# **OPERATING MANUAL**

## **AIR CONDITIONER**



OPERATING MANUAL BEDIENUNGSANLEITUNG MODE D'EMPLOI MANUAL DE FUNCIONAMIENTO MANUALE DI ISTRUZIONI ΕΓΧΕΙΡΙΔΙΟ ΛΕΙΤΟΥΡΓΙΑΣ

Indoor Unit CEILING SUSPENSION TYPE AB A30TATA AB A36TATA AB A45TATA

FLOOR CONSOLE/UNDER CEILING DUAL TYPE AB A18TATA AB A24TATA DUCT TYPE ARXA25TATA ARXA30TATA ARXA36TATA ARXA45TATA

CASSETTE TYPE AUXA18TATA AUA25TATA AUA30TATA AUA36TATA AUA45TATA

Outdoor Unit AJA90EATA AJA90TATA AJA90EATB AJA90TATB Español

English

Deutsch

Français

ΕλληνΙκά

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## SAFETY PRECAUTIONS

- Before using the appliance, read these "PRECAUTIONS" thoroughly and operate in the correct way.
- The instructions in this section all relate to safety; be sure to maintain safe operating conditions.
- "DANGER", "WARNING" and "CAUTION" have the following meanings in these instructions:

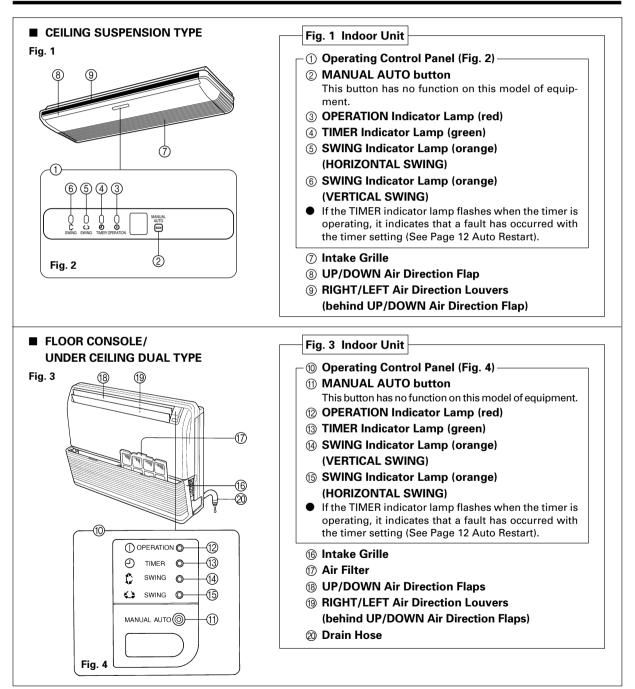
DANGER!	This mark indicates procedures which, if improperly performed, are most likely to result in the death of or serious injury to the user or service personnel.
MARNING!	This mark indicates procedures which, if improperly performed, might lead to the death or serious injury of the user.
	This mark indicates procedures which, if improperly performed, might possibly result in personal harm to the user, or damage to property.
•	• Do not attempt to install this air conditioner by yourself.
DANGER!	<ul> <li>This unit contains no user-serviceable parts. Always consult authorized service personnel for repairs.</li> </ul>
	• When moving, consult authorized service personnel for disconnection and install tion of the unit.
	• Do not become over-exposed to cold air by staying in the direct path of the airflow the air conditioner for extended periods of time.
	Do not insert fingers or objects into the outlet port or intake grilles.
	• Do not start and stop air conditioner operation by turning off the electrical break and so on.
	<ul> <li>In the event of a malfunction (burning smell, etc.), immediately stop operation, tu off the electrical breaker, and consult authorized service personnel.</li> </ul>
	Provide occasional ventilation during use.
	Do not direct air flow at fireplaces or heating apparatus.
	Do not climb on, or place objects on, the air conditioner.
	Do not hang objects from the indoor unit.
	Do not set flower vases or water containers on top of air conditioners.
	Do not expose the air conditioner directly to water.
	Do not operate the air conditioner with wet hands.
	Turn off power source when not using the unit for extended periods.
	<ul> <li>Always turn off the electrical breaker whenever cleaning the air conditioner or the a filter.</li> </ul>
	Connection valves become hot during Heating; handle with care.
	Check the condition of the installation stand for damage.
	Do not place animals or plants in the direct path of the air flow.
	• When restarting after a long period of disuse in the winter, turn the power switch at least 12 hours before starting the unit.
	Do not drink the water drained from the air conditioner.
	<ul> <li>Do not use in applications involving the storage of foods, plants or animals, precision equipment, or art works.</li> </ul>
	Do not apply any heavy pressure to radiator fins.
	Operate only with air filters installed.
	Do not block or cover the intake grille and outlet port.
	• Ensure that any electronic equipment is at least one metre away from either the i door or outdoor units.
	Avoid installing the air conditioner near a fireplace or other heating apparatus.
	<ul> <li>When installing the indoor and outdoor units, take precautions to prevent access by infan</li> </ul>

### **AUTOMATIC OPERATION**

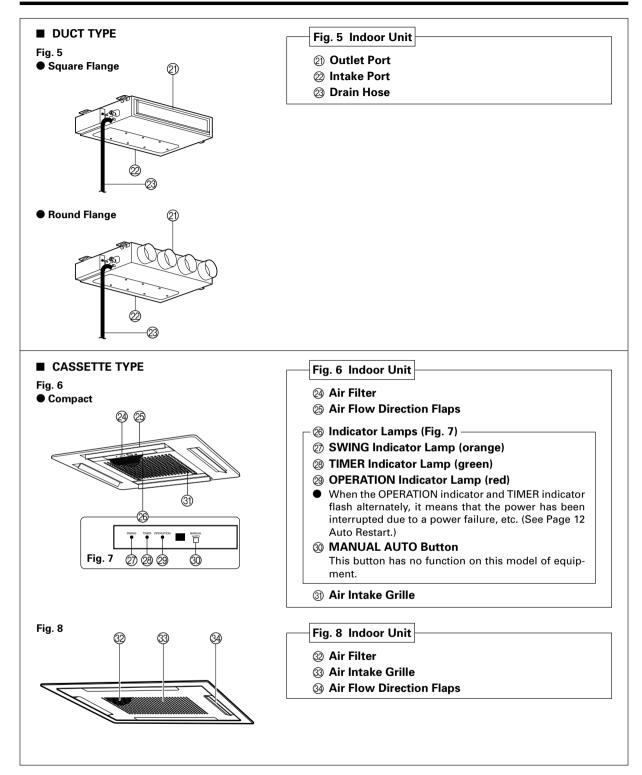
#### HEAT & COOL MODEL (REVERSE CYCLE)

Merely press the START/STOP button, and the unit will begin automatic operation in either the Heating, Cooling or Monitor modes as appropriate, in accordance with the thermostat setting and the actual temperature of the room.

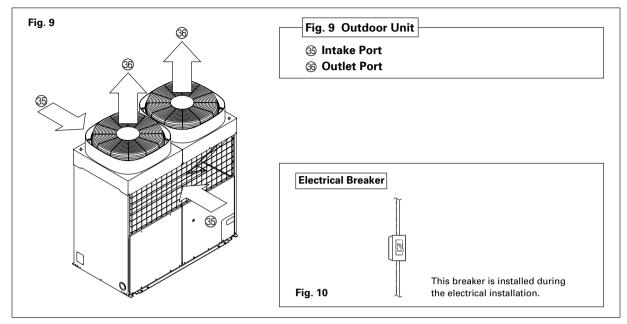
## NAME OF PARTS



## NAME OF PARTS



### Instructions relating to heating (\*) are applicable only to "HEAT & COOL MODEL" (Reverse Cycle).



## **CLEANING AND CARE**

- When used for extended periods, the unit may accumulate dirt inside, reducing its performance. We recommend that the unit be inspected regularly, in addition to your own cleaning and care. For more information, consult authorized service personnel.
- When cleaning the unit's body, do not use water hotter than 40 °C, harsh abrasive cleansers, or volatile agents like benzene or thinner.
- Do not expose the unit body to liquid insecticides or hairsprays.
- If the unit will not be operated for a period of one month or more, be sure to allow the inner parts of the unit to dry thoroughly, in advance, by operating the unit in fan mode for half a day.

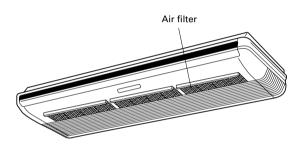
#### ■ CEILING SUSPENSION TYPE



- Before cleaning the air conditioner, be sure to turn it off and disconnect the power supply.
- Turn off the electrical breaker.

#### **Cleaning the Air Filter**

1. Pull the air filters upward to remove them. Remove the air filters by raising its handle while pulling it out towards you.



#### 2. Clean the air filters.

Remove the dust from the air filters by vacuuming or washing them. After washing, allow the air filters to dry thoroughly in an area protected from sunlight.

#### 3. Re-attach the air filters to the intake grille.

The air filters fit onto the inside of the intake grille.

- Dust can be cleaned from the air filter either with a vacuum cleaner, or by washing the filter in a solution of mild detergent and warm water. If you wash the filter, be sure to allow it to dry thoroughly in a shady place before reinstalling.
- If dirt is allowed to accumulate on the air filter, air flow will be reduced, lowering operating efficiency and increasing noise.
- During periods of normal use, the air filters should be cleaned every four weeks.

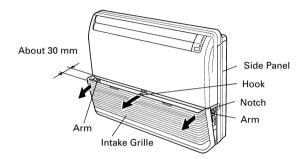
### ■ FLOOR CONSOLE/UNDER CEILING DUAL TYPE



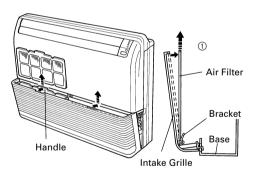
- Before cleaning the air conditioner, be sure to turn it off and disconnect the power supply cord.
- Be sure the intake grille is installed securely.
- When removing and replacing the air filters, be sure not to touch the heat exchanger, as personal injury may result.

#### **Cleaning the Air Filter**

1. Pull out both sides and the center of the intake grille.



2. Pull the air filters upward to remove them. Push the air filter handles away from the intake grille in direction ①, then pull out the air filters.

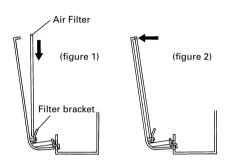


#### 3. Clean the air filters.

Remove the dust from the air filters by vacuuming or washing them. After washing, allow the air filters to dry thoroughly in an area protected from sunlight.

#### 4. Re-attach the air filters to the intake grille.

- ① The air filters fit onto the inside of the intake grille. (figure 1)
- (2) The bottom edges of the air filters should fit into the filter brackets. (figure 1)
- ③ The air filters should be pushed down so that their top edges fit under the projections at the top of the intake grille. (figure 2)



5. Push in both sides and the center of the intake grille.



- Dust can be cleaned from the air filter either with a vacuum cleaner, or by washing the filter in a solution of mild detergent and warm water. If you wash the filter, be sure to allow it to dry thoroughly in a shady place before reinstalling.
- If dirt is allowed to accumulate on the air filter, air flow will be reduced, lowering operating efficiency and increasing noise.
- During periods of normal use, the air filters should be cleaned every two weeks.

## **CLEANING AND CARE**

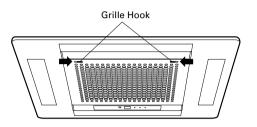
### ■ CASSETTE TYPE (COMPACT)



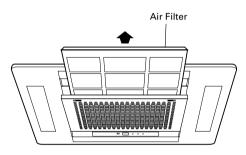
- Before cleaning the unit, be sure to stop the unit and disconnect the power supply.
- Turn off the electrical breaker.
- A fan operates at high speed inside the unit, and personal injury could result.

### **Cleaning the Air Filter**

1. Push the intake grille's hooks inward towards the center of the unit to open the intake grille.



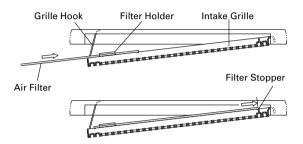
2. Pull out the filter from the intake grille.



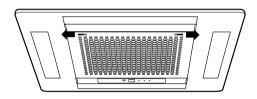
#### 3. Clean the air filters.

Remove the dust from the air filters by vacuuming or washing them. After washing, allow the air filters to dry thoroughly in an area protected from sunlight.

- 4. Re-attach the air filters to the intake grille.
  - ① Replace the air filter into its holder.
  - Make sure that the air filter makes contact with the filter stopper when it is replaced into its holder.



5. Close the intake grille and push the intake grille's hooks outward.



- Dust can be cleaned from the air filter either with a vacuum cleaner, or by washing the filter in a solution of mild detergent and warm water. If you wash the filter, be sure to allow it to dry thoroughly in a shady place before reinstalling.
- If dirt is allowed to accumulate on the air filter, air flow will be reduced, lowering operating efficiency and increasing noise.
- During periods of normal use, the air filters should be cleaned every two weeks.

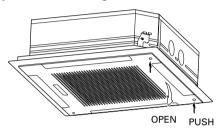
### CASSETTE TYPE



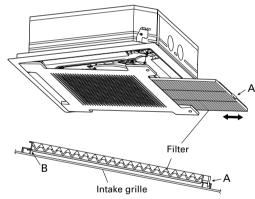
- Before cleaning the unit, be sure to stop the unit and disconnect the power supply.
- Turn off the electrical breaker.
- A fan operates at high speed inside the unit, and personal injury could result.

#### **Cleaning the Air Filter**

- 1. Push the intake grille pushbuttons (two places).
- 2. Open the intake grille.



3. Hold down the hook at A and pull the filter out.



• When reinstalling the filter, be sure that the hooks at A and B engage correctly into place.



#### 4. Clean the air filters.

Remove the dust from the air filters by vacuuming or washing them. After washing, allow the air filters to dry thoroughly in an area protected from sunlight.

- Dust can be cleaned from the air filter either with a vacuum cleaner, or by washing the filter in a solution of mild detergent and warm water. If you wash the filter, be sure to allow it to dry thoroughly in a shady place before reinstalling.
- If dirt is allowed to accumulate on the air filter, air flow will be reduced, lowering operating efficiency and increasing noise.
- During periods of normal use, the air filters should be cleaned every two months.

#### DUCT TYPE



- Before cleaning the unit, be sure to stop the unit and disconnect the power supply.
- Turn off the electrical breaker.
- A fan operates at high speed inside the unit, and personal injury could result.

#### Installing the Air Filter

Be sure the filter is always installed in the inlet air grille of the indoor unit.

Filters can be purchased through your local dealer.

#### **Cleaning the Air Filter**

If dirt is allowed to collect in the air filter, the airflow will be reduced, leading to reduced performance, and increased operation noise. Be sure to clean the filters regularly.

#### How to Cleaning

Use a vacuum cleaner to remove dust and dirt from the air filter, or wash in a synthetic detergent. After washing, dry in a shaded place, then reinstall.

## TROUBLESHOOTING

#### Instructions relating to heating (\*) are applicable only to "HEAT & COOL MODEL" (Reverse Cycle). Instructions relating to "the OPERATION indicator lamp" (\*\*) are applicable to "CEILING SUSPENSION TYPE" and "FLOOR CONSOLE/UNDER CEILING DUAL TYPE".



In the event of a malfunction (burning smell, etc.), immediately stop operation, turn off the electrical breaker, and consult authorized service personnel.

Merely turning off the unit's power switch will not completely disconnect the unit from the power source. Always be sure to turn off the electrical breaker to ensure that power is completely off.

Before requesting service, perform the following checks:

	Symptom	Problem	See Page
NORMAL FUNCTION	Doesn't operate immedi- ately:	<ul> <li>If the unit is stopped and then immediately started again, the compressor will not operate for about 3 minutes, in order to prevent fuse blowouts.</li> <li>Whenever the electrical breaker is turned off then on again, the protection circuit will operate for about 3 minutes, preventing unit operation during that period.</li> </ul>	_
	Noise is heard:	<ul> <li>During operation and immediately after stopping the unit, the sound of water flowing in the air conditioner's piping may be heard. Also, noise may be particularly noticeable for about 2 to 3 minutes after starting operation (sound of coolant flowing).</li> <li>During operation, a slight squeaking sound may be heard. This is the result of minute expansion and contraction of the panel due to temperature changes.</li> </ul>	_
		*• During Heating operation, a sizzling sound may be heard occa- sionally. This sound is produced by the Automatic Defrosting op- eration.	11
	Smells:	• Some smell may be emitted from the indoor unit. This smell is the result of room smells (furniture, tobacco, etc.) which have been taken into the air conditioner.	_
	Mist or steam are emitted:	• During Cooling operation, a thin mist may be seen emitted from the indoor unit. This results from the sudden Cooling of room air by the air emitted from the air conditioner, resulting in condensation and misting.	_
		*• During Heating operation, the outdoor unit's fan may stop, and steam may be seen rising from the unit. This is due to the Automatic Defrosting operation.	11
	Airflow is weak or stops:	<ul> <li>*• When Heating operation is started, fan speed is temporarily very low, to allow internal parts to warm up.</li> <li>*• During Heating operation, if the room temperature rises above the thermostat setting, the outdoor unit will stop, and the indoor unit will operate at very low fan speed. If you wish to warm the room further, set the thermostat to a higher setting.</li> </ul>	_
		*• During Heating operation, the unit will temporarily stop opera- tion (between 2 and 16 minutes) as the Automatic Defrosting mode operates. During the Automatic Defrosting operation, <b>WW</b> will be shown on the remote controller display **and the OPERA- TION indicator lamp will flash.	11
		• The fan may operate at very low speed when the unit is monitor- ing the room's temperature.	_
		<ul> <li>In the monitor AUTO operation, the fan will operate at very low speed.</li> </ul>	
	Water is produced from the outdoor unit:	*• During Heating operation, water may be produced from the out- door unit due to the Automatic Defrosting operation.	11

## TROUBLESHOOTING

Instructions relating to heating (\*) are applicable only to "HEAT & COOL MODEL" (Reverse Cycle). Instructions relating to "the TIMER indicator lamp" (\*\*) are applicable to "CEILING SUSPENSION TYPE" and "FLOOR CON-SOLE/UNDER CEILING DUAL TYPE".

	Symptom	Items to check	See Page
CHECK ONCE MORE	Doesn't operate at all:	<ul> <li>Has there been a power failure?</li> <li>Has a fuse blown out, or a circuit breaker been tripped?</li> <li>Is the main power switch set to the OFF position?</li> </ul>	
		• Is the timer operating?	_
	Poor Cooling (or *Heating) performance:	<ul> <li>Is the air filter dirty?</li> <li>Are the air conditioner's intake grille or outlet port blocked?</li> <li>Did you adjust the room temperature settings (thermostat) correctly?</li> <li>Is there a window or door open?</li> <li>In the case of Cooling operation, is a window allowing bright sunlight to enter? (Close the curtains.)</li> <li>In the case of Cooling operation, are there heating apparatus and computers inside the room, or are there too many people in the room?</li> </ul>	

If the problem persists after performing these checks, or if you notice burning smells, \*\* or the TIMER indicator lamp flashes, stop operation immediately, turn off the electrical breaker, and consult with authorized service personnel.

## **OPERATING TIPS**

Instructions relating to heating (\*) are applicable only to "HEAT & COOL MODEL" (Reverse Cycle). Instructions relating to "the OPERATION indicator lamp" (\*\*) are applicable to "CEILING SUSPENSION TYPE" and "FLOOR CONSOLE/UNDER CEILING DUAL TYPE".

#### **Operation and Performance**

#### \*Heating Performance

- This air conditioner operates on the heat-pump principle, absorbing heat from outdoor air and transferring that heat indoors. As a result, the operating performance is reduced as outdoor air temperature drops. If you feel that insufficient heating performance is being produced, we recommend you use this air conditioner in conjunction with another kind of heating appliance.
- Heat-pump air conditioners heat your entire room by recirculating air throughout the room, with the result that some time may be required after first starting the air conditioner until the room is heated.

#### \*Microcomputer-controlled Automatic Defrosting

When using the Heating mode under conditions of low outdoor temperature and high humidity, frost may form on the outdoor unit, resulting in reduced operating performance. In order to prevent this kind of reduced performance, this unit is equipped with a Microcomputer-controlled Automatic Defrosting function. If frost forms, the air conditioner will temporarily stop, and the defrosting circuit will operate briefly (for about 4 to 15 minutes).

During Automatic Defrosting operation, will be displayed on the remote controller, \*\* and the OPERATION indicator lamp (red) will flash.

#### Low Ambient Cooling

When the outdoor temperature drops, the outdoor unit's fans may switch to Low Speed, or one of the fans may stop intermittently. Instructions relating to heating (\*) are applicable only to "HEAT & COOL MODEL" (Reverse Cycle).

### AUTO Restart

#### In Event of Power Interruption

- Should the power supply to the air conditioner be interrupted by a power failure, the air conditioner will restart automatically in the previously selected mode once the power is restored.
- Use of other electrical appliances (electric shaver, etc.) or nearby use of a wireless radio transmitter may cause the air conditioner to malfunction. In this event, temporarily turn off the circuit breaker, reconnect it, and then use the remote controller to resume operation.

### **Temperature and Humidity Range**

Permissible range of temprature and humidity are as follows:

		Cooling Mode	*Heating Mode	
Outdoor temperature COOLING MODEL		About 0 to 52 °C	_	
HEAT & COOL MODEL (Reverse Cycle)		About 0 to 52 °C	About -10 to 21 °C	
Indoor temperature		About 18 °C to 30 °C	About 16 °C to 30 °C	
Indoor humidity		About 80 % or less If the unit is used for long pe- riods under high-humidity conditions, condensation may form on the surface of the indoor unit, and drip onto the floor or other objects un- derneath.	_	

- If the air conditioner is operated under higher temperature conditions than those listed, the built-in protection circuit may operate to prevent internal circuit damage. Also, during Cooling mode, if the unit is used under conditions of lower temperatures than those listed above, the heat-exchanger may freeze, leading to water leakage and other damage.
- Do not use this unit for any purposes other than the Cooling, (\*)Heating, Dehumidifying, and air-circulation of rooms in ordinary dwellings.

## **SPECIFICATIONS**

Models intended only for cooling have no heating capacity.

#### **CEILING SUSPENSION TYPE**

мог	DEL		AB A30TATA	AB A36TATA	AB A45TATA		
POWER			220-240 V~50 Hz				
COOLING CAPACITY [kW]		[kW]	8.6-8.8 10.3-10.5 12.4-12.7				
HEA	HEATING CAPACITY [kW]		8.8-9.1 10.5-10.7 13.4-13.7				
DIM	ENSIONS & WEIGHT						
HEIGHT [mm]			240				
	WIDTH	[mm]		1,660			
	DEPTH	[mm]	700				
	WEIGHT	[kg]	1 48				

## FLOOR CONSOLE/UNDER CEILING DUAL TYPE

мо	DEL		AB A18TATA	AB A24TATA			
POWER			220-240 V~50 Hz				
coc	COOLING CAPACITY [kW] 5.2-5.3 6.5-6.6						
HEA	HEATING CAPACITY [kW]		5.5-5.6 7.6-7.7				
DIM	ENSIONS & WEIGHT						
	HEIGHT	[mm]	199				
WIDTH [mm]		[mm]	990				
DEPTH [mm] WEIGHT [kg]		[mm]	655				
		[kg]	28	30			

### DUCT TYPE

мо	DEL		ARXA25TATA	ARXA30TATA	ARXA36TATA	ARXA45TATA		
POWER				220-240 V~50 Hz				
coc	COOLING CAPACITY [kW]		6.95-7.05 8.60-8.80 10.3-10.5 12.4-12.7					
HEA	HEATING CAPACITY [kW]		7.60-7.85 8.80-9.10 10.5-10.7 13.4-13.7					
DIM	DIMENSIONS & WEIGHT							
HEIGHT [mm]			270					
	WIDTH	[mm]	1,210					
	DEPTH	[mm]	700					
	WEIGHT	[kg]	43 45			15		

### **CASSETTE TYPE**

мо	DEL		AUXA18TATA	AU 🛛 A25TATA	AU 🛛 A30TATA	AU A36TATA	AU 🛛 A45TATA	
POWER				220-240 V~50 Hz				
coc	COOLING CAPACITY [kW]		4.85-5.00 6.95-7.05 8.60-8.80 10.3-10.5 12.4-12.7				12.4-12.7	
HEA	TING CAPACITY	[kW]	5.30-5.45 7.60-7.85 8.80-9.10 10.5-10.7 13.4-13.7					
DIM	ENSIONS & WEIGHT							
HEIGHT [mm]		[mm]	235 (35)	296 (35)				
	WIDTH	[mm]	580 (650)	830 (940)				
	DEPTH	[mm]	580+70 (650)	830 (940)				
	WEIGHT	[kg]	18	38	38	40	40	

ullet ( ) indicates the dimensions of the grille.