

**TEST REPORT**  
**IEC 60335-2-40**

**Safety of household and similar electrical appliances**  
**Part 2-40: Particular requirements for electrical heat pumps, air**  
**conditioners and dehumidifiers**

**Report Number**.....: E-202506DQAQSZDQGX250663.01001

**Date of issue**.....: June 10, 2025

**Total number of pages**.....: 37

**Applicant's name**.....: Gree Electric Appliances, Inc. of Zhuhai

**Address**.....: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070

**Manufacturer's name**.....: Gree Electric Appliances, Inc. of Zhuhai

**Manufacturer's Address**.....: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070

**Factory's name**.....: Gree Electric Appliances, Inc. of Zhuhai

**Factory's Address**.....: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070

**Test specification:**

**Standard**.....: PNS IEC 60335-1:2011  
PNS IEC 60335-2-40:2013

**Test procedure**.....: Safety report

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

**Testing location:**

**Testing Laboratory**.....: Testing Center of Gree Electric Appliances Inc. of Zhuhai

**Testing address**.....: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070

**Tested by(name+signature)** .....: Wang Weifeng

**Approved by(name+signature)** ....: Luo Liangchen

**Test item description**.....: Split Type Air Conditioner

**Trade Mark**.....: GREE

**Model/Type reference**.....: GWC09AVCXB-D6DNA1A(KS-IW10-GPAI13P1M32)

**Manufacturer**.....: Same as applicant

**Ratings**.....: 220-240V~, 60Hz., Class I, R32, IPX4 for outdoor part  
Rated power input(Cooling): 1200W

**General disclaimer:**

The test results presented in this report relate only to the object tested.



<b>Classification of installation and use</b> .....: Fixed appliance	
<b>Supply Connection</b> .....: Type Y, supply cord with plug	
<b>Possible test case verdicts:</b>	
- 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)	
<b>List of Attachments (including a total number of pages in each attachment):</b>	
N/A	
<b>Summary of testing:</b> The product complies with the following standards: PNS IEC 60335-1:2011 PNS IEC 60335-2-40:2013	
<b>Tests performed (name of test and test clause):</b> After review, clause 7, 8, 10, 11, 13, 19, 23, 25, 27, 28, 29 were conducted on the model GWC09AVCXB-D6DNA1A.	<b>Testing location:</b> Gree Electric Appliances, Inc. of Zhuhai West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070
<b>Summary of compliance with National Differences</b>	
N/A	
<input checked="" type="checkbox"/> <b>The product fulfils the requirements of PNS IEC 60335-1:2011 and PNS IEC 60335-2-40:2013</b>	

**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.



<b>GREE</b>	
<b>AIR CONDITIONER OUTDOOR UNIT</b>	
Model	GWC09AVCXB-D6DNA1A/O
Rated Voltage	220-240V~
Rated Frequency	60Hz
Climate Type	T1
Cooling Capacity	2700W
Cooling Power Input	645W
Cooling Rated Input	1200W
Maximum Allowable Pressure	4.3MPa
Operating Pressure	
(Discharge Side/Suction Side)	4.3/2.5MPa
Sound Pressure Level	49dB(A)
Moisture Protection	IPX4
Isolation	I
Refrigerant	R32
Refri. Charge	0.42kg
Weight	22.5kg
Manufactured Date	YYYY.MM
GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI	
 	
600004093721	

Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070

**Testing.....:**

**Date of receipt of test item.....:** June 11, 2025

**Date (s) of performance of tests.....:** June 10, 2025 ~ June 11, 2025

**General product information:**

The appliance is a split type air conditioner intended for household use. The appliance has cooling function only.

<b>7</b>	<b>MARKING AND INSTRUCTIONS</b>	<b>—</b>
7.1	Rated voltage or voltage range (V).....: See marking plates	P
	Symbol for nature of supply, or..... : ~	P
	Rated frequency (Hz).....: 60	P
	Rated power input (W), or.....: See marking plates	P
	Rated current (A) ....., or.....: N/A	
	Manufacturer's or responsible vendor's name, trademark or identification mark.....: KOLIN	P
	Model or type reference.....: See marking plates	P
	Symbol IEC 60417- 5172, for class II appliances	N/A
	IP number, other than IPX0.....: outdoor part: IPX4	P
	Symbol IEC 60417- 5180, for class III appliances, unless	N/A
	the appliance is operated by batteries only, or	N/A
	for appliances powered by rechargeable batteries recharged in the appliance	N/A
	Symbol IEC 60417- 5018, for class II and class III appliances incorporating a functional earth	N/A
	Symbol IEC 60417- 5036, for the enclosure of electrically- operated water valves in external hose- sets for connection of an appliance to the water mains, if the working voltage exceeds extra- low voltage	N/A
	Refrigerant charge ....., or.....: See marking plates	P
	Refrigerant as designated under ISO 817 or ANSI/ASHRAE 34 ....., or.....: R32	P
	Permissible excessive operating pressure for sanitary hot water heat pumps ....., or.....: N/A	
	Maximum operating pressure in the water and/or brine for the heat exchanger for hydronic fan coil units ....., or.....: N/A	
	Maximum operating pressure for the refrigerant circuit; if the permissible excessive operating pressure for the suction and discharge side differ, a separate indication is required; ....., or.....: See marking plates	P
	Symbol for degree of protection against ingress of water, other than IPX0 ....., or.....: outdoor part: IPX4	P
	Separate marking of appliances with all rated characteristics of supplementary heaters ....., or.....: N/A	
	Marking of direction of fluid flow	N/A
7.2	Warning for stationary appliances for multiple supply	N/A
	Warning placed in vicinity of terminal cover	N/A
7.3	Range of rated values marked with the lower and upper limits separated by a hyphen	N/A

	Different rated values marked with the values separated by an oblique stroke		N/A
7.4	Appliances adjustable for different rated voltages or rated frequencies, the voltage or the frequency setting is clearly discernible		N/A
	Requirement met if frequent changes are not required and the rated voltage or rated frequency to which the appliance is to be adjusted is determined from a wiring diagram		N/A
7.5	Appliances with more than one rated voltage or one or more rated voltage ranges, marked with rated input or rated current for each rated voltage or range, unless		N/A
	the power input or current are related to the arithmetic mean value of the rated voltage range		N/A
	Relation between marking for upper and lower limits of rated power input or rated current and voltage is clear		N/A
7.6	Correct symbols used		P
	Symbol for nature of supply placed next to rated voltage		P
	Symbol for class II appliances placed unlikely to be confused with other marking		N/A
	Units of physical quantities and their symbols according to international standardized system		P
7.7	Connection diagram fixed to appliances to be connected to more than two supply conductors and appliances for multiple supply, unless		N/A
	correct mode of connection is obvious		P
7.8	Except for type Z attachment, terminals for connection to the supply mains indicated as follows:		—
	- marking of terminals exclusively for the neutral conductor (letter N)		P
	- marking of protective earthing terminals (symbol IEC 60417-5019)		P
	- marking of functional earthing terminals (symbol IEC 60417-5018)		N/A
	- marking not placed on removable parts		P
7.9	Marking or placing of switches which may cause a hazard		N/A
7.10	Indications of switches on stationary appliances and controls on all appliances by use of figures, letters or other visual means.....:	By use of figures, letters or other visual means	P
	This applies also to switches which are part of a control		N/A
	If figures are used, the off position indicated by the figure 0		N/A
	The figure 0 indicates only OFF position, unless no confusion with the OFF position		N/A

7.11	Indication for direction of adjustment of controls		N/A
7.12	Instructions for safe use provided		P
	Details concerning precautions during user maintenance		P
	Appliances not accessible to general public, classification of clause 6.101 included		N/A
	Appliances using flammable refrigerants, an installation, service and operation manual, either separate or combined manuals, provided and include information given in annex DD		P
	The instructions state that:		—
	- the appliance is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction		P
	- children being supervised not to play with the appliance		P
	For a part of class III construction supplied from a detachable power supply unit, the instructions state that the appliance is only to be used with the unit provided		N/A
	Instructions for class III appliances state that it must only be supplied at SELV, unless		N/A
	it is a battery- operated appliance, the battery being charged outside the appliance		N/A
	For appliances for altitudes exceeding 2000 m, the maximum altitude is stated..... :		N/A
	The instructions for appliances incorporating a functional earth states that the appliance incorporates an earth connection for functional purposes only		N/A
7.12.1	Sufficient details for installation supplied		P
	For an appliance intended to be permanently connected to the water mains and not connected by a hose- set, this is stated		N/A
	If different rated voltages or different rated frequencies are marked, the instructions state what action to be taken to adjust the appliance		N/A
	Sufficient details for installation or maintenance supplied :		----
	- that the appliance shall be installed in accordance with national wiring regulations		P
	- the dimensions of the space necessary for correct installation of the appliance including the minimum permissible distance to adjacent structures		P
	- for appliances with supplementary heaters, the minimum clearance from the appliance to combustible surfaces		N/A

	- a wiring diagram with a clear indication of the connections and wiring to external control devices and supply cord		P
	- the range of external static pressures at which the appliance was tested (add-on heat pumps and appliances with supplementary heaters only)		N/A
	- the method of connection to the appliance to the electrical supply and interconnection of separate components		N/A
	- indication of which parts of the appliance are suitable for outdoor use, if applicable		P
	- details of type and rating of fuses, or rating of circuit breakers;		P
	- details of supplementary heating elements that may be used in conjunction with the appliance, including fitting instructions either with the appliance or with the supplementary heater		N/A
	- maximum and minimum water or brine operating temperatures		N/A
	- maximum and minimum water or brine operating pressures		N/A
	Open storage tanks of heat pumps for water heating, accompanied by an instruction sheet which state that the vent shall not be obstructed		N/A
7.12.2	Stationary appliances not fitted with means for disconnection from the supply mains having a contact separation in all poles that provide full disconnection under overvoltage category III, the instructions state that means for disconnection must be incorporated in the fixed wiring in accordance with the wiring rules		N/A
7.12.3	Insulation of the fixed wiring in contact with parts exceeding 50 K during clause 11; instructions state that the fixed wiring must be protected		N/A
7.12.4	Instructions for built-in appliances:		—
	- dimensions of space		P
	- dimensions and position of supporting and fixing		P
	- minimum distances between parts and surrounding structure		P
	- minimum dimensions of ventilating openings and arrangement		P
	- connection to supply mains and interconnection of separate components		P
	- allow disconnection of the appliance after installation, by accessible plug or a switch in the fixed wiring, unless		P
	a switch complying with 24.3		N/A
7.12.5	Replacement cord instructions, type X attachment with a specially prepared cord		N/A
	Replacement cord instructions, type Y attachment		P

	Replacement cord instructions, type Z attachment		N/A
7.12.6	Caution in the instructions for appliances incorporating a non-self-resetting thermal cut-out that is reset by disconnection of the supply mains, if this cut-out is required to comply with the standard		N/A
7.12.7	Instructions for fixed appliances stating how the appliance is to be fixed		P
7.12.8	Instructions for appliances connected to the water mains:	—	
	- max. inlet water pressure (Pa).....:		N/A
	- min. inlet water pressure, if necessary (Pa).....:		N/A
	Instructions concerning new and old hose-sets for appliances connected to the water mains by detachable hose-sets		N/A
7.12.9	Instructions specified in 7.12 and from 7.12.1 to 7.12.8 appear together before any other instructions supplied with the appliance		P
	These instructions may be supplied with the appliance separately from any functional use booklet		P
	They may follow the description of the appliance that identifies parts, or follow the drawings/sketches		P
	In addition, instructions are also available in an alternative format such as on a website or on request from the user in a format such as a DVD		P
	In addition, instructions are also available in an alternative format such as on a website or in a format such as a DVD.....:		P
7.13	Instructions and other texts in an official language	In English	P
7.14	Markings clearly legible and durable:	—	
	Signal words WARNING, CAUTION, DANGER in uppercase having a height as specified.....:		P
	Uppercase letter of the text explaining the signal word not smaller than 1,6 mm.....:		N/A
	Moulded in, engraved, or stamped markings either raised above or have a depth below the surface of at least 0,25 mm, unless		N/A
	contrasting colours are used		N/A
	Markings checked by inspection, measurement and rubbing test as specified		P
7.15	Markings on a main part		P
	Marking clearly discernible from the outside, if necessary after removal of a cover		P
	For portable appliances, cover can be removed or opened without a tool		N/A

	For stationary appliances, name, trademark or identification mark and model or type reference visible after installation		P
	For fixed appliances, name, trademark or identification mark and model or type reference visible after installation according to the instructions		P
	Indications for switches and controls placed on or near the components. Marking not on parts which can be positioned or repositioned in such a way that the marking is misleading		P
	The symbol IEC 60417- 5018 placed next to the symbol IEC 60417- 5172 or IEC 60417- 5180		N/A
	Marking on panel allowed, provided panel in place for intended operation of appliance		N/A
7.16	Marking of a possible replaceable thermal link or fuse link clearly visible with regard to replacing the link		P
7.101	Marking of fuses and overload protective devices, if replaceable :	----	----
	- fuse rated current in amperes, type and rated voltage or		P
	- manufacturer and model of overload protective device		N/A
7.102	Marking for connection with aluminium wire, if necessary		N/A
7.103	For appliances made up of more than one factory made assembly specified by the manufacturer to be used together, instructions shall be provided for completing the assembly to ensure compliance with the requirements.		N/A
7.104	For partial units, the instructions or markings shall include the following additional information:	----	----
	- For evaporating units and condensing units, the instructions or markings shall include wording to assure that the maximum operating pressure is considered when connecting to any condenser unit or evaporator unit.		N/A
	- For evaporating units, condensing units and condenser units, the instructions or markings shall include refrigerant charging instructions.		N/A
	- A warning to assure that partial units shall only be connected to an appliance suitable for the same refrigerant.		N/A
	- This unit <model xxx> is a partial unit air conditioner, complying with partial unit requirements of this International Standard, and must only be connected to other units that have been confirmed as complying to corresponding partial unit requirements of this International Standard.		N/A

	- The electrical interfaces shall be specified with purpose, voltage, current, and safety class of construction.		N/A
	- The SELV connection points, if provided, are to be clearly indicated in the instructions. The connection point should be marked with the "read the instructions" symbol per ISO 7000-0790 (2004-01) and the Class III symbol according to IEC 60417-5180 (2003- 02).		N/A
<b>8</b>	<b>PROTECTION AGAINST ACCESS TO LIVE PARTS</b>		—
8.1	Adequate protection against accidental contact with live parts		P
8.1.1	Requirement applies for all positions, detachable parts removed		P
	Lamps behind a detachable cover not removed, if conditions met		N/A
	Insertion or removal of lamps, protection against contact with live parts of the lamp cap		N/A
	Use of test probe B of IEC 61032, with a force not exceeding 1 N: no contact with live parts		P
	Use of test probe B of IEC 61032 through openings, with a force of 20 N: no contact with live parts		P
8.1.2	Use of test probe 13 of IEC 61032, with a force not exceeding 1 N, through openings in class 0 appliances and class II appliances/constructions: no contact with live parts		P
	Test probe 13 also applied through openings in earthed metal enclosures having a non-conductive coating: no contact with live parts		P
8.1.3	For appliances other than class II, use of test probe 41 of IEC 61032, with a force not exceeding 1 N: no contact with live parts of visible glowing heating elements or supporting parts		N/A
	For a single switching action obtained by a switching device, requirements as specified		N/A
	For appliances with a supply cord and without a switching device, the single switching action may be obtained by the withdrawal of the plug		N/A
8.1.4	Accessible part not considered live if:		—
	- safety extra-low a.c. voltage: peak value not exceeding 42,4 V		N/A
	- safety extra-low d.c. voltage: not exceeding 42,4 V		N/A
	- or separated from live parts by protective impedance		N/A
	If protective impedance: d.c. current not exceeding 2 mA, and		N/A
	a.c. peak value not exceeding 0,7 mA		N/A

	- for peak values over 42,4 V up to and including 450 V, capacitance not exceeding 0,1 $\mu$ F		N/A
	- for peak values over 450 V up to and including 15 kV, discharge not exceeding 45 $\mu$ C		N/A
	- for peak values over 15 kV, the energy in the discharge not exceeding 350 mJ		N/A
8.1.5	Live parts protected at least by basic insulation before installation or assembly:		—
	- built-in appliances		P
	- fixed appliances		P
	- appliances delivered in separate units		N/A
	As regards the products which have a dedicated installation panel or cover and which cannot be installed without them, compliance is checked according to 5.10 (after the installation as instructed in the installation manual).		N/A
8.2	Class II appliances and constructions constructed so that there is adequate protection against accidental contact with basic insulation and metal parts separated from live parts by basic insulation only		P
	Only possible to touch parts separated from live parts by double or reinforced insulation		P
<b>10</b>	<b>POWER INPUT AND CURRENT</b>		—
10.1	Power input at normal operating temperature, rated voltage and normal operation not deviating from rated power input by more than shown in table 1.....:	(see appended table)	P
	If the power input varies throughout the operating cycle and the maximum value of the power input exceeds, by a factor greater than two, the arithmetic mean value of the power input occurring during a representative period, the power input is the maximum value that is exceeded for more than 10 % of the representative period		N/A
	Otherwise the power input is the arithmetic mean value		P
	Test carried out at upper and lower limits of the ranges for appliances with one or more rated voltage ranges, unless		N/A
	the rated power input is related to the arithmetic mean value		N/A
10.2	Current at normal operating temperature, rated voltage and normal operation not deviating from rated current by more than shown in table 2.....:	(see appended table)	N/A
	If the current varies throughout the operating cycle and the maximum value of the current exceeds, by a factor greater than two, the arithmetic mean value of the current occurring during a representative period, the current is the maximum value that is exceeded for more than 10 % of the representative period		N/A

	Otherwise the current is the arithmetic mean value		P
	Test carried out at upper and lower limits of the ranges for appliances with one or more rated voltage ranges, unless		N/A
	the rated current is related to the arithmetic mean value of the range		N/A
<b>11</b>	<b>HEATING</b>		P
11.1	No excessive temperatures in normal use		P
	Compliance is checked by the tests of annex C, if :		---
	- temperature of motor winding exceeds values shown in table 3		N/A
	- there is doubt about classification of insulation system of the motor		N/A
11.2	Placing and mounting of appliance :		---
	- clearances to adjacent surfaces		P
	- flow rates for liquid source or sink equipment be minimum, except for hydronic fan coil units where flow rates and liquid temperatures be maximum		N/A
	- static pressures		N/A
	- means of adjusting the flow, flow for tests be minimum obtainable		N/A
	- adjustable limit controls set at maximum cut-out setting and minimum differential		N/A
	Appliances with supplementary heaters, use test casing of clause 11.9		N/A
11.2.1	Appliances with supplementary heaters, inlet duct connected to inlet air opening		N/A
	Appliance that includes or has provision for supplementary heater is fitted with a metal outlet duct in accordance with Figure 101a) or Figure 101b), depending on the direction of the airflow.		N/A
11.2.2	Ducted appliance without supplementary heaters, air outlet used		N/A
11.2.3	For the evaluation and testing of partial units, the following test setup and conditions are to be applied.		N/A
	- evaporator units and condenser units are tested as individual units at the maximum ambient temperature stated in the instructions. If not stated in the instructions, these units shall be tested at an ambient temperature that is equal to the saturated temperature of the refrigerant at the marked maximum allowable operating pressure ( $\pm 0,1$ MPa) minus 10 K ( $\pm 1$ K). (IEC 60335-2-40:2013, am1:2016)		N/A

	- condensing units are tested in the cooling mode only, at the maximum specified ambient temperature with 9 K ( $\pm 1$ K) sub-cooling and the maximum specified evaporating pressure with 11 K ( $\pm 1$ K) superheat. For condensing units provided with expansion device(s), the superheat/sub-cooling is to be as under the normal control of the expansion device(s).		N/A
	- evaporating units, intended for cooling only, are tested in the cooling mode only with a condensing pressure that is equal to the marked maximum allowable operating pressure ( $\pm 0,1$ MPa) with 9 K ( $\pm 1$ K) sub-cooling.		N/A
	- evaporating units that are intended for reverse cycle operation are tested in the heating mode only, at the maximum specified evaporating pressure. (IEC 60335-2-40:2013/,am1:2016)		N/A
11.3	Temperature rise determine by thermocouples or resistance method	Thermocouples	P
11.4	Test performed at supply voltage between 0,94 and 1,06 times the rated voltage		P
	Heating elements energized at voltage which gives an electrical input of 1,15 times maximum rated power input		N/A
11.5	Test conducted in heating mode and cooling mode, if both exist	Cooling only	N/A
	All supplementary heating elements operative simultaneously		N/A
11.6	Defrost test in most unfavourable conditions, if needed		N/A
11.7	Appliances operated continuously until steady conditions except for defrost tests		P
11.8	Temperatures not exceeding values of table 3	(See appended tables)	P
	Protective devices do not operate		P
	Sealing compound not flowing out		P
	Temperature of air in outlet duct not exceed 90 °C		N/A
11.9	Test casing and installation of appliances in accordance with manufacturer's instructions		N/A
	Glass fibre insulation for appliances without indication of minimum clearances according to manufacturer; thermocouple in contact with enclosure		N/A
<b>13</b>	<b>LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE</b>		—
13.1	Leakage current not excessive and electric strength adequate		P
	Heating appliances operated at 1,15 times the rated power input (W)..... :		N/A

	Motor-operated appliances and combined appliances supplied at 1,06 times the rated voltage (V).....:	1,06x230=243,8V;	P
	Protective impedance and radio interference filters disconnected before carrying out the tests		N/A
13.2	The leakage current is measured by means of the circuit described in figure 4 of IEC 60990:1999		P
	For stationary class I appliances, the leakage current shall not exceed 2 mA per kilowatt rated power input with a maximum value of 10 mA for appliances accessible to the general public, and a maximum value of 30 mA for appliances not accessible to the general public.		P
	Leakage current measurements.....: (see appended table)		P
13.3	The appliance is disconnected from the supply		P
	Electric strength tests according to table 4.....: (see appended table)		P
	No breakdown during the tests		P
<b>19</b>	<b>ABNORMAL OPERATION</b>		—
19.1	The risk of fire, mechanical damage or electric shock under abnormal or careless operation obviated		P
	Electronic circuits so designed and applied that a fault will not render the appliance unsafe .....		N/A
	Failure of transfer medium flow, or of any control device, does not result in a hazard		P
	Appliances are subjected to the tests specified in 19.2 to 19.10, 19.101, 19.102 and 19.103, as applicable.		P
	Appliances incorporating electronic circuits subjected to the tests of 19.11 and 19.12, as applicable		N/A
	Appliances incorporating contactors or relays subjected to the test of 19.14, being carried out before the tests of 19.11		N/A
	Appliances incorporating voltage selector switches subjected to the test of 19.15		N/A
	Unless otherwise specified, the tests are continued until a non-self-resetting thermal cut-out operates, or		N/A
	until steady conditions are established		P
	If a heating element or intentionally weak part becomes open-circuited, the relevant test is repeated on a second sample		N/A
19.13	During the tests the appliance does not emit flames, molten metal, poisonous or ignitable gas in hazardous amounts		P
	Temperature rises not exceeding the values shown in table 9.....: (see appended table)		P
	Compliance with clause 8 not impaired		P

	If the appliance can still be operated it complies with 20.2		P
	Insulation, other than of class III appliances or class III constructions that do not contain live parts, withstands the electric strength test of 16.3, the test voltage as specified in table 4:		—
	- basic insulation (V).....: 1000		P
	- supplementary insulation (V).....: 1750		P
	- reinforced insulation (V).....: 3000		P
	After operation or interruption of a control, clearances and creepage distances across the functional insulation withstand the electric strength test of 16.3, the test voltage being twice the working voltage		P
	The appliance does not undergo a dangerous malfunction, and		P
	no failure of protective electronic circuits, if the appliance is still operable		N/A
	Appliances tested with an electronic switch in the off position, or in the stand-by mode:		—
	- do not become operational, or		N/A
	- if they become operational, do not result in a dangerous malfunction during or after the tests of 19.11.4		N/A
	If the appliance contains lids or doors that are controlled by one or more interlocks, one of the interlocks may be released provided that:		—
	- the lid or door does not move automatically to an open position when the interlock is released, and		N/A
	- the appliance does not start after the cycle in which the interlock was released		N/A
19.101	Test of appliance with heat transfer medium flow of the outdoor heat exchanger restricted or shut off when reaching steady conditions		P
	Test of appliance with heat transfer flow of the indoor heat exchanger restricted or shut off when reaching steady conditions		P
	Disconnection of motor common to both the outdoor and the indoor heat exchangers when reaching steady conditions		N/A
19.103	Test of air to air appliances at rated voltage or at the upper limit of the rated voltage range. Dry-bulb temperature is 5 K below values specified by manufacturer (IEC 60335-2-40:2018)		N/A
	Test with the dry-bulb temperature 10 K over the values specified by manufacturer (IEC 60335-2-40:2018)		P
<b>23</b>	<b>INTERNAL WIRING</b>		----
23.1	Wireways smooth and free from sharp edges		P
	Wires protected against contact with burrs, cooling fins etc.		P

	Wire holes in metal well-rounded or provided with bushings		P
	Wiring effectively prevented from coming into contact with moving parts		P
23.2	Beads etc. on live wires cannot change their position, and are not resting on sharp edges		N/A
	Beads inside flexible metal conduits contained within an insulating sleeve		N/A
23.3	Electrical connections and internal conductors movable relatively to each other not exposed to undue stress		P
	Flexible metallic tubes not causing damage to insulation of conductors		N/A
	Open-coil springs not used		N/A
	Adequate insulating lining provided inside a coiled spring, the turns of which touch one another		N/A
	No damage after 10 000 flexings for conductors flexed during normal use, or		N/A
	100 flexings for conductors flexed during user maintenance		P
	Electric strength test of 16.3, 1000 V between live parts and accessible metal parts		P
	Not more than 10 % of the strands of any conductor broken, and		P
	not more than 30 % for wiring supplying circuits that consume no more than 15 W		N/A
23.4	Bare internal wiring sufficiently rigid and fixed		N/A
23.5	The insulation of internal wiring subjected to the supply mains voltage withstanding the electrical stress likely to occur in normal use		P
	Basic insulation electrically equivalent to the basic insulation of cords complying with IEC 60227 or IEC 60245, or		N/A
	no breakdown when a voltage of 2000 V is applied for 15 min between the conductor and metal foil wrapped around the insulation		P
	For class II construction, the requirements for supplementary insulation and reinforced insulation apply,		P
	except that the sheath of a cord complying with IEC 60227 or IEC 60245 may provide supplementary insulation.		N/A
	A single layer of internal wiring insulation does not provide reinforced insulation		P
23.6	Sleeving used as supplementary insulation on internal wiring retained in position by clamping at both ends, or		P
	be such that it can only be removed by breaking or cutting		N/A

23.7	The colour combination green/yellow only used for earthing conductors		P
23.8	Aluminium wires not used for internal wiring		P
23.9	Stranded conductors not consolidated by soldering where they are subjected to contact pressure, unless		P
	the contact pressure is provided by spring terminals		N/A
23.10	The insulation and sheath of internal wiring, incorporated in external hoses for the connection of an appliance to the water mains, at least equivalent to that of light polyvinyl chloride sheathed flexible cord (60227 IEC 52)		N/A
23.101	Wires protected if they can be damaged by contact with refrigerant piping.	Sheath on wires	P
<b>25</b>	<b>SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CORDS</b>		----
25.1	Appliance not intended for permanent connection to fixed wiring, means for connection to the supply:		----
	- supply cord fitted with a plug, the current rating and voltage rating of the plug being not less than the corresponding ratings of its associated appliance		N/A
	- an appliance inlet having at least the same degree of protection against moisture as required for the appliance, or		N/A
	- pins for insertion into socket-outlets		N/A
	Supply cord fitted with plug provided, if:		----
	- supply cord with a plug is for indoor use only		N/A
	- marked with rating of 25 A or less and		N/A
	- complies with code requirements of country where it will be used		N/A
	Appliance inlet not allowed		N/A
25.2	Appliance not provided with more than one means of connection to the supply mains		P
	Stationary appliance for multiple supply may be provided with more than one means of connection, provided electric strength test of 1250 V for 1 min between each means of connection causes no breakdown		N/A
25.3	Appliance intended to be permanently connected to fixed wiring provided with one of the following means for connection to the supply mains:		----
	- a set of terminals allowing the connection of a flexible cord		N/A
	- a fitted supply cord		N/A
	- a set of supply leads accommodated in a suitable compartment		N/A

	- a set of terminals for the connection of cables of fixed wiring, cross-sectional areas specified in 26.6, and the appliance allows the connection of the supply conductors after the appliance has been fixed to its support		P
	- a set of terminals and cable entries, conduit entries, knock-outs or glands, allowing connection of appropriate types of cable or conduit, and the appliance allows the connection of the supply conductors after the appliance has been fixed to its support		N/A
	For a fixed appliance constructed so that parts can be removed to facilitate easy installation, this requirement is met if it is possible to connect the fixed wiring without difficulty after a part of the appliance has been fixed to its support		P
25.4	Cable and conduit entries, rated current of appliance not exceeding 16 A, dimension according to table 10 (mm).....:		N/A
	Introduction of conduit or cable does not reduce clearances or creepage distances below values specified in clause 29		N/A
25.5	Method for assembling the supply cord to the appliance:		----
	- type X attachment		N/A
	- type Y attachment		P
	- type Z attachment, if allowed in relevant part 2		N/A
	Type X attachment, other than those with a specially prepared cord, not used for flat twin tinsel cords		N/A
	For multi-phase appliances supplied with a supply cord and that are intended to be permanently connected to fixed wiring, the supply cord is assembled to the appliance by type Y attachment		N/A
25.6	Plugs fitted with only one flexible cord		N/A
25.7	Supply cords, other than for class III appliances, being one of the following types:		----
	- rubber sheathed (at least 60245 IEC 53)		N/A
	- polychloroprene sheathed (at least 60245 IEC 57)		N/A
	- polyvinyl chloride sheathed. Not used if they are likely to touch metal parts having a temperature rise exceeding 75 K during the test of clause 11		----
	- light polyvinyl chloride sheathed cord (60227 IEC 52), for appliances not exceeding 3 kg		N/A
	- ordinary polyvinyl chloride sheathed cord (60227 IEC 53), for other appliances		N/A
	- heat resistant polyvinyl chloride sheathed. Not used for type X attachment other than specially prepared cords		----
	- heat-resistant light polyvinyl chloride sheathed cord (60227 IEC 56), for appliances not exceeding 3 kg		N/A
	- heat-resistant polyvinyl chloride sheathed cord (60227 IEC 57), for other appliances		N/A

	- halogen-free, low smoke, thermoplastic insulated and sheathed	----
	- light duty halogen-free low smoke flexible cable (62821 IEC 101) for circular cable and (62821 IEC 101f) for flat cable	N/A
	- Ordinary duty halogen-free low smoke flexible cable (62821 IEC 102) for circular cable and (62821 IEC 102f) for flat cable	N/A
	Supply cords for class III appliances adequately insulated	N/A
	Test with 500 V for 2 min for supply cords of class III appliances that contain live parts	N/A
	Supply cords for outdoor use not lighter than polychloroprene sheathed flexible cord (60245 IEC 57)	P
25.8	Nominal cross-sectional area of supply cords not less than table 11; rated current (A); cross-sectional area (mm <sup>2</sup> ).....:.....	Rated current: 19,0A; cross-sectional area: min. 2,5mm <sup>2</sup>
25.9	Supply cords not in contact with sharp points or edges	P
25.10	Supply cord of class I appliances have a green/yellow core for earthing	P
	In multi-phase appliances, the colour of the neutral conductor of the supply cord is blue	N/A
	Where additional neutral conductors are provided in the supply cord:	----
	- other colours may be used for these additional neutral conductors;	N/A
	- all of the neutral conductors and line conductors are identified by marking using the alpha numeric notation specified in IEC 60445	N/A
	- the supply cord is fitted to the appliance	N/A
25.11	Conductors of supply cords not consolidated by soldering where they are subject to contact pressure, unless	P
	the contact pressure is provided by spring terminals	N/A
25.12	Insulation of the supply cord not damaged when moulding the cord to part of the enclosure	N/A
25.13	Inlet openings so constructed as to prevent damage to the supply cord	P
	If it is not evident that the supply cord can be introduced without risk of damage, a non-detachable lining or bushing complying with 29.3 for supplementary insulation provided	N/A
	If unsheathed supply cord, a similar additional bushing or lining is required, unless the appliance is	N/A
	class 0, or	N/A
	a class III appliance not containing live parts	N/A
25.14	Supply cords moved while in operation adequately protected against excessive flexing	N/A
	Flexing test, as described:	----

	- applied force (N).....: .....		N/A
	- number of flexings.....: .....		N/A
	The test does not result in:		----
	- short-circuit between the conductors, such that the current exceeds a value of twice the rated current		N/A
	- breakage of more than 10% of the strands of any conductor		N/A
	- separation of the conductor from its terminal		N/A
	- loosening of any cord guard		N/A
	- damage to the cord or the cord guard		N/A
	- broken strands piercing the insulation and becoming accessible		N/A
25.15	For appliances with supply cord and appliances to be permanently connected to fixed wiring by a flexible cord, conductors of the supply cord relieved from strain, twisting and abrasion by use of cord anchorage		P
	The cord cannot be pushed into the appliance to such an extent that the cord or internal parts of the appliance can be damaged		P
	Pull and torque test of supply cord:		----
	- fixed appliances: pull 100 N; torque (not on automatic cord reel) (Nm).....: .....	100N, 0,35Nm	P
	- other appliances: values shown in table 12: mass (kg); pull (N); torque (not on automatic cord reel) (Nm).....: .....		N/A
	Cord not damaged and max. 2 mm displacement of the cord		P
25.16	Cord anchorages for type X attachments constructed and located so that:		----
	- replacement of the cord is easily possible		N/A
	- it is clear how the relief from strain and the prevention of twisting are obtained		N/A
	- they are suitable for different types of supply cord		N/A
	- cord cannot touch the clamping screws of cord anchorage if these screws are accessible, unless		N/A
	they are separated from accessible metal parts by supplementary insulation		N/A
	- the cord is not clamped by a metal screw which bears directly on the cord		N/A
	- at least one part of the cord anchorage securely fixed to the appliance, unless		N/A
	it is part of a specially prepared cord		N/A
	- screws which have to be operated when replacing the cord do not fix any other component, unless		N/A
	the appliance becomes inoperative or incomplete or the parts cannot be removed without a tool		N/A

	- if labyrinths can be bypassed the test of 25.15 is nevertheless withstood		N/A
	- for class 0, 0I and I appliances they are of insulating material or are provided with an insulating lining, unless		N/A
	failure of the insulation of the cord does not make accessible metal parts live		N/A
	- for class II appliances they are of insulating material, or		N/A
	if of metal, they are insulated from accessible metal parts by supplementary insulation		N/A
	After the test of 25.15, under the conditions specified, the conductors have not moved by more than 1 mm in the terminals		N/A
25.17	Adequate cord anchorages for type Y and Z attachment, test with the cord supplied with the appliance		P
25.18	Cord anchorages only accessible with the aid of a tool, or		P
	Constructed so that the cord can only be fitted with the aid of a tool		N/A
25.19	Type X attachment, glands not used as cord anchorage in portable appliances		N/A
	Tying the cord into a knot or tying the cord with string not used		N/A
25.20	The conductors of the supply cord for type Y and Z attachment insulated from accessible metal parts		P
25.21	Space for supply cord for type X attachment or for connection of fixed wiring constructed:		----
	- to permit checking of conductors with respect to correct positioning and connection before fitting any cover		P
	- so there is no risk of damage to the conductors or their insulation when fitting the cover		P
	- for portable appliances, so that the uninsulated end of a conductor, if it becomes free from the terminal, prevented from contact with accessible metal parts		P
	2 N test to the conductor for portable appliances; no contact with accessible metal parts		P
25.22	Appliance inlets:		----
	- live parts not accessible during insertion or removal		N/A
	Requirement not applicable to appliance inlets complying with IEC 60320- 1		N/A
	- connector can be inserted without difficulty		N/A
	- the appliance is not supported by the connector		N/A
	- not for cold conditions if temp. rise of external metal parts exceeds 75 K during clause 11, unless		N/A

	the supply cord is unlikely to touch such metal parts		N/A
25.23	Interconnection cords comply with the requirements for the supply cord, except that:		----
	- the cross-sectional area of the conductors is determined on the basis of the maximum current during clause 11		P
	- the thickness of the insulation may be reduced		P
	- for class I or class II appliance with class III construction, the cross sectional areas of the conductors need not comply with 25.8 if specified conditions are met		N/A
	If necessary, electric strength test of 16.3		N/A
25.24	Interconnection cords not detachable without the aid of a tool if compliance with this standard is impaired when they are disconnected		P
25.25	Dimensions of pins that are inserted into socket-outlets compatible with the dimensions of the relevant socket-outlet.		N/A
	Dimensions of pins and engagement face in accordance with the dimensions of the relevant plug in IEC/TR 60083		N/A
<b>27</b>	<b>PROVISION FOR EARTHING</b>		----
27.1	Accessible metal parts of class 0I and I appliances permanently and reliably connected to an earthing terminal or earthing contact of the appliance inlet		P
	Earthing terminals and earthing contacts not connected to the neutral terminal		P
	Class 0, II and III appliances have no provision for protective earthing		N/A
	Class II appliances and class III appliances can incorporate an earth for functional purposes		N/A
	Safety extra-low voltage circuits not earthed, unless		N/A
	protective extra-low voltage circuits		N/A
27.2	Clamping means of earthing terminals adequately secured against accidental loosening		P
	Terminals for the connection of external equipotential bonding conductors allow connection of conductors of 2,5 to 6 mm <sup>2</sup> , and		N/A
	- do not provide earthing continuity between different parts of the appliance, and		N/A
	- conductors cannot be loosened without the aid of a tool		N/A
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A

27.3	For a detachable part having an earth connection and being plugged into another part of the appliance, the earth connection is made before and separated after current-carrying connections when removing the part		N/A
	For appliances with supply cords, current-carrying conductors become taut before earthing conductor, if the cord slips out of the cord anchorage		P
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
27.4	No risk of corrosion resulting from contact between parts of the earthing terminal and the copper of the earthing conductor or other metal		P
	Parts providing earthing continuity, other than parts of a metal frame or enclosure, have adequate resistance to corrosion		P
	If of steel, these parts provided with an electroplated coating with a thickness at least 5 µm		P
	Adequate protection against rusting of parts of coated or uncoated steel, only intended to provide or transmit contact pressure		P
	In the body of the earthing terminal is a part of a frame or enclosure of aluminium or aluminium alloys, precautions taken to avoid risk of corrosion		P
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
27.5	Low resistance of connection between earthing terminal and earthed metal parts		P
	This requirement does not apply to connections providing earthing continuity in the protective extra-low voltage circuit, provided the clearances of basic insulation are based on the rated voltage of the appliance		N/A
	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
	Resistance not exceeding 0,1 Ω at the specified low-resistance test (Ω).....:	Max. 0.023Ω	P
	If the ground continuity between system components meets the minimum values specified in 27.5, it is considered to meet the requirements without dedicated grounding conductors. (IEC 60335-2-40:2018)		N/A
27.6	The printed conductors of printed circuit boards not used to provide earthing continuity in hand-held appliances.		N/A
	They may be used to provide earthing continuity in other appliances if at least two tracks are used with independent soldering points and the appliance complies with 27.5 for each circuit		N/A

	Requirements not applicable to class II appliances and class III appliances that incorporate an earth for functional purposes		N/A
<b>28</b>	<b>SCREWS AND CONNECTIONS</b>		----
28.1	Fixings, electrical connections and connections providing earthing continuity withstand mechanical stresses		P
	Screws not of soft metal liable to creep, such as zinc or aluminium		P
	Diameter of screws of insulating material min. 3 mm		N/A
	Screws of insulating material not used for any electrical connections or connections providing earthing continuity		N/A
	Screws used for electrical connections or connections providing earthing continuity screwed into metal		P
	Screws not of insulating material if their replacement by a metal screw can impair supplementary or reinforced insulation		N/A
	For type X attachment, screws to be removed for replacement of supply cord or for user maintenance, not of insulating material if their replacement by a metal screw impairs basic insulation		N/A
	For screws and nuts; torque-test as specified in table 14.....:	(see appended table)	P
28.2	Electrical connections and connections providing earthing continuity constructed so that contact pressure is not transmitted through non-ceramic insulating material liable to shrink or distort, unless		P
	there is resiliency in the metallic parts to compensate for shrinkage or distortion of the insulating material		N/A
	This requirement does not apply to electrical connections in circuits of appliances for which:		----
	- 30.2.2 is applicable and that carry a current not exceeding 0,5 A		N/A
	- 30.2.3 is applicable and that carry a current not exceeding 0,2 A		N/A
28.3	Space-threaded (sheet metal) screws only used for electrical connections if they clamp the parts together		N/A
	Thread-cutting (self-tapping) screws and thread rolling screws only used for electrical connections if they generate a full form standard machine screw thread		N/A
	Thread-cutting (self-tapping) screws not used if they are likely to be operated by the user or installer		P

	Thread-cutting, thread rolling and space threaded screws may be used in connections providing earthing continuity provided it is not necessary to disturb the connection:	----
	- in normal use,	P
	- during user maintenance,	P
	- when replacing a supply cord having a type X attachment, or	N/A
	- during installation	P
	At least two screws being used for each connection providing earthing continuity, unless	P
	the screw forms a thread having a length of at least half the diameter of the screw	N/A
28.4	Screws and nuts that make mechanical connection secured against loosening if they also make electrical connections or connections providing earthing continuity	P
	This requirement does not apply to screws in the earthing circuit if at least two screws are used, or	P
	if an alternative earthing circuit is provided	N/A
	Rivets for electrical connections or connections providing earthing continuity secured against loosening if the connections are subjected to torsion	N/A
29	<b>CLEARANCES, CREEPAGE DISTANCES AND SOLID INSULATION</b>	----
	Clearances, creepage distances and solid insulation withstand electrical stress	P
	For coatings used on printed circuits boards to protect the microenvironment (Type 1) or to provide basic insulation (Type 2), annex J applies.....:	N/A
	The microenvironment is pollution degree 1 under type 1 protection	N/A
	For type 2 protection, the spacing between the conductors before the protection is applied is not less than the values specified in Table 1 of IEC 60664-3	N/A
	These values apply to functional, basic, supplementary and reinforced insulation.....:	N/A
	For motor- compressor not complying with IEC 60335-2-34, additions and modifications as specified (IEC 60335-2-40:2018)	P
29.1	Clearances not less than the values specified in table 16, taking into account the rated impulse voltage for the overvoltage categories of table 15, unless.....:	(see appended table)
	for basic insulation and functional insulation they comply with the impulse voltage test of clause 14	N/A

	However, if the distances are affected by wear, distortion, movement of the parts or during assembly, the clearances for rated impulse voltages of 1500 V and above are increased by 0,5 mm and the impulse voltage test is not applicable		P
	For appliances intended for use at altitudes exceeding 2 000 m, the clearances in Table 16 is increased according to the relevant multiplier values in Table A.2 of IEC 60664- 1		N/A
	Impulse voltage test is not applicable:		----
	- when the microenvironment is pollution degree 3, or		P
	- for basic insulation of class 0 and class 01 appliances, or		N/A
	- to appliances intended for use at altitudes exceeding 2 000 m		N/A
	Appliances are in overvoltage category II		P
	A force of 2 N is applied to bare conductors, other than heating elements		P
	A force of 30 N is applied to accessible surfaces		P
29.1.1	Clearances of basic insulation withstand the overvoltages, taking into account the rated impulse voltage		P
	The values of table 16 or the impulse voltage test of clause 14 are applicable.....:	(see appended table)	P
	Clearance at the terminals of tubular sheathed heating elements may be reduced to 1,0 mm if the microenvironment is pollution degree 1		N/A
	Lacquered conductors of windings considered to be bare conductors		P
29.1.2	Clearances of supplementary insulation not less than those specified for basic insulation in table 16 .....	(see appended table)	P
29.1.3	Clearances of reinforced insulation not less than those specified for basic insulation in table 16, using the next higher step for rated impulse voltage .....	(see appended table)	P
	For double insulation, with no intermediate conductive part between basic and supplementary insulation, clearances are measured between live parts and the accessible surface, and the insulation system is treated as reinforced insulation		N/A
29.1.4	Clearances for functional insulation are the largest values determined from:		----
	- table 16 based on the rated impulse voltage.....:	(see appended table)	P
	- table F.7a in IEC 60664- 1, frequency not exceeding 30 kHz		N/A
	- clause 4 of IEC 60664- 4, frequency exceeding 30 kHz		N/A

	If values of table 16 are largest, the impulse voltage test of clause 14 may be applied instead, unless		N/A
	the microenvironment is pollution degree 3, or		N/A
	the distances can be affected by wear, distortion, movement of the parts or during assembly		N/A
	However, clearances are not specified if the appliance complies with clause 19 with the functional insulation short-circuited		P
	Lacquered conductors of windings considered to be bare conductors		P
	However, clearances at crossover points are not measured		P
	Clearance between surfaces of PTC heating elements may be reduced to 1 mm		N/A
29.1.5	Appliances having higher working voltages than rated voltage, clearances for basic insulation are the largest values determined from:	----	
	- table 16 based on the rated impulse voltage.....:	P	
	- table F.7a in IEC 60664- 1, frequency not exceeding 30 kHz		N/A
	- clause 4 of IEC 60664- 4, frequency exceeding 30 kHz		N/A
	If clearances for basic insulation are selected from Table F.7a of IEC 60664- 1 or clause 4 of IEC 60664- 4, the clearances of supplementary insulation are not less than those specified for basic insulation		N/A
	If clearances for basic insulation are selected from Table F.7a of IEC 60664- 1, the clearances of reinforced insulation dimensioned as specified in Table F.7a are to withstand 160 % of the withstand voltage required for basic insulation		N/A
	If clearances for basic insulation are selected from clause 4 of IEC 60664- 4, the clearances of reinforced insulation are twice the value required for basic insulation		N/A
	If the secondary winding of a step-down transformer is earthed, or if there is an earthed screen between the primary and secondary windings, clearances of basic insulation on the secondary side not less than those specified in table 16, but using the next lower step for rated impulse voltage		N/A
	Circuits supplied with a voltage lower than rated voltage, clearances of functional insulation are based on the working voltage used as the rated voltage in table 15		N/A
29.2	Creepage distances not less than those appropriate for the working voltage, taking into account the material group and the pollution degree.....:	(see appended table)	P
	Pollution degree 2 applies, unless		P

	- precautions taken to protect the insulation; pollution degree 1		N/A
	- insulation subjected to conductive pollution; pollution degree 3		P
	A force of 2 N is applied to bare conductors, other than heating elements		P
	A force of 30 N is applied to accessible surfaces		P
	In a double insulation system, the working voltage for both the basic and supplementary insulation is taken as the working voltage across the complete double insulation system		N/A
	Insulation located in airflow, pollution degree 3 unless		P
	insulation enclosed or located so that unlikely to be exposed to pollution due to normal use		N/A
29.2.1	Creepage distances of basic insulation not less than specified in table 17.....:	(see appended table)	P
	However, if the working voltage is periodic and has a frequency exceeding 30 kHz, the creepage distances are also determined from table 2 of IEC 60664-4, these values being used if exceeding the values in table 17.....:		N/A
	Except for pollution degree 1, corresponding creepage distance not less than the minimum specified for the clearance in table 16, if the clearance has been checked according to the test of clause 14.....:		N/A
29.2.2	Creepage distances of supplementary insulation at least those specified for basic insulation in table 17, or.....:	(see appended table)	P
	Table 2 of IEC 60664-4, as applicable.....:		N/A
29.2.3	Creepage distances of reinforced insulation at least double those specified for basic insulation in table 17, or.....:	(see appended table)	P
	Table 2 of IEC 60664-4, as applicable.....:		N/A
29.2.4	Creepage distances of functional insulation not less than specified in table 18.....:	(see appended table)	P
	However, if the working voltage is periodic and has a frequency exceeding 30 kHz, the creepage distances are also determined from table 2 of IEC 60664-4, these values being used if exceeding the values in table 18.....:		N/A
	Creepage distances may be reduced if the appliance complies with clause 19 with the functional insulation short-circuited		P
29.3	Supplementary and reinforced insulation have adequate thickness, or a sufficient number of layers, to withstand the electrical stresses		P
	Compliance checked:		----
	- by measurement, in accordance with 29.3.1, or		P

	- by an electric strength test in accordance with 29.3.2, or		P
	- for insulation, other than single layer internal wiring insulation, by an assessment of the thermal quality of the material combined with an electric strength test, in accordance with 29.3.3, and		P
	for accessible parts of reinforced insulation consisting of a single layer, by measurement in accordance with 29.3.4, or		N/A
	- by an assessment of the thermal quality of the material according to 29.3.3 combined with an electric strength test in accordance with 23.5, for each single layer internal wiring insulation touching each other, or		N/A
	- as specified in subclause 6.3 of IEC 60664-4 for insulation that is subjected to any periodic voltage having a frequency exceeding 30 kHz		N/A
29.3.1	Supplementary insulation have a thickness of at least 1 mm		P
	Reinforced insulation have a thickness of at least 2 mm		P
29.3.2	Each layer of material withstand the electric strength test of 16.3 for supplementary insulation		P
	Supplementary insulation consist of at least 2 layers		P
	Reinforced insulation consist of at least 3 layers		N/A
29.3.3	The insulation is subjected to the dry heat test Bb of IEC 60068-2-2, followed by		P
	the electric strength test of 16.3		P
	If the temperature rise during the tests of clause 19 does not exceed the value specified in table 3, the test of IEC 60068-2-2 is not carried out		P
29.3.4	Thickness of accessible parts of reinforced insulation consisting of a single layer not less than specified in table 19..... :		N/A

11.8	TABLE:			P
	Test voltage (V).....	240x1,06=254.4		—
	Ambient (°C).....	Cooling mode: Indoor(DB/WB) 32/23°C; outdoor(DB/WB) 43/26°C		—
Thermocouple locations		Max. temperature measured, T (°C)	Max. temperature limit, T (°C)	
		Cooling	Heating	
Internal fan	37.6	—	150	
Internal blower motor	31.62	—	150	
Internal electrolytic capacitor	40.03	—	105	
Internal transformer	38.28	—	115	
Internal choke coil	37.79	—	120	
Internal X capacitor	37.05	—	100	
Internal varistor	38.79	—	85	
Internal PCB	33.55	—	145	
Internal fan wire	33.37	—	105	
Internal power wire	33.59	—	75	
Internal Y capacitor	36.06	—	100	
Internal terminal board	32	—	85	
Internal exhaust	18.12	—	/	
External terminal board	49.46	—	85	
External fan	53.6	—	150	
External relay	67.4	—	85	
External electrolytic capacitor	70.38	—	105	
External PFC inductor	86.81	—	120	
External X capacitor	63.54	—	100	
External X capacitor	68.03	—	100	
External varistor	63.94	—	85	
External choke coil	74.89	—	120	
External PCB	65.05	—	145	
External fan wire	57.97	—	105	
External compressor wire	58.17	—	105	
External power wire	60.58	—	75	
Supplementary information: --				

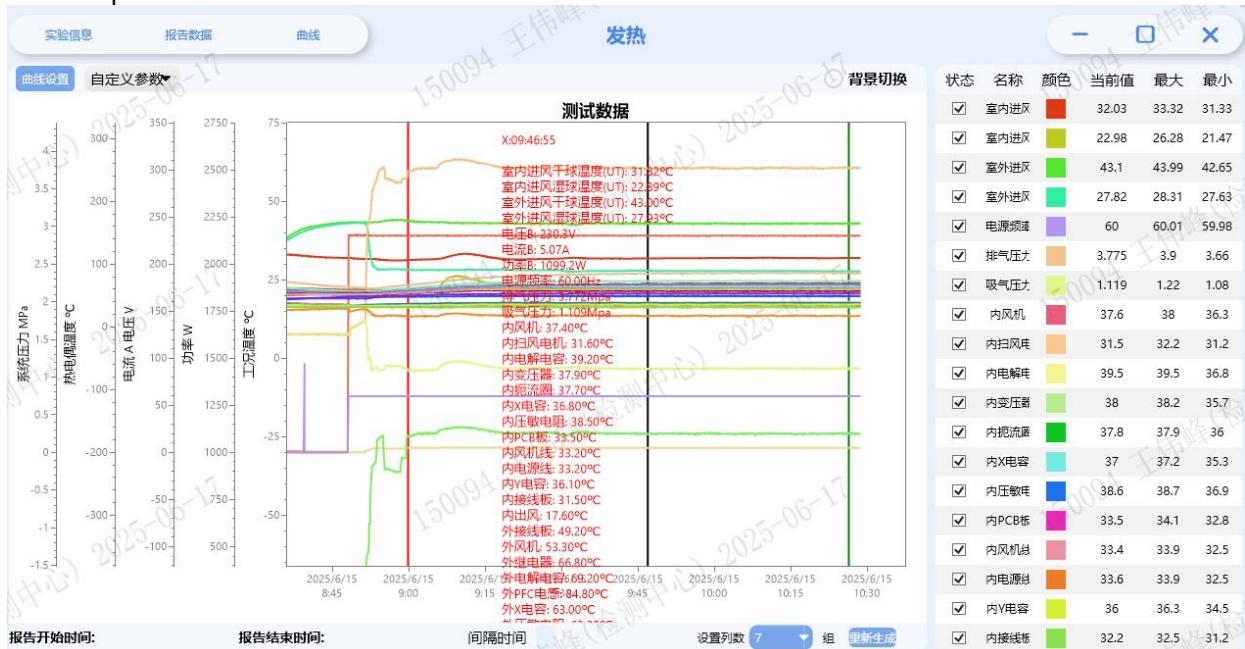
13.2	TABLE: Leakage current			P
	Heating appliances: 1,15 x rated input (W).....		N/A	—

	Motor-operated and combined appliances: 1,06 x rated voltage (V).....	254,4V; 60Hz	—
Leakage current between		I (mA)	Max. allowed I (mA)
Live parts and accessible earthed metal part	1.224		2
Live parts and plastic enclosure	Max. 0,0031peak	0.25 peak	
Supplementary information: tested for all models and recorded maximum value.			

13.3	TABLE: Dielectric strength	P
Test voltage applied between:	Test potential applied (V)	Breakdown / flashover (Yes/No)
Live parts and accessible earthed metal part	1000	No
Live parts and plastic enclosure	3000	No
Supplementary information:		

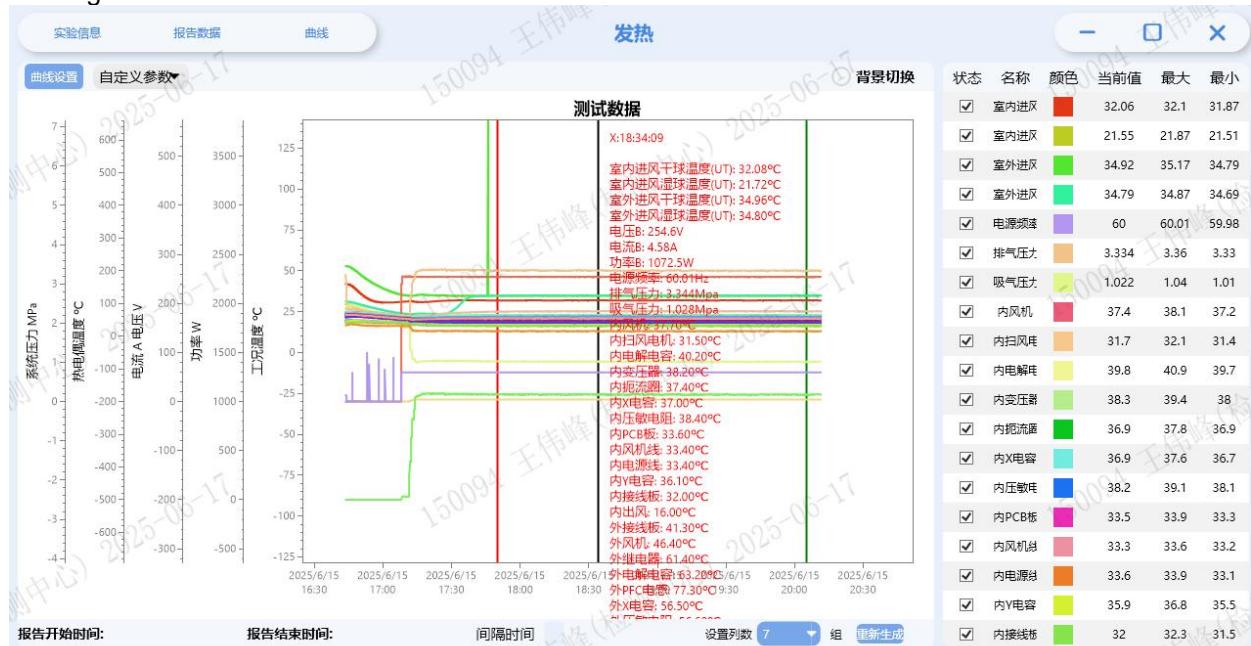
## Photo documents:

## Power input and current





### Heating test

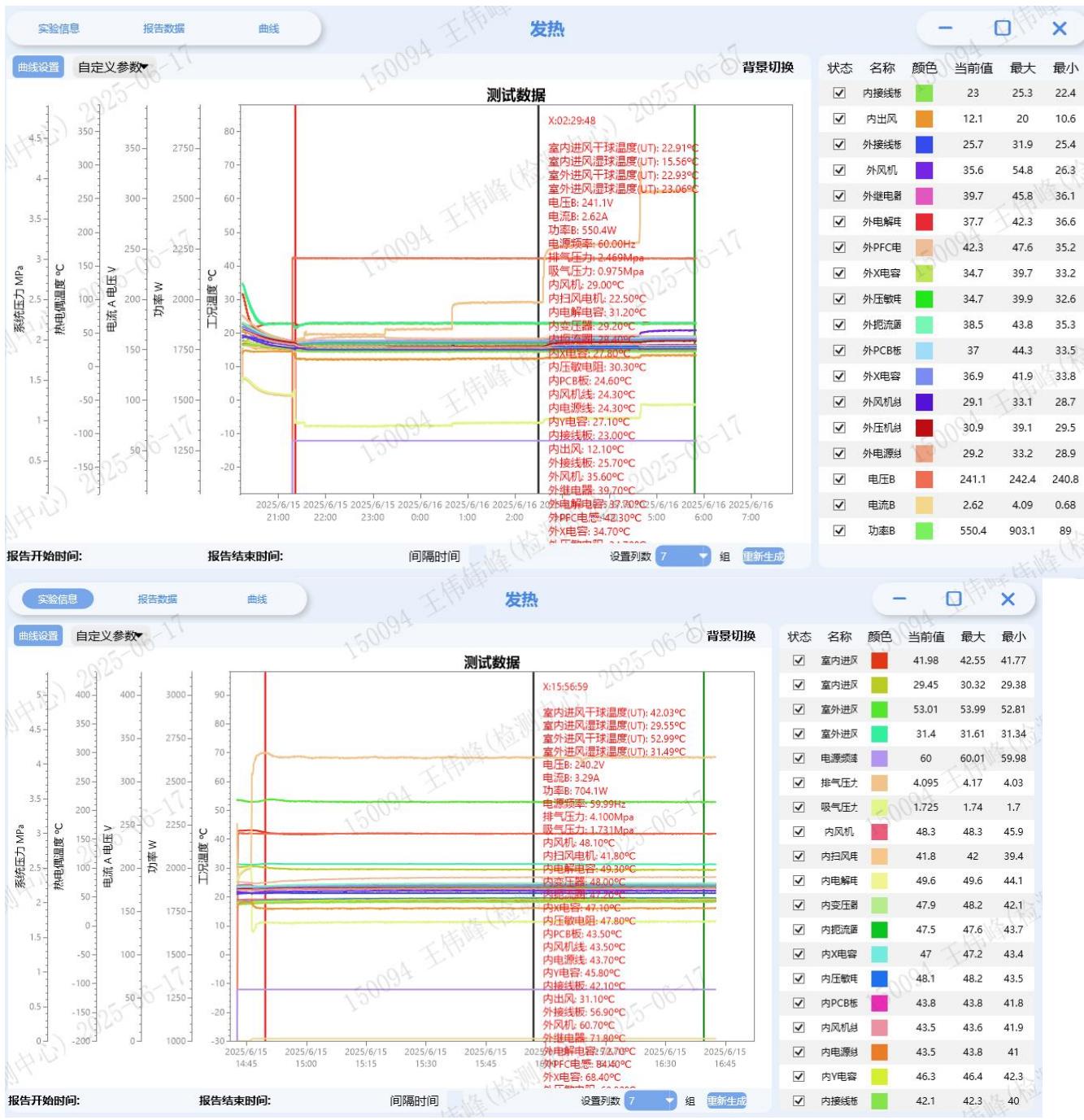


### Leakage current and electric strength





Abnormal operation



PROVISION FOR EARTHING





----End of Report----