



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.....	ABUV-ESH-P21112748-A3 Supplement "A3" to "Test report No. ABUG-ESH-P21112748 dated on 2021-12-15"
Date of issue	2023-03-28
Total number of pages	48
Name of Testing Laboratory preparing the Report	LCIE CHINA Company Limited Building 4, No. 518, XinZhuan Road, CaoHejing Songjiang High-Tech Park, Shanghai, P.R.C(201612)
Applicant's name	Qingdao Haier Air Conditioner General Corp. Ltd.
Address	No.1 Haier Road, Hi-Tech Zone, Qingdao 266101, P.R. China
Test specification:	
Standard	IEC 60335-2-40:2002, AMD1:2005, COR1:2006, AMD2:2005 in conjunction with IEC 60335-1:2010, AMD1:2013, AMD2:2016
Test procedure.....	CE
Non-standard test method.....	N/A
Test Report Form No.	IEC60335_2_40R
Test Report Form(s) Originator ...	VDE Prüf- und Zertifizierungsinstitut GmbH
Master TRF	Dated 2020-04-30
<i>This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/ and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.</i>	

Test item description:	Split type room air conditioner		
Trade Mark			
Manufacturer:	Qingdao Haier Air Conditioner General Corp. Ltd. No.1 Haier Road, Hi-Tech Zone, Qingdao 266101, P.R. China		
Model/Type reference:	AS18TBRHRA (indoor unit) with 1U18MRAFR (outdoor unit) HEC50T0-IN (indoor unit) with HEC50T0-OU (outdoor unit) HSU-18T0R32(DB)-IN (indoor unit) with HSU-18T0R32(DB)-OUT (outdoor unit) TRK18INVDMEI(indoor unit) with TRK18INVDMEO (outdoor unit) OLE-18DIH(indoor unit) with OLE-18DIH (outdoor unit) AS18PCBHRA (indoor unit) with 1U18MERFRA (outdoor unit) AS50PCBHRA (indoor unit) with 1U50MERFRA (outdoor unit) AS50RCBHRA (indoor unit) with 1U50MERFRA (outdoor unit) AS50RCBHRA-TU (indoor unit) with 1U50MERFRA-TU (outdoor unit)		
Ratings	See the model list on Page 3.		
Testing procedure and testing location:			
☒	Testing Laboratory:	LCIE CHINA Company Limited	
Testing location/ address:		Building 4, No. 518, Xin Zhuan Road, CaoHejing Songjiang High-Tech Park, Shanghai, P.R.C (201612)	
Tested by (name + signature)		Project Engineer: Jason Kong	
Approved by (name + signature)		Product Line Manager Tim GUO	
☐	Testing procedure: CTF Stage 1:		
Testing location/ address:			
Tested by (name + signature)			
Approved by (name + signature)			
☐	Testing procedure: CTF Stage 2:		
Testing location/ address:			
Tested by (name + signature)			
Witnessed by (name + signature)			
Approved by (name + signature)			
☐	Testing procedure:		

CTF Stage 3 or 4:		
Testing location/ address..... :		
Tested by (name + signature) :		
Witnessed by (name + signature) :		
Approved by (name + signature) :		
Supervised by (name + signature)..... :		

The model list:

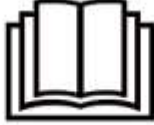
220-240V~, 50Hz, Class I, Max work pressure: 4,3MPa, outdoor unit: IPX4, T1				
Model No.	Rated power input	Rated current input	Refrigerant	Trade Mark
AS18TBRHRA (indoor unit) with 1U18MRAFRA (outdoor unit)	1,75kW	7,5A	R32/ 0,68kg	Haier
HEC50T0-IN (indoor unit) with HEC50T0-OU (outdoor unit)	1,75kW	7,5A	R32/ 0,68kg	HEC
HSU-18T0R32(DB)-IN (indoor unit) with HSU-18T0R32(DB)-OUT (outdoor unit)	1,75kW	7,5A	R32/ 0,68kg	N/A
TRK18INVDMEI(indoor unit) with TRK18INVDMEO (outdoor unit)	1,75kW	7,5A	R32/ 0,68kg	Tronic
OLE-18DIH(indoor unit) with OLE-18DIH (outdoor unit)	1,75kW	-	R32/ 0,68kg	 OLEFINI
AS18PCBHRA (indoor unit) with 1U18MERFRA (outdoor unit)	1,90kW	8,6A	R32/ 0,78kg	Haier
AS50PCBHRA (indoor unit) with 1U50MERFRA (outdoor unit)	1,90kW	8,6A	R32/ 0,78kg	Haier
AS50RCBHRA (indoor unit) with 1U50MERFRA (outdoor unit)	1,90kW	8,6A	R32/ 0,78kg	Haier
AS50RCBHRA-TU (indoor unit) with 1U50MERFRA-TU (outdoor unit)	1,90kW	8,6A	R32/ 0,78kg	Haier

List of Attachments (including a total number of pages in each attachment): Appendix 1: EU differences of EN 60335-2-40:2003 +A11:2004 +A12:2005 +A1:2006 +A2:2009 + A13:2012, EN 60335-1:2012 +A11:2014 +A13:2017 +A1:2019 +A14:2019 +A2:2019+A15:2021 and EN 62233:2008 (Page 45 - 48)	
Summary of testing: The products were tested according to: EN 60335-1:2012 +A11:2014 +A13:2017 +A1:2019 +A14:2019 +A2:2019 +A15:2021 EN 60335-2-40:2003 +A11:2004 +A12:2005 +A1:2006 +A2:2009 + A13:2012 EN 62233:2008	
Tests performed (name of test and test clause): After technical evaluation, Cl. 7 and Cl. 24 were checked. Other test data were based on the original report. All test results were found complying with the standards.	Testing location: LCIE CHINA Company Limited Building 4, No. 518, Xin Zhuan Road, CaoHejing Songjiang High-Tech Park, Shanghai, P.R.C (201612)
Summary of compliance with National Differences (List of countries addressed): EU Group Differences EN 60335-1:2012 +A11:2014 +A13:2017 +A1:2019 +A14:2019 +A2:2019 +A15:2021 EN 60335-2-40:2003 +A11:2004 +A12:2005 +A1:2006 +A2:2009 + A13:2012 EN 62233:2008	

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.

AS18TBRHRA (indoor unit) with 1U18MRAFRA (outdoor unit)

Haier CE 		Power supply	1PH,220-240V~,50Hz
MODEL: AS18TBRHRA		Anti-electric shock	Class I
Split type room air conditioner		Net Weight	8.7 kg
		Air volume	700m³/h
  		Manufacture date	
		MADE IN P.R.C.	
		Manufactured by Haier	
		0011519671	

Haier CE 	
MODEL: 1U18MRAFRA	
Single split type room air conditioner outdoor unit	
ITEM	PARAMETER
Pdesignnc Capacity (kW)	4.60
SEER	6.3
Heating Capacity (kW)	4.60
Pdesignnh Capacity (kW)	3.30
SCOP	4.0
Rated power input (kW)	1.75
Rated current (A)	7.5
Power supply	220-240V~,50Hz
Climate class	T1
Anti-electric shock	Class I
Net weight	29.2 kg
Max work pressure	4.3 MPa
Refrigerant	R32 0.68kg
GWP	675
Equivalent CO ₂	0.46t
 IPX4	
  	
 	
The product contains fluorinated greenhouse gases and its functioning relies upon such gases. Manufacture date: On the bar code	
0011519685	

HEC50T0-IN (indoor unit) with HEC50T0-OU (outdoor unit)

   MODEL: HEC50T0-IN Split type room air conditioner	<table> <tr> <td>Power supply</td><td>220-240V~,50Hz</td></tr> <tr> <td>Anti-electric shock</td><td>Class I</td></tr> <tr> <td>Net Weight</td><td>8.7 kg</td></tr> <tr> <td>Air volume</td><td>700 m³/h</td></tr> <tr> <td>Manufacture date</td><td>XXXX / XX</td></tr> <tr> <td colspan="2">MADE IN P.R.C.</td></tr> <tr> <td colspan="2">Manufactured by Haier</td></tr> </table>	Power supply	220-240V~,50Hz	Anti-electric shock	Class I	Net Weight	8.7 kg	Air volume	700 m³/h	Manufacture date	XXXX / XX	MADE IN P.R.C.		Manufactured by Haier	
Power supply	220-240V~,50Hz														
Anti-electric shock	Class I														
Net Weight	8.7 kg														
Air volume	700 m³/h														
Manufacture date	XXXX / XX														
MADE IN P.R.C.															
Manufactured by Haier															
  															

   MODEL: HEC50T0-OU Single split type room air conditioner outdoor unit	
ITEM	PARAMETER
Pdesignc Capacity (kW)	4.60
SEER	6.3
Heating Capacity (kW)	4.60
Pdesignh Capacity (kW)	3.30
SCOP	4.0
Rated power input (kW)	1.75
Rated current (A)	7.5
Power supply	220-240V~,50Hz
Climate class	T1
Anti-electric shock	Class I
Net weight	29.2 kg
Max work pressure	4.3 MPa
Refrigerant	R32 0.68kg
GWP	675
Equivalent CO ₂	0.46t
 IPX4	
    	
The product contains fluorinated greenhouse gases and its functioning relies upon such gases. Manufacture date:XXXX / XX	

HSU-18T0R32(DB)-IN (indoor unit) with HSU-18T0R32(DB)-OUT (outdoor unit)

MODEL   HSU-18T0/R32(DB)-IN Split type room air conditioner	Power supply 220-240V~,50Hz Anti-electric shock Class I Net Weight 8.7 kg Air volume 700 m³/h
  	Manufacture date XXXX / XX MADE IN P.R.C. Manufactured by Haier

 	
MODEL: HSU-18T0/R32(DB)-OUT Single split type room air conditioner outdoor unit	
ITEM	PARAMETER
Pdesignc Capacity (kW)	4.60
SEER	6.3
Heating Capacity (kW)	4.60
Pdesignh Capacity (kW)	3.30
SCOP	4.0
Rated power input (kW)	1.75
Rated current (A)	7.5
Power supply	220-240V~,50Hz
Climate class	T1
Anti-electric shock	Class I
Net weight	29.2 kg
Max work pressure	4.3 MPa
Refrigerant	R32 0.68kg
GWP	675
Equivalent CO ₂	0.46t
 IPX4	
    	
The product contains fluorinated greenhouse gases and its functioning relies upon such gases. Manufacture date: XXXX / XX	

TRK18INVDMEI(indoor unit) with TRK18INVDMEO (outdoor unit)

Tronic  MODEL : TRK18INVDMEI INVERTER WALL MOUNTED TYPE INDOOR UNIT MADE FOR IKLIMSA MANUFACTURED DATE: xxxx / xx   		POWER SUPPLY 1PH,220-240V~,50Hz COOLING CAPACITY 15695 (3240-17060) BTU/h HEATING CAPACITY 15695 (4430-17750) BTU/h COOLING RATED INPUT 1.75 kW HEATING RATED INPUT 1.75 kW OUTDOOR RESISTANCE CLASS IPX4 MANUFACTURER NAME: QINGDAO HAIER AIR CONDITIONER GENERAL CO.,LTD. MANUFACTURER ADD : QINGDAO HIGH-TECH. IND. PARK HAIER ROAD QINGDAO, SHANDONG 266101 P.R. CHINA. CONTAINS FLUORINATED GREENHOUSE GASES	REFRIGERANT R32 MAXIMUM CURRENT 7.5 A (COOLING) MAXIMUM CURRENT 7.5 A (HEATING) NET WEIGHT 8.7 kg EXCESSIVE OPERATING PRESSURE HI 4.3MPa LO 2.5MPa Tronic Oracle Code 6.4001.9683 0011523978
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INVERTER WALL MOUNTED TYPE AIR CONDITIONER OUTDOOR UNIT		
MODEL	TRK18INVDMEO	
POWER SUPPLY	1PH,220-240V~,50Hz	
COOLING CAPACITY	15695(3240-17060) BTU/h	
HEATING CAPACITY	15695(4430-17750)BTU/h	
NET WEIGHT	29.2kg	
REFRIGERANT	R32/680g	
COOLING RATED INPUT	1.75kW	
HEATING RATED INPUT	1.75kW	
CO ₂ EQUIVALENT	0.46 Tonnes	
GWP	675	
EXCESSIVE OPERATING PRESSURE	HI	4.3MPa
	LO	2.5MPa
OUTDOOR RESISTANCE CLASS	IPX4	
MANUFACTURED DATE: xxxx/xx		
 MADE FOR iKLIMSA		
MANUFACTURER NAME: QINGDAO HAIER AIR CONDITIONER GENERAL CO.,LTD.		
MANUFACTURER ADD : QINGDAO HIGH-TECH. IND. PARK HAIER ROAD QINGDAO, SHANDONG 266101 P.R. CHINA.		
CONTAINS FLUORINATED GREENHOUSE GASES		

Tronic Oracle Code

0011523988

6.4001.9684

OLE-18DIH(indoor unit) with OLE-18DIH (outdoor unit)

		  	
SPLIT AIR CONDITIONER INDOOR UNIT		AIR CONDITIONER OUTDOOR UNIT	
Model	OLE-18DIH	Model	OLE-18DIH
Rated Voltage	220-240V~	Rated Voltage	220-240V~
Rated Frequency	50Hz	Rated Frequency	50Hz
Cooling Capacity	4600W	Climate Type	T1
Heating Capacity	4600W	Cooling Capacity	4.6kW
Air Flow Volume	700m³/h	Heating Capacity	4.6kW
Sound Pressure Level(H)	44dB(A)	Cooling Power Input	1750W
Weight	8.7kg	Heating Power Input	1750W
Manufactured Date	DD/MM/YYYY	Cooling Rated Input	1500W
Importer		Heating Rated Input	1350W
OAC IKLIMLENDIRME A.S.		Maximum Allowable Pressure	4.3MPa
Gursel Mh. Nurtac Cd. No:71/A Kagithane/Istanbul/Turkey		Operating Pressure	4.3/2.5MPa
Manufacturer		(Discharge Side/Suction Side)	
Qingdao Haier Air Conditioner General Co.,Ltd.		Sound Pressure Level	54dB(A)
Add: Qingdao High-Tech. Ind. Park Haier Road		Moisture Protection	IPX4
Qingdao, Shandong 266101 P.R. China		Isolation	I
		Refrigerant	R32
		Refri. Charge	0.68kg
		Weight	29.2kg
		GWP	675
		Co₂ equivalent	0.46t
		Manufactured Date	DD/MM/YYYY
		Importer	
		OAC IKLIMLENDIRME A.S.	
		Gursel Mh. Nurtac Cd. No:71/A Kagithane/Istanbul/Turkey	
		Manufacturer	
		Qingdao Haier Air Conditioner General Co.,Ltd.	
		Add: Qingdao High-Tech. Ind. Park Haier Road Qingdao, Shandong 266101 P.R. China	
		MADE IN P.R.C.	
 			
  		  	
MADE IN P.R.C.			

AS18PCBHRA (indoor unit) with 1U18MERFRA (outdoor unit)

  		Power supply Anti-electric shock Net Weight Air volume Manufacture date Manufactured by Haier	220-240V~,50Hz Class I 10.0kg 810m³/h XXXX / XX MADE IN P.R.C.
MODEL: AS18PCBHRA Split type room air conditioner			
  			

0011524915

  	
MODEL: 1U18MERFRA Single split type room air conditioner outdoor unit	
ITEM	PARAMETER
Pdesignc Capacity (kW)	4.80
SEER	6.3
Heating Capacity (kW)	4.80
Pdesignh Capacity (kW)	3.60
SCOP	4.0
Rated power input (kW)	1.90
Rated current (A)	8.6
Power supply	220-240V~,50Hz
Climate class	T1
Anti-electric shock	Class I
Net weight	29.2 kg
Max work pressure	4.3 MPa
Refrigerant	R32 0.78kg
GWP	675
Equivalent CO ₂	0.53t
 IPX4	
  	
 	
The product contains fluorinated greenhouse gases and its functioning relies upon such gases. Manufacture date: XXXX / XX	

0011524917

AS50PCBHRA (indoor unit) with 1U50MERFRA (outdoor unit)

Haier  		Power supply Anti-electric shock Net Weight Air volume	220-240V~,50Hz Class I 10.0kg 810m³/h
MODEL: AS50PCBHRA Split type room air conditioner		Manufacture date Manufactured by Haier	XXXX / XX MADE IN P.R.C.
  		0011524915	

Haier  	
MODEL: 1U50MERFRA Single split type room air conditioner outdoor unit	
ITEM	PARAMETER
Pdesignc Capacity (kW)	4.80
SEER	6.3
Heating Capacity (kW)	4.80
Pdesignh Capacity (kW)	3.60
SCOP	4.0
Rated power input (kW)	1.90
Rated current (A)	8.6
Power supply	220-240V~,50Hz
Climate class	T1
Anti-electric shock	Class I
Net weight	29.2 kg
Max work pressure	4.3 MPa
Refrigerant	R32 0.78 kg
GWP	675
Equivalent CO ₂	0.53t
 IPX4	
  	
 	
The product contains fluorinated greenhouse gases and its functioning relies upon such gases. Manufacture date: XXXX / XX	
0011524917	

AS50RCBHRA (indoor unit) with 1U50MERFRA (outdoor unit)

  		Power supply Anti-electric shock Net Weight Air volume Manufacture date Manufactured by Haier	220-240V~,50Hz Class I 10.0kg 810m³/h XXXX / XX MADE IN P.R.C.
MODEL: AS50RCBHRA Split type room air conditioner			
  			

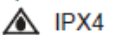
0011524015

  	
MODEL: 1U50MERFRA Single split type room air conditioner outdoor unit	
ITEM	PARAMETER
Pdesignc Capacity (kW)	4.80
SEER	6.3
Heating Capacity (kW)	4.80
Pdesignh Capacity (kW)	3.60
SCOP	4.0
Rated power input (kW)	1.90
Rated current (A)	8.6
Power supply	220-240V~,50Hz
Climate class	T1
Anti-electric shock	Class I
Net weight	29.2 kg
Max work pressure	4.3 MPa
Refrigerant	R32 0.78kg
GWP	675
Equivalent CO ₂	0.53t
 IPX4	
  	
 	
The product contains fluorinated greenhouse gases and its functioning relies upon such gases. Manufacture date: XXXX / XX	

0011524917

AS50RCBHRA-TU (indoor unit) with 1U50MERFRA-TU (outdoor unit)

Haier  		Power supply	220-240V~,50Hz
MODEL: AS50RCBHRA-TU		Anti-electric shock	Class I
Split type room air conditioner		Net Weight	10.0kg
  		Air volume	730m³/h
		Manufacture date	XXXX / XX
		Manufactured by Haier	MADE IN P.R.C.

Haier   	
MODEL: 1U50MERFRA-TU	
Single split type room air conditioner outdoor unit	
ITEM	PARAMETER
Pdesignc Capacity (kW)	4.80
SEER	6.3
Heating Capacity (kW)	4.80
Pdesignh Capacity (kW)	3.60
SCOP	4.0
Rated power input (kW)	1.90
Rated current (A)	8.6
Power supply	220-240V~,50Hz
Climate class	T1
Anti-electric shock	Class I
Net weight	29.2 kg
Max work pressure	4.3 MPa
Refrigerant	R32 0.78kg
GWP	675
Equivalent CO ₂	0.53t
 IPX4	
  	
 	
The product contains fluorinated greenhouse gases and its functioning relies upon such gases. Manufacture date: XXXX / XX Made in P.R.C.	
0011524917	

Note: The manufacturer confirmed that:

- 1) A label shall be attached on the external enclosure of the product, which indicates the name, registered trade name or registered trade mark and the postal address of the importer or authorized representatives. The postal address shall be a single point at which the importer or authorised representatives can be contacted and in the European Union countries.
- 2) The content about a type, batch or serial number or other element allowing its identification shall be on above label or on a separate label which shall be clearly discernible from the outside of the appliance.
- 3) A label including the following symbols shall be attached on the external enclosure of the product (outdoor & indoor unit), the height of which is at least 10mm.



- 4) A label of the following symbol shall be attached on the external enclosure of the product (outdoor & indoor unit), the height of which is at least 30mm.



- 5) A label containing the information for F-gas shall be attached on the external enclosure of the product.

Test item particulars : Split type room air conditioner	
Classification of installation and use : Stationary appliance	
Supply Connection : Connection to fixed wiring	
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: 2023-02-27 Date (s) of performance of tests: 2023-02-27 to 2023-03-27	
General remarks:	
"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Throughout this report a ☒ comma / ☐ point is used as the decimal separator.	
Manufacturer's Declaration per sub-clause 4.2.5 of IEC60335-2-40:	
The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided.....:	☐ Yes ☒ Not applicable
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies): Qingdao Haier Air Conditioner Electric Co., Ltd. Haier industrial Park, No.236, Qianwangang Road, Qingdao Eco-tech Development Zone, Qingdao 266555, China.	
General product information and other remarks: 1. The appliances are Split type room air conditioner . The appliance is mainly composed of compressor, evaporator, condenser, capillary, 4-way valve, WIFI module. They are used to achieve heating and cooling and other functions. The rated voltage is 220-240V, rated frequency is 50Hz. The refrigerant is R32. 2. The indoor unit shall be installed at the 2,5 m of height above floor. 3. The power is supplied by connecting fixed wiring, and shall be installed in accordance with the user manual and national electric regulation. 4. The difference between "AS18TBRHRA (indoor unit) with 1U18MRAFRA (outdoor unit)" and "HEC50T0-IN (indoor unit) with HEC50T0-OU (outdoor unit)" are model name and trade mark only. 5. The difference between "AS18TBRHRA (indoor unit) with 1U18MRAFRA (outdoor unit)" and "HSU-18T0R32(DB)-IN (indoor unit) with HSU-18T0R32(DB)-OUT (outdoor unit)" are model name and trade mark only.	

Amendment 1:

The original report ABUV-ESH-P21112748 dated on 2021-12-15 was modified on 2022-05-11 to include the following changed, which were considered as technical modifications:

1. Adding new model "TRK18INVDMEI (indoor unit) with TRK18INVDMEO (outdoor unit)" and "OLE-18DIH (indoor unit) with OLE-18DIH (outdoor unit)", which were marked in "Bold" in page 2. "TRK18INVDMEI (indoor unit) with TRK18INVDMEO (outdoor unit)" and "OLE-18DIH (indoor unit) with OLE-18DIH (outdoor unit)" are both identical with the original model "AS18TBRHRA (indoor unit) with 1U18MRAFRA (outdoor unit)" except model name and trade mark.
2. Update standard to include "EN 60335-1:2012/A15:2021".

After technical evaluation, Clause 7.1 and 24 were checked. New standard "EN 60335-1:2012/A15:2021" was evaluated. Other test data were based on the original report.

Amendment 2:

The original report ABUV-ESH-P21112748+A1 dated on 2021-12-15, 2022-05-11 was modified on 2022-08-24 to include the following changed, which were considered as technical modifications:

1. Adding new model "**AS18PCBHRA (indoor unit) with 1U18MERFRA (outdoor unit)**", "**AS50PCBHRA (indoor unit) with 1U50MERFRA (outdoor unit)**" and "**AS50RCBHRA (indoor unit) with 1U50MERFRA (outdoor unit)**", which were marked in "Bold" in page 2. "AS50PCBHRA (indoor unit) with 1U50MERFRA (outdoor unit)" and "AS50RCBHRA (indoor unit) with 1U50MERFRA (outdoor unit)" are both identical with the model "AS18PCBHRA (indoor unit) with 1U18MERFRA (outdoor unit)" except model name. "1U18MERFRA (outdoor unit)" are both identical with the original model "1U18MRAFRA (outdoor unit)" except model name and fan motor.
2. Adding new alternative components, which were marked in "**Bold**" in table 24.2.

After technical evaluation, Full test were performed on the samples of AS18PCBHRA (indoor unit) with 1U18MERFRA (outdoor unit). Construction check (6-8 & 20-29) were checked on other models. The products were found complying with the standards.

Amendment 3:

The original report ABUV-ESH-P21112748+A1+A2 dated on 2021-12-15, 2022-05-11, 2022-08-24 was modified on 2023-03-28 to include the following changed, which were considered as technical modifications:

- a) Adding new model "**AS50RCBHRA-TU (indoor unit) with 1U50MERFRA-TU (outdoor unit)**", which were marked in "Bold" on page 2. The new model is identical with the original model "**AS50RCBHRA (indoor unit) with 1U50MERFRA (outdoor unit)**" except model name only.
- b) Correct some information in CDF which were bold in table 24.1.
- c) Add new factory of main control PCB board.

After technical evaluation, Cl.24 were checked.

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
7	MARKING AND INSTRUCTIONS		P
7.1	Rated voltage or voltage range (V)	220-240	P
	Symbol for nature of supply, or	~	P
	Rated frequency (Hz).....	50	P
	Rated power input (W), or.....	See marking plates	P
	Rated current (A)	See marking plates	P
	Manufacturer's or responsible vendor's name, trademark or identification mark.....	See marking plates	P
	Model or type reference	See marking plates	P
	Symbol IEC 60417-5172, for class II appliances		N/A
	IP number, other than IPX0.....	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	Class I appliance	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
	Mass of refrigerant or of each refrigerant in blend (except for azeotropic type) (IEC 60335-2-40).....	See marking plates	P
	Refrigerant identification (IEC 60335-2-40)	R32	P
	Permissible excessive operating pressure for sanitary hot water heat pumps (IEC 60335-2-40):.		N/A
	Maximum operating pressure for heat exchanger for hydronic fan coil/air handling units (IEC 60335-2-40/AMD2)		N/A
	Permissible excessive operating pressure of refrigerant circuit for suction and discharge, if they differ (IEC 60335-2-40)	See marking plates	P
	Symbol for degree of protection against ingress of water, other than IPX0 (IEC 60335-2-40).....	IPX4	P
	Separate marking of appliances with all rated characteristics of supplementary heaters (IEC 60335-2-40)		N/A
	Marking of direction of fluid flow (IEC 60335-2-40)	Evident from the design	N/A
	Flame symbol and instruction manual symbol of 7.6 visible when flammable refrigerant employed and following conditions exist (IEC 60335-2-40/AMD1):		P

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	- accessing parts expected to be subjected to maintenance or repair (IEC 60335-2-40/AMD1);		P
	- observing appliance under sale or installed conditions (IEC 60335-2-40/AMD1);		P
	- observing appliance packaging, if appliance charged with refrigerant (IEC 60335-2-40/AMD1).		P
	If flammable refrigerant used, symbols for "read operator's manual", "operator's manual; operating instructions" and "service indicator; read technical manual" (symbols 0790, 1641 and 1659 of ISO 7000) placed on appliance in location visible to persons required to know information. Perpendicular height be at least 10 mm (IEC 60335-2-40/AMD1/COR1)		P
	Additional warning symbol (flame symbol: B.3.2 of ISO 3864) placed on nameplate of unit near declaration of refrigerant type and charge information. Perpendicular height be at least 10 mm, and symbol need not be in colour (IEC 60335-2-40/AMD1)		P
	Following warning also applied to appliance when flammable refrigerant employed. WARNING Appliance shall be installed, operated and stored in a room with a floor area larger than 'X' m ² (only applies to appliances that are not fixed appliances) (IEC 60335-2-40/AMD1)	Fixed appliances	N/A
	Not fixed appliances, minimum room size X specified on appliance. X in marking determined in m ² by procedure described in paragraph 2 of annex GG for unventilated areas and X in marking be 4 if refrigerant charge of appliance is less than m ₁ (see annex GG, paragraph 1.1) (IEC 60335-2-40/AMD1)		N/A
	Maximum allowable pressure for low-pressure side and high-pressure side marked on product (IEC 60335-2-40/AMD1)	Max. 4,3MPa	P
	If not already visible when accessing service port and if service port provided, service port marked to identify type of refrigerant. If refrigerant is flammable, symbol B.3.2 of ISO 3864, be included, without specifying the colour (IEC 60335-2-40/AMD1)		P
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	220-240V	P

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	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 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 is related to the arithmetic mean value of the rated voltage range		P
	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
	Flammable refrigerant, warning symbol B.3.2 of ISO 3864, including colour and format, permanently placed on appliance. Perpendicular height of triangle containing "Caution, risk of fire" symbol be at least 30 mm (IEC 60335-2-40/AMD1)		P
	Flammable refrigerant, symbol requiring reference to manual [0790 of ISO 7000], including colour and format, permanently placed on appliance (IEC 60335-2-40/AMD1/COR1)		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		P
	correct mode of connection is obvious		N/A
7.8	Except for type Z attachment, terminals for connection to the supply mains indicated as follows:		P
	- marking of terminals exclusively for the neutral conductor (letter N)		P
	- marking of protective earthing terminals (symbol IEC 60417-5019)		P

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	- 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..... :	Patterns, letters and visual means used for the controller of indoor units	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		P
7.11	Indication for direction of adjustment of controls		P
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 (IEC 60335-2-40)		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 (IEC 60335-2-40/AMD1)		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	Replaced by EN 60335-1	N/A
	- children being supervised not to play with the appliance	Replaced by EN 60335-1	N/A
	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

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	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 (IEC 60335-2-40):		P
	- that the appliance shall be installed in accordance with national wiring regulations (IEC 60335-2-40);		P
	- the dimensions of the space necessary for correct installation of the appliance including the minimum permissible distance to adjacent structures (IEC 60335-2-40);		P
	- for appliances with supplementary heaters, the minimum clearance from the appliance to combustible surfaces (IEC 60335-2-40);		N/A
	- a wiring diagram with a clear indication of the connections and wiring to external control devices and supply cord (IEC 60335-2-40);		P
	- the range of external static pressures at which the appliance was tested (add-on heat pumps and appliances with supplementary heaters only) (IEC 60335-2-40);		N/A
	- the method of connection to the appliance to the electrical supply and interconnection of separate components (IEC 60335-2-40);		P
	- indication of which parts of the appliance are suitable for outdoor use, if applicable (IEC 60335-2-40);		P
	- details of type and rating of fuses (IEC 60335-2-40);		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 (IEC 60335-2-40);		N/A
	- maximum and minimum water or brine operating temperatures (IEC 60335-2-40);		N/A
	- maximum and minimum water or brine operating pressures (IEC 60335-2-40).		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Open storage tanks of heat pumps for water heating, accompanied by an instruction sheet which state that the vent shall not be obstructed (IEC 60335-2-40)		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		P
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:		N/A
	- dimensions of space		N/A
	- dimensions and position of supporting and fixing		N/A
	- minimum distances between parts and surrounding structure		N/A
	- minimum dimensions of ventilating openings and arrangement		N/A
	- connection to supply mains and interconnection of separate components		N/A
	- allow disconnection of the appliance after installation, by accessible plug or a switch in the fixed wiring, unless		N/A
	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

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
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	Incorporated in the user manual	N/A
	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 :	Available on the manufacturer's website	P
7.13	Instructions and other texts in an official language		P
7.14	Markings clearly legible and durable:		P
	Signal words WARNING, CAUTION, DANGER in uppercase having a height as specified :	In uppercase and 3,6mm	P
	Uppercase letter of the text explaining the signal word not smaller than 1,6 mm :	2,5mm	P
	Moulded in, engraved, or stamped markings either raised above or have a depth below the surface of at least 0,25 mm, unless		P
	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		N/A
	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

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Marking on panel allowed, provided panel in place for intended operation of appliance (IEC 60335-2-40)		P
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 (IEC 60335-2-40):		P
	- fuse rated current in amperes, type and rated voltage or (IEC 60335-2-40)		P
	- manufacturer and model of overload protective device (IEC 60335-2-40)		N/A
7.102	Marking for connection with aluminium wire, if necessary (IEC 60335-2-40)		N/A
24	COMPONENTS		P
24.1	Components comply with safety requirements in relevant IEC standards		P
	List of components.....:	(see appended table)	P
	Motors not required to comply with IEC 60034-1, they are tested as part of the appliance		P
	Relays tested as part of the appliance, or		P
	alternatively acc. to IEC 60730-1, and meeting the additional requirements in IEC 60335-1		P
	The requirements of clause 29 apply between live parts of components and accessible parts of the appliance		P
	Components can comply with the requirements for clearances and creepage distances for functional insulation in the relevant component standard		P
	30.2 of this standard apply to parts of non-metallic material in components including parts of non-metallic material supporting current-carrying connections		P
	Components that have not been previously tested to comply with the IEC standard for the relevant component are tested according to the requirements of 30.2		P
	Components that have been previously tested to comply with the resistance to fire requirements in the IEC standard for the relevant component need not be retested provided the specified conditions are met		P
	If these conditions are not satisfied, the component is tested as part of the appliance.		P

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Power electronic converter circuits not required to comply with IEC 62477-1, they are tested as part of the appliance		P
	If components have not been tested and found to comply with relevant IEC standard for the number of cycles specified, they are tested in accordance with 24.1.1 to 24.1.9		P
	For components mentioned in 24.1.1 to 24.1.9 no additional tests specified in the relevant component standard are necessary other than those specified in 24.1.1 to 24.1.9		P
	Components not tested and found to comply with relevant IEC standard and components not marked or not used in accordance with its marking, tested under the conditions occurring in the appliance		P
	Lampholders and starterholders that have not being tested and found to comply with the relevant IEC standard, tested as a part of the appliance and additionally according to the gauging and interchangeability requirements of the relevant IEC standard	No lampholder or starterholder	N/A
	No additional tests specified for nationally standardized plugs such as those detailed in IEC/TR 60083 or connectors complying with the standard sheets of IEC 60320-1 and IEC 60309	No plug	N/A
	Motor-compressors not tested according to IEC 60335-2-34 (not necessary to meet all requirements of IEC 60335-2-34) (IEC 60335-2-40)		N/A
24.1.1	Capacitors likely to be permanently subjected to the supply voltage and used for radio interference suppression or for voltage dividing, complying with IEC 60384-14		P
	If the capacitors have to be tested, they are tested according to annex F		N/A
24.1.2	Transformers in associated switch mode power supplies comply with annex BB of IEC 61558-2-16		N/A
	Safety isolating transformers complying with IEC 61558-2-6		N/A
	If they have to be tested, they are tested according to annex G		P
24.1.3	Switches complying with IEC 61058-1, the number of cycles of operation being at least 10 000		N/A
	If they have to be tested, they are tested according to annex H		N/A
	If the switch operates a relay or contactor, the complete switching system is subjected to the test		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	If the switch only operates a motor starting relay complying with IEC 60730-2-10 with the number of cycles of a least 10 000 as specified, the complete switching system need not be tested		N/A
24.1.4	Automatic controls complying with IEC 60730-1 with the relevant part 2. The number of cycles of operation being at least:		P
	- thermostats: 10 000		N/A
	- temperature limiters: 1 000		N/A
	- self-resetting thermal cut-outs: 3000		P
	- voltage maintained non-self-resetting thermal cut-outs: 1 000		N/A
	- other non-self-resetting thermal cut-outs: 300		N/A
	- timers: 3 000		N/A
	- energy regulators: 10 000		N/A
	- thermostats which control motor-compressor (IEC/EN 60335-2-40): 100 000		N/A
	- motor-compressor starting relays (IEC/EN 60335-2-40): 100 000	100000	P
	- automatic thermal motor-protectors for hermetic and semi-hermetic type motor-compressors (not less than number of operations during locked rotor test) (IEC/EN 60335-2-40): min 2000		N/A
	- manual reset thermal motor-protectors for hermetic and semi-hermetic type motor-compressors (IEC/EN 60335-2-40): 50		N/A
	- other automatic thermal motor-protectors (IEC/EN 60335-2-40): 2000		N/A
	- other manual reset thermal motor-protectors (IEC/EN 60335-2-40): 30		N/A
	The number of cycles for controls operating during clause 11 need not be declared, if the appliance meets the requirements of this standard when they are short-circuited		P
	Thermal motor protectors are tested in combination with their motor under the conditions specified in annex D		N/A
	For water valves containing live parts and that are incorporated in external hoses for connection of an appliance to the water mains, the degree of protection declared for subclause 6.5.2 of IEC 60730-2-8 is IPX7		N/A
	Thermal cut-outs of the capillary type comply with the requirements for type 2.K controls in IEC 60730-2-9		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
24.1.5	Appliance couplers complying with IEC 60320-1		N/A
	However, for appliances classified higher than IPX0, the appliance couplers complying with IEC 60320-2-3		N/A
	Interconnection couplers complying with IEC 60320-2-2		N/A
24.1.6	Small lamp holders similar to E10 lampholders complying with IEC 60238, the requirements for E10 lampholders being applicable		N/A
24.1.7	For remote operation of the appliance via a telecommunication network, the relevant standard for the telecommunication interface circuitry in the appliance is IEC 62151		N/A
24.1.8	The relevant standard for thermal links is IEC 60691		N/A
	Thermal links not complying with IEC 60691 are considered to be an intentionally weak part for the purposes of clause 19		N/A
24.1.9	Contactors and relays, other than motor starting relays, tested as part of the appliance		P
	They are also tested in accordance with clause 17 of IEC 60730-1, the number of cycles of operations in 24.1.4 selected according to the contactor or relay function in the appliance	10 000 cycles	P
24.2	Appliances not fitted with:		P
	- switches or automatic controls in flexible cords		P
	- devices causing the protective device in the fixed wiring to operate in the event of a fault in the appliance		P
	- thermal cut-outs that can be reset by soldering, unless		P
	the solder has a melting point of at least 230 °C		N/A
24.3	Switches intended for all-pole disconnection of stationary appliances are directly connected to the supply terminals and have a contact separation in all poles, providing full disconnection under overvoltage category III conditions		N/A
24.4	Plugs and socket-outlets for extra-low voltage circuits and heating elements, not interchangeable with plugs and socket-outlets listed in IEC/TR 60083 or IEC 60906-1 or with connectors and appliance inlets complying with the standard sheets of IEC 60320-1		P
24.5	Capacitors in auxiliary windings of motors marked with their rated voltage and capacitance, and used accordingly	No motor capacitor	N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Voltage across capacitors in series with a motor winding does not exceed 1,1 times rated voltage, when the appliance is supplied at 1,1 times rated voltage under minimum load		N/A
24.6	Working voltage of motors connected to the supply mains and having basic insulation that is inadequate for the rated voltage of the appliance, not exceeding 42 V		N/A
	In addition, the motors comply with the requirements of annex I		N/A
24.7	Detachable hose-sets for connection of appliances to the water mains comply with IEC 61770		N/A
	They are supplied with the appliance		N/A
	Appliances intended to be permanently connected to the water mains not connected by a detachable hose-set		N/A
24.8	Motor running capacitors in appliances for which 30.2.3 is applicable and that are permanently connected in series with a motor winding, not causing a hazard in event of a failure	No motor capacitor	N/A
	One or more of the following conditions are to be met:		N/A
	- the capacitors are of class P2 according to IEC 60252-1		N/A
	- the capacitors are housed within a metallic or ceramic enclosure		N/A
	- the distance of separation of the outer surface to adjacent non-metallic parts exceeds 50 mm		N/A
	- adjacent non-metallic parts within 50 mm withstand the needle-flame test of annex E		N/A
	- adjacent non-metallic parts within 50 mm classified as at least V-1 according to IEC 60695-11-10		N/A
24.101	Replaceable parts of thermal control devices identified by marking (IEC 60335-2-40)		N/A

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24.1	TABLE: Critical components information				P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity
Terminal block	Changzhou Changheng Kaidu Electric Products Co., Ltd	JXW/JX/JXG Series	AC 600V; 4,0mm ²	EN 60998-2-1:2004 EN 61210:2010 EN 60998-1:2004	VDE 40042595
Alternative	Nantong Huaguan Electric Co., Ltd	JXW/JX/JXO Series	AC 600V; 4,0mm ²	EN 60998-2-1:2004 EN 61210:2010 EN 60998-1:2004	VDE 40013197
Alternative	Zhenjiang Honglian Electrician Co., Ltd.	JX Series	AC 600V; 4,0mm ²	EN 60335-1 EN 60335-2-40	Test with appliance &UL E313520
Alternative	Foshan Shunde Yuanfeng Metal Electrical Appliances Co., Ltd.	YF2004A YF Series	AC 600V; 4,0mm ²	EN 60998-2-1:2004 EN 61210:2010 EN 60998-1:2004	LVD19-8014
Power Cord	Guangdong Rifeng Electrical Cable Co., Ltd.	H07RN-F	450/750V 3G 1.5/2.5/4.0mm ²	EN 50525-2-21:2011	VDE 40015999
Alternative	Guangdong Huasheng Electrical Appliances Co.,Ltd.	H07RN-F	450/750V 3G 1.5/2.5/4.0mm ²	EN 50525-2-21:2011	VDE 40016788
Alternative	Yangzhou Huasheng Electronics Industrial Co.,Ltd .	H07RN-F	450/750V 3G 1.5/2.5/4.0mm ²	EN 50525-2-21:2011	VDE 40030537
Alternative	Weihai Honglin Electronic Co.,Ltd .	H07RN-F	450/750V 3G 1.5/2.5/4.0mm ²	EN 50525-2-21:2011	VDE 40031965
Interconnection Cord	Guangdong Rifeng Electrical Cable Co., Ltd.	H07RN-F	450/750V 4G 1.0 mm ²	EN 50525-2-21:2011	VDE 40015999
Alternative	Guangdong Huasheng Electrical Appliances Co.,Ltd.	H07RN-F	450/750V 4G 1.0 mm ²	EN 50525-2-21:2011	VDE 40016788
Alternative	Yangzhou Huasheng Electronics Industrial Co.,Ltd .	H07RN-F	450/750V 4G 1.0 mm ²	EN 50525-2-21:2011	VDE 40030537
Alternative	Weihai Honglin Electronic Co.,Ltd .	H07RN-F	450/750V 4G 1.0 mm ²	EN 50525-2-21:2011	VDE 40031965
Internal wire	Hefei Deren Electronic Device Co., Ltd.	UL1015 UL3173	AWG12-30#	EN 60335-1 EN 60335-2-40	UL E338621+ Test with appliance
Alternative	Qingdao Riken Wire & Cable Co., Ltd	UL1015 UL3173	AWG12-30#	EN 60335-1 EN 60335-2-40	UL E212103 + Test with appliance

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Alternative	CHINA LONSID ELECTRIC CO.,LTD.	UL1015 UL3173	AWG12-30#	EN 60335-1 EN 60335-2-40	UL E205056 + Test with Appliance
Alternative	Weihai Honglin Electronic Co., Ltd	UL1015 UL3173	AWG12-30#	EN 60335-1 EN 603 35-2-40	UL E239426 + Test with appliance
Alternative	Xinya Electronic Co., Ltd.	UL1015 UL3173	AWG12-30#	EN 60335-1 EN 60335-2-40	UL E170689 + Test with appliance
Alternative	TITION ELECTRIC WIRE GROUP CO.,LTD.	UL1015 UL3173	AWG12-30#	EN 60335-1 EN 60335-2-40	UL E216894 + Test with appliance
Alternative	ZHEJIANG YUEQING XINGDA ELECTRONICS WIRE&CABLE CO.,LTD.	UL1015 UL3173	AWG12-30#	EN 60335-1 EN 60335-2-40	UL E187208 + Test with appliance
Alternative	WENZHOU HU TAI ELECTRIC WIRE&CABLE CO.,LTD.	UL1015 UL3173	AWG12-30#	EN 60335-1 EN 60335-2-40	UL E238824 + Test with appliance
Alternative	LTK ELECTRIC WIRE (HUIZHOU) LTD	UL1015 UL3173	AWG12-30#	EN 60335-1 EN 60335-2-40	UL E148000 + test with appliance
Alternative	JIANGYIN JIANGZHOU COPPER PRODUCT CO LTD	UL1015 UL3173	AWG12-30#	EN 60335-1 EN 60335-2-40	UL E341212 + test with appliance
Alternative	ZHEJIANG LONDA ELECTRONIC WIRE & CABLE CO LTD	UL1015 UL3173	AWG12-30#	EN 60335-1 EN 60335-2-40	UL E205056 + test with appliance
Alternative	TAIZHOU RISHUN ELECTRIC APPLIANCE DEVELOPMENT CO LTD	UL1015 UL3173	AWG12-30#	EN 60335-1 EN 60335-2-40	UL E237675 + test with appliance
Alternative	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL COLTD	UL1015 UL3173	AWG12-30#	EN 60335-1 EN 60335-2-40	UL E227566 + test with appliance
Alternative	LINOYA ELECTRONIC TECHNOLOGY CO., LTD.	UL1015, UL3173	AWG12-30#	EN 60335-1 EN 60335-2-40	UL E315619 Test with appliance

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Alternative	Dongguan Linoya Wire&Cable CO.,LTD.	UL1015, UL3173	AWG12-30#	EN 60335-1 EN 60335-2-40	UL E315618 Test with appliance
Critical component on outdoor unit					
Compressor	AVIC ELECTROMECHANICAL(SHEN YANG) SANYO REFRIGERATION EQUIPMENT CO. LTD	C-1RZ120H1AAF	48-420V 15-130Hz R32/R410 winding: 1,78Ω at 25°C	EN 60335-1 EN 60335-2-40	Test with appliance
Outdoor fan motor for 18T	Wolong Electric (Jinan) Motor Co.,Ltd.	WZD-A01025L-01A	DC 310V, 25W, Class B	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	NIDEC SHIBAURA (Zhejiang) CORPORATION	SIC-54FM-F125-1	DC 310V, 25W, Class E	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Jeamo Motor Co.,Ltd.	YMA040BL01S7	DC 310V, 25W, Class B	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	ZHONGSHAN BROAD-OCEAN MOTOR CO., LTD.	ZW465A500014	DC 310V, 25W , Class E	EN 60335-1 EN 60335-2-40	Test with appliance
Outdoor fan motor for 18P	Hefei city Tongdeli electric manufacturing Co.,Ltd.	T10WZ25-A03	DC310V, 25W, Class E	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Jeamo Motor Co., Ltd.	YMA025BL01S7	DC310V, 25W, Class B	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	ZHONGSHAN BROAD-OCEAN MOTOR CO., LTD.	ZW428A800003L	DC310V, 25W, Class E	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	NIDEC SHIBAURA (Zhejiang) CORPORATION	SIC-54FH-F125-1	DC310V, 25W, Class E	EN 60335-1 EN 60335-2-40	Test with appliance
4-way valve	Zhejiang Dun'an Artificial Environment Co., Ltd.	DSF-4	AC 220-240V; 50/60Hz; Class E	EN 60730-1:2011	VDE 40013212
Alternative	Zhejiang Sanhua Intelligent Controls Co., Ltd.	SHF-4H-23U-P /SHF-4-10L3	AC 220-240V; 50/60Hz; Class E	EN 60730-1:2011	VDE 40048077
Alternative	OKAYAMA SEIKO (ZHONG SHAN) CO.,LTD.	DSF-C4-23-1	AC 220-240V; 50/60Hz; Class E	EN 60730-1:2011	VDE 40044501
Alternative	ZHONGSHAN CITY GANGLI REFRIGERATION FITTINGS CO.,LTD.	SHF-4	AC 220-240V; 50/60Hz; Class E	EN 60730-1:2011	VDE 40026249
Reactor	Nantong DPC Electronics Co., Ltd.	DPC1552A-PR	5.20mH/15A, Class N	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	QINGDAO YUNLU ENERGY TECHNOLOGY CO.,LTD.	R1505HRA	15A/5.2mH, Class N	EN 60335-1 EN 60335-2-40	Test with appliance
Outdoor control PCB for 18T	Chearihi (Anhui) Technology Co., Ltd	0011801039V	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance

IEC 60335-2-40					
Alternative	Qingdao Haier Intelligent Electronics Co., Ltd.	0011801039V	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Ruking Emerson Climate Technologies (Shanghai) Co., Ltd.	0011801039V	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Shenzhen H&T Intelligent Control Co., Ltd.	0011801039V	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Guangdong Shangyan Electronic Technology Co., Ltd.	0011801039V	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Hefei Huntkey Electronic Technology Co., Ltd.	0011801039V	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	COSMO AIoT Technology Co., Ltd Qingdao Lingzhi Electronic Technology Co., Ltd.	0011801039V	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Outdoor control PCB for 18P	Chearihi (Anhui) Technology Co., Ltd	0011801039W	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Qingdao Haier Intelligent Electronics Co., Ltd.	0011801039W	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Ruking Emerson Climate Technologies (Shanghai) Co., Ltd.	0011801039W	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Shenzhen H&T Intelligent Control Co., Ltd.	0011801039W	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Guangdong Shangyan Electronic Technology Co., Ltd.	0011801039W	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Hefei Huntkey Electronic Technology Co., Ltd.	0011801039W	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	COSMO AIoT Technology Co., Ltd Qingdao Lingzhi Electronic Technology Co., Ltd.	0011801039W	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Critical component on indoor unit					
Indoor fan motor for 18T	NIDEC SHIBAURA (Zhejiang) Co., Ltd	SIC-310-30-1	DC 310V, 30W , Class E, plastic packaging type	EN 60335-1 EN 60335-2-40	Test with appliance

IEC 60335-2-40

Alternative	Zhongshan Broad-Ocean Motor Co., Ltd.	ZWK465A0040 2	DC 310V, 30W, Class E, plastic packaging type	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Fisher & Paykel Appliances LTD	MH0.2Z402	DC 310V, 30W, Class E, plastic packaging type	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Wolong Electric (Jinan) Motor Co., Ltd	WZD-40	DC 310V, 40W, Class B, plastic packaging type	EN 60335-1 EN 60335-2-40	Test with appliance
Indoor fan motor for 18P	NIDEC SHIBAURA (Zhejiang) CORPORATION	SIC-36CS-F130-1	DC 310V, 30W, Class E	EN 60335-1 EN 60335-2-40	Test with appliance
Step motor for 18T	Changzhou Leili Electronics Co., Ltd.	28BYJ48	12V DC, Class E	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Jiangsu Huayang Intelligent Equipment Co., Ltd.	28BYJ48	12V DC, Class E	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Changzhou Oukai Electric Co., Ltd.	28BYJ48	12V DC, Class E	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Hefei Huilipu motor Co., Ltd.	28BYJ48	12V DC, Class E	EN 60335-1 EN 60335-2-40	Test with appliance
Step motor for 18P	Changzhou Leili Electronics Co., Ltd.	35BYJ46	12V DC, Class E	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Jiangsu Huayang Intelligent Equipment Co., Ltd.	35BYJ46	12V DC, Class E	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Changzhou Oukai Electric Co., Ltd.	35BYJ46	12V DC, Class E	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Hefei Huilipu motor Co., Ltd.	35BYJ46	12V DC, Class E	EN 60335-1 EN 60335-2-40	Test with appliance
Indoor control PCB for 18T	Qingdao Haier Intelligent Electronics Co., Ltd.	0011800646L	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Chearihi (Anhui) Technology Co., Ltd	0011800646L	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Ruking Emerson Climate Technologies (Shanghai) Co., Ltd.	0011800646L	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Shenzhen H&T Intelligent Control Co., Ltd.	0011800646L	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Guangdong Shangyan Electronic Technology Co., Ltd.	0011800646L	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Hefei Huntkey Electronic Technology Co., Ltd.	0011800646L	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	COSMO IoT Technology Co., Ltd Qingdao Lingzhi Electronic Technology Co., Ltd.	0011800646L	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance

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Indoor control PCB for 18P	Qingdao Haier Intelligent Electronics Co., Ltd.	0011801123A	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Chearihi (Anhui) Technology Co., Ltd.	0011801123A	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Ruking Emerson Climate Technologies (Shanghai) Co., Ltd.	0011801123A	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Shenzhen H&T Intelligent Control Co., Ltd.	0011801123A	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Guangdong Shangyan Electronic Technology Co., Ltd.	0011801123A	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	Hefei Huntkey Electronic Technology Co., Ltd.	0011801123A	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
Alternative	COSMO AIoT Technology Co., Ltd Qingdao Lingzhi Electronic Technology Co., Ltd.	0011801123A	AC 220-240V; 50Hz	EN 60335-1 EN 60335-2-40	Test with appliance
WIFI module	Qingdao Haier Technology Co., Ltd	MK-QTWIFI-08	DC 5V; 300mA	IEC 60950-1 IEC 62311 IEC 60335-2-40	TÜV SUD CE No. T8A 103612 0003 Test with appliance & SZEM17030 01951CRV
Alternative	HANGZHOU TUYA INFORMATION TECHNOLOGY CO., LTD	HEWRQU1	DC 5V; 300mA	EN 300 328 EN 301 489 EN 62311 EN 62368	TUV SUD CE No. T8A 104731 0037
Alternative	JiangSu Fulian Communication Technology Co., Ltd.	ESP32-for-Haier	DC 5V; 300mA	EN 300 328 EN 301 489 EN 62311 EN 62368	SGS CE No.SHEM20 0500402601 CRC
Critical component on control PCB					
PCB	HUIZHOU GLORYSKY ELECTRONICS CO.,LTD.	GS-001, GS-004, TC-1, GS*, GS-D1	1,6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E257384
-Alternative	Changzhou Aohong Electronics Co., Ltd.	AOH-2/ AOH-3/ AOH-4	1.6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E303981
-Alternative	Kunshan Huaxin Circuit Board Co., Ltd.	HXF-S/ HX-SA	1.6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E227809

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-Alternative	HT Circuits(Qingdao) Co., Ltd.	1094V0/1194V0 /1194V0G/1194 V0Z/1294V0/14 94V0/1494V0G/ 2694V0/A894V 0/894V0G /1594V0/ 2894V0	1.6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E56334
-Alternative	NIPPON(BOLUO)EL ECTRONICS Co.,Ltd.	Q2-3/ D2/ KB- 6160/ KB- 6160C	1.6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E56327
-Alternative	Shenzhen Sun&Lynn Circuits Co.,Ltd	SL-D	0.2mm-3.2mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E234156
-Alternative	HUIZHOU XINGZHIGUANG TECHNOLOGY CO.,LTD	XZG-P2 XZG- P3 XZG-P1	1.6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E246887
-Alternative	Jiangxi Xusheng Electronics Co	PWB Type XS- M, XS-D	1,6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E503744
-Alternative	LongNan Champion Asia Precision Circuit Co.,Ltd	C1 C2 C3 F-H F-M H1 H2 M1 M2 F-M2 D1 D2 D3 F-D F-D1 F- D2	1.6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E342828
-Alternative	INNO CIRCUITS LIMITED	NY2140/NY160 0/KB-6160/KB- 6160C/S1141/S 1600L/IQE-D1	1.6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E365781
-Alternative	Jiangsu Zhong xin hua Electronic Technology Co., Ltd.	ZXH-4,ZXH- 3,ZXH- 1,ZXHPCB,M,Z XH-2,ZXHPCB- D	1.0mm, V-0 1.6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E505746
-Alternative	TEAN ELECTRONIC (DA YA BAY) CO.,LTD.	KB6160C/ KB6160/ S1600	1.6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E358874
-Alternative	NIPPON(BOLUO)EL ECTRONICS CO.,LTD	Q2-3/D2/KB- 6160/KB-6160C	1.6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E56327
-Alternative	SHANTOU FENGLIDA ELECTRONICS TECHNOLOGY CO LTD	FLD-04, KB- 6160 /KB- 6160C, FLD-02	1.6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E347210
-Alternative	Suizhou Kangmei Electronics Co	KM-D1	1.6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E511140

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-Alternative	Kunshan Jinpeng Electronics Co. ,Ltd	JP-2, JP-1	1.6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E306084
-Alternative	ANHUI JUKANG ELECTRONICS CO.,LTD.	JK-2	1,6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E472363
-Alternative	KUNSHAN DAYANG PRINTED CIRCUIT BOARD CO.,LTD.	DY-M	1,6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E360224
-Alternative	KUNSHAN YIMAI CIRCUIT BOARD MFR CO.,LTD.	YM-M	1,6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E209202
-Alternative	Jiangsu H-Fast Electronic Co.,Ltd.	211004	1,6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E507530
-Alternative	SHENZHEN KECHENGDA TECHNOLOGY CORP LTD	KD-002	1,6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E498693
-Alternative	Jiangxi Ronghui Electronics Co., LTD	RH-4 RH-4HF RH-1 RH-2 RH-3 RH-3HF	1.6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E252098
-Alternative	DONG GUAN NEW ENERGY PRINTED CIRCUIT B	NE1000B, NE2000, NE6000, NE5000A, NE5000, NE3000, NE1000A, NE1000, NE4000	1.6mm, V-0	EN 60335-1 EN 60335-2-40	Test with appliance &UL E206420
Relay 1	Xiamen Hongfa Electroacoustics Co., Ltd.	HF33F/012-HSL(310)(335)	AC 250V DC12V 10E4 5A 40T85	EN 61810-1:2015 EN 60079-15:2010	VDE 125661 64.100.15.0 4554.01
-Alternative	OMRON Corporation	G5Q-1A4-HA	AC 250V DC12V 10E4 5A 40T85	EN 61810-1:2015 EN 60079-15:2010	VDE 40009467
-Alternative	Tyco Electronics (Shenzhen) Co., Ltd.	OJE-SH-112DM	AC 250V DC12V 10E4 5A 40T85	EN 61810-1:2015 EN 60079-15:2010	VDE 40007630 AK 50439949
Relay 2	Xiamen Hongfa Electroacoustics Co., Ltd.	HF161F/12-H(310)(335)	AC 250V DC12V 10E4 20A 40T85	EN 61810-1:2015 EN 60079-15:2010	VDE 40031410 64.105.15.0 5241.01
-Alternative	Shanghai Song Chuan Precision Electron Co.,Ltd.	891P-1A-S	AC 250V DC12V 10E4 20A 40T85	EN 61810-1:2015 EN 60079-15:2010	R50003966

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-Alternative	Zhejiang Meishuo Electric Technology Co., Ltd.	MPY-S-112-A-P	AC 250V DC12V 10E4 20A 40T105	EN 61810-1:2015 EN 60079-15:2010	TUV R 50204088 AK 50410083
-Alternative	WangRong Electronics (Shenzhen) Co. Ltd.	RF Serie(s) RFL Serie(s)	AC250V/277V,D C12V,10E4,20A, 40T85	EN 61810-1:2015 EN 60079-15:2010	R50194013 D 105370 0002
-Alternative	Huangshan Wangrong Electronics Co.,Ltd.	RF-SS-112DM	AC 250V DC12V 10E4 20A 40T85	EN 61810-1:2015 EN 60079-15:2010	VDE 40032929
-Alternative	Sanyou Corporation Limited	SFK-112DMP-F	AC250V,DC12V, 10E4 20A 40T85	EN 61810-1:2015 EN 60079-15:2010	TUV R 50138321 TUV AK 50464382 0001
Alternative	Xiamen Hongfa Electroacoustics Co., Ltd.	HF33F/012-ZS(310)(335)	AC 250V DC12V 7.5E4 5A 40T70	EN 61810-1:2015 EN 60079-15:2010	VDE 125661 64.100.15.0 4554.01
-Alternative	Zhejiang Meishuo Electric Technology Co., Ltd.	MPDN-S-112-C	AC 250V DC12V 10E4 5A 40T85	EN 61810-1:2015 EN 60079-15:2010	R50403369 AK50461279
-Alternative	WangRong Electronics (Shenzhen) Co. Ltd.	RJE-112D-S	AC277V/250V,D C12V,10E4,5A,4 0T85	EN 61810-1:2015 EN 60079-15:2010	R 50246903 D 105370 0003
-Alternative	Sanyou Corporation Limited	SJE-SH-112D2	AC250V,DC12V, 10E4 5A 40T105	EN 61810-1:2015 EN 60079-15:2010	VDE 40035912
-Alternative	Xiamen Hongfa Electroacoustics Co., Ltd.	JZC-32F/012-HS HF32FV/012-HSTF	AC 250V DC12V 10E4 5A 40T85	EN 61810-1:2015 EN 60079-15:2010	VDE 40012204
-Alternative	Xiamen Hongfa Electroacoustics Co., Ltd.	HF32F/012-HS(310)(335)	AC 250V DC12V 10E4 5A 40T70	EN 61810-1:2015 EN 60079-15:2010	VDE 40012204 64.105.16.0 2325.01
-Alternative	Zhejiang Meishuo Electric Technology Co., Ltd.	MPD-S-112-A	AC 250V DC12V 10E4 5A 40T105	EN 61810-1:2015 EN 60079-15:2010	TUV R 50184948 AK 50396767
-Alternative	Xiamen Hongfa Electroacoustic Co., Ltd	HF32F-G	AC 250VAC DC12V 10E4 5A 40T105	EN 61810-1:2015 EN 60079-15:2010	VDE 40012204 64.105.16.0 2325.01
-Alternative	WangRong Electronics (Shenzhen) Co. Ltd.	RJ-SS-112DM-S	AC250V,DC12V, 10E4,5A,40T85	EN 61810-1:2015 EN 60079-15:2010	TUV R 50222701 TUV D 1053700004
-Alternative	Sanyou Corporation Limited	SJ-SH-112DM2	AC250V,DC12V, 10E4 5A 40T105	EN 61810-1:2015 EN 60079-15:2010	VDE 40002146
-Alternative	Shanghai Song Chuan Precision Electron Co.,Ltd.	307-1AH-V/H/S-307-1AH-F-C/V/S	AC 250V DC12V 10E4 5A 40T85	EN 61810-1:2015 EN 60079-15:2010	VDE 40028236

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-Alternative	Shanghai Song Chuan Precision Electron Co.,Ltd.	MPD-S-112-A	AC 250V DC12V 10E4 5A 40T105	EN 61810-1:2015 EN 60079-15:2010	TUV AK 50396767
Transformer for indoor PCB	Qingdao Jingshi Electronic Co.,Ltd.	BK-19-1933	Input :AC 90-264V~, 50/60Hz Output :DC 12V Class B	EN61558-1:2005 EN61558-2-16:2009	VDE 40037839
-Alternative	Dezhou Sanhe Electric Co.,Ltd.	SANHE-19-090	Input :AC 90-245V~, 50/60Hz Output :DC 12V Class B	EN61558-1:2005 EN61558-2-16:2009	VDE 40029326
-Alternative	Jiangsu Taichang Electronics Co., Ltd.	BCK-EE19-03414	Input :AC 90-245V~, 50/60Hz Output :DC 12V Class B	EN61558-1:2005 EN61558-2-16:2009	VDE 40042740
Alternative	Qingdao Jingshi Electronic Co.,Ltd.	BK-19-1989	Input :AC 90-264V~, 50/60Hz Output :DC 12V Class B	EN61558-1:2005	VDE 40037839
Alternative	Wuxi Derun Electron Co.,Ltd.	DB26-00146A	Input :AC 85-240V~, 50/60Hz Output :DC 12V Class B	EN61558-2-16:2009	TUV B 16 10 8689 0003
Alternative	Dezhou Sanhe Electric Co.,Ltd.	SANHE-19-195	Input :AC 90-245V~, 50/60Hz Output :DC 12V Class B	EN61558-1:2005	VDE 40029326
Transformer for outdoor PCB	Qingdao Jingshi Group Co., Ltd.	BK-19-0030	Input :AC 90-264V~, 50/60Hz Output :DC Class B	EN 61558-2-16:2009 EN 61558-1:2005	VDE 40037839
Alternative	Wuxi Derun Electron Co., Ltd.	DA26-00021A	Input :AC 85-240V~, 50/60Hz Output :DC Class B	EN 61558-2-16:2009 EN 61558-1:2005	TUV B 16 10 8689 0003
Fuse on PCB(Indoor)	Suzhou Littelfuse OVS Ltd.	215 Series	T3.15A250V	EN 60127-1:2006 EN 60127-2:2014	VDE 40013521
Alternative	Dongguan Better Electronic Technology Co.,Ltd.	524	T3.15A250V	EN 60127-1:2006 EN 60127-2:2014	VDE 40025424
Alternative	Sun Electric Co.	5H	T3.15A250V	EN 60127-2:2003+A1 EN 60127-1:2006	TUV J 50220933
Alternative	Suzhou Walter Electronic Co., Ltd.	TSC	T3.15A, 250V	EN 60127-1:2006 EN 60127-2:2014	VDE 40016670
Fuse on PCB(Outdoor)	Suzhou Littelfuse OVS Ltd.	325/326 Series	T25A or 20A, 250V	EN 60335-1 EN 60335-2-40	E10480 Test with appliance
Alternative	Chi Lick Schurter Ltd	SUT 6.3x32 Series	T25A, 250V	EN 60335-1 EN 60335-2-40	E184831
Alternative	SUN ELECTRIC CO	6HP/6SP/6EP	T25A, 250V	EN 60335-1 EN 60335-2-40	Test with appliance &UL E166522 E166522

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Alternative	DongGuan Better Electronic Co., Ltd.	614 Series	T25A, 250V	EN 60335-1 EN 60335-2-40	Test with appliance &UL E300003 E300003
Alternative	Dongguan Cooper Electronics Co.,Ltd.	612 Series	T25A, 250V	EN 60127-1	VDE 400122052
Alternative	Suzhou Walter Electronic Co., Ltd.	MTP	T25A, 250V	EN 60127-1	TUV R 50305728
Alternative	Suzhou Littelfuse OVS Ltd.	325/326 Series	T25A, 250V	EN 60335-2-40	Test with appliance &UL E10480
Alternative	Suzhou Littelfuse OVS Ltd.	215 Series	T3.15A, 250V	EN 60127-1:2006 EN 60127-2:2014	VDE 40013521
Alternative	Sun Electric Co.	5H	T3.15A, 250V	EN 60127-2:2003+A1 EN 60127-1:2006	TUV J 50220933
Alternative	Dongguan Better Electronic Technology Co.,Ltd.	524	T3.15A, 250V	EN 60127-1:2006 EN 60127-2:2014	VDE 40025424
Alternative	Suzhou Walter Electronic Co., Ltd.	TSC	T3.15A, 250V	EN 60127-1:2006 EN 60127-2:2014	VDE 40016670
Alternative	Walter Electronic Co., Ltd.	2010 Series	T1A, 250V	EN 60127-2:2003+A1 EN 60127-1:2006	TUV R 50305728
Alternative	Suzhou Littelfuse OVS Ltd.	392 Series	T1A, 250V	EN 60127-1:2006 EN 60127-2:2014	VDE 126983
Alternative	Walter Electronic Co., Ltd.	2010 Series	T1A or 3.15A, 250V	EN 60127-2:2003+A1 EN 60127-1:2006	TUV R 50305728
Alternative	Suzhou Littelfuse OVS Ltd.	392 Series	T1A or 3.15A, 250V	EN 60127-1:2006 EN 60127-2:2014	VDE 126983
Alternative	CONQUER ELECTRONICS CO., LTD.	MST Series	T1A or 3.15A, 250V	EN 60127-2:2003+A1 EN 60127-1:2006	TUV R 50176525
Alternative	DongGuan Better Electronic Co., Ltd.	932 Series	T1A or 3.15A, 250V	EN 60127-1:2006 EN 60127-2:2014	VDE 40033369
IPM for 18K Compressor	Infineon Technologies China Co., Ltd.	IKCM20L60GD	600V, 20A	EN 60335-2-40	Test with appliance
-Alternative	Infineon Technologies China Co, Ltd	IKCM15L60GD	600V; 15A	EN 60335-2-40	Test with appliance
Optocoupler	Lite-On Technology Corporation	LTV-817S-TA-A LTV-817S	6V/50mA	EN 60747-5-5:2011	VDE 40015248
-Alternative	Everlight Electronics Co., Ltd.	EL817S1A(TA) EL817S1	6V/60mA	EN 60747-5-5:2011	VDE 132249
-Alternative	Lite-On Technology Corporation	LTV-851S-TP-HR-CU	6V/50mA	EN 60747-5-5:2011	VDE 40015248
-Alternative	Everlight Electronics Co., Ltd.	EL851S1(TU)	6V/80mA	EN 60747-5-5:2011	VDE 132249
-Alternative	Lite-on Technology Corporation	LTV-817	890V peak; T115; Cr.&Cl.>=7,0mm	EN 60747-5-5:2011	VDE 40015248 R 9653630

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-Alternative	Lite-on Technology Corporation	LTV-851 LTV-851S-TP-HR-CU	890V peak; T115; Cr.&Cl.>=7,0mm	EN 60747-5-5:2011	VDE 40015248 R 9653630
-Alternative	Everlight Electronics Co., Ltd.	EL851 EL817	850V peak; T100; Cr. & Cl.>=7,6mm	EN 60747-5-5	VDE 132249
-Alternative	Sharp Corporation Electronic Components Group	PC 817 PC 851	890V peak; T110; Cr.&Cl.>=6.4mm	EN 60747-5-5:2011	VDE 40008087
-Alternative	Shenzhen Orient Components Co. Ltd.	ORPC-851	850V peak; T100; Cr. & Cl.>=7,6mm	EN 60747-5-5:2011	VDE 40029733
-Alternative	Toshiba Electronic Devices & Storage Corporation	TLP351	890V peak; T85; Cr.&Cl.>=7,0mm	EN 60747-5-5:2011	VDE 40011913
-Alternative	Fairchild Semiconductor Pte Ltd	FOD3150	890V peak; T110; Cr. & Cl.>=7,0mm	EN 60747-5-5:2011	VDE 40018398
-Alternative	Lite-On Technology Corporation	LTV-3150	1140V peak; T115; Cr. & Cl.>=7,0mm	EN 60747-5-5:2011	VDE 40027788
-Alternative	Toshiba Electronic Devices & Storage Corporation	TLP251	890V peak; T85; Cr.&Cl.>=7,0mm	EN 60747-5-5:2011	VDE 40011913
-Alternative	Sharp Corporation Electronic Components Group	PC725V	890V peak; T100; Cr.&Cl.>=6,4mm	EN 60747-5-5:2011	VDE 40008189
-Alternative	Toshiba Electronic Devices & Storage Corporation	TLP628	890V peak; T100; Cr. & Cl.>=7,0mm	EN 60747-5-5:2011	VDE 40009302
-Alternative	Toshiba Electronic Devices & Storage Corporation	TLP388	1230V peak; T125; Cr. & Cl.>=8,0mm	EN 60747-5-5:2011	VDE 40040216
PTC	Thinking Electronic Industrial Co., Ltd.	PPL20400NA2 B7CKL	250VAC; 40Ω(25°C); I _{max} 12A	EN 60738-1-3:2008	TUV R 50426392 VDE 40017625
-Alternative	Thinking Electronic Industrial Co., Ltd.	PSB400M	250VAC; 40Ω(25°C); I _{max} 12A	EN 60738-1-3:2008	VDE 40017625
-Alternative	Thinking Electronic Industrial Co., Ltd.	PSB400MA2B5 10CGY	250VAC; 40Ω(25°C); I _{max} 12A	EN 60738-1-3:2008	VDE 40017625
-Alternative	Dandong guotong electronic components co.,ltd	MZ9240RN	250VAC; 40Ω(25°C); I _{max} 12A	EN 60738-1-3:2008	TUV B 17 07 67733 002
-Alternative	Xiaogan Huagong Gaoli Electronic Co., Ltd.	MZ8II- CH400M MZ8I-CH400M	250VAC; 40Ω(25°C); I _{max} 12A	EN 60738-1-3:2008	TUV R 50176237
-Alternative	ShenZhen AMPRON Technology co., Ltd.	MZ3240R	250VAC; 40Ω(25°C); I _{max} 12A	EN 60738-1-3:2008	TUV R 50187698

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Varistor	Thinking Electronic Industrial Co.Ltd	TVR14621KB26 2Y(TVR14621)	6000A, 620V	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 005944
-Alternative	TDK (Zhuhai FTZ) Co., Ltd.	SNF14K385E2 S5M3,5K1	6000A, 620V	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 40027582
-Alternative	Chengdu Tieda Electronics Capacitors co.,Ltd	MYN15-621KM	6000A, 620V	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 40045597
-Alternative	TDK Electronics GmbH & Co OG	S14K385	620V, 40T85	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 40027582
-Alternative	Thinking Electronic Industrial Co., Ltd.	TVR14621 TVR14621V TVR14621*	620V, 40T85	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 005944
-Alternative	Chengdu Tieda Electronics Capacitors co.,Ltd	MYN15-621KM	620V/ 385Vrms , 40T85	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 40045597
-Alternative	Chengdu Tieda Electronics Corporation	14KAC385MS	620V, 40T125	IEC 61051-1 IEC 61051-2 IEC 61051-2-2	VDE 40045597
Y Capacitor	Yinan Don's Electronic Component Co.,Ltd	CT81-250VAC-12e-2E4-472M-YB	250/400VAC,401 25/21/B,4700pF	EN 60384-14:2013	VDE135256
-Alternative	TDK XIAMEN CO., LTD	CS45-E2GA472M-SKA	250VAC,55/125/2 1/B,4700pF	EN 60384-14:2013	VDE 40029781
-Alternative	TDK XIAMEN CO., LTD	CD45-E2GA222M-SKA	250VAC,55/125/2 1/B,2200pF	EN 60384-14:2013	VDE 40017931
-Alternative	Yinan Don's Electronic Component Co.,Ltd	CT81-400VAC-10A-2E4-222M-YA-T3	250VAC,40/125/2 1/B,25/125/21/C, 2200pF	EN 60384-14:2013	VDE135256
-Alternative	TDK Corporation	CD	AC250/400V,55/1 25/21/B, Y1, 2200pF, 4700pF, 10000pF	EN 60384-14:2013	VDE 40017931
-Alternative	TDK Corporation	CS	AC 250V, 25/125/21/B, Y2, 2200pF, 4700pF, 10000pF	EN 60384-14:2013	VDE 40029781
-Alternative	Yinan Don's Electronic Component Co.,Ltd.	CT81	AC250/400V,25/1 25/21/C,Y2,Y1, 2200pF, 4700pF, 10000pF	EN 60384-14:2013	VDE135256
-Alternative	Shantou High-New Technology Dev. Zone Songtian Enterprise Co., Ltd.	CE	AC250V,25/125/2 1/C,X1Y2, 2200pF, 4700pF, 10000pF	EN 60384-14:2013	VDE 40025748
-Alternative	Capatronics Electronics (Kunshan) Co., Ltd.	Y5P/Y5V/Y5U	AC250/400V,20/1 25/21/C, Y1,Y2, 2200pF, 4700pF, 10000pF	EN 60384-14:2013	VDE 40013317

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-Alternative	Capatronics Electronics (Kunshan) Co., Ltd.	Y5P/Y5V/Y5U	AC 250V,20/125/21/C, Y2, 2200pF, 4700pF, 10000pF	EN 60384-14:2013	VDE 40013317
-Alternative	Murata Mfg. Co., Ltd.	KY	AC 250V/ 300V ,40/125/21/C, Y2, 2200pF, 4700pF, 10000pF	EN 60384-14:2013	VDE 40006273
-Alternative	Murata Mfg. Co., Ltd.	KX	AC 250V/ 300V ,40/125/21/C, Y1, 2200pF, 4700pF	EN 60384-14:2013	VDE 40002831
-Alternative	Guangdong Fenghua Advanced Technology Holding CO., LTD.	CT7	AC 250V/ 300V ,25/125/21/C,Y2, 2200pF, 4700pF, 10000pF	EN 60384-14:2013	VDE 40013869
-Alternative	Walsin Technology Corp.	AC	AC 250V/ 300V ,40/125/21/C,Y2, 2200pF, 4700pF, 10000pF	EN 60384-14:2013	VDE 40001829
-Alternative	Walsin Technology Corp.	AH	AC 250V,40/125/21/C,Y2, 2200pF, 4700pF	EN 60384-14:2013	VDE 40001804
-Alternative	Nistronics (Jiangxi) Co., Ltd.	MPY	AC 250V,40/125/21/B,Y2, 2200pF, 4700pF, 10000pF	EN 60384-14:2013	VDE 40039835
X2 Capacitor	Nistronics (Jiangxi) Co.,Ltd.	MPR V0275K474M010A225	310VAC,40/110/56/B 470nF	EN 60384-14:2013	VDE 40032056
-Alternative	Ultra Tech Xiphi Enterprise Co., Ltd	HQX474K0275IAYCCL21B	275VAC,40/110/56/B,470nF	EN 60384-14:2013	VDE 40024534
-Alternative	Xiamen Faratronic Co.,Ltd.	MKP62	275VAC,40/110/56/B 470nF	EN 60384-14:2013	VDE 40000358
-Alternative	Nistronics(Jiangxi)Co.,Ltd.	MPR V0275K104M0000200	275VAC,40/110/56/B,0.1uF	EN 60384-14:2013	VDE 40032056
-Alternative	Ultra Tech Xiphi Enterprise Co., Ltd	HQX	275VAC,40/110/56/B,0.1uF	EN 60384-14:2013	VDE 40024534
-Alternative	Xiamen Faratronic Co.,Ltd.	MKP61	275VAC,40/100/56/B,0.01uF	EN 60384-14:2013	VDE 40007424
-Alternative	Guangdong Fengming Electronic Tech.Co.,Ltd.	MKP-X2	275VAC,40/105/21/C,0.01uF	EN 60384-14:2013	VDE 40025702

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-Alternative	Xiamen Faratronic Co.,Ltd.	MKP62	AC 275V or AC305V or AC310V ,40/110/56/B or 40/105/56/B or 40/100/56/B , 0,01μF, 0,1μF, 0,47μF, 1,0μF, 2,2μF, 0.022μF ,0.22μF	EN 60384-14:2013	VDE 40000358
-Alternative	Xiamen Faratronic Co.,Ltd.	MKP61	AC 275V or AC305V ,40/110/56/B or 40/100/56/B , 0,01μF, 0,1μF, 0,47μF, 1,0μF, 2,2μF, 0.022μF ,0.22μF	EN 60384-14:2013	VDE 40007424
-Alternative	Nistronics (Jiangxi) Co., Ltd.	MPR	AC 275V or AC310V ,40/110/56/B or 40/100/21/B , 0,01μF, 0,1μF, 0,47μF, 1,0μF, 2,2μF, 0.022μF ,0.22μF	EN 60384-14:2013	VDE 40032056
-Alternative	Ultra Tech Xiphi Enterprise Co. Ltd.	HQX	AC 250/275/280/300/305/310V, 40/110/56/B or C, 0,01μF, 0,1μF, 0.22μF,0,47μF, 1,0μF, 2,2μF	EN 60384-14:2013	VDE 40024534
-Alternative	JIMSON ELECTRONICS (XIAMEN) CO., LTD.	MKP	AC 275V or AC 250V , 40/100/21/B, 0,01μF, 0,1μF, 0,47μF, 1,0μF, 2,2μF, 0.022μF ,0.22μF	EN 60384-14:2013	VDE 40000463
-Alternative	TDK (Zhuhai FTZ) Co., Ltd.	B3292 Series	AC 305V, 40/105/56/B, 0,01μF, 0,1μF, 0,47μF, 1,0μF, 2,2μF, 0.022μF ,0.22μF	EN 60384-14:2013	VDE 40010694
-Alternative	Guangdong Fengming Electronic Tech. Co.,Ltd.	MKP-X2	AC 275V or AC305V or AC310V ,40/105/21/C or 40/110/56/B or 40/110/56/C , 0,01μF, 0,1μF, 0,47μF, 1,0μF, 2,2μF, 0.022μF ,0.22μF	EN 60384-14:2013	VDE 40025702

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Discharge tube	OKAYA ELECTRIC INDUSTRIES CO LTD	RA-362MX-V7-Y5-HIS	3600V	EN 60335-1 EN 60335-2-40	Test with appliance &UL E322107
-Alternative	TDK Electronics	B88069X3813A 103	3600V	EN 60335-1 EN 60335-2-40	Test with appliance &UL E319264
-Alternative	Shenzhen Bencent Electronics Co., Ltd.	B5G3600-G	3600V	EN 60335-1 EN 60335-2-40	Test with appliance &UL E337906
-Alternative	TDK Electronics	B88069X2311T 502	3600V	EN 60335-1 EN 60335-2-40	Test with appliance &UL E319264
-Alternative	Shenzhen Bencent Electronics Co., Ltd.	B5G3600-F	3600V	EN 60335-1 EN 60335-2-40	Test with appliance &UL E337906

Appendix 1: EU differences of EN 60335-2-40:2003 +A11:2004 +A12:2005 +A1:2006 +A2:2009 + A13:2012, EN 60335-1:2012 +A11:2014 +A13:2017 +A1:2019 +A14:2019 +A2:2019+A15:2021

	CENELEC COMMON MODIFICATIONS		
7.1	Single-phase appliances to be connected to the supply mains: 230 V covered	220-240V	P
	Multi-phase appliances to be connected to the supply mains: 400 V covered		N/A
7.10	Devices used to start/stop operational functions of the appliance distinguished from other manual devices by means of shape, size, surface texture, position, etc.	The on/stop button on control panel of indoor unit is in a different position with others.	P
	An indication that the device has been operated is given by:		P
	- a tactile feedback, or		P
	- an audible and visual feedback		P
	Delete the paragraphs starting with "Devices used to start/stop..." until the end of the requirement "...by vulnerable persons.". This includes Notes Z1 and Z2. (EN 60335-1:2012/A2:2019)		P
7.12	The instructions include the substance of the following:		P
	- this appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved		P
	- children shall not play with the appliance		P
	- cleaning and user maintenance shall not be made by children without supervision		P
7.12.1	Installation instructions for appliances intended to be permanently connected to fixed wiring, and have leakage current exceed 10 mA, state that installation of residual current device (RCD) having rated residual operating current not exceeding 30 mA is advisable (EN 60335-2-40)		N/A
	For appliances not accessible to the general public and which are intended to be permanently connected to fixed wiring and which may have leakage currents exceeding 10 mA, the installation instructions shall specify the rating of the residual current device (RCD) to be installed (EN 60335-2-40/A12)		N/A
7.14	Delete Note Z1 (EN 60335-1:2012/A2:2019)		P
24.1	Replace the existing text by the following:	(EN 60335-1:2012/A1:2019)	—
	Components shall comply with the safety requirements specified in the relevant EN standards as far as they reasonably apply		P

Appendix 1: EU differences of EN 60335-2-40:2003 +A11:2004 +A12:2005 +A1:2006 +A2:2009 + A13:2012, EN 60335-1:2012 +A11:2014 +A13:2017 +A1:2019 +A14:2019 +A2:2019+A15:2021

	Compliance with the EN standard for the relevant component does not necessarily ensure compliance with the requirements of this standard		P
	Motors are not required to comply with EN 60034-1. They are tested as part of the appliance according to this standard		P
	Relays shall be tested as part of the appliance according to this standard. They may be alternatively tested to EN 60730-1, in which case they shall also meet the additional requirements in EN 60335-1		P
	Unless otherwise specified, the requirements of Clause 29 of this standard apply between live parts of components and accessible parts of the appliance		P
	Unless otherwise specified, components may comply with the requirements for clearances and creepage distances for functional insulation as specified in the relevant component standard		P
	Unless otherwise specified, the requirements of 30.2 of this standard apply to parts of non-metallic material in components including parts of non-metallic material supporting current-carrying connections inside components		P
	Components that have not been previously tested and shown to comply with the EN standard for the relevant component are tested according to the requirements of 30.2 of this standard		P
	Components that have been previously tested and shown to comply with the resistance to fire requirements in the EN standard for the relevant component need not be retested provided that:		P
	— the severity specified in the component standard is not less than the severity specified in 30.2 of this standard, and		P
	— unless the pre-selection alternatives in 30.2 are used, the test report for the component states the values of t_e and t_i as required by EN 60695-2-11		P
	If the above two conditions are not satisfied, the component is tested as part of the appliance		P
	Power electronic converter circuits are not required to comply with EN 62477-1. They are tested as part of the appliance according to this standard		P
	Unless components have been previously tested and found to comply with the relevant EN standard for the number of cycles specified, they are tested in accordance with 24.1.1 to 24.1.9		P
	For components mentioned in 24.1.1 to 24.1.9, no additional tests specified in the relevant EN standard for the component are necessary other than those specified in 24.1.1 to 24.1.9		P

Appendix 1: EU differences of EN 60335-2-40:2003 +A11:2004 +A12:2005 +A1:2006 +A2:2009 +A13:2012, EN 60335-1:2012 +A11:2014 +A13:2017 +A1:2019 +A14:2019 +A2:2019+A15:2021

	Components that have not been separately tested and found to comply with the relevant EN standard and components that are not marked or not used in accordance with their marking, are tested in accordance with the conditions occurring in the appliance, the number of samples being that required by the relevant standard		P
	Lamp-holders and starter-holders that have not been previously tested and found to comply with the relevant EN standard are tested as a part of the appliance and shall additionally comply with the gauging and interchangeability requirements of the relevant EN standard under the conditions occurring in the appliance. Where the relevant EN standard specifies these gauging and interchangeability requirements at elevated temperatures, the temperatures measured during the tests of Clause 11 are used	No lampholder or starterholder	N/A
	There are no additional tests specified for nationally standardized plugs such as those detailed in IEC/TR 60083 or connectors complying with the standard sheets of EN 60320-1 and EN 60309, unless they are specifically mentioned in the text of this standard	No plug	N/A
	Plugs and socket-outlets and other connecting devices of interconnection cords shall not be interchangeable with plugs and socket-outlets listed in IEC/TR 60083 or IEC 60906-1 or with connectors and appliance inlets complying with the standard sheets of EN 60320-1, if direct supply to these parts from the supply mains could give rise to a hazard		N/A
	NOTE Z3 For details of plugs used in CENELEC countries listed in IEC TR 60083 see Annex ZH. (EN 60335-1:2012/A14:2019)		N/A
	When an EN standard does not exist for a component, there are no additional tests specified		P
24.1.7	If the remote operation of the appliance is via a telecommunication network, the relevant standard for the telecommunication interface circuitry in the appliance is EN 41003		N/A
	Compliance with clause 8 of this standard is not impaired by connecting the appliance to a device covered by EN 41003		N/A
24.Z1	For motor running capacitors (IEC 60252-1 type P2) with a metallic enclosure having an overpressure fuse the flame testing of internal plastic parts supporting current carrying connections as required in 30.2.2 and 30.2.3.1 is not necessary	No motor capacitor	N/A
	Replacement: (EN 60335-1:2012/A2:2019)		—
	Type S2 and S3 capacitors according to EN 60252-1 are not required to undergo the testing as required by 30.2.2 and 30.2.3.1.		N/A

Appendix 1: EU differences of EN 60335-2-40:2003 +A11:2004 +A12:2005 +A1:2006 +A2:2009 + A13:2012, EN 60335-1:2012 +A11:2014 +A13:2017 +A1:2019 +A14:2019 +A2:2019+A15:2021

24.1	In the note, replace the word "NOTE Z3" with "NOTE Z1" (EN 60335-1:2012/A15:2021)		N/A
24.1.7	Replace the sub clause with the following: If the remote operation of the appliance is via a telecommunication network, the relevant standard for the telecommunication interface circuitry in the appliance is IEC 62151. (EN 60335-1:2012/A15:2021)		N/A

*** End of test report ***