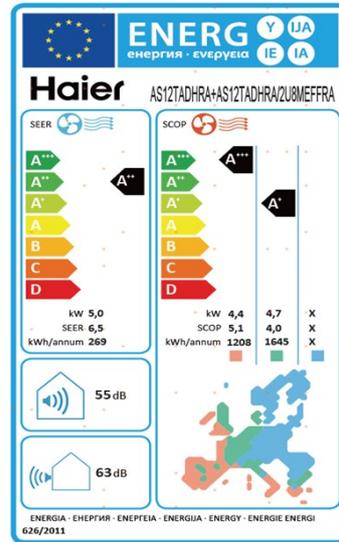
内机铭牌



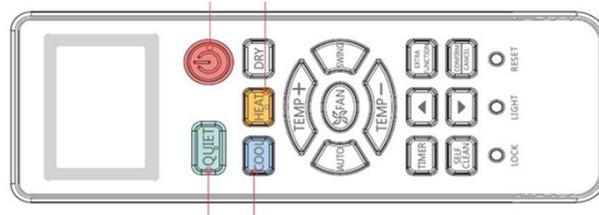
外机铭牌



能耗标贴



遥控器



indoor unit



outdoor unit



1.5 Information requirements

1.5 信息要求

Model				2U18MEFFRA/AS12TADHRA AS12TADHRA			
Function (indicate if present)				If function includes heating: indicate the heating season the information relates to. Indicated values should relate to one heating season at a time. Include at least the heating season 'Average'.			
cooling	Yes			Average (mandatory)	Yes		
heating	Yes			Warmer (if designated)	Yes		
				Colder (if designated)	No		
Item	symbol	value	unit	Item	symbol	value	unit
Design load				Seasonal efficiency			
cooling	Pdesignc	5	kW	cooling	SEER	6.5	—
heating/Average	Pdesignh	4.7	kW	heating/Average	SCOP	4	—
heating/Warmer	Pdesignh	4.4	kW	heating/Warmer	SCOP	5.1	—
heating/Colder	Pdesignh	-	kW	heating/Colder	SCOP	-	—
Annual electricity consumption							
cooling	Qce	269	kWh/a	heating/Warmer	Qhe	1208	kWh/a
heating/Average	Qhe	1645	kWh/a	heating/Colder	Qhe	-	kWh/a
Declared capacity (*) for cooling, at indoor temperature 27(19) °C and outdoor temperature Tj				Declared energy efficiency ratio (*), at indoor temperature 27(19) °C and outdoor temperature Tj			
Tj = 35 °C	Pdc	5.000	kW	Tj = 35 °C	EERd	3.45	—
Tj = 30 °C	Pdc	3.680	kW	Tj = 30 °C	EERd	5.30	—
Tj = 25 °C	Pdc	2.370	kW	Tj = 25 °C	EERd	8.30	—
Tj = 20 °C	Pdc	1.400	kW	Tj = 20 °C	EERd	12.80	—
Declared capacity (*) for heating/Average season, at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance (*)/Average season, at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	4.160	kW	Tj = -7 °C	COPd	2.65	—
Tj = 2 °C	Pdh	2.530	kW	Tj = 2 °C	COPd	4.10	—
Tj = 7 °C	Pdh	1.630	kW	Tj = 7 °C	COPd	4.80	—
Tj = 12 °C	Pdh	1.400	kW	Tj = 12 °C	COPd	5.80	—
Tj = operating limit	Pdh	4.100	kW	Tj = operating limit	COPd	2.60	—
Tj = bivalent temperature	Pdh	4.160	kW	Tj = bivalent temperature	COPd	2.65	—
Declared capacity (*) for heating/Warmer season, at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance (*)/Warmer season, at indoor temperature 20 °C and outdoor , temperature Tj .			
Tj = 2 °C	Pdh	4.4	kW	Tj = 2 °C	COPd	3.4	—
Tj = 7 °C	Pdh	2.83	kW	Tj = 7 °C	COPd	5	—
Tj = 12 °C	Pdh	1.4	kW	Tj = 12 °C	COPd	5.8	—
Tj = operating limit	Pdh	N/A	kW	Tj = operating limit	COPd	N/A	—
Tj = bivalent temperature	Pdh	4.4	kW	Tj = bivalent temperature	COPd	3.4	—

Declared capacity (*) for heating/Colder season, at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance (*) /Colder season, at indoor temperature 20 °C and outdoor , temperature Tj			
Item	symbol	value	unit	Item	symbol	value	unit
Tj = - 7 °C	Pdh	NA	kW	Tj =-7 °C	COPd	NA	—
Tj = 2 °C	Pdh	NA	kW	Tj = 2 °C	COPd	NA	—
Tj = 7 °C	Pdh	NA	kW	Tj = 7 °C	COPd	NA	-
Tj = 12 °C	Pdh	NA	kW	Tj = 12 °C	COPd	NA	—
Tj = operating limit	Pdh	NA	kW	Tj = operating limit	COPd	NA	—
Tj = bivalent temperature	Pdh	NA	kW	Tj = bivalent temperature	COPd	NA	—
Tj = - 20 °C	Pdh	NA	kW	Tj = -15 °C	COPd	NA	-
Bivalent temperature				Operating limit temperature			
heating/Average	Tbiv	-7	°C	heating/Average	Tol	-10	°C
heating/Warmer	Tbiv	2	°C	heating/Warmer	Tol	2	°C
heating/Colder	Tbiv	NA	°C	heating/Colder	Tol	NA	°C
Cycling interval capacity				Cycling interval efficiency			
for cooling	Pcycc	N/A	kW	for cooling	EERcyc	N/A	—
for heating	Pcych	N/A	kW	for heating	COPcyc	N/A	—
Degradation coefficient cooling(**)	Cdc	0.25	-	Degradation coefficient heating	Cdh	0.25	—
Electric power input in power modes other than 'active mode'							
(Cooling)				(Heating)			
off mode	P _{OFF}	12.0	W	off mode	P _{OFF}	12.0	W
standby mode	P _{SB}	12.0	W	standby mode	P _{SB}	12.0	W
Thermostat-off mode	P _{TO}	16.0	W	Thermostat-off mode	P _{TO}	16.0	W
crankcase heater mode	P _{CK}	0.0	W	crankcase heater mode	P _{CK}	0.0	W
Contact details for obtaining more information							
获取详细信息的联系方式	Name manufacturer 制造商名称	Qingdao Haier Air Conditioner General Co., Ltd. 青岛海尔空调器有限公司					
	Address 地址	No.1 Haier Road, Hi-tech Zone, Qingdao, 266107, P.R. China 中国青岛市高科园海尔路1号					
(*) For staged capacity units, two values divided by a slash ('/') will be declared in each box in the section ' Declared capacity of the unit' and 'declared EER/COP' of the unit.							
(**) if default Cd = 0,25 is chosen then (results from) cycling tests are not required. Otherwise either the heating or cooling cycling test value is required.							

2. Test Results

2. 测试结果

2.1 Table 1 Cooling test data

2.1 表格1 制冷测试数据

Part-Load 部分负载	Unit 单位	A (100%)	B (74%)	C (47%)	D (21%)
Rating conditions,outdoor dry bulb/indoor dry bulb(wet bulb) 额定工况 室外干球/室内干球(湿球)	(°C)	A35 A27(19)	A30 A27(19)	A25 A27(19)	A20 A27(19)
Test date 测试日期	/	2019/11/23	2019/11/23	2019/11/23	2019/11/24
Dry bulb temperature,air inlet,outdoor side 干球温度-室外侧进风口	(°C)	35.01	30.00	25.01	20.00
Wet bulb temperature,air inlet,outdoor side 湿球温度-室外侧进风口	(°C)	24.00	18.94	9.72	7.05
Dry bulb temperature,air inlet indoor side 干球温度-室内侧进风口	(°C)	27.01	27.00	27.00	27.00
Wet bulb temperature,air inlet indoor side 湿球温度-室内侧进风口	(°C)	19.02	19.00	19.01	18.97
Atmospheric pressure 大气压力	(kPa)	101.90	101.82	102.05	101.86
Total power input 总输入功率	(kW)	1.509	0.621	0.275	0.100
Total cooling capacity 总制冷量	(kW)	5.037	3.585	2.305	1.309
EER	/	3.34	5.77	8.39	13.12
Compressor frequenc (±3Hz) 压缩机频率(±3Hz)	Hz	60	34	21	10

2.2 Table 2 Heating test data (Average)

2.2 表格2 制热测试数据 (平均地区)

Part-Load 部分负载	Unit 单位	A (88%)	B (54%)	C (35%)	D (15%)	E (100%)	F (88%)
Rating conditions,outdoor dry bulb/indoor dry bulb(wet bulb) 额定工况 室外干球/室内干球(湿球)	(°C)	A-7(-8) A20	A2(1) A20	A7(6) A20	A12(11) A20	A-10(-11) A20	A-7(-8) A20
Test date 测试日期	/	2019/11/24	2019/11/25	2019/11/25	2019/11/26	2019/11/26	2019/11/24
Dry bulb temperature,air inlet,outdoor side 干球温度-室外侧进风口	(°C)	-6.99	2.00	6.98	12.00	-9.97	-6.99
Wet bulb temperature,air inlet,outdoor side 湿球温度-室外侧进风口	(°C)	-8.05	1.00	6.00	11.00	-10.96	-8.05
Dry bulb temperature,air inlet indoor side 干球温度-室内侧进风口	(°C)	20.10	20.00	19.94	19.90	19.99	20.10
Wet bulb temperature,air inlet indoor side 湿球温度-室内侧进风口	(°C)	/	/	/	/	/	/
Atmospheric pressure 大气压力	(kPa)	102.32	101.79	101.79	101.63	102.02	102.32
Total power input 总输入功率	(kW)	1.610	0.612	0.352	0.235	1.577	1.610
Heating capacity 总制热量	(kW)	4.431	2.562	1.714	1.414	3.931	4.431
Defrost period 除霜时间	(s)	180	180	/	/	180	180
Operating cycle with defrost 除霜运行循环周期	(min)	150	150	/	/	150	150
Measuring period 测量周期	(min)	360	360	/	/	360	360
COP	/	2.75	4.19	4.87	6.01	2.49	2.75
Compressor frequenc (±3Hz) 压缩机频率(±3Hz)	Hz	92	41	24	17	92	92

2.3 Table 3 Heating test data (Warmer)

2.3 表格3 制热测试数据 (温暖地区)

Part-Load 部分负载	Unit 单位	B (100%)	C (35%)	D (15%)	E (100%)	F (100%)
Rating conditions,outdoor dry bulb/indoor dry bulb(wet bulb) 额定工况 室外干球/室内干球(湿球)	(°C)	A2(1) A20	A7(6) A20	A12(11) A20	A2(1) A20	A2(1) A20
Test date 测试日期	/	2019/11/27	2019/11/28	2019/11/26	/	2019/11/27
Dry bulb temperature,air inlet,outdoor side 干球温度-室外侧进风口	(°C)	2.00	7.01	12.00	/	2.00
Wet bulb temperature,air inlet,outdoor side 湿球温度-室外侧进风口	(°C)	1.00	5.99	11.00	/	1.00
Dry bulb temperature,air inlet indoor side 干球温度-室内侧进风口	(°C)	20.00	19.97	19.90	/	20.00
Wet bulb temperature,air inlet indoor side 湿球温度-室内侧进风口	(°C)	/	/	/	/	/
Atmospheric pressure 大气压力	(kPa)	101.54	101.45	101.63	/	101.54
Total power input 总输入功率	(kW)	1.489	0.543	0.235	/	1.489
Heating capacity 总制热量	(kW)	4.867	2.909	1.414	/	4.867
Defrost period 除霜时间	(s)	180	/	/	/	180
Operating cycle with defrost 除霜运行循环周期	(min)	150	/	/	/	150
Measuring period 测量周期	(min)	360	/	/	/	360
COP	/	3.43	5.03	6.01	/	3.43
Compressor frequenc (±3Hz) 压缩机频率(±3Hz)	Hz	85	22	14	/	85

2.4 Table 4 Electric power input during thermostat-off mode, standby mode and off mode

2.4 表格4 达温模式、待机模式、关机模式的功率

Thermostat off in Cooling mode - EN 14825:2018 达温功率 (制冷) -EN 14825:2018		Thermostat off in Heating mode - EN 14825:2018 达温功率 (制热) -EN 14825:2018	
Test date 测试日期	2019/11/26	Test date 测试日期	2019/11/26
Outdoor dry bulb/indoor dry bulb 室外干球/室内干球 (湿球)	A20 A27(19)	Outdoor dry bulb/indoor dry bulb 室外干球 (湿球) /室内干球	A12(11) A20
Power consumption (W) 测试功率	12.8	Power consumption (W) 测试功率	15.73
Standby in Cooling mode - EN 14825:2018 待机功率 (制冷) - EN 14825:2018		Standby in Heating mode - EN 14825:2018 待机功率 (制热) - EN 14825:2018	
Test date 测试日期	2019/11/26	Test date 测试日期	2019/11/26
Outdoor dry bulb/indoor dry bulb 室外干球/室内干球 (湿球)	A20 A27(19)	Outdoor dry bulb/indoor dry bulb 室外干球 (湿球) /室内干球	A20 A27(19)
Power consumption (W) 测试功率	10.6	Power consumption (W) 测试功率	10.3
Off mode in Cooling mode - EN 14825:2018 关机模式功率 (制冷) - EN 14825:2018		Off mode in Heating mode - EN 14825:2018 关机模式功率 (制热) - EN 14825:2018	
Test date 测试日期	2019/11/26	Test date 测试日期	2019/11/26
Outdoor dry bulb/indoor dry bulb 室外干球/室内干球 (湿球)	A20 A27(19)	Outdoor dry bulb/indoor dry bulb 室外干球 (湿球) /室内干球	A20 A27(19)
Power consumption (W) 测试功率	10.6	Power consumption (W) 测试功率	10.3

3. Calculation of SEER / SCOP

3. 季节能效比计算

3.1 Calculation of SEER

3.1 SEER 计算

Tdesignc: 35 °C

Full load (Pdesignc): 5 kW

Test result at A,B,C,D conditions as below table 1

Table 1: data for SEER:

Test conditions (°C)	Part Load Ratio (in%)	Part Load (kW)	Measured capacity (kW)	EER at measured capacity	CR	EER at part Load (EER _{bin})
测试条件	部分负载	部分负载	测量有效能力			
A - A35 A27(19)	100	5	5.0369	3.34	0.99	3.34
B - A30 A27(19)	74	3.68	3.5854	5.77	1.00	5.77
C - A25 A27(19)	47	2.37	2.305	8.39	1.00	8.39
D - A20 A27(19)	21	1.05	1.3094	13.12	0.80	12.50

Test result of electric power consumption for below four modes,see table 2

Table 2: electric power consumptions

Power consumption (cooling)		unit	value
off mode	P _{OFF}	(W)	10.6
standby mode	P _{SB}	(W)	10.6
Thermostat-off mode	P _{TO}	(W)	12.8
crankcase heater mode	P _{CK}	(W)	0

Final result

SEER _{ON}	7.54
SEER	6.79

APPLICATION 类别	Unit 单位	Measured 测量	Declared 宣称	Limit 容差	Ratio (in%)	Result 结果
Full load (Pdesignc) 制冷量	(kW)	5.0369	5	-	100.74%	PASSED 合格
SEER 制冷季节能效比	-	6.79	6.5	0	104.53%	PASSED 合格
Qce 制冷季节耗电量	(kWh/annum)	259	197	-	-	N/A N/A
SEER Class 制冷能效等级	-	A++	A++	-	-	PASSED 合格

3.2. Calculation of SCOP (Average)

3.2. SCOP 计算 (平均地区)

Tdesignh -10°C

Tbivalent -7°C

TOL: -10°C

Full load (Pdesignh): 4.7 kW

Test result at A,B,C,D,E,F conditions as below table 1

Table 1: data for SCOP:

Test conditions (°C) (Average)	Part Load Ratio (in%)	Part Load (kW)	Measured capacity (kW)	COP at measured capacity	CR	COP at part Load (COP _{bin})
测试条件 (平均地区)	部分负载	部分负载	测量有效能力			
A - A-7(-8) A20	88	4.16	4.4306	2.75	0.94	2.75
B - A2(1) A20	54	2.53	2.5617	4.19	0.99	4.19
C - A7(6) A20	35	1.63	1.7138	4.87	0.95	4.87
D - A12(11) A20	15	0.68	1.4138	6.01	0.48	5.33
E - A-10(-11) A20 (TOL)	100	4.70	3.931	2.49	1.00	2.49
F - A-7/-8 A20 (T _{biv})	88	4.16	4.4306	2.75	0.94	2.75

Test result of electric power consumption for below four modes,see table 2

Table 2: electric power consumptions

Power consumption (Heating)	unit	value
off mode	P _{OFF}	(W) 10.3
standby mode	P _{SB}	(W) 10.3
Thermostat-off mode	P _{TO}	(W) 15.73
crankcase heater mode	P _{CK}	(W) 0

Final result

SCOP _{net}	4.14
SCOP _{ON}	4.10
SCOP	4.09

APPLICATION 类别	Unit 单位	Measured 测量	Declared 宣称	Limit 容差	Ratio (in%)	Result 判定
Full load (Pdesignh) 制热量	(kW)	5.01	4.7	-	106.57%	PASSED 合格
SCOP 制热季节能效比	-	4.09	4	0	102.36%	PASSED 合格
Qhe 制热季节耗电量	(kWh/annum)	1713	1645	-	-	N/A N/A
SCOP Class 制热能效等级	-	A+	A+	-	-	PASSED 合格

3.3. Calculation of SCOP (Warmer)

3.3. SCOP 计算 (温暖地区)

Tdesignh 2°C

Tbivalent 2°C

TOL:2°C

Full load (Pdesignh): 4.4 kW

Test result at B,C,D,E,F conditions as below table 1

Table 1: data for SCOP:

Test conditions (°C) (Warmer) 测试条件 (温暖地区)	Part Load Ratio (in%) 部分负载	Part Load (kW) 部分负载	Measured capacity (kW) 测量有效能力	COP at measured capacity	CR	COP at part Load (COP _{bin})
A - A-7(-8) A20	n/a	n/a	n/a	n/a	n/a	n/a
B - A2(1) A20	100	4.40	4.867	3.43	0.90	3.43
C - A7(6) A20	64	2.83	2.9091	5.03	0.97	5.03
D - A12(11) A20	29	1.26	1.4138	6.01	0.89	6.01

Test result of electric power consumption for below four modes, see table 2

Table 2: electric power consumptions

Power consumption (Heating)		unit	value
off mode	P _{OFF}	(W)	10.3
standby mode	P _{SB}	(W)	10.3
Thermostat-off mode	P _{TO}	(W)	15.73
crankcase heater mode	P _{CK}	(W)	0

Final result

SCOP _{net}	5.32
SCOP _{ON}	5.32
SCOP	5.27

APPLICATION 类别	Unit 单位	Measured 测量	Declared 宣称	Limit 容差	Ratio (in%)	Result 判定
Full load (Pdesignh) 制热量	(kW)	4.87	4.40	-	110.61%	PASSED 合格
SCOP 制热季节能效比	-	5.27	5.1	0	103.40%	PASSED 合格
Qhe 制热季节耗电量	(kWh/annum)	1292	1208	-	-	N/A N/A
SCOP Class 制热能效等级	-	A+++	A+++	-	-	PASSED 合格

4. Minimum energy efficiency requirement (from 1 January 2014)

4. 最低能效要求 (2014年1月1日起)

Rated capacity for cooling 制冷额定能力		(KW)	5		
GWP			675		
	Measured SEER	Requirement for minimum energy efficiency	Measured SCOP	Requirement for minimum energy efficiency (Average)	Result
	测量的 SEER	最低能效要求	测量的 SCOP	最低能效要求	判定
If GWP of refrigerant > 150 for < 6 kW	6.79	4,60	4.09	3,80	PASSED
If GWP of refrigerant > 150 for 6-12 kW	-	4.3	-	3,80	NA

5. Test equipment list			
5. 测试设备清单			
Equipment	Serial No.	Brand/Manufacture	next calibration
Balanced ambient double room	TQ-022A-073	Guangzhou Kinte Industrial Co.,Ltd.	2020/4/28

Test Report No. :	HR20191107131A32004		
Applicant Name:	Qingdao Haier Air Conditioner General Co., Ltd.		
	No.1 Haier Road, Hi-tech Zone, Qingdao, 266107, P.R. China		
Test item:	Split Air Conditioner		
Identification(factory name)	AS12TADHRA+AS12TADHRA/2U18MEFFRA		
Identification(custom name)	/		
Serial No.:	AAANW1E0000N5KA70002 AAANW1E0000N5KA70004 AAB0T0E0900N2KAB0001		
Date of receipt:	2019/11/21		
testing period:	2019/11/21-2019/11/22		
Test specification:	EN12102:2017		
	COMMISSION DELEGATED REGULATION (EU) No 626/2011		
	COMMISSION REGULATION (EU) No 206/2012		
Test Result:	The test items passed the test specification(s).		
Testing Laboratory:	Qingdao Haier Air Conditioner General Co.,Ltd. Calibration & Testing Center		
Place of test:	No.1, Haier Road, Hi-Tech Zone, Qingdao, Shangdong, China		
tested by:	reviewed by:	approved by:	
Date Signature		Date Signature	
		Date Signature	
Abbreviations :	P (ass)=passed F(ail)=failed N/A=not applicable N/T=not tested		
Other:	This test report relates to test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts.		

Manufacturer	Qingdao Haier Air Conditioner General Co., Ltd
Factory	Qingdao Haier (JiaoZhou) Air Conditioner Co., Ltd.
	Haier industries park, No.1, Haier road, Jiaozhou district, Qingdao, P.R. China

Summary of testing

1. The appliances were tested according to

EN12102:2017
COMMISSION DELEGATED REGULATION (EU) No 626/2011
COMMISSION REGULATION (EU) No 206/2012

2. Only indoor and outdoor sound power level were tested by Sound Power method in this report.

Test sample particulars

Additional information	New unit
Classification of installation and use	Fixed appliance
Type of the appliance	Split type appliance
Function of the appliance	Cooling and heating
Heating season (heating function applicable)	Average / Warmer

Possible test case verdicts

-test case does not apply to the test object	N/A
- test object does meet the requirement	P(Pass)
- test object does not meet the requirement	F(Fail)

General product information

1. This is a set of inverter split type room air conditioner for household use. The refrigerant is R32. Indoor unit is supplied directly by a flexible cord to fixed wiring, and outdoor unit is supplied through interconnection cord connected to the indoor unit.
2. Electrical control system is composed of one indoor control PCB and one set of outdoor control system.
3. The indoor unit is a wall mounted type air conditioner, which will be installed at 1.8meters above the floor, and an infrared remote controller was used.

indoor unit



outdoor unit



Detail description:		
Model	AS12TADHRA+AS12TADHRA/2U18MEFFRA	
Identification(custom name)	/	
Indoor unit	AS12TADHRA+AS12TADHRA	
Outdoor unit	2U18MEFFRA	
Rated voltage / Frequency	230V/50Hz	
Refrigerant/charge/GWP	R32/1400g/GWP675	
Rated capacity (kW)	5	
Function	cooling / heating	
Dimension (Indoor) (LxDxH)(mm)	820*195*280	
Dimension (Outdoor) (LxDxH)(mm)	800*275*553	
IP class (indoor / outdoor unit)	IPX4	
Sound power level (indoor) dB(A)	55	
Sound power level (outdoor) dB(A)	63	
Compressor	GTD130UKQA8JT6 manufactured by Haichang Hitachi Electrical Appliances Co., Ltd.	
Indoor fan motor	SIC-310-30-1 (G) manufactured by NIDEC SHIBAURA(zhe jiang)CORPORATION	
Outdoor fan motor	SIC-310-40-2 manufactured by NIDEC SHIBAURA(zhe jiang)CORPORATION	

Haier CE  MODEL: AS12TADHRA Split type room air conditioner	Power supply Anti-electric shock Net Weight Air volume	1PH,230V~,50Hz Class I 8.4 kg 550m ³ /h
	Manufacture date MADE IN P.R.C. Manufactured by Haier	
  		

Haier  CE	
Model 2U18MEFFRA Multi splittype room air conditioner outdoor unit	
	
ITEM	PARAMETER
Pdesignc Capacity (kW)	5.0
SEER	6.5
Heating Capacity (kW)	5.2
Pdesignh Capacity (kW)	4.7
SCOP	4.0
Rated power input (kW)	2.8
Rated current (A)	12.5
Power supply	1PH,230V~,50Hz
Climate class	T1
Anti-electric shock	Class I
Net weight	36 kg
Max work pressure	4.3 MPa
 IPX4	
Refrigerant	R32 1.4kg
Equivalent weight	CO ₂ 0.95 t
GWP	675
  	
 	
The product contains fluorinated greenhouse gases and its functioning relies upon such gases. Manufacture date:	
0011507255	

Test information		
Model	AS12TADHRA+AS12TADHRA/2U18MEFFRA	
	Rated capacity(kW)	5
Test Method	Sound Power method	
Test voltage	230V	
Working condition class	Class A	
Acoustical environment	hemi-anechoic	
Measuring equipment	name	Noise Testing and Analysis System
	type	BK 4966
	manufacturer	HBK
Calibration equipment	B&K 4231 type	
Windshield type	sponge	
Installation of the unit	Indoor unit was supported by a rigid frame and installed at 1.8meters above the floor. Outdoor unit was installed in the middle of the outdoor room. Indoor room and outdoor room are using hemi-anechoic method. Indoor and outdoor unit were connected by the connection tube with a length of 10m.	
working conditions:cooling mode (°C)	indoor air dry bulb /wet bulb temperature	outdoor air dry bulb /wet bulb temperature
	27/18.9	35.0/24

Test requirement			
EN12102:2017 COMMISSION REGULATION (EU) No 206/2012 COMMISSION DELEGATED REGULATION (EU) No 626/2011			
from 1January 2013, air conditioners,except single and double duct air conditioners,shall correspond to minimum energy efficiency and maximum sound power level requirements as indicated in table 4 and 5 t			
<p>Table 5</p> <p>Requirements for maximum sound power level</p>			
Rated capacity ≤ 6 kW		6 < Rated capacity ≤ 12 kW	
Indoor sound power level in dB(A)	Outdoor sound power level in dB(A)	Indoor sound power level in dB(A)	Outdoor sound power level in dB(A)
60	65	65	70

Test result			
indoor side		outdoor side	
position	L _p sound pressure level dB(A)	position	L _p sound pressure level dB(A)
1	-	1	-
2	-	2	-
3	-	3	-
4	-	4	-
5	-	5	-
6	-	6	-
average	-	7	-
		8	-
		9	-
		average	-

Remark: Appliances worked at high fan speed. The indoor side measurement surface area is 19.7 square meters. The outdoor side measurement surface area is 22.8square meters.

Lw(sound power level) dB(A)	indoor side	outdoor side	Verdict
	54.2	62.5	P