


Air Conditioner ERP Test Report	
Report Number	4931815.59
Tested by (name + signature) :	Linda Li <i>Linda Li</i>
Approved by (name + signature)	Jacky Zhang <i>Jacky Zhang</i>
Date of issue	2025-01-16
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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	
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	Outdoor unit: HNT-M32VMTC/O Indoor unit : HNT-BN07VMCL/I*2 + HNT-BN09VMCL/I*2
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:

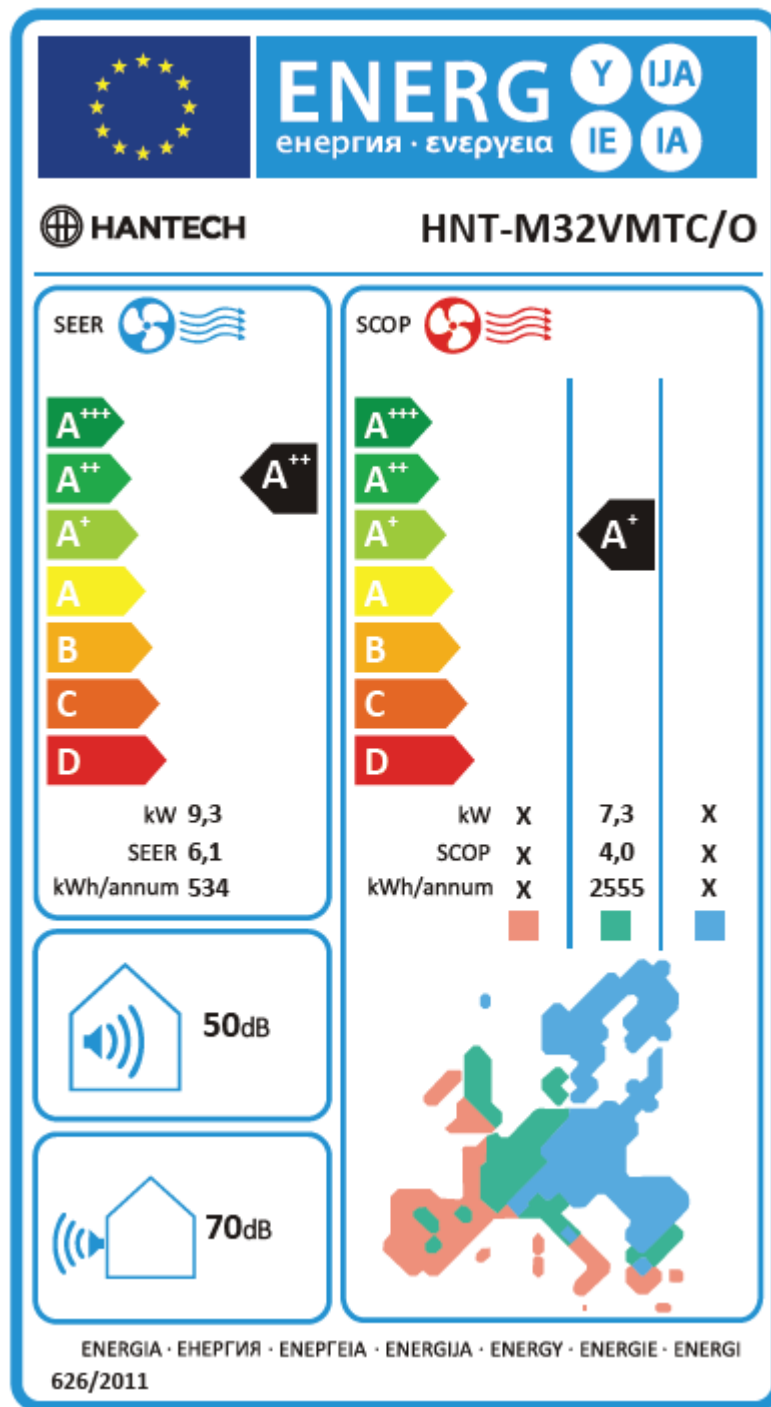
The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBS that own these marks.

 HANTECH  		
SPLIT TYPE AIR CONDITIONER/ OUTDOOR SPLIT TİP KLİMA/ DIŞ ÜNİTE		
OUTDOOR MODEL CODE DIŞ ÜNİTE MODEL KODU	HNT-M32VMTC/O	
	COOLING/ SOĞUTMA	HEATING/ ISITMA
CAPACITY/ KAPASİTE	9400(3100~10200)W	9450(2550~10200)W
CURRENT / ÇALIŞMA AKIMI	14,1(1,8~17,0)A	13,0(2,3~17,0)A
RATED CURRENT / MAKS. AKIM (IEC/EN60335)	17,0A	17,0A
POWER INPUT /ENERJİ TÜKETİMİ	2765(410~3500)W	2547(510~3500)W
RATED POWER INPUT / MAKS.ENERJİ TÜKETİMİ (IEC/EN60335)	3500W	3500W
MAX.ALLOWABLE PRESSURE MAKSİMUM İZİN VERİLEN BASINÇ	DISCHARGE / BASMA	3,7Mpa
	SUCTION /EMİŞ	1,2Mpa
SOUND POWER / SES GÜCÜ SEVİYESİ	70dB(A)	
WEIGHT/ AĞIRLIK	68kg	
RATED VOLTAGE/ANMA GERİLİMİ	220-240V~	
RATED FREQUENCY/ ANMA FREKANSI GERİLİMİ	50Hz	
REFRIGERANT /CHARGE/GWP SOĞUTKAN TİPİ/ŞARJ MİKTARI/GWP	R32/2,2kg/675	
CO ₂ EQUIVALENT / CO ₂ SALINIMI	1,485 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 Blv. No:7E / 138 Başakşehir – İstanbul / Türkiye	
X		
MADE IN CHINA	4 260414 718878	

   SPLIT TYPE AIR CONDITIONER/ INDOOR SPLIT TİP KLİMA/ İÇ ÜNİTE		
INDOOR MODEL CODE İÇ ÜNİTE MODEL KODU	HNT-BN07VMCL/I	
	COOLING/ SOĞUTMA	HEATING/ ISITMA
CAPACITY/ KAPASİTE	7000Btu/h	7000Btu/h
CURRENT / ÇALIŞMA AKIMI	0,2A	0,2A
RATED CURRENT / MAKS. AKIM (IEC/EN60335)	0,2A	0,2A
POWER INPUT /ENERJİ TÜKETİMİ	35W	35W
RATED POWER INPUT / MAKS.ENERJİ TÜKETİMİ	35W	35W
INDOOR AIR VOLUME / İÇ ÜNİTE HAVA DEBİSİ	420m ³ /h	420m ³ /h
MAX. PRESSURE MAKSİMUM BASINÇ	DISCHARGE / BASMA	3,7Mpa
	SUCTION /EMİŞ	1,2Mpa
SOUND POWER / SES GÜCÜ SEVİYESİ	50dB(A)	
WEIGHT/ AĞIRLIK	6,5kg	
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 718137	
MADE IN CHINA		

   SPLIT TYPE AIR CONDITIONER/ INDOOR SPLIT TİP KLİMA/ İÇ ÜNİTE		
INDOOR MODEL CODE İÇ ÜNİTE MODEL KODU	HNT-BN09VMCL/I	
	COOLING/ SOĞUTMA	HEATING/ ISITMA
CAPACITY/ KAPASİTE	9000Btu/h	9000Btu/h
CURRENT / ÇALIŞMA AKIMI	0,2A	0,2A
RATED CURRENT / MAKS. AKIM (IEC/EN60335)	0,2A	0,2A
POWER INPUT /ENERJİ TÜKETİMİ	35W	35W
RATED POWER INPUT / MAKS.ENERJİ TÜKETİMİ	35W	35W
INDOOR AIR VOLUME / İÇ ÜNİTE HAVA DEBİSİ	420m ³ /h	420m ³ /h
MAX. PRESSURE MAKSİMUM BASINÇ	DISCHARGE / BASMA	3,7Mpa
	SUCTION /EMİŞ	1,2Mpa
SOUND POWER / SES GÜCÜ SEVİYESİ	50dB(A)	
WEIGHT/ AĞIRLIK	6,5kg	
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 718151	
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	2024-4-20
Date (s) of performance of tests	2024-4-20 to 2024-4-30

General remarks:

The test results presented in this report relate only to the object tested.
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 "(see Enclosure #)" refers to additional information appended to the report.
 "(see appended table)" refers to a table appended to the report.

Throughout this report, a dot is used as the decimal separator.

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.
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General product information:	
Model number of Unit Under Test	Outdoor unit: HNT-M32VMTC/O Indoor unit : HNT-BN07VMCL/I*2 + HNT-BN09VMCL/I*2
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)	78
Maximum continuous frequency for heating (applicable to inverter driven compressor only) (Hz)	100
This report is based on the original report No. 4931815.54, they are same except brand and model number, after reviewed, there's no need to add any test.	

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}	9.3	kW	cooling	SEER	6.1	—
heating/Average	P _{designh}	7.3	kW	heating/Average	SCOP/A	4.0	—
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}	9.336	kW	T _j = 35 °C	EER _d	3.57	—
T _j = 30 °C	P _{dc}	7.034	kW	T _j = 30 °C	EER _d	5.28	—
T _j = 25 °C	P _{dc}	4.624	kW	T _j = 25 °C	EER _d	7.90	—
T _j = 20 °C	P _{dc}	3.362	kW	T _j = 20 °C	EER _d	11.63	—
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}	6.468	kW	T _j = - 7 °C	COP _d	2.80	—
T _j = 2 °C	P _{dh}	4.296	kW	T _j = 2 °C	COP _d	4.10	—
T _j = 7 °C	P _{dh}	2.776	kW	T _j = 7 °C	COP _d	4.93	—
T _j = 12 °C	P _{dh}	2.504	kW	T _j = 12 °C	COP _d	5.48	—
T _j = bivalent temperature	P _{dh}	6.468	kW	T _j = bivalent temperature	COP _d	2.80	—
T _j = operating limit	P _{dh}	6.840	kW	T _j = operating limit	COP _d	2.46	—
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	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'				Annual electricity consumption			
off mode	POFF	—	kW	cooling	QCE	534	kWh/a
standby mode	PSB	0.008	kW	heating/Average	QHE	2555	kWh/a
thermostat-off mode	PTO	0.080	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	50/70	dB(A)
staged	N			Global warming potential	GWP	675 (R32)	kgCO2 eq.
variable	Y			Rated air flow (indoor/outdoor)	—	550/4000	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	100.47	100.53	100.43	100.54
Voltage	V	229.7	229.7	230.0	230.1
Current input	A	12.01	7.37	3.34	1.60
Power input	kW	2.612	1.332	0.585	0.289
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	9.336	7.034	4.624	3.362
Outdoor total cooling capacity	kW	9.282	7.007	4.643	3.379
Balance ratio	%	0.6	0.4	-0.4	-0.5
Power input	kW	2.612	1.332	0.585	0.289

Energy efficiency ratio	-	3.57	5.28	7.90	11.64
Compressor frequency	Hz	66	42	22	13

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	100.53	100.46	100.46	100.42	100.27	100.35
Voltage	V	230.34	230.24	230.24	230.08	230.30	230.76
Current input	A	12.12	10.04	10.04	5.69	3.21	2.51
Power input	kW	2.780	2.307	2.307	1.047	0.563	0.457
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	29.53/16.81	29.05/17.62	29.05/17.62	25.93/17.04	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	6.840	6.468	6.468	4.296	2.776	2.504
Outdoor total cooling capacity	kW	N/A	N/A	N/A	N/A	2.776	2.504
Balance ratio	%	N/A	N/A	N/A	N/A	0.0	0.0
Power input	kW	2.780	2.307	2.307	1.047	0.563	0.457
Coefficiency of performance	-	2.46	2.80	2.80	4.10	4.93	5.48
Compressor frequency	Hz	95	80	80	42	25	20

SEER calculation:

	Outdoor air °C	measured Cooling Capacity kW	Input Power kW	EER _{DC/meas}	Cd	EER _{PL}
A	35	9.336	2.612	3.57	0.25	3.57
B	30	7.034	1.332	5.28	0.25	5.28
C	25	4.624	0.585	7.90	0.25	7.90
D	20	3.362	0.289	11.63	0.25	10.43

	Tj	Part load ratio	Cooling demand Pc(Tj)	Bin hours hj	Measured Cooling capacity	Capacity ratio	Measured EER	Corrected EER _{PL}	EER(Tj) Cd=0,25	hj x Pc(Tj)	hj x Pc(Tj) /
											EERbin(Tj)
	17	5.3%	0.491	205					10.43	101	10
	18	10.5%	0.983	227					10.43	223	21
	19	15.8%	1.474	225					10.43	332	32
D	20	21.1%	1.965	225	3.362	0.585	11.63	10.43	10.43	442	42
	21	26.3%	2.457	216					9.92	531	53
	22	31.6%	2.948	215					9.42	634	67
	23	36.8%	3.440	218					8.91	750	84
	24	42.1%	3.931	197					8.41	774	92
C	25	47.4%	4.422	178	4.624	0.956	7.90	7.90	7.90	787	100
	26	52.6%	4.914	158					7.38	776	105
	27	57.9%	5.405	137					6.85	740	108
	28	63.2%	5.896	109					6.33	643	102
	29	68.4%	6.388	88					5.81	562	97
B	30	73.7%	6.879	63	7.034	0.978	5.28	5.28	5.28	433	82
	31	78.9%	7.371	39					4.94	287	58
	32	84.2%	7.862	31					4.60	244	53
	33	89.5%	8.353	24					4.26	200	47
	34	94.7%	8.845	17					3.92	150	38
A	35	100.0%	9.336	13	9.336	1.000	3.57	3.57	3.57	121	34
	36	105.3%	9.827	9					3.57	88	25
	37	110.5%	10.319	4					3.57	41	12
	38	115.8%	10.810	3					3.57	32	9
	39	121.1%	11.301	1					3.57	11	3
	40	126.3%	11.793	0					3.57	0	0
										8906	1275
										SEERon	6.99
										SEER	6.50

Equiv. Hce	350	h				Q _c /SEER _{on}	467.726	
H _{TO}	221	h	P _{TO}	0.08	kW	HTO*PTO	17.68	kWh
H _{SB}	2142	h	P _{SB}	0.008	kW	HSB*PSB	17.136	kWh
H _{CK}	2672	h	P _{CK}	0	kW	HCK*PCK	0	kWh
H _{OFF}	0	h	P _{OFF}	0	kW	HOFF*POFF	0	kWh
						Q _{co}	502.542	
P _{designc}	9.336	kW						
Q _c	3267.6	kWh						

SCOP calculation (Average):

	Outdoor air °C	Measured Heating Capacity kW	Input Power kW	COP _{DC/meas}	Cd	COP _{PL} (COP bin (T _j))
A	-7	6.468	2.307	2.80	0.25	2.80
B	2	4.296	1.047	4.10	0.25	4.10
C	7	2.776	0.563	4.93	0.25	4.93
D	12	2.504	0.457	5.48	0.25	4.72
E	-10	6.840	2.780	2.46	0.25	2.46
F	-7	6.468	2.307	2.80	0.25	2.80

Tj	Part load ratio	Heating demand Ph(Tj)	Bin hours hj	Heat load covered by the heat pump			Capacity ratio	COP _{PL}	COP _{bin(Tj)}	hj x Ph(Tj)	hj x COP _{bin(Tj)}	COP (including backup heater)	hj * Ph(Tj) / COP _{bin(Tj)}	hj * Ph(Tj) / COP _{bin(Tj)}
				etbu(Tj)	etbu(Tj)	etbu(Tj)								
-10	100.0%	7.312	1	6.840	0.472	1.07	2.46	2.46	7	3	2.25	7	2.78	
-9	96.2%	7.030	25	6.716	0.314	1.05	2.57	2.57	176	73	2.41	168	65.21	
-8	92.3%	6.749	23	6.592	0.157	1.02	2.69	2.69	155	60	2.59	152	56.38	
A	-7	6.468	24	6.468	0.000	1.00	2.80	2.80	155	55	2.80	155	55.37	
-6	84.6%	6.187	27	6.187	0.000	1.00	2.95	2.95	167	57	2.95	167	56.66	
-5	80.8%	5.906	68	5.906	0.000	1.00	3.09	3.09	402	130	3.09	402	129.86	
-4	76.9%	5.624	91	5.624	0.000	1.00	3.24	3.24	512	158	3.24	512	158.12	
-3	73.1%	5.343	89	5.343	0.000	1.00	3.38	3.38	476	141	3.38	476	140.64	
-2	69.2%	5.062	165	5.062	0.000	1.00	3.53	3.53	835	237	3.53	835	236.90	
-1	65.4%	4.781	173	4.781	0.000	1.00	3.67	3.67	827	225	3.67	827	225.36	
0	61.5%	4.499	240	4.499	0.000	1.00	3.81	3.81	1080	283	3.81	1080	283.11	
B	1	4.218	280	4.218	0.000	1.00	3.96	3.96	1181	298	3.96	1181	298.35	
2	53.8%	3.937	320	3.937	0.000	1.00	4.10	4.10	1260	307	4.10	1260	307.05	
3	50.0%	3.656	357	3.656	0.000	1.00	4.27	4.27	1305	306	4.27	1305	305.75	
4	46.2%	3.375	356	3.375	0.000	1.00	4.43	4.43	1201	271	4.43	1201	270.93	
5	42.3%	3.093	303	3.093	0.000	1.00	4.60	4.60	937	204	4.60	937	203.77	
6	38.5%	2.812	330	2.812	0.000	1.00	4.77	4.77	928	195	4.77	928	194.75	
C	7	2.531	326	2.531	0.000	1.00	4.93	4.93	825	167	4.93	825	167.34	
8	30.8%	2.250	348	2.250	0.000	1.00	4.89	4.89	783	160	4.89	783	160.12	
9	26.9%	1.969	335	1.969	0.000	1.00	4.85	4.85	659	136	4.85	659	136.02	
10	23.1%	1.687	315	1.687	0.000	1.00	4.81	4.81	532	111	4.81	532	110.56	
11	19.2%	1.406	215	1.406	0.000	1.00	4.77	4.77	302	63	4.77	302	63.43	
D	12	1.125	169	1.125	0.000	1.00	4.72	4.72	190	40	4.72	190	40.24	
13	11.5%	0.844	151	0.844	0.000	1.00	4.6836	4.6836	127	27	4.68	127	27.20	
14	7.7%	0.562	105	0.562	0.000	1.00	4.6424	4.6424	59	13	4.64	59	12.72	
15	3.8%	0.281	74	0.281	0.000	1.00	4.6012	4.6012	21	5	4.60	21	4.52	
16	0.0%		4910											
				0.943				summation		15103	3725		15091	3713
								SCOPon	4.05			SCOPnet	4.06	
								SCOP	4.03					

H _{he}	1400	h			Q _h /SCOP _{on}	2524.728	
H _{TO}	179	h	P _{TO}	0.08	kW	HTO*PTO	14.32 kwh
H _{SB}	0	h	P _{SB}	0.008	kW	HSB*PSB	0 kwh
H _{CK}	179	h	P _{CK}	0	kW	HCK*PCK	0 kwh
H _{OFF}	0	h	P _{OFF}	0	kW	HOFF*POFF	0 kwh
						Q _{he}	2539.048
P _{designh}	7.312	kW					
Q _h	10236.31	kWh					

Item	Measured value	Rated value	Deviation	Verdict
SEER	6.50	6.1	6.6%	P
SCOP(average)	4.03	4.0	0.8%	P
Power consumption in thermostat off mode	N/A	N/A	N/A	N/A
Power consumption in standby mode	8.0 W	8.0 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 1 TAC-07CHSD/XA21I										
Test voltage / frequency	230V/50Hz									
Air inlet temperature, DB/WB	27.0°C/19.0°C									
Measured surface	7.60m ²									
Background Noise Level [dB]	18.0									
Microphone Position	1	2	3	4	5	6	7	8	9	10
L _{pi} [dB]	38.2	40.1	39.7	39.9	40.0	40.3	41.0	40.1	41.0	41.1
L _{pmc} / Averaged Sound Pressure Level [dB (A)]	40.21									
LW / Sound Power Level [dB (A)]	49.02									
Rated sound Power Level [dB (A)]	50									
Verdict	P									

Indoor 2 TAC-09CHSD/XA21I										
Test voltage / frequency	230V/50Hz									
Air inlet temperature, DB/WB	27.0°C/19.0°C									
Measured surface	7.60m ²									
Background Noise Level [dB]	18.0									
Microphone Position	1	2	3	4	5	6	7	8	9	10
L _{pi} [dB]	38.4	40.3	39.5	39.8	40.1	40.2	41.2	40.2	40.9	41.1
L _{pmc} / Averaged Sound Pressure Level [dB (A)]	40.24									
LW / Sound Power Level [dB (A)]	49.05									
Rated sound Power Level [dB (A)]	50									
Verdict	P									

outdoor					
Test voltage / frequency	230V/50Hz				
Air inlet temperature, DB/WB	35.0°C/24.0°C				
Measured surface	39.27m ²				
Background Noise Level [dB]	18.0				
Microphone Position	1	2	3	4	5
L _{pi} [dB]	46.4	53.7	54.3	46.7	51.8
L _{pmc} / Averaged Sound Pressure Level [dB (A)]	51.73				
LW / Sound Power Level [dB (A)]	67.67				
Rated sound Power Level [dB (A)]	70				
Verdict	P				

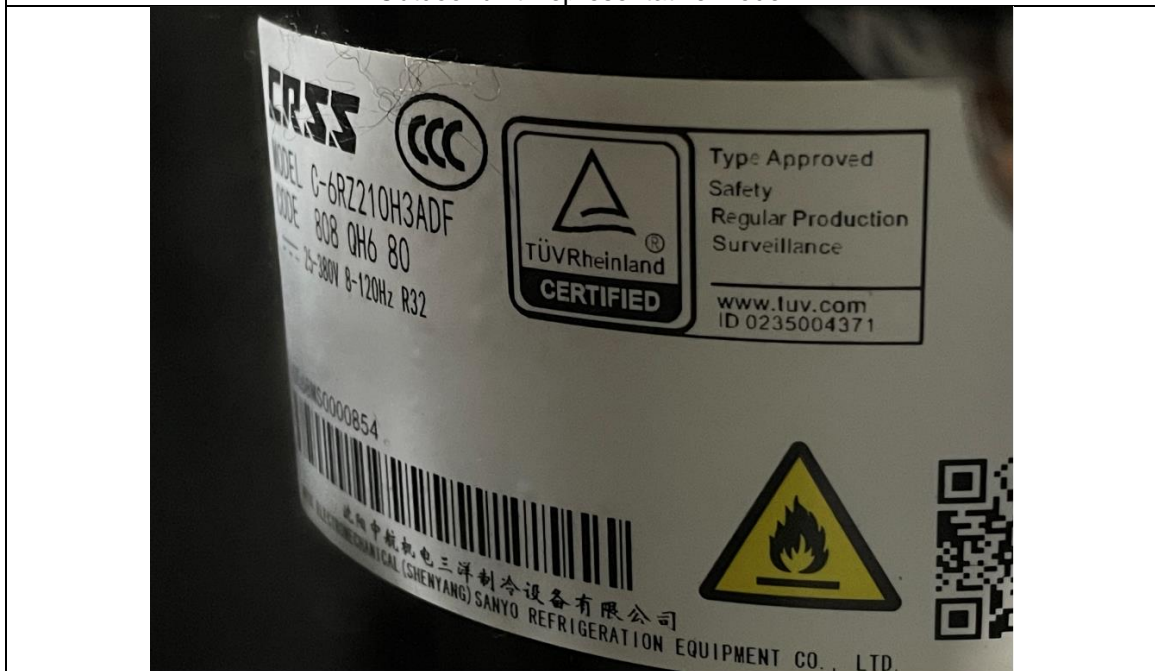
Photos:



Indoor unit- representative model



Outdoor unit- representative model



Compressor

End of report