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REPORT

On

Dehumidifiers, Refrigeration Type

GREE ELECTRIC APPLIANCES INC OF ZHUHAI
Zhuhai, Guangdong 519070, China

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DESCRIPTION

PRODUCT COVERED:

USL, CNL - Refrigeration type dehumidifier, Models GDN70BA-A3EBA1A, GDN50BA-A3EBA1A, GDN70BA-A3EBA1B, GDN50BA-A3EBA2A, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, G17-70ESDEHC, G17-50ESDEHC, GDN50BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN50BA-A3EBA1B, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, TDN50BA-A3EBA2B, TDN70BA-A3EBA2C, GDN50BA-A3EBA2C, GDN70BA-A3EBA2E, TDEH50C-N116A2, TDEH70C-P116A2, GDN45BA-A3EBA1A, GDN45BA-A3EBA1B, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN45BA-A3EBA4A, GDN45BA-A3EBA4B, GDN50BA-A3EBA1C, GDN50BA-A3EBA1E, TDEH45B-P116A2, GDN45BA-A3EBA3A, GDN45BA-A3EBA3B, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A, GDN50BA-A3EBA2E, TDEH50D-N116A2, TDEH50E-P116A2, GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B, KHD50BW, KHD50BWP, **GD50ABWP, GD50BW.**

OBSOLETE PRODUCT: (Retained for reference only)

USL, CNL - Refrigeration type dehumidifier, Models CK051030600, CK051030700, CK051030800.

GENERAL:

These units are self-contained portable refrigeration type dehumidifier with four casters without lock. They are energized through a permanently attached power supply cord.

Installation/operating instructions are provided with each unit.

Some models are provided water pump for drainage. The water pump is not energized when compressor is operating.

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Products designated USL have been investigated using requirements contained in the standard for Safety of Household and Similar Appliances, Part 1: General Requirements, UL 60335-1 and Safety of Household and Similar Electrical Appliances, Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers, UL 60335-2-40.

Products designated CNL have been investigated using requirements contained in the Standard for Safety of Household and Similar Appliances, Part 1: General Requirements, CAN/CSA-C22.2 No. 60335-1-11 and Safety of Household and Similar Electrical Appliances, Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers, CAN/CSA-C22.2 No. 60335-2-40-12.

"CN" indicates that a component shall bare the C-UL Listing/C-UL Recognition Mark, UL Certification or a CSA Certification Mark. If a CSA Certified component is used in lieu of a UL Certified component, the CSA Certification Mark shall be noted in the individual component description in lieu of the UL CCN.

MODEL NOMENCLATURE:

Model Designation:	G	D	N	70	BA	-	A	3	E	B	A1	A
Reference Field No.:	1	2	3	4	5		6	7	8	9	10	11

1	G	Gree
2	Product Code	D: Dehumidifier
3	Function Code	N: Normal Function; E: Electric Heater; A: Adjustable Temperature
4	Dehumidification Capacity Code	70: 70 pints/day; 50: 50 pints/day;
5	Series Code	Represented by two capital letters. First one represent product category code and second one represent enclosure code.
6	Power Supply Code	A: 115 V ac, 60 Hz; D: 208/230 V ac, 60 Hz
7	Refrigerant Code	3: R410a; 4: R134a
8	Control Method Code	E: Electronic control; M: Mechanical control
9	Working Ambient Temperature Range	A: 18~32°C, B: 5~32°C
10	Appearance Improvement Code	It maybe any letter with number in A1, A2, ...Z9.
11	Improvement Code	It maybe any letter in A, B, ... Z.

MODEL DIFFERENCE:

Model GDN50BA-A3EBA1A is similar to Model GDN70BA-A3EBA1A except for refrigeration system.

Model GDN70BA-A3EBA1B is similar to Model GDN70BA-A3EBA1A except for Model GDN70BA-A3EBA1B provided with water pump.

Model GDN50BA-A3EBA2A is similar to Model GDN50BA-A3EBA1A except for front panel assembly (including front unit cabinet and slide rail).

Model CK051030600 is identical to Model GDN50BA-A3EBA2A except for Model designation.

Model GDN70BA-A3EBA2A is similar to Model GDN70BA-A3EBA1A except for front panel assembly (including front unit cabinet and slide rail).The front panel assembly of Model GDN70BA-A3EBA2A is identical to that of Model GDN50BA-A3EBA2A.

Model CK051030700 is identical to Model GDN70BA-A3EBA2A except for Model designation.

MODEL DIFFERENCE: (Cont'd)

Model GDN70BA-A3EBA2B is similar to Model GDN70BA-A3EBA1B except for front panel assembly (including front unit cabinet and slide rail). The front panel assembly of Model GDN70BA-A3EBA2B is identical to that of Model GDN50BA-A3EBA2A.

Model CK051030800 is identical to Model GDN70BA-A3EBA2B except for Model designation.

Model G17-70ESDEHC is identical to Model GDN70BA-A3EBA2A except for model designation.

Model G17-50ESDEHC is identical to Model GDN50BA-A3EBA2A except for model designation.

Model GDN50BA-A3EBA2B is similar to Model GDN50BA-A3EBA2A except for additional temperature sensor on discharging tubing.

Model GDN70BA-A3EBA2C is similar to Model GDN70BA-A3EBA2A except for additional temperature sensor on discharging tubing.

Model GDN70BA-A3EBA2D is similar to Model GDN70BA-A3EBA2B except for additional temperature sensor on discharging tubing.

Model GDN50BA-A3EBA1B is similar to Model GDN50BA-A3EBA1A except for Model GDN50BA-A3EBA1A provided with optional temperature sensor on discharging tubing connecting to low-voltage Display PWB.

Model GDN70BA-A3EBA1C is similar to Model GDN70BA-A3EBA1A except for Model GDN70BA-A3EBA1A provided with optional temperature sensor on discharging tubing connecting to low-voltage Display PWB.

Model GDN70BA-A3EBA1D is similar to Model GDN70BA-A3EBA1B except for Model GDN70BA-A3EBA1B provided with optional temperature sensor on discharging tubing connecting to low-voltage Display PWB.

Model TDN50BA-A3EBA2B is identical to Model GDN50BA-A3EBA2B except for model designation.

Model TDN70BA-A3EBA2C is identical to Model GDN70BA-A3EBA2C except for model designation.

Model GDN50BA-A3EBA2C is similar to Model GDN50BA-A3EBA2B except for the Main PWB. Model GDN50BA-A3EBA2C is also provided WIFI module.

Model GDN70BA-A3EBA2E is similar to Model GDN70BA-A3EBA2C except for the Main PWB. Model GDN70BA-A3EBA2E is also provided WIFI module.

Model TDEH50C-N116A2 is identical to Model GDN50BA-A3EBA2B except for model designation.

MODEL DIFFERENCE: (Cont'd)

Refer to the following table for model difference -

New Model	Basic Model	Model Difference
TDEH70C-P116A2	GDN70BA-A3EBA2D	Model Designation
TDEH45B-P116A2	GDN45BA-A3EBA2B	Model Designation
GDN45BA-A3EBA2A	GDN45BA-A3EBA1A	front panel assembly (including Front Unit Cabinet and slide rail) and Display PWB
GDN45BA-A3EBA2B	GDN45BA-A3EBA1B	front panel assembly (including Front Unit Cabinet and slide rail) and Display PWB
GDN45BA-A3EBA3A	GDN45BA-A3EBA2A	Front Unit Cabinet
GDN45BA-A3EBA3B	GDN45BA-A3EBA2B	Front Unit Cabinet
GDN45BA-A3EBA4A	GDN45BA-A3EBA2A	Front Unit Cabinet
GDN45BA-A3EBA4B	GDN45BA-A3EBA2B	Front Unit Cabinet
GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A.	GDN50BA-A3EBA1C	Front Unit Cabinet and Display PWB
GDN50BA-A3EBA2E	GDN50BA-A3EBA1E	Front Unit Cabinet and Display PWB
TDEH50D-N116A2	GDN50BA-A3EBA2D	Model Designation
TDEH50E-P116A2	GDN50BA-A3EBA2E	Model Designation

Model GDN45BA-A3EBA1B is similar to Model GDN70BA-A3EBA1B except for different rating, compressor, evaporator, capillary tube, fan motor.

Model GDN45BA-A3EBA1A is similar to Model GDN45BA-A3EBA1B except for Model GDN45BA-A3EBA1B provided with water pump.

Refer to the following table for model similarity -

New Model	Basic Model	Model Similarity
GDN45BA-A3EBA2A, GDN45BA-A3EBA2B	GDN50BA-A3EBA2A	Same front panel assembly (including Front Unit Cabinet and slide rail)
*		

Model GDN50BA-A3EBA1C is similar to Model GDN45BA-A3EBA1A except for electrical rating, compressor, evaporator, Fan Shroud and temperature controller.

Model GDN50BA-A3EBA1E is similar to Model GDN45BA-A3EBA1B except for electrical rating, compressor, evaporator, Fan Shroud and temperature controller.

Model GDN50BA-A3EBA1E is similar to Model GDN50BA-A3EBA1C except for Model GDN50BA-A3EBA1E provided with water pump.

MODEL DIFFERENCE: (Cont'd)

Refer to the following table for model difference -

New Model	Basic Model	Model Difference
GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B	GDN50BA-A3EBA1E	Front Unit Cabinet, Display PWB and Refrigerating system (including compressor and capillary tubing)
KHD50BW, GD50BW	GDN50BA-A3EBA3A	Model Designation
KHD50BWP, GD50ABWP	GDN50BA-A3EBA3B	Model Designation

Refer to the following table for model similarity -

New Model	Basic Model	Model Similarity
GDN50BA-A3EBA2F	GDN50BA-A3EBA2E	Same Front Unit Cabinet
GDN50BA-A3EBA4B	GDN50BA-A3EBA4A	
GDN50BA-A3EBA3B	GDN50BA-A3EBA3A	

GENERAL DESCRIPTION

10 - MARKING:

10-1 Nameplate Marking (See Sec. Gen. for nameplate material, PGDQ2, CN)
(Applicant - Include print of blank nameplate including material
identification information)

Listee's Name	Gree Electric Appliances Inc Of Zhuhai
Location	Cabinet side

Model	GDN70BA-A3EBA1A, GDN70BA-A3EBA1B, GDN70BA-A3EBA2A, CK051030700, GDN70BA-A3EBA2B, CK051030800, G17- 70ESDEHC, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, TDN70BA-A3EBA2C, GDN70BA-A3EBA2E, TDEH70C-P116A2	GDN50BA-A3EBA1A, GDN50BA-A3EBA2A, CK051030600, G17-50ESDEHC, GDN50BA-A3EBA2B, GDN50BA-A3EBA1B, TDN50BA-A3EBA2B, GDN50BA-A3EBA2C, TDEH50C-N116A2	GDN45BA-A3EBA1A, GDN45BA-A3EBA1B, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN45BA-A3EBA4A, GDN45BA-A3EBA4B, TDEH45B-P116A2, GDN45BA-A3EBA3A, GDN45BA-A3EBA3B
V	115	115	115
Frequency	60	60	60
Total A	7.6	5.2	6.2
Refrigerant, Type	R410A	R410A	R410A
Amount, kg	0.26	0.23	0.21
Design Pressure			
High Side, MPa	3.6	3.6	3.6
Low Side, MPa	2.2	2.2	2.2
Special Comments	@1, @3	@2, @4	@5

Models above assembled with the following refrigeration system:

Nameplate footnote	Compressor	Cond. ILL.	Evap. ILL.	Capillary Code No.
@1	QXA-A069xL130A	ILL. 5	ILL. 6	CT1
@2	QXA-A050xL130A	ILL. 5A	ILL. 6A	CT2
@3	YZG- A068FY2D2T2	ILL. 5	ILL. 6	CT1
@4	39A121H	ILL. 5A	ILL. 6A	CT2
@5	QXA-A062xL130B	ILL. 5	ILL. 6B	CT3

Date Code - (See Section General for explanation of date code)

Applicant - include explanation of date code and location.

GENERAL DESCRIPTION

10 - MARKING: - Cont'd

10-1 Nameplate Marking (See Sec. Gen. for nameplate material, PGDQ2, CN)
(Applicant - Include print of blank nameplate including material
identification information)

Listee's Name	Gree Electric Appliances Inc Of Zhuhai
Location	Cabinet side

Model	GDN50BA-A3EBA1C, GDN50BA-A3EBA1E, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A, GDN50BA-A3EBA2E, TDEH50D-N116A2, TDEH50E-P116A2, KHD50BW, GD50BW		
V	115		
Frequency	60		
Total A	7.2		
Refrigerant, Type	R410A		
Amount, kg	0.255		
Design Pressure			
High Side, MPa	3.6		
Low Side, MPa	2.2		
Special Comments	@6		

Models above assembled with the following refrigeration system:

Nameplate footnote	Compressor	Cond. ILL.	Evap. ILL.	Capillary Code No.
@6	YZG-A065FY2D2	ILL. 5	ILL. 6C	CT3

Date Code - (See Section General for explanation of date code)

Applicant - include explanation of date code and location.

10-1 Nameplate Marking (See Sec. Gen. for nameplate material, PGDQ2, CN)
(Applicant - Include print of blank nameplate including material
identification information) (Cont'd)

Listee's Name	Gree Electric Appliances Inc Of Zhuhai
Location	Cabinet side

Model	GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B, KHD50BWP, GD50ABWP
V	115
Frequency	60
Total A	7.2
Refrigerant, Type	R410A
Amount, kg	0.23
Design Pressure	
High Side, MPa	3.6
Low Side, MPa	2.2
Special Comments	@7

Models above assembled with the following refrigeration system:

Nameplate footnote	Compressor	Cond. ILL.	Evap. ILL.	Capillary Code No.
@7	YZG-V066FY2D2T6	ILL. 5	ILL. 6C	CT4

Date Code - (See Section General for explanation of date code)

Applicant - include explanation of date code and location.

10-2 Special Marking (PGDQ2, 8)

Model	All
A. Type	Label
Listee's Name	Various
Recognized Designation	Various
Location	Nearby power supply cord entrance
Quote Marking	"A damaged cord must be replaced with one supplied by the unit manufacturer and not repaired" or the equivalent

Model	GDN70BA-A3EBA1A, GDN70BA-A3EBA1B, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, GDN70BA-A3EBA2E
A. Type	Nameplate
Listee's Name	Various
Recognized Designation	Various
Location	Cabinet side
Quote Marking	"Use on Single Outlet Circuit Only"

10-3 Wiring Diagram

Model	GDN70BA-A3EBA1A, GDN50BA-A3EBA1A, GDN50BA-A3EBA2A, GDN70BA-A3EBA2A
Location	Control Box
Material	Adhesive backed paper label or equivalent
Illustration	See Ill. 1 for details
Model	GDN70BA-A3EBA1B, GDN70BA-A3EBA2B
Location	Control Box
Material	Adhesive backed paper label or equivalent
Illustration	See Ill. 1A for details
Model	GDN50BA-A3EBA2B, GDN70BA-A3EBA2C, GDN50BA-A3EBA1B, GDN70BA-A3EBA1C
Location	Control Box
Material	Adhesive backed paper label or equivalent
Illustration	See Ill. 1B for details

10-3 Wiring Diagram

Model	GDN70BA-A3EBA2D, GDN70BA-A3EBA1D
Location	Control Box
Material	Adhesive backed paper label or equivalent
Illustration	See Ill. 1C for details

Alternate -

Model	GDN50BA-A3EBA1A, GDN70BA-A3EBA1A, GDN45BA-A3EBA1A, GDN45BA-A3EBA2A, GDN45BA-A3EBA4A, GDN50BA-A3EBA1C, GDN45BA-A3EBA3A, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A.
Location	Control Box
Material	Adhesive backed paper label or equivalent
Illustration	See Ill. 1B for details

Alternate -

Model	GDN70BA-A3EBA1B, GDN45BA-A3EBA1B, GDN45BA-A3EBA2B, GDN45BA-A3EBA4B, GDN50BA-A3EBA1E, GDN45BA-A3EBA3B, GDN50BA-A3EBA2E, GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B.
Location	Control Box
Material	Adhesive backed paper label or equivalent
Illustration	See Ill. 1C for details

Model	GDN50BA-A3EBA2C, GDN70BA-A3EBA2E
Location	Control Box
Material	Adhesive backed paper label or equivalent
Illustration	See Ill. 1D for details

Model	GDN70BA-A3EBA1B, GDN70BA-A3EBA2D, GDN70BA-A3EBA1D
Location	Control Box
Material	Adhesive backed paper label or equivalent
Illustration	See Ill. 1E for details

20 CABINET AND ENCLOSURES:

20-1 Unit Cabinet

Model	GDN70BA-A3EBA1A, GDN50BA-A3EBA1A, GDN70BA-A3EBA1B, GDN50BA-A3EBA1B, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, GDN45BA-A3EBA1A, GDN45BA-A3EBA1B, GDN50BA-A3EBA1C, GDN50BA-A3EBA1E
Special Comments	Consist of three parts (Front Unit Cabinet, Rear Unit Cabinet, Top Unit Cabinet); See ILL. 2 (Front Unit Cabinet) and ILL. 3 (Top Unit Cabinet) for details.
Length, mm	375
Depth, mm	290
Height, mm	595
Material	Polymeric, see Sec. 30 for details
Thickness, mm	See Sec. 30 for details
Openings	
Area (L x W), mm	Air Outlet (on Top Unit Cabinet): 265 x 87; Air Inlet (on Left/Right side of Front Unit Cabinet): 275 x 25
Spacing, mm	Air Outlet (on Top Unit Cabinet): 5; Air Inlet (on Front Unit Cabinet): 25;
Minimum distance to fan, mm	Air Outlet (on Top Unit Cabinet): 62; Air Inlet (on Front Unit Cabinet): N/A, Protected by Evaporator
Securement	By screws
Bonding for Grounding	N/A

(%) - The only difference between Top Unit Cabinet of Models with water pump and Models without water pump is openings on Top Unit Cabinet for control button on Display PWB.

20-1 Unit Cabinet

Model	GDN50BA-A3EBA2A, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN50BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN50BA-A3EBA2C, GDN70BA-A3EBA2E, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN50BA-A3EBA2D, GDN50BA-A3EBA2E, GDN50BA-A3EBA2F.
Special Comments	Consist of three parts (Front Unit Cabinet, Rear Unit Cabinet, Top Unit Cabinet); See ILL. 2A (Front Unit Cabinet) and ILL. 3 (Top Unit Cabinet) for details.
Length, mm	375
Depth, mm	290
Height, mm	595
Material	Polymeric, see Sec. 30 for details
Thickness, mm	See Sec. 30 for details
Openings	
Area (L x W), mm	Air Outlet (on Top Unit Cabinet): 265 x 87; Air Inlet (on Front Unit Cabinet): 293 x 240
Spacing, mm	Air Outlet (on Top Unit Cabinet): 5; Air Inlet (on Front Unit Cabinet): 6;
Minimum distance to fan, mm	Air Outlet (on Top Unit Cabinet): 62; Air Inlet (on Front Unit Cabinet): N/A, Protected by Evaporator
Securement	By screws
Bonding for Grounding	N/A

(%) - The only difference between Top Unit Cabinet of Models with water pump and Models without water pump is openings on Top Unit Cabinet for control button on Display PWB.

20-1 Unit Cabinet

Model	GDN45BA-A3EBA4A, GDN45BA-A3EBA4B, GDN50BA-A3EBA4A, GDN50BA-A3EBA4B
Special Comments	Consist of three parts (Front Unit Cabinet, Rear Unit Cabinet, Top Unit Cabinet); See ILL. 2B (Front Unit Cabinet) and ILL. 3 (Top Unit Cabinet) for details.
Length, mm	375
Depth, mm	289
Height, mm	610
Material	Polymeric, see Sec. 30 for details
Thickness, mm	See Sec. 30 for details
Openings	
Area (L x W), mm	Air Outlet (on Top Unit Cabinet): 265 x 87; Air Inlet (on Front Unit Cabinet): 282 x 250
Spacing, mm	Air Outlet (on Top Unit Cabinet): 5; Air Inlet (on Front Unit Cabinet): 5;
Minimum distance to fan, mm	Air Outlet (on Top Unit Cabinet): 62; Air Inlet (on Front Unit Cabinet): N/A, Protected by Evaporator
Securement	By screws
Bonding for Grounding	N/A

(%) - The only difference between Top Unit Cabinet of Models with water pump and Models without water pump is openings on Top Unit Cabinet for control button on Display PWB.

20-1 Unit Cabinet (Cont'd)

Model	GDN45BA-A3EBA3A, GDN45BA-A3EBA3B, GDN50BA-A3EBA3A, GDN50BA-A3EBA3B
Special Comments	Consist of three parts (Front Unit Cabinet, Rear Unit Cabinet, Top Unit Cabinet); See ILL. 2C (Front Unit Cabinet) and ILL. 3 (Top Unit Cabinet) for details.
Length, mm	375
Depth, mm	290
Height, mm	595
Material	Polymeric, see Sec. 30 for details
Thickness, mm	See Sec. 30 for details
Openings	
Area (L x W), mm	Air Outlet (on Top Unit Cabinet): 265 x 87; Air Inlet (on Front Unit Cabinet): 285 x 250
Spacing, mm	Air Outlet (on Top Unit Cabinet): 5; Air Inlet (on Front Unit Cabinet): 11
Minimum distance to fan, mm	Air Outlet (on Top Unit Cabinet): 62; Air Inlet (on Front Unit Cabinet): N/A, Protected by Evaporator
Securement	By screws
Bonding for Grounding	N/A

(%) - The only difference between Top Unit Cabinet of Models with water pump and Models without water pump is openings on Top Unit Cabinet for control button on Display PWB.

20-2 Unit Base

Model	GDN70BA-A3EBA1A, GDN50BA-A3EBA1A, GDN70BA-A3EBA1B, GDN50BA-A3EBA2A, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN50BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN50BA-A3EBA1B, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, GDN50BA-A3EBA2C, GDN70BA-A3EBA2E, GDN45BA-A3EBA1A, GDN45BA-A3EBA1B, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN45BA-A3EBA4A, GDN45BA-A3EBA4B, GDN50BA-A3EBA1C, GDN50BA-A3EBA1E, GDN45BA-A3EBA3A, GDN45BA-A3EBA3B, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A, GDN50BA-A3EBA2E, GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B.
Material	Polymeric, see Sec. 30 for details
Thickness, mm	See Sec. 30 for details
Openings	None
Bonding for Grounding	N/A

20-3 Front Grille

Model	GDN70BA-A3EBA1A, GDN50BA-A3EBA1A, GDN70BA-A3EBA1B, GDN50BA-A3EBA2A, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN50BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN50BA-A3EBA1B, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, GDN50BA-A3EBA2C, GDN70BA-A3EBA2E, GDN45BA-A3EBA1A, GDN45BA-A3EBA1B, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN45BA-A3EBA4A, GDN45BA-A3EBA4B, GDN50BA-A3EBA1C, GDN50BA-A3EBA1E, GDN45BA-A3EBA3A, GDN45BA-A3EBA3B, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A, GDN50BA-A3EBA2E, GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B.
Material	Polymeric, see Sec. 30 for details
Securement	By screws
Special Comment	Integrated with Front Unit Cabinet

20-4 Moving Parts - Guarding

Model	GDN70BA-A3EBA1A, GDN50BA-A3EBA1A, GDN70BA-A3EBA1B, GDN50BA-A3EBA2A, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN50BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN50BA-A3EBA1B, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, GDN50BA-A3EBA2C, GDN70BA-A3EBA2E, GDN45BA-A3EBA1A, GDN45BA-A3EBA1B, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN45BA-A3EBA4A, GDN45BA-A3EBA4B, GDN50BA-A3EBA1C, GDN50BA-A3EBA1E, GDN45BA-A3EBA3A, GDN45BA-A3EBA3B, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A, GDN50BA-A3EBA2E, GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B.
Material	Polymeric, see Sec. 30 for details
Securement (method)	Integrated with Top Unit Cabinet

20-5 Control Box

Model	All		
Material	Galvanized steel		
Physical Size (L x D x H), mm	105 x 90 x 191		
Material Thickness, mm	Control Box Body - 0.75; Top Cover - 0.75	Control Box Body - 0.75; Top Cover - 0.6	Control Box Body - 0.6; Top Cover - 0.6
Bonding for Grounding	By the grounding lead of power supply cord		
Securement	By screws		
Contained Components	Temperature Controller (Main PWB), Compressor Capacitor, Fan Motor capacitor, Transformer		
Special Comments	Consist of two parts (Control Box Body, Top Cover); Secured to each other by screws; Only minimum size openings for the passage of power supply cords and internal wiring; No other openings when assembled;		
Illustration	Refer to ILL. 4 for details	Refer to ILL. 4A for details	Refer to ILL. 4B for details

20-6 Terminal Cap

Model	All
Material	Galvanized steel
Thickness, mm	1.15
Securement	By a bolt and nut
Location	Over terminal enclosure of compressor
Special Comments	Used as additional cover of compressor terminal

20-7 Unit Drain Pan

Model	All
Material	Polymeric, see Sec. 30 for details
Thickness, mm	See Sec. 30 for details
Securement	Inserted into the slot of Unit Base and also secured by screws
Special Comments	Used to support Condenser Coil, Evaporator Coil and Fan Shroud; Also served as barrier to isolate compressor and Water Bucket

20-8 Water Level Switch Box

Model	All
Material	Polymeric, see sec.30 for details
Securement (Method)	By screws

20-9 Water Bucket Switch Box

Model	All Models with Water Pump
Material	Polymeric, see sec.30 for details
Securement (Method)	By screws

20-10 Water Pump Box

Model	GDN70BA-A3EBA1B, GDN70BA-A3EBA2B, GDN70BA-A3EBA2D, GDN70BA-A3EBA1D, GDN45BA-A3EBA1B, GDN45BA-A3EBA2B, GDN45BA-A3EBA4B, GDN50BA-A3EBA1E, GDN45BA-A3EBA3B, GDN50BA-A3EBA2E, GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B.
Special Comment	Consists of two parts - Bottom Part and Cover Part; Cover Part secured to Bottom Part by screws;
Material	Bottom Part - Polymeric, see Sec. 30 for details; Cover Part - Galvanized steel
Physical Size, mm	Refer to Ill. 11 or ILL. 11A for details
Material Thickness, mm	Bottom Part - 3.0; Cover Part - 0.75 or 0.6
Contain components	Water Pump
Securement (Method)	Secured to Unit Drain Pan by screws

20-11 Slide Rail

Model	GDN50BA-A3EBA2A, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN50BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN50BA-A3EBA2C, GDN70BA-A3EBA2E
Material	Polymeric, see Sec. 30 for details
Securement	By screws

30 NONMETALLIC COMPONENTS:

Manufacturer - Provide a description of all nonmetallic materials such as breaker, fan guards, cabinet or door liner light shields, etc. Specify whether or not it is Recognized.

Note: Assembly drawings may be helpful in illustrating the location of nonmetallic material with regard to wiring, fan motors, heaters, controls, etc. to aid in determining the appropriate flammability tests for materials.

30-1 Nonmetallic Components

MODEL	All
Front/Rear/Top Unit Cabinet	Recognized (QMFZ2, CN)
Listee	KINGFA SCI & TECH CO LTD (E171666)
Material Designation	ABS, HF-606
Thickness, mm	2.5
Minimum Flammability Rating/RTI, °C	V-0/60
Alternate Front/Rear/Top Unit Cabinet	- Same as above except
Listee	SILVER AGE ENGINEERING PLASTICS (DONGGUAN) CO LTD (E225348)
Material Designation	ABS, 3360
*	
Alternate Front/Rear/Top Unit Cabinet	- Same as above except
Listee	NINGBO LG YONGXING CHEMICAL CO LTD (E203955)
Material Designation	ABS, HI-121H
Minimum Flammability Rating/RTI, °C	HB/80

30-1 Nonmetallic Components (Cont'd)

MODEL	All
Alternate Top Unit Cabinet - Same as above except	
Listee	SILVER AGE ENGINEERING PLASTICS (DONGGUAN) CO LTD (E225348)
Material Designation	PC/ABS, 2540 (f2)
Thickness, mm	2.5
Minimum Flammability Rating/RTI, °C	V-0/60
Alternate Rear Unit Cabinet - Same as above except	
Listee	SANSHUI CITY GOLD LAKE ENGINEERING PLASTIC CO LTD (E200174)
Material Designation	ABS, PA-6001
Minimum Flammability Rating/RTI, °C	V-2/60
Alternate Rear Unit Cabinet - Same as above except	
Listee	Zhuhai Gree New Materials Co Ltd (E494416)
Material Designation	ABS, AB001F
Minimum Flammability Rating/RTI, °C	V-0/60
Alternate Top/Rear Unit Cabinet - Same as above except	
Listee	KINGFA SCI & TECH CO LTD (E171666)
Material Designation	ABS, GAR-011
Minimum Flammability Rating/RTI, °C	HB/60
Alternate Rear Unit Cabinet - Same as above except	
Listee	SILVER AGE ENGINEERING PLASTICS (DONGGUAN) CO LTD (E225348)
Material Designation	PC/ABS, 2540 (f2)

30-1 Nonmetallic Components (Cont'd)

MODEL	All
Unit Base	Recognized (QMFZ2, CN)
Listee	KINGFA SCI & TECH CO LTD (E171666)
Material Designation	ABS, HF-606
Thickness, mm	2.5
Minimum Flammability Rating/RTI, °C	V-0/60
Alternate Unit Base - Same as above except	
Listee	SILVER AGE ENGINEERING PLASTICS (DONGGUAN) CO LTD (E225348)
Material Designation	ABS, 3360
* *	
Listee	NINGBO LG YONGXING CHEMICAL CO LTD (E203955)
Material Designation	ABS, HI-121H
Minimum Flammability Rating/RTI, °C	HB/80
Unit Drain Pan	Recognized (QMFZ2, CN)
Listee	KINGFA SCI & TECH CO LTD (E171666)
Material Designation	ABS, HF-606
Thickness, mm	2.5
Minimum Flammability Rating/RTI, °C	V-0/60
Alternate Unit Drain Pan - Same as above except	
Listee	SILVER AGE ENGINEERING PLASTICS (DONGGUAN) CO LTD (E225348)
Material Designation	ABS, 3360
*	

30-1 Nonmetallic Components (Cont'd)

MODEL	All
Alternate Unit Drain Pan - Same as above except	
Listee	SANSHUI CITY GOLD LAKE ENGINEERING PLASTIC CO LTD (E200174)
Material Designation	ABS, PA-6001
Thickness, mm	2.5
Minimum Flammability Rating/RTI, °C	V-2/60
*	
Alternate Unit Drain Pan - Same as above except	
Listee	Zhuhai Gree New Materials Co Ltd (E494416)
Material Designation	ABS, AB001F
Minimum Flammability Rating/RTI, °C	V-0/60
Alternate Unit Drain Pan - Same as above except	
Listee	KINGFA SCI & TECH CO LTD (E171666)
Material Designation	ABS, GAR-011
Minimum Flammability Rating/RTI, °C	HB/60
Alternate Unit Drain Pan - Same as above except	
Listee	NINGBO LG YONGXING CHEMICAL CO LTD(E203955)
Material Designation	ABS, HI-121H
Minimum Flammability Rating/RTI, °C	HB/80

30-1 Nonmetallic Components (Cont'd)

MODEL	All
Water Level Swtich Box	Recognized (QMFZ2, CN)
Listee	Various
Material Designation	Various
Thickness, mm	Any required for V-0
Minimum Flammability Rating	V-0

MODEL	All models with water pump
Water Bucket Switch Box	Recognized (QMFZ2, CN)
Listee	Various
Material Designation	Various
Thickness, mm	Any required for V-0
Minimum Flammability Rating/RTI, °C	V-0

Model	All models with water pump
Water Pump Box - Bottom Part	Recognized (QMFZ2,8)
Listee's Name	KINGFA SCI & TECH CO LTD (E171666)
Material type, Model Designation	ABS, HF-630
Thickness, mm	3.0
Minimum Flammability Rating/RTI, °C	5VA/60
Alternate Water Pump Box - Bottom Part	- Same as above except
Listee's Name	SILVER AGE ENGINEERING PLASTICS (DONGGUAN) CO LTD (E225348)
Material type, Model Designation	ABS, 3370
Minimum Flammability Rating/RTI, °C	5VA/90
*	

MODEL	GDN50BA-A3EBA2A, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN50BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN50BA-A3EBA2C, GDN70BA-A3EBA2E
Slide Rail	Recognized (QMFZ2, CN)
Listee	Various
Material Designation	Various
* Thickness, mm	Any required for HB
Minimum Flammability Rating	HB

30-1 Nonmetallic Components (Cont'd)

Model	All
Blower Wheel	Recognized (QMFZ2)
Listee's Name	Any recognized
Material Designation	Any recognized (ABS)
Thickness, mm	2.5
Minimum Flammability Rating	HB
Fan Shroud	Recognized (QMFZ2)
Listee's Name	KINGFA SCI & TECH CO LTD (E171666)
Material Designation	ABS, HF-606
Thickness, mm	2.0
Minimum Flammability Rating/RTI, °C	V-0/60
Alternate Fan Shroud - Same as above except	
Listee	SILVER AGE ENGINEERING PLASTICS (DONGGUAN) CO LTD (E225348)
Material Designation	ABS, 3360
*	
Alternate Fan Shroud - Same as above except	
Listee	SANSHUI CITY GOLD LAKE ENGINEERING PLASTIC CO LTD (E200174)
Material Designation	ABS, PA-6001
Minimum Flammability Rating/RTI, °C	V-2/60
*	
Alternate Fan Shroud - Same as above except	
Listee	Zhuhai Gree New Materials Co Ltd (E494416)
Material Designation	ABS, AB001F
Minimum Flammability Rating/RTI, °C	V-0/60
Alternate Fan Shroud - Same as above except	
Listee	NINGBO LG YONGXING CHEMICAL CO LTD (E203955)
Material Designation	ABS, HI-121H
Minimum Flammability Rating/RTI, °C	HB/80
Water Bucket	Recognized (QMFZ2, CN)
Listee's Name	Various
Material Designation	Various
Thickness, mm	Any required
Minimum Flammability Rating	HB
Air Filter	Recognized (QMFZ2, CN)
Listee's Name	Various
Material Designation	Various
Thickness, mm	Any required
Minimum Flammability Rating	HB

Note: Line voltage wiring is isolated from HB and HBF rated materials unless the wiring is rated VW-1.

30-1 Nonmetallic Components (Cont'd)

Model	GDN50BA-A3EBA2C, GDN70BA-A3EBA2E
PWB Supporting Base	Recognized (QMFZ2,8)
Listee's Name	KINGFA SCI & TECH CO LTD (E171666)
Material Designation	ABS, HF-630
Minimum Thickness Used, mm	2.0 mm
Flammability Classification (Minimum Required)	5VA
HWI/HAI/CTI	4/0/0
RTI, °C	60
PWB Supporting Base - Alternate - Same as above except	
*	
Listee's Name	SILVER AGE ENGINEERING PLASTICS (DONGGUAN) CO LTD (E225348)
Material Designation	ABS, 3370
HWI/HAI/CTI	2/0/1
RTI, °C	90

30-1 Nonmetallic Components (Cont'd)

Model	GDN70BA-A3EBA1B, GDN70BA-A3EBA2D, GDN70BA-A3EBA1D
PWB Supporting Base (%)	Recognized (QMFZ2,8)
Listee's Name	KINGFA SCI & TECH CO LTD (E171666)
Material Designation	ABS, HF-630
Minimum Thickness Used, mm	2.5 mm
Flammability Classification (Minimum Required)	5VA
HWI/HAI/CTI	4/0/0
RTI, °C	60
PWB Supporting Base - Alternate - Same as above except	
Listee's Name	SILVER AGE ENGINEERING PLASTICS (DONGGUAN) CO LTD (E225348)
Material Designation	ABS, 3370
HWI/HAI/CTI	2/0/1
RTI, °C	90

(%) - Only for models assembled with alternate Main PWB integrated switching mode power supply circuits.

40 REFRIGERATION SYSTEM:

40-1 Compressor (Recognized SLIS2, CN)

Model	GDN70BA-A3EBA1A, GDN70BA-A3EBA1B, GDN70BA-A3EBA1D, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN70BA-A3EBA1C, GDN70BA-A3EBA2E
Listee's Name	ZHUHAI LANDA COMPRESSOR CO LTD (SA10212)
Designation	QXA-A069xL130A
UL File No./Issued Date	SA44218/2008-04-18
Electrical Rating	
V, Hz, Phase	115, 60, 1
LRA	29
Bonding for Grounding	A dedicated bonding wire identified by color combination green/yellow (16 AWG) secured to control box by a mechanical screw with 4 mm thread diameter
Components of Compressor Assembly (Not for UL Representative's Use)	
Terminal Enclosure	R/C (QMFZ2, CN), Rated 5VA, RTI - 140°C
Gasket under Terminal Enclosure	R/C (QMFZ2, CN), Rated Min. HB, RTI - Min. 130°C

40-2 Overload Protector

Model	GDN70BA-A3EBA1A, GDN70BA-A3EBA1B, GDN70BA-A3EBA1D, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN70BA-A3EBA1C, GDN70BA-A3EBA2E
Employed with Compressor	QXA-A069xL130A
Listee's Name	Ubukata Industries Co.,Ltd.(E85460)
Model or Designation	UP30E05XX-T56
Internal or External?	Internal

40-5 Run Capacitor (Recognized CYWT2, CN) (See Sec. Gen. for Spacings)

Model	GDN70BA-A3EBA1A, GDN70BA-A3EBA1B, GDN70BA-A3EBA1D, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN70BA-A3EBA1C, GDN70BA-A3EBA2E
Employed with Compressor	QXA-A069xL130A
Type	Oil Filled
Listee's Name	Various
Model No.	Various
Rating, uF, V min., Ambient Temperature	50, 250, T70
Minimum AFC Rating	5000
Location	Within Control Box
Container Material	Aluminum or steel
Corrosion Protection	Inherent
Mounting (+)	Minimum 14.3 mm clearance
Retention means	Secured by a metal strap and screw

(+) - No obstruction located in front of cover.

40-1 Compressor (Recognized SLIS2, CN) (Cont'd)

Model	GDN50BA-A3EBA1A, GDN50BA-A3EBA2A, GDN50BA-A3EBA2B, GDN50BA-A3EBA1B, GDN50BA-A3EBA2C
Listee's Name	ZHUHAI LANDA COMPRESSOR CO LTD (SA10212)
Designation	QXA-A050xL130A
UL File No./Issued Date	SA44218/2008-04-18
Electrical Rating	
V, Hz, Phase	115, 60, 1
LRA	21
Bonding for Grounding	A dedicated bonding wire identified by color combination green/yellow (18 AWG) secured to control box by a mechanical screw with 4 mm thread diameter
Components of Compressor Assembly (Not for UL Representative's Use)	
Terminal Enclosure	R/C (QMFZ2, CN), Rated 5VA, RTI - 140°C
Gasket under Terminal Enclosure	R/C (QMFZ2, CN), Rated Min. HB, RTI - Min. 130°C

40-2 Overload Protector

Model	GDN50BA-A3EBA1A, GDN50BA-A3EBA2A, GDN50BA-A3EBA2B, GDN50BA-A3EBA1B, GDN50BA-A3EBA2C
Employed with Compressor	QXA-A050xL130A
Listee's Name	Changzhou Changrong Electrical Appliance Co., Ltd (E237353)
Model or Designation	HPA-121
Internal or External?	Internal

40-5 Run Capacitor (Recognized CYWT2, CN) (See Sec. Gen. for Spacings)

Model	GDN50BA-A3EBA1A, GDN50BA-A3EBA2A, GDN50BA-A3EBA2B, GDN50BA-A3EBA1B, GDN50BA-A3EBA2C
Employed with Compressor	QXA-A050xL130A
Type	Oil Filled
Listee's Name	Various
Model No.	Various
Rating, uF, V min., Ambient Temperature	35, 250, T70
Minimum AFC Rating	5000
Location	Within Control Box
Container Material	Aluminum or steel
Corrosion Protection	Inherent
Mounting (+)	Minimum 14.3 mm clearance
Retention means	Secured by a metal strap and screw

(+) - No obstruction located in front of cover.

40-1 Compressor (Recognized SLIS2, CN) (Cont'd)

Alternate -

Model	GDN70BA-A3EBA1A, GDN70BA-A3EBA1B, GDN70BA-A3EBA1D, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN70BA-A3EBA1C, GDN70BA-A3EBA2E
Listee's Name	XIAN QINGAN REFRIGERATION EQUIPMENT CO LTD
Designation	YZG-A068FY2D2T2
UL File No./Issued Date	SA32170/2006-09-29
Electrical Rating	
V, Hz, Phase	115, 60, 1
LRA	33
Bonding for Grounding	A dedicated bonding wire identified by color combination green/yellow (16 AWG) secured to control box by a mechanical screw with 4 mm thread diameter
Components of Compressor Assembly (Not for UL Representative's Use)	
Terminal Enclosure	R/C (QMFZ2, CN), Rated 5VA, RTI - 155°C
Gasket under Terminal Enclosure	R/C (QMFZ2, CN), Rated Min. HB, RTI - Min. 130°C

40-2 Overload Protector

Model	GDN70BA-A3EBA1A, GDN70BA-A3EBA1B, GDN70BA-A3EBA1D, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN70BA-A3EBA1C, GDN70BA-A3EBA2E
Employed with Compressor	YZG-A068FY2D2T2
Listee's Name	ChangZhou ChangRong Electrical APPLIANCE CO LTD
Model or Designation	HPA-335
Internal or External?	Internal

40-5 Run Capacitor (Recognized CYWT2, CN) (See Sec. Gen. for Spacings)

Model	GDN70BA-A3EBA1A, GDN70BA-A3EBA1B, GDN70BA-A3EBA1D, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN70BA-A3EBA1C, GDN70BA-A3EBA2E
Employed with Compressor	YZG-A068FY2D2T2
Type	Oil Filled
Listee's Name	Various
Model No.	Various
Rating, uF, V min., Ambient Temperature	40, 250, T70
Minimum AFC Rating	5000
Location	Within Control Box
Container Material	Aluminum or steel
Corrosion Protection	Inherent
Mounting (+)	Minimum 14.3 mm clearance
Retention means	Secured by a metal strap and screw

(+) - No obstruction located in front of cover.

40-1 Compressor (Recognized SLIS2, CN) (Cont'd)

Alternate -

Model	GDN50BA-A3EBA1A, GDN50BA-A3EBA2A, GDN50BA-A3EBA2B, GDN50BA-A3EBA1B, GDN50BA-A3EBA2C
Listee's Name	RECHI PRECISION CO LTD
Designation	39A121H
UL File No./Issued Date	SA10219/1998-04-30
Electrical Rating	
V, Hz, Phase	115, 60, 1
LRA	26
Bonding for Grounding	A dedicated bonding wire identified by color combination green/yellow (18 AWG) secured to control box by a mechanical screw with 4 mm thread diameter
Components of Compressor Assembly (Not for UL Representative's Use)	
Terminal Enclosure	R/C (QMFZ2, CN), Rated 5VA, RTI - 140°C
Gasket under Terminal Enclosure	R/C (QMFZ2, CN), Rated Min. HB, RTI - Min. 130°C

40-2 Overload Protector

Model	GDN50BA-A3EBA1A, GDN50BA-A3EBA2A, GDN50BA-A3EBA2B, GDN50BA-A3EBA1B, GDN50BA-A3EBA2C
Employed with Compressor	39A121H
Listee's Name	CHANGZHOU CHANGRONG ELECTRICAL APPLIANCE CO LTD
Model or Designation	HPA-330
Internal or External?	Internal

40-5 Run Capacitor (Recognized CYWT2, CN) (See Sec. Gen. for Spacings)

Model	GDN50BA-A3EBA1A, GDN50BA-A3EBA2A, GDN50BA-A3EBA2B, GDN50BA-A3EBA1B, GDN50BA-A3EBA2C
Employed with Compressor	39A121H
Type	Oil Filled
Listee's Name	Various
Model No.	Various
Rating, uF, V min., Ambient Temperature	35, 250, T70
Minimum AFC Rating	5000
Location	Within Control Box
Container Material	Aluminum or steel
Corrosion Protection	Inherent
Mounting (+)	Minimum 14.3 mm clearance
Retention means	Secured by a metal strap and screw

(+) - No obstruction located in front of cover.

40-1 Compressor (Recognized SLIS2, CN) (Cont'd)

Model	GDN45BA-A3EBA1A, GDN45BA-A3EBA1B, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN45BA-A3EBA4A, GDN45BA-A3EBA4B, GDN45BA-A3EBA3A, GDN45BA-A3EBA3B
Listee's Name	ZHUHAI LANDA COMPRESSOR CO LTD (SA10212)
Designation	QXA-A062xL130B
UL File No./Issued Date	SA44218/2008-04-18
Electrical Rating	
V, Hz, Phase	115, 60, 1
LRA	25
Bonding for Grounding	A dedicated bonding wire identified by color combination green/yellow (16 AWG) secured to control box by a mechanical screw with 4 mm thread diameter
Components of Compressor Assembly (Not for UL Representative's Use)	
Terminal Enclosure	R/C (QMFZ2, CN), Rated 5VA, RTI - 140°C
Gasket under Terminal Enclosure	R/C (QMFZ2, CN), Rated Min. HB, RTI - Min. 130°C

40-2 Overload Protector

Model	GDN45BA-A3EBA1A, GDN45BA-A3EBA1B, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN45BA-A3EBA4A, GDN45BA-A3EBA4B, GDN45BA-A3EBA3A, GDN45BA-A3EBA3B
Employed with Compressor	QXA-A062xL130B
Listee's Name	Changzhou Changrong Electrical Appliance Co., Ltd. (E237353)
Model or Designation	HPA-322
Internal or External?	Internal

40-5 Run Capacitor (Recognized CYWT2, CN) (See Sec. Gen. for Spacings)

Model	GDN45BA-A3EBA1A, GDN45BA-A3EBA1B, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN45BA-A3EBA4A, GDN45BA-A3EBA4B, GDN45BA-A3EBA3A, GDN45BA-A3EBA3B
Employed with Compressor	QXA-A062xL130B
Type	Oil Filled
Listee's Name	Various
Model No.	Various
Rating, uF, V min., Ambient Temperature	40, 250, T70
Minimum AFC Rating	5000
Location	Within Control Box
Container Material	Aluminum or steel
Corrosion Protection	Inherent
Mounting (+)	Minimum 14.3 mm clearance
Retention means	Secured by a metal strap and screw

(+) - No obstruction located in front of cover.

40-1 Compressor (Recognized SLIS2, CN) (Cont'd)

Model	GDN50BA-A3EBA1C, GDN50BA-A3EBA1E, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A, GDN50BA-A3EBA2E.
Listee's Name	XIAN QINGAN REFRIGERATION EQUIPMENT CO LTD
Designation	YZG-A065FY2D2
UL File No./Issued Date	SA32170/2017-11-23
Electrical Rating	
V, Hz, Phase	115, 60, 1
LRA	28
Bonding for Grounding	A dedicated bonding wire identified by color combination green/yellow (16 AWG) secured to control box by a mechanical screw with 4 mm thread diameter
Components of Compressor Assembly (Not for UL Representative's Use)	
Terminal Enclosure	R/C (QMFZ2, CN), Rated 5VA, RTI - 140°C
Gasket under Terminal Enclosure	R/C (QMFZ2, CN), Rated Min. HB, RTI - Min. 130°C

40-2 Overload Protector

Model	GDN50BA-A3EBA1C, GDN50BA-A3EBA1E, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A, GDN50BA-A3EBA2E.
Employed with Compressor	YZG-A065FY2D2
Listee's Name	Changzhou Changrong Electrical Appliance Co., Ltd. (E237353)
Model or Designation	HPA-530
Internal or External?	Internal

40-5 Run Capacitor (Recognized CYWT2, CN) (See Sec. Gen. for Spacings)

Model	GDN50BA-A3EBA1C, GDN50BA-A3EBA1E, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A, GDN50BA-A3EBA2E.
Employed with Compressor	YZG-A065FY2D2
Type	Oil Filled
Listee's Name	Various
Model No.	Various
Rating, uF, V min., Ambient Temperature	50, 250, T70
Minimum AFC Rating	5000
Location	Within Control Box
Container Material	Aluminum or steel
Corrosion Protection	Inherent
Mounting (+)	Minimum 14.3 mm clearance
Retention means	Secured by a metal strap and screw

(+) - No obstruction located in front of cover.

40-1 Compressor (Recognized SLIS2, CN) (Cont'd)

Model	GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B
Listee's Name	XIAN QINGAN REFRIGERATION EQUIPMENT CO LTD
Designation	YZG-V066FY2D2T6
UL File No./Issued Date	SA32170/2017-11-23
Electrical Rating	
V, Hz, Phase	115, 60, 1
LRA	30
Bonding for Grounding	A dedicated bonding wire identified by color combination green/yellow (16 AWG) secured to control box by a mechanical screw with 4 mm thread diameter
Components of Compressor Assembly (Not for UL Representative's Use)	
Terminal Enclosure	R/C (QMFZ2, CN), Rated 5VA, RTI - 140°C
Gasket under Terminal Enclosure	R/C (QMFZ2, CN), Rated Min. HB, RTI - Min. 130°C

40-2 Overload Protector

Model	GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B
Employed with Compressor	YZG-V066FY2D2T6
Listee's Name	Changzhou Changrong Electrical Appliance Co., Ltd. (E237353)
Model or Designation	HPA-430
Internal or External?	Internal

40-5 Run Capacitor (Recognized CYWT2, CN) (See Sec. Gen. for Spacings)

Model	GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B
Employed with Compressor	YZG-V066FY2D2T6
Type	Oil Filled
Listee's Name	Various
Model No.	Various
Rating, uF, V min., Ambient Temperature	50, 250, T70
Minimum AFC Rating	5000
Location	Within Control Box
Container Material	Aluminum or steel
Corrosion Protection	Inherent
Mounting (+)	Minimum 14.3 mm clearance
Retention means	Secured by a metal strap and screw

(+) - No obstruction located in front of cover.

50 REFRIGERATION SYSTEM: (Refrigerant Containing Components)

50-1 Condenser (Fin and Tube Types)

Model	GDN70BA-A3EBA1A, GDN70BA-A3EBA1B, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, GDN70BA-A3EBA2E, GDN45BA-A3EBA1A, GDN45BA-A3EBA1B, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN45BA-A3EBA4A, GDN45BA-A3EBA4B, GDN50BA-A3EBA1C, GDN50BA-A3EBA1E, GDN45BA-A3EBA3A, GDN45BA-A3EBA3B, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A, GDN50BA-A3EBA2E, GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B.
Manufacturer	Gree Electric Appliances Inc Of Zhuhai
No. Tubes High	12
No. Tubes Deep	3
Physical Size of Finned Section, W x H x D, mm	260 x 228.6 x 34.2
Tubing Material	Copper
Tubing OD, mm	5.0
Tubing Wall Thickness, mm	0.23
Return Bend Tubing OD, mm	5.0
Return Bend Wall Thickness, mm	0.41
Fins per Inch	18
Bonding for Grounding (Method)	Through copper tubing to compressor
Product Line Test Pressure, MPa (Minimum)	3.6
Illustration	Refer to ILL. 5 for details

50-1 Condenser (Fin and Tube Types) (Cont'd)

Model	GDN50BA-A3EBA1A, GDN50BA-A3EBA2A, GDN50BA-A3EBA2B, GDN50BA-A3EBA1B, GDN50BA-A3EBA2C
Manufacturer	Gree Electric Appliances Inc Of Zhuhai
No. Tubes High	12, 10, 8
No. Tubes Deep	3
Physical Size of Finned Section, W x H x D, mm	260 x 228.6 x 34.2
Tubing Material	Copper
Tubing OD, mm	5
Tubing Wall Thickness, mm	0.23
Return Bend Tubing OD, mm	5
Return Bend Wall Thickness, mm	0.41, 0.5
Fins per Inch	18
Bonding for Grounding (Method)	Through copper tubing to compressor
Product Line Test Pressure, MPa (Minimum)	3.6
Illustration	Refer to ILL. 5A for details

50-2 Evaporator (Fin and Tube Type)

Model	GDN70BA-A3EBA1A, GDN70BA-A3EBA1B, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, GDN70BA-A3EBA2E
Manufacturer	GREE ELECTRIC APPLIANCES INC OF ZHUHAI
No. Tubes High	12
No. Tubes Deep	2
Physical Size of Finned Section, W x H x D, mm	260 x 228.6 x 25.4
Tubing Material	Copper
Tubing OD, mm	7
Tubing Wall Thickness, mm	0.25
Return Bend OD, mm	7
Return Bend Wall Thickness, mm	0.41
Fins per Inch	18
Bonding	Through copper tubing to compressor
Product Line Test Pressure, MPa (Minimum)	2.2
Illustration	Refer to ILL. 6 for details

50-2 Evaporator (Fin and Tube Type) (Cont'd)

Model	GDN50BA-A3EBA1A, GDN50BA-A3EBA2A, GDN50BA-A3EBA2B, GDN50BA-A3EBA1B, GDN50BA-A3EBA2C
Manufacturer	GREE ELECTRIC APPLIANCES INC OF ZHUHAI
No. Tubes High	11, 5
No. Tubes Deep	2
Physical Size of Finned Section, W x H x D, mm	260 x 228.6 x 25.4
Tubing Material	Copper
Tubing OD, mm	7
Tubing Wall Thickness, mm	0.25
Return Bend OD, mm	7
Return Bend Wall Thickness, mm	0.41
Fins per Inch	18
Bonding	Through copper tubing to compressor
Product Line Test Pressure, MPa (Minimum)	2.2
Illustration	Refer to ILL. 6A for details

50-2 Evaporator (Fin and Tube Type) (Cont'd)

Model	GDN45BA-A3EBA1A, GDN45BA-A3EBA1B, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN45BA-A3EBA4A, GDN45BA-A3EBA4B, GDN45BA-A3EBA3A, GDN45BA-A3EBA3B
Manufacturer	GREE ELECTRIC APPLIANCES INC OF ZHUHAI
No. Tubes High	12, 12
No. Tubes Deep	2
Physical Size of Finned Section, W x H x D, mm	260 x 228.6 x 25.4
Tubing Material	Copper
Tubing OD, mm	7
Tubing Wall Thickness, mm	0.25
Return Bend OD, mm	7
Return Bend Wall Thickness, mm	0.41
Fins per Inch	19
Bonding	Through copper tubing to compressor
Product Line Test Pressure, MPa (Minimum)	2.2
Illustration	Refer to ILL. 6B for details

50-2 Evaporator (Fin and Tube Type) (Cont'd)

Model	GDN50BA-A3EBA1C, GDN50BA-A3EBA1E, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A, GDN50BA-A3EBA2E, GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B.
Manufacturer	GREE ELECTRIC APPLIANCES INC OF ZHUHAI
No. Tubes High	12, 12, 12
No. Tubes Deep	3
Physical Size of Finned Section, W x H x D, mm	261 x 228.6 x 38.1
Tubing Material	Copper
Tubing OD, mm	7
Tubing Wall Thickness, mm	0.25
Return Bend OD, mm	7
Return Bend Wall Thickness, mm	0.5, 0.41
Fins per Inch	19
Bonding	Through copper tubing to compressor
Product Line Test Pressure, MPa (Minimum)	2.2
Illustration	Refer to ILL. 6C for details

50-3 Accumulator - Integrated Part of R/C Compressor

50-4 Refrigerant Control

Model	GDN70BA-A3EBA1A, GDN70BA-A3EBA1B, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, GDN70BA-A3EBA2E	GDN50BA-A3EBA1A, GDN50BA-A3EBA2A, GDN50BA-A3EBA2B, GDN50BA-A3EBA1B, GDN50BA-A3EBA2C
Capillary Tube - No. Provided	1	1
Material	Copper	Copper
ID, mm	1.0	1.0
Wall Thickness, mm	0.65	0.65
Length, mm	400	600
Capillary Code (Not for UL Representative's use)	CT1	CT2

Model	GDN45BA-A3EBA1A, GDN45BA-A3EBA1B, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN45BA-A3EBA4A, GDN45BA-A3EBA4B, GDN50BA-A3EBA1C, GDN50BA-A3EBA1E, GDN45BA-A3EBA3A, GDN45BA-A3EBA3B, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A, GDN50BA-A3EBA2E
Capillary Tube - No. Provided	1
Material	Copper
ID, mm	1.0
Wall Thickness, mm	0.65
Length, mm	450
Capillary Code (Not for UL Representative's use)	CT3

Model	GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B
Capillary Tube - No. Provided	1
Material	Copper
ID, mm	1.0
Wall Thickness, mm	0.65
Length, mm	350
Capillary Code (Not for UL Representative's use)	CT4

*

50-6 Interconnecting Tubing (See Sec. Gen.)

50-7 Method of Joining Tubing and Components - See Sec. Gen.

60 MOTORS:

60-1 Fan Motor (Recognized XEWR2, CN)

Model	GDN70BA-A3EBA1A, GDN50BA-A3EBA1A, GDN70BA-A3EBA1B, GDN50BA-A3EBA2A, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN50BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN50BA-A3EBA1B, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, GDN50BA-A3EBA2C, GDN70BA-A3EBA2E
Listee's Name	ZHUHAI KAIBANG MOTOR MFG CO LTD (E257969)
Model No.	CF25W-L
Recognized Designation	YY025-804P01-901
UL File No./Issued Date	E470671/2013-08-08
Rating V, A, W, Hz	115, 0.69, 25, 60 (AL winding, Class A)
Overheating Protection	Thermally protected
Listee's Name	CHANGZHOU CHANGHONG TONGLI ELECTRICAL APPLIANCE CO LTD (E309547)
Model Designation	KW-A1
Motor Type	Enclosed
Mounting	Secured to Fan Shroud by screws
Bonding for Grounding	A dedicated bonding wire identified by color combination green/yellow (18 AWG) secured to control box by a mechanical screw with 4 mm thread diameter

60-2 Fan Capacitor (Recognized CZDS2, CN or CYWT2, CN) (See Sec. Gen. for Spacings)

Model	GDN70BA-A3EBA1A, GDN50BA-A3EBA1A, GDN70BA-A3EBA1B, GDN50BA-A3EBA2A, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN50BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN50BA-A3EBA1B, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, GDN50BA-A3EBA2C, GDN70BA-A3EBA2E
Employed with Fan Motor	YY025-804P01-901
Type	Dry
Listee	Various
Model No.	Various
Rating, uF, V min., Ambient Temperature	6, 250, T70
Location	Within Control Box
Securement	By one screw and two tabs

60-1 Fan Motor (Recognized XEWR2, CN) (Cont'd)

Alternate -

Model	GDN70BA-A3EBA1A, GDN50BA-A3EBA1A, GDN70BA-A3EBA1B, GDN50BA-A3EBA2A, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN50BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN50BA-A3EBA1B, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, GDN50BA-A3EBA2C, GDN70BA-A3EBA2E
Listee's Name	ZHONG SHAN NAN-FENG ELECTRICAL MACHINERY CO LTD
Model No.	CF25W-L
Recognized Designation	YY025-824PL01-004L
UL File No./Issued Date	E256306/2013-04-26
Rating V, A, W, Hz	115, 0.53, 25, 60 (AL winding, Class A)
Overheating Protection	Thermally protected
Listee's Name	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD (E214731)
Model Designation	BR-A
Motor Type	Enclosed
Mounting	Secured to Fan Shroud by screws
Bonding for Grounding	A dedicated bonding wire identified by color combination green/yellow (18 AWG) secured to control box by a mechanical screw with 4 mm thread diameter

60-2 Fan Capacitor (Recognized CZDS2, CN or CYWT2, CN) (See Sec. Gen. for Spacings)

Model	GDN70BA-A3EBA1A, GDN50BA-A3EBA1A, GDN70BA-A3EBA1B, GDN50BA-A3EBA2A, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN50BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN50BA-A3EBA1B, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, GDN50BA-A3EBA2C, GDN70BA-A3EBA2E
Employed with Fan Motor	YY025-824PL01-004L
Type	Dry
Listee	Various
Model No.	Various
Rating, uF, V min., Ambient Temperature	6, 250, T70
Location	Within Control Box
Securement	By one screw and two tabs

60-1 Fan Motor (Recognized XEWR2, CN) (Cont'd)

Alternate -

Model	GDN70BA-A3EBA1A, GDN50BA-A3EBA1A, GDN70BA-A3EBA1B, GDN50BA-A3EBA2A, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN50BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN50BA-A3EBA1B, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, GDN50BA-A3EBA2C, GDN70BA-A3EBA2E
Listee's Name	ZHONGSHAN BROAD-OCEAN MOTOR CO LTD
Model No.	CF25W-L
Recognized Designation	Y4L403B810L
UL File No./Issued Date	E256965/2016-11-09
Rating V, A, W, Hz	115, 0.6, 25, 60 (Aluminum winding, Class B)
Overheating Protection	Thermally protected
Listee's Name	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD (E214731)
Model Designation	BR-A2D
Motor Type	Enclosed
Mounting	Secured to Fan Shroud by screws
Bonding for Grounding	A dedicated bonding wire identified by color combination green/yellow (18 AWG) secured to control box by a mechanical screw with 4 mm thread diameter

60-2 Fan Capacitor (Recognized CZDS2, CN or CYWT2, CN) (See Sec. Gen. for Spacings)

Model	GDN70BA-A3EBA1A, GDN50BA-A3EBA1A, GDN70BA-A3EBA1B, GDN50BA-A3EBA2A, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN50BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN50BA-A3EBA1B, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, GDN50BA-A3EBA2C, GDN70BA-A3EBA2E
Employed with Fan Motor	Y4L403B810L
Type	Dry
Listee	Various
Model No.	Various
Rating, uF, V min., Ambient Temperature	6, 250, T70
Location	Within Control Box
Securement	By one screw and two tabs

60-1 Fan Motor (Recognized XEWR2, CN) (Cont'd)

Alternate -

Model	GDN70BA-A3EBA1D
Listee's Name	ZHONGSHAN BROAD-OCEAN MOTOR CO LTD
Model No.	CF25W-L
Recognized Designation	Y4L403B816L
UL File No./Issued Date	E256965/2018-02-12
Rating V, A, W, Hz	115, 0.6, 25, 60 (Aluminum winding, Class B)
Overheating Protection	Thermally protected
Listee's Name	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD (E214731)
Model Designation	BR-A2D-130°C
Motor Type	Enclosed
Mounting	Secured to Fan Shroud by screws
Bonding for Grounding	A dedicated bonding wire identified by color combination green/yellow (18 AWG) secured to control box by a mechanical screw with 4 mm thread diameter
Special Comments	Only employed with Compressor YZG-A068FY2D2T2

60-2 Fan Capacitor (Recognized CZDS2, CN or CYWT2, CN) (See Sec. Gen. for Spacings)

Model	GDN70BA-A3EBA1D
Employed with Fan Motor	Y4L403B816L
Type	Dry
Listee	Various
Model No.	Various
Rating, uF, V min., Ambient Temperature	6, 250, T70
Location	Within Control Box
Securement	By one screw and two tabs

60-1 Fan Motor (Recognized XEWR2, CN) (Cont'd)

Model	GDN45BA-A3EBA1A, GDN45BA-A3EBA1B, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN45BA-A3EBA4A, GDN45BA-A3EBA4B, GDN50BA-A3EBA1C, GDN50BA-A3EBA1E, GDN45BA-A3EBA3A, GDN45BA-A3EBA3B, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A, GDN50BA-A3EBA2E, GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B
Listee's Name	ZHUHAI KAIBANG MOTOR MFG CO LTD (E257969)
Model No.	CF30W-L
Recognized Designation	YY030-804P01-901
UL File No./Issued Date	E470671/2013-08-08
Rating V, A, W, Hz	115, 0.72, 30, 60 (AL winding, Class A)
Overheating Protection	Thermally protected
Listee's Name	JIANGSU CHANGSHENG ELECTRIC APPLIANCE CO LTD (E214731)
Model Designation	18AM-B
Motor Type	Enclosed
Mounting	Secured to Fan Shroud by screws
Bonding for Grounding	A dedicated bonding wire identified by color combination green/yellow (18 AWG) secured to control box by a mechanical screw with 4 mm thread diameter

60-2 Fan Capacitor (Recognized CZDS2, CN or CYWT2, CN) (See Sec. Gen. for Spacings)

Model	GDN45BA-A3EBA1A, GDN45BA-A3EBA1B, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN45BA-A3EBA4A, GDN45BA-A3EBA4B, GDN50BA-A3EBA1C, GDN50BA-A3EBA1E, GDN45BA-A3EBA3A, GDN45BA-A3EBA3B, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A, GDN50BA-A3EBA2E, GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B
Employed with Fan Motor	YY030-804P01-901
Type	Dry
Listee	Various
Model No.	Various
Rating, uF, V min., Ambient Temperature	6, 250, T70
Location	Within Control Box
Securement	By one screw and two tabs

70 ELECTRICAL COMPONENTS:

70-1 Switches

Model	All
Use (Loads Controlled)	Water Level
Manufacturer	Various
Model Number	Various
Electrical Rating	125 V, 16 A
Location/Enclosure	Behind Water Bucket
Special Comments	Electrically located in low voltage circuit power supplied by class 2 transformer. No safety function.

Model	All Models with water pump
Use	Water Bucket Switch
Manufacturer	Various
Model Number	Various
Electrical Rating	125 V, 16 A
Location/Enclosure	Behind Water Bucket
Special Comments	Electrically located in low voltage circuit power supplied by class 2 transformer. No safety function.

70-2 Transformer - R/C (XOKV2, CN)

Model	All except models with switch mode power supply
Listee's Name	DONGGUAN CITY DAZHONG ELEC CO LTD DONGGUAN CITY WANXING ELEC FTY
Model Designation	35X15D(1)
UL File No./Issued Date	E218861/2006-08-21
Rating	Primary - 110-120 V, 60 Hz; Secondary - 11.8 V, 250 mA
Securement	By screws

Alternative:

Model	All except models with switch mode power supply
Listee's Name	SHENZHEN JINGQUANHUA ELECTRONICS CO LTD
Model Designation	DB-EI35-5051A
UL File No./Issued Date	E221053/2012-02-23
Rating	Primary - 120 V, 60 Hz; Secondary - 11.8 V, 250 mA
Securement	By screws

70-3 Temperature Controller

Model	GDN70BA-A3EBA1A, GDN50BA-A3EBA1A, GDN50BA-A3EBA2A, GDN70BA-A3EBA2A, GDN50BA-A3EBA2B, GDN70BA-A3EBA2C, GDN50BA-A3EBA1B, GDN70BA-A3EBA1C, GDN45BA-A3EBA1A, GDN45BA-A3EBA2A, GDN45BA-A3EBA4A, GDN45BA-A3EBA3A	GDN70BA-A3EBA1B, GDN70BA-A3EBA2B, GDN70BA-A3EBA2D, GDN70BA-A3EBA1D, GDN45BA-A3EBA1B, GDN45BA-A3EBA2B, GDN45BA-A3EBA4B, GDN45BA-A3EBA3B
Main PWB		
Manufacturer	Gree Electric Appliances Inc Of Zhuhai	
Model No.	M10101AH	M10101AG
Circuit Schematic	High voltage circuit shall not differ from ILL. 7 or 7D	
PWB Layout	PWB layout shall not differ from ILL. 8 or 8D	
Printed Wiring Board	R/C (ZPMV2, CN), Rated V=0, 130°C, Suitable for direct support of live parts	
Populated Components on M10101AH (Main PWB) -		
Compressor Relay (1 provided)	R/C (NLDX2, 8), XIAMEN HONGFA ELECTROACOUSTIC CO LTD (E134517), Type JQX-102F, Rated 1 HP, 120V ac, 100K cycles, T85; Or R/C (NLDX2, 8), SONG CHUAN PRECISION CO LTD (E88991), Type 891WP-1A-C, Rated 18 FLA, 98 LRA, 240 Vac, 30K cycles, T65; Or R/C (NLDX2, 8), DONGGUAN SANYOU ELECTRICAL APPLIANCES CO LTD (E190598), Type SFK-112DM, Rated 1 HP, 120 V ac, 100K cycles, T80; Or R/C (NLDX2, 8), DONGGUAN CHUROD ELECTRONICS CO LTD (E341422), Type CHF-V-112DA2, Rated 240 V ac, 2 Hp, 100K cycles, T85;	
Fan Motor Relay (3 provided) Water Pump Relay (only for models with water pump, 1 provided)	R/C (NLDX2, 8), XIAMEN HONGFA ELECTROACOUSTIC CO LTD (E134517), Type JZC-32F, Rated 1/10 HP, 125 V ac, 100K cycles, T70; Or R/C (NLDX2, CN), DONGGUAN SANYOU ELECTRICAL APPLIANCES CO LTD (E190598), Type SJ-S-112DM, Rated 1/3 HP, 240 V ac, 30K Cycles, T105; Or R/C (NLDX2, CN), DONGGUAN CHUROD ELECTRONICS CO LTD (E341422), Model A1-S-112DA, Rated 125 V ac, 1/6 HP, 100K cycles, T85; Or R/C (NRNT2, CN), TYCO ELECTRONICS (SHENZHEN) CO LTD (E82292), Model OJE-SS-112DM, Rated 125 V ac, 1/10 HP, 100K Cycles, T85;	
Fuse (FU1)	R/C (JDYX2, CN), Rated 120 V Min., 3.15 A	
Varistor (RV1)	R/C (VZCA2, CN), Rated 385 V Min.	
X Capacitor (C1)	R/C (FOWX2, CN), Rated 275 V Min., 0.01 uF	
Display PWB - Low voltage		
Printed Wiring Board	R/C (ZPMV2), Rated V=0	
Humidity PWB - Low voltage		
Printed Wiring Board	R/C (ZPMV2), Rated V=0	

70-3 Temperature Controller (cont'd)

Model	GDN50BA-A3EBA2C, GDN70BA-A3EBA2E
Main PWB	
Model No.	M10101AK (Refer to Sec. 110 for details)
Populated Relays on Main PWB -	
Compressor Relay (1 provided)	<p>R/C (NLDX2, 8), DONGGUAN SANYOU ELECTRICAL APPLIANCES CO LTD (E190598), Type SFK-112DM-E, Rated 1 HP, 120 V ac, 100K cycles, T80; Also recognized as sealed device - R/C (NWFR2, 8), DONGGUAN SANYOU ELECTRICAL APPLIANCES CO LTD (E480915), -40~80°C, epoxy resin seal;</p> <p>Or R/C (NLDX2, 8), DONGGUAN CHUROD ELECTRONICS CO LTD (E341422), Type CHF-S-112DA2, Rated 240 V ac, 2 Hp, 100K cycles, T85; Also recognized as sealed device - R/C (NWFR2, 8), DONGGUAN CHUROD ELECTRONICS CO LTD (E493474), -40~85°C, epoxy resin seal;</p> <p>Or R/C (NLDX2, 8), XIAMEN HONGFA ELECTROACOUSTIC CO LTD (E134517), Type HF160F/12-H5, Rated 1 HP, 120V ac, 100K cycles, T85; Also recognized as sealed device - R/C (NWFR2, 8), XIAMEN HONGFA ELECTROACOUSTIC CO LTD (E592276), -20~85°C, epoxy resin seal;</p>
Fan Motor Relay (3 provided) Water Pump Relay (only for models with water pump, 1 provided)	<p>R/C (NLDX2, 8), XIAMEN HONGFA ELECTROACOUSTIC CO LTD (E134517), Type JZC-32F, Rated 1/10 HP, 125 V ac, 100K cycles, T70; Also recognized as sealed device - R/C (NWFR2, 8), XIAMEN HONGFA ELECTROACOUSTIC CO LTD (E592276), -20~70°C, epoxy resin seal;</p> <p>Or R/C (NLDX2, CN), DONGGUAN SANYOU ELECTRICAL APPLIANCES CO LTD (E190598), Type SJ-SH-112DM2, Rated 1/3 HP, 240 V ac, 30K Cycles, T105; Also recognized as sealed device - R/C (NWFR2, 8), DONGGUAN SANYOU ELECTRICAL APPLIANCES CO LTD (E480915), -40~105°C, epoxy resin seal;</p> <p>Or R/C (NLDX2, CN), DONGGUAN CHUROD ELECTRONICS CO LTD (E341422), Model A1-S-112DA, Rated 125 V ac, 1/6 HP, 100K cycles, T85; Also recognized as sealed device - R/C (NWFR2, 8), DONGGUAN CHUROD ELECTRONICS CO LTD (E493474), -40~85°C, epoxy resin seal;</p>
Display PWB - Low voltage	
Printed Wiring Board	R/C (ZPMV2), Rated V-0
Humidity PWB - Low voltage	
Printed Wiring Board	R/C (ZPMV2), Rated V-0
WIFI PWB	
Printed Wiring Board	R/C (ZPMV2), Rated V-0

70-3 Temperature Controller (cont'd)

Alternate -

Model	GDN70BA-A3EBA1B, GDN70BA-A3EBA2D, GDN70BA-A3EBA1D
Main PWB	
Manufacturer	Gree Electric Appliances Inc Of Zhuhai
Model No.	M10101AR (Refer to Sec. 110 for details)
Populated Relays on Main PWB -	
Compressor Relay (1 provided)	R/C (NLDX2, 8), XIAMEN HONGFA ELECTROACOUSTIC CO LTD (E134517), Type JQX-102F, Rated 1 HP, 120 V ac, 100K cycles, T85; Or R/C (NLDX2, 8), SANYOU CORPORATION LIMITED (E190598), Type SFK-112DM, Rated 2 HP, 240 V ac, 100K cycles, T80; Or R/C (NLDX2, 8), DONGGUAN CHUROD ELECTRONICS CO LTD (E341422), Type CHF-V-112DA2, Rated 240 V ac, 2 HP, 100K cycles, T85; Or R/C (NLDX2, 8), SONG CHUAN PRECISION CO LTD (E88991), Type 891WP-1A-C, Rated 18 FLA, 98 LRA, 240 V ac, 30K cycles, T65;
Fan Motor Relay (3 provided) Water Pump Relay (only for models with water pump, 1 provided)	R/C (NLDX2, 8), XIAMEN HONGFA ELECTROACOUSTIC CO LTD (E134517), Type JZC-32F, Rated 1/10 HP, 125 V ac, 100K cycles, T70; Also recognized as sealed device - R/C (NWFR2, 8), XIAMEN HONGFA ELECTROACOUSTIC CO LTD (E592276), - 20~70°C, epoxy resin seal; Or R/C (NLDX2, CN), SANYOU CORPORATION LIMITED (E190598), Type SJ-S-112DM, Rated 1/3 HP, 240 V ac, 30K Cycles, T105; Or R/C (NLDX2, CN), DONGGUAN CHUROD ELECTRONICS CO LTD (E341422), Model A1-S-112DA, Rated 125 V ac, 1/6 HP, 100K cycles, T85; Also recognized as sealed device - R/C (NWFR2, 8), DONGGUAN CHUROD ELECTRONICS CO LTD (E493474), - 40 85 C, epoxy resin seal; Or R/C (NRNT2, CN), TYCO ELECTRONICS (SHENZHEN) CO LTD (E82292), Model OJE-SS-112DM, Rated 125 V ac, 1/10 HP, 100K Cycles, T85;
Display PWB - Low voltage Printed Wiring Board	R/C (ZPMV2), Rated V-0
Humidity PWB - Low voltage Printed Wiring Board	R/C (ZPMV2), Rated V-0

70-3 Temperature Controller

Model	GDN50BA-A3EBA1C, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A.	GDN50BA-A3EBA1E, GDN50BA-A3EBA2E, GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B
Main PWB		
Manufacturer	Gree Electric Appliances Inc Of Zhuhai	
Model No.	M10101AW	M10101AX
Circuit Schematic	High voltage circuit shall not differ from ILL. 7D	
PWB Layout	PWB layout shall not differ from ILL. 8D	
Printed Wiring Board	R/C (ZPMV2, CN), Rated V-0, 130°C, Suitable for direct support of live parts	
Populated Components on M10101AW (Main PWB) -		
Compressor Relay (1 provided)	R/C (NLDX2, 8), XIAMEN HONGFA ELECTROACOUSTIC CO LTD (E134517), Type JQX-102F, Rated 1 HP, 120V ac, 100K cycles, T85; Or R/C (NLDX2, 8), SONG CHUAN PRECISION CO LTD (E88991), Type 891WP-1A-C, Rated 18 FLA, 98 LRA, 240 Vac, 30K cycles, T65; Or R/C (NLDX2, 8), DONGGUAN SANYOU ELECTRICAL APPLIANCES CO LTD (E190598), Type SFK-112DM, Rated 1 HP, 120 V ac, 100K cycles, T80; Or R/C (NLDX2, 8), DONGGUAN CHUROD ELECTRONICS CO LTD (E341422), Type CHF-V-112DA2, Rated 240 V ac, 2 Hp, 100K cycles, T85;	
Fan Motor Relay (3 provided) Water Pump Relay (only for models with water pump, 1 provided)	R/C (NLDX2, 8), XIAMEN HONGFA ELECTROACOUSTIC CO LTD (E134517), Type JZC-32F, Rated 1/10 HP, 125 V ac, 100K cycles, T70; Or R/C (NLDX2, CN), DONGGUAN SANYOU ELECTRICAL APPLIANCES CO LTD (E190598), Type SJ-S-112DM, Rated 1/3 HP, 240 V ac, 30K Cycles, T105; Or R/C (NLDX2, CN), DONGGUAN CHUROD ELECTRONICS CO LTD (E341422), Model A1-S-112DA, Rated 125 V ac, 1/6 HP, 100K cycles, T85; Or R/C (NRNT2, CN), TYCO ELECTRONICS (SHENZHEN) CO LTD (E82292), Model OJE-SS-112DM, Rated 125 V ac, 1/10 HP, 100K Cycles, T85;	
Fuse (FU1)	R/C (JDYX2, CN), Rated 120 V Min., 3.15 A	
Varistor (RV1)	R/C (VZCA2, CN), Rated 385 V Min.	
X Capacitor (C1)	R/C (FOWX2, CN), Rated 275 V Min., 0.01 uF	
Display PWB - Low voltage		
Printed Wiring Board	R/C (ZPMV2), Rated V-0	
Humidity PWB - Low voltage		
Printed Wiring Board	R/C (ZPMV2), Rated V-0	

Comment : M10101AW, M10101AX are respectively similar to M10101AH, M10101AG except the temperature controller M10101AW, M10101AX canceled the voltage stabilizing modular V1.

70-4 Water pump (REUZ2, CN)

Models	GDN70BA-A3EBA1B, GDN70BA-A3EBA2B, GDN70BA-A3EBA2D, GDN70BA-A3EBA1D, GDN45BA-A3EBA1B, GDN45BA-A3EBA2B, GDN45BA-A3EBA4B, GDN50BA-A3EBA1E, GDN45BA-A3EBA3B, GDN50BA-A3EBA2E, GDN50BA-A3EBA2F , GDN50BA-A3EBA4B , GDN50BA-A3EBA3B
Listee's Name	YUEQING HUACHEN ELECTRICAL CO LTD
Model Number	WSB-III
UL File No./Issued Date	E303907/2006-09-08
Electrical Rating	120 V ac, 0.15 A, 18 W
Location	Located in water pump box
Supplementary Thermal Protector	R/C (YFZW2/8), type 2MMT95, Nominal Operating Temperature, open 95 °C, close 55 °C, automatic reset type, by Sensata Technologies, Inc (E15962). Provided with integral leads, R/C (AVLV2, 8), AWM, No. 20 AWG, 150°C. Trapped into Pump's integral pocket by snap fit. All connection was enclosed by VW-1 tubing, no live parts exposed.

Alternate - Same as above except

Listee's Name	ET TECHNOLOGY LTD
Model Number	M7
UL File No./Issued Date	E331129/2009-09-01
Electrical Rating	120 V ac, 0.2 A, 16 W

80 INTERNAL WIRING:

80-1 Wiring Method

Except as follows, see Sec. Gen. for complete wiring details.

A. Compressor leads are type UL 1015, rated 105°C, detailed AWG refer to table below -

Model	AWG
GDN70BA-A3EBA1A, GDN70BA-A3EBA1B, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, GDN70BA-A3EBA2E, GDN45BA-A3EBA1A, GDN45BA-A3EBA1B, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN45BA-A3EBA4A, GDN45BA-A3EBA4B, GDN50BA-A3EBA1C, GDN50BA-A3EBA1E, GDN45BA-A3EBA3A, GDN45BA-A3EBA3B, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A, GDN50BA-A3EBA2E, GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B	16
GDN50BA-A3EBA1A, GDN50BA-A3EBA2A, GDN50BA-A3EBA2B, GDN50BA-A3EBA1B, GDN50BA-A3EBA2C	18

B. Fan motor leads are No. 18 or 20 AWG (UL 1015), rated 105°C.

C. All wiring is rated VW-1, 300 V minimum.

D. The internal leads as indicated below are covered by one layer of R/C (YDPU2, CN) insulating sleeving with min. thickness as indicated below. Insulating sleeving is secured in place by cable tie and used for isolating when these leads contact with high voltage leads.

- 0.5 mm thick sleeving for Internal leads connecting Main PWB and Display Board (PWB);
- 0.5 mm thick sleeving for Internal leads connecting Water Level/Pump Switch
- only for models provided with temperature sensor on discharging tubing - 0.25 mm thick sleeving for Internal leads connecting temperature sensor on discharging tubing;

E. The internal leads as indicated below are additionally covered by one layer of R/C (YDPU2, CN) shrinkable insulating sleeving with min thickness as indicated below. These sleeving are placed nearby the termination of leads (connector).

- 0.25 mm thick sleeving for Internal leads connecting Main PWB and Display Board (PWB);
- 0.25 mm thick sleeving for Internal leads connecting Water Level/Pump Switch

F. Water pump leads are No. 18 AWG (UL 1015), rated 105°C.

90 ELECTRICAL SUPPLY CONNECTION:

90-1 Cord Connected Unit

Model	GDN70BA-A3EBA1A, GDN70BA-A3EBA1B, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN70BA-A3EBA2C, GDN70BA-A3EBA2D, GDN70BA-A3EBA1C, GDN70BA-A3EBA1D, GDN70BA-A3EBA2E, GDN45BA-A3EBA1A, GDN45BA-A3EBA1B, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN45BA-A3EBA4A, GDN45BA-A3EBA4B, GDN50BA-A3EBA1C, GDN50BA-A3EBA1E, GDN45BA-A3EBA3A, GDN45BA-A3EBA3B, GDN50BA-A3EBA2D, GDN50BA-A3EBA3A, GDN50BA-A3EBA4A, GDN50BA-A3EBA2E, GDN50BA-A3EBA2F, GDN50BA-A3EBA4B, GDN50BA-A3EBA3B	GDN50BA-A3EBA1A, GDN50BA-A3EBA2A, GDN50BA-A3EBA2B, GDN50BA-A3EBA1B, GDN50BA-A3EBA2C
Power Supply Cord (with plug)	Any Listed (ELBZ,7)	
Flexible Cord Type	SJT	
Size, AWG No., Minimum	3 x 16	3 x 18 or 3 x 16
Attachment Plug Cap		
Rating (V, A)	125, 15	
Cord Length(+), m	1.5 minimum, 3 maximum	
Strain Relief Means	Cable clamp screwed to Unit Base, refer to ILL. 9 for details	
Means to prevent pushback displacement	Integrated bushing of power supply cord blocked by the rib integrated with Unit Base	
Grounding Conductor Color	Green with one or more yellow stripes.	
Securement of Grounding Conductor		
Location	Control Box	
Securement of Means	4 mm thread diameter of mechanical screw with star washer	

+ - Measured between the attachment plug and (1) any point at which the cord exits the product cabinet or (2) the last strain relief, whichever is shorter.

100 ADDITIONAL COMPONENTS:

Model	All
Cluster Connectors - Recognized (ECBT2, CN), suitable for size and type of wires used.	
Quick Connectors - Recognized (RFWV2, CN), suitable for size and type of wires used.	
Tubing/Sleeving - Recognized (YDPU2, CN), VW-1, suitable for size and type of wires used.	

110 - Class 2 Power Supply:

Model designation	M10101AK	M10101AR		
Manufacturer	Gree Electric Appliances Inc Of Zhuhai			
Location	Within Control Box			
Electrical rating	Input - 115 V, 60 Hz, 800 mA; Output - 12 V dc, 500 mA			
Circuit Schematic	See ILL. 7A for details	See ILL. 7C for details	See ILL. 7B for details	See ILL. 7C for details
PWB Layout	See ILL. 8A for details	See ILL. 8C for details	See ILL. 8B for details	See ILL. 8C for details
Main PWB Model (Not populated components)	GRJ101-A13 (Version 1.0)	GRJ101-A13 (Version 1.2)	GRJ101-A13 (Version 1.1)	GRJ101-A13 (Version 1.2)
Printed Wiring Board	R/C (ZPMV2), Rated V-0, 130°C, suitable for direct support Current-Carrying Parts			

Alternate - Same as about except the following:

Model designation	M10101AK
Circuit Schematic	See ILL. 7C for details
PWB Layout	See ILL. 8D for details
Main PWB Model (Not populated components)	GRJ101-A13 (Version 1.3)

110 - Class 2 Power Supply:

Model designation	M10101AK	M10101AR
Populated Components on PWB		
Current Fuse (FU or FU1)	R/C (JDYX2/8), HOLLYLAND CO LTD (E156471), Type 50CT, rated 250 V ac, 3.15 A; Or R/C (JDYX2/8), WALTER ELECTRONIC CO LTD (E56092), Type TSC, Rated 250 V ac, 3.15 A;	
Varistor (RV2)	R/C (VZCA2/8), CHENGDU TIEDA ELECTRONIC CO LTD (E334320), Type MYN15-621KM, MCOV - 385 V, MLV - 1590V, In - 3 KA Or R/C R/C (VZCA2/8), GUANGDONG FENGHUA ADVANCED TECHNOLOGY HOLDING CO LTD. XIANHUA NEW SENSITIVE COMPONENTS BRANCH (E325462), Type FNR-14K621, MCOV - 385 V, MLV - 1520V, In - 3 KA	
NTC Resistor (NTC)	R/C (XGPU2/8), SEMITEC CORP (E92669), Type 16D2-11, rated 250 V, maximum 2.5 A.	
Capacitors (C15, C14)	R/C (FOWX2/8), XIAMEN FARATRONIC CO LTD (E186600), Type MKP62, Rated 275 V ac, 0.1 uF, 110°C Or R/C (FOWX2/8), OKAYA ELECTRIC INDUSTRIES CO LTD (E47474), Type LE104, Rated 275 V ac, 0.1 uF, 100°C	
Line Choke (L1) -	Constructed as below - Not for Field Representative Use: a. Bobbin - R/C (QMFZ2), CHANG CHUN PLASTICS CO LTD (E59481), PBT Material, Type 4130, rated V-0, 120°C, HWI - 4, HAI - 0, CTI - 2, measured minimum 0.9 mm thick. Maintain min. 2.4 mm spacing between L and N windings; Alternate - Same as above except - R/C (QMFZ2), JIANGYIN JIHUA NEW MATERIAL CO LTD (E139063), Type PBT4308G(0), Rated V-0, 120°C, HWI - 0, HAI - 0, CTI - 3; b. Bobbin Holder - R/C (QMFZ2), CHANG CHUN PLASTICS CO LTD (E59481), Type T375J, rated V-0, 150°C, HWI - 1, HAI - 0, CTI - 3, measured minimum 0.75 mm thick. c. Core - Ferrite, U-U type, overall 20 by 14 by 4.5 mm. d. Windings - R/C (OBMW2), Two provided. Enameled copper wire, each measures 0.27 mm diameter, 100 turns.	

110-10 Class 2 Power Supply (Cont'd)

Model designation	M10101AK	M10101AR
Populated Components on PWB		
Resistor (R13, R15)	Rated 470 K Ω , 3/4 W	
Rectifier (Z1)	Rated 600 V, 4 A	
Capacitor (C11)	Rated 450 V, 22 μ F	
Resistor (R18)	Rated 10 K Ω , 1/10 W	
Resistor (R20)	Rated 1 K Ω , 1/10 W	
Resistor (R19)	Rated 10 M Ω , 3/4 W	
Resistor (R76)	Rated 2 M Ω , 3/2 W	
Resistor (R48)	Rated 150 K Ω , 3/4 W	
Capacitor (C20)	Rated 1 kV, 1 nF	
* Diode (D1)	Manufactured by PANJIT SemiConductor, Type RS1MF , Rated VRRM - 1 kV, IFSM - 30 A	
IC (U9)	Type TOP264VG, manufactured by POWER INTEGRATIONS	
Resistor (R14, R46)	Rated 2 M Ω , 3/2 W	
Resistor (R37)	Rated 100 Ω , 1/8 W	
Capacitor (C21)	Rated 250 V, 1 nF	
Diode (D6)	Rated 200 V, 2 A	
* Y Capacitor (C201, C202)	R/C (FOWX2, 8), TDK CORPORATION (E37861), Type CS102M, Rated 400 V, 1 nF, 125°C; Or R/C (FOWX2), MURATA MFG CO LTD (E37921), Type KY102M, Rated 400 V, 1 nF, 125°C; Or R/C (FOWX2), HAOHUA ELECTRONIC CO (E233106), Type CT7, Rated 400 V, 1 nF, 125°C;	
Optical Coupler (U6)	R/C (FPQU2), SHARP CORP ELECTRONIC COMPONENTS AND DEVICES BU (E64380), Type PC851, with isolation voltage of 5000 V ac	
Diode (D5)	Rated 200 V, 4 A	
Resistor (R123)	Rated 36 Ω , 1/4 W	
Capacitor (C24)	Rated 250 V, 1 nF	
Capacitors (C16)	Rated 25 V, 470 μ F.	

110-10 Class 2 Power Supply (Cont'd)

Model designation	M10101AK	M10101AR																												
Populated Components on PWB																														
Transformer (T1)	<p>Model EC020-7P, see ILL. 12 for Transformer insulation details.</p> <p>Constructed as follows - Not for Field Representative Use:</p> <p>A. Core - Ferrite, E-E type, measures 25.7 x 21.7 by 7.7 mm. Outer wrapped by two layers of Insulation Tape.</p> <p>B. Primary Windings (N4, N1, N2) - R/C (OBMW2), magnet copper wire, MW79-C, rated 155°C.</p> <p>C. Secondary Windings (N3) - R/C (OBMW2), magnet copper wire, MW79-C, rated 155°C.</p> <p>D. Bobbin - Two-flange. R/C (QMFZ2), CHANG CHUN PLASTICS CO LTD (E59481), PMC, Type T375HF, Rated V-0, 150°C, measured minimum 0.80 mm thick.</p> <p>E. Insulation Tape - R/C (OANZ2), JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD (E165111), Type CT-280B, CT-286F or WF(*) (c) (h), rated 130°C, minimum 0.025 mm thick.</p> <p>F. Primary Crossover Lead Insulation - One layer of Insulation Tape is used as crossover lead insulation of primary windings.</p> <p>G. Transformer insulation provided as follows:</p>																													
	<table border="1"> <thead> <tr> <th data-bbox="472 1039 646 1094">Location</th> <th data-bbox="646 1039 927 1094">Material</th> <th data-bbox="927 1039 1068 1094">Layers</th> <th data-bbox="1068 1039 1409 1094">Total Thickness (mm)</th> </tr> </thead> <tbody> <tr> <td data-bbox="472 1094 646 1188">N4 outer-wrap</td> <td data-bbox="646 1094 927 1188">Insulation Tape</td> <td data-bbox="927 1094 1068 1188">3</td> <td data-bbox="1068 1094 1409 1188">0.075</td> </tr> <tr> <td data-bbox="472 1188 646 1220">N4 to N3</td> <td data-bbox="646 1188 927 1220">Insulation Tape</td> <td data-bbox="927 1188 1068 1220">3</td> <td data-bbox="1068 1188 1409 1220">0.075</td> </tr> <tr> <td data-bbox="472 1220 646 1251">N3 to N2</td> <td data-bbox="646 1220 927 1251">Insulation Tape</td> <td data-bbox="927 1220 1068 1251">3</td> <td data-bbox="1068 1220 1409 1251">0.075</td> </tr> <tr> <td data-bbox="472 1251 646 1283">N2 to N1</td> <td data-bbox="646 1251 927 1283">Insulation Tape</td> <td data-bbox="927 1251 1068 1283">2</td> <td data-bbox="1068 1251 1409 1283">0.05</td> </tr> <tr> <td data-bbox="472 1283 646 1314">N1 to</td> <td data-bbox="646 1283 927 1314">Insulation Tape</td> <td data-bbox="927 1283 1068 1314">1</td> <td data-bbox="1068 1283 1409 1314">0.025</td> </tr> <tr> <td data-bbox="472 1314 646 1341">Core</td> <td data-bbox="646 1314 927 1341">Bobbin</td> <td data-bbox="927 1314 1068 1341">-</td> <td data-bbox="1068 1314 1409 1341">0.8</td> </tr> </tbody> </table>			Location	Material	Layers	Total Thickness (mm)	N4 outer-wrap	Insulation Tape	3	0.075	N4 to N3	Insulation Tape	3	0.075	N3 to N2	Insulation Tape	3	0.075	N2 to N1	Insulation Tape	2	0.05	N1 to	Insulation Tape	1	0.025	Core	Bobbin	-
Location	Material	Layers	Total Thickness (mm)																											
N4 outer-wrap	Insulation Tape	3	0.075																											
N4 to N3	Insulation Tape	3	0.075																											
N3 to N2	Insulation Tape	3	0.075																											
N2 to N1	Insulation Tape	2	0.05																											
N1 to	Insulation Tape	1	0.025																											
Core	Bobbin	-	0.8																											

Figures

The following figures represent all models unless otherwise specified.

Fig.	Description
1	Front Side
2	Left Side
3	Rear Side
4	Right Side
5	Top Side
6	Internal View - A
7	Internal View - B
8	Internal View - C
9	Control Box
10	Main PWB - Top Layer
11	Main PWB - Bottom Layer

The following figure represents Model GDN70BA-A3EBA1B, GDN70BA-A3EBA2B, GDN70BA-A3EBA1D, GDN45BA-A3EBA1B, GDN45BA-A3EBA2B, GDN50BA-A3EBA1E, GDN45BA-A3EBA3B, GDN50BA-A3EBA2E.

Fig.	Description
12	Water Pump Box
13	Water Pump

*The following figure represents Model GDN50BA-A3EBA2A, GDN70BA-A3EBA2A, GDN70BA-A3EBA2B, GDN50BA-A3EBA2C, GDN70BA-A3EBA2E, GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, GDN50BA-A3EBA2D, GDN50BA-A3EBA2E, **GDN50BA-A3EBA2F**.

Fig.	Description
14	Front Side
15	Front panel assembly

The following figure represents Model GDN45BA-A3EBA3A, GDN45BA-A3EBA3B, GDN50BA-A3EBA3A, **GDN50BA-A3EBA3B**.

Fig.	Description
14A	Front Side

Figures (Cont'd)

The following figures represent models GDN50BA-A3EBA2C, GDN70BA-A3EBA2E.

Fig.	Description
16	Right & Top Side
17	Control Box
18	Main PWB - Top Layer
19	Main PWB - Bottom Layer
20	WIFI Module

The following figure represents Models GDN70BA-A3EBA1B, GDN70BA-A3EBA2D, GDN70BA-A3EBA1D for the alternate Main PWB.

Fig.	Description
9A	Within Control Box
21	Main PWB - Top Layer
21	Main PWB - Bottom Layer

The following figures represent models GDN45BA-A3EBA2A, GDN45BA-A3EBA2B, **GDN45BA-A3EBA3A, GDN45BA-A3EBA3B** for display film.

Fig.	Description
22	Top Side

Illustrations

ILL.	Description
1, 1A-1E	Wiring Diagram
*2, 2A-2C	Front Unit Cabinet
3	Top Unit Cabinet
4, 4A-4B	Control Box
5, 5A	Condenser
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7, 7A-7D	Circuit Schematic
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12	Transformer