

Air Conditioner ERP Test Report

Report Number.....: 4931815.56

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..... 22 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 14825-2022 V1.0

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

Test item description.....: Air conditioner

Trade Mark.....:



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

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

Factory: Same as the manufacturer

Model/Type reference.....: Indoor: HNT-BN24VMCL/I;Outdoor: HNT-BN24VMCL/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

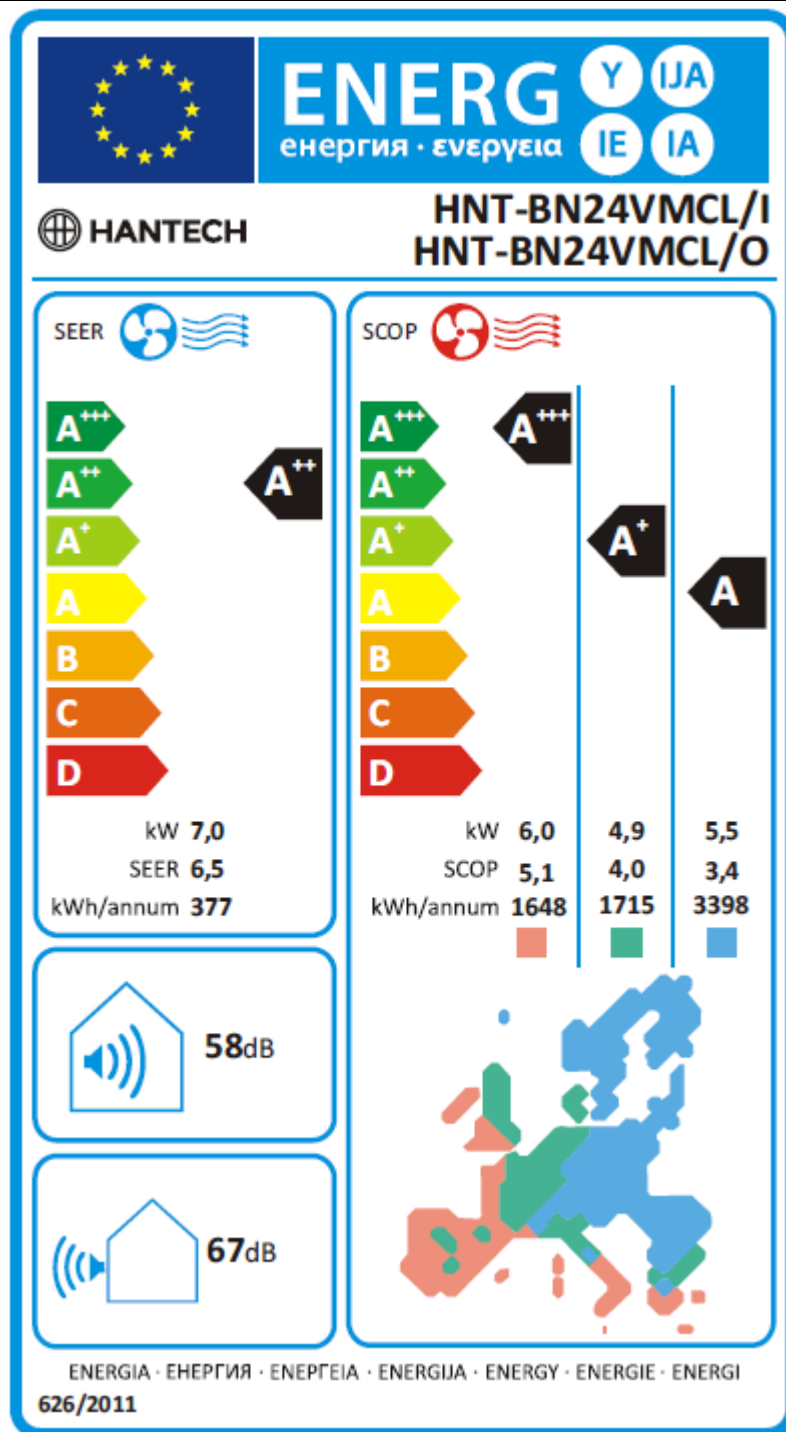
Copy of marking plate:

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.

|    | | |
|---|--|-----------------------|
| SPLIT TYPE AIR CONDITIONER/ INDOOR SPLİT TİP KLİMA/ İÇ ÜNİTE | | |
| INDOOR MODEL CODE İÇ ÜNİTE MODEL KODU | HNT-BN24VMCL/I | |
| | COOLING/ SOĞUTMA | HEATING/ ISITMA |
| CAPACITY/ KAPASİTE | 7040(1500~7800)W | 7200(1500~7900)W |
| CURRENT / ÇALIŞMA AKIMI | 9.6(1.8~12.6)A | 9.5(1.8~13.4)A |
| RATED CURRENT / MAKS. AKIM (IEC/EN60335) | 12,6A | 13,4A |
| POWER INPUT /ENERJİ TÜKETİMİ | 2166(390~2800)W | 2112(390~3000)W |
| RATED POWER INPUT / MAKS.ENERJİ TÜKETİMİ (IEC/EN60335) | 2800W | 3000W |
| INDOOR AIR VOLUME / İÇ ÜNİTE HAVA DEBİSİ | 1000m ³ /h | 1000m ³ /h |
| MAX.ALLOWABLE PRESSURE MAKSİMUM İZİN VERİLEN BASINÇ | DISCHARGE / BASMA | 3,7Mpa |
| | SUCTION /EMİŞ | 1,2Mpa |
| SOUND POWER / SES GÜCÜ SEVİYESİ | 58d B(A) | |
| WEIGHT/ AĞIRLIK | 12kg | |
| 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 |  | |
| MADE IN CHINA | 4 260414 718212 | |

|    | | |
|---|--|------------------|
| SPLIT TYPE AIR CONDITIONER/ OUTDOOR SPLİT TİP KLİMA/ DIŞ ÜNİTE | | |
| OUTDOOR MODEL CODE DIŞ ÜNİTE MODEL KODU | HNT-BN24VMCL/O | |
| | COOLING/ SOĞUTMA | HEATING/ ISITMA |
| CAPACITY/ KAPASİTE | 7040(1500~7800)W | 7200(1500~7900)W |
| CURRENT / ÇALIŞMA AKIMI | 9.6(1.8~12.6)A | 9.5(1.8~13.4)A |
| RATED CURRENT / MAKS. AKIM (IEC/EN60335) | 12,6A | 13,4A |
| POWER INPUT /ENERJİ TÜKETİMİ | 2166(390~2800)W | 2112(390~3000)W |
| RATED POWER INPUT / MAKS.ENERJİ TÜKETİMİ (IEC/EN60335) | 2800W | 3000W |
| MAX.ALLOWABLE PRESSURE MAKSİMUM İZİN VERİLEN BASINÇ | DISCHARGE / BASMA | 3,7Mpa |
| | SUCTION /EMİŞ | 1,2Mpa |
| SOUND POWER / SES GÜCÜ SEVİYESİ | 67d B(A) | |
| WEIGHT/ AĞIRLIK | 38kg | |
| RATED VOLTAGE/ANMA GERİLİMİ | 220-240V~ | |
| RATED FREQUENCY/ ANMA FREKANSI GERİLİMİ | 50Hz | |
| REFRIGERANT /CHARGE/GWP SOĞUTKAN TİPİ/ŞARJ MİKTARI/GWP | R32/1,14kg/675 | |
| CO ₂ EQUIVALENT / CO ₂ SALINIMI | 0,77 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 |  | |
| MADE IN CHINA | 4 260414 718229 | |

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 | 2024-03-10 |
| Date (s) of performance of tests | 2024-03-10 to 2024-03-25 |

| |
|--|
| 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.</p> |

| General product information: | |
|---|--|
| Model number of Unit Under Test | Indoor: HNT-BN24VMCL/I;Outdoor: HNT-BN24VMCL/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) | 80 |
| Maximum continuous frequency for heating (applicable to inverter driven compressor only) (Hz) | 92 |
| This report is based on the original report No.4913313.51,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) | Y | | |
| | | | | Colder (if designated) | Y | | |
| 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} | 4.9 | kW | heating/Average | SCOP/A | 4.0 | — |
| heating/Warmer | P _{designh} | 6.0 | kW | heating/Warmer | SCOP/W | 5.1 | — |
| heating/Colder | P _{designh} | 5.5 | kW | heating/Colder | SCOP/C | 3.4 | — |
| 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} | 7.010 | kW | T _j = 35 °C | EER _d | 3.29 | — |
| T _j = 30 °C | P _{dc} | 4.800 | kW | T _j = 30 °C | EER _d | 4.77 | — |
| T _j = 25 °C | P _{dc} | 3.164 | kW | T _j = 25 °C | EER _d | 7.50 | — |
| T _j = 20 °C | P _{dc} | 1.964 | kW | T _j = 20 °C | EER _d | 13.18 | — |
| 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} | 4.335 | kW | T _j = - 7 °C | COP _d | 2.67 | — |
| T _j = 2 °C | P _{dh} | 2.721 | kW | T _j = 2 °C | COP _d | 4.01 | — |
| T _j = 7 °C | P _{dh} | 1.846 | kW | T _j = 7 °C | COP _d | 5.09 | — |
| T _j = 12 °C | P _{dh} | 1.759 | kW | T _j = 12 °C | COP _d | 6.04 | — |
| T _j = bivalent temperature | P _{dh} | 4.335 | kW | T _j = bivalent temperature | COP _d | 2.67 | — |
| T _j = operating limit | P _{dh} | 4.770 | kW | T _j = operating limit | COP _d | 2.34 | — |
| 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} | 6.013 | kW | T _j = 2 °C | COP _d | 2.50 | — |
| T _j = 7 °C | P _{dh} | 4.124 | kW | T _j = 7 °C | COP _d | 4.61 | — |
| T _j = 12 °C | P _{dh} | 2.071 | kW | T _j = 12 °C | COP _d | 6.70 | — |
| T _j = bivalent temperature | P _{dh} | 6.013 | kW | T _j = bivalent temperature | COP _d | 2.50 | — |
| T _j = operating limit | P _{dh} | 6.013 | kW | T _j = operating limit | COP _d | 2.50 | — |

| 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 | 3.296 | kW | Tj = - 7 °C | COPd | 2.83 | — |
| Tj = 2 °C | Pdh | 2.167 | kW | Tj = 2 °C | COPd | 4.15 | — |
| Tj = 7 °C | Pdh | 1.384 | kW | Tj = 7 °C | COPd | 5.16 | — |
| Tj = 12 °C | Pdh | 1.223 | kW | Tj = 12 °C | COPd | 5.91 | — |
| Tj = bivalent temperature | Pdh | 4.487 | kW | Tj = bivalent temperature | COPd | 2.07 | — |
| Tj = operating limit | Pdh | 3.523 | kW | Tj = operating limit | COPd | 1.75 | — |
| Tj = - 15 °C | Pdh | 4.487 | kW | Tj = - 15 °C | COPd | 2.07 | — |
| Bivalent temperature | | | | Operating limit temperature | | | |
| heating/Average | Tbiv | -7 | °C | heating/Average | Tol | -15 | °C |
| heating/Warmer | Tbiv | 2 | °C | heating/Warmer | Tol | 2 | °C |
| heating/Colder | Tbiv | -15 | °C | heating/Colder | Tol | -22 | °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 co-efficient cooling (**) | Cdc | 0.25 | — | Degradation co-efficient heating (**) | Cdh | 0.25 | — |
| Electric power input in power modes other than 'active mode' | | | | Annual electricity consumption | | | |
| off mode | POFF | — | kW | cooling | QCE | 377 | kWh/a |
| standby mode | PSB | 0.004 | kW | heating/Average | QHE | 1715 | kWh/a |
| thermostat-off mode | PTO | 0.026 | kW | heating/Warmer | QHE | 1648 | kWh/a |
| crankcase heater mode | PCK | — | kW | heating/Colder | QHE | 3398 | kWh/a |
| Capacity control (indicate one of three options) | | | | Other items | | | |
| fixed | N | | | Sound power level (indoor/outdoor) | LWA | 58/67 | dB(A) |
| staged | N | | | Global warming potential | GWP | 675 (R32) | kgCO ₂ eq. |
| variable | Y | | | Rated air flow (indoor/outdoor) | — | 1000/3000 | 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 | 99.90 | 99.96 | 99.93 | 99.94 |
| Voltage | V | 229.65 | 229.73 | 229.96 | 230.11 |
| Current input | A | 9.64 | 6.83 | 3.01 | 1.20 |
| Power input | kW | 2.128 | 1.007 | 0.422 | 0.149 |
| 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 |
| | | | | | |
| Total cooling capacity-indoor | kW | 7.010 | 4.800 | 3.164 | 1.964 |
| Total cooling capacity-outdoor | kW | 6.970 | 4.781 | 3.177 | 1.974 |
| Balance Ratio | % | 0.6 | 0.4 | -0.4 | -0.5 |
| Power input | kW | 2.128 | 1.007 | 0.422 | 0.149 |

| | | | | | |
|-------------------------|----|------|------|------|-------|
| Energy efficiency ratio | - | 3.29 | 4.77 | 7.50 | 13.19 |
| Compressor frequency | Hz | 79 | 50 | 28 | 14 |

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 | 100.07 | 100.01 | 100.01 | 100.04 | 99.97 | 99.99 |
| Voltage | V | 230.34 | 230.24 | 230.24 | 230.08 | 230.30 | 230.76 |
| Current input | A | 9.23 | 7.48 | 7.48 | 4.69 | 2.58 | 2.14 |
| Power input | kW | 2.038 | 1.624 | 1.624 | 0.678 | 0.363 | 0.291 |
| 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 | 31.54/31.51 | 30.47/17.05 | 30.47/17.05 | 15.65/26.96 | 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 | | | | | | | |
| Total heating capacity-indoor | kW | 4.770 | 4.335 | 4.335 | 2.721 | 1.846 | 1.759 |
| Total heating capacity-outdoor | kW | N/A | N/A | N/A | N/A | 1.846 | 1.759 |
| Balance Ratio | % | N/A | N/A | N/A | N/A | 0.0 | 0.0 |
| Power input | kW | 2.038 | 1.624 | 1.624 | 0.678 | 0.363 | 0.291 |
| Co-efficiency of performance | - | 2.34 | 2.67 | 2.67 | 4.01 | 5.09 | 6.05 |
| Compressor frequency | Hz | 96 | 80 | 80 | 38 | 24 | 20 |

Table for heating test data (Warmer)

| General test conditions/part load | unit | A2/A20 (100%) | A2/A20 (100%) | -- | A2/A20 (100%) | A7/A20 (64%) | A12/A20 (29%) |
|-----------------------------------|------|---------------|---------------|----|---------------|--------------|---------------|
| - | - | E | F | A | B | C | D |
| Barometric | KPa | 99.99 | 99.99 | -- | 99.99 | 99.96 | 99.95 |
| Voltage | V | 230.31 | 230.31 | -- | 230.31 | 229.73 | 229.66 |
| Current input | A | 10.81 | 10.81 | -- | 10.81 | 6.10 | 2.29 |
| Power input | kW | 2.410 | 2.410 | -- | 2.410 | 0.895 | 0.309 |
| Test conditions indoor unit | | | | | | | |
| Air inlet temperature, DB/WB | °C | 20.01/15.00 | 20.01/15.00 | -- | 20.01/15.00 | 20.06/14.99 | 20.03/14.97 |
| Air outlet temperature, DB/WB | °C | 34.48/19.79 | 34.48/19.79 | -- | 34.48/19.79 | N/A | N/A |
| Test conditions outdoor unit | | | | | | | |
| Air inlet temperature, DB/WB | °C | 2.00/1.00 | 2.00/1.00 | -- | 2.00/1.00 | 7.01/6.02 | 12.00/11.02 |
| Summary of the test results | | | | | | | |
| Total heating capacity-indoor | kW | 6.013 | 6.013 | -- | 6.013 | 4.124 | 2.071 |
| Total heating capacity-outdoor | kW | N/A | N/A | -- | N/A | 4.124 | 2.071 |
| Balance Ratio | % | N/A | N/A | -- | N/A | 0.0 | 0.0 |
| Power input | kW | 2.410 | 2.410 | -- | 2.410 | 0.895 | 0.309 |
| Co-efficiency of performance | - | 2.50 | 2.50 | -- | 2.50 | 4.61 | 6.70 |
| Compressor frequency | Hz | 96 | 96 | -- | 96 | 48 | 22 |

Table for heating test data (Colder)

| General test conditions/part load | unit | A-22/A20 (100%) | A-15/A20 (82%) | A-15/A20 (82%) | A-7/A20 (61%) | A2/A20 (37%) | A7/A20 (24%) | A12/A20 (11%) |
|-----------------------------------|------|-------------------|-------------------|-------------------|-----------------|-----------------|-----------------|-----------------|
| - | - | E | F | G | A | B | C | D |
| Barometric | KPa | 100.04 | 100.11 | 100.11 | 100.05 | 100.12 | 100.00 | 100.03 |
| Voltage | V | 230.33 | 230.13 | 230.13 | 230.24 | 230.25 | 230.24 | 230.62 |
| Current input | A | 9.13 | 9.78 | 9.78 | 5.38 | 3.66 | 2.01 | 1.58 |
| Power input | kW | 2.014 | 2.164 | 2.164 | 1.166 | 0.522 | 0.268 | 0.207 |
| Test conditions indoor unit | | | | | | | | |
| Air inlet temperature, DB/WB | °C | 20.01/ 15.00 | 20.00/ 15.00 | 20.00/ 15.00 | 20.00/ 15.00 | 19.99/ 15.00 | 19.99/ 15.02 | 20.04/ 15.03 |
| Air outlet temperature, DB/WB | °C | 28.35/ 28.35 | 30.70/ 30.70 | 30.70/ 30.70 | 27.81/ 16.09 | 25.23/ 16.83 | N/A | N/A |
| Test conditions outdoor unit | | | | | | | | |
| Air inlet temperature, DB/WB | °C | -22.02/ -22.88 | -15.00/ -16.00 | -15.00/ -16.00 | -7.01/ -8.00 | 2.00/ 1.00 | 7.00/ 6.02 | 12.03/ 11.04 |
| Summary of the test results | | | | | | | | |
| Total heating capacity-indoor | kW | 3.523 | 4.487 | 4.487 | 3.296 | 2.167 | 1.384 | 1.223 |
| Total heating capacity-outdoor | kW | N/A | N/A | N/A | N/A | N/A | 1.384 | 1.223 |
| Balance Ratio | % | N/A | N/A | N/A | N/A | N/A | 0.0 | 0.0 |
| Power input | kW | 2.014 | 2.164 | 2.164 | 1.166 | 0.522 | 0.268 | 0.207 |
| Co-efficiency of performance | - | 1.75 | 2.07 | 2.07 | 2.83 | 4.15 | 5.17 | 5.91 |
| Compressor frequency | Hz | 106 | 106 | 106 | 64 | 33 | 21 | 14 |

SEER calculation:

| | Outdoor air °C | measured Cooling Capacity kW | Input Power kW | EER _{DC/meas} | Cd | EER _{PL} |
|---|-------------------|---------------------------------|-------------------|------------------------|------|-------------------|
| A | 35 | 7.010 | 2.128 | 3.29 | 0.25 | 3.29 |
| B | 30 | 4.800 | 1.007 | 4.77 | 0.25 | 4.77 |
| C | 25 | 3.164 | 0.422 | 7.50 | 0.25 | 7.50 |
| D | 20 | 1.964 | 0.149 | 13.18 | 0.25 | 12.36 |

| | 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% | 0.369 | 205 | | | | | 12.36 | 76 | 6 |
| | 18 | 10.5% | 0.738 | 227 | | | | | 12.36 | 168 | 14 |
| | 19 | 15.8% | 1.107 | 225 | | | | | 12.36 | 249 | 20 |
| D | 20 | 21.1% | 1.476 | 225 | 1.964 | 0.751 | 13.18 | 12.36 | 12.36 | 332 | 27 |
| | 21 | 26.3% | 1.845 | 216 | | | | | 11.39 | 398 | 35 |
| | 22 | 31.6% | 2.214 | 215 | | | | | 10.42 | 476 | 46 |
| | 23 | 36.8% | 2.583 | 218 | | | | | 9.44 | 563 | 60 |
| | 24 | 42.1% | 2.952 | 197 | | | | | 8.47 | 581 | 69 |
| C | 25 | 47.4% | 3.321 | 178 | 3.164 | 1.049 | 7.50 | 7.50 | 7.50 | 591 | 79 |
| | 26 | 52.6% | 3.689 | 158 | | | | | 6.95 | 583 | 84 |
| | 27 | 57.9% | 4.058 | 137 | | | | | 6.41 | 556 | 87 |
| | 28 | 63.2% | 4.427 | 109 | | | | | 5.86 | 483 | 82 |
| | 29 | 68.4% | 4.796 | 88 | | | | | 5.31 | 422 | 79 |
| B | 30 | 73.7% | 5.165 | 63 | 4.800 | 1.076 | 4.77 | 4.77 | 4.77 | 325 | 68 |
| | 31 | 78.9% | 5.534 | 39 | | | | | 4.47 | 216 | 48 |
| | 32 | 84.2% | 5.903 | 31 | | | | | 4.18 | 183 | 44 |
| | 33 | 89.5% | 6.272 | 24 | | | | | 3.88 | 151 | 39 |
| | 34 | 94.7% | 6.641 | 17 | | | | | 3.59 | 113 | 31 |
| A | 35 | 100.0% | 7.010 | 13 | 7.010 | 1.000 | 3.29 | 3.29 | 3.29 | 91 | 28 |
| | 36 | 105.3% | 7.379 | 9 | | | | | 3.29 | 66 | 20 |
| | 37 | 110.5% | 7.748 | 4 | | | | | 3.29 | 31 | 9 |
| | 38 | 115.8% | 8.117 | 3 | | | | | 3.29 | 24 | 7 |
| | 39 | 121.1% | 8.486 | 1 | | | | | 3.29 | 8 | 3 |
| | 40 | 126.3% | 8.855 | 0 | | | | | 3.29 | 0 | 0 |
| | | | | | | | | | | 6687 | 985 |
| | | | | | | | | | | SEERon | 6.79 |
| | | | | | | | | | | SEER | 6.53 |

| | | | | | | | | |
|----------------------|--------|-----|------------------|-------|----|------------------------------------|-----------------|----------|
| Equiv. Hce | 350 | h | | | | Q _c /SEER _{on} | 361.29635 | |
| H _{TO} | 221 | h | P _{TO} | 0.026 | kW | HTO*PTO | 5.746 | kwh |
| H _{SB} | 2142 | h | P _{SB} | 0.004 | kW | HSB*PSB | 8.568 | 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 _{ce} | 375.6104 |
| P _{designc} | 7.010 | kW | | | | | | |
| Q _c | 2453.5 | 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 | 4.335 | 1.624 | 2.67 | 0.25 | 2.67 |
| B | 2 | 2.721 | 0.678 | 4.01 | 0.25 | 4.01 |
| C | 7 | 1.846 | 0.363 | 5.09 | 0.25 | 5.09 |
| D | 12 | 1.759 | 0.291 | 6.04 | 0.25 | 5.18 |
| E | -10 | 4.770 | 2.038 | 2.34 | 0.25 | 2.34 |
| F | -7 | 4.335 | 1.624 | 2.67 | 0.25 | 2.67 |

| 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 * [(Ph(Tj) - elbu(Tj)) / COPbin(Tj)] | | COP (including backup heater) | hj * [Ph(Tj) - elbu(Tj)] / COPbin(Tj) | |
|-------|-----------------|-----------------------|--------------|------------------------------------|----------|----------|----------------|-------------------|------------------------|-------------|---|----------|-------------------------------|---|----------|
| | | | | elbu(Tj) | etbu(Tj) | etpu(Tj) | | | | | elbu(Tj) | etpu(Tj) | | elbu(Tj) | etpu(Tj) |
| -10 | 100.0% | 4.900 | 1 | 4.770 | 0.130 | 1.03 | 2.34 | 2.34 | 5 | 2 | 2.26 | 5 | 2.04 | | |
| -9 | 96.2% | 4.712 | 25 | 4.625 | 0.087 | 1.02 | | 2.45 | 118 | 49 | 2.39 | 116 | 47.19 | | |
| -8 | 92.3% | 4.523 | 23 | 4.480 | 0.043 | 1.01 | | 2.56 | 104 | 41 | 2.52 | 103 | 40.25 | | |
| A -7 | 88.5% | 4.335 | 24 | 4.335 | 0.000 | 1.00 | 2.67 | 2.67 | 104 | 39 | 2.67 | 104 | 38.98 | | |
| -6 | 84.6% | 4.147 | 27 | 4.147 | 0.000 | 1.00 | | 2.82 | 112 | 40 | 2.82 | 112 | 39.72 | | |
| -5 | 80.8% | 3.958 | 68 | 3.958 | 0.000 | 1.00 | | 2.97 | 269 | 91 | 2.97 | 269 | 90.68 | | |
| -4 | 76.9% | 3.770 | 91 | 3.770 | 0.000 | 1.00 | | 3.12 | 343 | 110 | 3.12 | 343 | 110.04 | | |
| -3 | 73.1% | 3.581 | 89 | 3.581 | 0.000 | 1.00 | | 3.27 | 319 | 98 | 3.27 | 319 | 97.57 | | |
| -2 | 69.2% | 3.393 | 165 | 3.393 | 0.000 | 1.00 | | 3.42 | 560 | 164 | 3.42 | 560 | 163.87 | | |
| -1 | 65.4% | 3.204 | 173 | 3.204 | 0.000 | 1.00 | | 3.57 | 554 | 155 | 3.57 | 554 | 155.48 | | |
| 0 | 61.5% | 3.016 | 240 | 3.016 | 0.000 | 1.00 | | 3.71 | 724 | 195 | 3.71 | 724 | 194.84 | | |
| 1 | 57.7% | 2.827 | 280 | 2.827 | 0.000 | 1.00 | | 3.86 | 792 | 205 | 3.86 | 792 | 204.87 | | |
| B 2 | 53.8% | 2.639 | 320 | 2.639 | 0.000 | 1.00 | 4.01 | 4.01 | 844 | 210 | 4.01 | 844 | 210.40 | | |
| 3 | 50.0% | 2.450 | 357 | 2.450 | 0.000 | 1.00 | | 4.23 | 875 | 207 | 4.23 | 875 | 206.90 | | |
| 4 | 46.2% | 2.262 | 356 | 2.262 | 0.000 | 1.00 | | 4.44 | 805 | 181 | 4.44 | 805 | 181.26 | | |
| 5 | 42.3% | 2.073 | 303 | 2.073 | 0.000 | 1.00 | | 4.66 | 628 | 135 | 4.66 | 628 | 134.91 | | |
| 6 | 38.5% | 1.885 | 330 | 1.885 | 0.000 | 1.00 | | 4.87 | 622 | 128 | 4.87 | 622 | 127.69 | | |
| C 7 | 34.6% | 1.696 | 326 | 1.696 | 0.000 | 1.00 | 5.09 | 5.09 | 553 | 109 | 5.09 | 553 | 108.74 | | |
| 8 | 30.8% | 1.508 | 348 | 1.508 | 0.000 | 1.00 | | 5.10 | 525 | 103 | 5.10 | 525 | 102.80 | | |
| 9 | 26.9% | 1.319 | 335 | 1.319 | 0.000 | 1.00 | | 5.12 | 442 | 86 | 5.12 | 442 | 86.26 | | |
| 10 | 23.1% | 1.131 | 315 | 1.131 | 0.000 | 1.00 | | 5.14 | 356 | 69 | 5.14 | 356 | 69.27 | | |
| 11 | 19.2% | 0.942 | 215 | 0.942 | 0.000 | 1.00 | | 5.16 | 203 | 39 | 5.16 | 203 | 39.25 | | |
| D 12 | 15.4% | 0.754 | 169 | 0.754 | 0.000 | 1.00 | 5.18 | 5.18 | 127 | 25 | 5.18 | 127 | 24.59 | | |
| 13 | 11.5% | 0.565 | 151 | 0.565 | 0.000 | 1.00 | | 5.2004 | 85 | 16 | 5.20 | 85 | 16.42 | | |
| 14 | 7.7% | 0.377 | 105 | 0.377 | 0.000 | 1.00 | | 5.2195 | 40 | 8 | 5.22 | 40 | 7.58 | | |
| 15 | 3.8% | 0.188 | 74 | 0.188 | 0.000 | 1.00 | | 5.2387 | 14 | 3 | 5.24 | 14 | 2.66 | | |
| 16 | 0.0% | | 4910 | | | | | | | | | | | | |
| 0.261 | | | | | | | | | | summation | 10122 | 2508 | | 10119 | 2504 |
| | | | | | | | | | | SCOPon | 4.04 | | SCOPnet | | 4.04 |
| | | | | | | | | | | SCOP | 4.03 | | | | |

| | | | | | | | |
|----------------------|-----------|-----|------------------|-------|----|------------------------------------|--------------------------|
| H _{he} | 1400 | h | | | | Q _H /SCOP _{on} | 1699.5339 |
| H _{TO} | 179 | h | P _{TO} | 0.026 | kW | HTO*PTO | 4.654 kwh |
| H _{SB} | 0 | h | P _{SB} | 0.004 | 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} 1704.188 |
| P _{designh} | 4.900 | kW | | | | | |
| Q _H | 6860.6087 | kWh | | | | | |

SCOP calculation (Warmer):

| | Outdoor air °C | measured Heating Capacity kW | Input Power kW | COP _{DC/meas} | Cd | COP _{PL} (COP bin (T _j)) |
|---|-------------------|---------------------------------|-------------------|------------------------|------|--|
| B | 2 | 6.013 | 2.410 | 2.50 | 0.25 | 2.50 |
| C | 7 | 4.124 | 0.895 | 4.61 | 0.25 | 4.61 |
| D | 12 | 2.071 | 0.309 | 6.70 | 0.25 | 6.42 |
| E | 2 | 6.013 | 2.410 | 2.50 | 0.25 | 2.50 |
| F | 2 | 6.013 | 2.410 | 2.50 | 0.25 | 2.50 |

| Bin | T _j | Part load ratio | Heating demand Ph(T _j) | Bin hours h _j | Heat load covered by the heat pump | | Capacity ratio | COP _d | COP _h (T _j) | h _j x Ph(T _j) | h _j * [Ph(T _j) - elbu(T _j)] / COPbin(T _j) + elbu(T _j) | COP (including backup heater) | h _j * [Ph(T _j) - elbu(T _j)] / COPbin(T _j) | |
|--------------------------|----------------|-----------------|------------------------------------|--------------------------|------------------------------------|-----------------------|----------------|------------------|------------------------------------|--------------------------------------|--|-------------------------------|--|-------------|
| | | | | | etbu(T _j) | etbu(T _j) | | | | | | | | |
| B | 2 | 100.0% | 6.013 | 3 | 6.013 | 0.000 | 1.00 | 2.50 | 2.50 | 18 | 7 | 2.50 | 18.0 | 7.2 |
| | 3 | 92.9% | 5.584 | 22 | 5.635 | 0.000 | 0.99 | 2.92 | 2.92 | 123 | 42 | 2.92 | 122.8 | 42.1 |
| | 4 | 85.7% | 5.154 | 63 | 5.257 | 0.000 | 0.98 | 3.34 | 3.34 | 325 | 97 | 3.34 | 324.7 | 97.2 |
| | 5 | 78.6% | 4.725 | 63 | 4.880 | 0.000 | 0.97 | 3.76 | 3.76 | 298 | 79 | 3.76 | 297.6 | 79.1 |
| C | 6 | 71.4% | 4.295 | 175 | 4.502 | 0.000 | 0.95 | 4.19 | 4.19 | 752 | 180 | 4.19 | 751.6 | 179.6 |
| | 7 | 64.3% | 3.866 | 162 | 4.124 | 0.000 | 0.94 | 4.61 | 4.61 | 626 | 136 | 4.61 | 626.2 | 135.9 |
| | 8 | 57.1% | 3.436 | 259 | 3.713 | 0.000 | 0.93 | 4.97 | 4.97 | 890 | 179 | 4.97 | 889.9 | 179.1 |
| | 9 | 50.0% | 3.007 | 360 | 3.303 | 0.000 | 0.91 | 5.33 | 5.33 | 1082 | 203 | 5.33 | 1082.3 | 203.0 |
| D | 10 | 42.9% | 2.577 | 428 | 2.892 | 0.000 | 0.89 | 5.69 | 5.69 | 1103 | 194 | 5.69 | 1103.0 | 193.7 |
| | 11 | 35.7% | 2.148 | 430 | 2.482 | 0.000 | 0.87 | 6.05 | 6.05 | 923 | 153 | 6.05 | 923.4 | 152.5 |
| | 12 | 28.6% | 1.718 | 503 | 2.071 | 0.000 | 0.83 | 6.42 | 6.42 | 864 | 135 | 6.42 | 864.2 | 134.7 |
| | 13 | 21.4% | 1.289 | 444 | 1.660 | 0.000 | 0.78 | 6.78 | 6.78 | 572 | 84 | 6.78 | 572.1 | 84.4 |
| | 14 | 14.3% | 0.859 | 384 | 1.250 | 0.000 | 0.69 | 7.14 | 7.14 | 330 | 46 | 7.14 | 329.9 | 46.2 |
| | 15 | 7.1% | 0.430 | 294 | 0.839 | 0.000 | 0.51 | 7.50 | 7.50 | 126 | 17 | 7.50 | 126.3 | 16.8 |
| | 16 | 0.0% | 0.000 | 0 | 0.429 | 0.000 | 0.00 | 7.86 | 7.86 | 0 | 0 | | | |
| SCOP_{on} | | | | | | | | | | | 5.18 | SCOP_{net} | | 5.18 |
| SCOP | | | | | | | | | | | 5.11 | | | |

| | | | | | | | | |
|----------------------|--------|-----|------------------|-------|----|-----------|------------------------------------|--------------------------|
| Equiv. H | 1400 | h | | | | | Q _h /SCOP _{on} | 1626.1586 |
| H _{TO} | 755 | h | P _{TO} | 0.026 | kW | HTO*PTO | 19.63 | kwh |
| H _{SB} | 0 | h | P _{SB} | 0.004 | kW | HSB*PSB | 0 | kwh |
| H _{CK} | 755 | h | P _{CK} | 0 | kW | HCK*PCK | 0 | kwh |
| H _{OFF} | 0 | h | P _{OFF} | 0 | kW | HOFF*POFF | 0 | kwh |
| | | | | | | | | Q _{he} 1645.789 |
| P _{designh} | 6.013 | kW | | | | | | |
| Q _H | 8418.2 | kWh | | | | | | |

SCOP calculation (Colder):

| | Outdoor air °C | measured Heating Capacity kW | Input Power kW | COP _{DC/meas} | Cd | COP _{PL} (COP bin (T _j)) |
|---|-------------------|---------------------------------|-------------------|------------------------|------|--|
| A | -7 | 3.296 | 1.166 | 2.83 | 0.25 | 2.83 |
| B | 2 | 2.167 | 0.522 | 4.15 | 0.25 | 4.15 |
| C | 7 | 1.384 | 0.268 | 5.16 | 0.25 | 5.16 |
| D | 12 | 1.223 | 0.207 | 5.91 | 0.25 | 5.13 |
| E | -22 | 3.523 | 2.014 | 1.75 | 0.25 | 1.75 |
| F | -15 | 4.487 | 2.164 | 2.07 | 0.25 | 2.07 |
| G | -15 | 4.487 | 2.164 | 2.07 | 0.25 | 2.07 |

| T _j | Part load ratio | Heating demand Ph(T _j) | Bin hours h _j | Heat load covered by the heat pump | | Capacity ratio | declared COP _{PL} | COP _{PL} (T _j) | h _j x Ph(T _j) | h _j * [(Ph(T _j)-elbu(T _j))/COPbin(T _j)]-elbu(T _j) | COP (including backup heater) | h _j *[(Ph(T _j)-elbu(T _j))/COPbin(T _j)] | |
|----------------------|-----------------|------------------------------------|--------------------------|------------------------------------|-------|----------------|------------------------------------|-------------------------------------|--------------------------------------|--|-------------------------------|---|------|
| -22 | 100.0% | 5.500 | 1 | 3.523 | 1.977 | | 1.7492552 | 1.75 | 6 | 4 | 1.38 | 4 | |
| -21 | 97.4% | 5.355 | 6 | 3.661 | 1.695 | | | 1.80 | 32 | 22 | 1.43 | 22 | |
| -20 | 94.7% | 5.211 | 13 | 3.798 | 1.412 | | | 1.84 | 68 | 45 | 1.50 | 49 | |
| -19 | 92.1% | 5.066 | 17 | 3.936 | 1.130 | | | 1.89 | 86 | 55 | 1.58 | 67 | |
| -18 | 89.5% | 4.921 | 19 | 4.074 | 0.847 | | | 1.93 | 94 | 56 | 1.67 | 77 | |
| -17 | 86.8% | 4.776 | 26 | 4.212 | 0.565 | | | 1.98 | 124 | 70 | 1.77 | 110 | |
| -16 | 84.2% | 4.632 | 39 | 4.349 | 0.282 | | | 2.03 | 181 | 95 | 1.91 | 170 | |
| G | -15 | 81.6% | 41 | 4.487 | 0.000 | | 2.073475 | 2.07 | 184 | 89 | 2.07 | 184 | |
| -14 | 78.9% | 4.342 | 35 | 4.338 | 0.000 | | | 2.17 | 152 | 70 | 2.17 | 152 | |
| -13 | 76.3% | 4.198 | 52 | 4.189 | 0.000 | | | 2.26 | 218 | 97 | 2.26 | 218 | |
| -12 | 73.7% | 4.053 | 37 | 4.040 | 0.000 | | | 2.36 | 150 | 64 | 2.36 | 150 | |
| -11 | 71.1% | 3.908 | 41 | 3.892 | 0.000 | | | 2.45 | 160 | 65 | 2.45 | 160 | |
| -10 | 68.4% | 3.763 | 43 | 3.743 | 0.000 | 1.01 | | 2.54 | 162 | 64 | 2.54 | 162 | |
| -9 | 65.8% | 3.619 | 54 | 3.594 | 0.000 | 1.01 | | 2.64 | 195 | 74 | 2.64 | 195 | |
| -8 | 63.2% | 3.474 | 90 | 3.445 | 0.000 | 1.01 | | 2.73 | 313 | 114 | 2.73 | 313 | |
| A | -7 | 60.5% | 125 | 3.296 | 0.000 | 1.01 | 2.83 | 2.83 | 416 | 147 | 2.83 | 416 | |
| -6 | 57.9% | 3.184 | 169 | 3.171 | 0.000 | 1.00 | | 2.97 | 538 | 181 | 2.97 | 538 | |
| -5 | 55.3% | 3.040 | 195 | 3.045 | 0.000 | 1.00 | | 3.12 | 593 | 190 | 3.12 | 593 | |
| -4 | 52.6% | 2.895 | 278 | 2.920 | 0.000 | 0.99 | | 3.27 | 805 | 246 | 3.27 | 805 | |
| -3 | 50.0% | 2.750 | 306 | 2.794 | 0.000 | 0.98 | | 3.42 | 842 | 246 | 3.42 | 842 | |
| -2 | 47.4% | 2.605 | 454 | 2.669 | 0.000 | 0.98 | | 3.56 | 1183 | 332 | 3.56 | 1183 | |
| -1 | 44.7% | 2.461 | 385 | 2.543 | 0.000 | 0.97 | | 3.71 | 947 | 255 | 3.71 | 947 | |
| 0 | 42.1% | 2.316 | 490 | 2.418 | 0.000 | 0.96 | | 3.86 | 1135 | 294 | 3.86 | 1135 | |
| 1 | 39.5% | 2.171 | 533 | 2.292 | 0.000 | 0.95 | | 4.00 | 1157 | 289 | 4.00 | 1157 | |
| B | 2 | 36.8% | 380 | 2.167 | 0.000 | 0.94 | 4.15 | 4.15 | 770 | 185 | 4.15 | 770 | |
| 3 | 34.2% | 1.882 | 228 | 2.010 | 0.000 | 0.94 | | 4.35 | 429 | 99 | 4.35 | 429 | |
| 4 | 31.6% | 1.737 | 261 | 1.854 | 0.000 | 0.94 | | 4.56 | 453 | 99 | 4.56 | 453 | |
| 5 | 28.9% | 1.592 | 279 | 1.697 | 0.000 | 0.94 | | 4.76 | 444 | 93 | 4.76 | 444 | |
| 6 | 26.3% | 1.447 | 229 | 1.541 | 0.000 | 0.94 | | 4.96 | 331 | 67 | 4.96 | 331 | |
| C | 7 | 23.7% | 269 | 1.384 | 0.000 | 0.94 | 5.16 | 5.16 | 350 | 68 | 5.16 | 350 | |
| 8 | 21.1% | 1.158 | 233 | 1.352 | 0.000 | 0.86 | | 5.16 | 270 | 52 | 5.16 | 270 | |
| 9 | 18.4% | 1.013 | 230 | 1.320 | 0.000 | 0.77 | | 5.15 | 233 | 45 | 5.15 | 233 | |
| 10 | 15.8% | 0.868 | 243 | 1.287 | 0.000 | 0.67 | | 5.14 | 211 | 41 | 5.14 | 211 | |
| 11 | 13.2% | 0.724 | 191 | 1.255 | 0.000 | 0.58 | | 5.14 | 138 | 27 | 5.14 | 138 | |
| D | 12 | 10.5% | 146 | 1.223 | 0.000 | 0.47 | 5.13 | 5.13 | 85 | 16 | 5.13 | 85 | |
| 13 | 7.9% | 0.434 | 150 | 1.191 | 0.000 | 0.36 | | 5.12 | 65 | 13 | 5.12 | 65 | |
| 14 | 5.3% | 0.289 | 97 | 1.159 | 0.000 | 0.25 | | 5.12 | 28 | 5 | 5.12 | 28 | |
| 15 | 2.6% | 0.145 | 61 | 1.126 | 0.000 | 0.13 | | 5.11 | 9 | 2 | 5.11 | 9 | |
| 16 | 0.0% | 0.000 | 0 | 1.094 | 0.000 | 0.00 | | | 0 | | | | |
| | | | | | | | | | 13557 | 3978 | | 13465 | 3887 |
| | | | | | | | | | SCOPon | 3.41 | | SCOPnet | 3.46 |
| Equiv. H | 2100 | h | | | | | Q _b /SCOP _{on} | 2319.0634 | | | | | |
| H _{ro} | 131 | h | P _{ro} | 0.026 | kW | HTO*PTO | 3.406 | kWh | SCOP | 3.40 | | | |
| H _{ra} | 0 | h | P _{ra} | 0.004 | kW | HSB*PSB | 0 | kWh | | | | | |
| H _{rc} | 131 | h | P _{rc} | 0 | kW | HCK*PCK | 0 | kWh | | | | | |
| H _{rr} | 0 | h | P _{rr} | 0 | kW | HOFF*POFF | 0 | kWh | | | | | |
| | | | | | | | | | Ohe 2322.4894 | | | | |
| P _{designh} | 3.763 | kW | | | | | | | | | | | |
| Q _b | 7902.909677 | kWh | | | | | | | | | | | |

| Item | Measured value | Rated value | Deviation | Verdict |
|--|----------------|-------------|-----------|---------|
| SEER | 6.53 | 6.5 | 0.5% | P |
| SCOP(average) | 4.03 | 4.0 | 0.8% | P |
| SCOP (warmer) | 5.11 | 5.1 | 0.2% | P |
| SCOP (colder) | 3.40 | 3.4 | 0% | P |
| Power consumption in thermostat off mode | 26.0 W | 26.0 W | 0% | P |
| Power consumption in standby mode | 4.0 W | 4.0 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] | 44.2 | 46.3 | 46.7 | 47.0 | 45.8 | 46.3 | 47.5 | 46.7 | 46.2 | 46.4 |
| L _{pmc} / Averaged Sound Pressure Level [dB (A)] | 46.38 | | | | | | | | | |
| LW / Sound Power Level [dB (A)] | 57.89 | | | | | | | | | |
| 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 | 25.13m ² | | | | |
| Background Noise Level [dB] | 18.0 | | | | |
| Microphone Position | 1 | 2 | 3 | 4 | 5 |
| L _{pi} [dB] | 53.3 | 52.1 | 53.7 | 53.1 | 51.1 |
| L _{pmc} / Averaged Sound Pressure Level [dB (A)] | 52.76 | | | | |
| LW / Sound Power Level [dB (A)] | 66.76 | | | | |
| Rated sound Power Level [dB (A)] | 67 | | | | |
| Verdict | P | | | | |

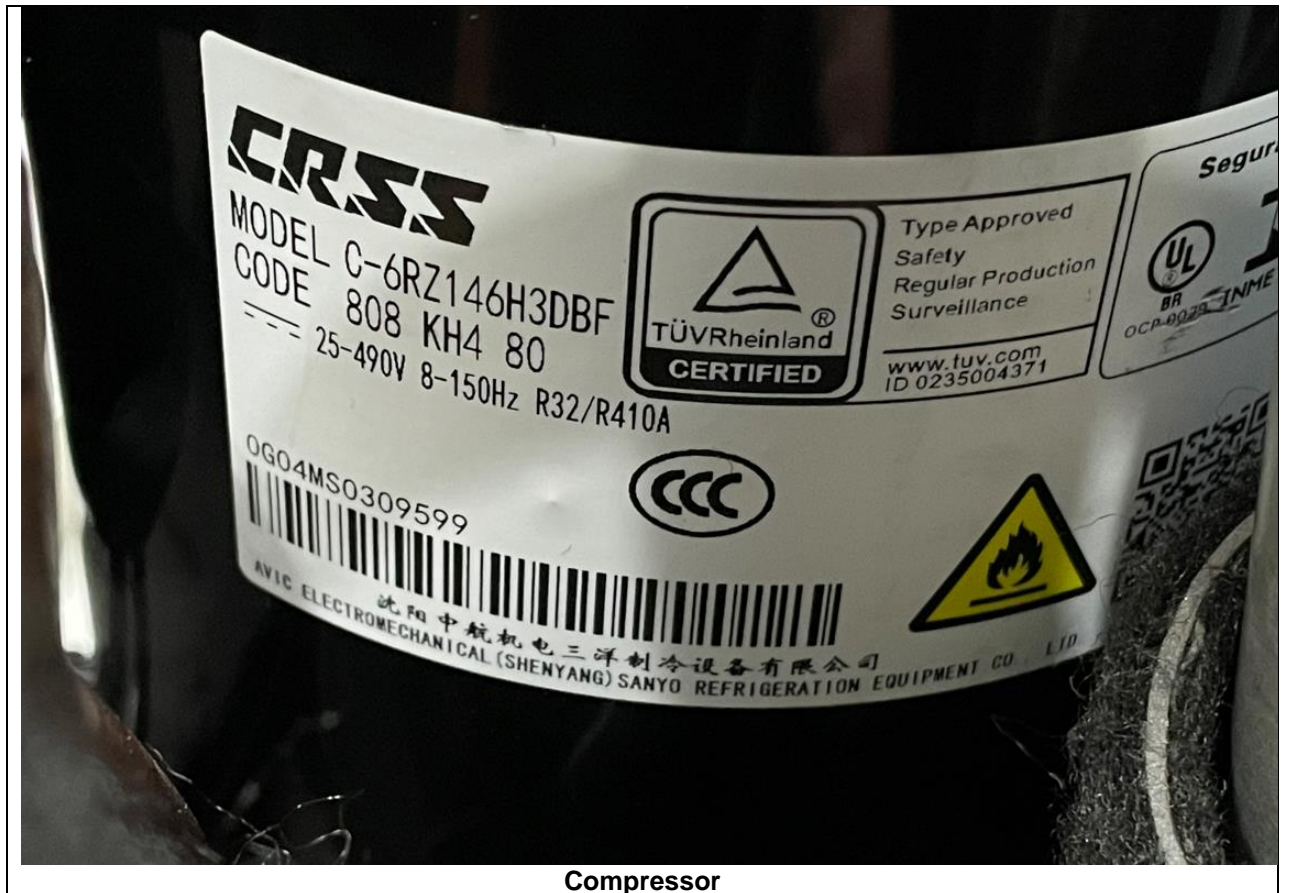
Photos:



Indoor



Outdoor unit



Compressor

End of report