

Air Conditioner ERP Test Report

Report Number.....: 4931815.60

Tested by (name + signature) : Linda Li

Linda Li

Approved by (name + signature).....: Jacky Zhang

Jacky Zhang

Date of issue.....: 2025-01-16

Total number of pages..... 19 Pages

Testing Laboratory: DEKRA Testing and Certification (Shanghai) Ltd., Guangzhou branch
Address.....: Block 5, No.3, Qiyun Road, Huangpu District, Guangzhou, Guangdong, China

Applicant's name: HANTECH İKLİMLENDİRME SAN. TİC.A.Ş.

Address.....: Ziya Gökalp Mah. Süleyman Demirel Blv. No:7E / 138, Başakşehir - İstanbul, Türkiye

Test specification:

Standard: EN 14511-1:2022, EN 14511-2:2022, EN 14511-3:2022, EN 14511-4:2022, EN 14825:2022, EN 12102-1:2022

Test procedure.....: (EU) No 206/2012, (EU) No 626/2011, EU 2017/254, EU 2016/2282, (EU) 2023/2048

Non-standard test method.....: N/A

Test Report Form No.....: EN 14825-2018 V1.0

Test Report Form(s) Originator DEKRA
.....:

Test item description.....: Air conditioner

Trade Mark.....:



Manufacturer.....: TCL Air conditioner (Zhong Shan) Co.,Ltd.
No.59.Nantou Road West, Nantou Town Zhongshan City, Guangdong P.R. China

Factory: Same as the manufacturer

Model/Type reference.....: Model 1:Indoor unit :HNT-WP24VMCL/I;Outdoor unit:HNT-WP24VMCL/O
Model 2:Indoor unit:HNT-WP24VMCL/I-B;Outdoor unit:HNT-WP24VMCL/O

Ratings.....: 220-240 V~, 50 Hz, see rating label

Summary of testing:**Tests performed (Test items):**

Cooling capacity

Heating capacity

Standby/off, thermostat off mode power consumption






Testing location:






TCL Air conditioner (Zhong Shan) Co.,Ltd.








No.59.Nantou Road West, Nantou Town Zhongshan City, Guangdong P.R. China








Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBS that own these marks.

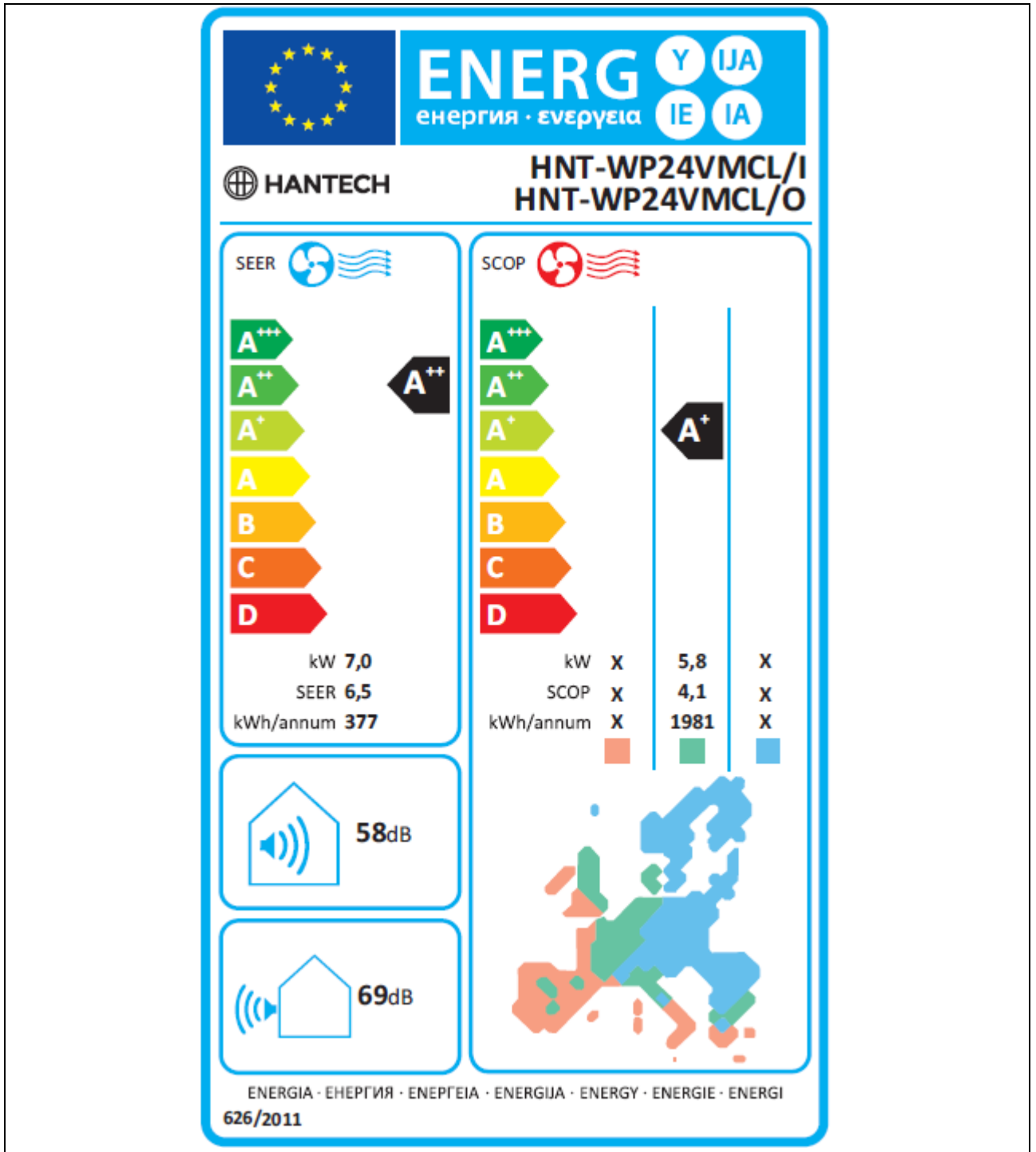
 HANTECH   		
SPLIT TYPE AIR CONDITIONER/ INDOOR SPLIT TİP KLİMA/ İÇ ÜNİTE		
INDOOR MODEL CODE İÇ ÜNİTE MODEL KODU	HNT-WP24VMCL/I	
	COOLING/ SOĞUTMA	HEATING/ ISITMA
CAPACITY/ KAPASİTE	7020(1830~8000)W	7100(1850~8000)W
CURRENT / ÇALIŞMA AKIMI	9,2(1,7~15,5)A	8,2(1,7~17,0)A
RATED CURRENT / MAKS. AKIM (IEC/EN60335)	15,5A	17,0A
POWER INPUT /ENERJİ TÜKETİMİ	2100(390~2900)W	1870(390~3200)W
RATED POWER INPUT / MAKS.ENERJİ TÜKETİMİ (IEC/EN60335)	2900W	3200W
INDOOR AIR VOLUME / İÇ ÜNİTE HAVA DEBİSİ	1100m ³ /h	1100m ³ /h
MAX.ALLOWABLE PRESSURE MAKSİMUM İZİN VERİLEN BASINÇ	DISCHARGE / BASMA	3,7Mpa
	SUCTION /EMİŞ	1,2Mpa
SOUND POWER / SES GÜCÜ SEVİYESİ	58dB(A)	
WEIGHT/ AĞIRLIK	14kg	
RATED VOLTAGE/ANMA GERİLİMİ	220-240V~	
RATED FREQUENCY/ ANMA FREKANSI GERİLİMİ	50Hz	
CONTAINS FLUORINATED GREENHOUSE GASES / FLORLU SERA GAZLARI İÇERİR		
INDOOR UNIT WATER PROOF PROTECTION/ İÇ ÜNİTE KORUMA SINIFI		IPX0
MANUFACTURE/ADRES/ DATE ÜRETİCİ FİRMA/ TARİH	TCL AIR CONDITIONER(ZHONGSHAN)CO.,LTD 59, Nantou Road West, Nantou Town, Zhongshan, Guangdong, 528427 China	
IMPORTER / İTHALATÇI	HANTECH İKLİMLENDİRME SAN. TİC.A.Ş. Ziya Gökalp Mah. Süleyman Demirel Biv. No:7E / 138 Başakşehir – İstanbul / Türkiye	
X	 4 260414 718298	
MADE IN CHINA		

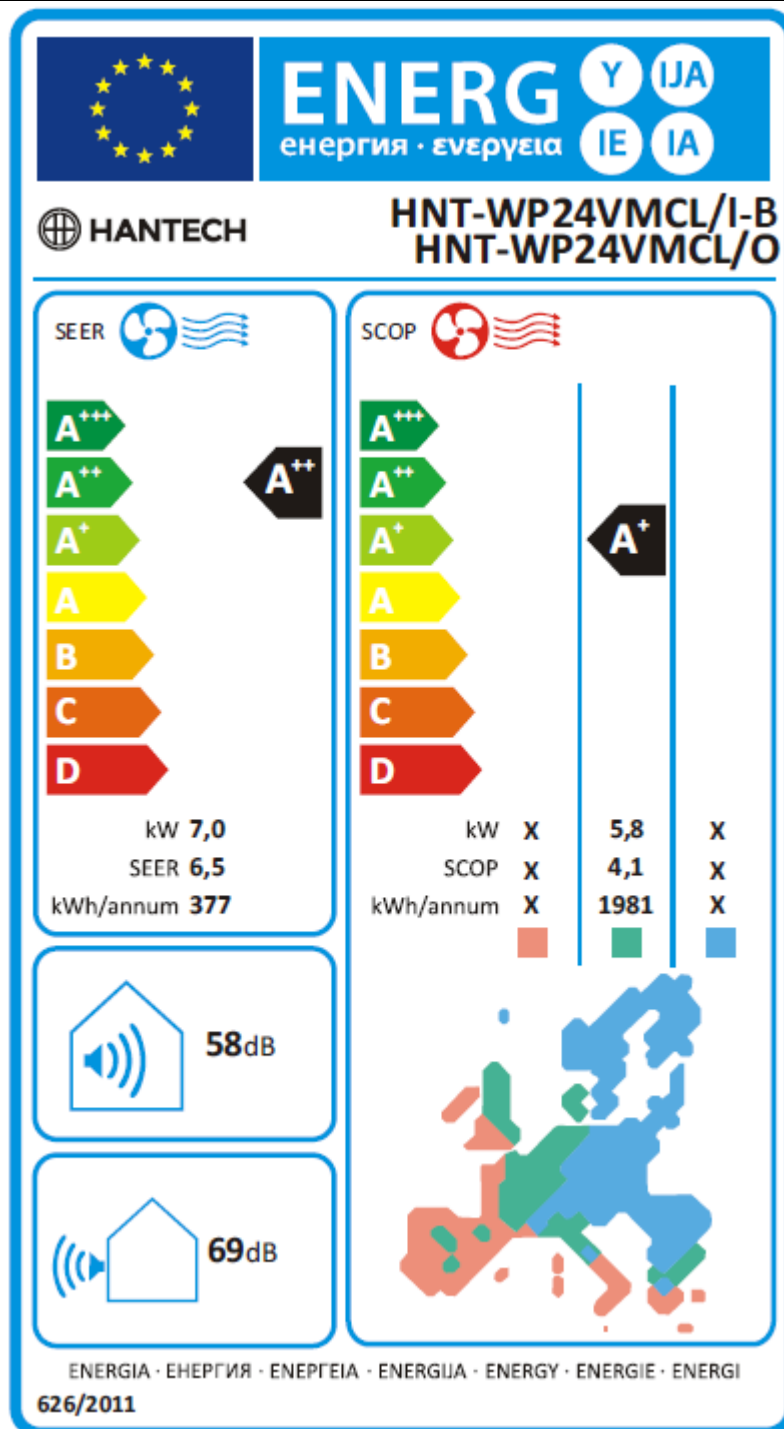
 HANTECH   		
SPLIT TYPE AIR CONDITIONER/ OUTDOOR SPLIT TİP KLİMA/ DIŞ ÜNİTE		
OUTDOOR MODEL CODE DIŞ ÜNİTE MODEL KODU	HNT-WP24VMCL/O	
	COOLING/ SOĞUTMA	HEATING/ ISITMA
CAPACITY/ KAPASİTE	7020(1830~8000)W	7100(1850~8000)W
CURRENT / ÇALIŞMA AKIMI	9,2(1,7~15,5)A	8,2(1,7~17,0)A
RATED CURRENT / MAKS. AKIM (IEC/EN60335)	15,5A	17,0A
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MAX.ALLOWABLE PRESSURE MAKSİMUM İZİN VERİLEN BASINÇ	DISCHARGE / BASMA	3,7Mpa
	SUCTION /EMİŞ	1,2Mpa
SOUND POWER / SES GÜCÜ SEVİYESİ	69dB(A)	
WEIGHT/ AĞIRLIK	39kg	
RATED VOLTAGE/ANMA GERİLİMİ	220-240V~	
RATED FREQUENCY/ ANMA FREKANSI GERİLİMİ	50Hz	
REFRIGERANT /CHARGE/GWP SOĞUTKAN TİPİ/ŞARJ MİKTARI/GWP	R32/1,07kg /675	
CO ₂ EQUIVALENT / CO ₂ SALINIMI	0,723 TONNES	
CONTAINS FLUORINATED GREENHOUSE GASES / FLORLU SERA GAZLARI İÇERİR		
OUTDOOR UNIT WATER PROOF PROTECTION/ DIŞ ÜNİTE KORUMA SINIFI		IPX4
MANUFACTURE/ADRES/ DATE ÜRETİCİ FİRMA/ TARİH	TCL AIR CONDITIONER(ZHONGSHAN)CO.,LTD 59, Nantou Road West, Nantou Town, Zhongshan, Guangdong, 528427 China	
IMPORTER / İTHALATÇI	HANTECH İKLİMLENDİRME SAN. TİC.A.Ş. Ziya Gökalp Mah. Süleyman Demirel Biv. No:7E / 138 Başakşehir – İstanbul / Türkiye	
X	 4 260414 718304	
MADE IN CHINA		

 HANTECH  		 HANTECH  	
SPLIT TYPE AIR CONDITIONER/ INDOOR SPLİT TİP KLİMA/ İÇ ÜNİTE		SPLIT TYPE AIR CONDITIONER/ OUTDOOR SPLİT TİP KLİMA/ DİŞ ÜNİTE	
INDOOR MODEL CODE İÇ ÜNİTE MODEL KODU	HNT-WP24VMCL/I-B		
	COOLING/ SOĞUTMA	HEATING/ ISITMA	
CAPACITY/ KAPASİTE	7020(1830~8000)W	7100(1850~8000)W	
CURRENT / ÇALIŞMA AKIMI	9,2(1,7~15,5)A	8,2(1,7~17,0)A	
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MAX.ALLOWABLE PRESSURE MAKSİMUM İZİN VERİLEN BASINÇ	DISCHARGE / BASMA	3,7Mpa	
	SUCTION /EMİŞ	1,2Mpa	
SOUND POWER / SES GÜCÜ SEVİYESİ	58dB(A)		
WEIGHT/ AĞIRLIK	14kg		
RATED VOLTAGE/ANMA GERİLİMİ	220-240V~		
RATED FREQUENCY/ ANMA FREKANSI GERİLİMİ	50Hz		
REFRIGERANT /CHARGE/GWP SOĞUTKAN TİPİ/SARJ MİKTARI/GWP	R32/1,07kg/675		
CO ₂ EQUIVALENT / CO ₂ SALINIMI	0,723 TONNES		
CONTAINS FLUORINATED GREENHOUSE GASES / FLORLU SERA GAZLARI İÇERİR			
INDOOR UNIT WATER PROOF PROTECTION/ İÇ ÜNİTE KORUMA SINIFI		IPX0	
MANUFACTURE/ADRES/ DATE ÜRETİCİ FİRMA/ TARİH	TCL AIR CONDITIONER(ZHONGSHAN)CO.,LTD 59, Nantou Road West, Nantou Town, Zhongshan, Guangdong, 528427 China		
IMPORTER / İTHALATÇI	HANTECH İKLİMLENDİRME SAN. TİC.A.Ş. Ziya Gökalp Mah. Süleyman Demirel Blv. No:7E / 138 Başakşehir – İstanbul / Türkiye		
X	 4 260414 718373		
MADE IN CHINA			

 HANTECH  		 HANTECH  	
SPLIT TYPE AIR CONDITIONER/ INDOOR SPLİT TİP KLİMA/ İÇ ÜNİTE		SPLIT TYPE AIR CONDITIONER/ OUTDOOR SPLİT TİP KLİMA/ DİŞ ÜNİTE	
OUTDOOR MODEL CODE DİŞ ÜNİTE MODEL KODU	HNT-WP24VMCL/O		
	COOLING/ SOĞUTMA	HEATING/ ISITMA	
CAPACITY/ KAPASİTE	7020(1830~8000)W	7100(1850~8000)W	
CURRENT / ÇALIŞMA AKIMI	9,2(1,7~15,5)A	8,2(1,7~17,0)A	
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OUTDOOR UNIT WATER PROOF PROTECTION/ DİŞ ÜNİTE KORUMA SINIFI		IPX4	
MANUFACTURE/ADRES/ DATE ÜRETİCİ FİRMA/ TARİH	TCL AIR CONDITIONER(ZHONGSHAN)CO.,LTD 59, Nantou Road West, Nantou Town, Zhongshan, Guangdong, 528427 China		
IMPORTER / İTHALATÇI	HANTECH İKLİMLENDİRME SAN. TİC.A.Ş. Ziya Gökalp Mah. Süleyman Demirel Blv. No:7E / 138 Başakşehir – İstanbul / Türkiye		
X	 4 260414 718304		
MADE IN CHINA			

Rating label (draft version only for indicating the ratings)





Energy label (draft version only for indicating the ratings)

Test item particulars :	
Classification of installation and use	Fixed appliance
Supply Connection	Non-detachable power supply cord with plug

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)
Testing :	
Date of receipt of test item	2024-7-2
Date (s) of performance of tests	2024-7-2 to 2024-12-30

General remarks:
<p>The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. "(see Enclosure #)" refers to additional information appended to the report. "(see appended table)" refers to a table appended to the report.</p> <p>Throughout this report, a dot is used as the decimal separator.</p> <p>The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to calculate the uncertainty associated with the measurement result. The test results presented in this report relate only to the object tested. The information provided by the customer in this report may affect the validity of the results, the test lab is not responsible for it. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. This report is not used for social proof function in China market. The models in this report are same except model number, after reviewed, choose model 1 as the test model.</p>

General product information:	
Model number of Unit Under Test	Indoor unit :HNT-WP24VMCL/I;Outdoor unit:HNT-WP24VMCL/O
Type of System	Split type air conditioner
Air-conditioner Type	Cooling and heating
Power Supply	Single Phase
Refrigerant	R32
Unit Mounting (applicable to non ducted indoor units only)	Wall mounted
Heat Source (Heating Mode)	Air
Heat Sink (Cooling Mode)	Air-cooled
Does this air conditioner have a variable output compressor?	Yes
Type of compressor	inverter
Maximum continuous frequency for cooling (applicable to inverter driven compressor only) (Hz)	84
Maximum continuous frequency for heating (applicable to inverter driven compressor only) (Hz)	110

Test and verification results			
Clause	Ecodesign requirements - GENERIC ECODESIGN REQUIREMENTS	Result - Remark	Verdict
2a)	From 1 January 2013: Single duct and double duct air conditioners shall correspond to requirements as indicated in Tables 1, 2 and 3		N/A
Table 1	Requirements for minimum energy efficiency		N/A
Table 2	Off mode: Power consumption of equipment in any off-mode condition shall not exceed 1,00 W		N/A
	Standby mode: 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.		N/A
	Standby mode: 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.		N/A
	Availability of standby and/or off mode Equipment shall, except where this is inappropriate for the intended use, provide off mode and/or standby mode, and/or another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode when the equipment is connected to the mains power source.		N/A
Table 3	Indoor sound power level no more than 65 dB(A)		N/A
2b)	From 1 January 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 Tables 4 and 5		N/A
Table 4	Requirements for minimum energy efficiency		P
Table 5	Requirements for maximum sound power level		P
2c)	From 1 January 2014, air conditioners shall correspond to requirements as indicated in the table 6		P
2d)	From 1 January 2014, single duct and double duct air conditioners and comfort fans shall correspond to requirements as indicated in Table 7		N/A
Table 7	Off mode: Power consumption of equipment in any off-mode condition shall not exceed 0,50 W.		N/A

Clause	Ecodesign requirements - GENERIC ECODESIGN REQUIREMENTS	Result - Remark	Verdict
	Standby mode: 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.		N/A
	Standby mode: 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.		N/A
	Availability of standby and/or off mode Equipment shall, except where this is inappropriate for the intended use, provide off mode and/or standby mode, and/or another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode when the equipment is connected to the mains power source.		N/A
	Power management When equipment is not providing the main function, or when other energy- using product(s) are not dependent on its functions, equipment shall, unless inappropriate for the intended use, offer a power management function, or a similar function, that switches equipment after the shortest possible period of time appropriate for the intended use of the equipment, automatically into: — standby mode, or — off mode, or — another condition which does not exceed the applicable power consumption requirements for off mode and/or standby mode when the equipment is connected to the mains power source. The power management function shall be activated before delivery.		N/A

Information requirements for air conditioners, except double duct and single duct air conditioners							
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	Y			Average (mandatory)	Y		
heating	Y			Warmer (if designated)	N		
				Colder (if designated)	N		
Item	symbol	value	unit	Item	symbol	value	unit
Design load				Seasonal efficiency			
cooling	P _{designc}	7.0	kW	cooling	SEER	6.5	—
heating/Average	P _{designh}	5.8	kW	heating/Average	SCOP/A	4.1	—
heating/Warmer	P _{designh}	N/A	kW	heating/Warmer	SCOP/W	N/A	—
heating/Colder	P _{designh}	N/A	kW	heating/Colder	SCOP/C	N/A	—
Declared capacity (*) for cooling, at indoor temperature 27(19) °C and outdoor temperature T _j				Declared energy efficiency ratio (*), at indoor temperature 27(19) °C and outdoor temperature T _j			
T _j = 35 °C	P _{dc}	7.002	kW	T _j = 35 °C	EER _d	3.39	—
T _j = 30 °C	P _{dc}	5.384	kW	T _j = 30 °C	EER _d	4.90	—
T _j = 25 °C	P _{dc}	3.559	kW	T _j = 25 °C	EER _d	8.49	—
T _j = 20 °C	P _{dc}	2.610	kW	T _j = 20 °C	EER _d	13.88	—
Declared capacity (*) for heating/Average season, at indoor temperature 20°C and outdoor temperature T _j				Declared coefficient of performance (*)/Average season, at indoor temperature 20°C and outdoor temperature T _j			
T _j = - 7 °C	P _{dh}	5.132	kW	T _j = - 7 °C	COP _d	2.73	—
T _j = 2 °C	P _{dh}	3.201	kW	T _j = 2 °C	COP _d	3.95	—
T _j = 7 °C	P _{dh}	2.108	kW	T _j = 7 °C	COP _d	5.49	—
T _j = 12 °C	P _{dh}	1.440	kW	T _j = 12 °C	COP _d	6.37	—
T _j = bivalent temperature	P _{dh}	5.132	kW	T _j = bivalent temperature	COP _d	2.73	—
T _j = operating limit	P _{dh}	6.173	kW	T _j = operating limit	COP _d	2.39	—
Declared capacity (*) for heating/Warmer season, at indoor temperature 20°C and outdoor temperature T _j				Declared coefficient of performance (*)/Warmer season, at indoor temperature 20°C and outdoor temperature T _j			
T _j = 2 °C	P _{dh}	N/A	kW	T _j = 2 °C	COP _d	N/A	—
T _j = 7 °C	P _{dh}	N/A	kW	T _j = 7 °C	COP _d	N/A	—
T _j = 12 °C	P _{dh}	N/A	kW	T _j = 12 °C	COP _d	N/A	—
T _j = bivalent temperature	P _{dh}	N/A	kW	T _j = bivalent temperature	COP _d	N/A	—
T _j = operating limit	P _{dh}	N/A	kW	T _j = operating limit	COP _d	N/A	—

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			
Tj = - 7 °C	Pdh	N/A	kW	Tj = - 7 °C	COPd	N/A	—
Tj = 2 °C	Pdh	N/A	kW	Tj = 2 °C	COPd	N/A	—
Tj = 7 °C	Pdh	N/A	kW	Tj = 7 °C	COPd	N/A	—
Tj = 12 °C	Pdh	N/A	kW	Tj = 12 °C	COPd	N/A	—
Tj = bivalent temperature	Pdh	N/A	kW	Tj = bivalent temperature	COPd	N/A	—
Tj = operating limit	Pdh	N/A	kW	Tj = operating limit	COPd	N/A	—
Tj = - 15 °C	Pdh	N/A	kW	Tj = - 15 °C	COPd	N/A	—
Bivalent temperature				Operating limit temperature			
heating/Average	Tbiv	-7	°C	heating/Average	Tol	-15	°C
heating/Warmer	Tbiv	N/A	°C	heating/Warmer	Tol	N/A	°C
heating/Colder	Tbiv	N/A	°C	heating/Colder	Tol	N/A	°C
Cycling interval capacity				Cycling interval efficiency			
for cooling	Pcycc	N/A	kW	for cooling	EERcyc	N/A	—
for heating	Pcyh	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'				Annual electricity consumption			
off mode	POFF	0.009	kW	cooling	QCE	377	kWh/a
standby mode	PSB	0.009	kW	heating/Average	QHE	1981	kWh/a
thermostat-off mode	PTO	0.058	kW	heating/Warmer	QHE	—	kWh/a
crankcase heater mode	PCK	—	kW	heating/Colder	QHE	—	kWh/a
Capacity control (indicate one of three options)				Other items			
fixed	N			Sound power level (indoor/outdoor)	LWA	58/69	dB(A)
staged	N			Global warming potential	GWP	675 (R32)	kgCO2 eq.
variable	Y			Rated air flow (indoor/outdoor)	—	1100/3000	m ³ /h

Information requirements for single duct and double duct air conditioners.			
Information to identify the model(s) to which the information relates to [fill in as necessary]			
Description	Symbol	Value	Unit
Rated output power for cooling	P_{rated} for cooling	N/A	kW
Rated output power for heating	P_{rated} for heating	N/A	kW
Rated power input for cooling	P_{EER}	N/A	kW
Rated power input for heating	P_{COP}	N/A	kW
Rated Energy efficiency ratio	EER_{rated}	N/A	—
Rated Coefficient of performance	COP_{rated}	N/A	—
Thermostat-off mode power consumption	P_{TO}	N/A	W
Standby mode power consumption	P_{SB}	N/A	W
Off mode power consumption	P_{OFF}	N/A	W
Seasonal electricity consumption for double ducts (DD): hourly electricity consumption for single ducts (SD): hourly electricity consumption	Q	N/A	kWh/60min.
Sound power level (indoor only)	L_{WA}	N/A	dB(A)
Global warming potential of refrigerant	GWP	N/A	kgCO ₂ eq.
Contact details for obtaining more information	N/A		

Table for cooling test data

General test conditions/part load	unit	A35/A27(100%)	A30/A27(74%)	A25/A27(47%)	A20/A27(21%)
-	-	A	B	C	D
Barometric	KPa	101.53	102.21	101.86	101.71
Voltage	V	229.65	229.73	229.96	230.11
Current input	A	9.42	7.15	2.99	1.59
Power input	kW	2.067	1.099	0.419	0.188
Test conditions indoor unit					
Air inlet temperature, DB/WB	°C	27.06/18.98	27.00/18.99	26.94/18.97	26.98/19.03
Air outlet temperature, DB/WB	°C	N/A	N/A	N/A	N/A
Test conditions outdoor unit					
Air inlet temperature, DB/WB	°C	35.04/24.03	30.03/25.03	25.03/15.04	19.99/14.05
Indoor total cooling capacity	kW	7.002	5.384	3.559	2.610
Outdoor total cooling capacity	kW	6.962	5.363	3.573	2.623
Balance ratio	%	0.57	0.39	-0.4	-0.49
Power input	kW	2.067	1.099	0.419	0.188

Energy efficiency ratio	-	3.39	4.90	8.49	13.89
Compressor frequency	Hz	68	47	25	16

Table for heating test data (Average)

General test conditions/part load	unit	A-10/A20 (100%)	A-7/A20 (88%)	A-7/A20 (88%)	A2/A20 (54%)	A7/A20 (35%)	A12/A20 (15%)
-	-	E	F	A	B	C	D
Barometric	KPa	100.41	101.69	101.69	103.08	100.20	100.39
Voltage	V	230.34	230.24	230.24	230.08	230.30	230.76
Current input	A	11.61	8.61	8.61	5.36	2.73	1.78
Power input	kW	2.582	1.877	1.877	0.811	0.384	0.226
Test conditions indoor unit							
Air inlet temperature, DB/WB	°C	20.01/15.00	20.00/15.01	20.00/15.01	20.02/14.99	19.99/14.97	20.00/15.00
Air outlet temperature, DB/WB	°C	32.78/19.41	30.65/18.85	30.65/18.85	26.97/17.18	N/A	N/A
Test conditions outdoor unit							
Air inlet temperature, DB/WB	°C	-10.00/-11.00	-7.01/-7.99	-7.01/-7.99	2.00/1.00	7.01/6.00	12.02/10.98
Summary of the test results							
Indoor total cooling capacity	kW	6.173	5.132	5.132	3.201	2.108	1.440
Outdoor total cooling capacity	kW	N/A	N/A	N/A	N/A	2.108	1.440
Balance ratio	%	N/A	N/A	N/A	N/A	0.0	0.0
Power input	kW	2.582	1.877	1.877	0.811	0.384	0.226
Coefficiency of performance	-	2.39	2.73	2.73	3.95	5.49	6.38
Compressor frequency	Hz	110	78	78	37	22	14

SEER calculation:

	Outdoor air °C	measured Cooling Capacity kW	Input Power kW	EER _{DC/meas}	Cd	EER _{PL}
A	35	7.002	2.067	3.39	0.25	3.39
B	30	5.384	1.099	4.90	0.25	4.90
C	25	3.559	0.419	8.49	0.25	8.49
D	20	2.610	0.188	13.88	0.25	12.37

	Tj	Part load ratio	Cooling demand Pc(Tj)	Bin hours hj	Measured		Corrected		EER(Tj) Cd=0,25	hj x Pc(Tj)	hj x Pc(Tj) / EERbin(Tj)
					Cooling capacity	Capacity ratio	Measured EER	d EER _{PL}			
	17	5.3%	0.369	205					12.37	76	6
	18	10.5%	0.737	227					12.37	167	14
	19	15.8%	1.106	225					12.37	249	20
D	20	21.1%	1.474	225	2.610	0.565	13.88	12.37	12.37	332	27
	21	26.3%	1.843	216					11.60	398	34
	22	31.6%	2.211	215					10.82	475	44
	23	36.8%	2.580	218					10.05	562	56
	24	42.1%	2.948	197					9.27	581	63
C	25	47.4%	3.317	178	3.559	0.932	8.49	8.49	8.49	590	70
	26	52.6%	3.685	158					7.78	582	75
	27	57.9%	4.054	137					7.06	555	79
	28	63.2%	4.422	109					6.34	482	76
	29	68.4%	4.791	88					5.62	422	75
B	30	73.7%	5.159	63	5.384	0.958	4.90	4.90	4.90	325	66
	31	78.9%	5.528	39					4.60	216	47
	32	84.2%	5.896	31					4.29	183	43
	33	89.5%	6.265	24					3.99	150	38
	34	94.7%	6.633	17					3.69	113	31
A	35	100.0%	7.002	13	7.002	1.000	3.39	3.39	3.39	91	27
	36	105.3%	7.371	9					3.39	66	20
	37	110.5%	7.739	4					3.39	31	9
	38	115.8%	8.108	3					3.39	24	7
	39	121.1%	8.476	1					3.39	8	3
	40	126.3%	8.845	0					3.39	0	0
										6679	927
										SEERon	7.21
										SEER	6.58

Equiv. Hce	350	h				Q _c /SEER _{on}	340.11707	
H _{TO}	221	h	P _{TO}	0.058	kW	HTO*PTO	12.818	kwh
H _{SB}	2142	h	P _{SB}	0.009	kW	HSB*PSB	19.278	kwh
H _{CK}	2672	h	P _{CK}	0	kW	HCK*PCK	0	kwh
H _{OFF}	0	h	P _{OFF}	0.009	kW	HOFF*POFF	0	kwh
							Q _{ce}	372.2131
P _{designc}	7.002	kW						
Q _c	2450.7	kWh						

SCOP calculation (Average):

	Outdoor air °C	Measured Heating Capacity kW	Input Power kW	COP _{DC/meas}	Cd	COP _{PL} (COP bin (Tj))
A	-7	5.132	1.877	2.73	0.25	2.73
B	2	3.201	0.811	3.95	0.25	3.95
C	7	2.108	0.384	5.49	0.25	5.49
D	12	1.440	0.226	6.37	0.25	5.77
E	-10	6.173	2.582	2.39	0.25	2.35
F	-7	5.132	1.877	2.73	0.25	2.73

Tj	Part load ratio	Heating demand Ph(Tj)	Bin hours hj	Heat load covered by the heat pump elbu(Tj)	Capacity ratio	COP _{PL}	COP _{bin(Tj)}	hj x Ph(Tj)	elbu(Tj)/COPbin(Tj)+elbu(Tj)	COP (including backup heater)	hj*[Ph(Tj)-elbu(Tj)]/COPbin(Tj)	hj*[Ph(Tj)-elbu(Tj)]/COPnet
-10	100.0%	5.801	1	6.173	0.000	2.35	2.35	6	2	2.35	6	2.46
-9	96.2%	5.578	25	5.826	0.000	2.48	2.48	139	56	2.48	139	56.20
-8	92.3%	5.355	23	5.479	0.000	2.61	2.61	123	47	2.61	123	47.23
A) -7	88.5%	5.132	24	5.132	0.000	2.73	2.73	123	45	2.73	123	45.05
-6	84.6%	4.909	27	4.909	0.000	2.87	2.87	133	46	2.87	133	46.20
-5	80.8%	4.686	68	4.686	0.000	3.00	3.00	319	106	3.00	319	106.08
-4	76.9%	4.463	91	4.463	0.000	3.14	3.14	406	129	3.14	406	129.40
-3	73.1%	4.239	89	4.239	0.000	3.27	3.27	377	115	3.27	377	115.27
-2	69.2%	4.016	165	4.016	0.000	3.41	3.41	663	194	3.41	663	194.46
-1	65.4%	3.793	173	3.793	0.000	3.54	3.54	656	185	3.54	656	185.23
0	61.5%	3.570	240	3.570	0.000	3.68	3.68	857	233	3.68	857	232.99
1	57.7%	3.347	280	3.347	0.000	3.81	3.81	937	246	3.81	937	245.83
B) 2	53.8%	3.124	320	3.124	0.000	3.95	3.95	1000	253	3.95	1000	253.26
3	50.0%	2.901	357	2.901	0.000	4.26	4.26	1036	243	4.26	1036	243.34
4	46.2%	2.678	356	2.678	0.000	4.56	4.56	953	209	4.56	953	208.85
5	42.3%	2.454	303	2.454	0.000	4.87	4.87	744	153	4.87	744	152.63
6	38.5%	2.231	330	2.231	0.000	5.18	5.18	736	142	5.18	736	142.12
C) 7	34.6%	2.008	326	2.008	0.000	5.49	5.49	655	119	5.49	655	119.26
8	30.8%	1.785	348	1.785	0.000	5.54	5.54	621	112	5.54	621	112.03
9	26.9%	1.562	335	1.562	0.000	5.60	5.60	523	93	5.60	523	93.43
10	23.1%	1.339	315	1.339	0.000	5.66	5.66	422	75	5.66	422	74.57
11	19.2%	1.116	215	1.116	0.000	5.71	5.71	240	42	5.71	240	42.00
D) 12	15.4%	0.893	169	0.893	0.000	5.77	5.77	151	26	5.77	151	26.16
13	11.5%	0.669	151	0.669	0.000	5.8214	5.8214	101	17	5.82	101	17.36
14	7.7%	0.446	105	0.446	0.000	5.8767	5.8767	47	8	5.88	47	7.97
15	3.8%	0.223	74	0.223	0.000	5.9320	5.9320	17	3	5.93	17	2.78
16	0.0%		4910		0.000							
								summation	11983	2902	11983	2902
								SCOPon	4.13		SCOPnet	4.13
								SCOP	4.11			

H _{he}	1400	h			Q _{ht} /SCOP _{on}	1966.997		
H _{TO}	179	h	P _{TO}	0.058	kW	HTO*PTO	10.382	
H _{SB}	0	h	P _{SB}	0.009	kW	HSB*PSB	0	
H _{CK}	179	h	P _{CK}	0	kW	HCK*PCK	0	
H _{OFF}	0	h	P _{OFF}	0.009	kW	HOFF*POFF	0	
							Q _{he}	1977.379
P _{designh}	5.801	kW						
Q _{ht}	8121.948	kWh						

Item	Measured value	Rated value	Deviation	Verdict
SEER	6.58	6.5	1.2%	P
SCOP(average)	4.11	4.1	0.2%	P
Power consumption in thermostat off mode	9.0 W	9.0 W	0%	P
Power consumption in standby mode	9.0 W	9.0 W	0%	P
Remark: For the original qualification test, the rating values should be equal to or more unfavorable than the tested values.				

Table 1

Energy efficiency classes for air conditioners, except double ducts and single ducts

Energy Efficiency Class	SEER	SCOP
A+++	SEER \geq 8,50	SCOP \geq 5,10
A++	6,10 \leq SEER $<$ 8,50	4,60 \leq SCOP $<$ 5,10
A+	5,60 \leq SEER $<$ 6,10	4,00 \leq SCOP $<$ 4,60
A	5,10 \leq SEER $<$ 5,60	3,40 \leq SCOP $<$ 4,00
B	4,60 \leq SEER $<$ 5,10	3,10 \leq SCOP $<$ 3,40
C	4,10 \leq SEER $<$ 4,60	2,80 \leq SCOP $<$ 3,10
D	3,60 \leq SEER $<$ 4,10	2,50 \leq SCOP $<$ 2,80
E	3,10 \leq SEER $<$ 3,60	2,20 \leq SCOP $<$ 2,50
F	2,60 \leq SEER $<$ 3,10	1,90 \leq SCOP $<$ 2,20
G	SEER $<$ 2,60	SCOP $<$ 1,90

Table for sound power

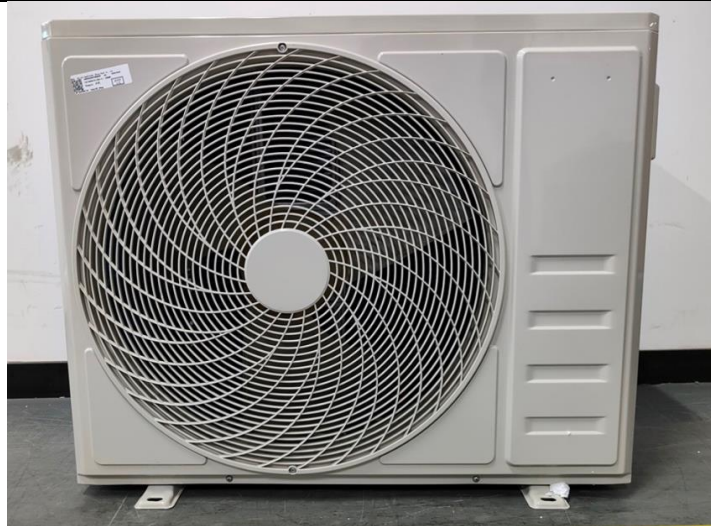
Indoor										
Test voltage / frequency	230V/50Hz									
Air inlet temperature, DB/WB	27.0°C/19.0°C									
Measured surface	14.14m ²									
Background Noise Level [dB]	18.0									
Microphone Position	1	2	3	4	5	6	7	8	9	10
L _{pi} [dB]	44.5	46.0	46.4	46.4	46.1	45.4	46.0	44.5	46.1	47.1
L _{pmc} / Averaged Sound Pressure Level [dB (A)]	45.92									
LW / Sound Power Level [dB (A)]	57.42									
Rated sound Power Level [dB (A)]	58									
Verdict	P									

outdoor					
Test voltage / frequency	230V/50Hz				
Air inlet temperature, DB/WB	35.0°C/24.0°C				
Measured surface	25.13 m ²				
Background Noise Level [dB]	18.0				
Microphone Position	1	2	3	4	5
L _{pi} [dB]	54.5	54.7	55.7	55.2	52.9
L _{pmc} / Averaged Sound Pressure Level [dB (A)]	54.70				
LW / Sound Power Level [dB (A)]	68.70				
Rated sound Power Level [dB (A)]	69				
Verdict	P				

Photos:



Indoor unit- representative model



Outdoor unit



Compressor

End of report