daitsu

AIR CURTAIN

Serie
AIR CURTAIN

Edition
06/21

Models
AUD-90-K
AUD-120-K
AUD-150-K

CONTENTS

PRODUCT

PRODUCT
1 Model List

Model	Product code	Air flow volume (m³/h)	Dimensions (W×D×H) mm×mm×mm	Appearance
AUD-90-K		1200	900×206×215	
AUD-120-K		1650	1200×206×215	
AUD-150-K		2300	1500×206×215	

2 Nomenclature

The model description of the air curtain comprises of capital letters and Arabic numbers. See the below table for more details:

FM	-	1.5	-	9	-	C
1		2		3		4

| No.	Part name	Options
1	Unit code	FM-Air curtain without Heating, RM- Air curtain with Heating
2	Outer Diameter of the Impeller	Diameter=Value×100mm
3	Nominal width of the outlet flow	Width=Value×100mm
4	Added code	C-Vertical Installation, S-Heating by Warm Water, D-Electric Heating , other design codes etc.

3 Functions

- ●Optimized design cross-flow and good performance motor are adopted
- ●Microprocessor control
- ●Reliable performance and long duration
- ●Both manual control and remote control available
- ●Anti-corrosion two-side painted electro-galvanized metal case
- ●Good strength structure provides airflow.

4 Product Data

Model	Length	Diameter of wind wheel	Power supply	Power Input	Noise (high-speed)	Weight	Outline dimensions (W×H×D)
	mm	mm	-	W	dB(A)	kg	mm
AUD-90-K	900	125	220-240V~ 50Hz/60Hz	110W	59	16	900×206×215
AUD-120-K	1200	125	220-240V~ 50Hz/60Hz	140W	61	20	1200×206×215
AUD-150-K	1200	125	220-240V~ 50Hz/60Hz	180W	61	25	1200×206×215

5 Piping Diagram

The air curtain can inhale the air inside the room through the cross flow fan, and then blow it out in continuous, high-speed flow downward to the floor, which will form an invisible "wall". It typically is installed at the door or above the window. When the door or the window is opened, it can effectively separate the inside and outsider air. Thus, it can as much as possible reduce the loss of the cool air and prevent the dust and insect coming in.

Indoor unit   Outdoor unit

Toxic gas

Dust

Clean air

Insects

Cool air

Warm air
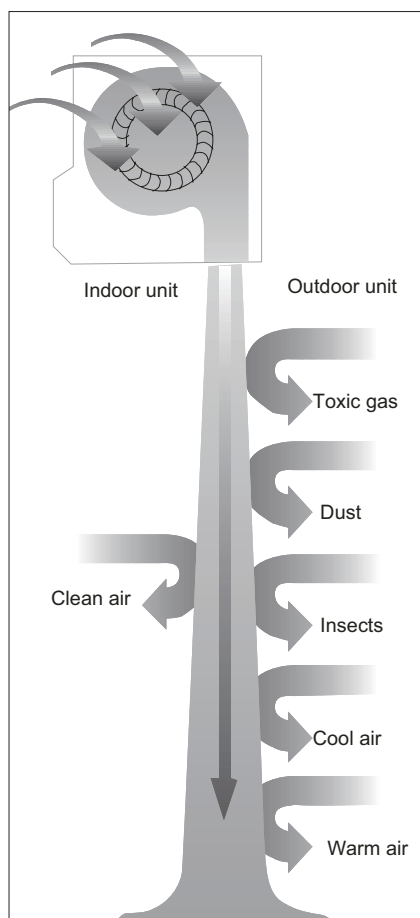
CONTROL

CONTROL
1 Wireless Controller

Operation instruction of the wireless controller: the unit can be started/stopped by pressing the "ON/OFF" key, and by pressing "FAN SPEED" key, high speed and low speed can be switched.

2 Wired Controller

Operation instruction of the wired controller: upon powered on, by pressing the "ON/OFF" key, the unit will start, with the green LED lighting on. When the unit runs at high speed, the red LED will light on. By pressing the "LOW" key to switch to the low speed, the red LED will light off and yellow LED lights on. By pressing the "HI" key to switch to the high speed, the yellow LED will light off and the red LED will light on. When the unit is stopped by pressing the "ON/OFF" key, all LEDs will light off.
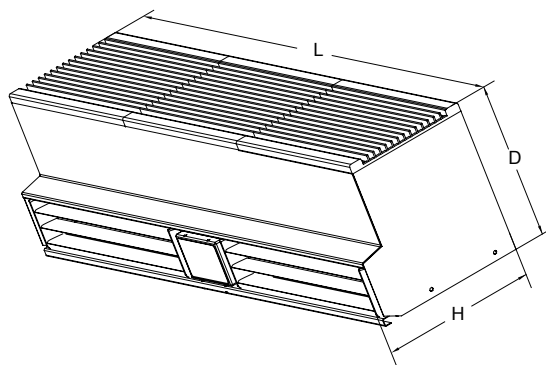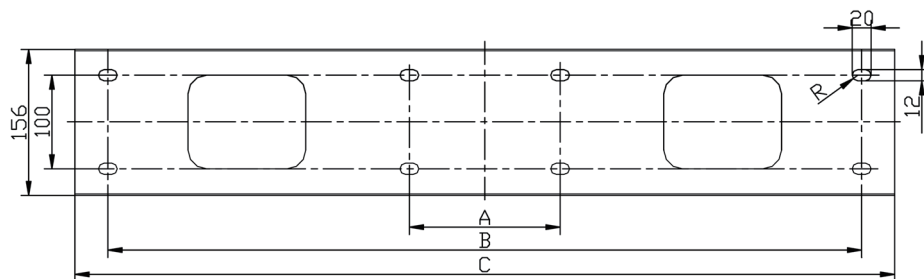
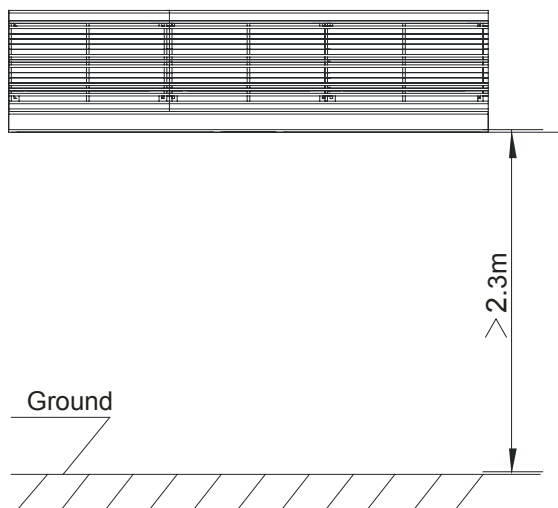# INSTALLATION

INSTALLATION
1 Dimensions Data

Unit:mm

MODEL	L	D	H
AUD-90-K	900	206	215
AUD-120-K	1200	206	215
AUD-150-K	1500	206	215

Unit:mm

MODEL	A	B	C
AUD-90-K	160	800	870
AUD-120-K	160	1100	1170
AUD-150-K	160	1400	1470

2 Clearance Data

Ground

>2.3m

3 Installation Notes

Please install it in the indoor side.
Do not install or use the unit under the following place:
(1) The place where it is frozen.
(2) The place where steam is produced.
(3) The place where dust is produced.
(4) The place where oil and smoke are produced.
(5) The place where explosive dust or gas exists.
(6) The place where corrosive gas is produced.
(7) The place where water can be sprayed to it.
(8) The place where it is more than 2.3m above the ground.

4 Installation Steps

(1) Put the installing panel on the expected position and mark out the positions of the holes for the retaining bolts.
(2) Take out the installing panel and drill the holes on it.
(3) Hang the unit on the installing panel and tighten the unit through these four bolts.
(4) Clean the unit; switch on the power supply and then check its running condition.

MAINTENANCE

MAINTENANCE

1 Error Display

| Serial No.	Fault	Cause	Solution
1	Start-up Failure	The power is not connected properly.	Reconnect the power line
		The fuse on the PCB is broken.	Replace the fuse
		The motor is burnt.	Replace the motor
2	Abnormal Noise	The bearing of the motor or the fan is damaged.	Replace the motor or the bearing
		The impeller collides with the flow path.	Replace the impeller

2 Care And Maintenance

When cleaning the unit, be sure to pull the plug out of the unit. Please wipe the body by using soft cloth; use the suction cleaner or vacuum cleaner to clean the unit inside. Lubricate the bearing of the fan motor once a year at least.
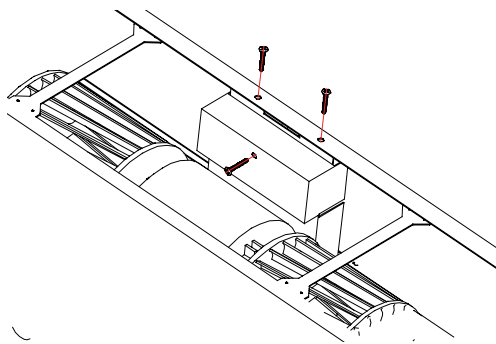
3 Wiring Diagram
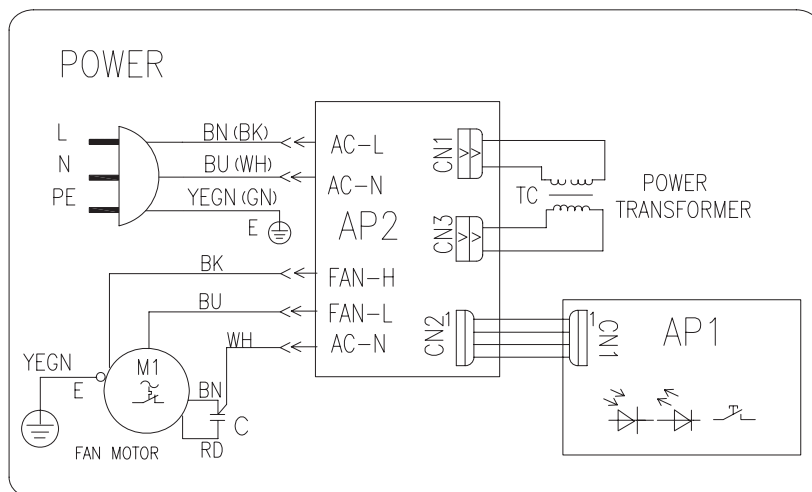
4 Disassembly And Assembly Procedure Of Main Parts

(1) Remove air-in grille. Twist off the screws on air-in grille and then remove the air-in grille.
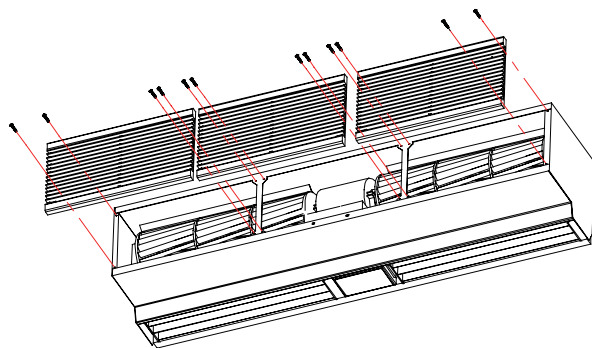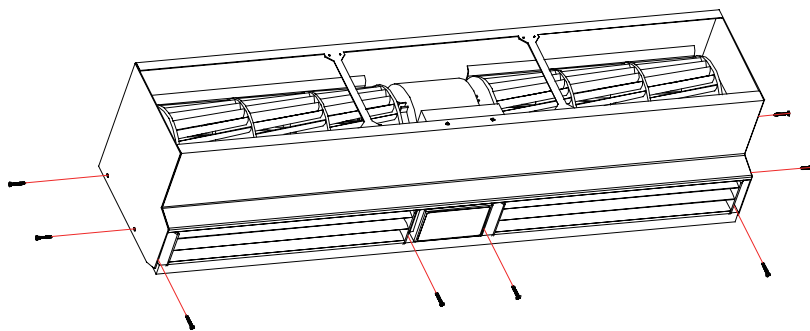

(2) Remove transformer. Twist off the 2 screws in the fig. and then remove the transformer.
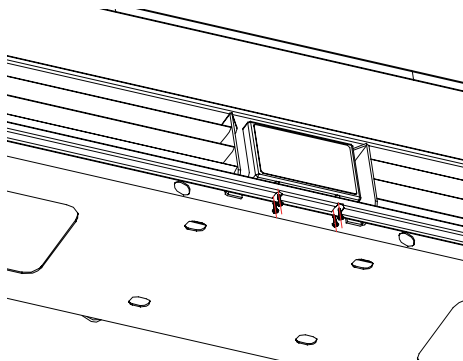

(3) Remove the outer case
   Twist off the 7 screws on the outer case and 2 screws around the controller and 2 screws at both side as shown in the fig, and then remove the outer case.
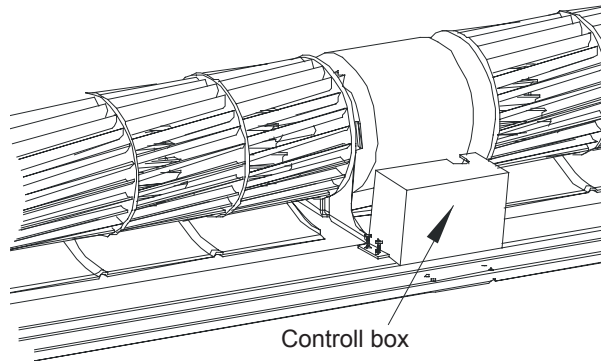

(4) Remove controller
1) Twist off the 4 screws and then remove the weak power control board of controller.

2) Twist off the 4 screws as shown in the fig and then remove the weak power control board of controller.
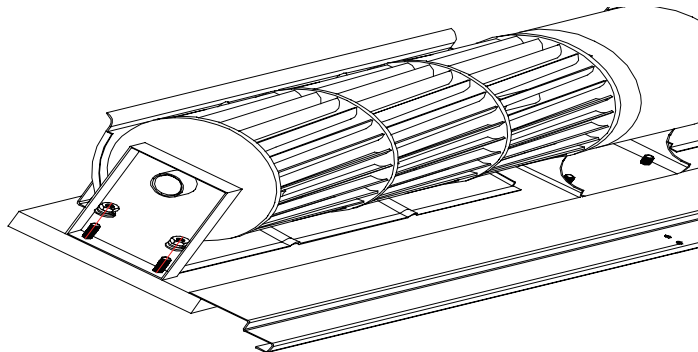
Controll box

(5) Remove motor
Twist off the 4 nuts at the base of motor with wrench, and then remove the motor.
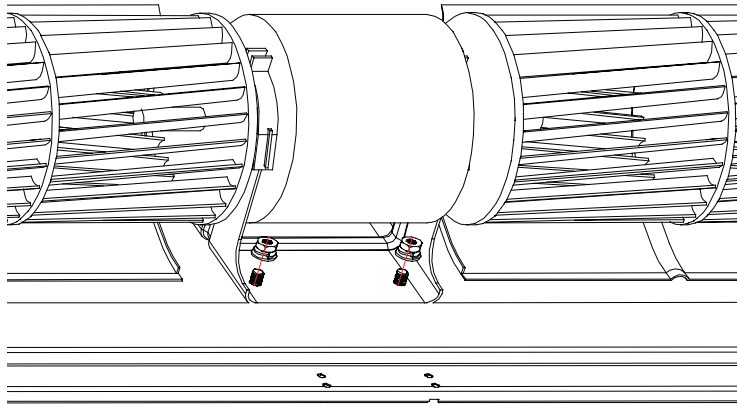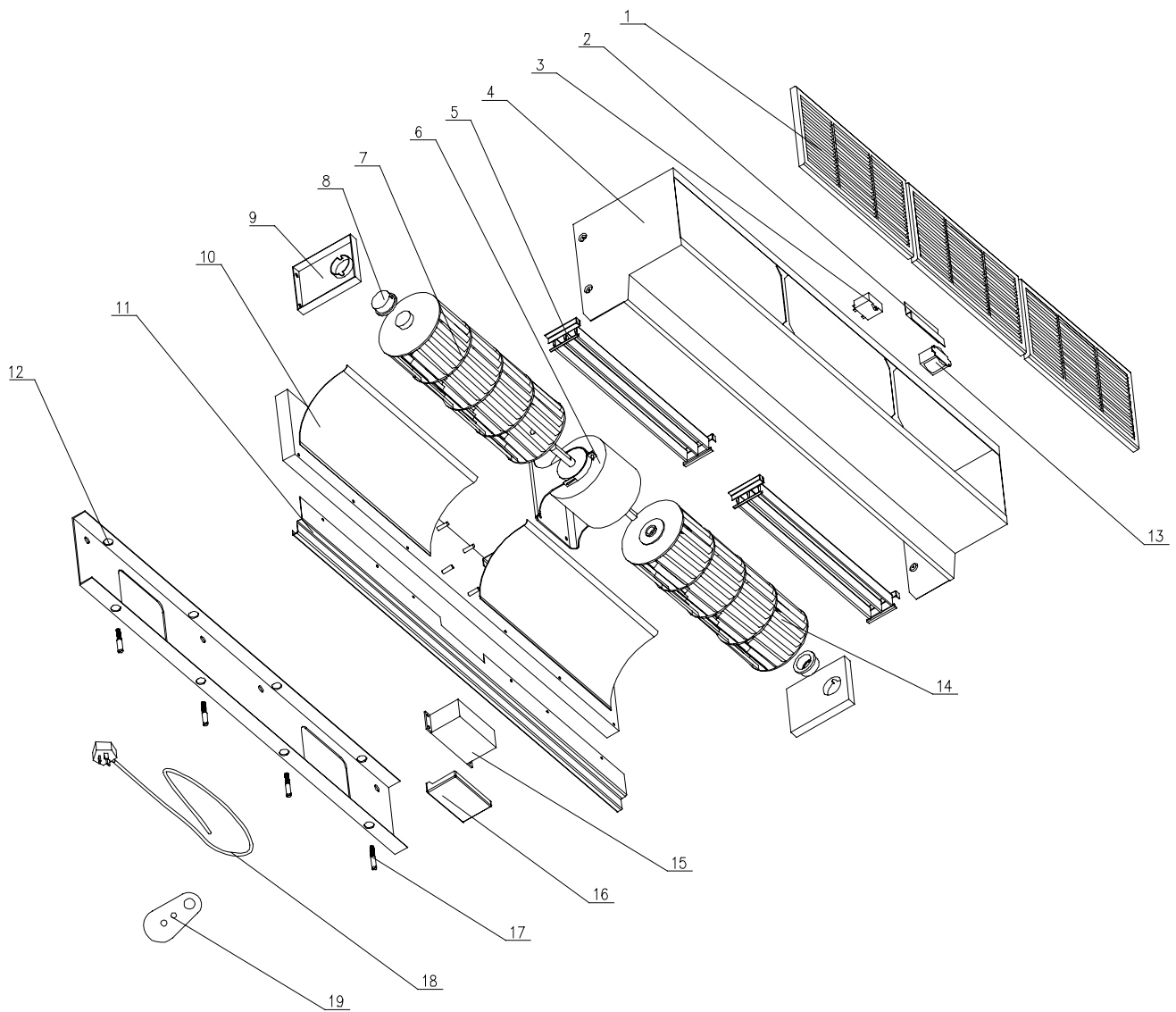
(6) Remove fan blade
Twist off the 3 bolts at both sides of bearing support, and then remove the fan blade.

Installation sequence is opposite to above procedure.

5 Exploded View And Spare Part List
5.1 Exploded View

5.2 Parts List

AUD-90-K Parts List

No.	Part Name	Material Code	Qty
1	Plastic Fence	22419811	3
2	Transformer Fixer	01339817	1
3	Capacitor 3uF/450V	33010027	1
4	Case Assay		1
5	Guide Louver Assay	01379811	2
6	Motor FM65A	15019811	1
7	Left Cross Flow Fan	10519811	1
8	Bearing Bush	76719811	2
9	Bearing Holder	01729813	2
10	Base Assay	01229810	1
11	Extended Base	01799812	1
12	Wall Mounting Frame	01339811	1
13	Transformer SC16B1	43110195	1
14	Right Cross Flow Fan	10519812	1
15	Main PCB-2 Z50151	30225004	1
16	Main PCB-1 Z50151	30225003	1
17	Mounting Screw	70119811	4
18	Power Cord	400202681	1
19	Remote Controller		1

AUD-120-K Parts List

No.	Part Name	Material Code	Qty
1	Plastic Fence	22419811	4
2	Transformer Fixer	01339817	1
3	Capacitor 4uF/450V	33010011	1
4	Case Assay		1
5	Guide Louver Assay	01379811	2
6	Motor FM65A	15019811	1
7	Left Cross Flow Fan	10519811	1
8	Bearing Bush	76719811	2
9	Bearing Holder	01729813	2
10	Base Assay	01229810	1
11	Extended Base	01799812	1
12	Wall Mounting Frame	01339811	1
13	Transformer SC16B1	43110195	1
14	Right Cross Flow Fan	10519812	1
15	Main PCB-2 Z50151	30225004	1
16	Main PCB-1 Z50151	30225003	1
17	Mounting Screw	70119811	4
18	Power Cord	400202681	1
19	Remote Controller		1

AUD-150-K Part List

No.	Part Name	Material Code	Qty
1	Plastic Fence	22419811	5
2	Transformer Fixer	01339817	1
3	Capacitor CBB61 5uF/450V	3301074711	1
4	Case Assay		1
5	Guide Louver Assay	01379817	2
6	Motor FM110A	150198111	1
7	Left Cross Flow Fan	105198112	1
8	Bearing Bush	76719811	2
9	Bearing Holder	01729813	2
10	Base Assay	01229818	1
11	Extended Base	01799816	2
12	Wall Mounting Fram	01339819	1
13	Transformer 35X15E	43110260	1
14	Right Cross Flow Fan	105198122	1
15	Main PCB-2 Z50151	30225004	1
16	Main PCB-1 Z50151	30225003	1
17	Mounting Screw	70119811	4
18	Power Code	400204645	1
19	Remote Controller		1

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