

**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.** .....: 130819055GZU-001

**Date of issue** .....: December 18, 2013; Modification 10: March 17, 2017

**Total number of pages**.....: 234

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

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

**Test specification:**

**Standard** .....: IEC 60335-2-40:2002 (Fourth Edition) + A1:2005 (incl. Corr.1:2006)  
+ A2:2005 in conjunction with  
IEC 60335-1:2010 (Fifth Edition)

**Test procedure** .....: LVD

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

**Test Report Form No.**.....: IEC60335\_2\_40J

**Test Report Form(s) Originator**.....: VDE

**Master TRF**.....: Dated 2014-06

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<b>Test item description..... :</b>	Split type, invert, multi-connected air-conditioner
<b>Trade Mark..... :</b>	GREE, REZNOR
<b>Manufacturer ..... :</b>	Gree Electric Appliances, Inc. of Zhuhai
<b>Model/Type reference ..... :</b>	<p><b>Indoor units:</b></p> <p><b>Ceiling cassette type:</b></p> <p>GREE:</p> <p>GMV-ND28T/A-T, GMV-ND36T/A-T, GMV-ND45T/A-T, GMV-ND50T/A-T, GMV-ND56T/A-T, GMV-ND63T/A-T, GMV-ND71T/A-T, GMV-ND80T/A-T, GMV-ND90T/A-T, GMV-ND100T/A-T, GMV-ND112T/A-T, GMV-ND125T/A-T, GMV-ND140T/A-T, GMV-ND100T/AR-T, GMV-ND90T/AR-T, GMV-ND80T/AR-T, GMV-ND71T/AR-T</p> <p><b>Ducted type:</b></p> <p>GREE:</p> <p>GMV-ND22PLS/A-T, GMV-ND25PLS/A-T, GMV-ND28PLS/A-T, GMV-ND32PLS/A-T, GMV-ND36PLS/A-T, GMV-ND40PLS/A-T, GMV-ND45PLS/A-T, GMV-ND50PLS/A-T, GMV-ND56PLS/A-T, GMV-ND63PLS/A-T, GMV-ND71PLS/A-T, GMV-ND80PLS/A-T, GMV-ND90PLS/A-T, GMV-ND100PLS/A-T, GMV-ND112PLS/A-T, GMV-ND125PLS/A-T, GMV-ND140PLS/A-T, GMV-ND22PLS/AR-T, GMV-ND28PLS/AR-T, GMV-ND36PLS/AR-T, GMV-ND45PLS/AR-T, GMV-ND56PLS/AR-T, GMV-ND71PLS/AR-T, GMV-ND80PLS/AR-T, GMV-ND90PLS/AR-T</p> <p>GMV-ND22PL/B-T, GMV-ND25PL/B-T, GMV-ND28PL/B-T, GMV-ND32PL/B-T, GMV-ND36PL/B-T, GMV-ND40PL/B-T, GMV-ND45PL/B-T, GMV-ND50PL/B-T, GMV-ND56PL/B-T, GMV-ND63PL/B-T, GMV-ND72PL/B-T</p> <p>REZNOR:</p> <p>BDDL-22(07)-BV, BDDL-25(08)-BV, BDDL-28(09)-BV, BDDL-32(11)-BV, BDDL-36(12)-BV, BDDL-40(13)-BV, BDDL-45(15)-BV, BDDL-50(17)-BV, BDDL-56(19)-BV, BDDL-63(21)-BV, BDDL-72(24)-BV</p> <p><b>Wall mounted type:</b></p> <p>GREE:</p> <p>GMV-N22G/A3A-K, GMV-N28G/A3A-K, GMV-N36G/A3A-K, GMV-N45G/A3A-K, GMV-N50G/A3A-K, GMV-N56G/A3A-K, GMV-N63G/A3A-K, GMV-N71G/A3A-K</p> <p><b>Floor standing type:</b></p> <p>GREE:</p> <p>GMV-ND140L/A-T, GMV-ND100L/A-T</p> <p>REZNOR:</p> <p>BDFS-140(47)-AV, BDFS-100(34)-AV</p> <p><b>Outdoor units:</b></p> <p>GREE:</p> <p>GMV-160WL/A-T, GMV-140WL/A-T, GMV-120WL/A-T</p> <p>REZNOR:</p> <p>V5BV-160(54)WMAV, V5BV-140(47)WMAV, V5BV-120(40)WMAV</p>
<b>Ratings..... :</b>	<p><b>For indoor units:</b></p> <p><b>Ceiling cassette type:</b></p>

TRF No. IEC60335\_2\_40J

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, China  
Tel: (86-20) 8213 9688 Fax: (86-20) 32057538

220-240V~, 50Hz, 208-230V~, 60Hz, Class I;  
GMV-ND28T/A-T, GMV-ND36T/A-T, GMV-ND45T/A-T: 48W;  
GMV-ND50T/A-T: 50W;  
GMV-ND56T/A-T, GMV-ND63T/A-T: 59W;  
GMV-ND71T/A-T, GMV-ND80T/A-T: 68W;  
GMV-ND90T/A-T, GMV-ND100T/A-T: 98W;  
GMV-ND112T/A-T, GMV-ND125T/A-T, GMV-ND140T/A-T,  
GMV-ND100T/AR-T, GMV-ND90T/AR-T: 110W  
GMV-ND80T/AR-T, GMV-ND71T/AR-T: 95W

**Ducted type:**

220-240V~, 50Hz, 208-230V~, 60Hz, Class I;  
GMV-ND22PLS/A-T, GMV-ND25PLS/A-T, GMV-ND28PLS/A-T: 35W;  
GMV-ND32PLS/A-T, GMV-ND36PLS/A-T: 43W;  
GMV-ND36PLS/AR-T: 38W  
GMV-ND40PLS/A-T, GMV-ND45PLS/A-T, GMV-ND50PLS/A-T: 52W;  
GMV-ND56PLS/A-T, GMV-ND63PLS/A-T, GMV-ND45PLS/AR-T, GMV-ND56PLS/AR-T: 99W;  
GMV-ND71PLS/A-T, GMV-ND71PLS/AR-T: 105W;  
GMV-ND80PLS/A-T: 140W;  
GMV-ND90PLS/A-T, GMV-ND100PLS/A-T, GMV-ND112PLS/A-T: 209W;  
GMV-ND80PLS/AR-T, GMV-ND90PLS/AR-T: 210W;  
GMV-ND125PLS/A-T, GMV-ND140PLS/A-T: 230W;  
GMV-ND22PL/B-T, GMV-ND25PL/B-T, GMV-ND28PL/B-T: 25W;  
GMV-ND32PL/B-T, GMV-ND36PL/B-T: 30W;  
GMV-ND40PL/B-T, GMV-ND45PL/B-T, GMV-ND50PL/B-T: 35W;  
GMV-ND56PL/B-T, GMV-ND63PL/B-T: 45W;  
GMV-ND72PL/B-T, GMV-ND22PLS/AR-T, GMV-ND28PLS/AR-T: 50W;  
BDDL-22(07)-BV, BDDL-25(08)-BV, BDDL-28(09)-BV: 25W;  
BDDL-32(11)-BV, BDDL-36(12)-BV: 30W;  
BDDL-40(13)-BV, BDDL-45(15)-BV, BDDL-50(17)-BV: 35W,  
BDDL-56(19)-BV, BDDL-63(21)-BV: 45W;  
BDDL-72(24)-BV: 50W;

**Wall mounted type:**



220-240V~, 50Hz;  
GMV-N22G/A3A-K; GMV-N28G/A3A-K: 50W;  
GMV-N36G/A3A-K; GMV-N45G/A3A-K; GMV-N50G/A3A-K: 60W;  
GMV-N56G/A3A-K; GMV-N63G/A3A-K; GMV-N71G/A3A-K: 70W

**Floor standing type:**

220-240V~, 50Hz, 208-230V~, 60Hz, Class I;  
GMV-ND140L/A-T, GMV-ND100L/A-T, BDFS-140(47)-AV,  
BDFS-100(34)-AV: 200W

**For outdoor units:**

220-240V~, 50Hz or 208-230V~, 60Hz, IPX4, Class I;  
GMV-160WL/A-T, V5BV-160(54)WMAV: 6800W, R410A: 5,0kg;  
GMV-140WL/A-T, V5BV-140(47)WMAV: 6300W, R410A: 5,0kg;  
GMV-120WL/A-T, V5BV-120(40)WMAV: 5700W, R410A: 5,0kg;

<b>Testing procedure and testing location:</b>	
<input checked="" type="checkbox"/> <b>CB Testing Laboratory:</b>	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch
Testing location/ address.....:	Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, China
<input type="checkbox"/> <b>Associated CB Laboratory:</b>	---
Testing location/ address.....:	---
Tested by (name + signature).....:	---
Approved by (+ signature) .....	---
<input checked="" type="checkbox"/> Testing procedure: TMP	
Tested by (name + signature).....:	Garvin Li 
Approved by (+ signature) .....	Kuboo Li 
Testing location/ address.....:	Gree Electric Appliances, Inc. of Zhuhai West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070
<input type="checkbox"/> Testing procedure: WMT	---
Tested by (name + signature).....:	---
Witnessed by (+ signature).....:	---
Approved by (+ signature) .....	---
Testing location/ address.....:	---
<input type="checkbox"/> Testing procedure: SMT	---
Tested by (name + signature).....:	---
Approved by (+ signature) .....	---
Supervised by (+ signature).....:	---
Testing location/ address.....:	---
<input type="checkbox"/> Testing procedure: RMT	---
Tested by (name + signature).....:	---
Approved by (+ signature) .....	---
Supervised by (+ signature).....:	---
Testing location/ address.....:	---

**List of Attachments (including a total number of pages in each attachment):**

None

**Summary of testing:**

The products tested comply with the requirements of the following standards:

EN 62233:2008;

EN 60335-1:2012 + A11:2014 (See appendix to TRF No. IEC60335\_2\_40J);

EN 60335-2-40:2003 + A11:2004 + A12:2005 + A1:2006 + A2:2009 + A13:2012 (See appendix to TRF No. IEC60335\_2\_40J).



<p><b>Tests performed (name of test and test clause):</b></p> <p><b>Original:</b></p> <p>The outdoor unit GMV-160WL/A-T was selected to performed full test matched with suitable indoor units.</p> <p>GMV-140WL/A-T and GMV-120WL/A-T were performed the tests of clause 10, 11, 13, 19 and Annex EE matched with suitable indoor units.</p> <p>Match list for test:</p> <table border="1"> <tr> <th>Outdoor unit</th><th>Indoor units</th></tr> <tr> <td>GMV-160WL/A-T</td><td>GMV-ND50T/A-T + GMV-ND140PLS/A-T</td></tr> <tr> <td>GMV-140WL/A-T</td><td>GMV-ND80T/A-T + GMV-ND80PLS/A-T</td></tr> <tr> <td>GMV-120WL/A-T</td><td>GMV-ND90T/A-T + GMV-ND32PL/B-T</td></tr> </table> <p><b>Modification 1:</b></p> <p>Tests of clause 10, 11, 13, 19, 24.5 and Annex EE were conducted on outdoor unit GMV-160WL/A-T match indoor units GMV-ND71T/A-T and GMV-ND140T/A-T which incorporated alternative indoor fan motors.</p> <p>Full tests were conducted on indoor units GMV-N28G/A3A-K, GMV-N50G/A3A-K, GMV-N71G/A3A-K and GMV-ND63PL/B-T which match outdoor unit GMV-160WL/A-T.</p> <p><b>Modification 2:</b></p> <p>After review, no test was needed.</p> <p><b>Modification 3:</b></p> <p>After review, test of clauses 10, 11, 13, 19 and annex EE were conducted on GMV-160WL/A-T with GMV-ND22PL/B-T+GMV-ND71PL/B-T+ GMV-ND25PLS/A-T + GMV-ND80PLS/A-T which incorporated alternative indoor fan motor FG60A-ZL (Mfg: Kaibang).</p> <p><b>Modification 4:</b></p> <p>After review, tests of clauses 8, 10, 11, 13, 19.2, 19.5, 19.7, 19.11, 29 and annex EE were conducted on GMV-160WL/A-T with GMV-ND140L/A-T and GMV-ND100L/A-T.</p> <p><b>Modification 5:</b></p> <p>After review, the clauses 8, 20.2 and 24.8 were revaluated.</p> <p><b>Modification 6:</b></p> <p>Tests of clause 10, 11, 13, 19, 21 and annex EE were conducted on outdoor unit GMV-160WL/A-T marched with indoor units GMV-ND140T/A-T + GMV-ND28T/A-T incorporated alternative outdoor fan motor SWZ120A (Mfg. Shibaura, Shangqi, Kaibang and Wolong).</p>	Outdoor unit	Indoor units	GMV-160WL/A-T	GMV-ND50T/A-T + GMV-ND140PLS/A-T	GMV-140WL/A-T	GMV-ND80T/A-T + GMV-ND80PLS/A-T	GMV-120WL/A-T	GMV-ND90T/A-T + GMV-ND32PL/B-T	<p><b>Testing location:</b></p> <p>Intertek Testing Services Shenzhen Ltd. Guangzhou Branch</p> <p>Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, China</p> <p>Gree Electric Appliances Inc. of Zhuhai</p> <p>West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</p>
Outdoor unit	Indoor units								
GMV-160WL/A-T	GMV-ND50T/A-T + GMV-ND140PLS/A-T								
GMV-140WL/A-T	GMV-ND80T/A-T + GMV-ND80PLS/A-T								
GMV-120WL/A-T	GMV-ND90T/A-T + GMV-ND32PL/B-T								

Tests of clause 10, 11, 13, 19, 21 and annex EE were conducted on outdoor unit GMV-160WL/A-T matched with indoor units GMV-ND140PLS/A-T incorporated alternative indoor fan motor FG150A-ZL (Mfg.: Kaibang).

**Modification 7:**

After review, no test was needed.

**Modification 8:**

After review, no test was needed.

**Modification 9:**

After review, no test was needed.

**Modification 10:**

After review, test of clauses 10, 11, 13, 19.5 and Annex EE were conducted on GMV-ND100T/AR-T, GMV-ND80T/AR-T, GMV-ND28PLS/AR-T, GMV-ND36PLS/AR-T, GMV-ND56PLS/AR-T, GMV-ND71PLS/AR-T and GMV-ND90PLS/AR-T.

The products tested were found to comply with the requirements of specific standards.

**Summary of compliance with National Differences**




Special National Conditions of Europe Group has been considered.




☒ **The product fulfils the requirements of EN 60335-1:2012 + A11:2014; 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.

**Following marking plates are for ceiling cassette type indoor units:**

	
MULTI VARIABLE AIR CONDITIONERS	
CASSETTE TYPE INDOOR UNIT	
Model	GMV-ND28T/A-T
Rated Voltage/Frequency	220-240V~/50Hz 208-230V~/60Hz
Cooling Capacity	2800W
Heating Capacity	3200W
Rated Input	48W
Air Flow Volume	750m <sup>3</sup> /h
Sound Pressure Level	36dB(A)
Weight	22.5kg
Manufactured Date	
GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI	
	
83274100079 Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070	

	
MULTI VARIABLE AIR CONDITIONERS	
CASSETTE TYPE INDOOR UNIT	
Model	GMV-ND36T/A-T
Rated Voltage/Frequency	220-240V~/50Hz 208-230V~/60Hz
Cooling Capacity	3600W
Heating Capacity	4000W
Rated Input	48W
Air Flow Volume	750m <sup>3</sup> /h
Sound Pressure Level	36dB(A)
Weight	22.5kg
Manufactured Date	
GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI	
	
83274100050 Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070	

	
MULTI VARIABLE AIR CONDITIONERS	
CASSETTE TYPE INDOOR UNIT	
Model	GMV-ND45T/A-T
Rated Voltage/Frequency	220-240V~/50Hz 208-230V~/60Hz
Cooling Capacity	4500W
Heating Capacity	5000W
Rated Input	48W
Air Flow Volume	750m <sup>3</sup> /h
Sound Pressure Level	36dB(A)
Weight	22.5kg
Manufactured Date	
GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI	
	
83274100051 Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070	

<p><b>GREE</b></p> <p>MULTI VARIABLE AIR CONDITIONERS CASSETTE TYPE INDOOR UNIT</p> <p>Model GMV-ND50T/A-T Rated Voltage/Frequency 220-240V~/50Hz 208-230V~/60Hz</p> <p>Cooling Capacity 5000W Heating Capacity 5600W Rated Input 50W Air Flow Volume 830m<sup>3</sup>/h Sound Pressure Level 36dB(A) Weight 22.5kg Manufactured Date</p> <p>GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI</p> <p> </p> <p>63274100052 Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</p>	<p><b>GREE</b></p> <p>MULTI VARIABLE AIR CONDITIONERS CASSETTE TYPE INDOOR UNIT</p> <p>Model GMV-ND56T/A-T Rated Voltage/Frequency 220-240V~/50Hz 208-230V~/60Hz</p> <p>Cooling Capacity 5600W Heating Capacity 6300W Rated Input 59W Air Flow Volume 1000m<sup>3</sup>/h Sound Pressure Level 37dB(A) Weight 26.5kg Manufactured Date</p> <p>GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI</p> <p> </p> <p>63274100053 Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</p>	<p><b>GREE</b></p> <p>MULTI VARIABLE AIR CONDITIONERS CASSETTE TYPE INDOOR UNIT</p> <p>Model GMV-ND63T/A-T Rated Voltage/Frequency 220-240V~/50Hz 208-230V~/60Hz</p> <p>Cooling Capacity 6300W Heating Capacity 7100W Rated Input 59W Air Flow Volume 1000m<sup>3</sup>/h Sound Pressure Level 37dB(A) Weight 26.5kg Manufactured Date</p> <p>GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI</p> <p> </p> <p>63274100054 Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</p>
<p><b>GREE</b></p> <p>MULTI VARIABLE AIR CONDITIONERS CASSETTE TYPE INDOOR UNIT</p> <p>Model GMV-ND71T/A-T Rated Voltage/Frequency 220-240V~/50Hz 208-230V~/60Hz</p> <p>Cooling Capacity 7100W Heating Capacity 8000W Rated Input 68W Air Flow Volume 1180m<sup>3</sup>/h Sound Pressure Level 38dB(A) Weight 26.5kg Manufactured Date</p> <p>GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI</p> <p> </p> <p>63274100055 Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</p>	<p><b>GREE</b></p> <p>MULTI VARIABLE AIR CONDITIONERS CASSETTE TYPE INDOOR UNIT</p> <p>Model GMV-ND80T/A-T Rated Voltage/Frequency 220-240V~/50Hz 208-230V~/60Hz</p> <p>Cooling Capacity 8000W Heating Capacity 9000W Rated Input 68W Air Flow Volume 1180m<sup>3</sup>/h Sound Pressure Level 38dB(A) Weight 26.5kg Manufactured Date</p> <p>GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI</p> <p> </p> <p>63274100056 Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</p>	<p><b>GREE</b></p> <p>MULTI VARIABLE AIR CONDITIONERS CASSETTE TYPE INDOOR UNIT</p> <p>Model GMV-ND90T/A-T Rated Voltage/Frequency 220-240V~/50Hz 208-230V~/60Hz</p> <p>Cooling Capacity 9000W Heating Capacity 10000W Rated Input 98W Air Flow Volume 1500m<sup>3</sup>/h Sound Pressure Level 40dB(A) Weight 32.5kg Manufactured Date</p> <p>GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI</p> <p> </p> <p>63274100057 Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</p>
<p><b>GREE</b></p> <p>MULTI VARIABLE AIR CONDITIONERS CASSETTE TYPE INDOOR UNIT</p> <p>Model GMV-ND100T/A-T Rated Voltage/Frequency 220-240V~/50Hz 208-230V~/60Hz</p> <p>Cooling Capacity 10000W Heating Capacity 11200W Rated Input 98W Air Flow Volume 1500m<sup>3</sup>/h Sound Pressure Level 40dB(A) Weight 32.5kg Manufactured Date</p> <p>GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI</p> <p> </p> <p>63274100058 Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</p>	<p><b>GREE</b></p> <p>MULTI VARIABLE AIR CONDITIONERS CASSETTE TYPE INDOOR UNIT</p> <p>Model GMV-ND112T/A-T Rated Voltage/Frequency 220-240V~/50Hz 208-230V~/60Hz</p> <p>Cooling Capacity 11200W Heating Capacity 12500W Rated Input 110W Air Flow Volume 1700m<sup>3</sup>/h Sound Pressure Level 41dB(A) Weight 32.5kg Manufactured Date</p> <p>GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI</p> <p> </p> <p>63274100059 Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</p>	<p><b>GREE</b></p> <p>MULTI VARIABLE AIR CONDITIONERS CASSETTE TYPE INDOOR UNIT</p> <p>Model GMV-ND125T/A-T Rated Voltage/Frequency 220-240V~/50Hz 208-230V~/60Hz</p> <p>Cooling Capacity 12500W Heating Capacity 14000W Rated Input 110W Air Flow Volume 1860m<sup>3</sup>/h Sound Pressure Level 43dB(A) Weight 32.5kg Manufactured Date</p> <p>GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI</p> <p> </p> <p>63274100060 Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</p>

**MULTI VARIABLE AIR CONDITIONERS**  
**CASSETTE TYPE INDOOR UNIT**

Model	GMV-ND140T/A-T
Rated Voltage/Frequency	220-240V~/50Hz 208-230V~/60Hz
Cooling Capacity	14000W
Heating Capacity	16000W
Rated Input	110W
Air Flow Volume	1860m <sup>3</sup> /h
Sound Pressure Level	43dB(A)
Weight	32.5kg
Manufactured Date	

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

63274100061

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

**MULTI VARIABLE AIR CONDITIONERS**  
**CASSETTE TYPE INDOOR UNIT**

Model	GMV-ND100T/AR-T
Rated Voltage/Frequency	220-240V~/50Hz 208-230V~/60Hz
Cooling Capacity	10000W
Heating Capacity	11200W
Rated Input	110W
Air Flow Volume	1540m <sup>3</sup> /h
Sound Pressure Level	48dB(A)
Weight	32.5kg
Manufactured Date	

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

803CC4004150

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

**MULTI VARIABLE AIR CONDITIONERS**  
**CASSETTE TYPE INDOOR UNIT**

Model	GMV-ND90T/AR-T
Rated Voltage/Frequency	220-240V~/50Hz 208-230V~/60Hz
Cooling Capacity	9000W
Heating Capacity	10000W
Rated Input	110W
Air Flow Volume	1540m <sup>3</sup> /h
Sound Pressure Level	48dB(A)
Weight	32.5kg
Manufactured Date	

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

803CC4004149

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

**MULTI VARIABLE AIR CONDITIONERS**  
**CASSETTE TYPE INDOOR UNIT**

Model	GMV-ND80T/AR-T
Rated Voltage/Frequency	220-240V~/50Hz 208-230V~/60Hz
Cooling Capacity	8000W
Heating Capacity	9000W
Rated Input	95W
Air Flow Volume	1240m <sup>3</sup> /h
Sound Pressure Level	45dB(A)
Weight	26.5kg
Manufactured Date	

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

803CC4004147

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

**MULTI VARIABLE AIR CONDITIONERS**  
**CASSETTE TYPE INDOOR UNIT**




Model	GMV-ND71T/AR-T
Rated Voltage/Frequency	220-240V~/50Hz 208-230V~/60Hz
Cooling Capacity	7100W
Heating Capacity	8000W
Rated Input	95W
Air Flow Volume	1240m <sup>3</sup> /h
Sound Pressure Level	45dB(A)
Weight	26.5kg
Manufactured Date	

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

803CC4004148

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

Following marking plates are for ducted type indoor units:

<p><b>GREE</b></p> <p>MULTI VARIABLE AIR CONDITIONERS DUCTED TYPE INDOOR UNIT</p> <p>Model GMV-ND22PLS/A-T</p> <p>Rated Voltage/Frequency 220-240V~/50Hz 208-230V~/60Hz</p> <p>Cooling Capacity 2200W</p> <p>Heating Capacity 2500W</p> <p>Rated Input 35W</p> <p>Air Flow Volume 450m<sup>3</sup>/h</p> <p>Sound Pressure Level 31dB(A)</p> <p>Weight 22kg</p> <p>Manufactured Date</p> <p>GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI</p> <p>CE  63274100065</p> <p>Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</p>	<p><b>GREE</b></p> <p>MULTI VARIABLE AIR CONDITIONERS DUCTED TYPE INDOOR UNIT</p> <p>Model GMV-ND25PLS/A-T</p> <p>Rated Voltage/Frequency 220-240V~/50Hz 208-230V~/60Hz</p> <p>Cooling Capacity 2500W</p> <p>Heating Capacity 2800W</p> <p>Rated Input 35W</p> <p>Air Flow Volume 450m<sup>3</sup>/h</p> <p>Sound Pressure Level 31dB(A)</p> <p>Weight 22kg</p> <p>Manufactured Date</p> <p>GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI</p> <p>CE  63274100067</p> <p>Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</p>	<p><b>GREE</b></p> <p>MULTI VARIABLE AIR CONDITIONERS DUCTED TYPE INDOOR UNIT</p> <p>Model GMV-ND28PLS/A-T</p> <p>Rated Voltage/Frequency 220-240V~/50Hz 208-230V~/60Hz</p> <p>Cooling Capacity 2800W</p> <p>Heating Capacity 3200W</p> <p>Rated Input 35W</p> <p>Air Flow Volume 450m<sup>3</sup>/h</p> <p>Sound Pressure Level 31dB(A)</p> <p>Weight 22kg</p> <p>Manufactured Date</p> <p>GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI</p> <p>CE  63274100068</p> <p>Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</p>
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TRF No. IEC60335\_2\_40J

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

Block E, No.7-2 Guang Dong Software Science Park, Caipin Road, Guangzhou Science City, GETDD, Guangzhou, China  
Tel: (86-20) 8213 9688 Fax: (86-20) 32057538



MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND32PLS/A-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 3200W  
 Heating Capacity 3600W  
 Rated Input 43W  
 Air Flow Volume 550m<sup>3</sup>/h  
 Sound Pressure Level 32dB(A)  
 Weight 22kg

Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100069

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

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND36PLS/A-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 3600W  
 Heating Capacity 4000W  
 Rated Input 43W  
 Air Flow Volume 550m<sup>3</sup>/h  
 Sound Pressure Level 32dB(A)  
 Weight 22kg

Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100070

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

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND40PLS/A-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 4000W  
 Heating Capacity 4500W  
 Rated Input 52W  
 Air Flow Volume 700m<sup>3</sup>/h  
 Sound Pressure Level 33dB(A)  
 Weight 27kg

Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100071

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

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND45PLS/A-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 4500W  
 Heating Capacity 5000W  
 Rated Input 52W  
 Air Flow Volume 700m<sup>3</sup>/h  
 Sound Pressure Level 33dB(A)  
 Weight 27kg

Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100072

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

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND50PLS/A-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 5000W  
 Heating Capacity 5600W  
 Rated Input 52W  
 Air Flow Volume 700m<sup>3</sup>/h  
 Sound Pressure Level 33dB(A)  
 Weight 27kg

Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100073

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

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND56PLS/A-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 5600W  
 Heating Capacity 6300W  
 Rated Input 99W  
 Air Flow Volume 1000m<sup>3</sup>/h  
 Sound Pressure Level 35dB(A)  
 Weight 31kg

Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100074

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

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND63PLS/A-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 6300W  
 Heating Capacity 7100W  
 Rated Input 99W  
 Air Flow Volume 1000m<sup>3</sup>/h  
 Sound Pressure Level 35dB(A)  
 Weight 31kg

Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100075

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

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND71PLS/A-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 7100W  
 Heating Capacity 8000W  
 Rated Input 105W  
 Air Flow Volume 1000m<sup>3</sup>/h  
 Sound Pressure Level 35dB(A)  
 Weight 40kg

Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100076

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

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND80PLS/A-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 8000W  
 Heating Capacity 9000W  
 Rated Input 140W  
 Air Flow Volume 1100m<sup>3</sup>/h  
 Sound Pressure Level 36dB(A)  
 Weight 40kg

Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100077

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



<div><div></div><div>MULTI VARIABLE AIR CONDITIONERS DUCTED TYPE INDOOR UNIT</div><div><div>ModelGMV-ND90PLS/A-T</div><div>Rated Voltage/Frequency220-240V~/50Hz 208-230V~/60Hz</div><div><div>Cooling Capacity9000W</div><div>Heating Capacity10000W</div><div>Rated Input209W</div><div>Air Flow Volume1500m<sup>3</sup>/h</div><div>Sound Pressure Level40dB(A)</div><div>Weight46kg</div><div>Manufactured Date</div></div><div>GREE ELECTRIC APPLIANCES,INC.OF ZHUHAI</div><div><div></div><div></div><div>63274100078</div></div><div>Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</div></div></div>	<div><div></div><div>MULTI VARIABLE AIR CONDITIONERS DUCTED TYPE INDOOR UNIT</div><div><div>ModelGMV-ND100PLS/A-T</div><div>Rated Voltage/Frequency220-240V~/50Hz 208-230V~/60Hz</div><div><div>Cooling Capacity10000W</div><div>Heating Capacity11200W</div><div>Rated Input209W</div><div>Air Flow Volume1500m<sup>3</sup>/h</div><div>Sound Pressure Level40dB(A)</div><div>Weight46kg</div><div>Manufactured Date</div></div><div>GREE ELECTRIC APPLIANCES,INC.OF ZHUHAI</div><div><div></div><div></div><div>63274100062</div></div><div>Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</div></div></div>	<div><div></div><div>MULTI VARIABLE AIR CONDITIONERS DUCTED TYPE INDOOR UNIT</div><div><div>ModelGMV-ND112PLS/A-T</div><div>Rated Voltage/Frequency220-240V~/50Hz 208-230V~/60Hz</div><div><div>Cooling Capacity11200W</div><div>Heating Capacity12500W</div><div>Rated Input209W</div><div>Air Flow Volume1700m<sup>3</sup>/h</div><div>Sound Pressure Level40dB(A)</div><div>Weight46kg</div><div>Manufactured Date</div></div><div>GREE ELECTRIC APPLIANCES,INC.OF ZHUHAI</div><div><div></div><div></div><div>63274100063</div></div><div>Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</div></div></div>
<div><div></div><div>MULTI VARIABLE AIR CONDITIONERS DUCTED TYPE INDOOR UNIT</div><div><div>ModelGMV-ND125PLS/A-T</div><div>Rated Voltage/Frequency220-240V~/50Hz 208-230V~/60Hz</div><div><div>Cooling Capacity12500W</div><div>Heating Capacity14000W</div><div>Rated Input230W</div><div>Air Flow Volume2000m<sup>3</sup>/h</div><div>Sound Pressure Level42dB(A)</div><div>Weight47kg</div><div>Manufactured Date</div></div><div>GREE ELECTRIC APPLIANCES,INC.OF ZHUHAI</div><div><div></div><div></div><div>63274100064</div></div><div>Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</div></div></div>	<div><div></div><div>MULTI VARIABLE AIR CONDITIONERS DUCTED TYPE INDOOR UNIT</div><div><div>ModelGMV-ND140PLS/A-T</div><div>Rated Voltage/Frequency220-240V~/50Hz 208-230V~/60Hz</div><div><div>Cooling Capacity14000W</div><div>Heating Capacity16000W</div><div>Rated Input230W</div><div>Air Flow Volume2000m<sup>3</sup>/h</div><div>Sound Pressure Level42dB(A)</div><div>Weight47kg</div><div>Manufactured Date</div></div><div>GREE ELECTRIC APPLIANCES,INC.OF ZHUHAI</div><div><div></div><div></div><div>63274100065</div></div><div>Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</div></div></div>	
<div><div></div><div>MULTI VARIABLE AIR CONDITIONERS DUCTED TYPE INDOOR UNIT</div><div><div>ModelGMV-ND22PL/B-T</div><div>Rated Voltage/Frequency220-240V~/50Hz 208-230V~/60Hz</div><div><div>Cooling Capacity2200W</div><div>Heating Capacity2500W</div><div>Rated Input25W</div><div>Air Flow Volume450m<sup>3</sup>/h</div><div>Sound Pressure Level30dB(A)</div><div>Weight18.5kg</div><div>Manufactured Date</div></div><div>GREE ELECTRIC APPLIANCES,INC.OF ZHUHAI</div><div><div></div><div></div><div>63274100084</div></div><div>Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</div></div></div>	<div><div></div><div>MULTI VARIABLE AIR CONDITIONERS DUCTED TYPE INDOOR UNIT</div><div><div>ModelGMV-ND25PL/B-T</div><div>Rated Voltage/Frequency220-240V~/50Hz 208-230V~/60Hz</div><div><div>Cooling Capacity2500W</div><div>Heating Capacity2800W</div><div>Rated Input25W</div><div>Air Flow Volume450m<sup>3</sup>/h</div><div>Sound Pressure Level30dB(A)</div><div>Weight18.5kg</div><div>Manufactured Date</div></div><div>GREE ELECTRIC APPLIANCES,INC.OF ZHUHAI</div><div><div></div><div></div><div>63274100094</div></div><div>Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</div></div></div>	<div><div></div><div>MULTI VARIABLE AIR CONDITIONERS DUCTED TYPE INDOOR UNIT</div><div><div>ModelGMV-ND28PL/B-T</div><div>Rated Voltage/Frequency220-240V~/50Hz 208-230V~/60Hz</div><div><div>Cooling Capacity2800W</div><div>Heating Capacity3200W</div><div>Rated Input25W</div><div>Air Flow Volume450m<sup>3</sup>/h</div><div>Sound Pressure Level30dB(A)</div><div>Weight18.5kg</div><div>Manufactured Date</div></div><div>GREE ELECTRIC APPLIANCES,INC.OF ZHUHAI</div><div><div></div><div></div><div>63274100095</div></div><div>Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070</div></div></div>

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND32PL/B-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 3200W  
 Heating Capacity 3600W  
 Rated Input 30W  
 Air Flow Volume 550m<sup>3</sup>/h  
 Sound Pressure Level 31dB(A)  
 Weight 19.5kg  
 Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100085

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

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND36PL/B-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 3600W  
 Heating Capacity 4000W  
 Rated Input 30W  
 Air Flow Volume 550m<sup>3</sup>/h  
 Sound Pressure Level 31dB(A)  
 Weight 19.5kg  
 Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100096

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

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND40PL/B-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 4000W  
 Heating Capacity 4500W  
 Rated Input 35W  
 Air Flow Volume 750m<sup>3</sup>/h  
 Sound Pressure Level 33dB(A)  
 Weight 23.5kg  
 Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100086

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

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND45PL/B-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 4500W  
 Heating Capacity 5000W  
 Rated Input 35W  
 Air Flow Volume 750m<sup>3</sup>/h  
 Sound Pressure Level 33dB(A)  
 Weight 23.5kg  
 Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100097

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

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND50PL/B-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 5000W  
 Heating Capacity 5600W  
 Rated Input 35W  
 Air Flow Volume 750m<sup>3</sup>/h  
 Sound Pressure Level 33dB(A)  
 Weight 23.5kg  
 Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100098

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

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND56PL/B-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 5600W  
 Heating Capacity 6300W  
 Rated Input 45W  
 Air Flow Volume 850m<sup>3</sup>/h  
 Sound Pressure Level 35dB(A)  
 Weight 24.5kg  
 Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100087

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

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND63PL/B-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 6300W  
 Heating Capacity 7000W  
 Rated Input 45W  
 Air Flow Volume 850m<sup>3</sup>/h  
 Sound Pressure Level 35dB(A)  
 Weight 24.5kg  
 Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100099

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

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model GMV-ND72PL/B-T  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 7200W  
 Heating Capacity 8000W  
 Rated Input 50W  
 Air Flow Volume 1100m<sup>3</sup>/h  
 Sound Pressure Level 37dB(A)  
 Weight 30.5kg  
 Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



63274100088

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

**REZNOR****MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT**

Model BDDL-22(07)-BV  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 2200W  
 Heating Capacity 2500W  
 Rated Input 25W  
 Air Flow Volume 450m<sup>3</sup>/h  
 Sound Pressure Level 30dB(A)  
 Weight 18.5kg  
 Manufactured Date

Nortek Global HVAC (UK) Ltd  
 Add.: Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA, UK



6322996645

**REZNOR****MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT**

Model BDDL-25(08)-BV  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 2500W  
 Heating Capacity 2800W  
 Rated Input 25W  
 Air Flow Volume 450m<sup>3</sup>/h  
 Sound Pressure Level 30dB(A)  
 Weight 18.5kg  
 Manufactured Date

Nortek Global HVAC (UK) Ltd  
 Add.: Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA, UK



6322996646

**REZNOR****MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT**

Model BDDL-28(09)-BV  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 2800W  
 Heating Capacity 3200W  
 Rated Input 25W  
 Air Flow Volume 450m<sup>3</sup>/h  
 Sound Pressure Level 30dB(A)  
 Weight 18.5kg  
 Manufactured Date

Nortek Global HVAC (UK) Ltd  
 Add.: Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA, UK



6322996649

**REZNOR****MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT**

Model BDDL-32(11)-BV  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 3200W  
 Heating Capacity 3600W  
 Rated Input 30W  
 Air Flow Volume 550m<sup>3</sup>/h  
 Sound Pressure Level 31dB(A)  
 Weight 19.5kg  
 Manufactured Date

Nortek Global HVAC (UK) Ltd  
 Add.: Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA, UK



6322996647

**REZNOR****MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT**

Model BDDL-36(12)-BV  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 3600W  
 Heating Capacity 4000W  
 Rated Input 30W  
 Air Flow Volume 550m<sup>3</sup>/h  
 Sound Pressure Level 31dB(A)  
 Weight 19.5kg  
 Manufactured Date

Nortek Global HVAC (UK) Ltd  
 Add.: Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA, UK



6322996650

**REZNOR****MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT**

Model BDDL-40(13)-BV  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 4000W  
 Heating Capacity 4500W  
 Rated Input 35W  
 Air Flow Volume 750m<sup>3</sup>/h  
 Sound Pressure Level 33dB(A)  
 Weight 23.5kg  
 Manufactured Date

Nortek Global HVAC (UK) Ltd  
 Add.: Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA, UK



6322996648

**REZNOR****MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT**

Model BDDL-45(15)-BV  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 4500W  
 Heating Capacity 5000W  
 Rated Input 35W  
 Air Flow Volume 750m<sup>3</sup>/h  
 Sound Pressure Level 33dB(A)  
 Weight 23.5kg  
 Manufactured Date

Nortek Global HVAC (UK) Ltd  
 Add.: Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA, UK



6322996651

**REZNOR****MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT**

Model BDDL-50(17)-BV  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 5000W  
 Heating Capacity 5600W  
 Rated Input 35W  
 Air Flow Volume 750m<sup>3</sup>/h  
 Sound Pressure Level 33dB(A)  
 Weight 23.5kg  
 Manufactured Date

Nortek Global HVAC (UK) Ltd  
 Add.: Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA, UK



6322996649

**REZNOR****MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT**

Model BDDL-56(19)-BV  
 Rated Voltage/Frequency 220-240V~/50Hz  
 208-230V~/60Hz  
 Cooling Capacity 5600W  
 Heating Capacity 6300W  
 Rated Input 45W  
 Air Flow Volume 850m<sup>3</sup>/h  
 Sound Pressure Level 35dB(A)  
 Weight 24.5kg  
 Manufactured Date

Nortek Global HVAC (UK) Ltd  
 Add.: Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA, UK



6322996652



REZNOR

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model

BDDL-63(21)-BV

Rated Voltage/Frequency

220-240V~/50Hz  
208-230V~/60Hz

Cooling Capacity

6300W

Heating Capacity

7000W

Rated Input

45W

Air Flow Volume

850m³/h

Sound Pressure Level

35dB(A)


Weight


24.5kg

Manufactured Date

Nortek Global HVAC (UK) Ltd

Add.: Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA, UK



  
63229969650

REZNOR

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model

BDDL-72(24)-BV

Rated Voltage/Frequency

220-240V~/50Hz  
208-230V~/60Hz

Cooling Capacity

7200W

Heating Capacity

8000W

Rated Input

50W

Air Flow Volume

1100m³/h

Sound Pressure Level

37dB(A)


Weight


30.5kg

Manufactured Date

Nortek Global HVAC (UK) Ltd

Add.: Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA, UK



  
63229966553

GREE

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model

GMV-ND22PLS/AR-T

Rated Voltage/Frequency

220-240V~/50Hz  
208-230V~/60Hz

Cooling Capacity

2200W

Heating Capacity

2500W

Rated Input

50W

Air Flow Volume

615m³/h

Sound Pressure Level


38dB(A)


Weight

22kg

Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



  
600004003381

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

GREE

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model

GMV-ND28PLS/AR-T

Rated Voltage/Frequency

220-240V~/50Hz  
208-230V~/60Hz

Cooling Capacity

2800W

Heating Capacity

3200W

Rated Input

50W

Air Flow Volume

615m³/h

Sound Pressure Level


38dB(A)


Weight

22kg

Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



  
600004003398

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

GREE

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model

GMV-ND36PLS/AR-T

Rated Voltage/Frequency

220-240V~/50Hz  
208-230V~/60Hz

Cooling Capacity

3600W

Heating Capacity

4000W

Rated Input

38W

Air Flow Volume

615m³/h

Sound Pressure Level


38dB(A)


Weight

22kg

Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



  
600004003409

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

GREE

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model

GMV-ND45PLS/AR-T

Rated Voltage/Frequency

220-240V~/50Hz  
208-230V~/60Hz

Cooling Capacity

4500W

Heating Capacity

5000W

Rated Input

99W

Air Flow Volume

960m³/h

Sound Pressure Level


35dB(A)


Weight

31kg

Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



  
600004003396

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

GREE

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model

GMV-ND56PLS/AR-T

Rated Voltage/Frequency

220-240V~/50Hz  
208-230V~/60Hz

Cooling Capacity

5600W

Heating Capacity

6300W

Rated Input

99W

Air Flow Volume

960m³/h

Sound Pressure Level


35dB(A)


Weight

31kg

Manufactured Date

GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI



  
600004003404

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

GREE

MULTI VARIABLE AIR CONDITIONERS  
DUCTED TYPE INDOOR UNIT

Model

GMV-ND71PLS/AR-T

Rated Voltage/Frequency

220-240V~/50Hz  
208-230V~/60Hz

Cooling Capacity

7100W

Heating Capacity

8000W

Rated Input

105W

Air Flow Volume

1210m³/h

Sound Pressure Level


42dB(A)


Weight

40kg



Manufactured Date



GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI





  
600004003402



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



<b>GREE</b>	
MULTI VARIABLE AIR CONDITIONERS	
DUCTED TYPE INDOOR UNIT	
Model	GMV-ND80PLS/AR-T
Rated Voltage/Frequency	220-240V~/50Hz 208-230V~/60Hz
Cooling Capacity	8000W
Heating Capacity	9000W
Rated Input	210W
Air Flow Volume	1510m <sup>3</sup> /h
Sound Pressure Level	45dB(A)
Weight	46kg
Manufactured Date	
GREE ELECTRIC APPLIANCES,INC.OF ZHUHAI	
	 600004003410
Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070	



<b>GREE</b>	
MULTI VARIABLE AIR CONDITIONERS	
DUCTED TYPE INDOOR UNIT	
Model	GMV-ND90PLS/AR-T
Rated Voltage/Frequency	220-240V~/50Hz 208-230V~/60Hz
Cooling Capacity	9000W
Heating Capacity	10000W
Rated Input	210W
Air Flow Volume	1510m <sup>3</sup> /h
Sound Pressure Level	45dB(A)
Weight	46kg
Manufactured Date	
GREE ELECTRIC APPLIANCES,INC.OF ZHUHAI	
	 600004003408
Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070	



Following marking plates are for wall mounting type indoor units:



<b>GREE</b>	
MULTI VARIABLE AIR CONDITIONERS	
WALL MOUNTED TYPE INDOOR UNIT	
Model	GMV-N22G/A3A-K
Rated Voltage	220-240V~
Rated Frequency	50Hz
Cooling Capacity	2200W
Heating Capacity	2500W
Rated Input	50W
Air Flow Volume	500m <sup>3</sup> /h
Sound Pressure Level	38dB(A)
Weight	10.0kg
Manufactured Date	
GREE ELECTRIC APPLIANCES,INC.OF ZHUHAI	
	 83274100123
Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070	

<b>GREE</b>	
MULTI VARIABLE AIR CONDITIONERS	
WALL MOUNTED TYPE INDOOR UNIT	
Model	GMV-N28G/A3A-K
Rated Voltage	220-240V~
Rated Frequency	50Hz
Cooling Capacity	2800W
Heating Capacity	3200W
Rated Input	50W
Air Flow Volume	500m <sup>3</sup> /h
Sound Pressure Level	38dB(A)
Weight	10.0kg
Manufactured Date	
GREE ELECTRIC APPLIANCES,INC.OF ZHUHAI	
	 83274100114
Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070	





<b>GREE</b>	
MULTI VARIABLE AIR CONDITIONERS	
WALL MOUNTED TYPE INDOOR UNIT	
Model	GMV-N36G/A3A-K
Rated Voltage	220-240V~
Rated Frequency	50Hz
Cooling Capacity	3600W
Heating Capacity	4000W
Rated Input	60W
Air Flow Volume	630m <sup>3</sup> /h
Sound Pressure Level	44dB(A)
Weight	12.5kg
Manufactured Date	
GREE ELECTRIC APPLIANCES,INC.OF ZHUHAI	
	 33274100124
Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070	

<b>GREE</b>	
MULTI VARIABLE AIR CONDITIONERS	
WALL MOUNTED TYPE INDOOR UNIT	
Model	GMV-N45G/A3A-K
Rated Voltage	220-240V~
Rated Frequency	50Hz
Cooling Capacity	4500W
Heating Capacity	5000W
Rated Input	60W
Air Flow Volume	630m <sup>3</sup> /h
Sound Pressure Level	44dB(A)
Weight	12.5kg
Manufactured Date	
GREE ELECTRIC APPLIANCES,INC.OF ZHUHAI	
	 83274100125
Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070	


<b>GREE</b>	
MULTI VARIABLE AIR CONDITIONERS	
WALL MOUNTED TYPE INDOOR UNIT	
Model	GMV-N50G/A3A-K
Rated Voltage	220-240V~
Rated Frequency	50Hz
Cooling Capacity	5000W
Heating Capacity	5800W
Rated Input	60W
Air Flow Volume	630m <sup>3</sup> /h
Sound Pressure Level	44dB(A)
Weight	12.5kg
Manufactured Date	
GREE ELECTRIC APPLIANCES,INC.OF ZHUHAI	
	 83274100113
Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070	




<b>GREE</b>	
MULTI VARIABLE AIR CONDITIONERS	
WALL MOUNTED TYPE INDOOR UNIT	
Model	GMV-N56G/A3A-K
Rated Voltage	220-240V~
Rated Frequency	50Hz
Cooling Capacity	5600W
Heating Capacity	6300W
Rated Input	70W
Air Flow Volume	750m <sup>3</sup> /h
Sound Pressure Level	44dB(A)
Weight	15.0kg
Manufactured Date	
GREE ELECTRIC APPLIANCES,INC.OF ZHUHAI	
	 83274100128
Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070	



GREE		GREE	
MULTI VARIABLE AIR CONDITIONERS WALL MOUNTED TYPE INDOOR UNIT		MULTI VARIABLE AIR CONDITIONERS WALL MOUNTED TYPE INDOOR UNIT	
Model	GMV-N63G/A3A-K	Model	GMV-N71G/A3A-K
Rated Voltage	220-240V~	Rated Voltage	220-240V~
Rated Frequency	50Hz	Rated Frequency	50Hz
Cooling Capacity	6300W	Cooling Capacity	7100W
Heating Capacity	7000W	Heating Capacity	7500W
Rated Input	70W	Rated Input	70W
Air Flow Volume	750m <sup>3</sup> /h	Air Flow Volume	750m <sup>3</sup> /h
Sound Pressure Level	44dB(A)	Sound Pressure Level	44dB(A)
Weight	15.0kg	Weight	15.0kg
Manufactured Date		Manufactured Date	
GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI		GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI	
  63274100127		  63274100112	
Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070		Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070	

Following marking plates are for floor standing type indoor units:

GREE		GREE	
MULTI VARIABLE AIR CONDITIONERS FLOOR STANDING TYPE INDOOR UNIT		MULTI VARIABLE AIR CONDITIONERS FLOOR STANDING TYPE INDOOR UNIT	
Model	GMV-ND140L/A-T	Model	GMV-ND100L/A-T
Rated Voltage/Frequency	220-240V~/50Hz 208-230V~/60Hz	Rated Voltage/Frequency	220-240V~/50Hz 208-230V~/60Hz
Cooling Capacity	14000W	Cooling Capacity	10000W
Heating Capacity	15000W	Heating Capacity	11000W
Rated Input	200W	Rated Input	200W
Air Flow Volume	1850m <sup>3</sup> /h	Air Flow Volume	1850m <sup>3</sup> /h
Sound Pressure Level	50dB(A)	Sound Pressure Level	50dB(A)
Weight	57kg	Weight	54kg
Manufactured Date		Manufactured Date	
GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI		GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI	
  63270050011		  63270050010	
Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070		Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070	

REZNOR		REZNOR	
MULTI VARIABLE AIR CONDITIONER FLOOR STANDING TYPE INDOOR UNIT		MULTI VARIABLE AIR CONDITIONER FLOOR STANDING TYPE INDOOR UNIT	
Model	BDFS-140(47)-AV	Model	BDFS-100(34)-AV
Rated Voltage/Frequency	220-240V~/50Hz 208-230V~/60Hz	Rated Voltage/Frequency	220-240V~/50Hz 208-230V~/60Hz
Cooling Capacity	14000W	Cooling Capacity	10000W
Heating Capacity	15000W	Heating Capacity	11000W
Rated Input	200W	Rated Input	200W
Air Flow Volume	1850m <sup>3</sup> /h	Air Flow Volume	1850m <sup>3</sup> /h
Sound Pressure Level	50dB(A)	Sound Pressure Level	50dB(A)
Weight	57kg	Weight	54kg
Manufactured Date		Manufactured Date	
Nortek Global HVAC (UK) Ltd Add: Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA, UK		Nortek Global HVAC (UK) Ltd Add: Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA, UK	
  63229969667		  63229969666	

TRF No. IEC60335\_2\_40J

Intertek Testing Services Shenzhen Ltd. Guangzhou Branch

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Tel: (86-20) 8213 9688 Fax: (86-20) 32057538

## Following marking plates are for outdoor units:

GREE AIR CONDITIONER OUTDOOR UNIT			
Model	GMV-160WL/A-T		
Rated Voltage/	220-240V~/50Hz	Cooling Capacity	16000W
Rated Frequency	208-230V~/60Hz	Heating Capacity	18500W
Climate Type	T1	Cooling Power Input	4850W
Weight	110kg	Heating Power Input	4670W
Isolation	I	Cooling Rated Input	6800W
Refrigerant	R410A	Heating Rated Input	6800W
Refri. Charge	5.00kg	CO <sub>2</sub> equivalent	10.44t
GWP	2088	Sound Pressure Level	58dB(A)
Maximum Allowable Pressure		4.2MPa	
Operating Pressure ( Discharge Side/Suction Side)		4.2/2.5MPa	
Manufactured Date		Moisture Protection	IPX4
Contains fluorinated greenhouse gases			
GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI			
 			
Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070 63274100092			

GREE AIR CONDITIONER OUTDOOR UNIT			
Model	GMV-140WL/A-T		
Rated Voltage/	220-240V~/50Hz	Cooling Capacity	14000W
Rated Frequency	208-230V~/60Hz	Heating Capacity	16500W
Climate Type	T1	Cooling Power Input	3980W
Weight	110kg	Heating Power Input	3990W
Isolation	I	Cooling Rated Input	6300W
Refrigerant	R410A	Heating Rated Input	6300W
Refri. Charge	5.00kg	CO <sub>2</sub> equivalent	10.44t
GWP	2088	Sound Pressure Level	56dB(A)
Maximum Allowable Pressure		4.2MPa	
Operating Pressure ( Discharge Side/Suction Side)		4.2/2.5MPa	
Manufactured Date		Moisture Protection	IPX4
Contains fluorinated greenhouse gases			
GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI			
 			
Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070 63274100091			

GREE AIR CONDITIONER OUTDOOR UNIT			
Model	GMV-120WL/A-T		
Rated Voltage/	220-240V~/50Hz	Cooling Capacity	12100W
Rated Frequency	208-230V~/60Hz	Heating Capacity	14000W
Climate Type	T1	Cooling Power Input	3050W
Weight	110kg	Heating Power Input	3270W
Isolation	I	Cooling Rated Input	5700W
Refrigerant	R410A	Heating Rated Input	5700W
Refri. Charge	5.00kg	CO <sub>2</sub> equivalent	10.44t
GWP	2088	Sound Pressure Level	55dB(A)
Maximum Allowable Pressure		4.2MPa	
Operating Pressure ( Discharge Side/Suction Side)		4.2/2.5MPa	
Manufactured Date		Moisture Protection	IPX4
Contains fluorinated greenhouse gases			
GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI			
 			
Add: West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070 63274100093			

REZNOR AIR CONDITIONER OUTDOOR UNIT			
Model	V5BV-160(54)WMAV		
Rated Voltage /	220-240V~/50Hz	Cooling Capacity	16000W
Rated Frequency	208-230V~/60Hz	Heating Capacity	18500W
Climate Type	T1	Cooling Power Input	4850W
Weight	110kg	Heating Power Input	4670W
Isolation	I	Cooling Rated Input	6800W
Refrigerant	R410A	Heating Rated Input	6800W
Refri. Charge	5.00kg	CO <sub>2</sub> equivalent	10.44t
Sound Pressure Level		58dB(A)	
Maximum Allowable Pressure		4.2MPa	
Operating Pressure ( Discharge Side/Suction Side)		4.2/2.5MPa	
Manufactured Date		Moisture Protection	IPX4
Contains fluorinated greenhouse gases covered by the Kyoto Protocol			
Nortek Global HVAC (UK) Ltd			
Add.: Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA, UK			
 			
63229966413			

REZNOR AIR CONDITIONER OUTDOOR UNIT			
Model	V5BV-140(47)WMAV		
Rated Voltage /	220-240V~/50Hz	Cooling Capacity	14000W
Rated Frequency	208-230V~/60Hz	Heating Capacity	16500W
Climate Type	T1	Cooling Power Input	3980W
Weight	110kg	Heating Power Input	3990W
Isolation	I	Cooling Rated Input	6300W
Refrigerant	R410A	Heating Rated Input	6300W
Refri. Charge	5.00kg	CO <sub>2</sub> equivalent	10.44t
Sound Pressure Level		56dB(A)	
Maximum Allowable Pressure		4.2MPa	
Operating Pressure ( Discharge Side/Suction Side)		4.2/2.5MPa	
Manufactured Date		Moisture Protection	IPX4
Contains fluorinated greenhouse gases covered by the Kyoto Protocol			
Nortek Global HVAC (UK) Ltd			
Add.: Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA, UK			
 			
63229966412			

REZNOR AIR CONDITIONER OUTDOOR UNIT			
Model	V5BV-120(40)WMAV		
Rated Voltage /	220-240V~/50Hz	Cooling Capacity	12100W
Rated Frequency	208-230V~/60Hz	Heating Capacity	14000W
Climate Type	T1	Cooling Power Input	3050W
Weight	110kg	Heating Power Input	3270W
Isolation	I	Cooling Rated Input	5700W
Refrigerant	R410A	Heating Rated Input	5700W
Refri. Charge	5.00kg	CO <sub>2</sub> equivalent	10.44t
Sound Pressure Level		55dB(A)	
Maximum Allowable Pressure		4.2MPa	
Operating Pressure ( Discharge Side/Suction Side)		4.2/2.5MPa	
Manufactured Date		Moisture Protection	IPX4
Contains fluorinated greenhouse gases covered by the Kyoto Protocol			
Nortek Global HVAC (UK) Ltd			
Add.: Fens Pool Avenue, Brierley Hill, West Midlands, DY5 1QA, UK			
 			
63229966411			

**Remark:**

1. When placing these electrical equipments on the market, the importer and manufacturer should indicate on the electrical equipments his name, registered trade name or registered trade mark and the postal address at which he can be contacted.
2. The GWP and equivalence will be mark marking plate of outdoor unit with trademark **REZNOR**. And the marking plate is the same as marking plate of outdoor unit with trademark **GREE** except trademark and model name.

**Test item particulars .....****Classification of installation and use .....** Fixed appliance**Supply Connection.....** Permanently connected 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 .....** February 17, 2017**Date (s) of performance of tests.....** February 17, 2017 – March 17, 2017**General remarks:**

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

This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

"(See Enclosure #)" refers to additional information appended to the report.

"(See appended table)" refers to a table appended to the report.

Throughout this report a ☒ comma / ☐ point is used as the decimal separator.

When determining the test result, measurement uncertainty has been considered.

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The test report only allows to be revised only within the report defined retention period unless standard or regulation was withdrawn or invalid.

This TRF includes an appendix EMF containing the IEC/EN 62233 requirements (see below).

IEC 62233:2005 (1. Edition)

EN 62233:2008 (incl. Corr.1:2008)

**Manufacturer's Declaration per sub-clause 4.2.5 of IECCE 02:**

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).....:** Gree Electric Appliances, Inc. of Zhuhai  
West Jinji Rd, Qianshan, Zhuhai, Guangdong,  
China, 519070

**General product information:****Original:**

The appliances are split type, DC invert, multi-connected air-conditioner with cooling and heating operation mode.

The outdoor unit can be matched with a certain ducted type or ceiling cassette type indoor units within the capacity of 50% - 135% of outdoor unit refer to installation manual. And the outdoor unit can be operated with other outdoor unit together, refer to below table for details.

The indoor units shall be installed at the height of 2,5m above the floor, the outdoor units shall be installed at the outdoor refer to the installation specified in user manual, the power supplied by outdoor unit permanently connected to fixed wiring and via interconnection cords for connecting power and signal with indoor units.

**Model differences:**

1. All outdoor units are the same as each other except the working frequency setting of main board.
2. The differences for all indoor units refer to below table.

**Model differences of indoor units:**

Type	Model name	Construction	Product size	Main board	Heat exchanger	Fan motor	Differences	
Ceiling cassette type	GMV-ND28T/A-T	same	same	Z6L35K	same	FN35 C-ZL	different capacity setting	
	GMV-ND36T/A-T							
	GMV-ND45T/A-T							
	GMV-ND50T/A-T							
	GMV-ND56T/A-T	same	same		Z6L35K	same	FN35 B-ZL	different capacity setting
	GMV-ND63T/A-T							
	GMV-ND71T/A-T							
	GMV-ND80T/A-T							
	GMV-ND90T/A-T	same	same		Z6L35K	same	FN60 C-ZL	different capacity setting
	GMV-ND100T/A-T							
	GMV-ND112T/A-T							
	GMV-ND125T/A-T							

TRF No. IEC60335\_2\_40J

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Tel: (86-20) 8213 9688 Fax: (86-20) 32057538



	GMV-ND140T/A-T											
Ducted type (standard static pressure)	GMV-ND22PLS/A-T	same	same	Z6L35K	same	FG60 A-ZL	different capacity setting					
	GMV-ND25PLS/A-T											
	GMV-ND28PLS/A-T											
	GMV-ND32PLS/A-T	same					different capacity setting					
	GMV-ND36PLS/A-T											
	GMV-ND40PLS/A-T	same	same				different capacity setting					
	GMV-ND45PLS/A-T											
	GMV-ND50PLS/A-T											
	GMV-ND56PLS/A-T	same	same				different capacity setting					
	GMV-ND63PLS/A-T											
	GMV-ND71PLS/A-T	same	same				different capacity setting					
	GMV-ND80PLS/A-T											
	GMV-ND90PLS/A-T	same	same	Z6L25L	same	FG15 0A-ZL	different capacity setting					
	GMV-ND100PLS/A-T											
	GMV-ND112PLS/A-T											
	GMV-ND125PLS/A-T	same										
	GMV-ND140PLS/A-T											
Ducted type (low static pressure)	GMV-ND22PL/B-T	same	same	Z6L35K	same	FG60 A-ZL	different capacity setting					
	GMV-ND25PL/B-T											
	GMV-ND28PL/B-T											
	GMV-ND32PL/B-T											
	GMV-ND36PL/B-T											
	GMV-ND40PL/B-T											
	GMV-ND45PL/B-T											
	GMV-ND50PL/B-T											
	GMV-ND56PL/B-T											
	GMV-ND63PL/B-T											
	GMV-ND72PL/B-T											
Matched table:												
Outdoor unit		Min sets of connectable IDUs		Max sets of connectable ODUs								
GMV-120WL/A-T		2		7								
GMV-140WL/A-T		2		7								



GMV-160WL/A-T	2	7
Remark: 1. IDU denotes indoor unit, ODU denotes outdoor unit; 2. The total capacity of indoor units shall be within 50% - 135% of outdoor unit(s).		

**Modification 1:**

This test report replaces the original test report 130819055GZU-001, dated on December 18, 2013. It is issued because of the following additions:

- Add eight new wall mounting type indoor units GMV-N22G/A3A-K, GMV-N28G/A3A-K, GMV-N36G/A3A-K, GMV-N45G/A3A-K, GMV-N50G/A3A-K, GMV-N56G/A3A-K, GMV-N63G/A3A-K and GMV-N71G/A3A-K which are identical except following differences and see photo documents for details.

New indoor units are powered by 220-240V, 50Hz

Model differences of new indoor units:

Type	Model name	Construction	Product size	Main board	Heat exchanger	Fan motor	Differences
wall mounting type	GMV-N22G/A3A-K	Same	Same	Z6L25G	Same	FN20J-PG	different capacity setting
	GMV-N28G/A3A-K						
	GMV-N36G/A3A-K	Same	Same	Z6L25K	Same	FN20V-PG	different capacity setting
	GMV-N45G/A3A-K						
	GMV-N50G/A3A-K						
	GMV-N56G/A3A-K	Same	Same	Z6L25N	Same	FN25A-PG	different capacity setting
	GMV-N63G/A3A-K						
	GMV-N71G/A3A-K						

- Add alternative Y capacitor for indoor units GMV-ND22PLS/A-T, GMV-ND25PLS/A-T, GMV-ND28PLS/A-T, GMV-ND32PLS/A-T, GMV-ND36PLS/A-T, GMV-ND40PLS/A-T, GMV-ND45PLS/A-T, GMV-ND50PLS/A-T, GMV-ND56PLS/A-T, GMV-ND63PLS/A-T, GMV-ND71PLS/A-T, GMV-ND80PLS/A-T, GMV-ND90PLS/A-T, GMV-ND100PLS/A-T, GMV-ND112PLS/A-T, GMV-ND125PLS/A-T, GMV-ND140PLS/A-T, refer to Table 24.1 for details. Add alternative Y capacitor and terminal board for indoor units GMV-ND28T/A-T, GMV-ND36T/A-T, GMV-ND45T/A-T, GMV-ND50T/A-T, refer to Table 24.1 for details.
- Add alternative Y capacitor, indoor fan motor (mfg.: Kaibang) and terminal board for indoor units GMV-ND56T/A-T, GMV-ND63T/A-T, GMV-ND71T/A-T, GMV-ND80T/A-T, refer to Table 24.1 for details.
- Add alternative Y capacitor, indoor fan motor (mfg.: Kaibang) and terminal board for indoor units GMV-ND90T/A-T, GMV-ND100T/A-T, GMV-ND112T/A-T, GMV-ND125T/A-T, GMV-ND140T/A-T, refer to Table 24.1 for details.
- Add alternative pressure protect switch for outdoor units GMV-160WL/A-T, GMV-140WL/A-T, GMV-120WL/A-T, refer to Table 24.1 for details.

**Modification 2:**

This test report replaces the original test report 130819055GZU-001 with modification 1, dated on February 18, 2013. It is issued for changing the weight of label of wall mounted type indoor units GMV-N22G/A3A-K, GMV-N28G/A3A-K, GMV-N36G/A3A-K, GMV-N45G/A3A-K, GMV-N50G/A3A-K, GMV-N56G/A3A-K, GMV-N63G/A3A-K, GMV-N71G/A3A-K. See below table for details.

Model	Original weight (Kg)	Updated weight (Kg)
GMV-N22G/A3A-K, GMV-N28G/A3A-K	9,5	10,0
GMV-N36G/A3A-K, GMV-N45G/A3A-K, GMV-N50G/A3A-K	11,0	12,5
GMV-N56G/A3A-K, GMV-N63G/A3A-K, GMV-N71G/A3A-K	13,0	15,0

**Modification 3:**

This test report replaces the original test report 130819055GZU-001 with modification 2, dated on April 18, 2014. It is issued for the following additions:

1. Adding some alternative components such as indoor fan motor (FG60A-ZL\_Kaibang), relay and terminal block for models GMV-ND22PLS/A-T, GMV-ND25PLS/A-T, GMV-ND28PLS/A-T, GMV-ND32PLS/A-T, GMV-ND36PLS/A-T, GMV-ND40PLS/A-T, GMV-ND45PLS/A-T, GMV-ND50PLS/A-T, GMV-ND56PLS/A-T, GMV-ND63PLS/A-T, GMV-ND71PLS/A-T and GMV-ND80PLS/A-T. See table 24.1 for details.
2. Adding some alternative components such as indoor fan motor (FG60A-ZL\_Kaibang) and relay for models GMV-ND22PL/B-T, GMV-ND25PL/B-T, GMV-ND28PL/B-T, GMV-ND32PL/B-T, GMV-ND36PL/B-T, GMV-ND40PL/B-T, GMV-ND45PL/B-T, GMV-ND50PL/B-T, GMV-ND56PL/B-T, GMV-ND63PL/B-T, GMV-ND72PL/B-T. See table 24.1 for details.

**Modification 4:**

This test report replaces the original report 130819055GZU-001 with modification 3, dated on November 03, 2014. It is issued for adding two new floor standing type indoor unit GMV-ND140L/A-T and GMV-ND100L/A-T, refer to photo documents for details.

The new model GMV-ND100L/A-T is identical to GMV-ND140L/A-T except for heat exchanger.

**Modification 5:**

This test report replaces the original report 130819055GZU-001 with modification 4, dated on December 16, 2014. It is issued because of following changes:

1. Upgraded the standards:  
From:  
EN 60335-1:2002 + A11:2004 + A1:2004 + A12:2006 + A2:2006 + A13:2008 + A14:2010 + A15:2011,  
To:  
EN 60335-1:2012 + A11:2014,
2. Added some alternative components including Y capacitor for models GMV-ND90PLS/A-T, GMV-ND100PLS/A-T, GMV-ND112PLS/A-T, GMV-ND125PLS/A-T and GMV-ND140PLS/A-T, refer to table 24.1 for details.
3. Added alternative relay for models GMV-ND28T/A-T, GMV-ND36T/A-T, GMV-ND45T/A-T, GMV-ND50T/A-T, GMV-ND56T/A-T, GMV-ND63T/A-T, GMV-ND71T/A-T, GMV-ND80T/A-T, GMV-ND90T/A-T, GMV-ND100T/A-T, GMV-ND112T/A-T, GMV-ND125T/A-T and GMV-ND140T/A-T, refer to table 24.1 for details.
4. Deleted Wall mounting type indoor units in this report.

**Modification 6:**

This test report replaces the original test report 130819055GZU-001 Modification 5, dated on January 16, 2015. It is issued because of as below:

1. Adding five alternative outdoor fan motors: SWZ120A\_Shibaura, SWZ120A\_Shangqi, SWZ120A\_Kaibang, ZWS120-A1\_Kaibang and SWZ120A\_Wolong for GMV-160WL/A-T, GMV-140WL/A-T and GMV-120WL/A-T. Fan motor ZWS120-A1\_Kaibang is the same as SWZ120A\_Kaibang except the model name. See table 24.1 for details.
2. Adding alternative components including water pump PSB-12A (Mfg.:Huayang), step motor, inductance and rectifier for Ceiling cassette type indoor units. See table 24.1 for details.

TRF No. IEC60335\_2\_40J

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3. Adding alternative components including electromagnetic valve, 4-way valve, opto-coupler, inductance, relay and X capacitor for GMV-160WL/A-T, GMV-140WL/A-T and GMV-120WL/A-T. See table 24.1 for details.
  4. Adding alternative inductance, indoor fan motor FG150A-ZL (Mfg.:Kaibang) and water pump PSB-12A (Mfg.:Huayang) for ducted type indoor units: GMV-ND90PLS/A-T, GMV-ND100PLS/A-T, GMV-ND112PLS/A-T, GMV-ND125PLS/A-T and GMV-ND140PLS/A-T. See table 24.1 for details.
  5. Correcting the weight parameter of marking plate for Ceiling cassette type indoor units.
- Updating the marking plate of fan motor FG60A-ZL, fan motor has not changed. See photo documents for details.

**Modification 7:**

This test report replaces the original test report 130819055GZU-001 Modification 6, dated on December 14, 2015. It is issued because of as below:

1. Adding Wall mounting type indoor units GMV-N22G/A3A-K, GMV-N28G/A3A-K, GMV-N36G/A3A-K, GMV-N45G/A3A-K, GMV-N50G/A3A-K, GMV-N56G/A3A-K, GMV-N63G/A3A-K and GMV-N71G/A3A-K which are identical except following differences and see photo documents for details.  
New indoor units are powered by 220-240V, 50Hz  
Model differences of new indoor units:

Type	Model name	Construction	Product size	Main board	Heat exchanger	Fan motor	Differences
wall mounting type	GMV-N22G/A3A-K	Same	Same	Z6L25G	Same	FN20J-PG	different capacity setting
	GMV-N28G/A3A-K						
	GMV-N36G/A3A-K	Same	Same	Z6L25K	Same	FN20V-PG	different capacity setting
	GMV-N45G/A3A-K						
	GMV-N50G/A3A-K						
	GMV-N56G/A3A-K	Same	Same	Z6L25N	Same	FN25A-PG	different capacity setting
	GMV-N63G/A3A-K						
	GMV-N71G/A3A-K						

2. Changed the IP degree from "IP24" to "IPX4" on the label for all models.
3. Correcting the weight for model GMV-ND71PLS/A-T from "31g" to "40g".
4. Updating the mark plates for all models. See marking plates for details.

**Modification 8:**

This test report replaces the original test report 130819055GZU-001 Modification 7, dated on March 29, 2016. It is issued the following additions:

1. Adding eleven new ducted type indoor units: BDDL-22(07)-BV, BDDL-25(08)-BV, BDDL-28(09)-BV, BDDL-32(11)-BV, BDDL-36(12)-BV, BDDL-40(13)-BV, BDDL-45(15)-BV, BDDL-50(17)-BV, BDDL-56(19)-BV, BDDL-63(21)-BV and BDDL-72(24)-BV.
  2. Adding two new floor standing type indoor units: BDFS-100(34)-AV and BDFS-140(47)-AV.
  3. Adding three new outdoor units: V5BV-120(40)WMAV, V5BV-140(47)WMAV, V5BV-160(54)WMAV.
- All the new models are identical with some old models except marking plate. See below table for details.

Type	Model name	The same model
Ducted type indoor units	BDDL-22(07)-BV	GMV-ND22PL/B-T
	BDDL-25(08)-BV	GMV-ND25PL/B-T
	BDDL-28(09)-BV	GMV-ND28PL/B-T
	BDDL-32(11)-BV	GMV-ND32PL/B-T

TRF No. IEC60335\_2\_40J

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		BDDL-36(12)-BV	GMV-ND36PL/B-T
		BDDL-40(13)-BV	GMV-ND40PL/B-T
		BDDL-45(15)-BV	GMV-ND45PL/B-T
		BDDL-50(17)-BV	GMV-ND50PL/B-T
		BDDL-56(19)-BV	GMV-ND56PL/B-T
		BDDL-63(21)-BV	GMV-ND63PL/B-T
		BDDL-72(24)-BV	GMV-ND72PL/B-T
	Floor standing type indoor units	BDFS-100(34)-AV	GMV-ND100L/A-T
		BDFS-140(47)-AV	GMV-ND140L/A-T
	Outdoor units	V5BV-120(40)WMAV	GMV-120WL/A-T
		V5BV-140(47)WMAV	GMV-140WL/A-T
		V5BV-160(54)WMAV	GMV-160WL/A-T

#### Modification 9:

This test report replaces the original test report 130819055GZU-001 Modification 8, dated on May 12, 2016. It is issued the following additions:

1. Adding alternative PFC inductance (model: 400uH+400uH/35A), rectifier (GBJ1508G), opto-coupler (HCPL-817) and PCB material for all models. See Table 24.1 for details.
2. Correcting Table 24.1 for adding driving board (ZQ1230A and ZQ1230C) and filter board (ZL1230A and ZL1230C).

#### Modification 10:

This test report replaces the original test report 130819055GZU-001 Modification 9, dated on May 21, 2016. It is issued the following additions:

1. Adding alternative Y capacitor, rectifier and terminal board (4 bits) for ceiling cassette type indoor unit. See Table 24.1 for details.
2. Adding alternative Y capacitor, inductance, rectifier and terminal board (4 bits) for ducted type indoor unit. See Table 24.1 for details.
3. Adding alternative rectifier and relay for wall mounting type indoor units. See Table 24.1 for details.
4. Adding alternative Y capacitor and terminal board (4 bits) 2# for floor standing type indoor units. See Table 24.1 for details.
5. Adding alternative relay and terminal board (4 bits) for outdoor unit. See Table 24.1 for details.
6. Adding alternative water pump for models GMV-ND22PLS/A-T, GMV-ND25PLS/A-T, GMV-ND28PLS/A-T, GMV-ND32PLS/A-T, GMV-ND36PLS/A-T, GMV-ND40PLS/A-T, GMV-ND45PLS/A-T, GMV-ND50PLS/A-T, GMV-ND56PLS/A-T, GMV-ND63PLS/A-T, GMV-ND71PLS/A-T and GMV-ND80PLS/A-T. See Table 24.1 for details.
7. Changing address of Applicant/ Manufacturer/factory from "Jinji West Road, Qianshan, Zhuhai, Guangdong 519070, P. R. China" to "West Jinji Rd, Qianshan, Zhuhai, Guangdong, China, 519070".
8. Adding new models GMV-ND100T/AR-T, GMV-ND80T/AR-T, GMV-ND90T/AR-T, GMV-ND71T/AR-T which are the same as GMV-ND100T/A-T, GMV-ND80T/A-T, GMV-ND90T/A-T and GMV-ND71T/A-T severally except the PCB Program.
9. Adding new models GMV-ND22PLS/AR-T, GMV-ND28PLS/AR-T, GMV-ND36PLS/AR-T, GMV-ND45PLS/AR-T, GMV-ND56PLS/AR-T, GMV-ND71PLS/AR-T, GMV-ND80PLS/AR-T and GMV-ND90PLS/AR-T. See model difference for details.

#### Model difference:

1. GMV-ND22PLS/AR-T, GMV-ND28PLS/AR-T, GMV-ND36PLS/AR-T, GMV-ND71PLS/AR-T are the same as GMV-ND22PLS/A-T, GMV-ND28PLS/A-T, GMV-ND36PLS/A-T, GMV-ND71PLS/A-T, severally except the PCB Program.
2. GMV-ND45PLS/AR-T and GMV-ND56PLS/AR-T are the same as GMV-ND56PLS/A-T except the PCB Program.
3. GMV-ND80PLS/AR-T and GMV-ND90PLS/AR-T are the same as GMV-ND90PLS/A-T except the

PCB Program.							
Type	Model name	Constru ction	Product size	Main board	Heat exchanger	Fan motor	Differences
Ceiling cassette type	GMV-ND71T/AR-T	same	same	Z6L35K	same	FN35B- ZL	different capacity setting
	GMV-ND80T/AR-T						
	GMV-ND90T/AR-T	same	same		same	FN60C- ZL	different capacity setting
	GMV-ND100T/AR-T						
Ducted type (standar d static pressure )	GMV-ND22PLS/A-T	same	same	Z6L35K	same	FG60A- ZL	different capacity setting
	GMV-ND28PLS/A-T						different capacity setting
	GMV-ND36PLS/A-T	different capacity setting					
	GMV-ND45PLS/A-T	same	same				different capacity setting
	GMV-ND56PLS/A-T						different capacity setting
	GMV-ND71PLS/A-T	same	same				different capacity setting
	GMV-ND80PLS/A-T	same	same	Z6L25L	same	FG150A -ZL	different capacity setting
	GMV-ND90PLS/A-T						



IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
5	GENERAL CONDITIONS FOR THE TESTS		----
	Tests performed according to clause 5, e.g. nature of supply, sequence of testing, etc.		P
5.2	Tests of clause 21 carried out on separate samples. Tests of clauses 11, 19 and 21 require pressure measurements made at various points in refrigerating system (IEC 60335-2-40/A1)		P
	At least one additional specially prepared sample required for tests of annex FF (Leak simulation tests) (IEC 60335-2-40/A1)		N/A
	Temperatures on refrigerant piping measured during test of clause 11 (IEC 60335-2-40/A1)		N/A
5.6	Appropriate controls rendered inoperative during test (IEC 60335-2-40)		P
5.7	Tests of clauses 10 and 11 carried out under most severe operating conditions within operating temperature range specified by manufacturer. Annex AA provide examples of such temperature conditions (IEC 60335-2-40)		P
5.10	For split-package units, refrigerant lines installed in accordance with installation instructions (IEC 60335-2-40)		P
	Refrigerant line length is maximum length stated in installation instructions or (IEC 60335-2-40)		P
	7,5 m, whichever is shorter (IEC 60335-2-40)		P
	Thermal insulation of refrigerant lines applied in accordance with installation instructions (IEC 60335-2-40)		N/A
5.101	Motor-compressor subjected to relevant test of clause 19 of IEC 60335-2-34, unless (IEC 60335-2-40)		N/A
	motor-compressor comply with that standard (IEC 60335-2-40)		P
5.102	Motor-compressors tested and comply with IEC 60335-2-34 need not additionally tested for clause 21 (IEC 60335-2-40/A1)		P
6	CLASSIFICATION		----
6.1	Protection against electric shock: Class I, II, III (IEC 60335-2-40) .....	Class I	P
6.2	Protection against harmful ingress of water, IP degree in accordance with IEC 60529 (IEC 60335-2-40)		----
	- appliances or parts intended for outdoor use be at least IPX4 (IEC 60335-2-40);	IPX4	P

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	- appliances intended only for indoor use (excluding laundry rooms) be IPX0 (IEC 60335-2-40);	IPX0 for indoor unit	P
	- appliances intended to be used in laundry rooms be at least IPX1 (IEC 60335-2-40).		N/A
6.101	Degree of accessibility (accessible/not accessible to the general public) (IEC 60335-2-40)	Accessible to the general public	P
7	MARKING AND INSTRUCTIONS		----
7.1	Rated voltage or voltage range (V) .....	See marking plates	P
	Symbol for nature of supply including number of phases, unless for single phase operation (IEC 60335-2-40) .....	~	P
	Rated frequency (Hz) .....	See marking plates	P
	Rated power input (W), or.....	See marking plates	P
	Rated current (A) .....		N/A
	Manufacturer's or responsible vendor's name, trademark or identification mark .....	GREE	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		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) .....	R410A	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/A2) .....		N/A
	Permissible excessive operating pressure of refrigerant circuit for suction and discharge, if they differ (IEC 60335-2-40) .....	Discharge side: 4,2MPa; Suction side: 2,5MPa	P
	Symbol for degree of protection against ingress of water, other than IPX0 (IEC 60335-2-40) .....	IPX4	P

TRF No. IEC60335\_2\_40J

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	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)		N/A
	Flame symbol and instruction manual symbol of 7.6 visible when flammable refrigerant employed and following conditions exist (IEC 60335-2-40/A1):		----
	- accessing parts expected to be subjected to maintenance or repair (IEC 60335-2-40/A1);		N/A
	- observing appliance under sale or installed conditions (IEC 60335-2-40/A1);		N/A
	- observing appliance packaging, if appliance charged with refrigerant (IEC 60335-2-40/A1).		N/A
	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/A1 corr.1)		N/A
	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/A1)		N/A
	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 <sup>2</sup> (only applies to appliances that are not fixed appliances) (IEC 60335-2-40/A1)		N/A
	Not fixed appliances, minimum room size X specified on appliance. X in marking determined in m <sup>2</sup> 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 <sub>1</sub> (see annex GG, paragraph 1.1) (IEC 60335-2-40/A1)		N/A
	Maximum allowable pressure for low-pressure side and high-pressure side marked on product (IEC 60335-2-40/A1)		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	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/A1)		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	220-240	P
	Different rated values marked with the values separated by an oblique stroke		N/A
7.4	Appliances adjustable for different rated voltages, the voltage 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/A1)		N/A
	Flammable refrigerant, symbol requiring reference to manual [0790 of ISO 7000], including colour and format, permanently placed on appliance (IEC 60335-2-40/A1 corr.1)		N/A
	Symbol for nature of supply placed next to rated voltage		N/A
	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		N/A

TRF No. IEC60335\_2\_40J

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
7.7	Connection diagram fixed to appliances to be connected to more than two supply conductors and appliances for multiple supply, unless 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:		----
	- marking of terminals exclusively for the neutral conductor (letter N)		N/A
	- marking of protective earthing terminals (symbol IEC 60417-5019)		P
	- marking not placed on removable parts		P
7.9	Marking or placing of switches which may cause a hazard		P
7.10	Indications of switches on stationary appliances and controls on all appliances by use of figures, letters or other visual means..... :	By figures or letters	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		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/A1)		N/A
	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 60335-1:2012	--
	- children being supervised not to play with the appliance	Replaced by EN 60335-1:2012	--

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	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
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
	Sufficient details for installation or maintenance supplied (IEC 60335-2-40):		----
	- 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);		N/A
	- 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 pump,s 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);		N/A
	- details of type and rating of fuses (IEC 60335-2-40);		N/A
	- 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

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	- maximum and minimum water or brine operating pressures (IEC 60335-2-40).		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 (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:		----
	- 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

TRF No. IEC60335\_2\_40J

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Instructions concerning new and old hose-sets for appliances connected to the water mains by detachable hose-sets		N/A
7.13	Instructions and other texts in an official language	In English	P
7.14	Marking clearly legible and durable, 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		N/A
	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		N/A
	Marking on panel allowed, provided panel in place for intended operation of appliance (IEC 60335-2-40)		N/A
7.16	Marking of a possible replaceable thermal link or fuse link clearly visible with regard to replacing the link		N/A
7.101	Marking of fuses and overload protective devices, if replaceable (IEC 60335-2-40):		----
	- fuse rated current in amperes, type and rated voltage or (IEC 60335-2-40)		N/A
	- 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
8	PROTECTION AGAINST ACCESS TO LIVE PARTS		----
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



IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	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		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 15kV, 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		N/A
	- fixed appliances		P
	- appliances delivered in separate units		P
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

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Only possible to touch parts separated from live parts by double or reinforced insulation		P
9	STARTING OF MOTOR-OPERATED APPLIANCES		----
	Requirements and tests are specified in part 2 when necessary		N/A
10	POWER INPUT AND CURRENT		----
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
	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		P
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
	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
11	HEATING		----
11.1	No excessive temperatures in normal use (IEC 60335-2-40)		P
	Compliance is checked by the tests of annex C, if (IEC 60335-2-40):		----
	- temperature of motor winding exceeds values shown in table 3 (IEC 60335-2-40)		N/A
	- there is doubt about classification of insulation system of the motor (IEC 60335-2-40)		N/A
11.2	Placing and mounting of appliance (IEC/EN 60335-2-40):		----
	- clearances to adjacent surfaces (IEC 60335-2-40);		P
	- flow rates for liquid source or sink equipment be minimum, except for fan coils where flow rates and liquid temperatures be maximum (IEC 60335-2-40/A2);		N/A
	- static pressures (IEC 60335-2-40);		N/A
	- means of adjusting the flow, flow for tests be minimum obtainable (IEC 60335-2-40);		N/A
	- adjustable limit controls set at maximum cut-out setting and minimum differential (IEC 60335-2-40).		P

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Appliances with supplementary heaters, use test casing of clause 11.9 (IEC 60335-2-40)		N/A
11.2.1	Appliances with supplementary heaters, inlet duct connected to inlet air opening (IEC 60335-2-40)		N/A
11.2.2	Appliance without supplementary heaters, air outlet used (IEC 60335-2-40)		N/A
11.3	Temperature rise determine by thermocouples or resistance method (IEC 60335-2-40)	Both methods	P
11.4	Test performed at supply voltage between 0,94 and 1,06 times the rated voltage (IEC 60335-2-40)	1,06 x 240=254,4V~/50Hz; 1,06 x 230=243,8V~/60Hz	P
	Heating elements energized at voltage which gives an electrical input of 1,15 times maximum rated power input (IEC 60335-2-40)		N/A
11.5	Test conducted in heating mode and cooling mode, if both exist (IEC 60335-2-40)		P
	All supplementary heating elements operative simultaneously (IEC 60335-2-40)		N/A
11.6	Defrost test in most unfavourable conditions, if needed (IEC/EN 60335-2-40)		N/A
11.7	Appliances operated continuously until steady conditions except for defrost tests (IEC 60335-2-40)		P
11.8	Temperatures not exceeding values of table 3 (IEC 60335-2-40/A2)	(See appended tables)	P
	Protective devices do not operate (IEC 60335-2-40)		P
	Sealing compound not flowing out (IEC 60335-2-40)		P
	Temperature of air in outlet duct not exceed 90 °C (IEC 60335-2-40)		N/A
11.9	Test casing and installation of appliances in accordance with manufacturer's instructions (IEC 60335-2-40)		N/A
	Glass fibre insulation for appliances without indication of minimum clearances according to manufacturer; thermocouple in contact with enclosure (IEC 60335-2-40)		N/A
13	LEAKAGE CURRENT AND ELECTRIC STRENGTH AT OPERATING TEMPERATURE		----
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

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Motor-operated appliances and combined appliances supplied at 1,06 times the rated voltage (V) .....	1,06 x 240=254,4V~/50Hz; 1,06 x 230=243,8V~/60Hz	P
	Protective impedance and radio interference filters disconnected before carrying out the tests		P
13.2	For class 0, class II and class III appliances, leakage current measured by means of the circuit described in figure 4 of IEC 60990		P
	For other appliances, a low impedance ammeter may be used		P
	Leakage current measurements ..... : (IEC 60335-2-40)	(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
14	TRANSIENT OVERVOLTAGES		----
	Appliances withstand the transient over-voltages to which they may be subjected		N/A
	Clearances having a value less than specified in table 16 subjected to an impulse voltage test, the test voltage specified in table 6 .....	(see appended table)	N/A
	No flashover during the test, unless		N/A
	of functional insulation if the appliance complies with clause 19 with the clearance short-circuited		N/A
15	MOISTURE RESISTANCE		----
15.1	Enclosure provides degree of moisture protection against ingress of water (rain, overflow from drain pan or defrosting), tests of clause 15.2, 15.3, 11.6 and 16) (IEC 60335-2-40)		P
	Motor-compressor not operated and detachable parts removed during tests of clause 15.2 and 15.3 (IEC 60335-2-40/A2)		P
15.2	Tests in accordance with IEC 60529 in appliances other than IPX0, as specified (IEC 60335-2-40) ... :	IPX4	P
15.3	Drain pan filled to brim and subjected to continuous overflow and fan(s) switched on (IEC 60335-2-40)		P
15.101	Spillage test as specified (IEC 60335-2-40/A2)		N/A
	After spillage completed, appliance withstand test of clause 16 (IEC 60335-2-40/A2)		N/A
16	LEAKAGE CURRENT AND ELECTRIC STRENGTH		----



IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
16.1	Leakage current not excessive and electric strength adequate		P
	Protective impedance disconnected from live parts before carrying out the tests		P
	Tests carried out at room temperature and not connected to the supply		P
16.2	Single-phase appliances: test voltage 1,06 times rated voltage (V) .....	1,06 x 240=254,4V~/50Hz; 1,06 x 230=243,8V~/60Hz	P
	Three-phase appliances: test voltage 1,06 times rated voltage divided by $\sqrt{3}$ (V) .....		N/A
	Leakage current measurements .....	(see appended table)	P
	(IEC 60335-2-40)		
	Limit values doubled if:		----
	- all controls have an off position in all poles, or		N/A
	- the appliance has no control other than a thermal cut-out, or		N/A
	- all thermostats, temperature limiters and energy regulators do not have an off position, or		N/A
	- the appliance has radio interference filters		N/A
	With the radio interference filters disconnected, the leakage current do not exceed limits specified .....	(see appended table)	N/A
16.3	Electric strength tests according to table 7 .....	(see appended table)	P
	Test voltage applied between the supply cord and inlet bushing and cord guard and cord anchorage as specified .....	(see appended table)	P
	No breakdown during the tests		P
17	OVERLOAD PROTECTION OF TRANSFORMERS AND ASSOCIATED CIRCUITS		----
	No excessive temperatures in transformer or associated circuits in event of short-circuits likely to occur in normal use .....	(see appended table)	N/A
	Appliance supplied with 1,06 or 0,94 times rated voltage under the most unfavourable short-circuit or overload likely to occur in normal use (V) .....		N/A
	Basic insulation is not short-circuited		N/A
	Temperature rise of insulation of the conductors of safety extra-low voltage circuits not exceeding the relevant value specified in table 3 by more than 15 K		N/A
	Temperature of the winding not exceeding the value specified in table 8		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	However, limits do not apply to fail-safe transformers complying with sub-clause 15.5 of IEC 61558-1		N/A
18	ENDURANCE		----
	Requirements and tests are specified in part 2 when necessary		N/A
19	ABNORMAL OPERATION		----
19.1	The risk of fire or mechanical damage under abnormal or careless operation obviated (tests 19.2-19.14) (IEC 60335-2-40)		P
	Failure of transfer medium flow or of any control device not result in a hazard (IEC 60335-2-40)		P
	Electronic circuits so designed and applied that a fault will not render the appliance unsafe (electric shock, fire or mechanical hazard, dangerous malfunction) (test 19.11 and 19.12) (IEC 60335-2-40)		P
19.2	Test of appliance with motor rotors, other than motor-compressors, operated for 15 days (360 h) or until protection device opens circuit (IEC 60335-2-40)		P
	Insulation of motor windings (IEC 60335-2-40)..... :	(see appended table)	P
	Temperature of enclosure does not exceed (°C) (IEC 60335-2-40) ..... :	(see appended table)	P
	Temperature of the windings does not exceed the values shown in the table ; temperature (°C) (IEC 60335-2-40) ..... :	(see appended table)	P
	Electric strength test as specified in 16.3, 72 h after the beginning of the test (IEC 60335-2-40)		P
	30 mA residual current device does not open (IEC 60335-2-40)		P
	At the end, leakage current between windings and enclosure does not exceed 2 mA (IEC 60335-2-40)		P
19.3	Motor-compressor complies with IEC 60335-2-34 (IEC 60335-2-40)		P
	Test of motor-compressor with rotor locked as specified in clause 19.101 of IEC 60335-2-34 and comply with 19.104 of that standard (IEC 60335-2-40)	(see appended table)	N/A
19.4	Test of three-phase motors operated under conditions of clause 11 with one phase disconnected until steady conditions or protective device operates (IEC 60335-2-40)		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
19.5	Test of appliance with heat transfer medium flow of the outdoor heat exchanger restricted or shut off when reaching steady conditions (IEC 60335-2-40)		P
	Test of appliance with heat transfer flow of the indoor heat exchanger restricted or shut off when reaching steady conditions (IEC 60335-2-40)		P
	Disconnection of motor common to both the outdoor and the indoor heat exchangers when reaching steady conditions (IEC 60335-2-40)		N/A
19.6	Test of appliances using water as heat transfer medium (IEC 60335-2-40)		N/A
19.7	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)		P
	Test with the dry-bulb temperature 10 K over the values specified by manufacturer (IEC 60335-2-40)		P
19.8	Test of appliances with supplementary heaters (IEC 60335-2-40)		N/A
19.9	Test at temperature permitting continuous operation of the motor-compressor and electric heating elements at same time (IEC 60335-2-40)		N/A
19.10	Test of appliance with any defect which expected during normal use (IEC 60335-2-40)		P
19.10.101	Test of clause 19.10 repeated on class 0I appliances and class I appliances incorporating tubular sheathed or embedded heating elements (IEC 60335-2-40/A2)		N/A
	However, controls not short-circuited but one end of element connected to sheath of heating element (IEC 60335-2-40/A2)		N/A
	Test repeated with polarity of supply to appliance reversed and with other end of element connected to sheath (IEC 60335-2-40/A2)		N/A
	Test not carried out on appliances intended to permanently connected to fixed wiring and on appliances where an all-pole disconnection occurs during test of clause 19.10 (IEC 60335-2-40/A2)		N/A
19.11	Electronic circuits, compliance checked by evaluation of the fault conditions specified in clause 19.11.2 for all circuits or parts of circuits (IEC 60335-2-40), unless		P
	they comply with conditions specified in clause 19.11.1 (IEC 60335-2-40)		P

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Windings temperature not exceeding values shown in table 8 (IEC 60335-2-40)		P
	Appliance comply with conditions of clause 19.14 (IEC 60335-2-40)		P
	Appliance withstands test: a conductor becomes open circuited and three conditions are met (IEC 60335-2-40)		N/A
19.11.1	Before applying the fault conditions a) to f) in 19.11.2, it is checked if circuits or parts of circuit meet both of following conditions (IEC 60335-2-40):		----
	- electronic circuit is low-power circuit, that is, maximum power at low-power points not exceed 15 W according to tests specified (IEC 60335-2-40)		P
	- protection against electric shock, fire hazard, mechanical hazard or dangerous malfunction in other parts of appliance does not rely on correct functioning of electronic circuit (IEC 60335-2-40)		P
19.11.2	Fault conditions applied one at a time, appliance operated under conditions specified in clause 11, but supplied at rated voltage, duration of tests as specified (IEC 60335-2-40):		----
	a) short circuit of creepage distances and clearances between live parts of different potential, if these distances less than values specified in clause 29.1, unless relevant part is adequately encapsulated (IEC 60335-2-40)		P
	b) open circuit at terminals of any component (IEC 60335-2-40)		P
	c) short circuit if capacitors, unless they comply with IEC 60384-14 (IEC 60335-2-40)		P
	d) short circuit of any two terminals of an electronic component, other than integrated circuits. This fault condition not applied between circuits of an optocoupler (IEC 60335-2-40)		P
	e) failure of triacs in diode mode (IEC 60335-2-40)		N/A
	f) failure of an integrated circuit. Possible hazardous situations of appliance assessed to ensure that safety not rely on correct functioning of such component (IEC 60335-2-40)		N/A
	Short-circuit of low-power circuits (IEC 60335-2-40)		P
	Duration of tests (IEC 60335-2-40):		----
	- as specified in clause 11.7 but only for one operating cycle, if fault cannot recognised by user (IEC 60335-2-40);		N/A



IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	- as specified in clause 19.2, if fault can recognised by user (IEC 60335-2-40);		P
	- until steady conditions established (IEC 60335-2-40).		P
	Test ended if interruption of supply occurs within the appliance (IEC 60335-2-40)		N/A
	If electronic circuit operates to ensure compliance with clause 19, relevant test repeated with single fault a) to f) simulated (IEC 60335-2-40)		N/A
	Fault condition f) applied to encapsulated or similar components (IEC 60335-2-40)		N/A
	PTC's, NTC's and VDR's resistors not short-circuited if used as specified by manufacturer (IEC 60335-2-40)		P
19.12	If safety of appliance for any of fault conditions specified in clause 19.11.2 depends on operation of miniature fuse-link complying with IEC 60127, test repeated with fuse-link replaced by an ammeter (IEC 60335-2-40)		P
	Current $\leq 2,1$ times rated current of fuse-link, circuit not adequately protected (fuse-link short-circuited) (IEC 60335-2-40)		N/A
	Current $\geq 2,75$ times rated current of fuse-link, circuit adequately protected (IEC 60335-2-40)		P
	Current $\geq 2,1$ and $\leq 2,75$ times rated current, fuse-link short-circuited and test carried out during specified time (IEC 60335-2-40)		N/A
19.13	Appliances with PTC heating elements test as specified (IEC 60335-2-40)		N/A
19.14	During tests of clause 19.2 to 19.10.101 and 19.11, 19.12 and 19.13 if appropriate, appliances not emit flames, molten metal, poisonous or ignitable gas in hazardous amounts (IEC 60335-2-40/A2)		P
	Enclosures not deform (IEC 60335-2-40)		P
	Temperature rise not exceed values shown in table 9 (IEC 60335-2-40)	(See appended table)	P
	Electric strength test, test voltage as specified in table 4 (IEC 60335-2-40)		P
19.15	For appliances with a mains voltage selector switch, the switch is set to the lowest rated voltage position and the highest value of rated voltage is applied		N/A
19.101	All appliances provided with supplementary heaters and free air discharge subjected to specified test in each mode of operation (IEC 60335-2-40/A2)		N/A

TRF No. IEC60335\_2\_40J

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	During test temperature not exceed 150 °C but an overshoot of 25 °C is permitted during first hour (IEC 60335-2-40/A2)		N/A
20	STABILITY AND MECHANICAL HAZARDS		----
20.1	Appliances having adequate stability	Fixed appliance	N/A
	Tilting test through an angle of 10°, appliance placed on an inclined plane/horizontal support, not connected to the supply mains; appliance does not overturn		N/A
	Tilting test repeated on appliances with heating elements, angle of inclination increased to 15°		N/A
	Possible heating test in overturned position; temperature rise does not exceed values shown in table 9		N/A
20.2	Moving parts adequately arranged or enclosed as to provide protection against personal injury		P
	Protective enclosures, guards and similar parts are non-detachable, and		P
	have adequate mechanical strength		P
	Enclosures that can be opened by overriding an interlock are considered to be detachable parts		N/A
	Self-resetting thermal cut-outs and overcurrent protective devices not causing a hazard by unexpected closure		N/A
	Not possible to touch dangerous moving parts with the test probe described		P
21	MECHANICAL STRENGTH		----
21.1	Appliance has adequate mechanical strength and is constructed as to withstand rough handling		P
	Checked by applying 3 blows to every point of the enclosure like to be weak, in accordance with test Ehb of IEC 60068-2-75, spring hammer test, with an impact energy of 0,5 J	(see appended table)	P
	The appliance shows no damage impairing compliance with this standard, and		P
	compliance with 8.1, 15.1 and clause 29 not impaired		P
	If doubt, supplementary or reinforced insulation subjected to the electric strength test of 16.3		N/A
	If necessary, repetition of groups of three blows on a new sample		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Safety requirements specified in annex EE applied. Pressure test in annex EE applies to parts other than pressure vessels (IEC 60335-2-40/A1)		P
	Safety requirements of ISO 5149 applied (IEC 60335-2-40/A2)		P
21.2	Accessible parts of solid insulation having strength to prevent penetration by sharp implements		P
	Test not applicable if the thickness of supplementary insulation is at least 1 mm and reinforced insulation at least 2 mm		P
	The insulation is tested as specified, and does withstand the electric strength test of 16.3		N/A
22	CONSTRUCTION		----
22.1	Appliance marked with the first numeral of the IP system, relevant requirements of IEC 60529 are fulfilled	IPX4	N/A
22.2	Stationary appliance: means to ensure all-pole disconnection from the supply being provided:		----
	- a supply cord fitted with a plug, or		N/A
	- a switch complying with 24.3, or		N/A
	- a statement in the instruction sheet that a disconnection incorporated in the fixed wiring is to be provided, or		P
	- an appliance inlet		N/A
	Single-pole switches and single-pole protective devices for the disconnection of heating elements in single-phase, permanently connected class 01 and class I appliances, connected to the phase conductor		N/A
22.3	Appliance provided with pins: no undue strain on socket-outlets		N/A
	Applied torque not exceeding 0,25 Nm		N/A
	Pull force of 50 N to each pin after the appliance has being placed in the heating cabinet; when cooled to room temperature the pins are not displaced by more than 1 mm		N/A
	Each pin subjected to a torque of 0,4 Nm; the pins are not rotating, unless		N/A
	rotating does not impair compliance with this standard		N/A
22.4	Appliance for heating liquids and appliance causing undue vibration not provided with pins for insertion into socket-outlets		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
22.5	No risk of electric shock when touching the pins of the plug, for appliances having a capacitor with rated capacitance exceeding 0,1 $\mu$ F, the appliance being disconnected from the supply at the instant of voltage peak		N/A
	Voltage not exceeding 34 V (V) ..... :		N/A
22.6	Electrical insulation not affected by condensing water or leaking liquid		P
	Electrical insulation of class II appliances not affected if a hose ruptures or seal leaks		N/A
	In case of doubt, test as described		N/A
	Electrical insulation not affected by snow penetration to appliance enclosure (IEC 60335-2-40)		P
22.7	Adequate safeguards against the risk of excessive pressure in appliances containing liquid or gases or having steam-producing devices		N/A
22.8	Electrical connections not subject to pulling during cleaning of compartments to which access can be gained without the aid of a tool, and that are likely to be cleaned in normal use		P
22.9	Insulation, internal wiring, windings, commutators and slip rings not exposed to oil, grease or similar substances, unless		P
	the substance has adequate insulating properties		P
22.10	Not possible to reset voltage-maintained non-self-resetting thermal cut-outs by the operation of an automatic switching device incorporated within the appliance, if:		N/A
	- a non-self-resetting thermal cut-out is required by the standard, and		N/A
	- a voltage maintained non-self-resetting thermal cut-out is used to meet it		N/A
	Non-self-resetting thermal motor protectors have a trip-free action, unless		N/A
	they are voltage maintained		N/A
	Reset buttons of non-self-resetting controls so located or protected that accidental resetting is unlikely		N/A
22.11	Reliable fixing of non-detachable parts that provide the necessary degree of protection against electric shock, moisture or contact with moving parts		P

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Obvious locked position of snap-in devices used for fixing such parts		N/A
	No deterioration of the fixing properties of snap-in devices used in parts that are likely to be removed during installation or servicing		N/A
	Tests as described		P
22.12	Handles, knobs etc. fixed in a reliable manner		N/A
	Fixing in wrong position of handles, knobs etc. indicating position of switches or similar components not possible		N/A
	Axial force 15 N applied to parts, the shape being so that an axial pull is unlikely to be applied		N/A
	Axial force 30 N applied to parts, the shape being so that an axial pull is likely to be applied		P
22.13	Unlikely that handles, when gripped as in normal use, make the operator's hand touch parts having a temperature rise exceeding the value specified for handles which are held for short periods only		N/A
22.14	No ragged or sharp edges creating a hazard for the user in normal use, or during user maintenance		P
	No exposed pointed ends of self-tapping screws or other fasteners, likely to be touched by the user in normal use or during user maintenance		P
22.15	Storage hooks and the like for flexible cords smooth and well rounded		N/A
22.16	Automatic cord reels cause no undue abrasion or damage to the sheath of the flexible cord, no breakage of conductors strands and no undue wear of contacts		N/A
	Cord reel tested with 6000 operations, as specified		N/A
	Electric strength test of 16.3, voltage of 1000 V applied		N/A
22.17	Spacers not removable from the outside by hand or by means of a screwdriver or a spanner		N/A
22.18	Current-carrying parts and other metal parts resistant to corrosion		P
22.19	Driving belts not relied upon to provide the required level of insulation, unless		N/A
	constructed to prevent inappropriate replacement		N/A
22.20	Direct contact between live parts and thermal insulation effectively prevented, unless		P



IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	material used is non-corrosive, non-hygroscopic and non-combustible		N/A
22.21	Wood, cotton, silk, ordinary paper and fibrous or hygroscopic material not used as insulation, unless		P
	impregnated		N/A
	This requirement does not apply to magnesium oxide and mineral ceramic fibres used for the electrical insulation of heating elements		N/A
22.22	Appliances not containing asbestos		P
22.23	Oils containing polychlorinated biphenyl (PCB) not used		P
22.24	Bare heating elements adequately supported to prevent contact with accessible metal parts in case of rupture or sagging (IEC 60335-2-40)		N/A
	Bare heating elements only used with metal enclosures (wood or composite enclosures not allowed) (IEC 60335-2-40)		N/A
22.25	Sagging heating conductors, except in class III appliances or class III constructions that do not contain live parts, cannot come into contact with accessible metal parts		N/A
22.26	For class III constructions the insulation between parts operating at safety extra-low voltage and other live parts complies with the requirements for double or reinforced insulation		N/A
22.27	Parts connected by protective impedance separated by double or reinforced insulation		P
22.28	Metal parts of class II appliances conductively connected to gas pipes or in contact with water, separated from live parts by double or reinforced insulation		N/A
22.29	Class II appliances permanently connected to fixed wiring so constructed that the required degree of access to live parts is maintained after installation		N/A
22.30	Parts serving as supplementary or reinforced insulation fixed so that they cannot be removed without being seriously damaged, or		P
	so constructed that they cannot be replaced in an incorrect position, and so that if they are omitted, the appliance is rendered inoperable or manifestly incomplete		N/A
22.31	Neither clearances nor creepage distances over supplementary and reinforced insulation reduced below values specified in clause 29 as a result of wear		P

TRF No. IEC60335\_2\_40J

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Neither clearances nor creepage distances between live parts and accessible parts reduced below values for supplementary insulation if wires, screws etc. become loose		P
22.32	Supplementary and reinforced insulation constructed or protected against pollution so that clearances or creepage distances are not reduced below the values in clause 29		P
	Supplementary insulation of natural or synthetic rubber resistant to ageing, or arranged and dimensioned so that creepage distances are not reduced below values specified in 29.2		N/A
	Ceramic material not tightly sintered, similar materials or beads alone not used as supplementary or reinforced insulation		N/A
	Insulating material in which heating conductors are embedded is considered to be basic insulation, not reinforced insulation		N/A
	Oxygen bomb test at 70 °C for 96 h and 16 h at room temperature		N/A
22.33	Conductive liquids that are or may become accessible in normal use and conductive liquids that are in contact with unearthed accessible metal parts are not in direct contact with live parts		P
	Electrodes not used for heating liquids		N/A
	For class II constructions, conductive liquids that are or may become accessible in normal use and conductive liquids that are in contact with unearthed accessible metal parts, not in direct contact with basic or reinforced insulation, unless		P
	the reinforced insulation consists of at least 3 layers		N/A
	For class II constructions, conductive liquids which are in contact with live parts, not in direct contact with reinforced insulation, unless		N/A
	the reinforced insulation consists of at least 3 layers		N/A
	An air layer not used as basic or supplementary insulation in a double insulation system if likely to be bridged by leaking liquid		N/A
22.34	Shafts of operating knobs, handles, levers etc. not live, unless		N/A
	the shaft is not accessible when the part is removed		N/A
22.35	For other than class III constructions, handles, levers and knobs, held or actuated in normal use, not becoming live in the event of a failure of basic insulation		P

TRF No. IEC60335\_2\_40J

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Such parts being of metal, and their shafts or fixings are likely to become live in the event of a failure of basic insulation, are either adequately covered by insulation material or their accessible parts are separated from their shafts or fixings by supplementary insulation		N/A
	This requirement does not apply to handles, levers and knobs on stationary appliances, other than those of electrical components, provided they are reliably connected to an earthing terminal or earthing contact, or separated from live parts by earthed metal		N/A
	Insulating material covering metal handles, levers and knobs withstand the electric strength test of 16.3 for supplementary insulation		N/A
22.36	For appliances other than class III, handles continuously held in the hand in normal use so constructed that when gripped as in normal use, the operators hand is not likely to touch metal parts, unless		N/A
	they are separated from live parts by double or reinforced insulation		N/A
22.37	Capacitors in class II appliances not connected to accessible metal parts and their casings, if of metal, separated from accessible metal parts by supplementary insulation, unless		N/A
	the capacitors comply with 22.42		N/A
22.38	Capacitors not connected between the contacts of a thermal cut-out		P
22.39	Lamp holders used only for the connection of lamps		N/A
22.40	Motor-operated appliances and combined appliances intended to be moved while in operation, or having accessible moving parts, fitted with a switch to control the motor. The actuating member of the switch being easily visible and accessible		N/A
	If the appliance cannot operate continuously, automatically or remotely without giving rise to a hazard, appliances for remote operation being fitted with a switch for stopping the operation. The actuating member of the switch being easily visible and accessible		N/A
22.41	No components, other than lamps, containing mercury		P
22.42	Protective impedance consisting of at least two separate components		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Values specified in 8.1.4 not exceeded if any one of the components are short-circuited or open-circuited		N/A
	Resistors checked by the test of 14.1 a) in IEC 60065		N/A
	Capacitors checked by the tests for class Y capacitors in IEC 60384-14		N/A
22.43	Appliances adjustable for different voltages, accidental changing of the setting of the voltage unlikely to occur		N/A
22.44	Appliances not having an enclosure that is shaped or decorated like a toy		P
22.45	When air is used as reinforced insulation, clearances not reduced below the values specified in 29.1.3 due to deformation as a result of an external force applied to the enclosure		P
22.46	For programmable protective electronic circuits used to ensure compliance with the standard, the software contains measures to control the fault/error conditions in table R.1		N/A
	Software that contains measures to control the fault/error conditions specified in table R.2 is to be specified in parts 2 for particular constructions or to address specific hazards		N/A
	These requirements are not applicable to software used for functional purpose or compliance with clause 11		N/A
22.47	Appliances connected to the water mains withstand the water pressure expected in normal use		N/A
	No leakage from any part, including any inlet water hose		N/A
22.48	Appliances connected to the water mains constructed to prevent backsiphonage of non-potable water		N/A
22.49	For remote operation, the duration of operation is to be set before the appliance can be started, unless		N/A
	the appliance switches off automatically or can operate continuously without hazard		N/A
22.50	Controls incorporated in the appliance take priority over controls actuated by remote operation		N/A
22.51	There is a control on the appliance manually adjusted to the setting for remote operation before the appliance can be operated in this mode		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	There is a visual indication showing that the appliance is adjusted for remote operation		N/A
	These requirements not necessary on appliances that can operate as follows, without giving rise to a hazard:		----
	- continuously, or		N/A
	- automatically, or		N/A
	- remotely		N/A
22.52	Socket-outlets on appliances accessible to the user in accordance with the socket-outlet system used in the country in which the appliance is sold		N/A
22.101	Appliances intended to be fixed, securely fixed (IEC 60335-2-40)		P
22.102.1	At least two thermal cut-outs in appliances with supplementary heating elements for air (first one be self-resetting and other non-self-resetting thermal cut-out) (IEC 60335-2-40/A2)		N/A
22.102.2	Appliances provided with supplementary heaters for water incorporate non-self-resetting thermal cut-out, providing all-pole disconnection that operates separately from water thermostats (IEC 60335-2-40/A2)		N/A
	However, for appliances intended to be connected to fixed wiring, the neutral conductor need not be disconnected (IEC 60335-2-40/A2)		N/A
22.102.3	Thermal cut-outs of capillary type open in event of leakage from capillary tube (IEC 60335-2-40/A2)		N/A
22.103	Non-self-resetting cut-outs independent of other control devices (IEC 60335-2-40)		N/A
22.104	Containers of sanitary hot water heat pumps withstand twice permissible operating pressure in closed containers (IEC 60335-2-40) or		N/A
	0,15 MPa in open containers (IEC 60335-2-40)		N/A
	without leakage or rupture (IEC 60335-2-40)		N/A
22.105	Air or vapour cushion in closed containers not exceeding 10 % (IEC 60335-2-40)		N/A
22.106	Pressure relief devices operating at 0,1 MPa over permissible operating pressure (IEC 60335-2-40)		N/A
22.107	Water outlet systems of open containers free from obstruction causing over-pressure (IEC 60335-2-40)		N/A
	Vented containers of sanitary hot water heat pumps always open to the atmosphere through appropriate aperture (IEC 60335-2-40)		N/A

TRF No. IEC60335\_2\_40J

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
22.108	Not vented open containers subjected to test in accordance with clause 22.104 to vacuum of 33 kPa for 15 min (IEC 60335-2-40)		N/A
	Container show no deformation which result in a hazard (IEC 60335-2-40)		N/A
22.109	Replacement of non-self-resetting thermal cut-outs does not damage other connections (IEC 60335-2-40)		N/A
22.110	Non-self-resetting thermal cut-outs operate without short-circuiting live parts of different potential and without causing contact between live parts and enclosure (IEC 60335-2-40)		N/A
	Test repeated five times without blowing 3 A fuse which connects appliance to earth (IEC 60335-2-40)		N/A
	Electric strength test as specified in clause 16.3 for supplementary heating elements (IEC 60335-2-40)		N/A
22.111	Manual resetting of thermostats not necessary after power supply interruption (IEC 60335-2-40)		N/A
22.112	Construction of refrigerating system comply with requirements of Section 3 of ISO 5149 (IEC 60335-2-40/A1)		P
22.113	Flammable refrigerant used, refrigerant tubing protected or enclosed to avoid mechanical damage (IEC 60335-2-40/A1)		N/A
	Tubing protected to extent that it will not be handled or used for carrying during moving of product (IEC 60335-2-40/A1)		N/A
	Tubing located within confines of cabinet considered to be protected from mechanical damage (IEC 60335-2-40/A1)		N/A
22.114	Flammable refrigerant used, low temperature solder alloys, such as lead/tin alloys, not acceptable for pipe connections (IEC 60335-2-40/A1)		N/A
22.115	Total refrigerant mass (M) of all refrigerating systems within appliance employing flammable refrigerants, not exceed $m_3$ defined in annex GG (IEC 60335-2-40/A1)		N/A
22.116	Appliances using flammable refrigerants constructed that any leaked refrigerant not flow or stagnate so as to cause fire or explosion hazard in areas within appliance where electrical components, which could be a source of ignition and which could function under normal conditions or in event of leak, fitted (IEC 60335-2-40/A1)		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Separate components, such as thermostats, which charged with less than 0,5 g of flammable gas not considered to cause fire or explosion hazard in event of leakage of gas within component itself (IEC 60335-2-40/A1)		N/A
	All electrical components that could be a source of ignition and which could function under normal conditions or in the event of a leak, comply with one of the following (IEC 60335-2-40/A1):		----
	- IEC 60079-15:2001, Cl. 9 to 26, for group IIA gases or the refrigerant used or an applicable standard that makes electrical components suitable for use in Zone 2, 1 or 0 as defined in IEC 60079-14 (IEC 60335-2-40/A1)		N/A
	- Not be located in an area where a potentially flammable gas mixture will accumulate as demonstrated by the test of annex FF (IEC 60335-2-40/A1)		N/A
	- Be located in an enclosure. The enclosure containing the electrical components comply with IEC 60079-15:2001 for enclosures suitable for use with group IIA gases or the refrigerant used (IEC 60335-2-40/A1)		N/A
22.117	Temperatures on surfaces that exposed to leakage of flammable refrigerants not exceed auto-ignition temperature of refrigerant reduced by 100 K; some typical values given in annex BB (IEC 60335-2-40/A1)		N/A
22.118	Flammable refrigerant used, all appliances charged with refrigerant at manufacturing location or charged on site as recommended by manufacturer (IEC 60335-2-40/A1)		N/A
	Part of appliance that charged on site, which requires brazing or welding in installation not shipped with flammable refrigerant charge. Joints made in installation between parts of refrigerating system, with at least one part charged, made in accordance with following (IEC 60335-2-40/A1):		----
	- A brazed, welded, or mechanical connection shall be made before opening the valves to permit refrigerant to flow between the refrigerating system parts. A vacuum valve shall be provided to evacuate the interconnecting pipe and/or any uncharged refrigerating system part (IEC 60335-2-40/A1)		N/A
	- Reusable mechanical connectors and flared joints are not allowed indoors (IEC 60335-2-40/A1)		N/A
	- Refrigerant tubing shall be protected or enclosed to avoid damage (IEC 60335-2-40/A1)		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Flexible refrigerant connectors (such as connecting lines between the indoor and outdoor unit) that may be displaced during normal operations shall be protected against mechanical damage (IEC 60335-2-40/A1)		N/A
23	INTERNAL WIRING		----
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		N/A
	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		N/A
	Electric strength test of 16.3, 1000 V between live parts and accessible metal parts		N/A
	Not more than 10 % of the strands of any conductor broken, and		N/A
	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

TRF No. IEC60335\_2\_40J

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	no breakdown when a voltage of 2000 V is applied for 15 min between the conductor and metal foil wrapped around the insulation		P
23.6	Sleeving used as supplementary insulation on internal wiring retained in position by clamping at both ends, or		N/A
	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
24	COMPONENTS		----
24.1	Components comply with safety requirements in relevant IEC standards		P
	List of components..... :	(see appended table)	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		N/A
	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		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	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		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	Safety isolating transformers complying with IEC 61558-2-6		N/A
	If they have to be tested, they are tested according to annex G		N/A
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
	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:		----
	- thermostats: ..... 10 000		N/A
	- temperature limiters: ..... 1 000		N/A
	- self-resetting thermal cut-outs: ..... 300		N/A
	- voltage maintained non-self-resetting thermal cut-outs: ..... 1 000		N/A
	- other non-self-resetting thermal cut-outs: ..... 30		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		N/A



IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	- 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		P
	- 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		P
	- 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		N/A
	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
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

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	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..... :		P
24.2	Appliances not fitted with:		----
	- 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		N/A
24.5	Capacitors in auxiliary windings of motors marked with their rated voltage and capacitance, and used accordingly		P
	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		P
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

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
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		N/A
	One or more of the following conditions are to be met:		----
	- 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
25	SUPPLY CONNECTION AND EXTERNAL FLEXIBLE CORDS		----
25.1	Appliance not intended for permanent connection to fixed wiring, means for connection to the supply:		----
	- supply cord fitted with a plug,		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 (IEC 60335-2-40):		----
	- appliance only for indoor use (IEC 60335-2-40),		N/A
	- marked with rating of 25 A or less and (IEC 60335-2-40)		N/A
	- complies with code requirements of country where it will be used (IEC 60335-2-40).		N/A
	Appliance inlet not allowed (IEC 60335-2-40)		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:		----

TRF No. IEC60335\_2\_40J

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	- a set of terminals allowing the connection of a flexible cord		N/A
	- a fitted supply cord		P
	- 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		N/A
	- 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		N/A
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

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	- cross-linked polyvinyl chloride sheathed (at least 60245 IEC 88)		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	H05VV-F	P
	- 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
	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) (IEC 60335-2-40)		N/A
25.8	Nominal cross-sectional area of supply cords not less than table 11; rated current (A); cross-sectional area (mm <sup>2</sup> ) .....		N/A
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
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 the enclosure at the inlet opening is not of insulating material, a non-detachable lining or bushing complying with 29.3 for supplementary insulation provided		N/A



IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	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, values shown in table 12: mass (kg); pull (N); torque (not on automatic cord reel) (Nm) .....	100N, 0,35Nm	P
	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

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	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 insulated conductors of the supply cord for type Y and Z attachment additionally insulated from accessible metal parts		P
25.21	Space for supply cord for type X attachment or for connection of fixed wiring constructed:		----

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	- to permit checking of conductors with respect to correct positioning and connection before fitting any cover		N/A
	- so there is no risk of damage to the conductors or their insulation when fitting the cover		N/A
	- 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		N/A
	2 N test to the conductor for portable appliances; no contact with accessible metal parts		N/A
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:		P
	- the cross-sectional area of the conductors is determined on the basis of the maximum current during clause 11		N/A
	- the thickness of the insulation may be reduced		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
26	TERMINALS FOR EXTERNAL CONDUCTORS		----
26.1	Appliances provided with terminals or equally effective devices for connection of external conductors		P

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Terminals only accessible after removal of a non-detachable cover, except		P
	for class III appliances that do not contain live parts		N/A
	Earthing terminals may be accessible if a tool is required to make the connections and means are provided to clamp the wire independently from its connection		N/A
26.2	Appliances with type X attachment and appliances for the connection of cables to fixed wiring provided with terminals in which connections are made by means of screws, nuts or similar devices, unless		P
	the connections are soldered		N/A
	Screws and nuts not used to fix any other component, except		N/A
	internal conductors, if so arranged that they are unlikely to be displaced when fitting the supply conductors		N/A
	If soldered connections used, the conductor so positioned or fixed that reliance is not placed on soldering alone, unless		N/A
	barriers provided so that neither clearances nor creepage distances between live parts and other metal parts reduced below the values for supplementary insulation if the conductor becomes free at the soldered joint		N/A
26.3	Terminals for type X attachment and for connection of cables of fixed wiring so constructed that the conductor is clamped between metal surfaces with sufficient contact pressure but without damaging the conductor		P
	Terminals fixed so that when the clamping means is tightened or loosened:		----
	- the terminal does not become loose		P
	- internal wiring is not subjected to stress		P
	- neither clearances nor creepage distances are reduced below the values in clause 29		P
	Compliance checked by inspection and by the test of subclause 9.6 of IEC 60999-1, the torque applied being equal to two-thirds of the torque specified (Nm) .....		N/A
	No deep or sharp indentations of the conductors		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
26.4	Terminals for type X attachment, except those having a specially prepared cord and those for the connection of cables of fixed wiring, no special preparation of conductors such as by soldering, use of cable lugs, eyelets or similar, and		P
	so constructed or placed that conductors prevented from slipping out when clamping screws or nuts are tightened		N/A
26.5	Terminals for type X attachment so located or shielded that if a wire of a stranded conductor escapes, no risk of accidental connection to other parts that result in a hazard		P
	Stranded conductor test, 8 mm insulation removed		N/A
	No contact between live parts and accessible metal parts and,		N/A
	for class II constructions, between live parts and metal parts separated from accessible metal parts by supplementary insulation only		N/A
26.6	Terminals for type X attachment and for connection of cables of fixed wiring suitable for connection of conductors with cross-sectional area according to table 13; rated current (A); nominal cross-sectional area (mm <sup>2</sup> ) ..... :		N/A
	If a specially prepared cord is used, terminals need only be suitable for that cord		N/A
26.7	Terminals for type X attachment, except in class III appliances not containing live parts, accessible after removal of a cover or part of the enclosure		P
26.8	Terminals for the connection of fixed wiring, including the earthing terminal, located close to each other		P
26.9	Terminals of the pillar type constructed and located as specified		N/A
26.10	Terminals with screw clamping and screwless terminals not used for flat twin tinsel cords, unless		P
	conductors ends fitted with means suitable for screw terminals		N/A
	Pull test of 5 N to the connection		N/A
26.11	For type Y and Z attachment, soldered, welded, crimped or similar connections may be used		P
	For class II appliances, the conductor so positioned or fixed that reliance is not placed on soldering, welding or crimping alone		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	If soldering, welding or crimping alone used, barriers provided so that clearances and creepage distances between live parts and other metal parts are not reduced below the values for supplementary insulation if the conductor becomes free		N/A
27	PROVISION FOR EARTHING		----
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 earthing		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		P
	conductors cannot be loosened without the aid of a tool		P
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
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



IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	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		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		P
	Resistance not exceeding 0,1Ω at the specified low-resistance test ( ) .....	Max.: 0,01Ω	P
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
28	SCREWS AND CONNECTIONS		----
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

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
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		P
	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		N/A
	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,		N/A
	- during user maintenance,		N/A
	- when replacing a supply cord having a type X attachment, or		N/A
	- during installation		N/A
	At least two screws being used for each connection providing earthing continuity, unless		N/A
	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		N/A
	This requirement does not apply to screws in the earthing circuit if at least two screws are used, or		N/A
	if an alternative earthing circuit is provided		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Rivets for electrical connections or connections providing earthing continuity secured against loosening if the connections are subjected to torsion		N/A
29	CLEARANCES, CREEPAGE DISTANCES AND SOLID INSULATION		----
	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)		N/A
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)	P
	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		N/A
	Impulse voltage test is not applicable:		----
	- when the microenvironment is pollution degree 3, or		N/A
	- for basic insulation of class 0 and class 01 appliances		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

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	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		N/A
	Lacquered conductors of windings considered to be bare conductors		P
	However, clearances at crossover points are not measured		N/A
	Clearance between surfaces of PTC heating elements may be reduced to 1mm		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 .....		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	- 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		N/A
	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 (IEC 60335-2-40)		N/A

TRF No. IEC60335\_2\_40J

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	insulation enclosed or located so that unlikely to be exposed to pollution due to normal use (IEC 60335-2-40)		P
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		N/A
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		N/A
	- by an assessment of the thermal quality of the material combined with an electric strength test, in accordance with 29.3.3, and		N/A



IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	for accessible parts of reinforced insulation consisting of a single layer, by measurement in accordance with 29.3.4, 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		N/A
29.3.2	Each layer of material withstand the electric strength test of 16.3 for supplementary insulation		N/A
	Supplementary insulation consist of at least 2 layers		N/A
	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		N/A
	the electric strength test of 16.3		N/A
	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		N/A
29.3.4	Thickness of accessible parts of reinforced insulation consisting of a single layer not less than specified in table 19 .....		N/A
30	RESISTANCE TO HEAT AND FIRE		----
30.1	External parts of non-metallic material,		P
	parts supporting live parts, and		P
	parts of thermoplastic material providing supplementary or reinforced insulation		P
	sufficiently resistant to heat		P
	Ball-pressure test according to IEC 60695-10-2		P
	External parts tested at 40 °C plus the maximum temperature rise determined during the test of clause 11, or at 75 °C, whichever is the higher; temperature (°C) .....	(see appended table)	P
	Parts supporting live parts tested at 40 °C plus the maximum temperature rise determined during the test of clause 11, or at 125 °C, whichever is the higher; temperature (°C) .....	(see appended table)	P

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Parts of thermoplastic material providing supplementary or reinforced insulation tested at 25 °C plus the maximum temperature rise determined during clause 19, if higher; temperature (°C)..... :	(see appended table)	N/A
30.2	Parts of non-metallic material resistant to ignition and spread of fire		P
	This requirement does not apply to:		----
	parts having a mass not exceeding 0,5 g, provided the cumulative effect is unlikely to propagate flames that originate inside the appliance by propagating flames from one part to another, or		P
	decorative trims, knobs and other parts unlikely to be ignited or to propagate flames that originate inside the appliance		P
	Compliance checked by the test of 30.2.1, and in addition:		P
	- for attended appliances, 30.2.2 applies		N/A
	- for unattended appliances, 30.2.3 applies		P
	For appliances for remote operation, 30.2.3 applies		N/A
	For base material of printed circuit boards, 30.2.4 applies		P
30.2.1	Parts of non-metallic material subjected to the glow-wire test of IEC 60695-2-11 at 550 °C		P
	However, test not carried out if the material is classified as having a glow-wire flammability index according to IEC 60695-2-12 of at least 550 °C, or		N/A
	the material is classified at least HB40 according to IEC 60695-11-10		N/A
	Parts for which the glow-wire test cannot be carried out need to meet the requirements in ISO 9772 for material classified HBF		N/A
30.2.3	Appliances operated while unattended, tested as specified in 30.2.3.1 and 30.2.3.2		P
	The tests are not applicable to conditions as specified..... :		N/A
30.2.3.1	Parts of non-metallic material supporting connections carrying a current exceeding 0,2 A during normal operation, and		P
	parts of non-metallic material, other than small parts, within a distance of 3 mm,		N/A
	subjected to the glow-wire test of IEC 60695-2-11 with a test severity of 850 °C		P

TRF No. IEC60335\_2\_40J

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Glow-wire applied to an interposed shielding material, if relevant		N/A
	The glow-wire test is not carried out on parts of material classified as having a glow-wire flammability index according to IEC 60695-2-12 of at least 850 °C		N/A
30.2.3.2	Parts of non-metallic material supporting connections, and		P
	parts of non-metallic material within a distance of 3 mm,		N/A
	subjected to glow-wire test of IEC 60695-2-11		P
	The test severity is:		----
	- 750 °C, for connections carrying a current exceeding 0,2 A during normal operation		P
	- 650 °C, for other connections		N/A
	Glow-wire applied to an interposed shielding material, if relevant		N/A
	However, the glow-wire test of 750 °C or 650 °C as appropriate, is not carried out on parts of material fulfilling both or either of the following classifications:		----
	- a glow-wire ignition temperature according to IEC 60695-2-13 of at least:		N/A
	- 775 °C, for connections carrying a current exceeding 0,2 A during normal operation		N/A
	- 675 °C, for other connections		N/A
	- a glow-wire flammability index according to IEC 60695-2-12 of at least:		N/A
	- 750 °C, for connections carrying a current exceeding 0,2 A during normal operation		N/A
	- 650 °C, for other connections		N/A
	The glow-wire test is also not carried out on small parts. These parts are to:		----
	- comprise material having a glow-wire ignition temperature of at least 775 °C or 675 °C as appropriate, or		N/A
	- comprise material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or		N/A
	- comply with the needle-flame test of annex E, or		N/A
	- comprise material classified as V-0 or V-1 according to IEC 60695-11-10		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	The consequential needle-flame test of annex E applied to non-metallic parts that encroach within the vertical cylinder placed above the centre of the connection zone and on top of the non-metallic parts supporting current-carrying connections, and parts of non-metallic material within a distance of 3 mm of such connections if these parts are those:		----
	- parts that withstood the glow-wire test of IEC 60695-2-11 of 750 °C or 650 °C as appropriate, but produce a flame that persist longer than 2 s, or		N/A
	- parts that comprised material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or		N/A
	- small parts, that comprised material having a glow-wire flammability index of at least 750 °C or 650 °C as appropriate, or		N/A
	- small parts for which the needle-flame test of annex E was applied, or		N/A
	- small parts for which a material classification of V-0 or V-1 was applied		N/A
	However, the consequential needle-flame test is not carried out on non-metallic parts, including small parts, within the cylinder that are:		----
	- parts having a glow-wire ignition temperature of at least 775 °C or 675 °C as appropriate, or		N/A
	- parts comprising material classified as V-0 or V-1 according to IEC 60695-11-10, or		N/A
	- parts shielded by a flame barrier that meets the needle-flame test of annex E or that comprises material classified as V-0 or V-1 according to IEC 60695-11-10		N/A
30.2.4	Base material of printed circuit boards subjected to the needle-flame test of annex E		P
	Test not applicable to conditions as specified ..... :		N/A
31	RESISTANCE TO RUSTING		----
	Relevant ferrous parts adequately protected against rusting		P
	Tests specified in part 2 when necessary		P
	Salt mist test of IEC 60068-2-52, severity 2 (IEC 60335-2-40)	For outdoor unit	P
	Before test, coatings are scratched by means of a harden steel pin as specified (IEC 60335-2-40)		P
	Five scratches made at least 5 mm apart and at least 5 mm from the edges (IEC 60335-2-40)		P

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Appliance not deteriorated to such an extent that compliance with clause 8 and 27 is impaired (IEC 60335-2-40)		P
	Coating not be broken and not loosened from the metal surface (IEC 60335-2-40)		P
A	ANNEX A (INFORMATIVE) ROUTINE TESTS		----
	Description of routine tests to be carried out by the manufacturer		N/A
B	ANNEX B (NORMATIVE) APPLIANCES POWERED BY RECHARGEABLE BATTERIES		----
	The following modifications to this standard are applicable for appliances powered by batteries that are recharged in the appliance		N/A
	This annex does not apply to battery chargers		N/A
3.1.9	Appliance operated under the following conditions:		----
	- the appliance, supplied by its fully charged battery, operated as specified in relevant part 2		N/A
	- the battery is charged, the battery being initially discharged to such an extent that the appliance cannot operate		N/A
	- if possible, the appliance is supplied from the supply mains through its battery charger, the battery being initially discharged to such an extent that the appliance cannot operate. The appliance is operated as specified in relevant part 2		N/A
	- if the appliance incorporates inductive coupling between two parts that are detachable from each other, the appliance is supplied from the supply mains with the detachable part removed		N/A
3.6.2	Part to be removed in order to discard the battery is not considered to be detachable		N/A
5.B.101	Appliances supplied from the supply mains tested as specified for motor-operated appliances		N/A
7.1	Battery compartment for batteries intended to be replaced by the user, marked with battery voltage and polarity of the terminals		N/A
	The positive terminal indicated by symbol IEC 60417-5005 and the negative terminal by symbol IEC 60417-5006		N/A
7.6	Symbols 60417-5005 and IEC 60417-5006		N/A
7.12	The instructions give information regarding charging		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	The instructions for appliances incorporating batteries intended to be replaced by the user includes required information		N/A
	Details about how to remove batteries containing materials hazardous to the environment given		N/A
7.15	Markings placed on the part of the appliance connected to the supply mains		N/A
8.2	Appliances having batteries that according to the instruction may be replaced by the user need only have basic insulation between live parts and the inner surface of the battery compartment		N/A
	If the appliance can be operated without batteries, double or reinforced insulation required		N/A
11.7	The battery is charged for the period stated in the instructions or 24 h..... :		N/A
19.1	Appliances subjected to tests of 19.B.101, 19.B.102 and 19.B.103		N/A
19.10	Not applicable		N/A
19.B.101	Appliances supplied at rated voltage for 168 h, the battery being continually charged		N/A
19.B.102	For appliances having batteries that can be removed without the aid of a tool, short-circuit of the terminals of the battery, the battery being fully charged,		N/A
19.B.103	Appliances having batteries replaceable by the user supplied at rated voltage under normal operation with the battery removed or in any position allowed by the construction		N/A
21.B.101	Appliances having pins for insertion into socket-outlets have adequate mechanical strength		N/A
	Part of the appliance incorporating the pins subjected to the free fall test, procedure 2, of IEC 60068-2-31, the number of falls being:		----
	- 100, if the mass of the part does not exceed 250 g (g)..... :		N/A
	- 50, if the mass of the part exceeds 250 g..... :		N/A
	After the test, the requirements of 8.1, 15.1.1, 16.3 and clause 29 are met		N/A
22.3	Appliances having pins for insertion into socket-outlets tested as fully assembled as possible		N/A
25.13	An additional lining or bushing not required for interconnection cords in class III appliances or class III constructions operating at safety extra-low voltage not containing live parts		N/A



IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
30.2	For parts of the appliance connected to the supply mains during the charging period, 30.2.3 applies		N/A
	For other parts, 30.2.2 applies		N/A
C	ANNEX C (NORMATIVE) AGEING TEST ON MOTORS		----
	Tests, as described, carried out when doubt with regard to the temperature classification of the insulation of a motor winding		N/A
	Test conditions as specified		N/A
E	ANNEX E (NORMATIVE) NEEDLE-FLAME TEST		----
	Needle-flame test carried out in accordance with IEC 60695-11-5, with the following modifications:		----
7	Severities		----
	The duration of application of the test flame is 30 s $\pm$ 1 s		P
9	Test procedure		----
9.1	The specimen so arranged that the flame can be applied to a vertical or horizontal edge as shown in the examples of figure 1		P
9.2	The first paragraph does not apply		N/A
	If possible, the flame is applied at least 10 mm from a corner		P
9.3	The test is carried out on one specimen		P
	If the specimen does not withstand the test, the test may be repeated on two additional specimens, both withstanding the test		N/A
11	Evaluation of test results		----
	The duration of burning not exceeding 30 s		N/A
	However, for printed circuit boards, the duration of burning not exceeding 15 s		P
F	ANNEX F (NORMATIVE) CAPACITORS		----
	Capacitors likely to be permanently subjected to the supply voltage, and used for radio interference suppression or voltage dividing, comply with the following clauses of IEC 60384-14, with the following modifications:		----
1.5	Terms and definitions		----
1.5.3	Class X capacitors tested according to subclass X2		N/A
1.5.4	This subclause is applicable		N/A
1.6	Marking		----

TRF No. IEC60335\_2\_40J

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Items a) and b) are applicable		N/A
3.4	Approval testing		----
3.4.3.2	Table 3 is applicable as described		N/A
4.1	Visual examination and check of dimensions		----
	This subclause is applicable		N/A
4.2	Electrical tests		----
4.2.1	This subclause is applicable		N/A
4.2.5	This subclause is applicable		N/A
4.2.5.2	Only table 11 is applicable		N/A
	Values for test A apply		N/A
	However, for capacitors in heating appliances the values for test B or C apply		N/A
4.12	Damp heat, steady state		----
	This subclause is applicable		N/A
	Only insulation resistance and voltage proof are checked		N/A
4.13	Impulse voltage		----
	This subclause is applicable		N/A
4.14	Endurance		----
	Subclauses 4.14.1, 4.14.3, 4.14.4 and 4.14.7 are applicable		N/A
4.14.7	Only insulation resistance and voltage proof are checked		N/A
	No visible damage		N/A
4.17	Passive flammability test		----
	This subclause is applicable		N/A
4.18	Active flammability test		----
	This subclause is applicable		N/A
G	ANNEX G (NORMATIVE) SAFETY ISOLATING TRANSFORMERS		----
	The following modifications to this standard are applicable for safety isolating transformers:		----
7	Marking and instructions		----
7.1	Transformers for specific use marked with:		----
	- name, trademark or identification mark of the manufacturer or responsible vendor .....		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	- model or type reference .....		N/A
17	Overload protection of transformers and associated circuits		----
	Fail-safe transformers comply with subclause 15.5 of IEC 61558-1		N/A
22	Construction		----
	Subclauses 19.1 and 19.1.2 of IEC 61558-2-6 are applicable		N/A
29	Clearances, creepage distances and solid insulation		----
29.1, 29.2, 29.3	The distances specified in items 2a, 2c and 3 in table 13 of IEC 61558-1 apply		N/A
	For insulated winding wires complying with subclause 19.12.3 of IEC 61558-1 there are no requirements for clearances or creepage distances		N/A
	For windings providing reinforced insulation, the distance specified in item 2c of table 13 of IEC 61558-1 is not assessed		N/A
	For safety isolating transformers subjected to periodic voltages with a frequency exceeding 30 kHz, the clearances, creepage distances and solid insulation values specified in IEC 60664-4 are applicable, if greater than the values specified in items 2a, 2c and 3 in table 13 of IEC 61558-1		N/A
H	ANNEX H (NORMATIVE) SWITCHES		----
	Switches comply with the following clauses of IEC 61058-1, as modified below:		----
	The tests of IEC 61058-1 carried out under the conditions occurring in the appliance		N/A
	Before being tested, switches are operated 20 times without load		N/A
8	Marking and documentation		----
	Switches are not required to be marked		N/A
	However, a switch that can be tested separately from the appliance marked with the manufacturer's name or trade mark and the type reference		N/A
13	Mechanism		----
	The tests may be carried out on a separate sample		N/A
15	Insulation resistance and dielectric strength		----
15.1	Not applicable		N/A
15.2	Not applicable		N/A
15.3	Applicable for full disconnection and micro-disconnection		N/A

TRF No. IEC60335\_2\_40J

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
17	Endurance		----
	Compliance is checked on three separate appliances or switches		N/A
	For 17.2.4.4, the number of cycles declared according to 7.1.4 is 10 000, unless		N/A
	otherwise specified in 24.1.3 of the relevant part 2 of IEC 60335 .....		N/A
	Switches for operation under no load and which can be operated only by a tool, and		N/A
	switches operated by hand that are interlocked so that they cannot be operated under load,		N/A
	are not subjected to the tests		N/A
	However, switches without this interlock are subjected to the test of 17.2.4.4 for 100 cycles of operation		N/A
	Subclauses 17.2.2 and 17.2.5.2 not applicable		N/A
	The ambient temperature during the test is that occurring in the appliance during the test of clause 11 in IEC 60335-1		N/A
	The temperature rise of the terminals not more than 30 K above the temperature rise measured in clause 11 of IEC 60335-1 (K).....		N/A
20	Clearances, creepage distances, solid insulation and coatings of rigid printed board assemblies		----
	This clause is applicable to clearances and creepage distances for functional insulation, across full disconnection and micro-disconnection, as stated in table 24		N/A
J	ANNEX J (NORMATIVE) COATED PRINTED CIRCUIT BOARDS		----
	Testing of protective coatings of printed circuit boards carried out in accordance with IEC 60664-3 with the following modifications:		----
5.7	Conditioning of the test specimens		----
	When production samples are used, three samples of the printed circuit board are tested		N/A
5.7.1	Cold		----
	The test is carried out at -25 °C		N/A
5.7.3	Rapid change of temperature		----
	Severity 1 is specified		N/A
5.9	Additional tests		----
	This subclause is not applicable		N/A

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
K	ANNEX K (NORMATIVE) OVERVOLTAGE CATEGORIES		----
	The information on overvoltage categories is extracted from IEC 60664-1		P
	Overvoltage category is a numeral defining a transient overvoltage condition		P
	Equipment of overvoltage category IV is for use at the origin of the installation		N/A
	Equipment of overvoltage category III is equipment in fixed installations and for cases where the reliability and the availability of the equipment is subject to special requirements		N/A
	Equipment of overvoltage category II is energy consuming equipment to be supplied from the fixed installation		P
	If such equipment is subjected to special requirements with regard to reliability and availability, overvoltage category III applies		N/A
	Equipment of overvoltage category I is equipment for connection to circuits in which measures are taken to limit transient overvoltages to an appropriate low level		N/A
L	ANNEX L (INFORMATIVE) GUIDANCE FOR THE MEASUREMENT OF CLEARANCES AND CREEPAGE DISTANCES		----
	Information for the determination of clearances and creepage distances		P
M	ANNEX M (NORMATIVE) POLLUTION DEGREE		----
	The information on pollution degrees is extracted from IEC 60664-1		P
	Pollution		----
	The microenvironment determines the effect of pollution on the insulation, taking into account the macroenvironment		P
	Means may be provided to reduce pollution at the insulation by effective enclosures or similar		P
	Minimum clearances specified where pollution may be present in the microenvironment		P
	Degrees of pollution in the microenvironment		----
	For evaluating creepage distances, the following degrees of pollution in the microenvironment are established:		----

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	- pollution degree 1: no pollution or only dry, non-conductive pollution occurs. The pollution has no influence		N/A
	- pollution degree 2: only non-conductive pollution occurs, except that occasionally a temporary conductivity caused by condensation is to be expected		P
	- pollution degree 3: conductive pollution occurs or dry non-conductive pollution occurs that becomes conductive due to condensation that is to be expected		N/A
	- pollution degree 4: the pollution generates persistent conductivity caused by conductive dust or by rain or snow		N/A
N	ANNEX N (NORMATIVE) PROOF TRACKING TEST		----
	The proof tracking test is carried out in accordance with IEC 60112 with the following modifications:		----
7	Test apparatus		----
7.3	Test solutions		----
	Test solution A is used		N/A
10	Determination of proof tracking index (PTI)		----
10.1	Procedure		----
	The proof voltage is 100 V, 175 V, 400 V or 600 V ..... :		N/A
	The test is carried out on five specimens		N/A
	In case of doubt, additional test with proof voltage reduced by 25 V, the number of drops increased to 100		N/A
10.2	Report		----
	The report states if the PTI value was based on a test using 100 drops with a test voltage of (PTI-25) V		N/A
O	ANNEX O (INFORMATIVE) SELECTION AND SEQUENCE OF THE TESTS OF clause 30		----
	Description of tests for determination of resistance to heat and fire		P
P	ANNEX P (INFORMATIVE) GUIDANCE FOR THE APPLICATION OF THIS STANDARD TO APPLIANCES USED IN WARM DAMP EQUABLE CLIMATES		----



IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Modifications applicable for class 0 and 01 appliances having a rated voltage exceeding 150 V, intended to be used in countries having a warm damp equable climate and that are marked WDaE		N/A
	Modifications may also be applied to class 1 appliances having a rated voltage exceeding 150 V, intended to be used in countries having a warm damp equable climate and that are marked WDaE, if liable to be connected to a supply mains that excludes the protective earthing conductor		N/A
5.7	The ambient temperature for the tests of clauses 11 and 13 is 40 +3/0 °C		N/A
7.1	The appliance marked with the letters WDaE		N/A
7.12	The instructions state that the appliance is to be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30 mA		N/A
	The instructions state that the appliance is considered to be suitable for use in countries having a warm damp equable climate, but may also be used in other countries		N/A
11.8	The values of Table 3 are reduced by 15 K		N/A
13.2	The leakage current for class I appliances not exceeding 0,5 mA		N/A
15.3	The value of t is 37 °C		N/A
16.2	The leakage current for class I appliances not exceeding 0,5 mA (mA):		N/A
19.13	The leakage current test of 16.2 is applied in addition to the electric strength test of 16.3		N/A
Q	ANNEX Q (INFORMATIVE) SEQUENCE OF TESTS FOR THE EVALUATION OF ELECTRONIC CIRCUITS		----
	Description of tests for appliances incorporating electronic circuits		P
R	ANNEX R (NORMATIVE) SOFTWARE EVALUATION		----
	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2 validated in accordance with the requirements of this annex		N/A
R.1	Programmable electronic circuits using software		----
	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2 constructed so that the software does not impair compliance with the requirements of this standard		N/A
R.2	Requirements for the architecture		----

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2 use measures to control and avoid software-related faults/errors in safety-related data and safety-related segments of the software		N/A
R.2.1.1	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.2 have one of the following structures:		----
	- single channel with periodic self-test and monitoring		N/A
	- dual channel (homogenous) with comparison		N/A
	- dual channel (diverse) with comparison		N/A
	Programmable electronic circuits requiring software incorporating measures to control the fault/error conditions specified in table R.1 have one of the following structures:		----
	- single channel with functional test		N/A
	- single channel with periodic self-test		N/A
	- dual channel without comparison		N/A
R.2.2	Measures to control faults/errors		----
R.2.2.1	When redundant memory with comparison is provided on two areas of the same component, the data in one area is stored in a different format from that in the other area		N/A
R.2.2.2	Programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.2 and that use dual channel structures with comparison, have additional fault/error detection means for any fault/errors not detected by the comparison		N/A
R.2.2.3	For programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2, means are provided for the recognition and control of errors in transmissions to external safety-related data paths		N/A
R.2.2.4	For programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2, the programmable electronic circuits incorporate measures to address the fault/errors in safety-related segments and data indicated in table R.1 and R.2 as appropriate		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
R.2.2.5	For programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2, detection of a fault/error occur before compliance with clause 19 is impaired		N/A
R.2.2.6	The software is referenced to relevant parts of the operating sequence and the associated hardware functions		N/A
R.2.2.7	Labels used for memory locations are unique		N/A
R.2.2.8	The software is protected from user alteration of safety-related segments and data		N/A
R.2.2.9	Software and safety-related hardware under its control is initialized and terminates before compliance with clause 19 is impaired		N/A
R.3	Measures to avoid errors		----
R.3.1	General		----
	For programmable electronic circuits with functions requiring software incorporating measures to control the fault/error conditions specified in table R.1 or R.2, the following measures to avoid systematic fault in the software are applied		----
	Software that incorporates measures used to control the fault/error conditions specified in table R.2 is inherently acceptable for software required to control the fault/error conditions specified in table R.1		N/A
R.3.2	Specification		----
R.3.2.1	Software safety requirements:	Software Id:	N/A
	The specification of the software safety requirements includes the descriptions listed		N/A
R.3.2.2	Software architecture		----
R.3.2.2.1	<p>The specification of the software architecture includes the aspects listed</p> <ul style="list-style-type: none"> <li>- techniques and measures to control software faults/errors (refer to R.2.2);</li> <li>- interactions between hardware and software;</li> <li>- partitioning into modules and their allocation to the specified safety functions;</li> <li>- hierarchy and call structure of the modules (control flow);</li> <li>- interrupt handling;</li> <li>- data flow and restrictions on data access;</li> <li>- architecture and storage of data;</li> <li>- time-based dependencies of sequences and data</li> </ul>	Document ref. No:	N/A

TRF No. IEC60335\_2\_40J

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
R.3.2.2.2	The architecture specification is validated against the specification of the software safety requirements by static analysis		N/A
R.3.2.3	Module design and coding		----
R.3.2.3.1	Based on the architecture design, software is suitably refined into modules		N/A
	Software module design and coding is implemented in a way that is traceable to the software architecture and requirements		N/A
R.3.2.3.2	Software code is structured		N/A
R.3.2.3.3	Coded software is validated against the module specification by static analysis		N/A
	The module specification is validated against the architecture specification by static analysis		N/A
R.3.3.3	Software validation		----
	The software is validated with reference to the requirements of the software safety requirements specification		N/A
	Compliance is checked by simulation of:		----
	- input signals present during normal operation		N/A
	- anticipated occurrences		N/A
	- undesired conditions requiring system action		N/A

TABLE R.1 <sup>e</sup> – GENERAL FAULT/ERROR CONDITIONS						
Component <sup>a</sup>	Fault/error	Acceptable measures <sup>b, c</sup>	Definitions	Document reference for applied measure	Document reference for applied test	Ver-dict
1 CPU 1.1 Registers	Stuck at	Functional test, or periodic self-test using either: - static memory test, or - word protection with single bit redundancy	H.2.16.5 H.2.16.6 H.2.19.6 H.2.19.8.2			N/A
1.2 VOID						N/A

IEC 60335-2-40						
Clause	Requirement + Test			Result - Remark		Verdict
1.3 Programme counter	Stuck at	Functional test, or Periodic self-test, or Independent time-slot monitoring, or Logical monitoring of the programme sequence	H.2.16.5 H.2.16.6 H.2.18.10.4 H.2.18.10.2			N/A
2 Interrupt handling and execution	No interrupt or too frequent interrupt	Functional test, or time-slot monitoring	H.2.16.5 H.2.18.10.4			N/A
3 Clock	Wrong frequency (for quartz synchronized clock: harmonics/sub-harmonics only)	Frequency monitoring, or time slot monitoring	H.2.18.10.1 H.2.18.10.4			N/A
4. Memory 4.1 Invariable memory	All single bit faults	Periodic modified checksum, or multiple checksum, or word protection with single bit redundancy	H.2.19.3.1 H.2.19.3.2 H.2.19.8.2			N/A
4.2 Variable memory	DC fault	Periodic static memory test, or word protection with single bit redundancy	H.2.19.6 H.2.19.8.2			N/A
4.3 Addressing (relevant to variable and invariable memory)	Stuck at	Word protection with single bit redundancy including the address	H.2.19.8.2			N/A
5 Internal data path	Stuck at	Word protection with single bit redundancy	H.2.19.8.2			N/A
5.1 VOID						N/A
5.2 Addressing	Wrong address	Word protection with single bit redundancy including the address	H.2.19.8.2			N/A

IEC 60335-2-40						
Clause	Requirement + Test			Result - Remark		Verdict
6 External communication	Hamming distance 3	Word protection with multi-bit redundancy, or CRC – single work, or Transfer redundancy, or Protocol test	H.2.19.8.1 H.2.19.4.1 H.2.18.2.2 H.2.18.14			N/A
6.1 VOID						N/A
6.2 VOID						N/A
6.3 Timing	Wrong point in time  Wrong sequence	Time-slot monitoring, or scheduled transmission  Time-slot and logical monitoring, or comparison of redundant communication channels by either: - reciprocal comparison - independent hardware comparator  Logical monitoring, or time-slot monitoring, or Scheduled transmission	H.2.18.10.4 H.2.18.18 H.2.18.10.3  H.2.18.15 H.2.18.3  H.2.18.10.2 H.2.18.10.4 H.2.18.18			N/A
7 Input/output periphery	Fault conditions specified in 19.11.2	Plausibility check	H.2.18.13			N/A
7.1 VOID						N/A
7.2 Analog I/O						N/A
7.2.1 A/D and D/A-converter	Fault conditions specified in 19.11.2	Plausibility check	H.2.18.13			N/A
7.2.2 Analog multiplexer	Wrong addressing	Plausibility check	H.2.18.13			N/A
8 VOID						N/A
9 Custom chips <sup>d</sup> e.g. ASIC, GAL, gate array	Any output outside the static and dynamic functional specification	Periodic self-test	H.2.16.6			N/A

TRF No. IEC60335\_2\_40J

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict

NOTE A Stuck-at fault model denotes a fault model representing an open circuit or a non-varying signal level. A DC fault model denotes a stuck-at fault model incorporating short circuit between signal lines.

- a) For fault/error assessment, some components are divided into their sub-functions.  
b) For each sub-function in the table, the Table R.2 measure will cover the software fault/error.  
c) Where more than one measure is given for a sub-function, these are alternatives.  
d) To be divided as necessary by the manufacturer into sub-functions.  
e) Table R.1 is applied according to the requirements of R.1 to R.2.2.9 inclusive.

AA	<b>ANNEX AA (INFORMATIVE) (IEC 60335-2-40) EXAMPLES FOR OPERATING TEMPERATURES OF THE APPLIANCE</b>	----
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BB	<b>ANNEX BB (NORMATIVE) (IEC 60335-2-40) SELECTED INFORMATION ABOUT REFRIGERANTS</b>	----
----	------------------------------------------------------------------------------------------	------

CC	<b>ANNEX CC (INFORMATIVE) (IEC/EN 60335-2-40/A1) TRANSPORTATION, MARKING AND STORAGE FOR UNITS THAT EMPLOY FLAMMABLE REFRIGERANTS</b>	----
CC.1	Transport of equipment containing flammable refrigerants (IEC 60335-2-40/A1)	N/A
CC.2	Marking of equipment using signs (IEC 60335-2-40/A1)	N/A
CC.3	Disposal of equipment using flammable refrigerants (IEC 60335-2-40/A1)	N/A
CC.4	Storage of equipment/appliances (IEC 60335-2-40/A1)	N/A
CC.5	Storage of packed (unsold) equipment (IEC 60335-2-40/A1)	N/A

DD	<b>ANNEX DD (NORMATIVE) (IEC/EN 60335-2-40/A1) SERVICE OPERATIONS</b>	----
DD.1	Generals (IEC 60335-2-40/A1)	N/A
DD.2	Symbols (IEC 60335-2-40/A1)	N/A
DD.3	Information in manual (IEC 60335-2-40/A1 corr.1)	N/A
DD.4	Information on servicing (IEC 60335-2-40/A1)	N/A
DD.5	Repairs to sealed components (IEC 60335-2-40/A1)	N/A
DD.6	Repair to intrinsically safe components (IEC 60335-2-40/A1)	N/A
DD.7	Cabling (IEC 60335-2-40/A1)	N/A
DD.8	Detection of flammable refrigerants (IEC 60335-2-40/A1)	N/A

TRF No. IEC60335\_2\_40J

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IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
DD.9	Leak detection methods (IEC 60335-2-40/A1)		N/A
DD.10	Removal and evacuation (IEC 60335-2-40/A1)		N/A
DD.11	Charging procedures (IEC 60335-2-40/A1)		N/A
DD.12	Decommissioning (IEC 60335-2-40/A1)		N/A
DD.13	Labelling (IEC 60335-2-40/A1)		N/A
DD.14	Recovery (IEC 60335-2-40/A1)		N/A

<b>EE</b>	<b>ANNEX EE (NORMATIVE) (IEC/EN 60335-2-40/A1)</b> <b>PRESSURE TESTS</b>		----
EE.1	General (IEC 60335-2-40/A1)		P
EE.2	Pressure test value determined under testing carried out in clause 11 (IEC 60335-2-40/A1)		P
EE.3	Pressure test value determined under testing carried out in clause 19 (IEC 60335-2-40/A1)		P
EE.4	Pressure test value determined under testing carried out under standstill conditions (IEC 60335-2-40/A1)		P
EE.5	Fatigue test option for Clauses EE.1 and EE.4.1 (IEC 60335-2-40/A1)		N/A

<b>FF</b>	<b>ANNEX FF (NORMATIVE) (IEC/EN 60335-2-40/A1)</b> <b>LEAK SIMULATION TESTS</b>		----
FF.1	General (IEC 60335-2-40/A1)		N/A
FF.2	Test methods (IEC 60335-2-40/A1 corr.1)		N/A

<b>GG</b>	<b>ANNEX GG (NORMATIVE) (IEC/EN 60335-2-40/A1)</b> <b>CHARGE LIMITS, VENTILATION REQUIREMENTS AND REQUIREMENTS FOR SECONDARY CIRCUITS</b>		----
GG.1	Requirements for charge limits in ventilated areas (IEC 60335-2-40/A1 Corr.1)		N/A
GG.2	Requirements for charge limits in unventilated areas (IEC 60335-2-40/A1 Corr.1)		N/A
GG.3	Requirements for charge limits in areas with mechanical ventilation (IEC 60335-2-40/A1)		N/A
GG.4	Requirements for mechanical ventilation within the appliance enclosure (IEC 60335-2-40/A1)		N/A
GG.5	Requirements for mechanical ventilation for rooms complying with ISO 5149 (IEC 60335-2-40/A1)		N/A

IEC 60335-2-40			
Clause	Requirement + Test	Result - Remark	Verdict
GG.6	Requirements for refrigeration systems employing secondary heat exchangers (IEC 60335-2-40/A1 Corr.1)		N/A
GG.7	The appliance shall then be tested with a maximum water flow under the conditions described in g) (IEC 60335-2-40/A1)		N/A

10.1-1	TABLE: Power input deviation					P
Input deviation of/at:		P rated (W)	P measured (W)	dP	Required dP	Remark
GMV-160WL/A-T / at 230V~, 50Hz		6800	3607,0	-47,0%	+15%	Cooling mode
			4426,0	-34,9%	+15%	Heating mode
GMV-160WL/A-T / at 208V~, 60Hz		6800	3612,0	-46,9%	+15%	Cooling mode
			4107,0	-39,6%	+15%	Heating mode
GMV-160WL/A-T / at 230V~, 60Hz		6800	3238,0	-52,4%	+15%	Cooling mode
			4379,0	-35,6%	+15%	Heating mode
GMV-140WL/A-T / at 230V~, 50Hz		6300	3207,0	-49,1%	+15%	Cooling mode
			3764,0	-40,3%	+15%	Heating mode
GMV-140WL/A-T / at 208V~, 60Hz		6300	3412,0	-45,8%	+15%	Cooling mode
			2969,0	-52,9%	+15%	Heating mode
GMV-140WL/A-T / at 230V~, 60Hz		6300	3231,0	-48,7%	+15%	Cooling mode
			3192,0	-49,3%	+15%	Heating mode
GMV-120WL/A-T / at 230V~, 50Hz		5700	2854,0	-49,9%	+15%	Cooling mode
			3318,0	-41,8%	+15%	Heating mode
GMV-120WL/A-T / at 208V~, 60Hz		5700	2835,0	-50,3%	+15%	Cooling mode
			2819,0	-50,5%	+15%	Heating mode
GMV-120WL/A-T / at 230V~, 60Hz		5700	3021,0	-47,0%	+15%	Cooling mode
			2796,0	-50,9%	+15%	Heating mode
Test ambient:						
For cooling mode: Indoor: 32°C(DB)/23°C (WB); outdoor: 37°C(DB)/24°C (WB);						
For heating mode: Indoor: 20°C(DB)/15°C (WB); outdoor: 7°C(DB)/6°C (WB);						
The outdoor unit matched with suitable indoor units, details as below table:						
Outdoor unit		Indoor units				
GMV-160WL/A-T		GMV-ND50T/A-T + GMV-ND140PLS/A-T				
GMV-140WL/A-T		GMV-ND80T/A-T + GMV-ND80PLS/A-T				
GMV-120WL/A-T		GMV-ND90T/A-T + GMV-ND32PL/B-T				

10.1-2	TABLE: Power input deviation					P
Input deviation of/at:	P rated (W)	P measured (W)	dP	Required dP	Remark	
GMV-160WL/A-T match GMV-N28G/A3A-K	6800	6796,7	-0,05%	+15%	Cooling mode	

+ GMV-N50G/A3A-K+ GMV-N71G/A3A-K + GMV- ND63PL/B-T / at 230V~, 50Hz		3880,3	-42,9%	+15%	Heating mode
GMV-160WL/A-T match GMV-ND71T/A-T + GMV-ND140T/A-T / at 230V~, 50Hz	6800	5183,0	-23,8%	+15%	Cooling mode
		4002,0	-41,1%	+15%	Heating mode
Test ambient: For cooling mode: Indoor: 32°C(DB)/23°C (WB); outdoor: 37°C(DB)/24°C (WB); For heating mode: Indoor: 20°C(DB)/15°C (WB); outdoor: 7°C(DB)/6°C (WB);					

10.1-3	TABLE: Power input deviation, with alternative fan motor FG60A-ZL_ Kaibang					P
Input deviation of/at:	P rated (W)	P measured (W)	dP	Required dP	Remark	
GMV-160WL/A-T match with GMV-ND22PL/B-T+GMV-ND71PL/B-T+GMV-ND25PLS/A-T+GMV-ND80PLS/A-T at 230, 50Hz	6800	5950	-12,5%	+15%	Cooling mode	
		5630	-17,2%	+15%	Heating mode	
GMV-160WL/A-T match with GMV-ND22PL/B-T+GMV-ND71PL/B-T+GMV-ND25PLS/A-T+GMV-ND80PLS/A-T at 208, 60Hz	6800	5109	-24,9%	+15%	Cooling mode	
		5003	-26,4%	+15%	Heating mode	
GMV-160WL/A-T match with GMV-ND22PL/B-T+GMV-ND71PL/B-T+GMV-ND25PLS/A-T+GMV-ND80PLS/A-T at 230, 60Hz	6800	5944	-12,6%	+15%	Cooling mode	
		5207	-23,4%	+15%	Heating mode	
Test ambient:						
For cooling mode: Indoor: 32°C(DB)/23°C (WB); outdoor: 37°C(DB)/24°C (WB);						
For heating mode: Indoor: 20°C(DB)/15°C (WB); outdoor: 7°C(DB)/6°C (WB);						

10.1-4	TABLE: Power input deviation, with alternative fan motor SWZ120A (Mfg. Shibaura, Shangqi, Kaibang and Wolong)					P
Input deviation of/at:	P rated (W)	P measured (W)	dP	Required dP	Remark	
GMV-160WL/A-T match GMV-ND140T/A-T+ GMV- ND28T/A-T at 230, 50Hz	6800	5931	-12,8%	+15%	Cooling mode	
		5713	-16,0%	+15%	Heating mode	
GMV-160WL/A-T match GMV-ND140T/A-T+ GMV- ND28T/A-T at 230, 60Hz	6800	5971	-12,2%	+15%	Cooling mode	
		5733	-15,7%	+15%	Heating mode	

TRF No. IEC60335\_2\_40J

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GMV-160WL/A-T match GMV-ND140T/A-T+ GMV-ND28T/A-T at 208, 60Hz	6800	5842	-14,1%	+15%	Cooling mode
		5830	-14,3%	+15%	Heating mode

10.1-5	TABLE: Power input deviation, with alternative indoor fan motor FG150A-ZL (Mfg.: Kaibang)				P
Input deviation of/at:	P rated (W)	P measured (W)	dP	Required dP	Remark
GMV-160WL/A-T match GMV-ND140PLS/A-T at 230, 50Hz	6800	3611	-46,9%	+15%	Cooling mode
		4416	-35,1%	+15%	Heating mode
GMV-160WL/A-T match GMV-ND140PLS/A-T at 230, 60Hz	6800	3542	-47,9%	+15%	Cooling mode
		4325	-36,4%	+15%	Heating mode
GMV-160WL/A-T match GMV-ND140PLS/A-T at 208, 60Hz	6800	3620	-46,8%	+15%	Cooling mode
		4233	-37,8%	+15%	Heating mode

10.1-6	TABLE: Power input deviation, with model GMV-ND100T/AR-T, GMV-ND80T/AR-T					P
Input deviation of/at:		P rated (W)	P measured (W)	dP	Required dP	Remark
GMV-ND100T/AR-T at 230V/50Hz		110	89,8	-18,4%	+20%	Cooling mode
			88,2	-19,8%	+20%	Heating mode
GMV-ND100T/AR-T at 208V/60Hz		110	84,7	-23,0%	+20%	Cooling mode
			81,6	-25,8%	+20%	Heating mode
GMV-ND100T/AR-T at 230V/60Hz		110	90,3	-17,9%	+20%	Cooling mode
			88,9	-19,2%	+20%	Heating mode
GMV-ND80T/AR-T at 230V/50Hz		95	75,4	-20,6%	+20%	Cooling mode
			72,1	-24,1%	+20%	Heating mode
GMV-ND80T/AR-T at 208V/60Hz		95	73,6	-22,5%	+20%	Cooling mode
			70,6	-25,7%	+20%	Heating mode
GMV-ND80T/AR-T at 230V/60Hz		95	77,6	-18,3%	+20%	Cooling mode
			74,1	-22,0%	+20%	Heating mode
Remark: Tested with all alternative components and recorded the maximum value.						

10.1-6	TABLE: Power input deviation, with model GMV-ND28PLS/AR-T, GMV-ND36PLS/AR-T, GMV-ND36PLS/AR-T, GMV-ND56PLS/AR-T, GMV-ND71PLS/AR-T, GMV-ND90PLS/AR-T				P
Input deviation of/at:	P rated (W)	P measured (W)	dP	Required dP	Remark
GMV-ND28PLS/AR-T	50	48,5	-3,0%	+20%	Cooling mode



at 230V/50Hz		40,2	-19,6%	+20%	Heating mode
GMV-ND28PLS/AR-T at 230V/60Hz	50	51,2	2,4%	+20%	Cooling mode
		43,4	-13,2%	+20%	Heating mode
GMV-ND28PLS/AR-T at 208V/60Hz	50	48,8	-2,4%	+20%	Cooling mode
		40,5	-19,0%	+20%	Heating mode
GMV-ND36PLS/AR-T at 230V/50Hz	38	37,5	-1,3%	+20%	Cooling mode
		29,4	-22,6%	+20%	Heating mode
GMV-ND36PLS/AR-T at 230V/60Hz	38	41,5	9,2%	+20%	Cooling mode
		33,2	-12,6%	+20%	Heating mode
GMV-ND36PLS/AR-T at 208V/60Hz	38	37,8	-0,5%	+20%	Cooling mode
		29,9	-21,3%	+20%	Heating mode
GMV-ND56PLS/AR-T at 230V/50Hz	99	94,2	-4,8%	+20%	Cooling mode
		85,5	-13,6%	+20%	Heating mode
GMV-ND56PLS/AR-T at 230V/60Hz	99	96,2	-2,8%	+20%	Cooling mode
		87,3	-11,8%	+20%	Heating mode
GMV-ND56PLS/AR-T at 208V/60Hz	99	94,6	-4,4%	+20%	Cooling mode
		85,1	-14,0%	+20%	Heating mode
GMV-ND71PLS/AR-T at 230V/50Hz	105	94,3	-10,2%	+20%	Cooling mode
		83,8	-20,2%	+20%	Heating mode
GMV-ND71PLS/AR-T at 230V/60Hz	105	98,3	-6,4%	+20%	Cooling mode
		87,2	-17,0%	+20%	Heating mode
GMV-ND71PLS/AR-T at 208V/60Hz	105	94,5	-10,0%	+20%	Cooling mode
		84,1	-19,9%	+20%	Heating mode
GMV-ND90PLS/AR-T at 230V/50Hz	210	202,2	-3,7%	+20%	Cooling mode
		193,4	-7,9%	+20%	Heating mode
GMV-ND90PLS/AR-T at 230V/60Hz	210	207,2	-1,3%	+20%	Cooling mode
		198,2	-5,6%	+20%	Heating mode
GMV-ND90PLS/AR-T at 208V/60Hz	210	201,6	-4,0%	+20%	Cooling mode
		194,1	-7,6%	+20%	Heating mode
Remark: Tested with all alternative components and recorded the maximum value.					

10.2	TABLE: Current deviation					N/A
Current deviation of/at:	I rated (A)	I measured (A)	dl	Required dl	Remark	

11.8-1	TABLE: Heating test, thermocouples for outdoor unit GMV-160WL/A-T matched with indoor units of GMV-ND50T/A-T and GMV-ND140PLS/A-T.					P
--------	------------------------------------------------------------------------------------------------------------------------------------	--	--	--	--	---

	Test voltage (V) .....	240x1,06=254,4V, 50Hz	—		
	Ambient, t <sub>1</sub> (°C) .....	Cooling(DB/WB): Indoor:32/23, Outdoor: 48/31;  Heating(DB/WB): Indoor: 27/--, Outdoor: 27/18			
	Ambient, t <sub>2</sub> (°C) .....	Same as above	—		
Thermocouple locations		T (°C)		Max. T (°C)	
		cooling	heating		
<b>Indoor unit: GMV-ND50T/A-T</b>					
Terminal block		30,4	36,1	85	
Inductance		32,3	39,8	Class A: 90	
Supply cord		35,1	44,5	75	
Winding of transformer		29,5	36,7	Class B: 110	
X2 capacitor		31,2	38,8	T100	
<b>Indoor unit: GMV-ND140PLS/A-T</b>					
Terminal block		31,4	25,7	85	
Inductance		31,2	25,9	Class A: 90	
Winding of transformer		35,3	30,0	Class B: 110	
X2 capacitor		34,1	27,3	T100	
Supply cord		31,1	26,3	75	
<b>Outdoor unit: GMV-160WL/A-T</b>					
Fan motor enclosure		55,2	27,3	For reference	
Top surface of compressor		55,8	35,0	For reference	
Lead wire for compressor		52,5	33,5	T105	
Discharge pipe of compressor		93,0	86,7	For reference	
Suction pipe of compressor		29,5	34,0	For reference	
PFC inductance		64,5	45,5	Class H: 165	
4-ways valve		51,0	37,1	For reference	
Terminal block		49,5	28,3	85	
Supply cord		73,0	48,8	75	
Varistor		49,0	26,3	T85	
X2 capacitor		54,4	33,7	T100	
Y capacitor		54,1	34,6	T110	
Ambient of relay		55,2	40,3	T85	
Winding of high-frequency transformer		50,7	29,8	Class E: 105	
Test corner		52,9	23,9	90	
11.8-1	TABLE: Heating test, resistance method				P

TRF No. IEC60335\_2\_40J

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	Test voltage (V) ..... :				240×1,06=254,4V, 50Hz		—	
	Ambient, t <sub>1</sub> (°C) .....:				25		—	
	Ambient, t <sub>2</sub> (°C) .....:				--		—	
Temperature of winding	T <sub>1</sub> (°C)	R <sub>1</sub> (Ω)	R <sub>2</sub> (Ω)		T (°C)		Max. T (°C)	Insulation class
			Cooling	Heating	Cooling	Heating		
Winding of 4-way valve	25	2085	--	2532	--	80,6	120	B
Remark:								
1. The fan motors are DC type which is difficult to conducted resistance method.								
2. 4-ways valve operates in heating operation mode, so the resistance method only measured in heating mode.								

11.8-2	TABLE: Heating test, thermocouples for outdoor unit GMV-160WL/A-T matched with indoor units of GMV-ND50T/A-T and GMV-ND140PLS/A-T.			P
	Test voltage (V) .....		230x1,06=243,8V, 60Hz	—
	Ambient, t <sub>1</sub> (°C) .....		Cooling(DB/WB): Indoor:32/23, Outdoor: 48/31;  Heating(DB/WB): Indoor: 27/--, Outdoor: 27/18	
	Ambient, t <sub>2</sub> (°C) .....		Same as above	—
Thermocouple locations		T (°C)		Max. T (°C)
		cooling	heating	
Indoor unit: GMV-ND50T/A-T				
Terminal block	30,5	35,7	85	
Inductance	32,4	39,9	Class A: 90	
Supply cord	34,9	44,0	75	
Winding of transformer	29,1	37,1	Class B: 110	
X2 capacitor	31,1	38,9	T100	
Indoor unit: GMV-ND140PLS/A-T				
Terminal block	31,5	26,5	85	
Inductance	31,1	26,1	Class A: 90	
Winding of transformer	35,0	30,5	Class B: 110	
X2 capacitor	33,6	26,9	T100	
Supply cord	30,9	26,0	75	
Outdoor unit: GMV-160WL/A-T				
Fan motor enclosure	55,7	27,7	For reference	
Top surface of compressor	55,7	34,8	For reference	
Lead wire for compressor	52,5	33,1	T105	

Discharge pipe of compressor	93,9	88,5	For reference					
Suction pipe of compressor	41,5	40,2	For reference					
PFC inductance	57,4	46,1	Class H: 165					
4-ways valve	50,8	36,5	For reference					
Terminal block	49,7	28,8	85					
Varistor	48,8	26,9	T85					
X2 capacitor	54,7	24,3	T100					
Y capacitor	54,4	35,0	T110					
Ambient of relay	55,8	40,9	T85					
Winding of high-frequency transformer	50,5	30,1	Class E: 105					
Test corner	53,6	24,3	90					
11.8-2	TABLE: Heating test, resistance method			P				
	Test voltage (V) .....	230×1,06=243,8V, 60Hz		—				
	Ambient, t <sub>1</sub> (°C) .....	25		—				
	Ambient, t <sub>2</sub> (°C) .....	--		—				
Temperature of winding	T <sub>1</sub> (°C)	R <sub>1</sub> (Ω)	R <sub>2</sub> (Ω)	T (°C)	Max. T (°C)	Insulation class		
			Cooling	Heating	Cooling	Heating		
Winding of 4-way valve	25	2085	--	2467	--	72,5	120	B
Remark:								
1. The fan motors are DC type which is difficult to conducted resistance method.								
2. 4-ways valve operates in heating operation mode, so the resistance method only measured in heating mode.								

11.8-3	TABLE: Heating test, thermocouples for outdoor unit GMV-140WL/A-T matched with indoor units of GMV-ND80T/A-T and GMV-ND80PLS/A-T.			P
	Test voltage (V) .....		240×1,06=254,4V, 50Hz	—
	Ambient, t <sub>1</sub> (°C) .....		Cooling(DB/WB): Indoor:32/23, Outdoor: 48/31;  Heating(DB/WB): Indoor: 27/--, Outdoor: 27/18	
	Ambient, t <sub>2</sub> (°C) .....		Same as above	—
Thermocouple locations		T (°C)		Max. T (°C)
		cooling	heating	
Indoor unit: GMV-ND80T/A-T				
Terminal block	31,1	29,6	85	
PCB	29,5	32,1	145	
Winding of transformer	29,7	32,1	Class B: 110	
Inductance	30,7	32,4	Class A: 90	

TRF No. IEC60335\_2\_40J

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Supply cord	29,3	25,8	75					
Varistor	28,7	25,7	T85					
Fan motor enclosure	43,9	33,7	For reference					
Indoor unit: GMV-ND80PLS/A-T								
Electric box enclosure	31,3	30,5	For reference					
X2 capacitor	32,4	31,5	T100					
Winding of transformer	35,1	38,5	Class B: 110					
Inductance	31,3	32,9	Class A: 90					
Terminal block	31,1	26,3	85					
Supply cord	31,6	26,8	75					
Fan motor enclosure	40,0	28,5	For reference					
Remark: The temperature rise for GMV-140WL/A-T can refer to GMV-160WL/A-T, because GMV-140WL/A-T is the same as GMV-160WL/A-T except for working frequency setting.								
11.8-3	TABLE: Heating test, resistance method			P				
	Test voltage (V) .....		240×1,06=254,4V, 50Hz	—				
	Ambient, t <sub>1</sub> (°C) .....		25	—				
	Ambient, t <sub>2</sub> (°C) .....		--	—				
Temperature of winding	T <sub>1</sub> (°C)	R <sub>1</sub> (Ω)	R <sub>2</sub> (Ω)		T (°C)		Max. T (°C)	Insulation class
			Cooling	Heating	Cooling	Heating		
--								
Remark: The fan motors are DC type which is difficult to conducted resistance method.								

11.8-4	TABLE: Heating test, thermocouples for outdoor unit GMV-140WL/A-T matched with indoor units of GMV-ND80T/A-T and GMV-ND80PLS/A-T.			P
	Test voltage (V) .....:		230×1,06=243,8V, 60Hz	—
	Ambient, t <sub>1</sub> (°C) .....:		Cooling(DB/WB): Indoor:32/23, Outdoor: 48/31;  Heating(DB/WB): Indoor: 27/--, Outdoor: 27/18	
	Ambient, t <sub>2</sub> (°C) .....:		Same as above	—
Thermocouple locations		T (°C)		Max. T (°C)
		cooling	heating	
Indoor unit: GMV-ND80T/A-T				
Terminal block	30,9	29,6	85	
PCB	29,8	32,1	145	

TRF No. IEC60335\_2\_40J

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Winding of transformer	30,0	32,2	Class B: 110
Inductance	30,4	32,4	Class A: 90
Supply cord	29,1	25,7	75
Varistor	28,9	25,6	T85
Fan motor enclosure	42,6	34,8	For reference
<b>Indoor unit: GMV-ND80PLS/A-T</b>			
Electric box enclosure	31,1	30,5	For reference
X2 capacitor	32,6	31,4	T100
Winding of transformer	35,3	38,3	Class B: 110
Inductance	31,5	32,8	Class A: 90
Terminal block	31,0	26,4	85
Supply cord	31,4	26,8	75
Fan motor enclosure	40,3	28,5	For reference

Remark:

The temperature rise for GMV-140WL/A-T can refer to GMV-160WL/A-T, because GMV-140WL/A-T is the same as GMV-160WL/A-T except for working frequency setting.

11.8-4	TABLE: Heating test, resistance method		P
	Test voltage (V) .....	230×1,06=243,8V, 60Hz	—
	Ambient, t <sub>1</sub> (°C) .....	25	—
	Ambient, t <sub>2</sub> (°C) .....	--	—

Temperature of winding	T <sub>1</sub> (°C)	R <sub>1</sub> (Ω)	R <sub>2</sub> (Ω)		T (°C)		Max. T (°C)	Insulation class
			Cooling	Heating	Cooling	Heating		
--								

Remark:

The fan motors are DC type which is difficult to conducted resistance method.

11.8-5	TABLE: Heating test, thermocouples for outdoor unit GMV-120WL/A-T matched with indoor units of GMV-ND90T/A-T and GMV-ND32PL/B-T.		P
	Test voltage (V) .....	240×1,06=254,4V, 50Hz	—
	Ambient, t <sub>1</sub> (°C) .....	Cooling(DB/WB): Indoor:32/23, Outdoor: 48/31; Heating(DB/WB): Indoor: 27/--, Outdoor: 27/18	

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	Ambient, t <sub>2</sub> (°C) .....		Same as above		—			
Thermocouple locations		T (°C)		Max. T (°C)				
		cooling	heating					
Indoor unit: GMV-ND90T/A-T								
Terminal block		30,3	29,9	85				
PCB		30,7	33,1	145				
Winding of transformer		30,9	33,6	Class B: 110				
Inductance		30,3	32,7	Class A: 90				
Supply cord		29,1	26,8	75				
Varistor		29,1	27,2	T85				
Fan motor enclosure		44,1	35,2	For reference				
Indoor unit: GMV-ND32PL/B-T								
Electric box enclosure		32,3	31,5	For reference				
X2 capacitor		31,7	32,8	T100				
Winding of transformer		37,1	36,8	Class B: 110				
Inductance		31,8	33,4	Class A: 90				
Terminal block		30,6	27,3	85				
Supply cord		31,1	27,2	75				
Fan motor enclosure		37,6	29,5	For reference				
Remark:								
The temperature rise for GMV-120WL/A-T can refer to GMV-160WL/A-T, because GMV-120WL/A-T is the same as GMV-160WL/A-T except for working frequency setting.								
11.8-5	TABLE: Heating test, resistance method					P		
	Test voltage (V) .....		240×1,06=254,4V, 50Hz			—		
	Ambient, t <sub>1</sub> (°C) .....		25			—		
	Ambient, t <sub>2</sub> (°C) .....		--			—		
Temperature of winding	T <sub>1</sub> (°C)	R <sub>1</sub> (Ω)	R <sub>2</sub> (Ω)		T (°C)		Max. T (°C)	Insulation class
			Cooling	Heating	Cooling	Heating		
--								
Remark:								
The fan motors are DC type which is difficult to conducted resistance method.								

11.8-6	TABLE: Heating test, thermocouples for outdoor unit GMV-120WL/A-T matched with indoor units of GMV-ND90T/A-T and GMV-ND32PL/B-T.				P
	Test voltage (V) .....		230×1,06=243,8V, 60Hz		—

	Ambient, t <sub>1</sub> (°C) .....		Cooling(DB/WB): Indoor:32/23, Outdoor: 48/31; Heating(DB/WB): Indoor: 27/--, Outdoor: 27/18					
	Ambient, t <sub>2</sub> (°C) .....		Same as above		—			
Thermocouple locations		T (°C)		Max. T (°C)				
		cooling	heating					
Indoor unit: GMV-ND90T/A-T								
Terminal block	30,2	28,3	85					
PCB	30,8	33,2	145					
Winding of transformer	31,0	33,9	Class B: 110					
Inductance	30,1	33,0	Class A: 90					
Supply cord	28,8	26,4	75					
Varistor	28,9	27,6	T85					
Fan motor enclosure	43,8	34,9	For reference					
Indoor unit: GMV-ND32PL/B-T								
Electric box enclosure	32,7	30,8	For reference					
X2 capacitor	31,6	32,6	T100					
Winding of transformer	37,3	36,3	Class B: 110					
Inductance	31,7	33,8	Class A: 90					
Terminal block	30,3	26,9	85					
Supply cord	31,3	26,8	75					
Fan motor enclosure	37,3	29,8	For reference					
Remark:								
The temperature rise for GMV-120WL/A-T can refer to GMV-160WL/A-T, because GMV-120WL/A-T is the same as GMV-160WL/A-T except for working frequency setting.								
11.8-6	TABLE: Heating test, resistance method				P			
	Test voltage (V) .....		230×1,06=243,8V, 60Hz		—			
	Ambient, t <sub>1</sub> (°C) .....		25		—			
	Ambient, t <sub>2</sub> (°C) .....		--		—			
Temperature of winding	T <sub>1</sub> (°C)	R <sub>1</sub> (Ω)	R <sub>2</sub> (Ω)		T (°C)		Max. T (°C)	Insulation class
			Cooling	Heating	Cooling	Heating		
--								
Remark:								
The fan motors are DC type which is difficult to conducted resistance method.								

11.8-7	TABLE: Heating test, thermocouples			P
	Test voltage (V) .....	240×1,06=254,4V, 50Hz		—
	Ambient, t <sub>1</sub> (°C) .....	Cooling(DB/WB): Indoor:32/23, Outdoor: 48/31; Heating(DB/WB): Indoor: 27/--, Outdoor: 27/18		
	Ambient, t <sub>2</sub> (°C) .....	Same as above		—
Thermocouple locations		T (°C)		Max. T (°C)
		cooling	heating	
Outdoor unit GMV-160WL/A-T matched with indoor units of GMV-N28G/A3A-K, GMV-N50G/A3A-K, GMV-N71G/A3A-K, GMV-ND63PL/B-T.				
Indoor unit: GMV-N28G/A3A-K				
Supply cord	32,3	30,1	75	
Terminal block	37,9	32,3	85	
Fan motor	29,1	65,2	For reference	
Relay	41,5	32,8	T70	
Fan motor capacitor	46,0	37,7	T70	
X capacitor	48,3	40,5	T100	
Y capacitor	48,6	32,9	T125	
PCB board	46,1	46,9	145	
Transformer	47,7	29,5	Class B: 110	
Step motor	31,0	37,6	For reference	
Electric box	38,5	31,0	85	
Enclosure	34,0	30,9	85	
Test floor	30,5	28,2	90	
Indoor unit: GMV-N50G/A3A-K				
Supply cord	32,3	30,6	75	
Terminal block	30,9	29,9	85	
Fan motor	52,4	70,6	For reference	
Relay	30,5	29,9	T70	
Fan motor capacitor	31,1	30,6	T70	
X capacitor	42,1	40,3	T100	
Y capacitor	41,9	39,7	T125	
PCB board	32,0	30,0	145	
Transformer	49,2	16,0	Class B: 110	
Step motor	25,8	28,5	For reference	

Electric box	29,3	29,4	85
Enclosure	28,3	29,0	85
Test floor	32,1	28,9	90
<b>Indoor unit: GMV-N71G/A3A-K</b>			
Supply cord	37,9	33,9	75
Terminal block	36,8	32,2	85
Fan motor	70,3	72,8	For reference
Relay	35,4	31,4	T70
Fan motor capacitor	36,2	31,9	T70
X capacitor	44,3	42,3	T100
Y capacitor	45,3	43,5	T125
PCB board	37,5	33,6	145
Transformer	45,4	43,0	Class B: 110
Step motor	32,2	29,3	For reference
Electric box	38,1	35,2	85
Enclosure	33,3	28,8	85
Test floor	30,9	28,4	90
<b>Indoor unit: GMV-ND63PL/B-T</b>			
Fan motor enclosure	36,8	30,6	For reference
<b>Outdoor unit:</b>			
Supply cord	77,7	49,9	75
Top surface of compressor	91,6	68,6	For reference
Discharge pipe of compressor	86,1	61,8	For reference
Fan motor enclosure	64,7	15,4	For reference
Winding of high-frequency transformer	54,9	34,6	Class B: 110
PCB board	49,5	25,1	145
Test corner	54,6	16,5	90
Outdoor unit GMV-160WL/A-T matched with indoor units of GMV-ND71T/A-T, GMV-ND140T/A-T			
<b>Indoor unit: GMV-ND71T/A-T incorporated alternative indoor fan motor FN35B-ZL (mfg.:Kaibang)</b>			
Supply cord	34,5	43,6	75
Terminal block	31,0	34,8	85
Inductance	32,9	35,4	For reference
Transformer	29,5	35,2	For reference
DC Fan motor	34,2	38,5	For reference
<b>Indoor unit: GMV-ND140T/A-T incorporated alternative indoor fan motor FN60C-ZL (mfg.:Kaibang)</b>			
Supply cord	31,1	26,1	75

Terminal block			32,4	26,3	85				
Inductance			31,2	29,3	For reference				
Transformer			34,8	26,8	For reference				
DC Fan motor			34,1	30,5	For reference				
Outdoor unit:									
Supply cord			53,4	34,5	75				
Top surface of compressor			86,1	82,7	For reference				
Discharge pipe of compressor			92,1	25,0	For reference				
Fan motor enclosure			54,4	29,5	For reference				
Test corner			51,0	25,8	90				
11.8-7	TABLE: Heating test, resistance method							P	
	Test voltage (V) .....			240×1,06=254,4V, 50Hz				—	
	Ambient, t <sub>1</sub> (°C) .....			25				—	
	Ambient, t <sub>2</sub> (°C) .....			--				—	
Temperature of winding		T <sub>1</sub> (°C)	R <sub>1</sub> (Ω)	R <sub>2</sub> (Ω)		T (°C)		Max. T (°C)	Insulation class
				Cooling	Heating	Cooling	Heating		
Fan motor winding FN20J-PG(mfg.: Shangqi)		25	275	298	336	46,7	82,6	115	E
Fan motor winding FN20J-PG(mfg.: Broad-Ocean)		25	276	296	335	43,8	80,5	115	E
Fan motor winding FN20J-PG(mfg.: Kaibang)		25	331	359	401	47,0	79,9	115	E
Fan motor winding FN20J-PG(mfg.: Sinya)		25	261	281	315	44,9	78,7	115	E
Fan motor winding FN20J-PG(mfg.: Wolong)		25	300	321	364	43,2	80,4	115	E
Fan motor winding FN20J-PG(mfg.: Tongde)		25	293	315	357	44,5	81,7	115	E
Fan motor winding FN20V-PG (mfg.: Kaibang)		25	243	285	261	69,9	44,5	115	E
Fan motor winding FN20V-PG (mfg.: Tongde)		25	195	212	215	47,8	51,5	115	E
Fan motor winding FN25A-PG (mfg.: Kaibang)		25	195	226	238	65,8	82,5	115	E
Fan motor winding FN25A-PG (mfg.: Tongde)		25	181	220	222	80,5	83,5	115	E
Remark:									
The fan motors are DC type which is difficult to conducted resistance method.									

11.8-8	TABLE: Heating test, thermocouples			P
	Test voltage (V) .....	240×1,06=254,4V, 50Hz		—
	Ambient, t <sub>1</sub> (°C) .....	Cooling(DB/WB): Indoor:32/23, Outdoor: 48/31;  Heating(DB/WB): Indoor: 27/--, Outdoor: 27/18		
	Ambient, t <sub>2</sub> (°C) .....	Same as above		—
Thermocouple locations		T (°C)		Max. T (°C)
		cooling	heating	
Outdoor unit GMV-160WL/A-T with GMV-ND22PL/B-T + GMV-ND71PL/B-T + GMV-ND25PLS/A-T + GMV-ND80PLS/A-T which incorporated alternative indoor fan motor FG60A-ZL (Mfg: Kaibang).				
GMV-ND80PLS/A-T				
Enclosure of indoor fan motor	35,5	33,0	For reference	
Terminal block of indoor unit	32,5	28,9	85	
PCB	36,5	33,5	145	
Supply cord	34,0	30,0	75	
Varistor	35,2	31,7	T85	
X2 capacitor surface	38,7	35,8	T100	
Test corner	35,4	27,1	90	
GMV-ND25PLS/A-T				
Enclosure of indoor fan motor	35,4	34,4	For reference	
PCB	36,6	34,0	145	
Supply cord	34,0	32,0	75	
GMV-ND71PL/B-T				
Enclosure of indoor fan motor	36,6	32,0	For reference	
PCB	35,9	32,9	145	
Supply cord	36,1	28,1	75	
GMV-ND22PL/B-T				
Enclosure of indoor fan motor	35,2	31,6	For reference	
PCB	33,5	30,5	145	
Supply cord	33,0	31,2	75	
Remark:				
The fan motors are DC type which is difficult to conducted resistance method.				
11.8-9	TABLE: Heating test, thermocouples for outdoor unit GMV-160WL/A-T matched with indoor units of GMV-ND140L/A-T and GMV-ND100PL/A-T.			P



	Test voltage (V) .....	240×1,06=254,4V, 50Hz, 230×1,06=243,8V, 60Hz	—
	Ambient, t <sub>1</sub> (°C) .....	Cooling(DB/WB): Indoor:32/23, Outdoor: 48/31; Heating(DB/WB): Indoor: 27/--, Outdoor: 27/18	
	Ambient, t <sub>2</sub> (°C) .....	Same as above	—
Thermocouple locations		T (°C)	
		cooling	heating
Max. T (°C)			
<b>Indoor unit: GMV-ND140L/A-T (at 254,4V, 50Hz)</b>			
Enclosure of indoor fan motor	42,7	33,4	For reference
Terminal block of indoor unit	31,7	31,5	85
PCB	32,4	32,0	145
Supply cord	32,0	31,9	75
Varistor	32,6	32,5	T85
X2 capacitor surface	34,5	34,9	T100
Test corner	35,7	27,8	90
<b>Indoor unit: GMV-ND140L/A-T (at 243,8V, 60Hz)</b>			
Enclosure of indoor fan motor	35,9	34,6	For reference
Terminal block of indoor unit	31,5	28,2	85
PCB	32,0	30,1	145
Supply cord	31,9	27,2	75
Varistor	32,5	28,0	T85
X2 capacitor surface	34,9	32,6	T100
Test corner	28,1	27,5	90
<b>Indoor unit: GMV-ND100PL/A-T</b>			
Enclosure of indoor fan motor	42,8	33,2	For reference
Terminal block of indoor unit	30,6	31,7	85
PCB	32,5	31,3	145
Supply cord	31,3	31,8	75
Varistor	32,7	33,1	T85
X2 capacitor surface	35,1	35,2	T100
Test corner	35,6	28,6	90
<b>Outdoor unit: GMV-160WL/A-T</b>			
Fan motor enclosure	55,7	27,7	For reference
Top surface of compressor	55,7	34,8	For reference
Discharge pipe of compressor	93,9	88,5	For reference

Suction pipe of compressor		41,5	40,2	For reference					
4-ways valve		50,8	36,5	For reference					
Terminal block		49,7	28,8	85					
Supply cord		79,7	50,1	75					
Test corner		53,6	24,3	90					
11.8-9	TABLE: Heating test, resistance method							N/A	
	Test voltage (V) .....		:	--				—	
	Ambient, t <sub>1</sub> (°C) .....		:	--				—	
	Ambient, t <sub>2</sub> (°C) .....		:	--				—	
Temperature of winding		T <sub>1</sub> (°C)	R <sub>1</sub> (Ω)	R <sub>2</sub> (Ω)		T (°C)		Max. T (°C)	Insulation class
				Cooling	Heating	Cooling	Heating		
--		--	--	--	--	--	--	--	--
Remark:									
1. The fan motors are DC type which is difficult to conducted resistance method.									
2. The indoor unit GMV-ND100L/A-T is the same as GMV-ND140L/A-T except for heat exchanger.									

11.8-10	TABLE: Heating test, thermocouples for indoor unit GMV-ND100T/AR-T and GMV-ND80T/AR-T with outdoor unit GMV-160WL/A-T .			P
	Test voltage (V) .....	240×1,06=254,4V, 50Hz, 230×1,06=243,8V, 60Hz		—
	Ambient, t <sub>1</sub> (°C) .....	Cooling(DB/WB): Indoor:32/23, Outdoor: 48/31;  Heating(DB/WB): Indoor: 27/--, Outdoor: 27/18		
	Ambient, t <sub>2</sub> (°C) .....	Same as above		—
Thermocouple locations		T (°C)		Max. T (°C)
		cooling	heating	
Indoor unit: GMV-ND100T/AR-T (at 254,4V, 50Hz)				
Pump	39,1	40,7	Class E: 105	
Fan motor_Zhongshan Broad-Ocean	46,7	42,2	Class B: 110	
Fan motor_Zhuhai Kaibang	50,4	56,2	Class B: 110	
PCB	33,5	28,5	145	
X2 Capacitor	40,4	38,7	T110	
Supply cord	33,5	30,5	75	
High Frequency Transformer	44,5	40,6	Class B: 110	
Relay	45,6	38,2	T70	
Terminal Board	39,2	29,8	75	
Step Motor	37,8	33,9	Class A: 90	

TRF No. IEC60335\_2\_40J

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Test corner	28,1	24,6	90
<b>Indoor unit: GMV-ND80T/AR-T (at 254,4V, 50Hz)</b>			
Pump	39,1	41,5	Class E: 105
Fan motor_Zhongshan Broad-Ocean	50,1	43,6	Class B: 110
Fan motor_Zhuhai Kaibang	52,6	58,7	Class B: 110
PCB	33,6	29,8	145
X2 Capacitor	41,5	37,6	T110
Supply cord	33,8	31,2	75
High Frequency Transformer	44,3	41,9	Class B: 110
Relay	45,3	42,1	T70
Terminal Board	38,2	30,5	75
Step Motor	39,1	34,6	Class A: 90
Test corner	27,2	24,1	90
<b>Indoor unit: GMV-ND100T/AR-T (at 243,8V, 60Hz)</b>			
Pump	39,2	35,6	Class E: 105
Fan motor_Zhongshan Broad-Ocean	47,8	44,2	Class B: 110
Fan motor_Zhuhai Kaibang	52,7	50,1	Class B: 110
PCB	34,2	28,9	145
X2 Capacitor	41,2	38,2	T110
Supply cord	36,2	30,4	75
High Frequency Transformer	45,3	40,1	Class B: 110
Relay	44,1	35,7	T70
Terminal Board	38,6	34,8	75
Step Motor	37,2	34,9	Class A: 90
Test corner	28,3	23,6	90
<b>Indoor unit: GMV-ND80T/AR-T (at 243,8V, 60Hz)</b>			
Pump	35,8	31,9	Class E: 105
Fan motor_Zhongshan Broad-Ocean	48,3	42,7	Class B: 110
Fan motor_Zhuhai Kaibang	48,2	42,5	Class B: 110
PCB	33,5	29,5	145
X2 Capacitor	40,2	40,1	T110
Supply cord	36,5	31,2	75
High Frequency Transformer	44,8	40,9	Class B: 110
Relay	46,2	38,2	T70
Terminal Board	36,1	33,8	75
Step Motor	39,8	32,6	Class A: 90

Test corner			27,9	26,5	90				
Outdoor unit: GMV-160WL/A-T									
Fan motor enclosure			61,2	30,4	For reference				
Top surface of compressor			78,6	69,3	For reference				
Lead wire for compressor			55,1	43,6	T105				
Discharge pipe of compressor			73,1	68,5	For reference				
Suction pipe of compressor			45,1	32,1	For reference				
PFC inductance			45,6	33,1	Class H: 165				
4-ways valve			55,6	61,3	For reference				
Terminal block			46,2	31,9	85				
Supply cord			47,9	29,8	75				
Varistor			50,1	39,2	T85				
X2 capacitor			49,3	33,1	T100				
Y capacitor			48,2	41,3	T110				
Ambient of relay			55,2	40,9	T85				
Winding of high-frequency transformer			53,6	36,5	Class E: 105				
Test corner			44,1	25,1	90				
11.8-10	TABLE: Heating test, resistance method							N/A	
	Test voltage (V) .....			:	--		—		
	Ambient, t <sub>1</sub> (°C) .....			:	--		—		
	Ambient, t <sub>2</sub> (°C) .....			:	--		—		
Temperature of winding		T <sub>1</sub> (°C)	R <sub>1</sub> (Ω)	R <sub>2</sub> (Ω)		T (°C)		Max. T (°C)	Insulation class
				Cooling	Heating	Cooling	Heating		
--		--	--	--	--	--	--	--	--
Remark: The fan motors are DC type which is difficult to conducted resistance method.									

11.8-11	TABLE: Heating test, thermocouples for indoor unit GMV-ND28PLS/AR-T, GMV-ND36PLS/AR-T, GMV-ND36PLS/AR-T, GMV-ND56PLS/AR-T, GMV-ND71PLS/AR-T, GMV-ND90PLS/AR-T			P
	Test voltage (V) .....	240×1,06=254,4V, 50Hz, 230×1,06=243,8V, 60Hz		—
	Ambient, t <sub>1</sub> (°C) .....	Cooling(DB/WB): Indoor:32/23, Outdoor: 48/31; Heating(DB/WB): Indoor: 27/--, Outdoor: 27/18		
	Ambient, t <sub>2</sub> (°C) .....	Same as above		—
Thermocouple locations		T (°C)		Max. T (°C)

TRF No. IEC60335\_2\_40J

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	cooling	heating	
<b>Indoor unit: GMV-ND28PLS/AR-T(at 254,4V, 50Hz)</b>			
Pump	34,2	27,5	Class E: 105
Fan motor_Zhuhai Kaibang	33,9	28,2	Class E: 105
Fan motor_Hangzhou Panasonic	33,5	28,1	Class E: 105
Main board	33,2	35,3	145
Supply cord	33,8	30,2	75
X2 Capacitor	36,2	35,4	T100
High Frequency Transformer	37,0	38,8	Class B: 110
Relay	33,9	24,7	T70
Terminal Board	33,4	28,6	85
Test corner	28,1	27,4	For reference
<b>Indoor unit: GMV-ND28PLS/AR-T(at 243,8V, 60HZ)</b>			
Pump	33,2	27,5	Class E: 105
Fan motor_Zhuhai Kaibang	34,0	28,0	Class E: 105
Fan motor_Hangzhou Panasonic	33,8	27,6	Class E: 105
Main board	32,4	35,4	145
Supply cord	32,4	30,3	75
X2 Capacitor	33,2	29,5	T100
High Frequency Transformer	36,7	38,7	Class B: 110
Relay	33,6	24,9	T70
Terminal Board	32,8	28,6	85
Test corner	28,2	27,6	For reference
<b>Indoor unit: GMV-ND36PLS/AR-T(at 254,4V, 50Hz)</b>			
Pump	34,2	27,8	Class E: 105
Fan motor_Zhuhai Kaibang	34,4	30,9	Class E: 105
Fan motor_Hangzhou Panasonic	34,3	30,6	Class E: 105
Main board	33,5	36,2	145
Supply cord	33,2	29,8	75
X2 Capacitor	36,6	35,8	T100
High Frequency Transformer	38,8	36,5	Class B: 110
Relay	39,8	38,5	T70
Terminal Board	33,8	29,5	85
Test corner	28,2	27,3	For reference
<b>Indoor unit: GMV-ND36PLS/AR-T(at 243,8V, 60HZ)</b>			
Pump	34,2	28,0	Class E: 105

Fan motor_Zhuhai Kaibang	34,5	30,9	Class E: 105
Fan motor_Hangzhou Panasonic	34,2	30,6	Class E: 105
Main board	32,3	34,8	145
Supply cord	32,3	30,5	75
X2 Capacitor	35,9	35,2	T100
High Frequency Transformer	36,0	38,9	Class B: 110
Relay	36,5	38,8	T70
Terminal Board	33,1	29,6	85
Test corner	28,1	27,5	For reference
<b>Indoor unit: GMV-ND56PLS/AR-T(at 254,4V, 50Hz)</b>			
Pump	33,3	27,2	Class E: 105
Fan motor_Zhuhai Kaibang)	33,8	29,5	Class E: 105
Fan motor_Hangzhou Panasonic	33,6	29,3	Class E: 105
Main board	32,6	34,2	145
Supply cord	33,2	30,0	75
X2 Capacitor	37,2	36,1	T100
High Frequency Transformer	38,6	37,5	Class B: 110
Relay	40,2	39,5	T70
Terminal Board	34,2	31,3	85
Test corner	28,1	27,0	For reference
<b>Indoor unit: GMV-ND56PLS/AR-T(at 243,8V, 60HZ)</b>			
Pump	33,6	27,5	Class E: 105
Fan motor_Zhuhai Kaibang	34,2	29,6	Class E: 105
Fan motor_Hangzhou Panasonic	33,8	29,2	Class E: 105
Main board	32,2	33,5	145
Supply cord	33,8	31,3	75
X2 Capacitor	36,5	35,8	T100
High Frequency Transformer	37,6	36,8	Class B: 110
Relay	37,2	38,1	T70
Terminal Board	33,5	30,8	85
Test corner	28,3	27,2	For reference
<b>Indoor unit: GMV-ND71PLS/AR-T(at 254,4V, 50Hz)</b>			
Pump	32,5	27,8	Class E: 105
Fan motor_Zhuhai Kaibang	32,1	28,4	Class E: 105
Fan motor_Hangzhou Panasonic	32,0	28,2	Class E: 105
Main board	31,9	33,5	145

Supply cord	32,4	31,4	75
X2 Capacitor	36,5	35,8	T100
High Frequency Transformer	38,8	39,0	Class B: 110
Relay	40,0	39,0	T70
Terminal Board	34,6	32,7	85
Test corner	28,2	27,2	For reference
<b>Indoor unit: GMV-ND71PLS/AR-T(at 243,8V, 60HZ)</b>			
Pump	32,2	27,5	Class E: 105
Fan motor_Zhuhai Kaibang	32,0	28,1	Class E: 105
Fan motor_Hangzhou Panasonic	31,6	27,7	Class E: 105
Main board	31,8	32,2	145
Supply cord	32,0	30,4	75
X2 Capacitor	36,2	35,1	T100
High Frequency Transformer	35,9	39,7	Class B: 110
Relay	37,3	39,0	T70
Terminal Board	33,3	32,8	85
Test corner	28,2	27,5	For reference
<b>Indoor unit: GMV-ND90PLS/AR-T(at 254,4V, 50Hz)</b>			
Pump	37,5	29,8	Class E: 105
Fan motor_Zhuhai Kaibang	43,1	33,4	Class E: 105
Fan motor_Hangzhou Panasonic	43,0	33,3	Class E: 105
Main board	32,9	31,5	145
Supply cord	33,4	32,4	75
X2 Capacitor	38,2	37,5	T100
High Frequency Transformer	41,2	37,6	Class B: 110
Relay	42,2	38,8	T70
Terminal Board	35,2	34,2	85
Test corner	28,2	27,2	For reference
<b>Indoor unit: GMV-ND90PLS/AR-T(at 243,8V, 60HZ)</b>			
Pump	35,2	28,3	Class E: 105
Fan motor_Zhuhai Kaibang	37,8	35,5	Class E: 105
Fan motor_Hangzhou Panasonic	37,4	35,1	Class E: 105
Main board	33,6	32,5	145
Supply cord	33,1	31,9	75
X2 Capacitor	37,2	37,5	T100
High Frequency Transformer	37,6	40,2	Class B: 110



Relay		38,8	41,2	T70					
Terminal Board		35,5	34,1	85					
Test corner		28,0	27,2	For reference					
11.8-11	TABLE: Heating test, resistance method					N/A			
	Test voltage (V) .....		--		—				
	Ambient, t <sub>1</sub> (°C) .....		--		—				
	Ambient, t <sub>2</sub> (°C) .....		--		—				
Temperature of winding		T <sub>1</sub> (°C)	R <sub>1</sub> (Ω)	R <sub>2</sub> (Ω)		T (°C)		Max. T (°C)	Insulation class
				Cooling	Heating	Cooling	Heating		
--		--	--	--	--	--	--	--	--
Remark: The fan motors are DC type which is difficult to conducted resistance method.									

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) .....	230×1,06=243,8V, 60Hz; 240×1,06=254,4V, 50H		—
Leakage current between		I (mA)	Max. allowed I (mA)	
Live parts and accessible basic insulation		Maximum: 0,44	10	
Live parts and accessible reinforced insulation		Maximum: 0,07	0,35 (peak)	
Supplementary information: --				

13.3	TABLE: Dielectric strength			P
Test voltage applied between:		Test potential applied (V)	Breakdown / flashover (Yes/No)	
Parts isolated with basic insulation		1000	No	
Parts isolated with supplementary insulation		1750	No	
Part isolated with reinforced insulation		3000	No	
Supplementary information: --				

14	TABLE: Transient overvoltages					N/A
Clearance between:	CI (mm)	Required CI (mm)	Rated impulse voltage (V)	Impulse test voltage (V)	Flashover (Yes/No)	
Supplementary information:						

16.2	TABLE: Leakage current					P
------	------------------------	--	--	--	--	---

	Single phase appliances: 1.06 x rated voltage .....	254,4 V	—
	Three phase appliances 1.06 x rated voltage divided by $\sqrt{3}$ ..... :	N/A	—
Leakage current between		I (mA)	Max. allowed I (mA)
Live parts and accessible earthed metal part		1,47	10
Live parts and plastic enclosure		0,04	0,25

<b>16.3</b>	<b>TABLE: Dielectric strength</b>		P
Test voltage applied between:		Voltage (V)	Breakdown (Yes/No)
Parts isolated with basic insulation		1250	No
Parts isolated with supplementary insulation		1750	No
Parts isolated with reinforced insulation		3000	No

<b>17</b>	<b>TABLE: Overload protection</b>		N/A
Thermocouple locations		Max. temperature rise measured, $\Delta T$ (K)	Max. temperature rise limit, $\Delta T$ (K)
Supplementary information:			

<b>17</b>	<b>TABLE: Overload protection, resistance method</b>					N/A
	Test voltage (V)..... :					—
	Ambient, t1 (°C) .....					—
	Ambient, t2 (°C) .....					—
Temperature of winding		R1 ( $\Omega$ )	R2 ( $\Omega$ )	$\Delta T$ (K)	T (°C)	Max. T (°C)
Supplementary information:						

<b>19</b>	<b>Abnormal operation conditions</b>						N/A
Operational characteristics		YES/NO	Operational conditions				
Are there electronic circuits to control the appliance operation?		N/A	N/A				
Are there “off” or “stand-by” position?		N/A	N/A				
The unintended operation of the appliance results in dangerous malfunction?		N/A	N/A				
Sub-clause	Operating conditions	Test results	PEC	EMP	Software type	19.11.3	Final

TRF No. IEC60335\_2\_40J

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	description	description	description	19.11.4	required	PEC	result
19.2	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.3	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.4	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.5	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.6	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.7	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.8	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.9	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.10	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.11.2	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.11.4.8	N.A	N.A	N.A	N.A	N.A	N.A	N.A
19.10X	N.A	N.A	N.A	N.A	N.A	N.A	N.A

Supplementary information:

19.2	TABLE: Lock motor test, temperature measurements. Test voltage: 240 V~ Ambient temperature: 25 °C Duration: 15 days endurance test, after 3 days high-voltage test performed.					P
Measured sample	Insulation class	Enclosure temperature(°C)	Winding temperature (°C)	HV test performed with 1250V	Leakage current (mA)	
Indoor fan motor (FN35C-ZL, Broad-Ocean)	B	87,5	102,2	Pass	0,035	
Indoor fan motor (FN35B-ZL, Broad-Ocean)	B	87,5	102,2	Pass	0,035	
Indoor fan motor (FN60C-ZL, Broad-Ocean)	B	60,9	71,6	Pass	0,048	
Indoor fan motor (FG60A-ZL, Panasonic)	E	63,3	65,4	Pass	0,051	
Indoor fan motor (FG150A-ZL, Panasonic)	E	71,3	73,0	Pass	0,048	
Indoor fan motor (FG150A-ZL, Kaibang)	E	43,8	44,1	Pass	0,112	
Indoor fan motor FN20J-PG(mfg.: Shangqi)	E	95,2	109,3	Pass	0,031	
Indoor fan motor FN20J-PG(mfg.: Broad-Ocean)	E	103,7	111,6	Pass	0,036	

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Indoor fan motor FN20J-PG(mfg.: Kaibang)	E	127,0	141,0	Pass	0,078
Indoor fan motor FN20J-PG(mfg.: Sinya)	E	89,5	118,0	Pass	0,039
Indoor fan motor FN20J-PG(mfg.: Wolong)	E	137,6	147,8	Pass	0,042
Indoor fan motor FN20J-PG(mfg.: Tongde)	E	114,1	129,5	Pass	0,035
Indoor fan motor FN20V-PG (mfg.: Kaibang)	E	87,8	122,3	Pass	0,420
Indoor fan motor FN20V-PG (mfg.: Tongde)	E	110,3	125,0	Pass	0,040
Indoor fan motor FN25A-PG (mfg.: Kaibang)	B	101,3	124,0	Pass	0,073
Indoor fan motor FN25A-PG (mfg.: Tongde)	E	99,6	121,4	Pass	0,064
Indoor DC fan motor FN35B-ZL (mfg.:Kaibang)	B	28,3	23,2	Pass	<1,0
Indoor DC fan motor FN60C-ZL (mfg.:Kaibang)	B	22,2	22,3	Pass	<1,0
Indoor DC fan motor FG60A-ZL_Kaibang)	E	23,9	25,7	Pass	<1,0
Indoor DC fan motor LN180F-ZL_Broad ocean)	B	24,0	27,0	Pass	0,29
Outdoor fan motor SWZ120A (Mfg.:Panasonic)	E	55,6	67,4	Pass	0,039
Outdoor fan motor SWZ120A (Mfg.:Kaibang)	E	41,1	43,4	Pass	0,117
Outdoor fan motor SWZ120A (Mfg.: SHIBAURA)	E	99,9	127,3	Pass	0,045

Outdoor fan motor SWZ120A (Mfg.: Shangqi)	E	105,0	136,0	Pass	0,037
Outdoor fan motor SWZ120A (Mfg.: Wolong)	E	34,0	38,0	Pass	0,035
Water Pump PSB- 12A(Mfg.: Huayang)	E	55,6	67,4	Pass	0,324
Remark: Winding limited: 175°C for Class B; 165°C for Class E; Enclosure limited: 150°C Leakage current limited: 2mA					

<b>19.3</b>	<b>Abnormal operation conditions – Locked rotor test motor-compressor</b>				N/A
	Motor-compressor .....	--			
	Start device .....	--			
	Protector .....	--			
	Start capacitor .....	--			
	Run capacitor .....	--			
	Cooling; (static); (fan-m <sup>3</sup> /h); (oil); .....	--			
	Thermal motor-protection system .....	--			
		Self-resetting			Manually reset
Rated voltage		Vn max (V)			Vn min (V)
		After 72 h	After 288 h	After 360 h	After 363 h
High-voltage test (see 16.3)		--	--	--	--
Leakage current (mA) (see 16.2)		--	--	--	--
Electric strength (see 13.3)		--	--	--	--
Room temperature (°C) (20 ± 5°C)		--	--	--	--
Number of cycles (≥ 2000 or 50)		--	--	--	--
Housing temperature (°C) (≤ 150°C)		--	--	--	--
supplementary information:--					

<b>19.5-19.9</b>	<b>Abnormal operation conditions</b>		P
Subclause	Effect		Verdict
19.5	No hazards		Pass
19.6	--		N/A
19.7	No hazards		Pass
19.8	--		N/A

19.9	--	N/A
Supplementary information: --		

<b>19.11.2</b>	<b>Abnormal Operation</b>			<b>P</b>
Fault condition	Short circuit	Open circuit	Effect	Verdict
According to a) to g) of clause 19.11.2	X	X	1. The appliance can not work normally. 2. The current fuse in the bus of circuit operated. Above two phenomenons occurred. No hazard during and after all tests.	Pass

<b>19.14</b>	<b>TABLE: Abnormal operation, temperature rises</b>			<b>P</b>
Thermocouple locations		Max. temperature rise measured, $\Delta T$ (K)	Max. temperature rise limit, $\Delta T$ (K)	
Supply cord		<100°C	175°C	
Test corner		<100°C	175°C	
Supplementary information: --				

<b>21.1</b>	<b>TABLE: Impact resistance</b>			<b>P</b>
Impacts per surface	Surface tested	Impact energy (Nm)	Comments	
3	Enclosure of indoor unit	0,5J	Pass	
3	Fan guard of outdoor unit	0,5J	Pass	
Supplementary information: --				

<b>24.1</b>	<b>TABLE: Components</b>					<b>P</b>
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity	
<b>Ceiling cassette type indoor units:</b>						
<b>A1 denotes:</b> GMV-ND28T/A-T, GMV-ND36T/A-T, GMV-ND45T/A-T, GMV-ND50T/A-T;						
<b>A2 denotes:</b> GMV-ND56T/A-T, GMV-ND63T/A-T, GMV-ND71T/A-T, GMV-ND80T/A-T, GMV-ND80T/AR-T, GMV-ND71T/AR-T						
<b>A3 denotes:</b>						
GMV-ND90T/A-T, GMV-ND100T/A-T, GMV-ND112T/A-T, GMV-ND125T/A-T, GMV-ND140T/A-T, GMV-ND100T/AR-T, GMV-ND90T/AR-T.						
Main board	GREE	Z6L35K	—	EN 60335-2-40	Tested with appliance	
-Y capacitor	TDK-EPC Corporation capacitors Group	CS472M	250VAC; 472M; T125	EN 60384-14	VDE 40029781	

-Alternative	TDK-EPC Corporation capacitors Group	CD472M	250VAC; 472M	EN 60384-14	VDE 40029780
-Alternative	Murata Mfg. Co., Ltd. (Headquarters)	KX472M	250VAC; 472M	EN 60384-14	VDE 40002831
-Alternative	Haohua Electronic Co.	CT7	250VAC; 472M	EN 60384-14	VDE 40003902
-Alternative	Various	Various	250VAC; 472M	EN 60384-14	S or other EU certification marks
-X capacitor	Xiamen Faratronic Co. Ltd.	MKP62	224K; 275 V; T110	EN 60384-14	VDE 40000358
-Alternative	Okaya Electric Industries Co., Ltd.	LE224	0,22μF; 275V; T100	EN 60384-14	ENEC SE/0142-1D
-Alternative	Various	Various	0,22μF; 275V	EN 60384-14	S or other EU certification marks
-Varistor	Chengdu Tieda Electronic Co. Ltd.	MYN15-621K	385 V(r.m.s)AC, T85	CECC 42000 CECC 42200 CECC 42201	VDE 40008571
-Alternative	Xianhua Advanced Sensitive Components Co., Ltd.	FNR-14K621	385 V(r.m.s)AC, T85	CECC 42000 CECC 42200 CECC 42201	VDE 40008242
-Opto-coupler	Sharp Corporation	PC817	Vceo:80 V; If: 50 mA; Ic: 50mA	EN 60747-5-2	VDE 40008087
-High Frequency Transformer	HUIZHOU JIAYANG ELECTRONIC CORE NEW-TECH CO., LTD	ECO2023-11PC	Input: 220 VAC, 65 KHz, output:15 V,12 V, 5 V, primary: P(8--7) 0,612Ω±20% P(12--11) 0,15 ΩMAX, P(10--9)0,20Ω MAX, secondary: P(2--1) 0,05 ΩMAX, P(4--3)0,09ΩMAX, P(6--5) 0,15 Ω MAX, primary:0,77mH±12 %,secondary:50uH MAX, Class B	EN 60335-2-40	Tested with appliance
-Inductance 1#	XINJI ELECTRONICS COMPONENT(HANGZHOU) CO. LTD	10uH	10uH/1,5A	EN 60335-2-40	Tested with appliance

TRF No. IEC60335\_2\_40J

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-Alternative	Shenzhen Yamaxi Electronic Co., Ltd.	10uH	10uH/1,5A	EN 60335-2-40	Tested with appliance
-Alternative	Dongguan Dazhong Electronic Co., Ltd.	10uH	10uH/1,5A	EN 60335-2-40	Tested with appliance
-Inductance 2#	Shenzhen Yamaxi Electronic Co., Ltd.	2.5A/1mH	2,5A/1mH	EN 60335-2-40	Tested with appliance
-Alternative	Hui Zhou Jia Yang Core New Tech Co., Ltd.	2.5A/1mH	2,5A/1mH	EN 60335-2-40	Tested with appliance
-Inductance 3#	Dongguan Dazhong Electronic Co., Ltd.	EE25-4PA	5mH; 5A	EN 60335-2-40	Tested with appliance
-Inductance 4#	TDK XIAMEN Co., LTD.	100uH/0,4A	100uH/0,4A	EN 60335-2-40	Tested with appliance
-Inductance 5#	Shenzhen Yamaxi Electronic Co., Ltd.	DG-50mH/300mA	50mH/300mA	EN 60335-2-40	Tested with appliance
-Alternative	Qingdao Yunlu energy technology Co., Ltd.	50mH/300mA	50mH/300mA	IEC 60335-1 IEC 60335-2-40	Tested with appliance
-Alternative	Qingdao Yunlu energy technology Co., Ltd.	24mH/150mA	24mH/150mA	IEC 60335-1 IEC 60335-2-40	Tested with appliance
-Alternative	Shenzhen Yamaxi Electronic Co., Ltd.	DG-24mH/100mA	24mH/100mA	IEC 60335-1 IEC 60335-2-40	Tested with appliance
-Relay	Xiamen Hongfa Electroacoustics Co., Ltd.	HF46F	250VAC; 5A; 12VDC; T85; 5E4 cycles	EN 61810-1	VDE 40025215
-Alternative	OMRON Corporation	G5NB-1A-E	250VAC; 5A; 12VDC; T85; 10E4 cycles	EN 61810-1	VDE 137575
-Alternative	Dongguan Sanyou Electrical Appliances Co., Ltd.	SRB-S-112DM	277VAC; 5A; 12VDC; T85; 10E4 cycles	EN 61810-1	TÜV Rheinland R50138320
-Alternative	Xiamen Hongfa Electroacoustics Co., Ltd.	JZC-32F	250VAC; 5A; T70	EN 61810-1	VDE 40012204

-Alternative	Dongguan Sanyou Electrical Appliances Co., Ltd.	SJ-S-112DM	250VAC; 5A; T85	EN 61810-1	VDE 40002146
-Alternative	Dongguan Churod Electronics Co., Ltd.	A1-S-112DA	250VAC; 5A; T85	EN 61810-1	TÜV Rheinland R50174892
-Alternative	Song Chuan Precision Co., Ltd.	307-1AH-C	250VAC; 5A; T85	EN 61810-1	TÜV Rheinland R50128391
-Alternative	Tyco Electronics(Shenzhen) Co., Ltd.	OJE-SS-112DM	250VAC; 5A; T70	EN 61810-1	TÜV Rheinland R50139166
-Current fuse	Hollyland Co., Ltd.	50CT	250 V; T; 3,15 A	EN 60127-1 EN 60127-2	VDE 40014896
-Alternative	Walter Electronic Co., Ltd.	TSC	250 V; T; 3,15 A	EN 60127-1 EN 60127-2	VDE 40016670
-Alternative	Various	Various	250 V; T; 3,15 A	EN 60127-1 EN 60127-2	S or other EU certification marks
-Rectifier	Tian Jin Zhong-Huan Semiconductor Joint-Stock Co. Ltd.	T3SB60	600 V; 4 A	EN 60335-2-40 EN 60335-1	Tested with appliance & VDE 40009662
-Alternative	Leshan Radio Co.; Ltd	D3SB60	600 V; 4 A	EN 60335-2-40	Tested with appliance
-Alternative	SHINDENGEN ELECTRIC MFG CO LTD	D3SB 60	600 V; 4 A	EN 60335-2-40	Tested with appliance
-Alternative	LITE-ON SEMICONDUCTOR CORP.	KBJ406GL	600V; 4A	EN 60335-2-40	Tested with appliance
-Alternative	Yangzhou HY Technology Development Co.; LTD.	4GBJ406	600V; 4A	EN 60335-2-40	Tested with appliance
-Rectifier 2#	Leshan Radio Co., Ltd	B6S	600V; 0,5A	EN 60335-1 EN 60335-2-40	Tested with appliance
-Alternative	LITE-ON SEMICONDUCTOR CORP.	HD06G	600V; 0,5A	EN 60335-2-40	Tested with appliance
-Alternative	Yangzhou HY Technology Development Co.; LTD.	B6S	600V; 0,8A	EN 60335-2-40	Tested with appliance

Terminal Board (3 bits) for <b>A1, A2</b>	Changzhou Changheng Kaidu Electric Appliance Co., Ltd.	JX-O	AC600V; 2,5mm <sup>2</sup>	EN 60998-1 EN 60998-2	Tested with appliance & VDE 40020936
Alternative	Nantong Huaguan Electric Co., Ltd.	JXW-T	AC600V; 2,5mm <sup>2</sup> ; 30A	EN 60335-2-40	Tested with appliance
Alternative	Changzhou Changheng Kaidu Electric Appliance Co., Ltd.	JX-O	AC600V; 4mm <sup>2</sup>	EN 60998-1 EN 60998-2	Tested with appliance & VDE 40020936
Alternative	Nantong Huaguan Electric Co., Ltd.	JXW-T	AC600V; 4mm <sup>2</sup> ; 30A	EN 60335-2-40	Tested with appliance
Terminal Board (5 bits) for <b>A3</b>	Changzhou Changheng Kaidu Electric Appliance Co., Ltd.	JX-O	AC600V; 2,5mm <sup>2</sup>	EN 60998-1 EN 60998-2	Tested with appliance & VDE 40020936
Alternative	Nantong Huaguan Electric Co., Ltd.	JXW-T	AC600V; 2,5mm <sup>2</sup> ; 30A	EN 60335-2-40	Tested with appliance
Terminal Board (4 bits)	Changzhou Changheng Kaidu Electric Appliance Co., Ltd.	JX-G-4A	AC250V; 2,5mm <sup>2</sup>	EN 60998-1 EN 60998-2	Tested with appliance & VDE 40020936
Alternative	Nantong Huaguan Electric Co., Ltd.	JXW	AC250V; 2,5mm <sup>2</sup>	EN 60998-1 EN 60998-2 EN 60335-2-40	Tested with appliance & VDE 40013197
Terminal Board (3 bits) for <b>A3</b>	Changzhou Changheng Kaidu Electric Appliance Co., Ltd.	JX-O	AC600V; 4mm <sup>2</sup>	EN 60998-1 EN 60998-2	Tested with appliance & VDE 40020936
Alternative	Nantong Huaguan Electric Co., Ltd.	JXW-T	AC600V; 4mm <sup>2</sup> ; 30A	EN 60335-2-40	Tested with appliance
Fan motor for <b>A1</b>	Zhongshan Broad-Ocean Motor Co., Ltd.	FN35C-ZL	DC310V; 35W; Class B	EN 60335-2-40	Tested with appliance
Fan motor for <b>A2</b>	Zhongshan Broad-Ocean Motor Co., Ltd.	FN35B-ZL	DC310V; 45W; Class B	EN 60335-2-40	Tested with appliance
Alternative	Zhuhai Kaibang Motor Manufacturing Co., Ltd.	FN35B-ZL	DC310V; 45W; Class B	EN 60335-2-40	Tested with appliance
Fan motor for <b>A3</b>	Zhongshan Broad-Ocean Motor Co., Ltd.	FN60C-ZL	DC310V; 75W; 0,35A; Class B	EN 60335-2-40	Tested with appliance

Alternative	Zhuhai Kaibang Motor Manufacturing Co., Ltd.	FN60C-ZL	DC310V; 75W; 0,35A; Class B	EN 60335-2-40	Tested with appliance
Water pump	Zhejiang Sanhua Co., Ltd.	PSB-12A	AC 220-240V; 50/60Hz; 12/10,8 W; Class E; 300Ω±10%	EN 60335-2-40	Tested with appliance & VDE 40015793
Alternative	Foshan Lepuda Motor Co., Ltd.	PLD-12	220-240V; 50/60Hz; 13W; Class E; 290±10%Ω	EN 60335-2-40	Tested with appliance
Alternative	Jiangsu Huayang Electrical Appliance Co., Ltd.	PSB-12A	AC220V-240V; 50Hz/60Hz; 12W; 318Ω±7%; Class E	IEC/EN 60335-1 IEC/EN 60335-2-41	VDE 40031533
Step motor	Changzhou Leshileili Motor Co., Ltd.	MP24AF	12VDC; Class A; (25°C); 300±8%Ω	EN 60335-2-40	Tested with appliance
Alternative	ZHONGSHAN HUILIPU MOTOR CO., Ltd.	MP24AF	DC12V; Class A; 300±7%	EN 60335-2-40	Tested with appliance
Alternative	Jiangsu Huayang Electrical Appliance Co., Ltd	MP24AF	12VDC; Class E; 300±8%Ω	IEC 60335-1 IEC 60335-2-40	Tested with appliance
Alternative	HEFEI RISHANG ELECTRICAL CO., LTD	MP24AF	DC 12V; 300±8%Ω; Class A	IEC 60335-1 IEC 60335-2-40	Tested with appliance
Alternative	Zhongshan Huilipu Motor Manufacturing CO, LTD, (Hefei Huilipu Motor Co, , Ltd, )	MP24AF	DC12V; Class A; 300±7%	IEC 60335-1 IEC 60335-2-40	Tested with appliance
PCB	GUANGDONG SHENGYI SCI TECH CO LTD	S2130	V-0	EN 60335-2-40	Tested with appliance & UL E109769
Alternative	KINGBOARD LAMINATES LTD	KB6160/P-138	V-0	EN 60335-2-40	Tested with appliance & UL E123995
Alternative	NAN YA PLASTICS CORP CCL DEPT ELECTRONIC MATERIAL DIVL DIV	FR-4-86	V-0	EN 60335-2-40	Tested with appliance & UL E98983(S)

Alternative	SHENGYI TECHNOLOGY CO LTD	S1141	V-0	EN 60335-2-40	Tested with appliance & UL E109769
<b>Ducted type indoor units:</b> <b>B1 denotes:</b> GMV-ND22PLS/A-T, GMV-ND25PLS/A-T, GMV-ND28PLS/A-T, GMV-ND32PLS/A-T, GMV-ND36PLS/A-T, GMV-ND40PLS/A-T, GMV-ND45PLS/A-T, GMV-ND50PLS/A-T, GMV-ND56PLS/A-T, GMV-ND63PLS/A-T, GMV-ND71PLS/A-T, GMV-ND80PLS/A-T; GMV-ND22PLS/AR-T, GMV-ND28PLS/AR-T, GMV-ND36PLS/AR-T, GMV-ND45PLS/AR-T, GMV-ND56PLS/AR-T, GMV-ND71PLS/AR-T, <b>B2 denotes:</b> GMV-ND22PL/B-T, GMV-ND25PL/B-T, GMV-ND28PL/B-T, GMV-ND32PL/B-T, GMV-ND36PL/B-T, GMV-ND40PL/B-T, GMV-ND45PL/B-T, GMV-ND50PL/B-T, GMV-ND56PL/B-T, GMV-ND63PL/B-T, GMV-ND72PL/B-T; <b>B3 denotes:</b> GMV-ND90PLS/A-T, GMV-ND100PLS/A-T, GMV-ND112PLS/A-T, GMV-ND125PLS/A-T, GMV-ND140PLS/A-T, GMV-ND80PLS/AR-T, GMV-ND90PLS/AR-T					
Main board for <b>B1, B2</b>	GREE	Z6L35K	—	EN 60335-2-40	Tested with appliance
Main board for <b>B3</b>	GREE	Z6L25L	—	EN 60335-2-40	Tested with appliance
-Y capacitor	TDK-EPC Corporation capacitors Group	CS472M	250VAC; 472M; T125	EN 60384-14	VDE 40029781
-Alternative	Murata Mfg. Co., Ltd. (Headquarters)	KX472M	250VAC; 472M	EN 60384-14	VDE 40002831
-Alternative	Haohua Electronic Co.	CT7	250VAC; 472M	EN 60384-14	VDE 40003902
-Alternative for <b>B1, B3</b>	TDK-EPC Corporation capacitors Group	CD472M	250VAC; 472M	EN 60384-14	VDE 40029780
-Alternative	Murata Mfg. Co., Ltd.	KX472M	250VAC; 472M	IEC/EN 60384-14	VDE 40002831
-Alternative	Haohua Electronic Co.	CT7	250VAC; 472M	EN 60384-14	VDE 40003902
-Alternative	Various	Various	250VAC; 472M	EN 60384-14	S or other EU certification marks
-X capacitor	Xiamen Faratronic Co. Ltd.	MKP62	224K; 275 V; T110	EN 60384-14	VDE 40000358
-Alternative	Okaya Electric Industries Co., Ltd.	LE224	0,22μF; 275V; T100	EN 60384-14	ENEC SE/0142-1D
-Alternative	Various	Various	0,22μF; 275V	EN 60384-14	S or other EU certification marks

-Varistor	Chengdu Tieda Electronic Co. Ltd.	MYN15-621K	385 V(r.m.s)AC, T85	CECC 42000 CECC 42200 CECC 42201	VDE 40008571
-Alternative	Xianhua Advanced Sensitive Components Co., Ltd.	FNR-14K621	385 V(r.m.s)AC, T85	CECC 42000 CECC 42200 CECC 42201	VDE 40008242
-Opto-coupler	Sharp Corporation	PC817	Vceo:80 V; If: 50 mA; Ic: 50mA	EN 60747-5-2	VDE 40008087
-High Frequency Transformer	HUIZHOU JIAYANG ELECTRONIC CORE NEW-TECH CO.,LTD	ECO2023-11PC	Input: 220 VAC, 65 KHz, output:15 V,12 V, 5 V, primary: P(8--7) 0,612Ω±20% P(12--11) 0,15 ΩMAX, P(10--9)0,20Ω MAX, secondary: P(2--1) 0,05 ΩMAX, P(4--3)0,09ΩMAX, P(6--5) 0,15 Ω MAX, primary:0,77mH±12 %,secondary:50uH MAX, Class B	EN 60335-2-40	Tested with appliance
-Inductance 1#	XINJI ELECTRONICS COMPONENT(HANGZHOU) CO. LTD	10uH	10uH/1,5A	EN 60335-2-40	Tested with appliance
-Alternative	Shenzhen Yamaxi Electronic Co., Ltd.	10uH	10uH/1,5A	EN 60335-2-40	Tested with appliance
-Alternative	Dongguan Dazhong Electronic Co., Ltd.	10uH	10uH/1,5A	EN 60335-2-40	Tested with appliance
-Inductance 2#	Shenzhen Yamaxi Electronic Co., Ltd.	2.5A/1mH	2,5A/1mH	EN 60335-2-40	Tested with appliance
-Alternative	Zhou Jia Yang Core New Tech Co., Ltd.	2.5A/1mH	2,5A/1mH	EN 60335-2-40	Tested with appliance
-Inductance 3#	Dongguan Dazhong Electronic Co., Ltd.	EE25-4PA	5mH; 5A	EN 60335-2-40	Tested with appliance
-Inductance 4#	TDK XIAMEN Co., LTD.	100uH/0,4A	100uH/0,4A	EN 60335-2-40	Tested with appliance

TRF No. IEC60335\_2\_40J

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-Alternative	TDK XIAMEN Co., LTD.	100uH/0,4A	100uH/0,4A	EN 60335-2-40	Tested with appliance
-Inductance 5#	Shenzhen Yamaxi Electronic Co., Ltd.	DG-50mH/300mA	50mH/300mA	EN 60335-2-40	Tested with appliance
-Alternative	Qingdao Yunlu energy technology Co., Ltd.	50mH/300mA	50mH/300mA	EN 60335-2-40	Tested with appliance
-Inductance 6#	Shenzhen Yamaxi Electronic Co., Ltd.	DG-24mH/100mA	24mH/100mA	EN 60335-2-40	Tested with appliance
-Alternative	Qingdao Yunlu energy technology Co., Ltd.	24mH/150mA	24mH/150mA	EN 60335-2-40	Tested with appliance
-Relay	Xiamen Hongfa Electroacoustics Co., Ltd.	HF46F	250VAC; 5A; 12VDC; T85; 5E4 cycles	EN 61810-1	VDE 40025215
-Alternative	OMRON Corporation	G5NB-1A-E	250VAC; 5A; 12VDC; T85; 10E4 cycles	EN 61810-1	VDE 137575
-Alternative	Dongguan Sanyou Electrical Appliances Co., Ltd.	SRB-S-112DM	277VAC; 5A; 12VDC; T85; 10E4 cycles	EN 61810-1	TÜV Rheinland R50138320
-Alternative	Xiamen Hongfa Electroacoustics Co., Ltd.	JZC-32F	250VAC; 5A; T70	EN 61810-1	VDE 40012204
-Alternative	Dongguan Sanyou Electrical Appliances Co., Ltd.	SJ-S-112DM	250VAC; 5A; T85	EN 61810-1	VDE 40002146
-Alternative	Dongguan Churod Electronics Co., Ltd.	A1-S-112DA	250VAC; 5A; T85	EN 61810-1	TÜV Rheinland R50174892
-Alternative	Song Chuan Precision Co., Ltd.	307-1AH-C	250VAC; 5A; T85	EN 61810-1	TÜV Rheinland R50128391
-Alternative	Tyco Electronics(Shenzhen) Co., Ltd.	OJE-SS-112DM	250VAC; 5A; T70	EN 61810-1	TÜV Rheinland R50139166
-Current fuse	Hollyland Co., Ltd.	50CT	250 V; T; 3,15 A	EN 60127-1 EN 60127-2	VDE 40014896
-Alternative	Walter Electronic Co., Ltd.	TSC	250 V; T; 3,15 A	EN 60127-1 EN 60127-2	VDE 40016670
-Alternative	Various	Various	250 V; T; 3,15 A	EN 60127-1 EN 60127-2	S or other EU certification marks



-Rectifier 1#	Tian Jin Zhong-Huan Semiconductor Joint-Stock Co. Ltd.	T3SB60	600 V; 4A	EN 60335-2-40 EN 60335-1	Tested with appliance & VDE 40009662
-Alternative	Leshan Radio Co.; Ltd	D3SB60	600 V; 4 A	EN 60335-2-40	Tested with appliance
-Alternative	SHINDENGEN ELECTRIC MFG CO LTD	D3SB 60	600 V; 4 A	EN 60335-2-40	Tested with appliance
-Alternative	LITE-ON SEMICONDUCTOR CORP.	KBJ406GL	600V; 4A	EN 60335-2-40	Tested with appliance
-Alternative	Yangzhou HY Technology Development Co.; LTD.	4GBJ406	600V; 4A	EN 60335-2-40	Tested with appliance
-Rectifier 2#	Leshan Radio Co., Ltd.	B6S	600V; 0,5A	EN 60335-2-40	Tested with appliance
-Alternative	LITE-ON SEMICONDUCTOR CORP.	HD06G	600V; 0,5A	EN 60335-2-40	Tested with appliance
-Alternative	Yangzhou HY Technology Development Co.; LTD.	B6S	600V; 0,8A	EN 60335-2-40	Tested with appliance
Terminal Board (2 bits) for <b>B1, B2</b>	Changzhou Changheng Kaidu Electric Appliance Co., Ltd.	JX-G-2	AC250V; 2,5mm <sup>2</sup>	EN 60335-2-40	Tested with appliance & VDE 40020936
Alternative	Nantong Huaguan Electric Co., Ltd.	JXW-2-G1	AC250V; 2,5mm <sup>2</sup>	EN 60335-2-40	Tested with appliance & VDE 40013197
Alternative	Weidmuller	LM5.08/90	AC250V; 2,5mm <sup>2</sup>	EN 60335-2-40	Tested with appliance
Terminal Board (3 bits) for <b>B1</b>	Weidmuller	LM5.08/90	AC250V; 2,5mm <sup>2</sup>	EN 60335-2-40	Tested with appliance
Terminal Board (4 bits) for <b>B3</b>	Changzhou Changheng Kaidu Electric Appliance Co., Ltd.	JXC	AC500V; 2,5mm <sup>2</sup>	EN 60335-2-40	Tested with appliance
Alternative	Nantong Huaguan Electric Co., Ltd.	JXW-Y	AC500V; 2,5mm <sup>2</sup> ; 40A	EN 60335-2-40	Tested with appliance
Terminal board (4 bits)	Changzhou Changheng Kaidu Electric Appliance Co., Ltd.	JX-G-4A	AC250V; 2,5mm <sup>2</sup>	EN 60998-1 EN 60998-2	Tested with appliance & VDE 40020936

TRF No. IEC60335\_2\_40J

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Alternative	Nantong Huaguan Electric Co., Ltd.	JXW	AC250V; 2,5mm <sup>2</sup>	EN 60998-1 EN 60998-2 EN 60335-2-40	Tested with appliance & VDE 40013197
Fan motor for <b>B1, B2</b>	Panasonic Appliances Motor (Hangzhou) Co., Ltd.	FG60A-ZL	310V; 60W; Class E	EN 60335-2-40	Tested with appliance
Alternative	Zhuhai Kaibang Motor Manufacturing Co., Ltd.	FG60A-ZL	DC310V; 60W; Class E	EN 60335-2-40	Tested with appliance
Fan motor for <b>B3</b>	Panasonic Appliances Motor (Hangzhou) Co., Ltd.	FG150A-ZL	310VDC; 150W; Class E	EN 60335-2-40	Tested with appliance
Alternative	Zhuhai Kaibang Motor Manufacturing CO., LTD.	FG150A-ZL	310VDC; 150W; Class E	EN 60335-2-40	Tested with appliance
Water pump for <b>B1, B3</b>	Zhejiang Sanhua Co., Ltd.	PSB-12A	AC 220-240V; 50/60Hz; 12/10,8 W; Class E; 300 $\Omega \pm 10\%$	EN 60335-2-40	Tested with appliance & VDE 40015793
Alternative	Foshan Lepuda Motor Co., Ltd.	PLD-12	220-240V; 50/60Hz; 13W; Class E; 290 $\pm 10\% \Omega$	EN 60335-2-40	Tested with appliance
Alternative	Jiangsu Huayang Electrical Appliance Co., Ltd.	PSB-12A	220-240V; 50/60HZ; 12/10.8W; 318 $\Omega \pm 7\%$ ; Class E	IEC 60335-1 IEC 60335-2-40	Tested with appliance & VDE 40031533
PCB	GUANGDONG SHENGYI SCI TECH CO LTD	S2130	V-0	EN 60335-2-40	Tested with appliance & UL E109769
Alternative	KINGBOARD LAMINATES LTD	KB6160/P-138	V-0	EN 60335-2-40	Tested with appliance & UL E123995
Alternative	NAN YA PLASTICS CORP CCL DEPT ELECTRONIC MATERIAL DIVL DIV	FR-4-86	V-0	EN 60335-2-40	Tested with appliance & UL E98983(S)
Alternative	SHENGYI TECHNOLOGY CO LTD	S1141	V-0	EN 60335-2-40	Tested with appliance & UL E109769

<b>Wall mounting type indoor units:</b> <b>C1 denotes:</b> GMV-N22G/A3A-K, GMV-N28G/A3A-K; <b>C2 denotes:</b> GMV-N36G/A3A-K, GMV-N45G/A3A-K, GMV-N50G/A3A-K; <b>C3 denotes:</b> GMV-N56G/A3A-K, GMV-N63G/A3A-K, GMV-N71G/A3A-K					
Supply cord	Huasheng Electrical Appliances Co., Ltd.	H05VV-F	3G1,0mm <sup>2</sup>	DIN VDE 0281-5	VDE 40005362
Alternative	Changzhou Hongchang Electronics Co., Ltd.	H05VV-F	3G1,0mm <sup>2</sup>	DIN VDE 0281-5	VDE 124978
Terminal Board (4 bits)	Changzhou Changheng Kaidu Electric Appliance Co., Ltd.	JX-G-4A	AC600V; 4,0mm <sup>2</sup>	EN 60998-1 EN 60998-2	Tested with appliance & VDE 40020936
Alternative	Nantong Huaguan Electric Co., Ltd.	JXW-4-L	AC600V; 4,0mm <sup>2</sup>	EN 60335-2-40	Tested with appliance & VDE 40013197
Step motor only for C1	Changzhou Leshileili Motor Co., Ltd.	MP24AA	12VDC; Class A; 200±8%Ω	EN 60335-2-40	Tested with appliance
Alternative	Jiangsu Huayang Electrical Appliance Co., Ltd.	MP24AA	Main:200±8%Ω; DC12V; Class A	EN 60335-2-40	Tested with appliance
Alternative	Changzhou Oukai Electrical Appliance Co., Ltd.	MP24AA	Main:200±8%Ω; DC12V; Class A	EN 60335-2-40	Tested with appliance
Alternative	HEFEI RISHANG ELECTRICAL Co., Ltd.	MP24AA	Main:200±8%Ω; DC12V; Class A	EN 60335-2-40	Tested with appliance
Alternative	ZHONGSHAN HUILIPU MOTOR Co., Ltd.	MP24AA	Main:200±7%Ω; DC12V; Class A	EN 60335-2-40	Tested with appliance
Step motor only for C2	Changzhou Leshileili Motor Co., Ltd.	MP28VB	12VDC; Class A; 200±8%Ω	EN 60335-2-40	Tested with appliance
Alternative	Jiangsu Huayang Electrical Appliance Co., Ltd.	MP28VB	Main:130±8%Ω; DC12V; Class A	EN 60335-2-40	Tested with appliance
Alternative	Changzhou Oukai Electrical Appliance Co., Ltd.	MP28VB	Main:130±8%Ω; DC12V; Class A	EN 60335-2-40	Tested with appliance

Alternative	ZHONGSHAN HUILIPU MOTOR Co., Ltd.	MP28VB	Main:130±8%Ω; DC12V; Class A	EN 60335-2-40	Tested with appliance
Step motor only C3	Jiangsu Huayang Electrical Appliance Co., Ltd.	MP35XX	Main:130±8%Ω; DC12V; Class A	EN 60335-2-40	Tested with appliance
Alternative	Changzhou Oukai Electrical Appliance Co., Ltd.	MP35XX	Main:130±8%Ω; DC12V; Class A	EN 60335-2-40	Tested with appliance
Fan motor only for C1	Jiangsu Shangqi Group Co., Ltd.	FN20J-PG	220-240V; 50Hz; 20W; class E; Main:274±8%Ω; Aux:568±8%Ω	EN 60335-2-40	Tested with appliance
Alternative	Zhongshan Broad-Ocean Motor Co., Ltd.	FN20J-PG	220-240V; 50Hz; 20W; 0,20A; Main:274,5±8%Ω; Aux:617,9±8%Ω; Class E	EN 60335-2-40	Tested with appliance
Alternative	Zhuhai Kaibang Motor Manufacturing Co., Ltd.	FN20J-PG	220-240V; 50Hz; 20W; 0,20A; Main:329,7±8%Ω; Aux:728,3±8%Ω; Class E	EN 60335-2-40	Tested with appliance
Alternative	Changzhou Regal-Beloit Sinya Motor Co., Ltd.	FN20J-PG	Main:256±8%Ω; Aux:531±8%Ω; 220-240V; 50Hz; 20W; class E	EN 60335-2-40	Tested with appliance
Alternative	Zhejiang Wolong Home Appliance Motor Co., Ltd.	FN20J-PG	220-240V; 50Hz; 20W; 0,215A; Main:298,8±8%Ω; Aux:598,2±8%Ω; Class E	EN 60335-2-40	Tested with appliance
Alternative	Zhuhai City Tongde Electric Equipment Co., Ltd.	FN20J-PG	220-240V; 50Hz; 20W; 0.20A; Class E; Main:285±8%Ω; Aux:588±8%Ω	EN 60335-2-40	Tested with appliance
Alternative	Zhuhai Kaibang Motor Manufacturing Co., Ltd. (Hefei Kaibang Motor Co., Ltd.)	FN20J-PG	220-240V; 50Hz; 20W; 0,20A; Main:329,7±8%Ω; Aux:728,3±8%Ω; Class E	EN 60335-2-40	Tested with appliance

Fan motor only for C2	Zhuhai Kaibang Motor Manufacturing Co., Ltd.	FN20V-PG	220-240V; 50Hz; 20W; 0,31A; Main:242,4±8%Ω; Aux:361,6±8%Ω; Class E	EN 60335-2-40	Tested with appliance
Alternative	Zhuhai City Tongde Electric Equipment Co., Ltd.	FN20V-PG	220-240V; 50Hz; 0,27A; 20W; class E; Main:190±8%Ω; Aux: 292±8%Ω	EN 60335-2-40	Tested with appliance
Fan motor only for C3	Zhuhai Kaibang Motor Manufacturing Co., Ltd.	FN25A-PG	220-240V; 50Hz; 35W; 0,31A; Main:194±8%Ω; Aux:188,8±8%Ω; Class E	EN 60335-2-40	Tested with appliance
Alternative	Zhuhai City Tongde Electric Equipment Co., Ltd.	FN25A-PG	220-240V; 50Hz; 0,29A; 35W; class E; Main:179±8%Ω; Aux: 169±8%Ω	EN 60335-2-40	Tested with appliance
Fan motor capacitor only for C1	Wuxi Xixi Capacitor Co., Ltd.	CBB61	1uF; 500V; T70	EN 60252-1	TÜV Rheinland R50128479
Alternative	Zhuhai Gree Xinyuan Electronic Co., Ltd.	CBB61	1uF; 500V; T70	EN 60252-1	TÜV Rheinland R50120798
Alternative	Xiamen Faratronic Co., Ltd.	CBB61	1uF; 500V; T70	EN 60252-1	VDE 40004094
Alternative	NINGBO SHINE ELECTRICAL Co., Ltd.	CBB61A	1uF; 500V; T70	EN 60252-1	TÜV Rheinland R50065558
Alternative	Anhui Feida Industry Stock Co., Ltd.	CBB61	1μF; 450V; T85	EN 60252-1	VDE 40012579
Alternative	Shanghai Haoye Capacitors Co., Ltd.	MKNS105	1μF; 450V; T85	EN 60252-1	TÜV Rheinland R50035566
Alternative	Foshan Shunde Fongming Electronic Tech. Co., Ltd.	CBB61	1μF; 450V; T85	EN 60252-1	VDE 40006835
Fan motor capacitor only for C2	Wuxi Xixi Capacitor Co., Ltd.	CBB61	1,5uF; 500V; T70	EN 60252-1	TÜV Rheinland R50128479
Alternative	Zhuhai Gree Xinyuan Electronic Co., Ltd.	CBB61	1,5uF; 500V; T70	EN 60252-1	TÜV Rheinland R50120798
Alternative	NINGBO SHINE ELECTRICAL Co., Ltd.	CBB61A	1,5uF; 500V; T70	EN 60252-1	TÜV Rheinland R50065558

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Fan motor capacitor only for <b>C3</b>	Wuxi Xixi Capacitor Co., Ltd.	CBB61-1	2,5uF; 450V; T70	EN 60252-1	TÜV Rheinland R50128479
Alternative	Zhuhai Gree Xinyuan Electronic Co., Ltd.	CBB61	2,5uF; 500V; T70	EN 60252-1	TÜV Rheinland R50120798
Alternative	NINGBO SHINE ELECTRICAL Co., Ltd.	CBB61A	2,5uF; 450V; T70	EN 60252-1	TÜV Rheinland R50065558
Alternative	Xiamen Faratronic Co., Ltd.	CBB61	2,5uF; 450V; T70	EN 60252-1	VDE 40004094
Alternative	NINGBO SHINE ELECTRICAL Co., Ltd.	CBB61A	2,5uF; 500V; T70	EN 60252-1	TÜV Rheinland R50065558
Alternative	Shanghai Haoye Capacitors Co., Ltd.	MKNS255	2,5uF; 450V; T70	EN 60252-1	TÜV Rheinland R50035566
Alternative	Foshan Shunde Fongming Electronic Tech. Co., Ltd.	CBB61	2,5uF; 450V; T70	EN 60252-1	VDE 40006835
Fan motor protector	Jiangsu Changsheng Electric Appliance Co., Ltd.	BR-B5D	250V; 5A; Operation:100°C	EN 60730-1	VDE 40015984
Alternative	Changzhou Changhong Tongli Electric Appliance Co., Ltd.	KW Series	250V; 8A; Operation:100°C	EN 60730-1	VDE 40020906
Alternative	Sensata Technologies Holland B.V.	BRL Series	250V; 8A; Operation:100°C	EN 60730-1	KEMA 2089558.01
Main board only for <b>C1</b>	GREE	Z6L25G	----	EN 60335-2-40	Tested with appliance
Main board only for <b>C2</b>	GREE	Z6L25K	----	EN 60335-2-40	Tested with appliance
Main board only for <b>C3</b>	GREE	Z6L25N	----	EN 60335-2-40	Tested with appliance
-PCB	CHANG CHUN PLASTICS Co., Ltd.	CCP-508	CEM-1; 94V-0	EN 60335-2-40	Tested with appliance & UL E108591
-Alternative	SHENGYI TECHNOLOGY Co., Ltd.	S3116	CEM-1; 94V-0	EN 60335-2-40	Tested with appliance & UL E109769

-Alternative	SHENGYI TECHNOLOGY Co., Ltd.	S1141	FR-4; 94V-0	EN 60335-2-40	Tested with appliance & UL E109769
-Alternative	SHENGYI TECHNOLOGY Co., Ltd.	S3110	CEM-1; 94V-0	EN 60335-2-40	Tested with appliance & UL E109769
-Alternative	KINGBOARD LAMINATES HOLDINGS LTD	KB3151C	FR-1; 94V-0	EN 60335-2-40	Tested with appliance & UL E123995
-Alternative	SHENGYI TECHNOLOGY Co., Ltd.	S2130	CEM-3; 94V-0	EN 60335-2-40	Tested with appliance & UL E109769
-Alternative	KINGBOARD LAMINATES HOLDINGS LTD	KB6160/P-138	FR-4	EN 60335-2-40	Tested with appliance & UL E123995
-Alternative	NAN YA PLASTICS CORP CCL DEPT ELECTRONIC MATERIAL DIV	FR-4-86	FR-4; 94V-0	EN 60335-2-40	Tested with appliance & UL E98983
-Alternative	NAN YA PLASTICS CORP CCL DEPT ELECTRONIC MATERIAL DIV	UV BLOCK FR-4-86	FR-4; 94V-0	EN 60335-2-40	Tested with appliance & UL E98983
-Alternative	SHENGYI TECHNOLOGY Co., Ltd.	S1141	FR-4; 94V-0	EN 60335-2-40	Tested with appliance & UL E109769
-Fuse 1#	Hollyland Company Limited	50T	250V; 10A	EN 60127-1 EN 60127-2	VDE 40014460
-Alternative	Walter Electronic Co., Ltd.	TMD	250V; 10A	EN 60127-1 EN 60127-2	VDE 40018200
-Fuse 2#	Hollyland Company Limited	50CT	250V; 3,15A	EN 60127-1 EN 60127-2	VDE 40014896
-Alternative	Walter Electronic Co., Ltd.	TSC	250V; 3,15A	EN 60127-1 EN 60127-2	VDE 40016670
-Varistor	Chengdu Tieda Electronic Co. Ltd.	MYN15-621K	385 V(r.m.s)AC; T85	CECC 42000 CECC 42200 CECC 42201	VDE 40008571
-Alternative	Xianhua Advanced Sensitive Components Co., Ltd.	FNR-14K621	380V(r.m.s)AC; T85	CECC 42000 CECC 42200 CECC 42201	VDE 40008242
-Opto-coupler	Sharp Corporation	PC817	Vceo:80 V; If: 50 mA; Ic: 50mA	EN 60747-5-2	VDE 40008087



-Alternative	Sharp Corporation	3SD11	V <sub>drn</sub> :600V; I <sub>f</sub> :50mA; I <sub>t</sub> :0.1A	EN 60747-5-2	VDE 40008189
-High Frequency Transformer	TDK XIAMEN Co., Ltd.	ECO2023-11PA	85-265V; 50Hz; 18V; 12V; 5V; Pri.:0,612Ω±20%; sec.:27,5mΩ±20% P(1-2); 55,4mΩ±20% P(3-4); 95mΩ±20% P(5-6); Pri.:770uH±12%; P-L:33uH MAX ; Class B	EN 60335-2-40	Tested with appliance
-Inductance 1#	XINJI ELECTRONICS COMPONENT(HANGZHOU) CO. LTD	10uH	10uH; 1,5A	EN 60335-2-40	Tested with appliance
-Alternative	Shenzhen Yamaxi Electronic Co., Ltd.	10uH	10uH; 1,5A	EN 60335-2-40	Tested with appliance
-Alternative	Dongguan Dazhong Electronic Co., Ltd.	10uH	10uH; 1,5A	EN 60335-2-40	Tested with appliance
-Inductance 2#	Qingdao Yunlu energy technology Co., Ltd.	15mH/1A	15mH; 1A	EN 60335-2-40	Tested with appliance
-Alternative	Shenzhen Yamaxi Electronic Co., Ltd.	15mH/1A	15mH; 1A	EN 60335-2-40	Tested with appliance
-Inductance 3#	HUIZHOU JIAYANG ELECTRONIC NEW-TECH Co., Ltd.	260uH/2A	260uH; 2A	EN 60335-2-40	Tested with appliance
-Inductance 4#	TDK XIAMEN Co., LTD.	100uH/0,4A	100uH; 0,4A	EN 60335-2-40	Tested with appliance
-Inductance 5#	Shenzhen Yamaxi Electronic Co., Ltd.	DG-50mH/300mA	50mH; 300mA	EN 60335-2-40	Tested with appliance
-Inductance 6#	Shenzhen Yamaxi Electronic Co., Ltd.	DG-24mH/100mA	24mH; 100mA	EN 60335-2-40	Tested with appliance
-Rectifier 1#	SHINDENGEN ELECTRIC MFG Co., Ltd.	NC 80	600V; 1,5A	EN 60335-2-40	Tested with appliance

-Rectifier 2#	Leshan Radio Co., Ltd.	B6S	600V; 0,5A	EN 60335-2-40	Tested with appliance
-Alternative	LITE-ON SEMICONDUCTOR CORP.	HD06G	600V; 0,5A	EN 60335-2-40	Tested with appliance
-Alternative	Yangzhou HY Technology Development Co.; LTD.	B6S	600V; 0,8A	EN 60335-2-40	Tested with appliance
-Y capacitor	TDK-EPC Corporation; capacitors Group	CD222M	250VAC; 222M	EN 60384-14	VDE 40029780
-Alternative	Murata Mfg. Co., Ltd. (Headquarters)	KX222M	250VAC; 222M	EN 60384-14	VDE 40002831
-X capacitor	Xiamen Faratronic Co., Ltd.	MKP62	224K; 275V; T110	EN 60384-14	VDE 40000358
-Alternative	Okaya Electric Industries Co., Ltd.	LE224	0.22uF; 275V; T100	EN 60384-14	ENEC SE/0142-1D
-Relay 1#	Sharp Corporation	R3BMF5	250VAC; 1,2A; T85	EN 61810-1	VDE 40008898
-Alternative	Matsushita Electric Works Ltd.	AQH3223	250VAC; 1,2A; T85	EN 61810-1	VDE 40004928
-Relay 2#	Xiamen Hongfa Electroacoustics Co., Ltd.	HF32F-G	250VAC; 10A; T85	EN 61810-1	VDE 40012204
-Alternative	Dongguan Sanyou Electrical Appliances Co., Ltd.	SJ-S-112DM	250VAC; 10A; T85	EN 61810-1	TÜV Rheinland R50142420
-Alternative	Dongguan Churod Electronics Co., Ltd.	A1-S-112HAF	250VAC; 10A; T85	EN 61810-1	TÜV Rheinland R50174892
-Alternative	Song Chuan Precision Co., Ltd.	835-1A-B-C	250VAC; 10A; T85	EN 61810-1	VDE 40010643
-Alternative	Tyco Electronics(Shenzhen) Co., Ltd.	OJE-SS-112HMF	250VAC; 10A; T70	EN 61810-1	TÜV Rheinland R50139166
-Relay 3#	Xiamen Hongfa Electroacoustics Co., Ltd.	HF46F	250VAC; 5A; T85	EN 61810-1	VDE 40025215
-Alternative	OMRON Corporation	G5NB-1A-E	250VAC; 5A; T85	EN 61810-1	VDE 137575

-Alternative	Dongguan Sanyou Electrical Appliances Co., Ltd.	SRB-S-112DM	277VAC; 5A; T85	EN 61810-1	TÜV Rheinland R50138320
-Alternative	Tyco Electronics (Shenzhen) Co., Ltd.	OJE-SS-112DM	250VAC; 5A; T70	EN 61810-1	TUV R 50139166
<b>Floor standing type indoor units:</b> GMV-ND140L/A-T, GMV-ND100L/A-T					
Main board	GREE	Z6L35B	—	EN 60335-2-40	Tested with appliance
-Y capacitor 1#	TDK-EPC Corporation capacitors Group	CD222M	250VAC; 222M	EN 60384-14	VDE 40029780
-Alternative	Murata Mfg. Co., Ltd. (Headquarters)	KX222M	250VAC; 222M	EN 60384-14	VDE 40002831
-Alternative	Various	Various	250VAC; 222M	EN 60384-14	S or other EU certification marks
-Y capacitor 2#	TDK-EPC Corporation capacitors Group	CD472M	250VAC; 472M	EN 60384-14	VDE 40029780
-Alternative	Murata Mfg. Co., Ltd. (Headquarters)	KX472M	250VAC; 472M	EN 60384-14	VDE 40002831
-Alternative	Haohua Electronic Co.	CT7	250VAC; 472M	EN 60384-14	VDE 40003902
-Alternative	Various	Various	250VAC; 472M	EN 60384-14	S or other EU certification marks
-X2 capacitor 1#	Xiamen Faratronic Co. Ltd.	MKP62	224K; 275 V; T110	EN 60384-14	VDE 40000358
-Alternative	Okaya Electric Industries Co., Ltd.	LE224	0,22µF; 275V; T100	EN 60384-14	ENEC SE/0142-1D
-Alternative	Various	Various	0,22µF; 275V	EN 60384-14	S or other EU certification marks
-X2 capacitor 2#	Xiamen Faratronic Co. Ltd.	MKP62	684K; 275 V; T110	EN 60384-14	VDE 40000358
-Alternative	Okaya Electric Industries Co., Ltd.	LE684	0,68µF; 275V; T100	EN 60384-14	ENEC SE/0142-1D

-Alternative	Various	Various	0,68µF; 275V; X2	EN 60384-14	S or other EU certification marks
-X2 capacitor 3#	Xiamen Faratronic Co. Ltd.	MKP62	104M; 275 V; T110	EN 60384-14	VDE 40000358
-Alternative	Anhui Xinyang Electronics Co., Ltd.	MKP	0,1µF; 275V; T100	EN 60384-14	VDE 40024537
-Alternative	Okaya Electric Industries Co., Ltd.	LE104	0,1µF; 275V; T100	EN 60384-14	ENEC SE/0142-1D
-Alternative	Various	Various	0,1µF; 275V; X2	EN 60384-14	S or other EU certification marks
-Varistor	Chengdu Tieda Electronic Co. Ltd.	MYN15-621K	385 V(r.m.s)AC; T85	CECC 42000 CECC 42200 CECC 42201	VDE 40008571
-Alternative	Xianhua Advanced Sensitive Components Co., Ltd.	FNR-14K621	385 V(r.m.s)AC; T85	CECC 42000 CECC 42200 CECC 42201	VDE 40008242
-Opto-coupler	Sharp Corporation	PC817	Vceo:80 V; If: 50 mA; Ic: 50mA	EN 60747-5-2	VDE 40008087
-High Frequency Transformer	TDK XIAMEN Co., Ltd.	ECO2023-11PA	85-265V; 50Hz; 18V; 12V; 5V; Pri.:0,612Ω±20%; sec.:27,5mΩ±20% P(1-2); 55,4mΩ±20% P(3-4); 95mΩ±20% P(5-6); Pri.:770uH±12%; P-L:33uH MAX ; Class B	EN 60335-2-40	Tested with appliance

-Alternative	SHENZHENYAMA XIELECTRONICS CO.LTD	ECO2023- 11PA	Input:85-265V; 50Hz; Output: 18V;12V; 5V; Pri.770uH±12%; Pri.-LK: 33uHMax.; R(9- 7)=0,612Ω±20%; R(1211)=0,112Ω±2 5%; R(2;3- 1)=27,5mΩ±30%; R(4- 2;3)=55,4mΩ±30%; R(6- 5)=95mΩ±25%; NS1:12V/1,3A; NS2:18V/0,3A; NS3:8V/0,1A; ND:12V/0,1A	EN 60335-2-40	Tested with appliance
-Inductance 1#	XINJI ELECTRONICS COMPONENT(HA NGZHOU) CO. LTD	10uH	10uH/1,5A	EN 60335-2-40	Tested with appliance
-Alternative	Shenzhen Yamaxi Electronic Co., Ltd.	10uH	10uH/1,5A	EN 60335-2-40	Tested with appliance
-Alternative	Dongguan Dazhong Electronic Co., Ltd.	10uH	10uH/1,5A	EN 60335-2-40	Tested with appliance
-Inductance 2#	Hui Zhou Jia Yang Core New Tech Co., Ltd.	80mH/0.6A	80mH; 0,6A	EN 60335-2-40	Tested with appliance
-Inductance 3#	TDK XIAMEN Co., LTD.	100mH/0.4A	100mH; 0,4A	EN 60335-2-40	Tested with appliance
-Inductance 4#	Shenzhen Yamaxi Electronic Co., Ltd.	DG- 50mH/300m A	50mH; 300mA	EN 60335-2-40	Tested with appliance
-Filter	Qingdao Yunlu energy technology Co., Ltd.	1.5mH/4A	1,5mH; 4A	EN 60335-2-40	Tested with appliance
-Alternative	HUIZHOU JIAYANG ELECTRONIC NEW-TECH CO., LTD	1.5mH/4A	1,5mH; 4A	EN 60335-2-40	Tested with appliance
-Relay	Xiamen Hongfa Electroacoustics Co., Ltd.	JZC-32F	250VAC; 5A; T70	EN 61810-1	VDE 40012204

-Alternative	Dongguan Sanyou Electrical Appliances Co., Ltd.	SJ-S-112DM	250VAC; 5A; T85	EN 61810-1	VDE 40002146
-Alternative	Dongguan Churod Electronics Co., Ltd.	A1-S-112DA	250VAC; 5A; T85	EN 61810-1	TÜV Rheinland R50174892
-Alternative	Song Chuan Precision Co., Ltd.	307-1AH-C	250VAC; 5A; T85	EN 61810-1	TÜV Rheinland R50128391
-Alternative	Tyco Electronics(Shenzhen) Co., Ltd.	OJE-SS-112DM	250VAC; 5A; T70	EN 61810-1	TÜV Rheinland R50139166
-Current fuse	Hollyland Co., Ltd.	50CT	250 V; T; 3,15 A	EN 60127-1 EN 60127-2	VDE 40014896
-Alternative	Walter Electronic Co., Ltd.	TSC	250 V; T; 3,15 A	EN 60127-1 EN 60127-2	VDE 40016670
-Alternative	Various	Various	250 V; T; 3,15 A	EN 60127-1 EN 60127-2	S or other EU certification marks
-Rectifier	SHINDENGEN ELECTRIC MFG CO LTD	NC 80	600 V; 1,5A	EN 60335-2-40	Tested with appliance
Terminal Board (4 bits) 1#	Changzhou Changheng Kaidu Electric Appliance Co., Ltd.	JXD-3	AC450V; 2,5mm <sup>2</sup>	EN 60335-2-40	Tested with appliance
Terminal Board (4 bits) 2#	Changzhou Changheng Kaidu Electric Appliance Co., Ltd.	JX-G-4A	AC250V; 2,5mm <sup>2</sup>	EN 60998-1 EN 60998-2	Tested with appliance & VDE 40020936
Alternative	Nantong Huaguan Electric Co., Ltd.	JXW	AC250V; 2,5mm <sup>2</sup>	EN 60998-1 EN 60998-2 EN 60335-2-40	Tested with appliance & VDE 40013197
Fan motor	Zhongshan Broad-Ocean Motor Co., Ltd.	LN180F-ZL	220-240V; 50/60Hz; 180W; Class B	EN 60335-2-40	Tested with appliance
Stepping motor 1#	Changzhou Leshileili Motor Co; Ltd	MP35AA	12VDC; Class A; 130±8%Ω	EN 60335-2-40	Tested with appliance
Alternative	Jiangsu Huayang Electrical Appliance Co., Ltd	MP35AA	Main:130±8%Ω; DC12V; Class A	EN 60335-2-40	Tested with appliance
Alternative	Changzhou Oukai Electrical Appliance Co., Ltd	MP35AA	12VDC; Class A; 100±8%Ω	EN 60335-2-40	Tested with appliance

Stepping motor 2#	Changzhou Leshileili Motor Co., Ltd	MP35AB	12VDC; Class A; Main:270±8%Ω	EN 60335-2-40	Tested with appliance
<b>Outdoor units:</b> GMV-160WL/A-T, GMV-140WL/A-T, GMV-120WL/A-T					
Compressor	Zhuhai Landa Compressor Co., Ltd.	QXAS-F428zX050 A	DC260-350V; 3PH; 15-120Hz; 4450W; 0,63±7%Ω; Synthetic	EN 60335-2-34	TÜV Rheinland R50246013
Electric Heater (for compressor)	Zhenjiang Dongfang Electric Heating Technology Co., Ltd.	DYQ-02-II-220	220V; 40W	EN 60335-2-40	Tested with appliance
Electric Heater (for chassis)	Zhenjiang Dongfang Electric Heating Technology Co., Ltd.	DYQ-02-I-230	230V; 40W	EN 60335-2-40	Tested with appliance
Fan motor	Panasonic Motor (Hangzhou) Co., Ltd.	SWZ120A	310VDC; 120W; Class E	EN 60335-2-40	Tested with appliance
Alternative	NIDEC SHIBAURA (Zhejiang) CORP	SWZ120A	DC310V; 120W; 0,495A; Class E; 7,935Ω	EN 60335-2-40	Tested with appliance
Alternative	Jiangsu Shangqi Group Co.Ltd	SWZ120A	DC310V; 120W; 0,85A; Class B; 17,5±8%Ω	EN 60335-2-40	Tested with appliance
Alternative	Zhuhai Kaibang Motor Manufacturing CO., LTD.	SWZ120A	DC200~370; 0,95A; 120W; Class E; 38,5Ω	EN 60335-2-40	Tested with appliance
Alternative	Zhuhai Kaibang Motor Manufacturing CO., LTD.	ZWS120-A1	DC200~370; 0,95A; 120W; Class E; 38,5Ω	EN 60335-2-40	Tested with appliance
Alternative	Zhejiang Wolong Home Appliance Motor Co., Ltd	SWZ120A	310V; 120W; 0,50A; Class E; 20,7Ω	EN 60335-2-40	Tested with appliance
PFC inductance	Qingdao Yunlu energy technology Co.; Ltd.	RC400GL	400μH+400μH; 35A	EN 60335-2-40	Tested with appliance
Alternative	HUIZHOU JIAYANG ELECTRONIC NEW-TECH CO.;LTD	400uH+400 uH/35A	400uH+400uH; 35A	EN 60335-2-40	Tested with appliance



Alternative	SHENZHEN YAMAXI ELECTRONICS CO.,LTD	400uH+400 uH/35A	400uH+400uH/35A	EN60335-2-40	Tested with appliance
Main board 1	GREE	WZ6L35A	--	EN 60335-2-40	Tested with appliance
Main board 2	GREE	WZ6L35A(C PU)	--	EN 60335-2-40	Tested with appliance
Driving Board	GREE	ZQ1230A	--	EN 60335-2-40	Tested with appliance
-Alternative	GREE	ZQ1230C	--	EN 60335-2-40	Tested with appliance
Filter Board	GREE	ZL1230A	--	EN 60335-2-40	Tested with appliance
-Alternative	GREE	ZL1230C	--	EN 60335-2-40	Tested with appliance
-X2 capacitor 1#	Xiamen Faratronic Co. Ltd.	MKP62	684K; 275 V; T110	EN 60384-14	VDE 40000358
-Alternative	Okaya Electric Industries Co., Ltd.	LE684	0,68µF; 275V; T100	EN 60384-14	ENEC SE/0142-1D
-Alternative	Various	Various	0,68µF; 275V	EN 60384-14	S or other EU certification marks
-X2 capacitor 2#	Xiamen Faratronic Co. Ltd.	MKP62	224K; 275 V; T110	EN 60384-14	VDE 40000358
-Alternative	Okaya Electric Industries Co., Ltd.	LE224	0,22µF; 275V; T100	EN 60384-14	ENEC SE/0142-1D
-Alternative	Various	Various	0,22µF; 275V	EN 60384-14	S or other EU certification marks
-X2 capacitor 3#	Xiamen Faratronic Co. Ltd.	MKP62	225K; 275V; T110	EN 60384-14	VDE 40000358
-Alternative	Okaya Electric Industries Co., Ltd.	LE225	2,2µF; 275V; T100	EN 60384-14	ENEC SE/0142-1D
-Alternative	Various	Various	2,2µF; 275V or above	EN 60384-14	S or other EU certification marks
-X2 capacitor 4#	Xiamen Faratronic Co. Ltd.	MKP62	105K/275V;T110	IEC/EN 60384- 14	VDE 40000358
-Alternative	Anhui Xinyang Electronics Co., Ltd.	MKP	1,0µF/275V;T100	IEC/EN 60384- 14	VDE 40024537

TRF No. IEC60335\_2\_40J

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-Alternative	Pilkor Electronics Ltd.	PCX2 335M	1 $\mu$ F/275V;T85	IEC/EN 60384-14	ENEC SE/0256
-Y capacitor	TDK-EPC Corporation capacitors Group	CS103M	250VAC; 103M; T125	EN 60384-14	VDE 40029781
-Alternative	Various	Various	250VAC; 103M	EN 60384-14	S or other EU certification marks
-Varistor	Chengdu Tieda Electronic Co. Ltd.	MYN15-621K	385 V(r.m.s)AC; T85	CECC 42000 CECC 42200 CECC 42201	VDE 40008571
-Alternative	Xianhua Advanced Sensitive Components Co.; Ltd.	FNR-14K621	385 V(r.m.s)AC; T85	CECC 42000 CECC 42200 CECC 42201	VDE 40008242
-Opto-coupler	Sharp Corporation	PC817	Vceo:80V; If:50mA; Ic:50mA; T100	EN 60747-5-2	VDE 40008087
-Alternative	VISHAY Semiconductor GmbH	VO617A	Vceo: 80V; If: 60mA; Ic: 50mA	IEC/EN 60747-5-2	VDE 40033345
-Alternative	Toshiba Corporation Semiconductor & Storage Products Company	TLP785	Vceo: 80V; If: 60mA; Ic: 50mA	IEC/EN 60747-5-2	VDE 40031808
-Alternative	Avago Technologies	HCPL-817	Vceo:70V;If:50mA;Ic:50mA	EN 60747-5-2	VDE:40016429
-Inductance 1#	XINJI ELECTRONICS COMPONENT(HANGZHOU) CO. LTD	10uH	10uH/1,5A	EN 60335-2-40	Tested with appliance
-Alternative	Shenzhen Yamaxi Electronic Co., Ltd.	10uH	10uH/1,5A	EN 60335-2-40	Tested with appliance
-Alternative	Dongguan Dazhong Electronic Co., Ltd.	10uH	10uH/1,5A	EN 60335-2-40	Tested with appliance
-Inductance 2#	Dongguan Dazhong Electronic Co., Ltd.	EE25-4PA	5mH; 5A	EN 60335-2-40	Tested with appliance

-Filter	Shenzhen Yamaxi Electronic Co., Ltd.	YMX 2.5mH/45A	2,5mH; 45A	EN 60335-2-40	Tested with appliance
-Alternative	HUIZHOU JIAYANG ELECTRONIC NEW-TECH CO., LTD	2.5mH/45A CNT	2,5mH; 45A	EN 60335-2-40	Tested with appliance
-Relay 1#	Xiamen Hongfa Electroacoustics Co., Ltd.	HF46F	250VAC; 5A; 12VDC; T85; 5E4 cycles	EN 61810-1	VDE 40025215
-Alternative	OMRON Corporation	G5NB-1A-E	250VAC; 5A; 12VDC; T85; 10E4 cycles	EN 61810-1	VDE 137575
-Alternative	Dongguan Sanyou Electrical Appliances Co., Ltd.	SRB-S-112DM	277VAC; 5A; 12VDC; T85; 10E4 cycles	EN 61810-1	TÜV Rheinland R50138320
-Alternative	Tyco Electronics (Shenzhen) Co.; Ltd.	OJE-SS-112DM	250VAC; 5A; T70	EN 61810-1	TUV R 50139166
-Relay 2#	Xiamen Hongfa Electroacoustics Co., Ltd.	JZC-32F	250VAC; 5A; 12 VDC; T70; 10E4 cycles	EN 61810-1	VDE 40012204
-Alternative	Dongguan Sanyou Electrical Appliances Co., Ltd.	SJ-S-112DM	250VAC; 5A; 12 VDC; T85; 10E4 cycles	EN 61810-1	VDE 40002146
-Alternative	Song Chuan Precision Co., Ltd.	307-1AH-C	250VAC; 5A; 12 VDC; T85; 10E4 cycles	EN 61810-1	TÜV Rheinland R50128391
-Alternative	Dongguan Churod Electronics Co., Ltd.	A1-S-112DA	250VAC; 5A; T85	IEC/EN 61810-1	TÜV Rheinland R 50174892
-Alternative	Tyco Electronics (Shenzhen) Co.; Ltd.	OJE-SS-112DM	250VAC; 5A; T70	EN 61810-1	TUV R 50139166
-Relay3#	Xiamen Hongfa Electroacoustic Co., Ltd.	JQX-116F-1	240VAC; 25A; 12 VDC; T70; 5E4 cycles	EN 61810-1	TÜV Rheinland R50154722
-Current fuse 1#	Hollyland Co., Ltd.	50CT	250 V; T; 5A	EN 60127-1 EN 60127-2	VDE 40014896
-Alternative	Walter Electronic Co., Ltd.	TSC	250 V; T; 5A	EN 60127-1 EN 60127-2	VDE 40016670
-Alternative	Various	Various	250 V; T; 5A	EN 60127-1 EN 60127-2	S or other EU certification marks

TRF No. IEC60335\_2\_40J

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-Current fuse 2#	Walter Electronic Co., Ltd.	ICP	250 V; T; 3,15 A	EN 60127-1 EN 60127-2	VDE 40012824
-Alternative	Various	Various	250 V; T; 3,15A	EN 60127-1 EN 60127-2	S or other EU certification marks
-High frequency transformer 1#	Xinji Electronics Component (Hangzhou) Co., Ltd.	EE20-8PA	Input: 85V-265V; 65KHz; 1,5Ω; output: 15V/12V/5V; 200mA; 300mA; 500mA; 0,35Ω; 0,26Ω; 0,19Ω; L- Pri: 1,07mH; Lk- Pri.: 25uH MAX; Class E	EN 60335-2-40	Tested with appliance
-Alternative	SHENZHEN YAMAXI ELECTRONICS CO.;LTD	EE20-8PA	≤250VAC; 5-200kHz; Pri.: R(2 - 1) ≤ 1,2Ω; R(4 - 3) ≤ 145Ω; sec.: R(6-5) ≤ 190mΩ; R(7-6) ≤ 190mΩ; R(8-6) ≤ 190mΩ; L- Pri: 1,07mH ± 10%; Lk- Pri.: 30uH MAX; Class B	EN 60335-2-40	Tested with appliance
-Alternative	HUIZHOU JIAYANG ELECTRONIC CORE NEW-TECH CO.;LTD	EE20-8PA	Input: 220VAC; 50KHz; output: R6-5: 5V; R5-8: 12V; R5-7: 15V PRI: PIN1-2 = 1,50Ω MAX; PIN4-3 = 185mΩ, MAX; SEC: PIN6-5 = 80mΩ, MAX; PIN7-6 = 240mΩ, MAX; PIN8-6 = 105mΩ, MAX; L- Pri: 1,07mH ± 10%; LK- Pri: 30uH MAX; Class B	EN 60335-2-40	Tested with appliance

-High frequency transformer 2#	SHENZHEN YAMAXI ELECTRONICS CO., LTD	KDB-28-04029	AC250V; 50HZ; 15V; 18V; 18V; Pri.: R(9-10):40mΩ MAX; R(12-13):40mΩ MAX; R(15-16):0,85Ω MAX; Sec.:R(1-2):180mΩ MAX; R(4-6):200mΩ MAX; R(7-8):230mΩ MAX; L-Pri.:1.6mH±10%; LK-Pri.:60uH MAX; Class B	EN 60335-2-40	Tested with appliance
-Alternative	JINMEIJIA ELECTRONIC (SHENZHEN) CO.,LTD	KDB-28-04029	300V; pri:6.25±15%Ω; Sec1:172±15%Ω; Sec2:185±15%Ω; Sec3:35±15%Ω; L-Pri.:L15-16:1,6mH±10%; LK-Pri.:LK(15-16)≤80uH; Class B	EN 60335-2-40	Tested with appliance
-Alternative	DONGGUAN DAZHONG ELECTRONIC CO.,LTD	KDB-28-04029	L-Pri.:L16-15=1,6mH±10% (1KHz 0.3V) LK-Pri.:LK(16-15)≤80uH	EN 60335-2-40	Tested with appliance
-IPM module	MITSUBISHI ELECTRIC CORP SEMICONDUCTOR DIV	PS21A79	Vces:600V; Ic: 50A	EN 60335-2-40	Tested with appliance
-Alternative	FAIRCHILD SEMICONDUCTOR CORP	FPDB60PH60B	Vces:600V; Ic:60A; Ic:60A; Ip:90A	EN 60335-2-40	Tested with appliance
-Rectifier	Shanghai Microsemi Semiconductor Co., Ltd.	GBJ15J	600V; 15A	EN 60335-2-40	Tested with appliance
-Alternative	SHINDENGEN ELECTRIC MFG CO LTD	D15XB 60	600V; 15A	EN 60335-2-40	Tested with appliance
-Alternative	LITE-ON SEMICONDUCTOR CORP.	GBJ1508G	800V;15A	EN60335-2-40	Tested with appliance
-PCB material	GUANGDONG SHENGYI SCI TECH CO LTD	S2130	V-0	EN 60335-2-40	Tested with appliance & UL E109769

-Alternative	KINGBOARD LAMINATES LTD	KB6160/P-138	V-0	EN 60335-2-40	Tested with appliance & UL E123995
-Alternative	NAN YA PLASTICS CORP CCL DEPT ELECTRONIC MATERIAL DIVL DIV	FR-4-86	V-0	EN 60335-2-40	Tested with appliance & UL E98983(S)
-Alternative	SHENGYI TECHNOLOGY CO LTD	S1141	V-0	EN 60335-2-40	Tested with appliance & UL E109769
-Alternative	Jiangxi Uniongain Electronics Technology Co.,Ltd	DS2	94V-0	EN 60335-2-40 UL94	Tested with appliance & UL E464601
-Alternative	PALWONNELECTRONICS(SHENZH EN) CO.LTD	D3	CEM-1; 94-V0;	EN 60335-2-40 UL94	Tested with appliance & UL E230435
-Alternative	CHANGCHUN PLASTIC CO LTD	CCP-508, CCP-508U	CEM-1; 94-V0	EN 60335-2-40 UL94	Tested with appliance & UL E108591
-Alternative	SHENGYI TECHNOLOGY CO LTD	S3116	CEM-1; 94-V0	EN 60335-2-40 UL94	Tested with appliance & UL E109769
-Alternative	SHENGYI TECHNOLOGY CO LTD	S3110	CEM-1; 94-V0	EN 60335-2-40 UL94	Tested with appliance & UL E109769
-Alternative	KINGBOARD LAMINATES HOLDINGS LTD	KB3151C	FR-1; 94-V0	EN 60335-2-40 UL94	Tested with appliance & UL E123995
-Alternative	SHENGYI TECHNOLOGY CO LTD	S2130	CEM-3; 94-V0;	EN 60335-2-40 UL94	Tested with appliance & UL E109769
-Alternative	KINGBOARD LAMINATES HOLDINGS LTD	KB-6160, KB-6160C	FR-4; 94-V0;	EN 60335-2-40 UL94	Tested with appliance & UL E123995
-Alternative	KINGBOARD LAMINATES HOLDINGS LTD	KB5150; KB-5150&	FR-4; 94-V0;	EN 60335-2-40 UL94	Tested with appliance & UL E123995
-Alternative	ZHUHAI JINHAO ELECTRONICS CO LTC	JP-3	94-V0	EN 60335-2-40 UL94	Tested with appliance & UL E309382
-Alternative	NAN YA PLASTICS CORP CCL DEPT ELECTRONIC MATERIAL DIVL DIV	FR-4-86	94V-0	EN 60335-2-40 UL94	Tested with appliance & UL E98983
-Alternative	Bomin Electronics Co., Ltd.	BM2; BM6-1	94V-0	EN 60335-2-40 UL94	Tested with appliance & UL E213371
-Alternative	Huizhou Xingzhiguang Co., Ltd	XZG-P1; XZG-T1	94V-0	EN 60335-2-40 UL94	Tested with appliance & UL E246887

TRF No. IEC60335\_2\_40J

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-Alternative	ZHUHAI JOINTEK ELECTRIC CO LTD	JK-004	94V-0	EN 60335-2-40 UL94	Tested with appliance & UL E214852
-Alternative	GUANGDONG XI NGDA HONGYE ELECTRONIC CO., LTD	XD-102	94V-0	EN 60335-2-40 UL94	Tested with appliance & UL E193079
-Alternative	SHUNDE JUNDA ELECTRONIC CO.LTD	JD-D, JD-E	94V-0	EN 60335-2-40 UL94	Tested with appliance & UL E173873
-Alternative	BaoYueJia Electronics(Zhong Shan) Co., Ltd	BYJ-3	94V-0	EN 60335-2-40 UL94	Tested with appliance & UL E230225
-Alternative	TATCHUN PRINTED CIRCUIT BOARD CO., LTD	TC	94V-0	EN 60335-2-40 UL94	Tested with appliance & UL E131175
-Alternative	Jiangmen Benlida Printed Circuit Co., Ltd	BLD-A	94V-0	EN 60335-2-40 UL94	Tested with appliance & UL E203640
Terminal board (3 bits) 1#	Dinkle Enterprise CO., LTD(Shenzhen Zeitgeist Electronics Co., Ltd)	DT-66	600 V; 40A	EN 60335-2-40	Tested with appliance
Alternative	Changzhou Kaidu Electrical Co., Ltd.	JXG	AC600V; 6mm <sup>2</sup>	EN 60335-2-40	Tested with appliance
Alternative	Nantong Huaguan Electric Co., Ltd.	JXW-N	AC600V; 6mm <sup>2</sup>	EN 60335-2-40	Tested with appliance
Terminal board (4 bits) 2#	Changzhou Kaidu Electrical Co., Ltd.	JX-G-4A	250VAC; 2,5mm <sup>2</sup>	EN 60335-2-40	Tested with appliance
Alternative	Nantong Huaguan Electric Co., Ltd.	JXW	AC250V; 2,5mm <sup>2</sup>	EN 60998-1 EN 60998-2 EN 60335-2-40	Tested with appliance & VDE 40013197
Electromagnetic Valve	ZHEJIANG SANHUA CO., LTD.	FDF2A24	AC220-240 V; 50/60 Hz; 5/4,5 W, Class B, 2085Ω	EN 60335-2-40	Tested with appliance
4-way Valve	Zhejiang Sanhua Climate and Appliance Controls Group Co., Ltd.	SHF-20A-46	220-240 V; 50/60 Hz; 4,5/3,5 W; Class B; 2085±208 Ω	EN 60730-1	VDE 40003240
Alternative	Zhejiang Dun'an Artificial Environment Co. Ltd.	DSF-20-R410A	AC220-240V; 50/60Hz; 7/5W; Class B; 1970±197Ω	IEC/EN 60730-1	VDE 40013212



Pressure protect switch	Changzhou Match-well Pressure Control Technique Co., Ltd.	YK-4.2/3.6	250V; 3A	EN 60730-1 EN 60730-2-6	VDE40000571
Alternative	Zhenjiang Honglian Electrician Co., Ltd.	YK-4.2/3.6	250V; 6A	EN 60730-1 EN 60730-2-6	TÜV R 50246886
<sup>1)</sup> An asterisk indicates a mark which assures the agreed level of surveillance					

28.1	TABLE: Threaded part torque test			P
Threaded part identification	Diameter of thread (mm)	Column number (I, II, or III)	Applied torque (Nm)	
Earthed screw	4,0	II	1,2	
Supplementary information: --				

<b>29.1</b>	<b>TABLE: Clearances</b>					<b>P</b>
	Overvoltage category ..... : II					—
		Type of insulation:				
Rated impulse voltage (V):	Min. cl (mm)	Basic (mm)	Supplementary (mm)	Reinforced (mm)	Functional (mm)	Verdict / Remark
330	0,2* / 0,5 / 0,8**	—	—	—	—	N/A
500	0,2* / 0,5 / 0,8**	—	—	—	—	N/A
800	0,2* / 0,5 / 0,8**	—	—	—	—	N/A
1 500	0,5 / 0,8** / 1,0***	—	—	—	—	N/A
2 500	<b>1,5</b> / 2,0***	3,0	5,0	—	3,5	P
4 000	<b>3,0</b> / 3,5***	—	—	>10	—	P
6 000	5,5 / 6,0***	—	—	—	—	N/A
8 000	8,0 / 8,5***	—	—	—	—	N/A
10 000	11,0 / 11,5***	—	—	—	—	N/A
Supplementary information:						
*) For tracks on printed circuit boards if pollution degree 1 and 2						
**) For pollution degree 3						
***) If the construction is affected by wear, distortion, movement of the parts or during assembly						

<b>29.2</b>	<b>TABLE: Creepage distances, basic, supplementary and reinforced insulation</b>			<b>P</b>
Working voltage (V)	Creepage distance (mm)			
	Pollution degree			

	1	2			3			Type of insulation			Verdict
		Material group			Material group						
		I	II	IIIa/IIIb	I	II	IIIa/IIIb*	B**	S**	R**	
≤50	0,18	0,6	0,85	1,2	1,5	1,7	1,9		—	—	N/A
≤50	0,18	0,6	0,85	1,2	1,5	1,7	1,9	—		—	N/A
≤50	0,36	1,2	1,7	2,4	3,0	3,4	3,8	—	—		N/A
125	0,28	0,75	1,05	1,5	1,9	2,1	2,4		—	—	N/A
125	0,28	0,75	1,05	1,5	1,9	2,1	2,4	—		—	N/A
125	0,56	1,5	2,1	3,0	3,8	4,2	4,8	—	—		N/A
250	0,56	1,25	1,8	<u>2,5</u>	3,2	3,6	4,0	3,0	—	—	P
250	0,56	1,25	1,8	<u>2,5</u>	3,2	3,6	4,0	—	>5	—	P
250	1,12	2,5	3,6	<u>5,0</u>	6,4	7,2	8,0	—	—	>10	P
400	1,0	2,0	2,8	4,0	5,0	5,6	6,3		—	—	N/A
400	1,0	2,0	2,8	4,0	5,0	5,6	6,3	—		—	N/A
400	2,0	4,0	5,6	8,0	10,0	11,2	12,6	—	—		N/A
500	1,3	2,5	3,6	5,0	6,3	7,1	8,0		—	—	N/A
500	1,3	2,5	3,6	5,0	6,3	7,1	8,0	—		—	N/A
500	2,6	5,0	7,2	10,0	12,6	14,2	16,0	—	—		N/A
>630 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0		—	—	N/A
>630 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	—		—	N/A
>630 and ≤800	3,6	6,4	9,0	12,6	16,0	18,0	20,0	—	—		N/A
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5		—	—	N/A
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	—		—	N/A
>800 and ≤1000	4,8	8,0	11,2	16,0	20,0	22,0	25,0	—	—		N/A
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0		—	—	N/A
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	—		—	N/A
>1000 and ≤1250	6,4	10,0	14,2	20,0	25,0	28,0	32,0	—	—		N/A
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0		—	—	N/A
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	—		—	N/A
>1250 and ≤1600	8,4	12,6	18,0	25,0	32,0	36,0	40,0	—	—		N/A
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0		—	—	N/A
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	—		—	N/A
>1600 and ≤2000	11,2	16,0	22,0	32,0	40,0	44,0	50,0	—	—		N/A
>2000 and ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0		—	—	N/A
>2000 and ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0	—		—	N/A

29.2	TABLE: Creepage distances, basic, supplementary and reinforced insulation										P
Working voltage (V)	Creepage distance (mm) Pollution degree										
	1	2			3			Type of insulation			Verdict
		Material group			Material group						
		I	II	IIIa/IIIb	I	II	IIIa/IIIb*	B**	S**	R**	
>2000 and ≤2500	15,0	20,0	28,0	40,0	50,0	56,0	64,0	—	—		N/A
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0		—	—	N/A
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	—		—	N/A
>2500 and ≤3200	20,0	25,0	36,0	50,0	64,0	72,0	80,0	—	—		N/A
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0		—	—	N/A
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0	—		—	N/A
>3200 and ≤4000	25,0	32,0	44,0	64,0	80,0	90,0	100,0	—	—		N/A
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0		—	—	N/A
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	—		—	N/A
>4000 and ≤5000	32,0	40,0	56,0	80,0	100,0	112,0	126,0	—	—		N/A
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0		—	—	N/A
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0	—		—	N/A
>5000 and ≤6300	40,0	50,0	72,0	100,0	126,0	142,0	160,0	—	—		N/A
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0		—	—	N/A
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	—		—	N/A
>6300 and ≤8000	50,0	64,0	90,0	126,0	160,0	180,0	200,0	—	—		N/A
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0		—	—	N/A
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0	—		—	N/A
>8000 and ≤10000	64,0	80,0	112,0	160,0	200,0	220,0	250,0	—	—		N/A
>10000 and ≤12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0		—	—	N/A
>10000 and ≤12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0	—		—	N/A
>10000 and ≤12500	80,0	100,0	142,0	200,0	250,0	280,0	320,0	—	—		N/A
Supplementary information:											
*) Material group IIIb is allowed if the working voltage does not exceed 50 V											
**) B = Basic insulation, S = Supplementary insulation, R = Reinforced insulation											

29.2	TABLE: Creepage distances, functional insulation										P
Working voltage (V)	Creepage distance (mm) Pollution degree							Verdict / Remark			

	1	2			3			
		Material group			Material group			
		I	II	IIIa/IIIb	I	II	IIIa/IIIb*	
≤10	0,08	0,4	0,4	0,4	1,0	1,0	1,0	N/A
50	0,16	0,56	0,8	1,1	1,4	1,6	1,8	N/A
125	0,25	0,71	1,0	1,4	1,8	2,0	2,2	N/A
250	0,42	1,0	1,4	<b>2,0</b>	2,5	2,8	3,2	P / 3,5 mm L & N pole on PCB
400	0,75	1,6	2,2	3,2	4,0	4,5	5,0	N/A
500	1,0	2,0	2,8	4,0	5,0	5,6	6,3	N/A
>630 and ≤800	1,8	3,2	4,5	6,3	8,0	9,0	10,0	N/A
>800 and ≤1000	2,4	4,0	5,6	8,0	10,0	11,0	12,5	N/A
>1000 and ≤1250	3,2	5,0	7,1	10,0	12,5	14,0	16,0	N/A
>1250 and ≤1600	4,2	6,3	9,0	12,5	16,0	18,0	20,0	N/A
>1600 and ≤2000	5,6	8,0	11,0	16,0	20,0	22,0	25,0	N/A
>2000 and ≤2500	7,5	10,0	14,0	20,0	25,0	28,0	32,0	N/A
>2500 and ≤3200	10,0	12,5	18,0	25,0	32,0	36,0	40,0	N/A
>3200 and ≤4000	12,5	16,0	22,0	32,0	40,0	45,0	50,0	N/A
>4000 and ≤5000	16,0	20,0	28,0	40,0	50,0	56,0	63,0	N/A
>5000 and ≤6300	20,0	25,0	36,0	50,0	63,0	71,0	80,0	N/A
>6300 and ≤8000	25,0	32,0	45,0	63,0	80,0	90,0	100,0	N/A
>8000 and ≤10000	32,0	40,0	56,0	80,0	100,0	110,0	125,0	N/A
>10000 and ≤12500	40,0	50,0	71,0	100,0	125,0	140,0	160,0	N/A
Supplementary information:								
*) Material group IIIb is allowed if the working voltage does not exceed 50 V								

30	TABLE: Resistance to heat and fire																			
Object/ part No.	Manufacturer/ trademark	Type/ model	Ball pressure test °C				Glow wire test (GWT) °C					Glow-wire flammability index (GWFI) °C				Glow- wire ignition temp. (GWIT) °C		Needle - flame test (NFT)	Verdict	
			75	125	cl. 11 +40	cl. 19 +25	550	650		750		850	550	650	750	850	675	775		
								te	ti	te	ti									
Terminal block	Kaidu	----	----	1,0 mm	----	----	----	---	---	No flame		P	----	----	----	----	----	----	----	P
Terminal block	Huangguan	----	----	1,0 mm	----	----	----	---	---	No flame		P	----	----	----	----	----	----	----	P
PCB	----	----	----	0,5 mm	----	----	----	---	---	----	----	----	----	----	----	----	----	----	P	P
Enclosure plastic of ceiling type indoor unit	----	----	1,0 mm	1,0 mm	----	----	P	---	---	----	----	----	----	----	----	----	----	----	----	P
Supplementary information:																				
1) Parts of material classified at least HB40 or if relevant HBF																				
2) Parts of material classified as V-0 or V-1																				
3) Flame persisting longer than 2 s (= te – ti) need only be reported for unattended appliances																				
4) Surrounding parts subjected to the needle-flame test of annex E																				
5) Base material classified as V-0 or if relevant VTM-0																				
6) The GWIT pre-selection option, the 850 °C GWFI pre-selection option, and the 850 °C GWT are not applicable for attended appliances.																				
Remark: All alternative components have been evaluated and listed severe results.																				

Appendix EMF			P
	TEST: Evaluation of the magnetic fields		
Applied standards:	IEC 62233:2005, EN 62233:2008 (incl. Corr.1:2008)		
Method	Used method: 5.5.2 Time domain evaluation		—
Applied Limit	ICNIRP Guidelines		—
Identification of the appliance	Type of apparatus	Split type air-conditioner	
	Rated Voltage	220-240V~	
	Rated Frequency	50Hz	
Parameters required prior to the test	Laboratory Ambient Temperature	25 °C ± 10 °C	
	Supply Voltage	(Rated Voltage ± 2 %) V	
	Supply Frequency	(Rated Frequency ± 2 %) Hz	
Parameters recorded during the test	Laboratory Ambient Temperature	25°C	
	Supply Voltage	230V	
	Supply Frequency	50Hz	
Operating Mode	Cooling & heating mode		
Method 5.5.2			
Measuring Positions	Measuring Distance	Coupling Factor	Measurement Uncertainty
Around the enclosure	30cm	N/A	N/A
Frequency (kHz)	Limit (%)	Measured Maximum Value (%)	
10Hz	100	1,36	
Supplementary information:			
The measured maximum value in this table may be weighted with the coupling factor if applicable, and the measurement uncertainty is applied if the measured result is more than 75 % of the limit.			

**Photo Documents:**

The following photos are for outdoor units GMV-160WL/A-T, GMV-140WL/A-T and GMV-120WL/A-T:



Front view



Back view

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Side view 1#



Side view 2#



Room temperature sensor



Internal view 1#



Internal view 2#



Internal view 3#

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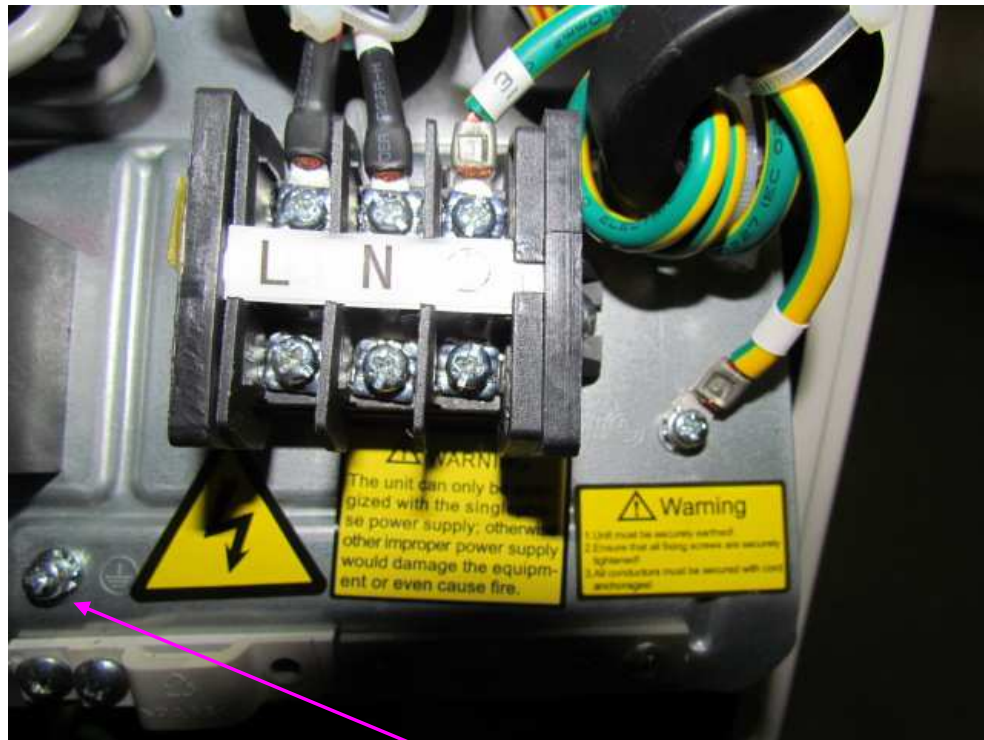




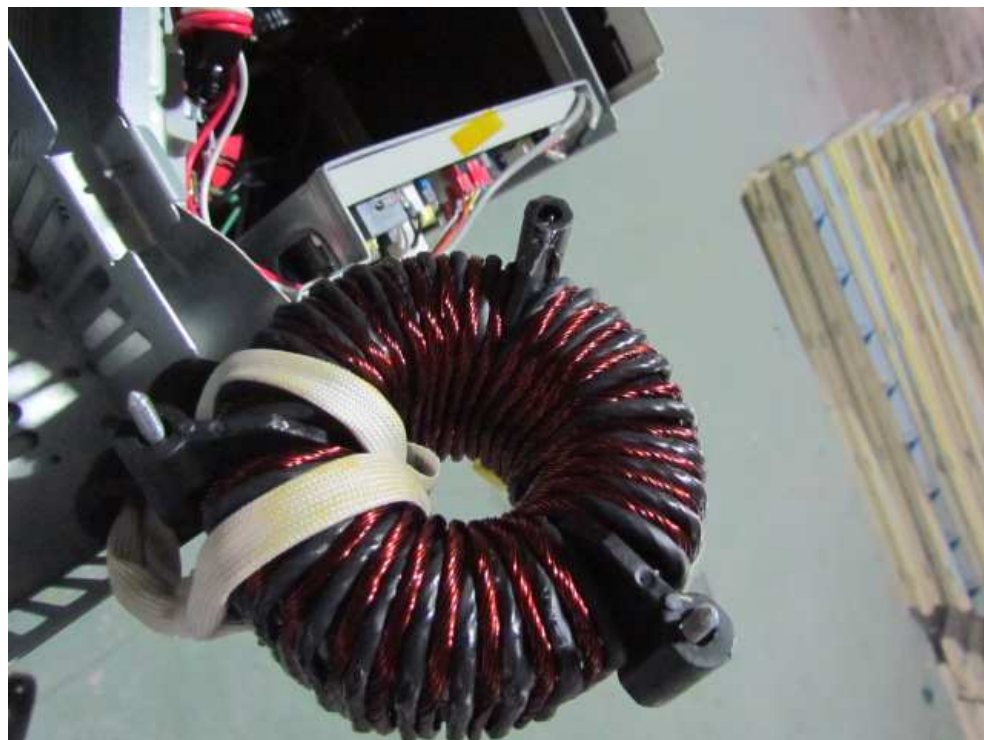
Internal view 4#



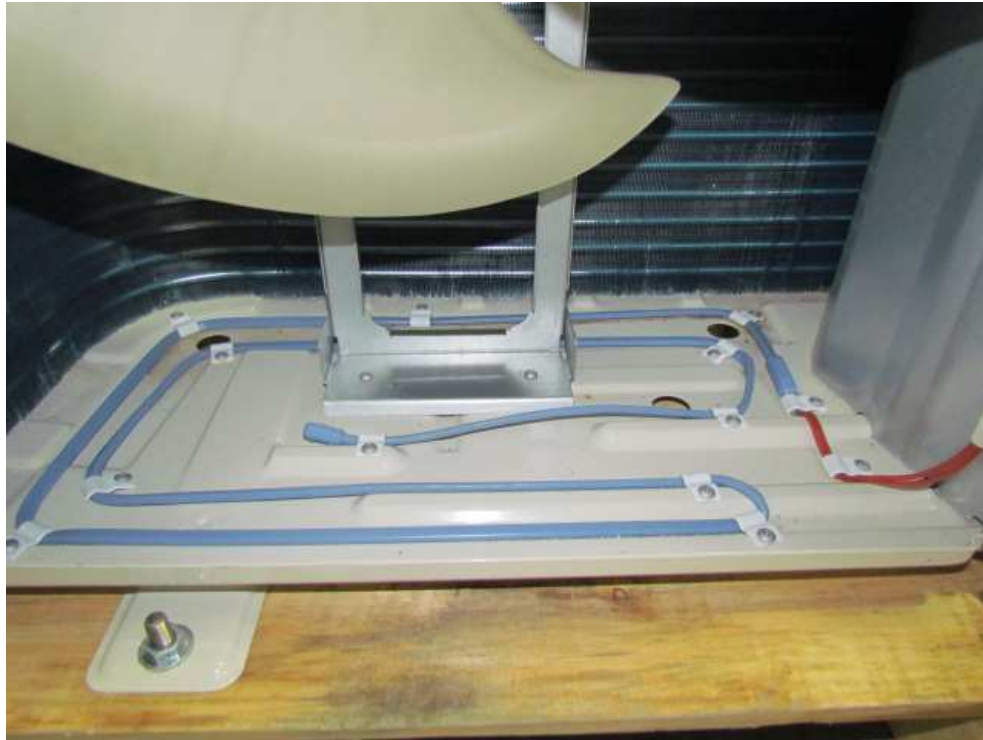
Terminal block & cord anchorage view



Earthing terminal



PFC inductance



Electric heater for chassis



Fan motor



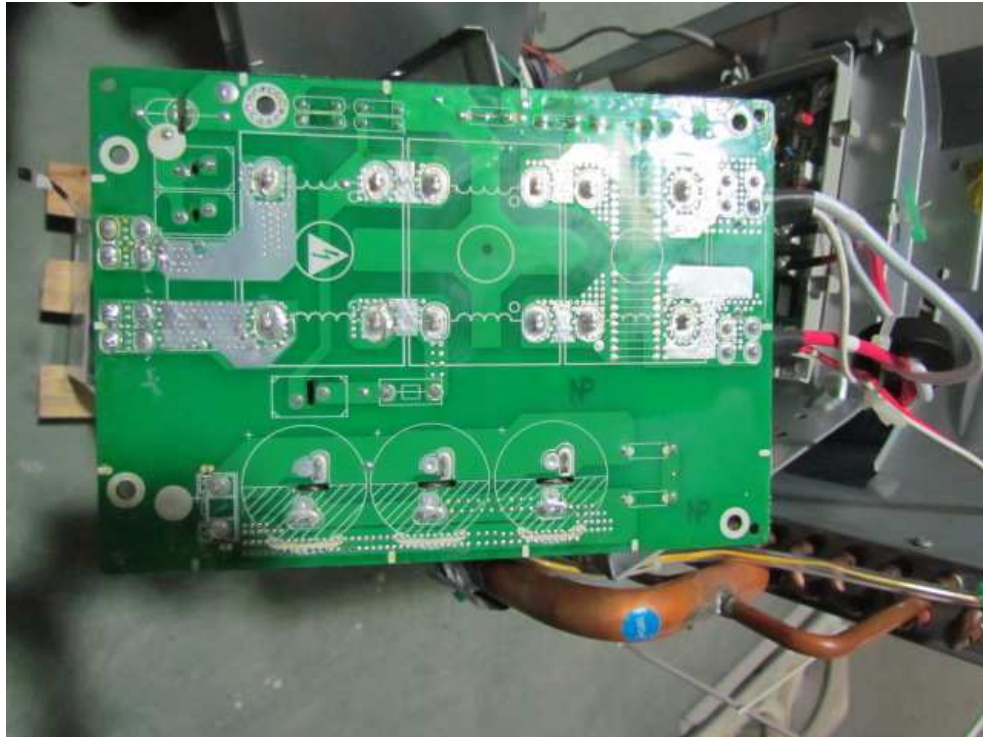


Compressor view

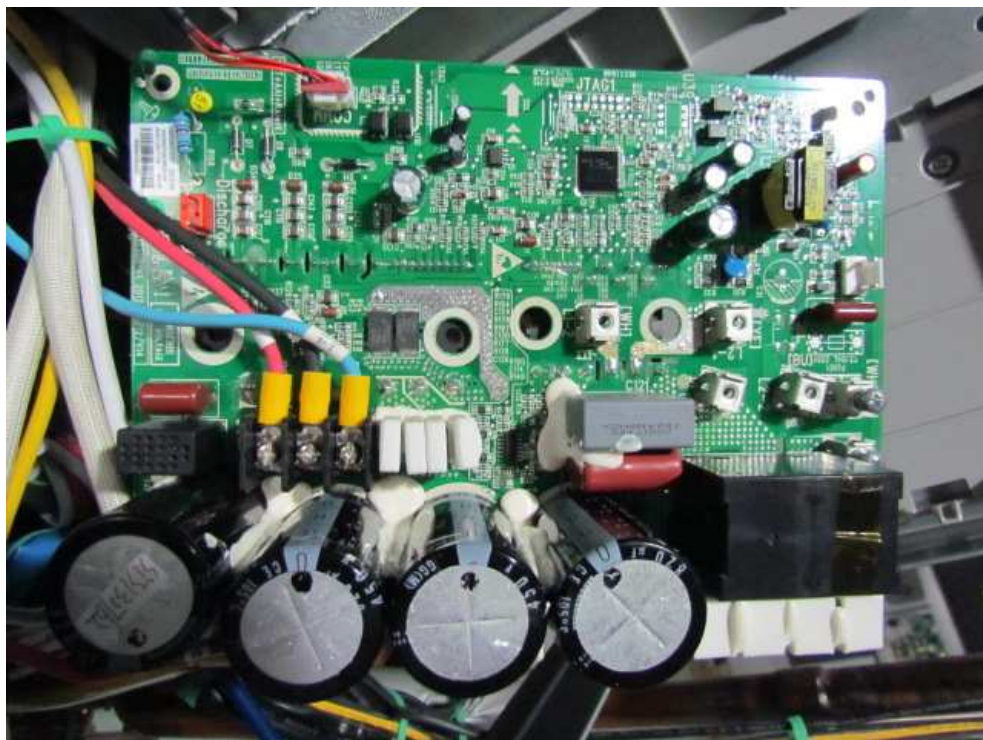


Front view for filter board





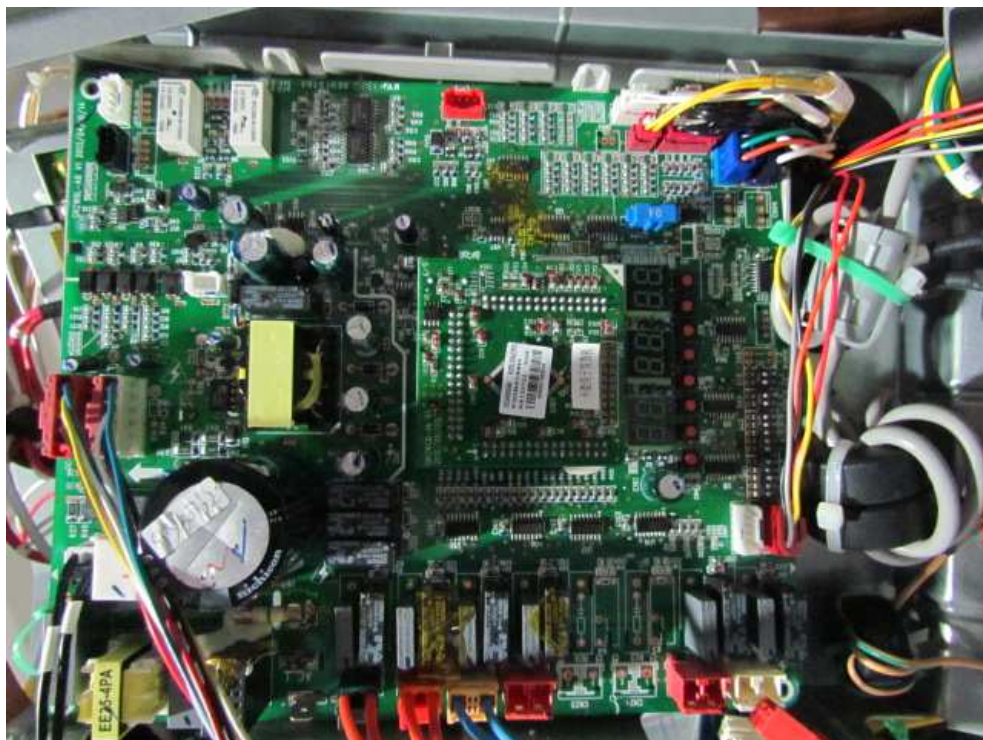
Rear view for filter board



Front view for driving board

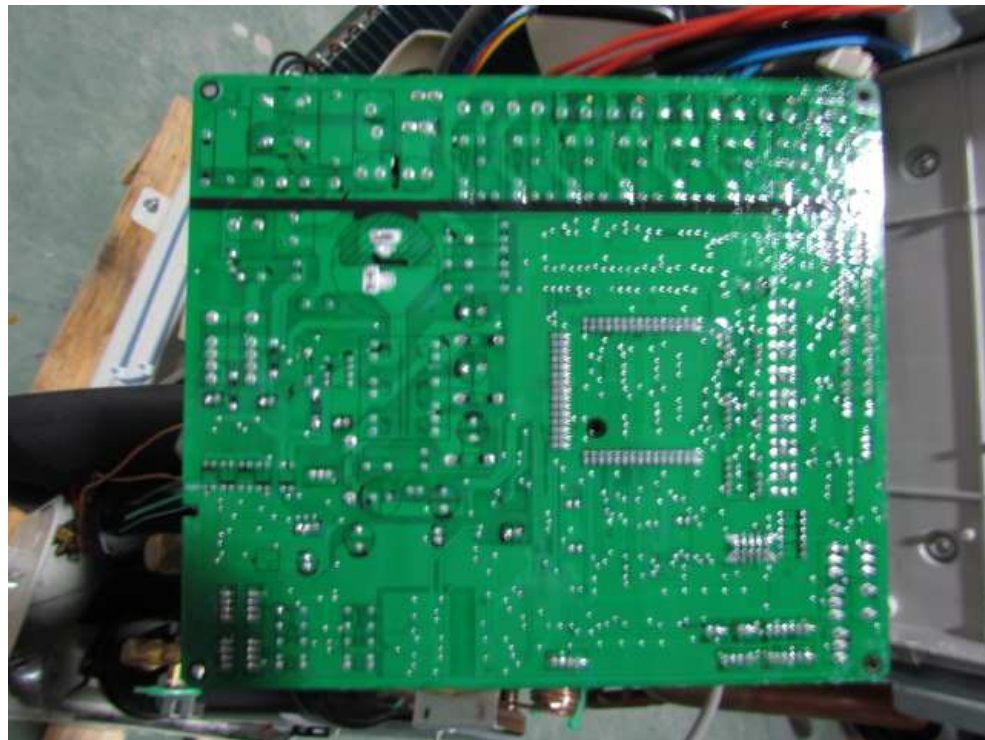


Rear view for driving board



Front view for main board





Rear view for main board

The following construction photos are for the ceiling cassette type indoor units except for especial note.

1. The indoor units of GMV-ND28T/A-T, GMV-ND36T/A-T, GMV-ND45T/A-T and GMV-ND50T/A-T are the same as each other except for the different capacity setting on main board.
2. The indoor units of GMV-ND56T/A-T, GMV-ND63T/A-T, GMV-ND71T/A-T and GMV-ND80T/A-T are the same as each other except for the different capacity setting on main board.
3. The indoor units of GMV-ND90T/A-T, GMV-ND100T/A-T, GMV-ND112T/A-T, GMV-ND125T/A-T and GMV-ND140T/A-T are the same as each other except for the different capacity setting on main board.
4. The above item 1 & 2 are the same as item 3 except product size, fan motor and different capacity setting on main board.



Front view



Side view

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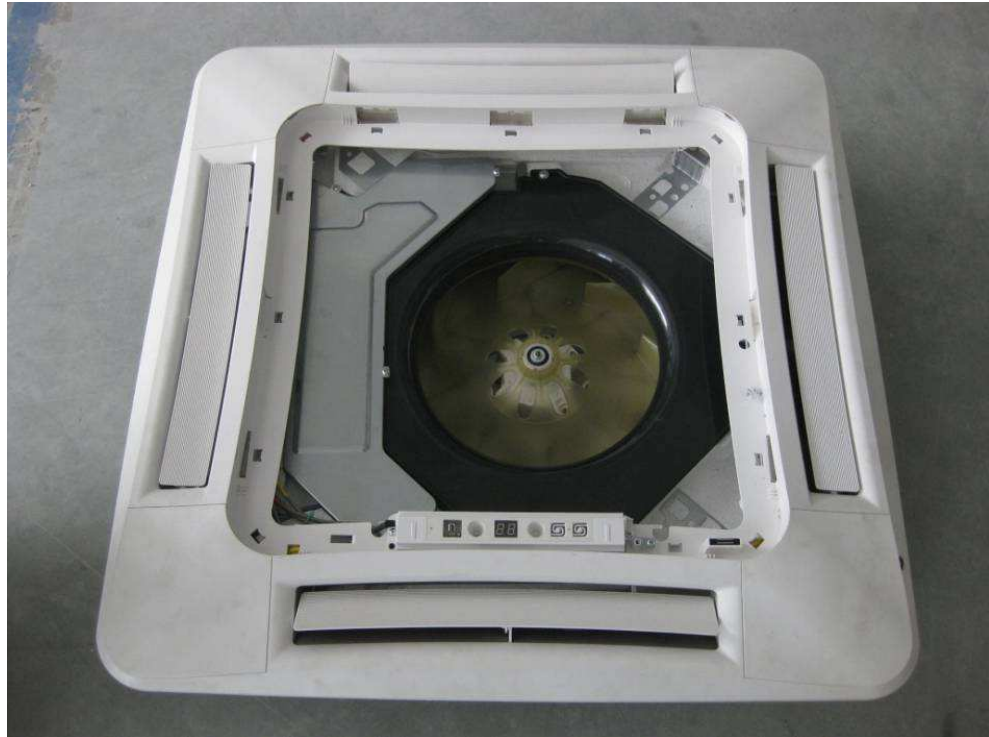


Side view



Control panel view





Removed air filter





Step motor location

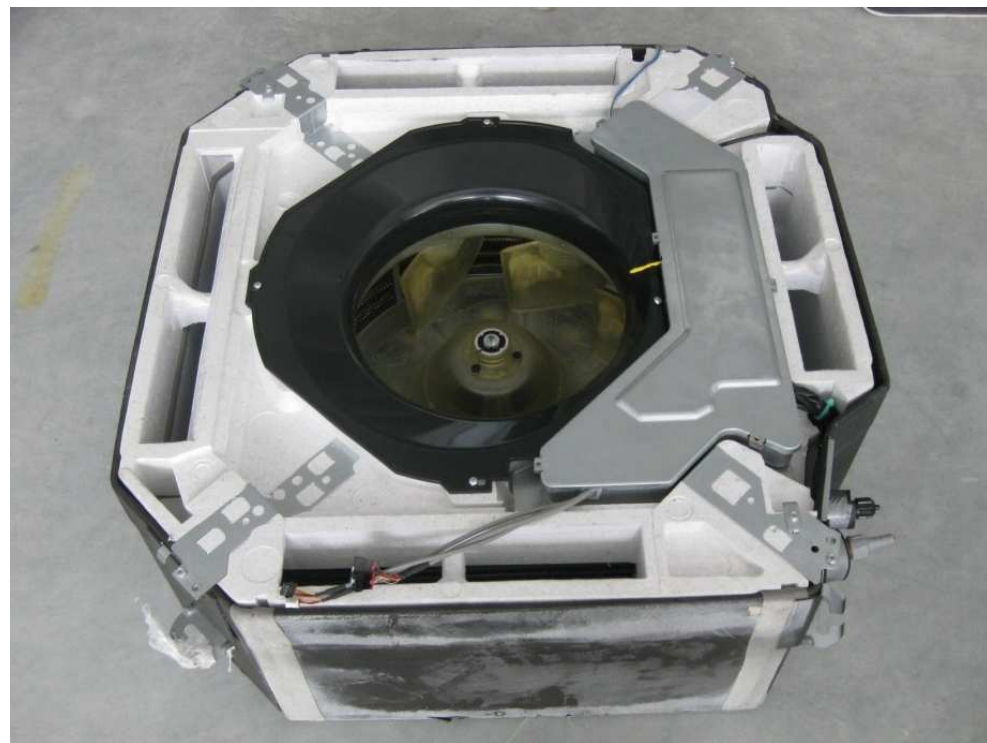


Step motor

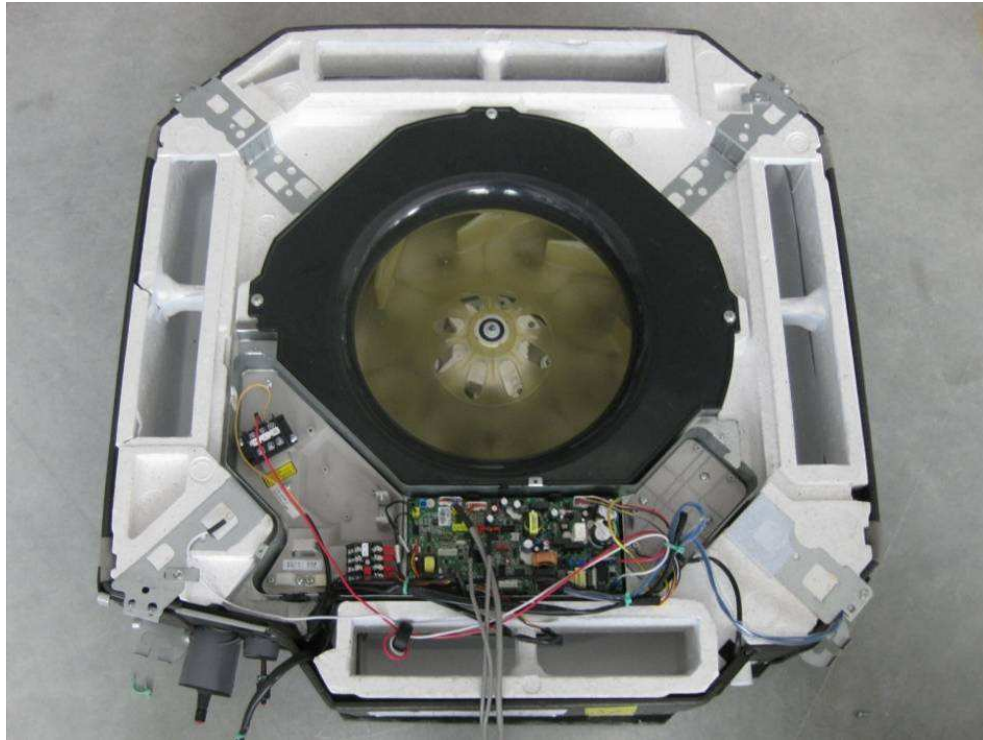




Display PCB



Electric box external view



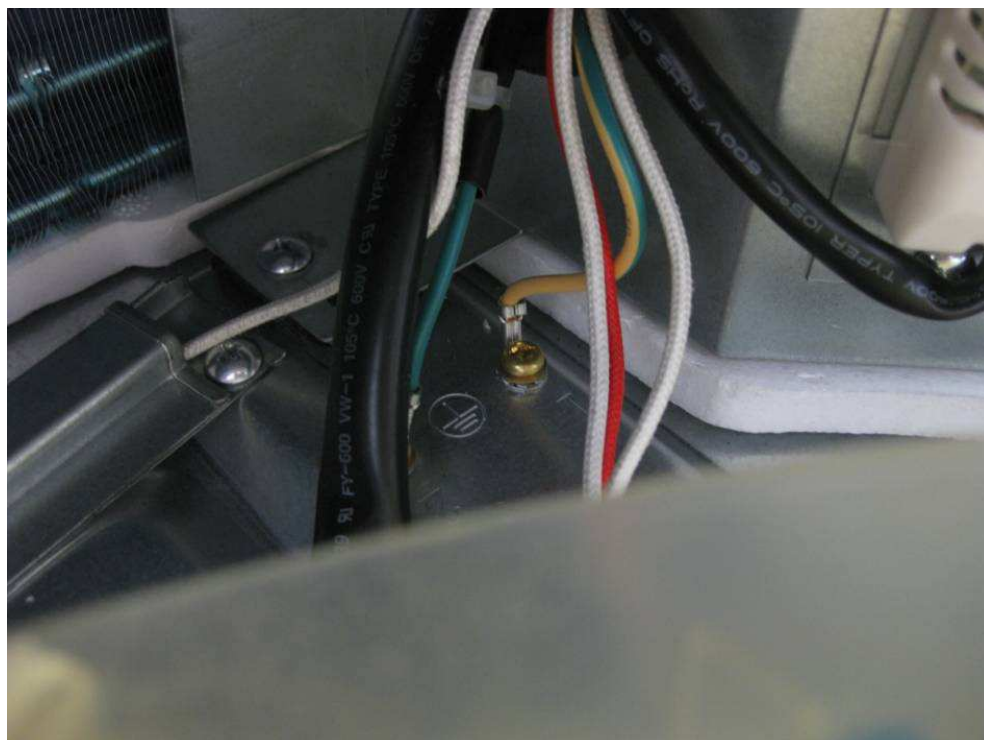
Electric box internal view



Cord anchorage view

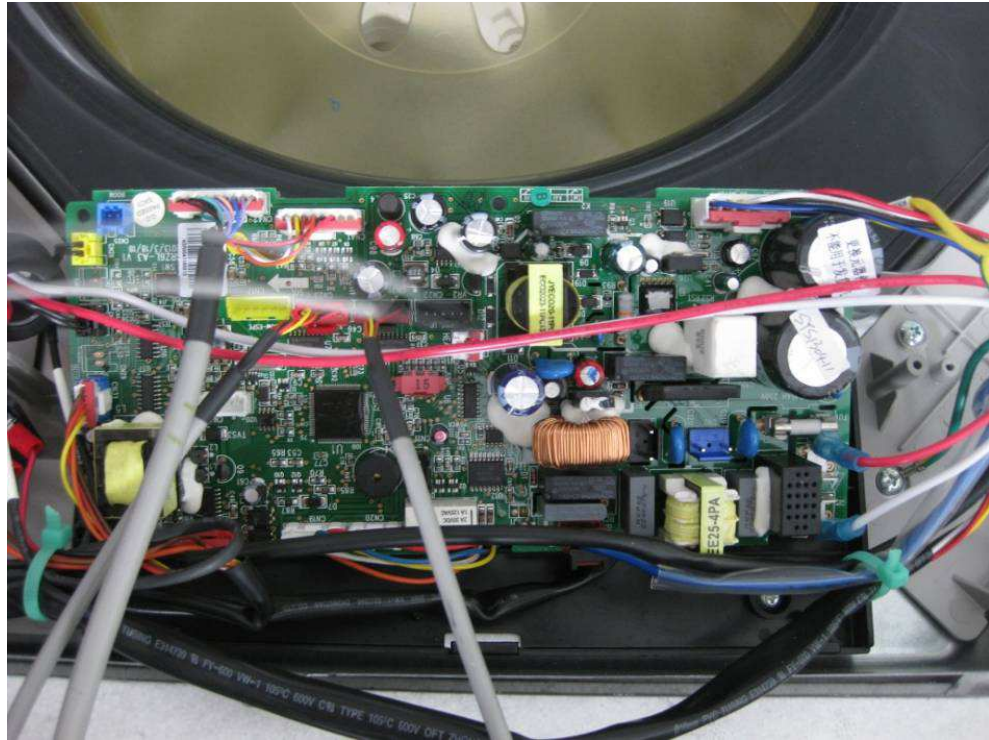


Terminal block view

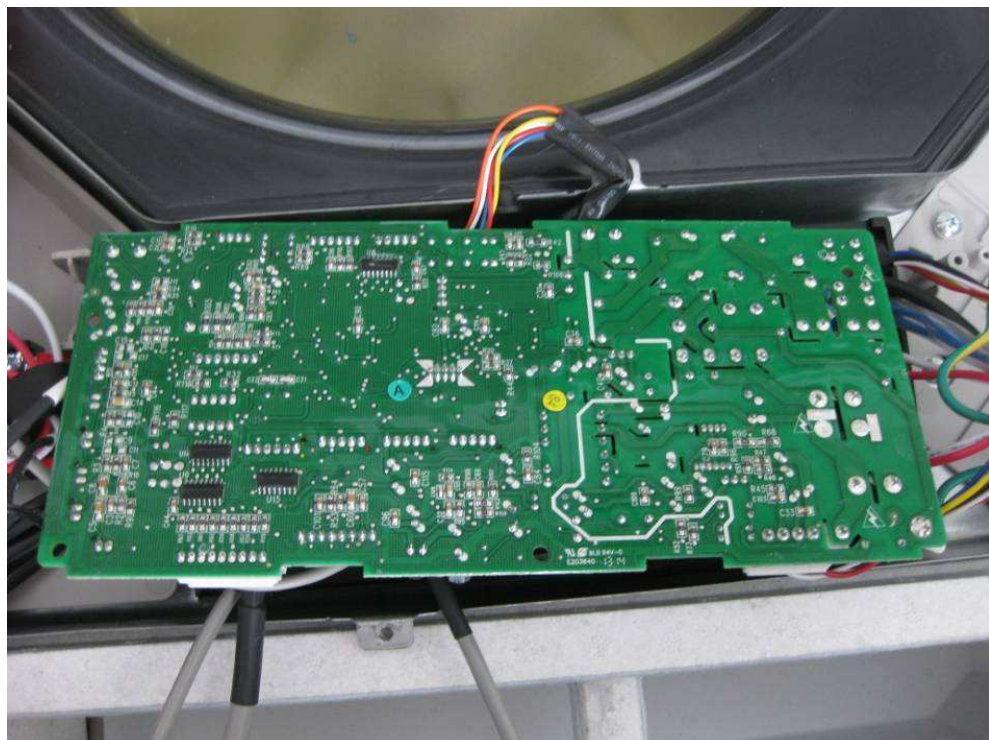


Earthing terminal





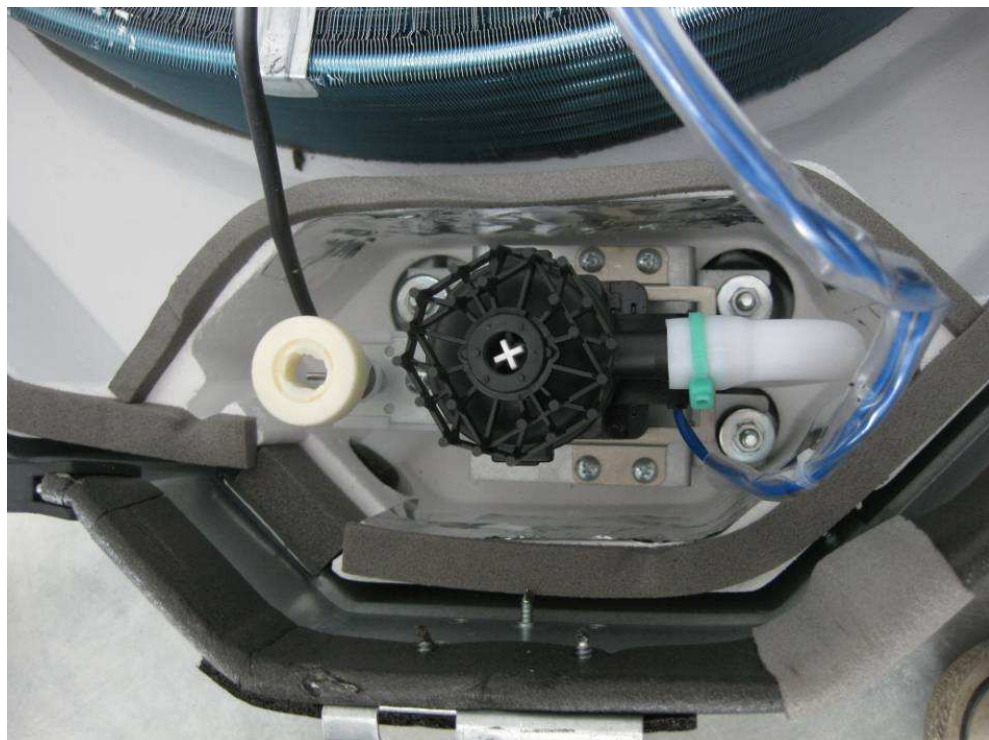
Front view for main board



Rear view for main board



Room temperature sensor



Water pump location





Water pump



Fan motor for:

GMV-ND28T/A-T, GMV-ND36T/A-T, GMV-ND45T/A-T, GMV-ND50T/A-T





Fan motor for:

GMV-ND56T/A-T, GMV-ND63T/A-T, GMV-ND71T/A-T, GMV-ND80T/A-T



Fan motor for:

GMV-ND90T/A-T, GMV-ND100T/A-T, GMV-ND112T/A-T, GMV-ND125T/A-T, GMV-ND140T/A-T

The following construction photos are for the ducted type (standard static pressure) indoor units except for especial note.

1. The indoor units of GMV-ND22PLS/A-T, GMV-ND25PLS/A-T, GMV-ND28PLS/A-T, GMV-ND32PLS/A-T, GMV-ND36PLS/A-T, GMV-ND40PLS/A-T, GMV-ND45PLS/A-T, GMV-ND50PLS/A-T, GMV-ND56PLS/A-T, GMV-ND63PLS/A-T, GMV-ND71PLS/A-T and GMV-ND80PLS/A-T are the same as each other except for the different capacity setting on main board.
2. The indoor units of GMV-ND90PLS/A-T, GMV-ND100PLS/A-T, GMV-ND112PLS/A-T, GMV-ND125PLS/A-T and GMV-ND140PLS/A-T are the same as each other except for the different capacity setting on main board.
3. The above item 1 is the same as item 2 except product size, fan motor and different capacity setting on main board.



Top view



Top view for:

GMV-ND22PLS/A-T, GMV-ND25PLS/A-T, GMV-ND28PLS/A-T, GMV-ND32PLS/A-T, GMV-ND36PLS/A-T, GMV-ND40PLS/A-T, GMV-ND45PLS/A-T, GMV-ND50PLS/A-T, GMV-ND56PLS/A-T, GMV-ND63PLS/A-T, GMV-ND71PLS/A-T, GMV-ND80PLS/A-T;



Top view for:

GMV-ND90PLS/A-T, GMV-ND100PLS/A-T, GMV-ND112PLS/A-T, GMV-ND125PLS/A-T,

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GMV-ND140PLS/A-T



Front view (removed air filter)



Electric box internal view models:

GMV-ND22PLS/A-T, GMV-ND25PLS/A-T, GMV-ND28PLS/A-T, GMV-ND32PLS/A-T, GMV-ND36PLS/A-T,  
GMV-ND40PLS/A-T, GMV-ND45PLS/A-T, GMV-ND50PLS/A-T, GMV-ND56PLS/A-T, GMV-ND63PLS/A-T,  
GMV-ND71PLS/A-T, GMV-ND80PLS/A-T



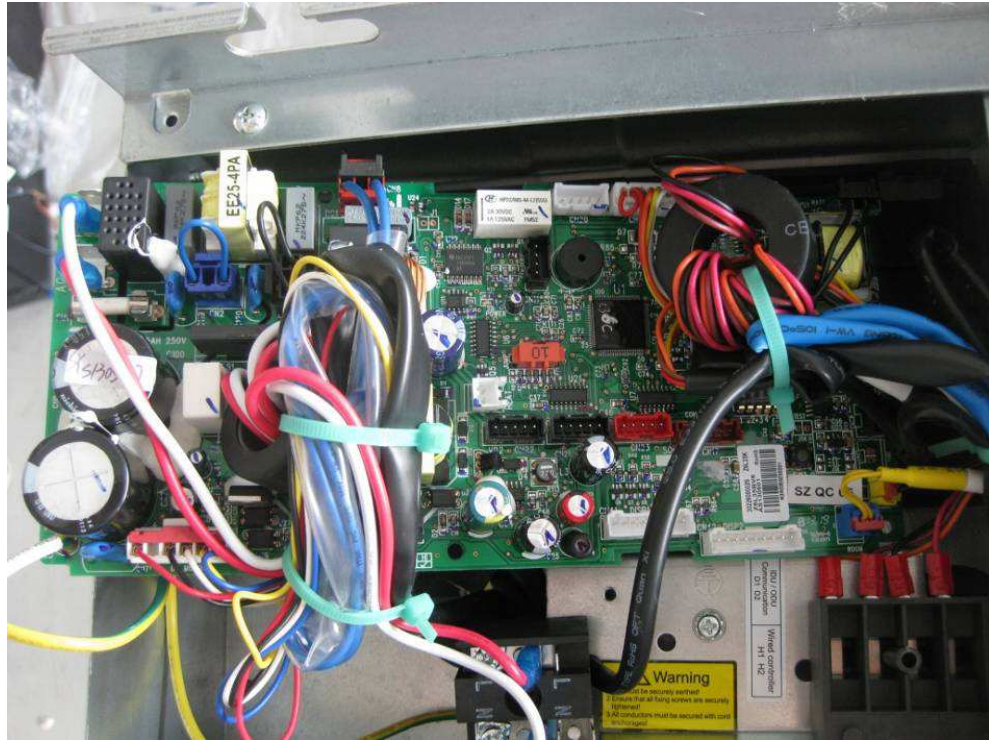
Electric box internal view models:

GMV-ND90PLS/A-T, GMV-ND100PLS/A-T, GMV-ND112PLS/A-T, GMV-ND125PLS/A-T,  
GMV-ND140PLS/A-T

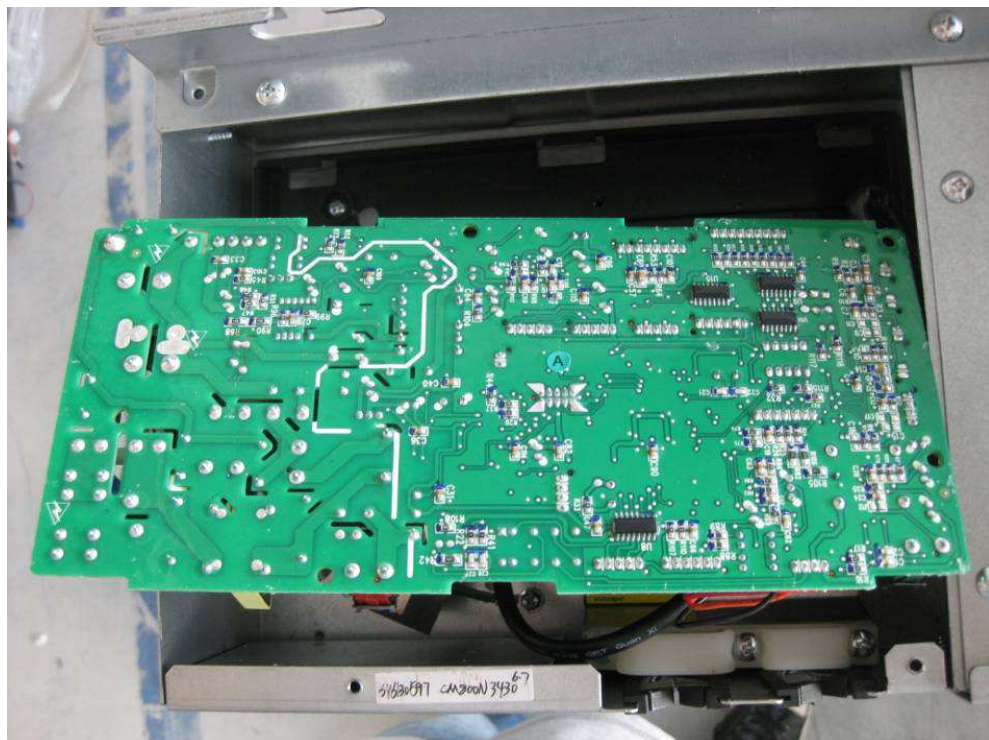


Cord anchorage and earthing terminal view



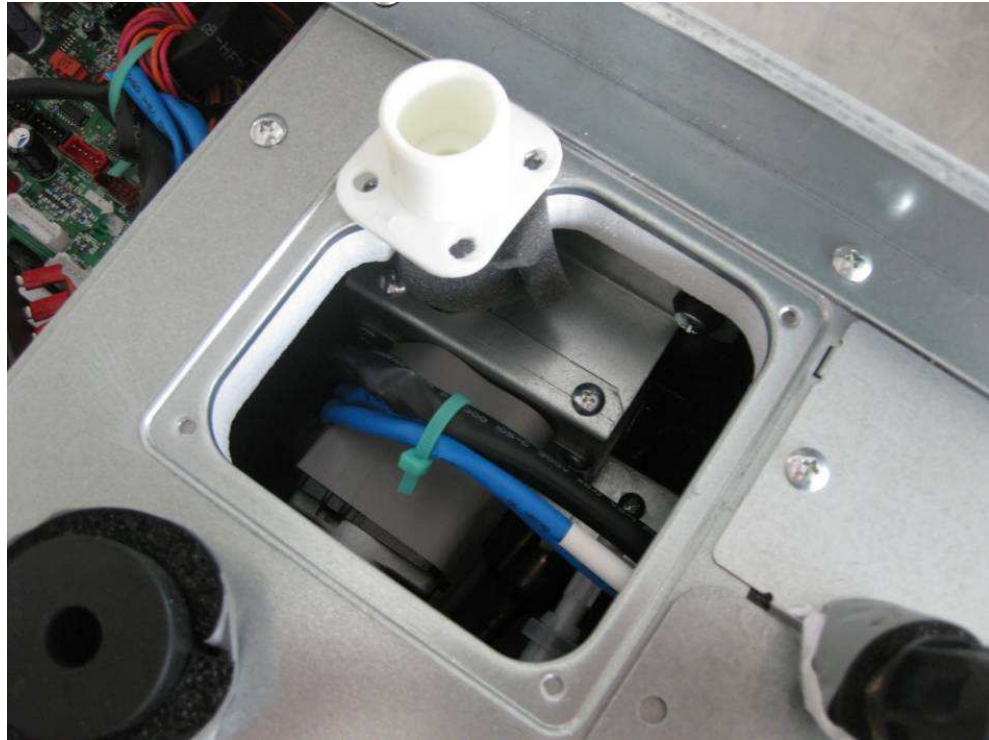


Front view for main board



Back view for main board





Water pump location



Water pump



Fan motor for:

GMV-ND22PLS/A-T, GMV-ND25PLS/A-T, GMV-ND28PLS/A-T, GMV-ND32PLS/A-T, GMV-ND36PLS/A-T, GMV-ND40PLS/A-T, GMV-ND45PLS/A-T, GMV-ND50PLS/A-T, GMV-ND56PLS/A-T, GMV-ND63PLS/A-T, GMV-ND71PLS/A-T, GMV-ND80PLS/A-T



Fan motor for:

GMV-ND90PLS/A-T, GMV-ND100PLS/A-T, GMV-ND112PLS/A-T, GMV-ND125PLS/A-T, GMV-ND140PLS/A-T

The following construction photos are for the ducted type (Low static pressure) indoor units except for especial note.

The indoor units GMV-ND22PL/B-T, GMV-ND25PL/B-T, GMV-ND28PL/B-T, GMV-ND32PL/B-T, GMV-ND36PL/B-T, GMV-ND40PL/B-T, GMV-ND45PL/B-T, GMV-ND50PL/B-T, GMV-ND56PL/B-T, GMV-ND63PL/B-T and GMV-ND72PL/B-T are the same as each other except for the different capacity setting on main board.

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Front view



Back view

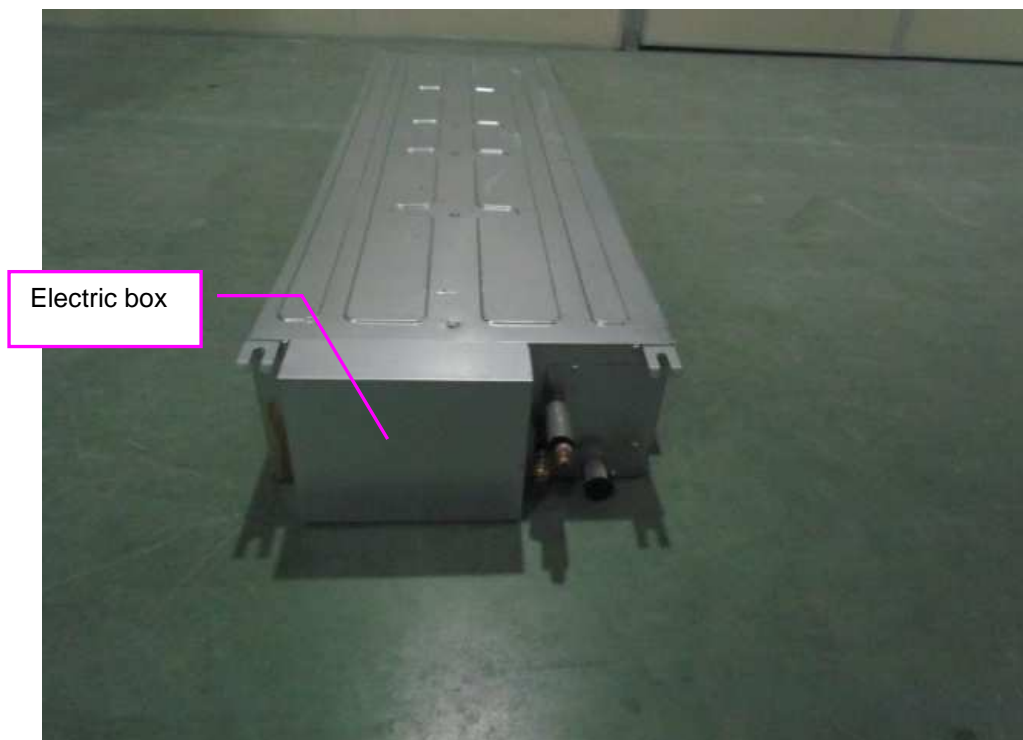
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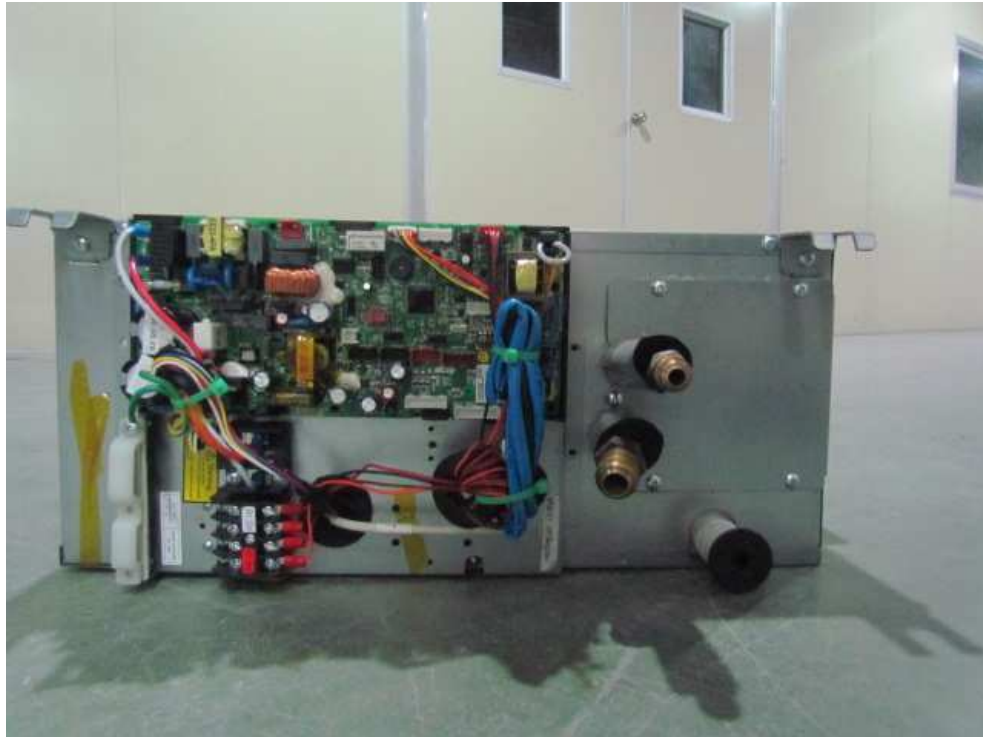


Side view



Side view





Electric box internal view



Cord anchorage and terminal view

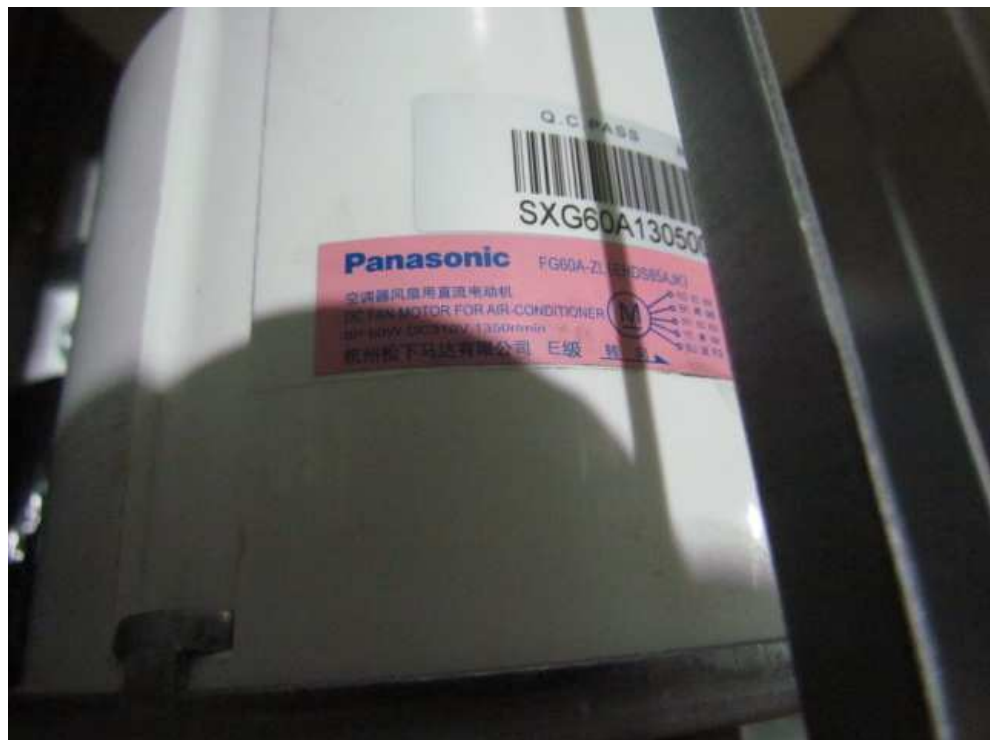


Front view for main board



Rear view for main board





Fan motor view

The following construction photos are for the wall mounting type indoor units except for especial note.

1. The indoor units of GMV-N22G/A3A-K and GMV-N28G/A3A-K are the same as each other except for the different capacity setting on main board.
2. The indoor units of GMV-N36G/A3A-K, GMV-N45G/A3A-K and GMV-N50G/A3A-K are the same as each other except for the different capacity setting on main board.
3. The indoor units of GMV-N56G/A3A-K, GMV-N63G/A3A-K and GMV-N71G/A3A-K are the same as each other except for the different capacity setting on main board.
4. The above item 1, 2 and 3 are identical except product size, fan motor and main board and evaporator.

Following photos for models GMV-N22G/A3A-K and GMV-N28G/A3A-K:



Front side and top view (location of marking plate)



Rear and side view



Display panel view



Display PCB board

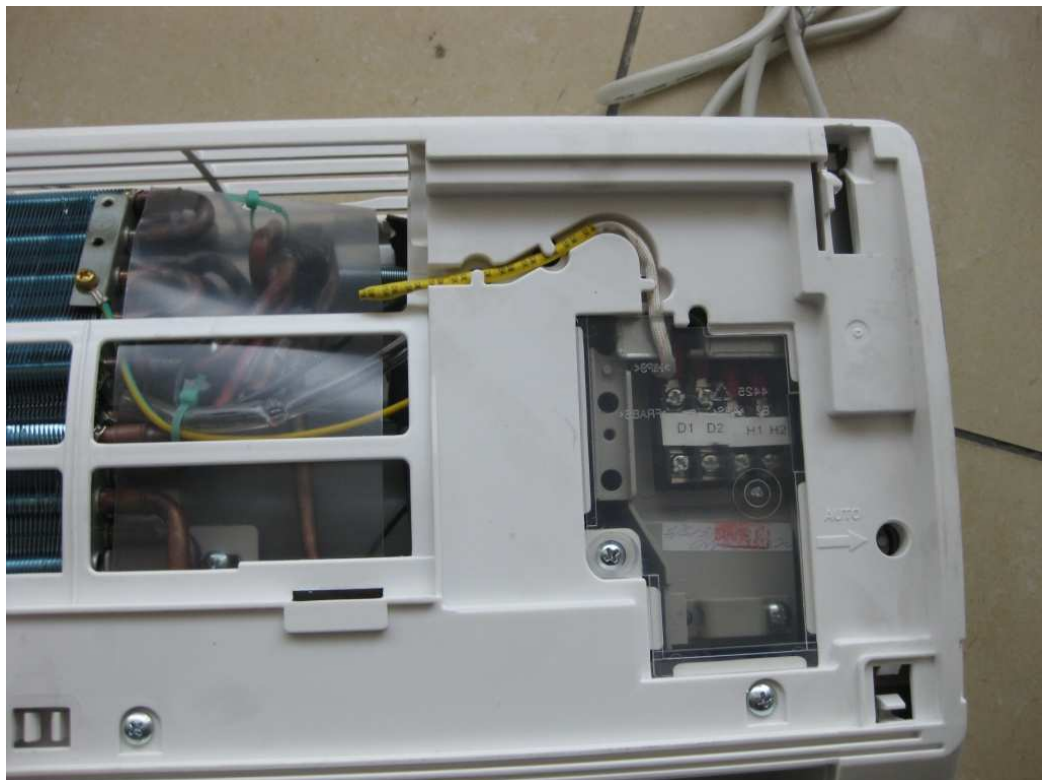


Display PCB board





Open top cover view



Internal view

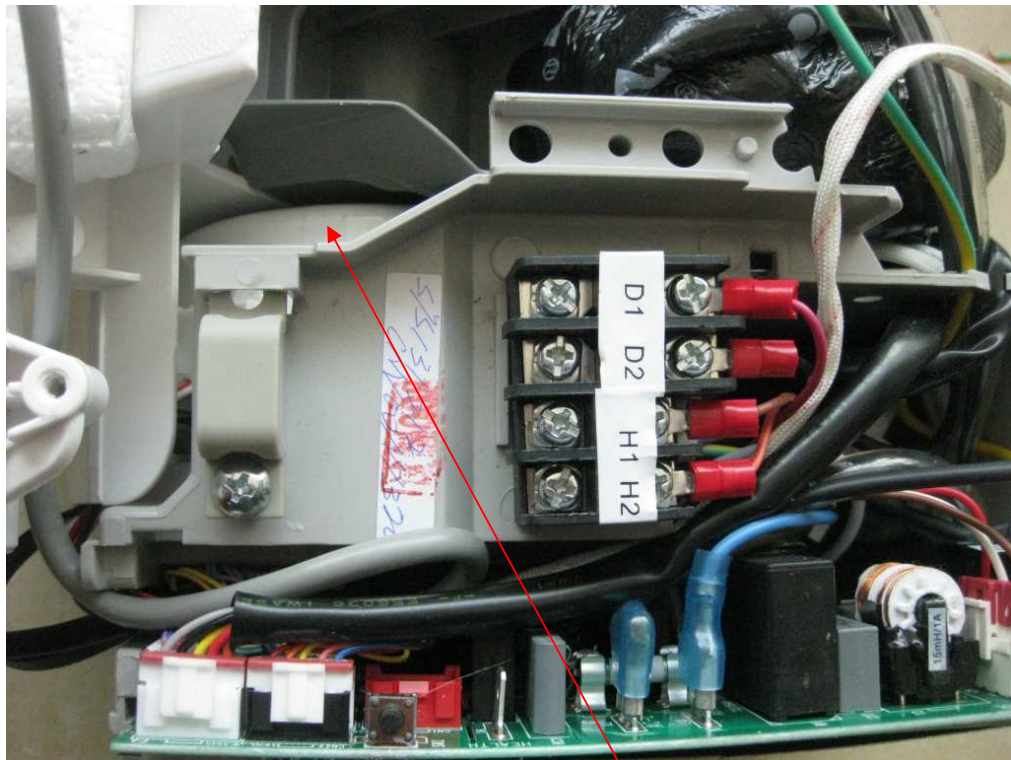




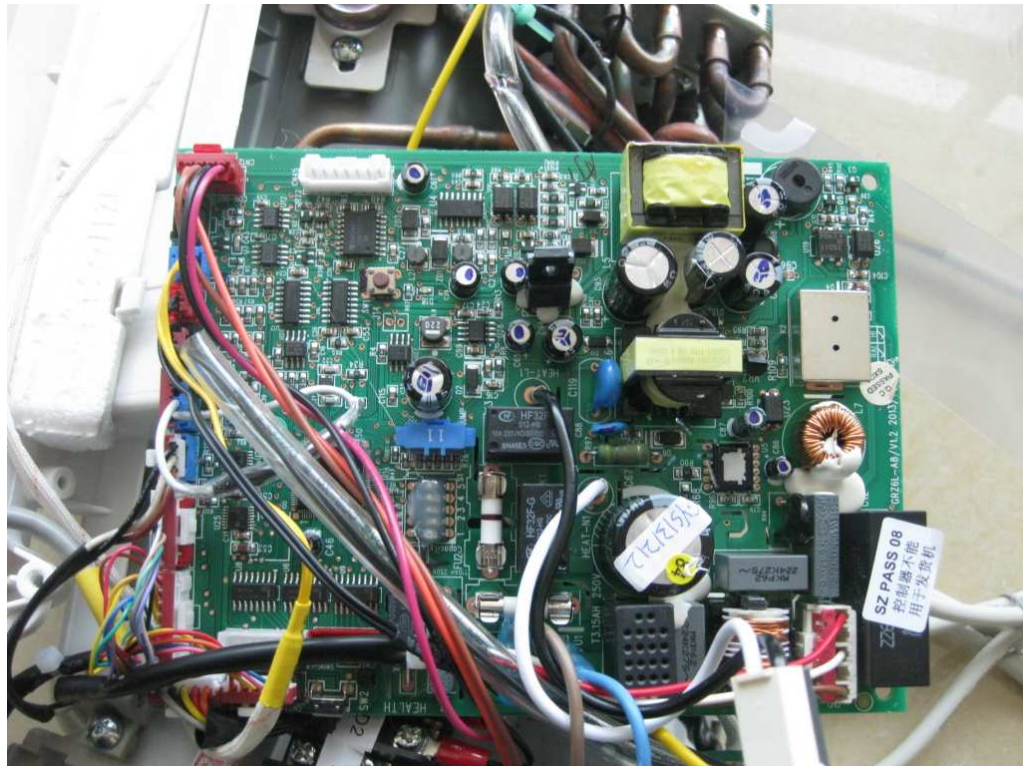
Internal view



Earthing marking

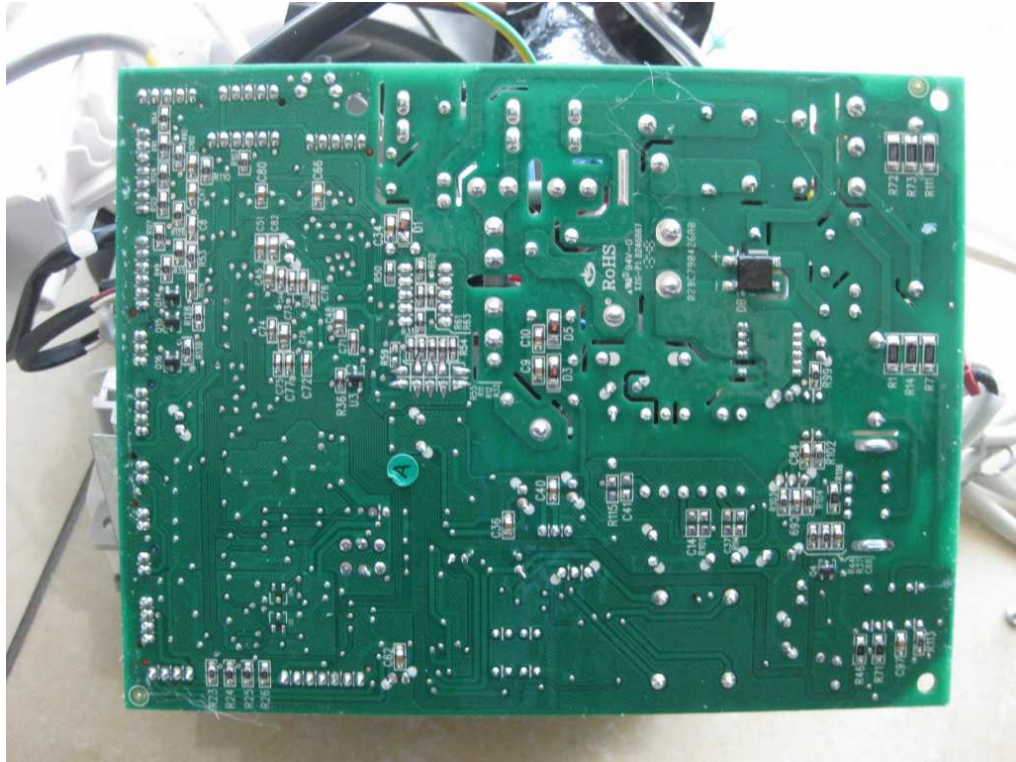


Internal view (location of fan motor)



Main PCB board





Main PCB board

Following photos for models GMV-N36G/A3A-K, GMV-N45G/A3A-K and GMV-N50G/A3A-K:



Front view



Open top cover view



Internal view



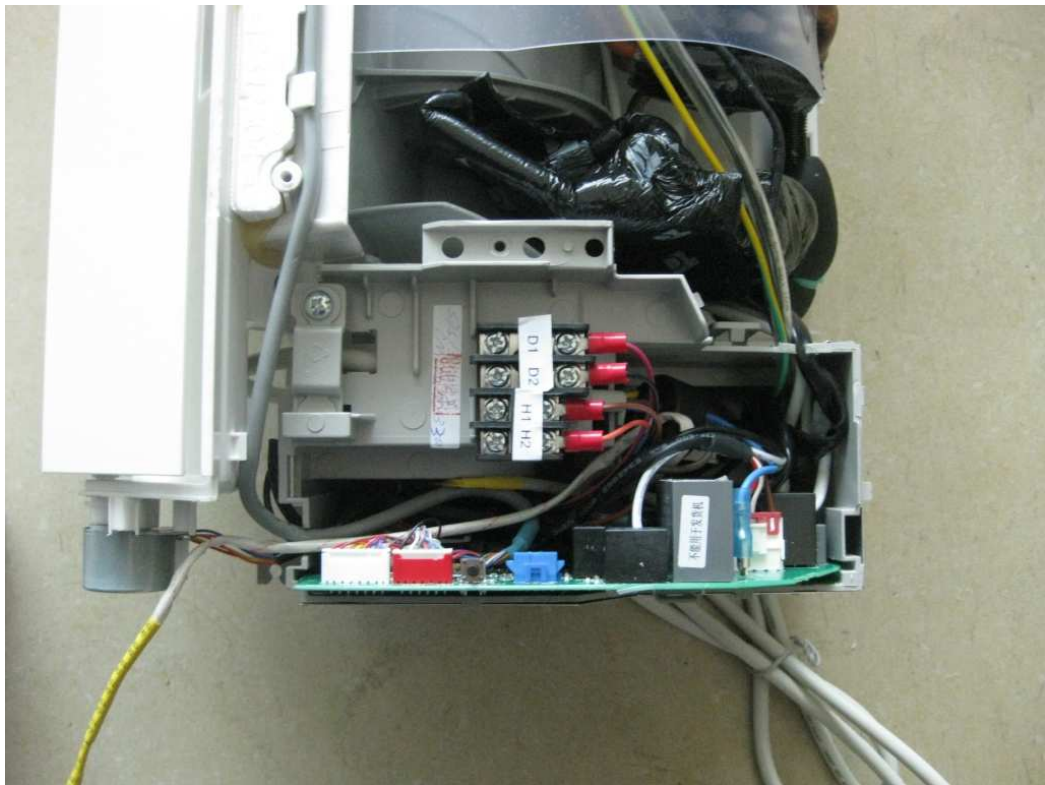


Internal view



Internal view

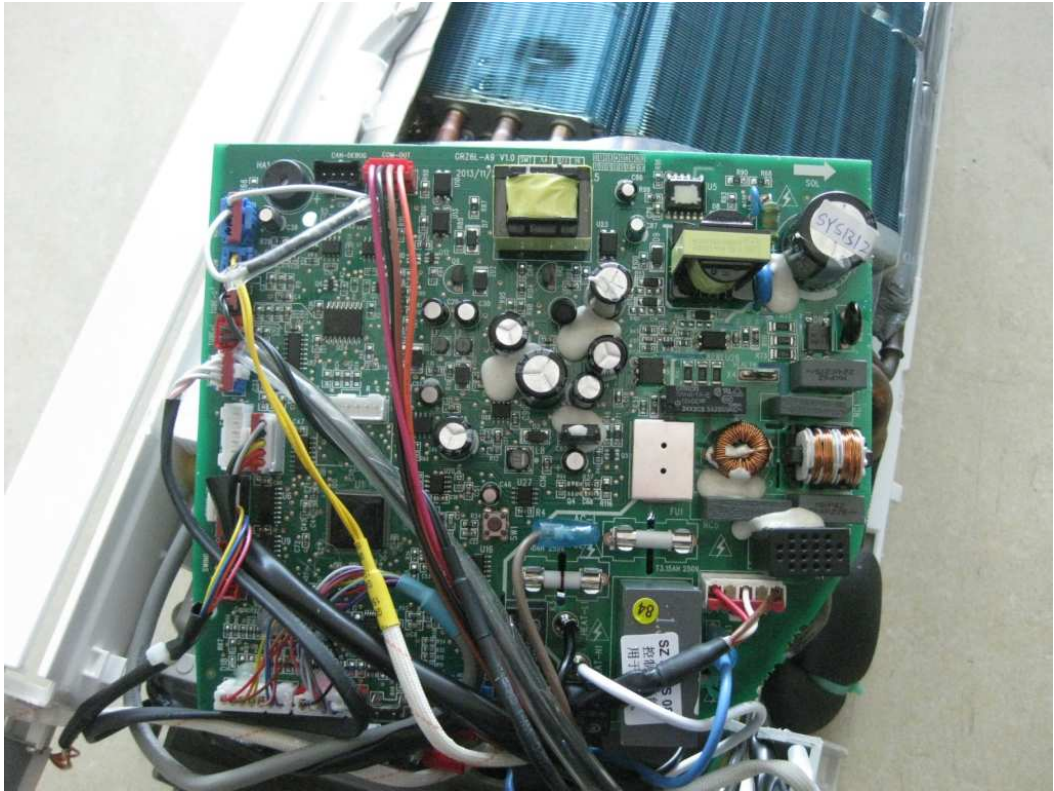




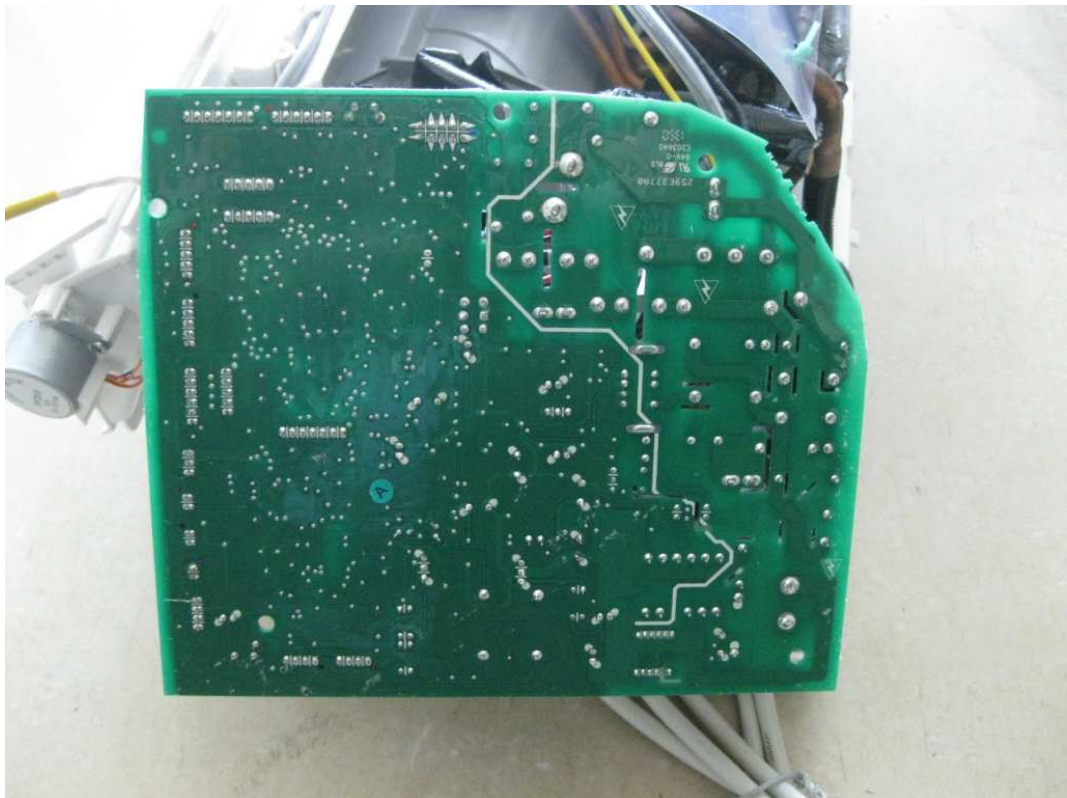
Internal view



Cord anchorage



Main PCB board



Main PCB board



Following photos for models GMV-N56G/A3A-K, GMV-N63G/A3A-K and GMV-N71G/A3A-K:



Front view

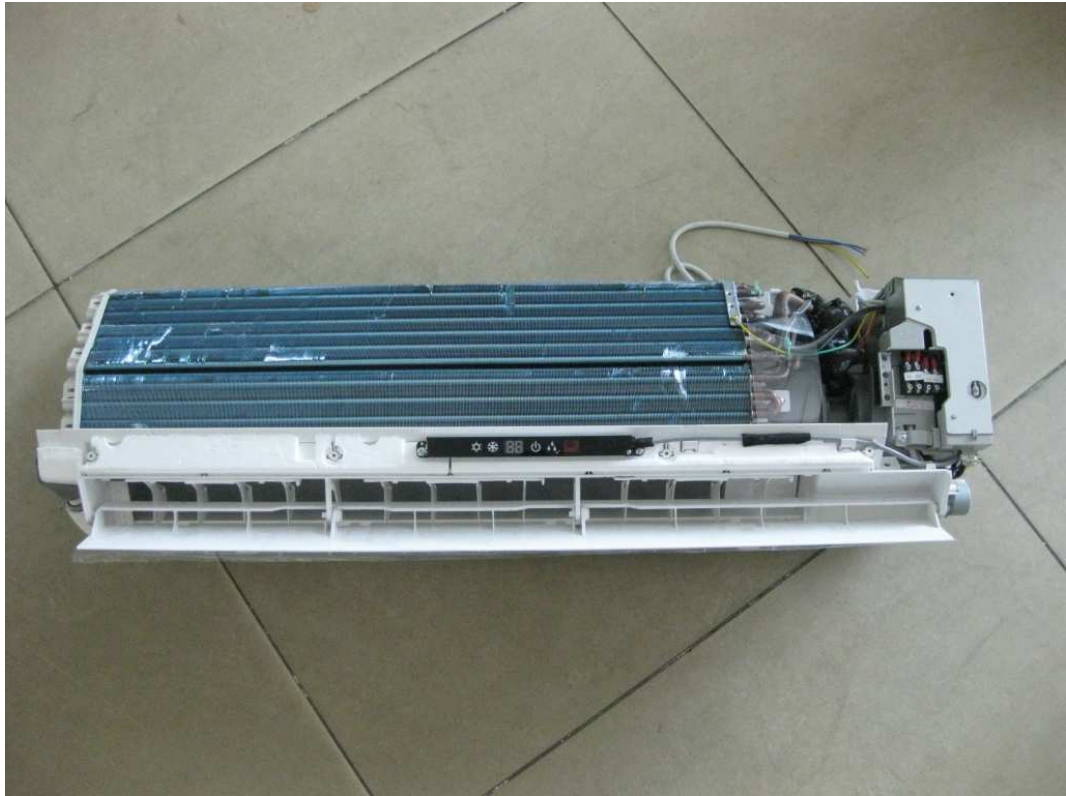


Open top cover view

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Internal view



Internal view

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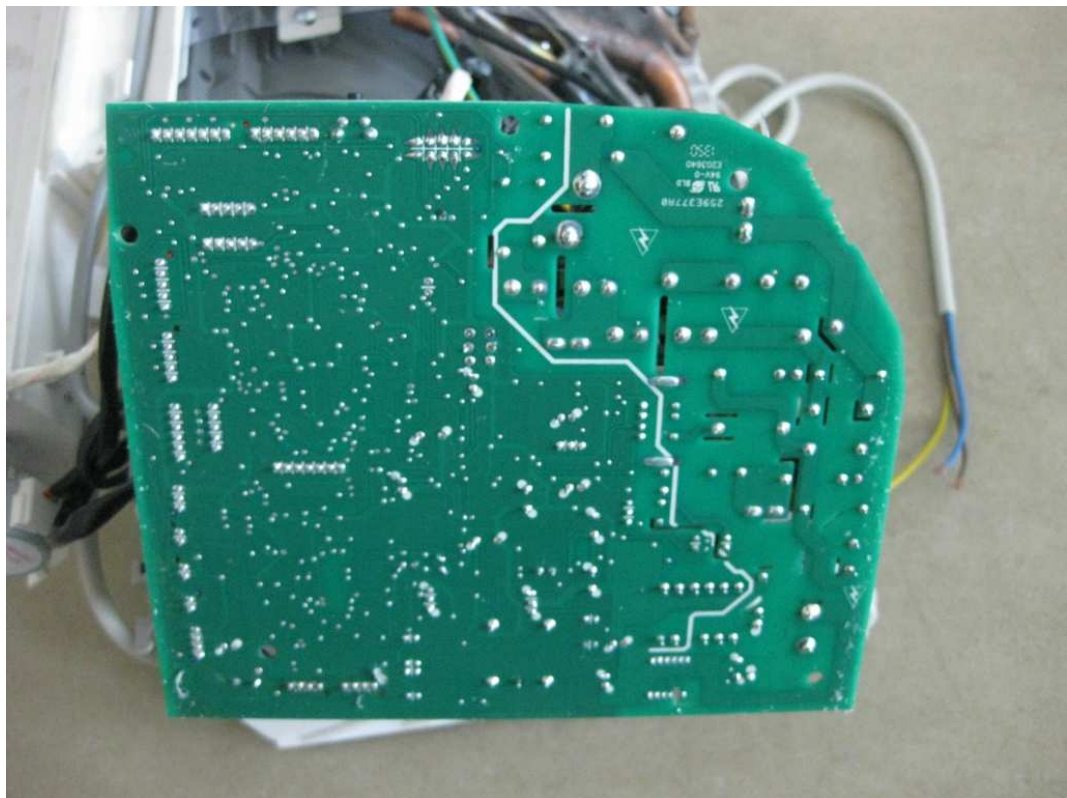
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Main PCB board



Main PCB board

TRF No. IEC60335\_2\_40J

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The following photos are for indoor units GMV-ND140L/A-T and GMV-ND100L/A-T:



Front view



Back view

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Side view (left)



Side view (right)



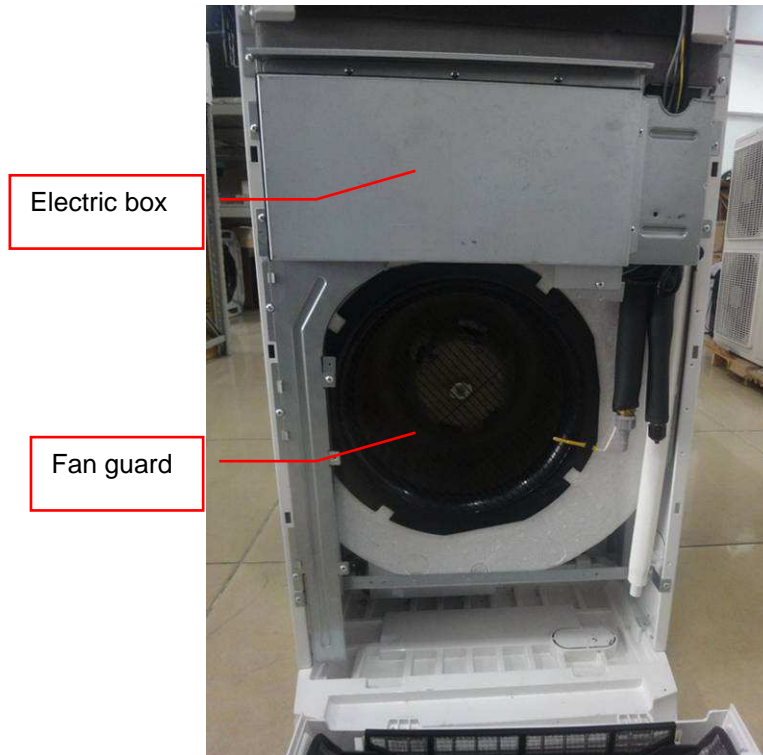
Control panel



Air outlet



Removed front cover



Internal view



Removed electric box cover



Internal view





Electric box internal view



Cord anchorage view



External view of electric box for fan motor drive board



Internal view of electric box for fan motor drive board



Front view of fan motor drive board



Back view of fan motor drive board

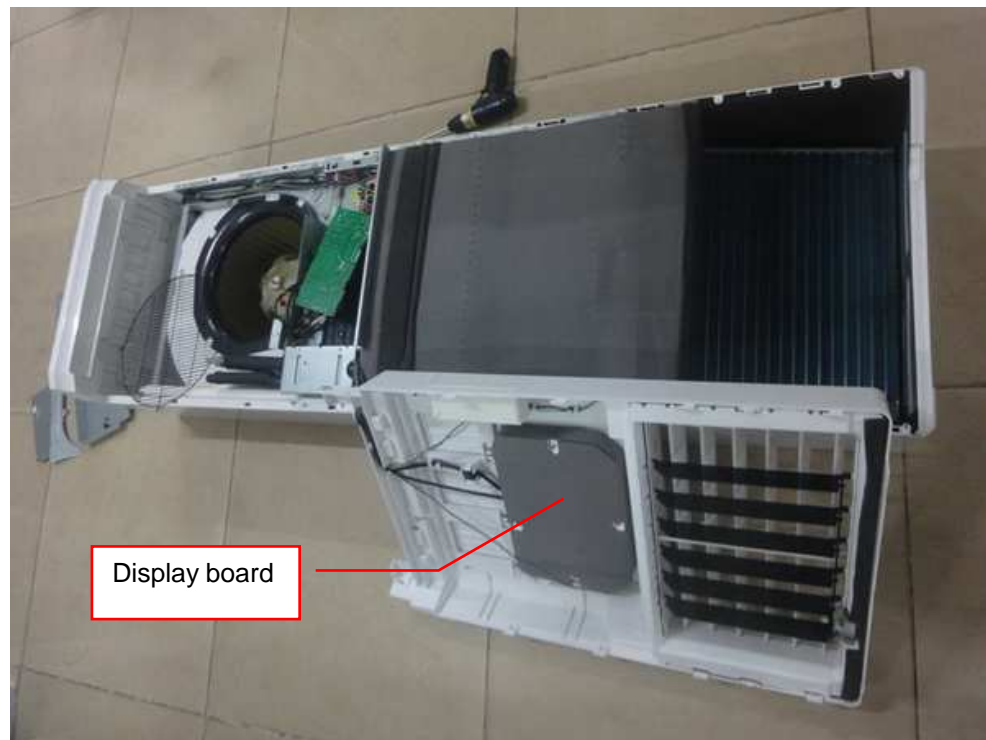




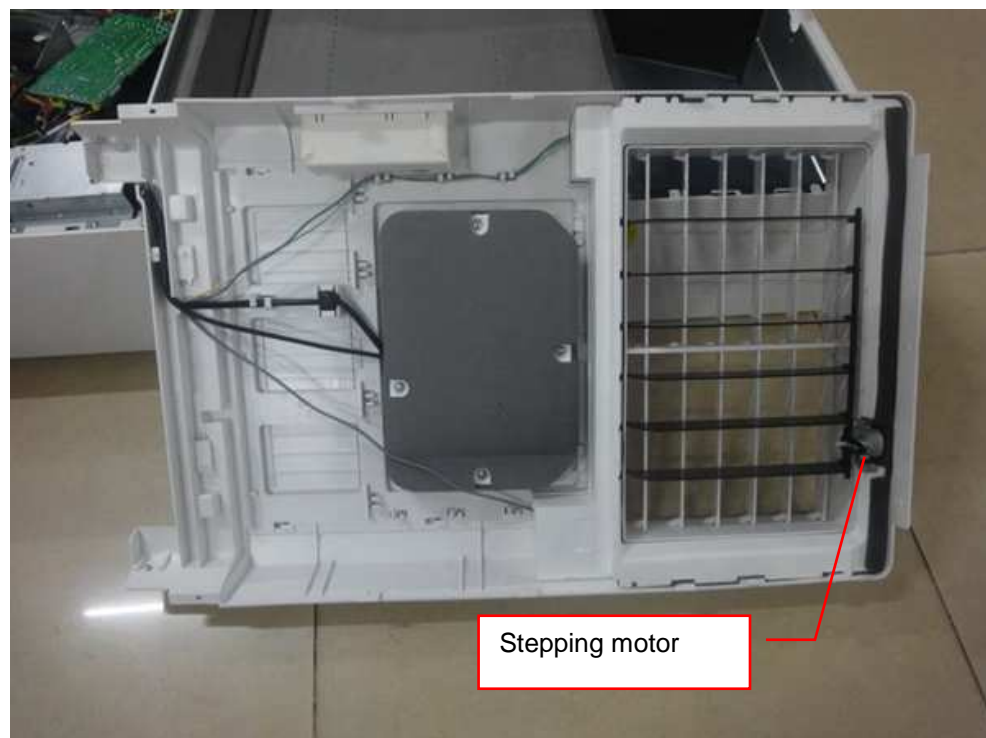
Front view of fan motor main board



Back view of fan motor main board

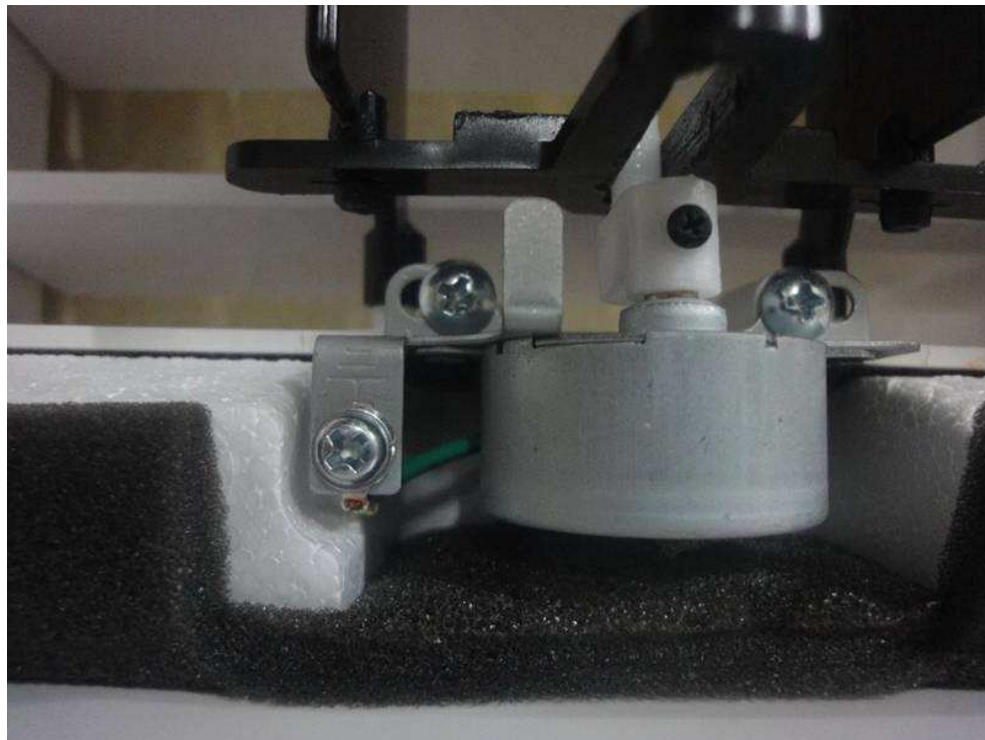


Internal view



Internal view





Earthing terminal on stepping motor



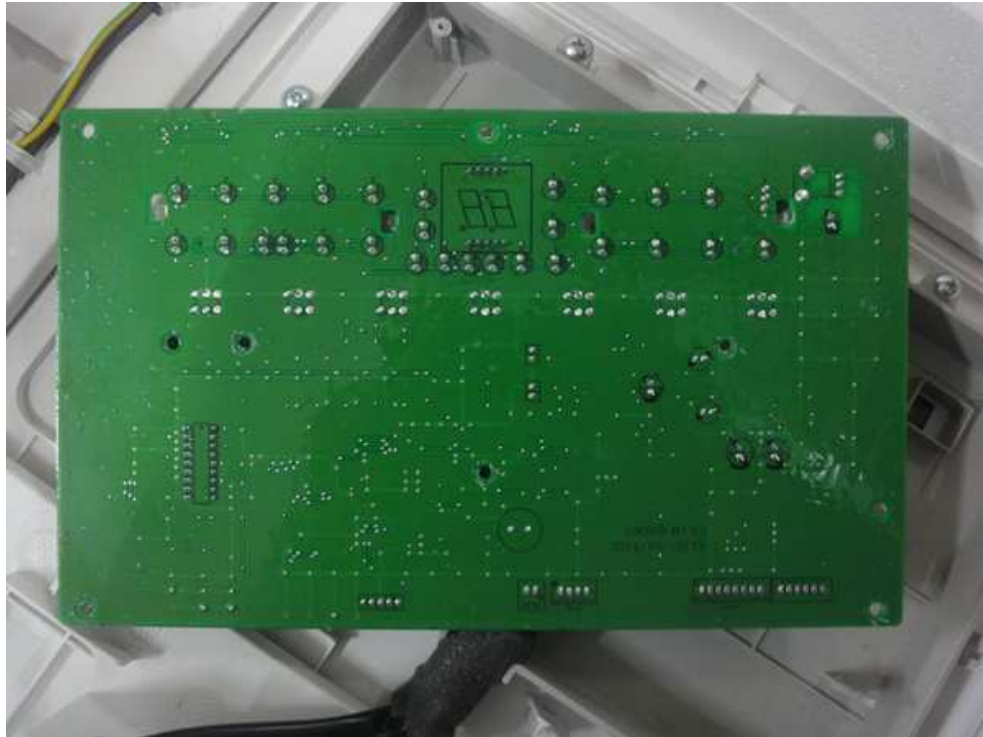
Stepping motor marking



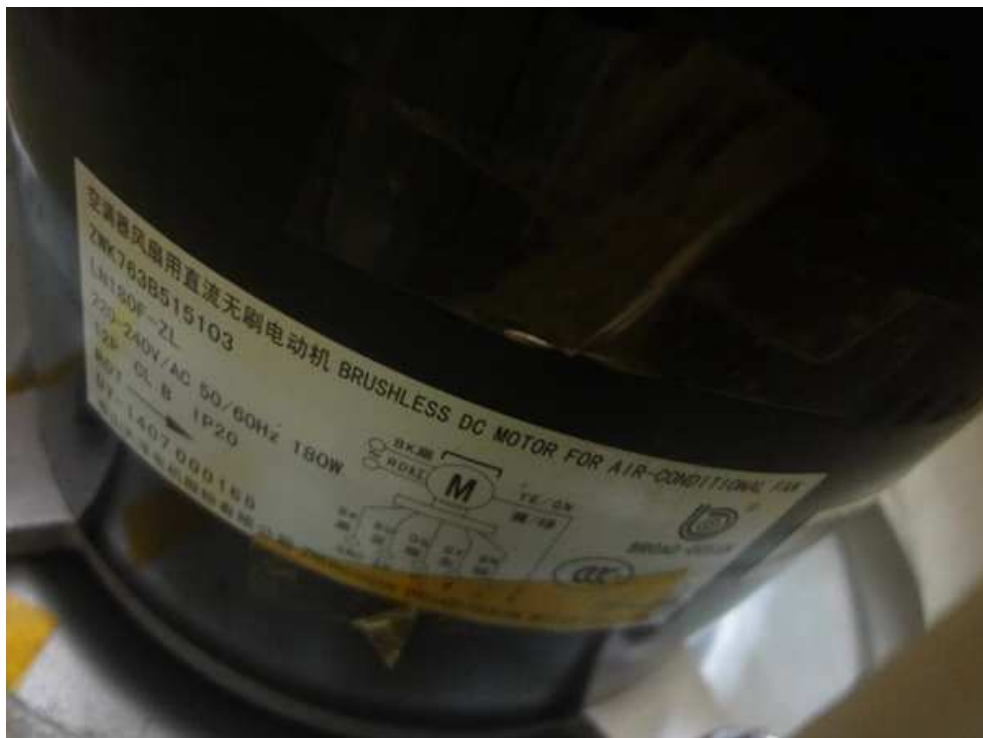
Display PCB location



Front view of display PCB



Back view of display PCB



Fan motor view

IEC60335_2_40J - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict

#### Appendix to TRF no. IEC60335\_2\_40J

<b>ATTACHMENT TO TEST REPORT IEC 60335-2-40</b> <b>EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES</b> Part-2-40: Particular requirements for electrical heat pumps, air conditioners and dehumidifiers	
<b>Differences according to :</b>	EN 60335-2-40:2003 (incl. Corr.:2006) + A11:2004 + A12:2005 + A1:2006 + A2:2009 + A13:2012 (incl. Corr.:2013) EN 60335-1:2012 + A11:2014 (incl. Corr.:2014)
<b>Attachment Form No. :</b>	EU_GD_IEC60335_2_40J
<b>Attachment Originator :</b>	VDE
<b>Master Attachment :</b>	2014-06
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CENELEC COMMON MODIFICATIONS			
6.1	Delete "class 0" and "class 01"		P
7.1	Single-phase appliances to be connected to the supply mains: 230 V covered		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.		P
	An indication that the device has been operated is given by:		----
	- a tactile feedback, or		P
	- an audible and visual feedback		P
7.12	The instructions include the substance of the following:		----
	- 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



IEC60335_2_40J - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
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
7.12.Z1	The specific instructions related to the safe operation of this appliance is collated together in the front section of the user instructions		P
	The height of the characters, measured on the capital letters, is at least 3 mm		P
	These instructions are also available in an alternative format, e.g. on a website		P
8.1.1	Also test probe 18 of EN 61032 is applied		P
	The appliance being in every possible position, except that appliances normally used on the floor and having a mass exceeding 40 kg are not tilted. (EN 60335-1:2012/AC:2014)		P
	The force on the probe in the straight position is increased to 10 N when probe 18 is used		P
	When using test probe 18 the appliance is fully assembled as in normal use without any parts removed, and		P
	parts intended to be removed for user maintenance are also not removed		P
8.2	Compliance is checked by applying the test probes of EN 61032		P
	For built-in appliances and fixed appliances, the test probe B and probe 18 of EN 61032 are applied only after installation		N/A
11.8	Footnotes to "External enclosure of motor-operated appliances" to be taken into account		P
13.2	Leakage current measurements (EN 60335-2-40)	(See appended table)	P
15.1.2	Appliances with an automatic cord reel tested with the cord in the most unfavourable position so that the reeling of the wet cord may affect electrical insulation during operation, the cord not being dried before reeling		N/A
15.2	Drain pan filled to brim and subjected to continuous overflow and fan(s) switched on (EN 60335-2-40)		P

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IEC60335_2_40J - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
16.2	Leakage current measurements (EN 60335-2-40)	(See appended table)	P
20.2	When using the test probe similar to test probe B with a circular stop face, the accessories and detachable covers are removed		P
	Test probe 18 applied with a force of 2,5 N on the appliance fully assembled		P
24.1	Components comply with the safety requirements specified in the relevant standards as far as they reasonably apply		P
	The requirements of clause 29 of this standard apply between live parts of components and accessible parts of the appliance.		P
	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 or do not comply with the standard for the relevant component are tested according to the requirements of 30.2		N/A
	Components that have been previously tested and shown to comply with the resistance to fire requirements in the standard for the relevant component need not be retested provided that:		----
	- the severity specified in the component standard is not less than the severity specified in 30.2, and		N/A
	- the test report for the component states whether it complied with the standard for the relevant component with or without flame, flames not exceeding 2 s during the test are ignored		N/A
	Unless components have been previously tested and found to comply with the relevant standard for the number of cycles specified, they are tested in accordance with 24.1.1 to 24.1.9		N/A
	For components mentioned in 24.1.1 to 24.1.9, no additional tests specified in the relevant standard for the component are necessary other than those specified in 24.1.1 to 24.1.9		N/A
	Components that have not been separately tested and found to comply with the relevant standard, and		N/A
	components that are not marked or not used in accordance with their marking,		N/A
	are tested in accordance with the conditions occurring in the appliance, the number of samples being that required by the relevant standard		P

IEC60335_2_40J - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	Lamp holders and starter holders that have not been previously tested and found to comply with the relevant standard are tested as a part of the appliance and additionally comply with the gauging and interchangeability requirements of the relevant standard under the conditions occurring in the appliance		N/A
	Where the relevant standard specifies these gauging and interchangeability requirements at elevated temperatures, the temperatures measured during the tests of clause 11 are used		N/A
	Plugs and socket-outlets and other connecting devices of interconnection cords are not interchangeable with plugs and socket-outlets listed in IEC/TR 60083 or IEC 60906-1, or		N/A
	with connectors and appliance inlets complying with the standard sheets of IEC 60320-1,		N/A
	if direct supply to these parts from the supply mains gives rise to a hazard		N/A
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		N/A
25.6	Supply cords of single-phase portable appliances having a rated current not exceeding 16 A, fitted with a plug complying with the following standard sheets of IEC/TR 60083:		----
	- for class I appliances: standard sheet C2b, C3b or C4..... :		N/A
	- for class II appliances: standard sheet C5 or C6 ..... :		N/A
25.7	Rubber sheathed cords (60245 IEC 53) are not suitable for appliances intended to be used outdoors or when they are liable to be exposed to significant amount of ultraviolet radiation		N/A
	Halogen-free thermoplastic compound sheathed supply cords have properties at least those of:		----

IEC60335_2_40J - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	- halogen-free thermoplastic compound sheathed cords (H03Z1Z1H2-F or H03Z1Z1-F), for appliances having a mass not exceeding 3 kg		N/A
	- halogen-free thermoplastic compound sheathed cords (H05Z1Z1H2-F or H05Z1Z1-F), for other appliances		N/A
	Cross-linked halogen-free compound sheathed supply cords have properties at least those of cross-linked halogen-free compound sheathed cords (H07ZZ-F)		N/A
26.11	Conductors connected by soldering are not considered to be positioned or fixed so that reliance is not placed upon the soldering alone to maintain them in position unless they are held in place near the terminals independently of the solder		N/A
29.3.Z1	Appliance constructed so that if there is a possibility of damaging the insulation during installation, the insulation withstands the scratch and penetration test of 21.2		N/A
32	Compliance regarding electromagnetic fields is checked according to EN 62233		P
GG.2	Requirements for charge limits in unventilated areas (EN 60335-2-40/A1)		N/A
GG.Z1	Non-fixed factory sealed single package units with a charge amount of $m_1 < M \leq 2 \times m_1$ (EN 60335-2-40/A1)		N/A
Annex I, 19.I.101	The appliance is supplied at rated voltage and operated under normal operation with each of the fault conditions specified		N/A
	The duration of the test is as specified in 19.7		N/A
<b>ZA</b>	<b>ANNEX ZA (NORMATIVE) SPECIAL NATIONAL CONDITIONS</b>		---
	<b>Norway</b>		----
19.5	The test is also applicable to appliances intended to be permanently connected to fixed wiring		N/A
	<b>Norway</b>		----
22.2	The second paragraph of this subclause, dealing with single-phase, permanently connected class I appliances having heating elements, is not applicable due to the supply system		N/A

IEC60335_2_40J - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	<b>All CENELEC countries</b>		----
25.6 and 25.25	Information concerning National plug and socket-outlets is available from the CENELEC website. Normative national requirements concerning plug and socket-outlets are shown in the relevant National standard		N/A
	<b>Ireland and United Kingdom</b>		----
25.8	In the table, the lines for 10 A and 16 A are replaced by:		----
	> 10 and ≤ 13 1,25 (1,0) <sup>b</sup> (EN 60335-1:2012/AC:2014)		N/A
	> 13 and ≤ 16 1,5 (1,0) <sup>b</sup> (EN 60335-1:2012/AC:2014)		N/A
<b>ZB</b>	<b>ANNEX ZB (INFORMATIVE) A-DEVIATIONS</b>		N/A
	<b>Ireland</b>		----
25.6	These regulations apply to all plugs for domestic use at a voltage of not less than 200 V and in general allow only plugs complying with I.S. 401:1997, or equivalent, to be fitted to domestic appliances		N/A
	<b>United Kingdom</b>		----
25.6	These regulations apply to all plugs for domestic use at a voltage of not less than 200 V and in general allow only plugs to BS 1363 to be fitted to domestic appliances. It also allows plugs to BS 4573 and EN 50075 to be fitted to shavers and toothbrushes		N/A
<b>ZC</b>	<b>ANNEX ZC (NORMATIVE) NORMATIVE REFERENCES TO INTERNATIONAL PUBLICATIONS WITH THEIR CORRESPONDING EUROPEAN PUBLICATIONS</b>		----
	A list of referenced documents in this standard		P
<b>ZD</b>	<b>ANNEX ZD (INFORMATIVE) IEC and CENELEC CODE DESIGNATIONS FOR FLEXIBLE CORDS</b>		----
	A table with IEC and CENELEC code designations for flexible cords		P

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IEC60335_2_40J - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
<b>ZE</b>	<b>ANNEX ZE (NORMATIVE) SPECIFIC ADDITIONAL REQUIREMENTS FOR APPLIANCES AND MACHINES INTENDED FOR COMMERCIAL USE</b>		----
7.1	Business name and full address of the manufacturer and, where applicable, his authorized representative .....		N/A
	Model or type reference .....		N/A
	Serial number, if any .....		N/A
	Production year		N/A
	Designation of the appliance .....		N/A
7.12	Instructions provided with the appliance so that the appliance can be used safely		N/A
	The instructions contain at least the following information:		----
	- the business name and full address of the manufacturer and, where applicable, his authorized representative		N/A
	- model or type reference of the appliance as marked on the appliance itself, except for the serial number		N/A
	- the designation of the appliance together with its explanation in case it is given by a combination of letters and/or numbers		N/A
	- the general description of the appliance, when needed due to the complexity of the appliance		N/A
	- specific precautions if required during installation, operation, adjusting, user maintenance, cleaning, repairing or moving		N/A
	- when needed drawings, diagrams, descriptions and explanations necessary for the safe use and user maintenance of the appliance		N/A
	- the possible reasonably foreseeable misuse and, whenever relevant, a warning against the effects it may have on the safe use of the appliance		N/A
	The words "Original instructions" appear on the language version(s) verified by the manufacturer or by the authorized representative		N/A
	When a translation of the original instructions has been provided by a person introducing the appliance on the market; the meaning of the sentence "Translation of the original instructions" appear in the relevant instructions delivered with the appliance		N/A



IEC60335_2_40J - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	The instructions for maintenance/service to be done by specialized personnel, mandated by the manufacturer or the authorized representative may be supplied in only one Community language which the specialized personnel understand		N/A
	The instructions indicate the type and frequency of inspections and maintenance required for safe operation including the preventive maintenance measures		N/A
	"This appliance is intended to be used by expert or trained users in shops, in light industry and on farms, or for commercial use by lay persons". (EN 60335-2-40/A13)		N/A
7.12.ZE1	If needed for specific appliances, the following information to be given:		----
	- on use, transportation, assembly, dismantling when out of service, testing or foreseeable breakdowns, if these operations have consequences on stability of the appliance in order to avoid overturning, falling or uncontrolled movements of the appliance or of its component parts		N/A
	- on how to maintain adequate mechanical stability when in use, during transportation, assembly, dismantling, scrapping and any other action involving the appliance		N/A
	- on the protective measures to be taken by the user, including, where appropriate, the personal protective equipment to be provided		N/A
	- on the operating method to be followed in the event of accident or breakdown; if a blockage is likely to occur the operating method to safely unblock the appliance		N/A
	- on the specifications on the spare parts to be used, when these affect the health and safety of the operator		N/A
	- on airborne noise emissions, determined and declared in accordance with the Annex ZAB, which includes: (EN 60335-2-40/A13)		----
	- the A-weighted emission sound pressure level at workstations, where this exceeds 70 dB(A) ..... ; (EN 60335-2-40/A13)		N/A
	- where this level does not exceed 70 dB(A), no value needs to be given, but the instructions shall state that the A-weighted sound pressure level is below 70 dB. (EN 60335-2-40/A13)		N/A

IEC60335_2_40J - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	- the peak C-weighted instantaneous sound pressure value at workstations, where this exceeds 63 Pa (130 dB in relation to 20 $\mu$ Pa):		N/A
	- the A-weighted sound power level emitted by the machinery, where the A-weighted emission sound pressure level at workstations exceeds 80 dB(A) ..... :		N/A
7.12.ZE2	The instructions includes a warning to disconnect the appliance from its power source during service and when replacing parts		N/A
	If the removal of the plug is foreseen, it is clearly indicated that the removal of the plug has to be such that an operator can check from any of the points to which he has access that the plug remains removed		N/A
	If this is not possible, due to the construction of the appliance or its installation, a disconnection with a locking system in the isolated position is provided		N/A
19.11.4.8	The appliance continues to operate, without causing any hazard to the user, from the same point in its operating cycle at which the voltage fluctuation occurred, or		N/A
	a manual operation is required to restart it		N/A
20.1	Appliances and their components and fittings have adequate mechanical stability during transportation, assembly, dismantling and any other action involving the appliance		N/A
20.2	Dangerous moving transmission parts safeguarded either by design or guards		N/A
	When guards are used, they are fixed guards, interlocking movable guards or protective devices		N/A
	Moving parts directly involved in the function of the appliance which cannot be made completely inaccessible fitted with:		----
	- fixed guards or interlocking movable guards preventing access to those sections of the parts that are not used in the work, and		N/A
	- adjustable guards restricting access to those sections of the moving parts where access is necessary		N/A
	Interlocking movable guards used where frequent access is required		N/A

IEC60335_2_40J - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
21.1	Appliances and their components and fittings have adequate mechanical strength and is constructed to withstand such rough handling that may be expected in normal use, during transportation, assembly, dismantling, scrapping and any other action involving the appliance		N/A
22.ZE.1	For appliances provided with a seat, the seat gives adequate stability		N/A
	The distance between the seat and the control devices capable of being adapted to the operator		N/A
22.ZE.2	For appliances provided with separate devices for the start and the stop functions, the stop function is unambiguously identifiable and does always override the start function		N/A
	For appliances provided with one device performing the start and the stop function, the stop function is unambiguously identifiable and does always override the start function		N/A
22.ZE.3	Appliances designed in such a way that incorrect mounting is avoided, if this can lead to an unsafe situation		N/A
	If this is not possible, information on the correct mounting is given directly on the part and/or the enclosure		N/A
22.ZE.4	Where the weight, size or shape prevents appliances from being moved manually, they are fitted with attachments for lifting gear, or		N/A
	so designed that they can be fitted with such attachments, or		N/A
	be shaped in such a way that standard lifting gear can easily be used		N/A
	Appliances to be moved manually are constructed or equipped so that they can be moved easily and safely		N/A
22.ZE.5	The fixing systems of fixed guards which prevent access to dangerous moving transmission parts only removable with the use of tools		N/A
	If such guards have to be removed by the user for routine cleaning or maintenance their fixing systems remain attached to the fixed guards or to the machine after removal		N/A
	Where possible, guards are incapable of remaining in place without their fixings		N/A
	This does not apply if, after removal of the screws, or if the component is incorrectly repositioned, the appliance becomes inoperative		N/A

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Clause	Requirement - Test	Result - Remark	Verdict
	Movable guards are interlocked		N/A
	The interlocking devices prevent the start of hazardous appliance functions until the guards are fixed in their position, and give a stop command whenever they are no longer closed		N/A
	Where it is possible for an operator to reach the danger zone before the risk due to hazardous appliance functions has ceased, movable guards associated with a guard locking device in addition to an interlocking device that:		----
	- prevents the start of hazardous appliance functions until the guard is closed and locked, and		N/A
	- keeps the guard closed and locked until the risk of injury from the hazardous appliance functions has ceased		N/A
	Interlocking movable guards remain attached to the appliance when open, and		N/A
	they are designed and constructed in such a way that they can be adjusted only by means of an intentional action		N/A
22.ZE.6	Interlocking movable guards designed in such a way that the absence or failure of one of their components prevents starting or stops the hazardous appliance functions		N/A
	The guard is opened at the extent needed to cause the interlocking to operate and is then closed. This operation is carried out for 5 000 cycles at a rate of 5 cycles per min. (EN 60335-2-40/A13/AC)		N/A
	After this test any defect that may be expected in normal use is applied to the interlock system, including interruption of the supply, only one defect being simulated at a time		N/A
	After these tests the interlock system is fit for further use		N/A
22.ZE.7	Adjustable guards restricting access to areas of the moving parts strictly necessary for the work are:		----
	- adjustable manually or automatically, depending on the type of work involved, and		N/A
	- readily adjustable without the use of tools		N/A
22.ZE.8	In case of interruption, re-establishment after an interruption or fluctuation in whatever manner of the power supply, the appliance does not restart		N/A
	However, automatic restarting of the operation is allowed if the appliance may continue to operate, without causing any hazard to the user, from the same point in its operating cycle at which the voltage interruption or fluctuation occurred		N/A

IEC60335_2_40J - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
22.ZE.9	Appliances fitted with means to isolate them from all energy sources		N/A
	Such isolators are clearly identified, and		N/A
	they are capable of being locked if reconnection endanger persons		N/A
	After the energy source is disconnected, it is possible to dissipate any energy remaining or stored in the circuits of the appliance without risk to persons		N/A
<b>ZF</b>	<b>ANNEX ZF (INFORMATIVE) CRITERIA APPLIED FOR THE ALLOCATION OF PRODUCTS COVERED BY STANDARDS IN THE EN 60335 SERIES UNDER LVD OR MD</b>		----
	List of standards under CENELEC/TC61 with the allocation under the LVD (Low Voltage Directive) or the MD (Machinery Directive) ..... :	LVD	P
<b>ZG</b>	<b>ANNEX ZG (NORMATIVE) UV APPLIANCES</b>		----
	The following modifications to this standard apply to appliances having UV emitters		N/A
	This annex is not applicable to appliances covered by the scopes of IEC 60335-2-27, IEC 60335-2-59 or IEC 60335-2-109		N/A
7.12.ZG	The instructions for appliances incorporating UVC emitters include the substance of the following: WARNING — This appliance contains a UV emitter. Do not stare at the light source		N/A
32	For appliances incorporating UV emitters the manufacturer delivers a declaration providing evidence that the plastic material exposed to the radiation is UV resistant		N/A
<b>ZZ</b>	<b>ANNEX ZZ (INFORMATIVE) COVERAGE OF ESSENTIAL REQUIREMENTS OF EC DIRECTIVES</b>		----
	Description of the relation between this European standard and the LVD (Low Voltage Directive, 2006/95/EC) and the MD (Machinery Directive, 2006/42/EC)	Low Voltage Directive 2014/35/EU	P



IEC60335_2_40J - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
<b>ZAA</b>	<b>ANNEX ZAA (INFORMATIVE) (EN 60335-2-40/A11) THE RELEVENCE OF THE PRESSURE EQUIPMENT DIRECTIVE</b>		----
	Refrigerating systems having a pressure greater than 0,05 MPa are considered to be assemblies falling within the scope of the Pressure Equipment Directive, 97/23/EC. However, according to Article 1, item 3.6 of the directive, equipment classified no higher than category I and covered by the low voltage directive is excluded from its scope. (EN 60335-2-40/A11)		P
	According to guideline 1/39 of the directive, this exclusion applies to both components and assemblies (refrigerant circuits). This applies to appliances containing vessels (e.g. compressors, receivers) or piping with limits in accordance with the following (EN 60335-2-40/A11):		P
	Vessels (EN 60335-2-40/A11)		----
	- dangerous refrigerants (Annex II, Table 1) (EN 60335-2-40/A11):		----
	- volume not exceeding 1 l, or (EN 60335-2-40/A11)		N/A
	- pressure x volume not exceeding 5 MPa l (EN 60335-2-40/A11)		N/A
	- non-dangerous refrigerants (Annex II, Table 2) (EN 60335-2-40/A11):		----
	- volume not exceeding 1 l, or (EN 60335-2-40/A11)		N/A
	- pressure x volume not exceeding 20 MPa l (EN 60335-2-40/A11)		P
	Piping (EN 60335-2-40/A11)		----
	- dangerous refrigerants (Annex II, Table 6) (EN 60335-2-40/A11):		----
	- numerical designation not exceeding 25, or (EN 60335-2-40/A11)		N/A
	- pressure not exceeding 1 MPa and numerical designation not exceeding 100, or (EN 60335-2-40/A11)		N/A
	- pressure exceeding 1 MPa and pressure x numerical designation not exceeding 100 MPa (EN 60335-2-40/A11).		N/A
	- non-dangerous refrigerants (Annex II, Table 7) (EN 60335-2-40/A11):		----
	- numerical designation not exceeding 100, or (EN 60335-2-40/A11)		N/A
	- pressure x numerical designation not exceeding 350 MPa (EN 60335-2-40/A11).		P
	For other components, the most onerous limit of the two applies (EN 60335-2-40/A11)		P

TRF No. IEC60335\_2\_40J

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IEC60335_2_40J - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	The volume is the internal volume of the vessel and includes the volume of pipework up to the first connection. It excludes the volume of fixed internal parts (EN 60335-2-40/A11)		N/A
	The pressure is the maximum pressure the vessel or piping system is exposed to, as specified by the manufacturer of the appliance (EN 60335-2-40/A11)		N/A
	The numerical designation designates the size common to all components in the piping system (EN 60335-2-40/A11)		N/A
	If any component exceeds the limits given above, the appliance has to comply with the directive. The technical requirements are given in Annex I and the conformity assessment tables and procedures in Annexes II and III of the directive (EN 60335-2-40/A11)		N/A
	Commonly used dangerous refrigerants, identified as Group 1 in the directive, are listed in table ZAA.1 (EN 60335-2-40/A11)		N/A
	Commonly used non-dangerous refrigerants, identified as Group 2 in the directive, are listed in table ZAA.2 (EN 60335-2-40/A11)		N/A
<b>ZAB</b>	<b>ANNEX ZAA (NORMATIVE) (EN 60335-2-40/A13) EMISSION OF ACOUSTICAL NOISE FROM APPLIANCES COVERED BY ANNEX ZE</b>		----
ZAB.1	Noise reduction is an integral part of the design process and achieved by particularly applying measures at source to control noise, see for example EN ISO 11688-1. (EN 60335-2-40/A13)		N/A
	Success of the applied noise reduction measures is assessed on the basis of the actual noise emission values in relation to other machines of the same type with comparable non-acoustical technical data. (EN 60335-2-40/A13)		N/A
ZAB.2.1	A-weighted emission sound pressure level determined in accordance with EN 11203:2009, 6.2.3 d) with the surface S being the measurement surface used for the sound power level determination. (EN 60335-2-40/A13)		N/A
	If the sound power level determination is based on a measurement method requiring a reverberant sound field, the surface S to define Q, shall be a parallelepiped measurement surface at a distance of 1 m from the reference box enclosing the source and assuming only one reflecting surface. (EN 60335-2-40/A13)		N/A

IEC60335_2_40J - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
ZAB.2.2	A-weighted sound power level determined in accordance with EN 12102 applying a measurement method of at least grade 2. (EN 60335-2-40/A13)		N/A
	If a grade 3 measurement method used for determining the A-weighted sound power level, the reasons are explicitly mentioned (EN 60335-2-40/A13)		N/A
ZAB.2.3	Total measurement uncertainty is depending on the standard deviation of reproducibility $\sigma_{R0}$ of the measurement method and the standard deviation $\sigma_{omc}$ representing the instability of the operating and mounting conditions. (EN 60335-2-40/A13)		N/A
	$\sigma_{R0}$ has an upper value for a grade 2 measurement method of about 1,5 dB, whereas $\sigma_{omc}$ may have values between 0,5 dB for small variations of the sound power due on the mounting and operating conditions or 4 dB for very instable sources (EN 60335-2-40/A13)		N/A
	Total measurement uncertainty for the A-weighted emission sound pressure level is of the same order as the one for the respective sound power level measurement. (EN 60335-2-40/A13)		N/A
ZAB.2.4	Information to be recorded covers all the technical requirements of this noise test code. (EN 60335-2-40/A13)		N/A
	Any deviations from this noise test code or from the basic standards upon which it is based are to be recorded together with the technical justification for such deviations. (EN 60335-2-40/A13)		N/A
ZAB.2.5	Information to be given in the test report includes : (EN 60335-2-40/A13)		N/A
	- the data required by the manufacturer for inclusion in the noise declaration,. (EN 60335-2-40/A13)		N/A
	- the data required by the user to verify the declared values. (EN 60335-2-40/A13)		N/A
	Thus the following information shall be included .. : (EN 60335-2-40/A13)		N/A
	- reference to the noise test code and the basic noise emission standards used; (EN 60335-2-40/A13)		N/A
	- description of the installation and operation conditions used; (EN 60335-2-40/A13)		N/A
	- location of the work station(s) and other specified positions; (EN 60335-2-40/A13)		N/A

IEC60335_2_40J - ATTACHMENT			
Clause	Requirement - Test	Result - Remark	Verdict
	- the noise emission values obtained (EN 60335-2-40/A13)		N/A
	Test report states that all requirements of the noise test code have been fulfilled, or, if this is not the case, it shall identify any unfulfilled requirements. (EN 60335-2-40/A13)		N/A
	Deviations from the requirements stated and a technical justification for these deviations shall be given. (EN 60335-2-40/A13)		N/A
ZAB.2.6	Noise emission declaration is made according to EN ISO 4871 (EN 60335-2-40/A13)		N/A
	Emission sound pressure level $L_{pA}$ is made as a dual number noise emission declaration, thus declaring the determined value for $L_{pA}$ and the respective uncertainty $K_{pA}$ . (EN 60335-2-40/A13)		N/A
	Sound power level $L_{WA}$ is declared as single number noise emission declaration declaring the sum of the measured sound power level and its uncertainty $K_{WA}$ . (EN 60335-2-40/A13)		N/A
	Noise declaration states that the noise emission values have been obtained according to this noise test code. (EN 60335-2-40/A13)		N/A
	Any deviations from this noise test code or from the basic standards upon which it is based are clearly indicated. (EN 60335-2-40/A13)		N/A
	Additional noise emission values are given in the declaration. (EN 60335-2-40/A13)		N/A
	If undertaken, verification of the noise emission values shall be conducted according to EN ISO 4871, using the same mounting and operating conditions as those used for the initial determination. (EN 60335-2-40/A13)		N/A

Clause	Requirement - Test	Result - Remark	Verdict
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**Appendix to TRF no. IEC60335\_2\_40J**

IEC 60335-2-65:2002 + A1:2008			
EN 60335-2-65:2003 + A1:2008			
<b>16</b>	<b>LEAKAGE CURRENT AND ELECTRIC STRENGTH</b>		----
16.101	High-voltage transformers must have adequate internal insulation. The duration of the test is ... sec. (IEC/EN 60335-2-65)	Certified component	P
<b>32</b>	<b>RADIATION, TOXICITY AND SIMILAR HAZARDS</b>		----
	The ozone concentration produced by ionozation is not excessive and shall not exceed $5 \times 10^{-6}$ (IEC/EN 60335-2-65)	XS-PL-06: $1,22 \times 10^{-9}$	P

--End of report--