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## **Correct Disposal of This Product (Waste Electrical & Electronic Equipment)**

### **(Applicable in the European Union and other European countries with separate collection systems)**

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Register your product at [www.samsung.com/global/register](http://www.samsung.com/global/register)

## Safety Precautions

*The following safety precautions are provided to protect the users' safety and prevent property damage. Make sure to read the followings and use the air conditioner properly.*

- ▶ Keep this user's manual together with the installation manual in a handy place so that you can find it whenever you need to see it after reading this manual thoroughly.



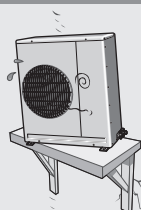
### WARNING

- This indicates the possibility of serious injury or death.

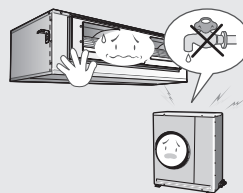
#### WHEN INSTALLING



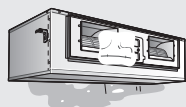
- ▶ Do not install the unit in a place where it is exposed to inflammable gas leakage.



- ▶ Do not install the outdoor unit where there's the risk of dropping such as on high outer wall or outside of the terrace.



- ▶ Do not connect the ground to a gas pipe, water pipe, lightning rod or telephone earth.



- ▶ Contact the service center if the air conditioner is under water.



- ▶ The installation must be carried out by a licensed installer or qualified personnel when installing the unit for the first time or reinstalling it.

#### REGARDING POWER SOURCE



- ▶ Do not pull the electric wire or touch the power plug with the wet hands.



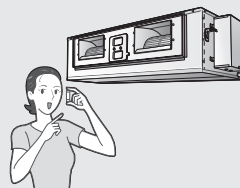
- ▶ Do not bend the electric wire by force or weigh down the air conditioner not to be out of order.



- ▶ Install the switch and circuit breaker only for air conditioner.



- ▶ Use the power source with separate wiring only for air conditioner.



- ▶ Use the rated current fuse.



- ▶ If the power plug is damaged, replace it by the manufacturer or qualified personnel to avoid the risk.

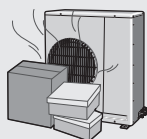


## WARNING

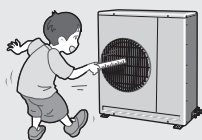
### DURING OPERATION



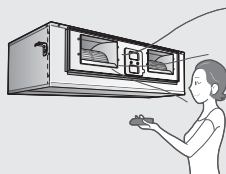
- ▶ Do not attempt to repair, move, modify or reinstall the unit on your own. Make sure that these installations are carried out by qualified personnel to avoid electric shock or fire.



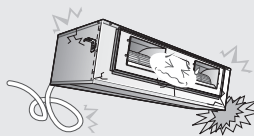
- ▶ Do not place any obstacles in front of the unit. Make sure that the unit is correctly ventilated at all times: Do not place clothing or other materials over it.



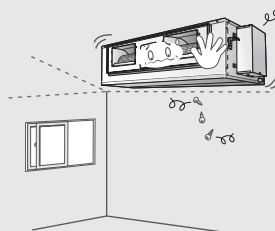
- ▶ Do not insert anything between the air outlet blades because the inner fan may be damaged and could cause injury. Keep children away from the unit.



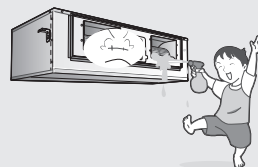
- ▶ When using a wireless remote control, the distance should not be more than 7 meters from the air conditioner. (If applicable)



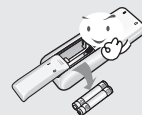
- ▶ The manufacturer declines any liability for damage resulting from modifications or errors in the electrical or hydraulic connections.



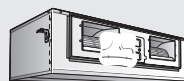
- ▶ Failure to observe the installation instruction, or use of the unit under conditions other than those indicated in the table 'Operating limit' of the unit installation manual, will immediately invalidate the unit warranty.



- ▶ Never spill any kind of liquid into the unit. Should this happen, unplug or main switch off the unit and contact an authorized service center.



- ▶ If the wireless remote control is not used for a long time, remove the batteries. (If applicable)



- ▶ Do not connect the electric heater to the air conditioner or repair it with your discretion.

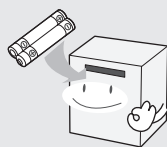


- ▶ Do not place any materials so that children cannot step on it.



## WARNING

### DISPOSING THE UNIT



- Before throwing out the device, it is necessary to pull back the battery cells and get rid of them safely for recycling reasons.



- When you need to dispose of the unit, consult your dealer. If pipes are removed incorrectly, refrigerant may blow out and come into contact with your skin, causing injury. Releasing refrigerant into the atmosphere also damages the environments.



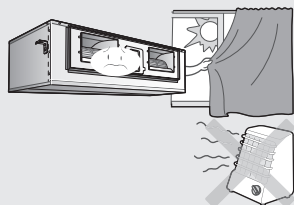
- Please recycle or dispose of the packaging material for this product in an environmentally responsible manner.



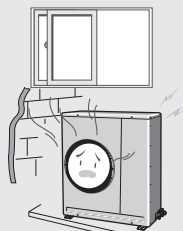
## CAUTION

- This indicates the possibility of serious injury or damage to environments when operated incorrectly.

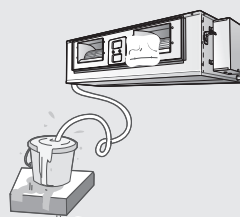
### WHEN INSTALLING



- Install the air conditioner avoiding direct sunlight or heater, especially water.



- Install the outdoor unit so as to let the discharged air out properly. Avoid a place that may disturb your neighbor by noise.

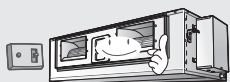


- Install the drain hose to let the water run safely and correctly.



## CAUTION

### REGARDING POWER SOURCE



- ▶ Disconnect the circuit breaker when you don't use the air conditioner for a long time to save energy.



- ▶ Contact the service center or manufacturer if you want to repair the air conditioner.

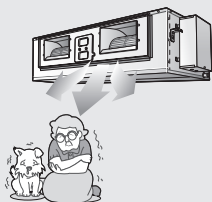


- ▶ Contact the service center after turning off the air conditioner if strange noise is heard, burning smell or smoke blow.

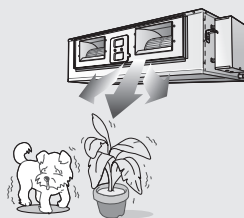
### DURING OPERATION



- ▶ Do not drink the water from the air conditioner.



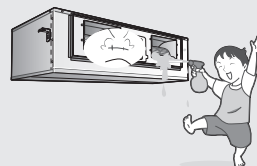
- ▶ Do not use the air conditioner for a long time in a closed room or in a place where there's a baby or an old person.



- ▶ Avoid cold and hot air reaching to person, pet or a plant directly for a long time.



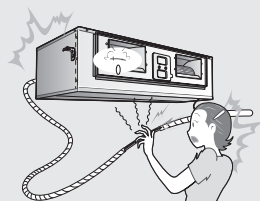
- ▶ Do not step on the air conditioner or put heavy object on it.



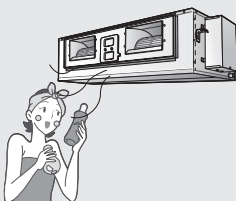
- ▶ Avoid the water from getting into the air conditioner.

# **CAUTION**

## **DURING OPERATION**



- ▶ Do not touch the pipes connected to the air conditioner.

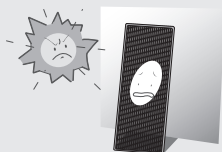


- ▶ Do not use the air conditioner to maintain the machine, food, pet, plant or cosmetics.

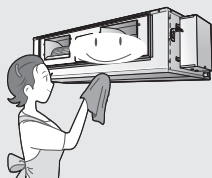


- ▶ Do not give excessive shock to the air conditioner.

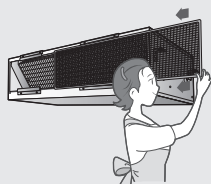
## **OTHERS**



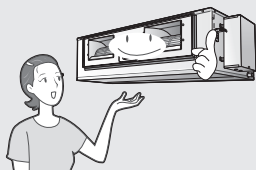
- ▶ Be sure that the air filter not to be exposed to direct sunlight.



- ▶ Turn off the air conditioner and if the fan stops to operate, clean the air conditioner.



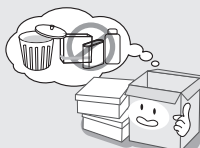
- ▶ Be sure to insert the air filter.



- ▶ The appliance is not intended for use by young children or infirm persons without supervision: Young children should be supervised to ensure that they do not play with the appliance.



- ▶ Do not clean the air conditioner by spraying water directly or with benzene, thinner or alcohol.



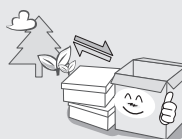
- ▶ Dispose of the packaging material in accordance with the local requirements.



- ▶ The maximum input power & current is measured according to the IEC standard and the input power & current is measured according to the ISO standard.



- ▶ The surface of the heat exchanger is sharp, so be careful of it when cleaning.



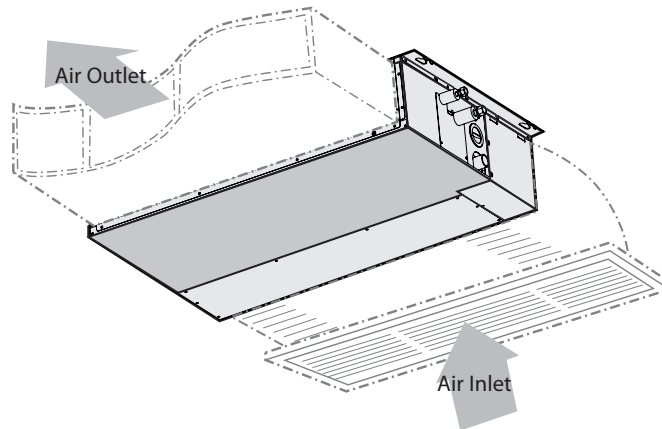
- ▶ All of the manufacturing and packaging materials used for your new appliance are compatible with the environment and can be recycled.

## View of the Indoor Unit

*The figures are shown in this instruction may differ from yours depending on the model.*

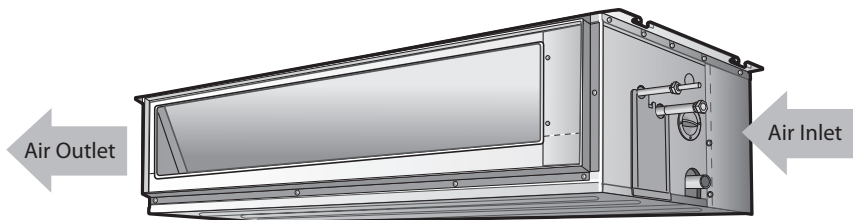
### Indoor Unit

EH035EAV1



### Indoor Unit

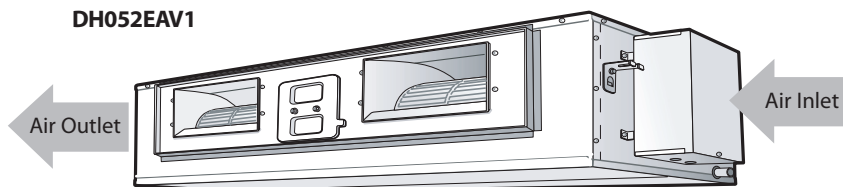
EH052/070EAV1





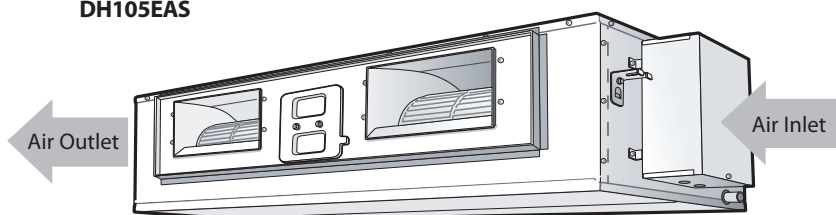
**Indoor Unit**

**DH052/070EAS  
DH052EAV1**



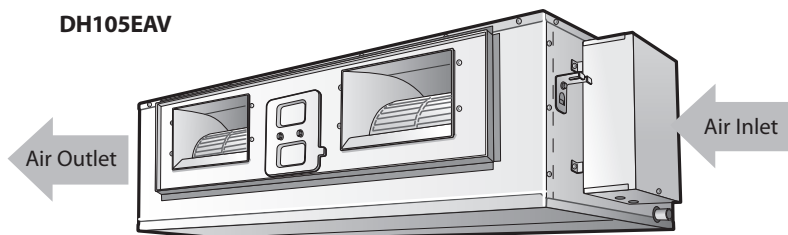
**Indoor Unit**

**DH070EAV1  
DH090EAV  
DH105EAS**



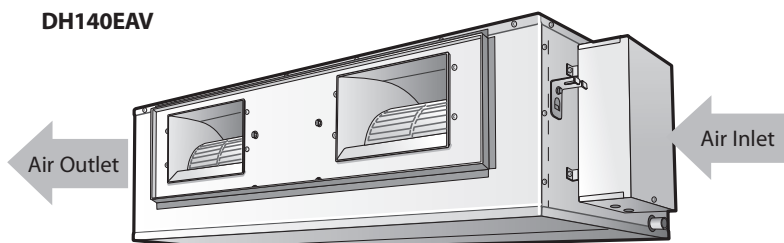
**Indoor Unit**

**DH105EAV**



**Indoor Unit**

**DH140EAV**



## Periodical Checks

Type	Description	Monthly	Every 4 months	Once a year
Indoor unit	Clean the air filter	● (1)		
	Clean the condensate drain pan (2)			●
	Thoroughly clean the heat exchanger (2)			●
	Clean the condensate drain pipe (2)		●	
	Replace the remote control batteries			●
Outdoor unit	Clean the heat exchanger on the outside of the unit (2)		●	
	Clean the heat exchanger on the inside of the unit (2)			●
	Clean the electric components with jets of air (2)			●
	Verify that all the electric components are firmly tightened (2)			●
	Clean the fan (2)			●
	Verify that all the fan assembly is firmly tightened (2)			●
	Clean the condensate drain pan (2)			●

✱ *The checks and maintenance operations described are essential to guarantee the efficiency of the air conditioner. The frequency of these operations varies according to the characteristics of the area, the amount of dust, etc.*

(1) The described operations should be performed more frequently if the area of installation is very dusty.

(2) These operations must always be performed by qualified personnel. For more detailed information, see the Installation Manual.

## Protections enabled by the Unit control system

Type of protection	Description	Operation	When it enables
Protection against cold air	The internal fan is off	Heating on heat pump	During operation
Defrost cycle	The internal fan is off	Heating on heat pump	During operation
Anti-frost protection of internal battery	The compressor is off	Cooling During operation	
Delayed start of compressor	The start of the compressor is delayed.	Cooling or heating on heat pump	At start-up or during the selection of the operating mode

### CAUTION

*If the air conditioner is operating in heat pump mode, it performs several defrost cycles in order to remove the frost that may have deposited on the outdoor unit (at low temperatures). In this case, the internal fan is switched off automatically and restarted only after the defrost cycle is completed.*

## Operating Recommendations

***Here are a few recommendations that you should follow when using your air conditioner.***

Topic	Recommendation
Heating performances	<p>The heat pump function of the air conditioner absorbs heat from outside air and brings it indoors. As the temperature of the outside air drops, the heating performance of air conditioner will decrease. If you find that the room is not warm enough, using an additional heating appliance is recommended.</p>
Frost & Defrost	<p>When outside temperature is low but humidity is high, frost may form on the outdoor unit at HEAT mode. If this happens:</p> <ul style="list-style-type: none"><li>◆ The heating operation stops.</li><li>◆ The defrost mode will be triggered automatically for about 10 minutes.</li><li>◆ The steam produced on the outdoor unit in the defrost mode is safe. (Only for Heat pump)</li></ul> <p>No intervention is required ; after about ten minutes, the air conditioner operates again normally.</p>
High indoor and outdoor temperatures	<p>If both indoor and outdoor temperatures are high and the air conditioner is running at HEAT mode, the outdoor unit's fan and compressor may stop at times. This is normal ; simply wait until the air conditioner switches on again.</p>
Power failure	<p>If a power failure occurs while the air conditioner is operating, the unit will be switched off. When the power returns, the air conditioner starts up again automatically.</p>
The simultaneous operation	<p>When you use the heat pump model, it is impossible to operate HEAT and COOL mode of several indoor units at the same time.</p>

## Operating Limits

*The table that follows provides the operating limits that have to be followed to ensure a correct operation of the air conditioner.*

COOL DEHUMIDIFICATION (1)	Maximum requirements (2)	Outdoor temperature: 50°C(Differ according to model)
		Indoor temperature: 32°C b.s. / 23°C b.u.
	Minimum requirements	Outdoor temperature: -15°C
		Indoor temperature: 21°C b.s. / 15°C b.u.
HEATING (1)	Maximum requirements (2)	Outdoor temperature: 24°C b.s. / 18°C b.u.
		Indoor temperature: 27°C b.s.
	Minimum requirements	Outdoor temperature: -20°C b.s.
		Indoor temperature: 15°C
POWER SUPPLY	Single-phase rated voltage Minimum and maximum limit	220V-240V ~ 50Hz 198V min. - 264V max.

**b.s.:** Dry bulb - **b.u.:** wet bulb;

(1) As per standard UNI EN 14511

(2) Maximum relative humidity: **80% or lower**

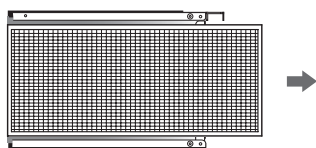
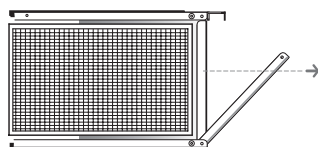
◆ *The standardized temperature for heating is 7°C. If the outdoor temperature drops to 0°C or below, the heating capacity can be reduced depending on the temperature condition.*

*If the cooling operation is used at over 32°C(indoor temperature), it does not cool at its full capacity.*

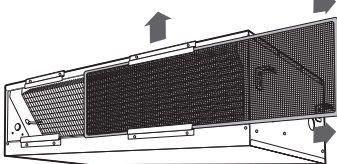
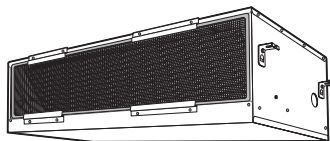
◆ *The use of the air conditioner at a relative humidity above the expected one (80%) may cause the formation of condensate and the leakage of water drops on the floor.*

## Cleaning Your Air Conditioner

### EH035EAV1 (OPTIONAL)



### DH\*\*\*EAV\*/DH\*\*\*EAS EH052/070EAV1



**To get the best possible use out of your air conditioner, you must clean it regularly to remove the dust that accumulates on the air filter.**

#### CAUTION

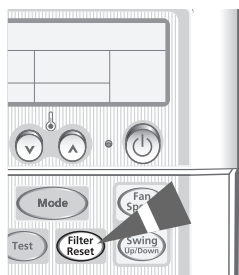
Before cleaning your air conditioner, ensure that you have switched off the electric circuit breaker used for the unit.

- 1 Pull the air filter to the right or left as you want.
- 2 Pull out the air filter.
- 3 Remove all dust on air filter with a vacuum cleaner or a brush. In case of serious dust accumulation, put the air filter in warm detergent water and shake it vertically.
- 4 After washing, allow them to dry thoroughly in an area protected from sunlight.
- 5 When you have finished, insert the filter into the front grille.

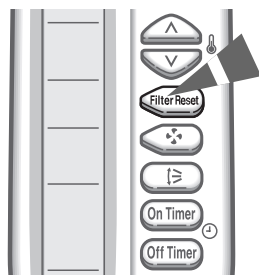
#### Note

- ◆ After cleaning the air conditioner, press the Filter Reset button.
- ◆ Do not operate the air conditioner without the filter.

#### Wired Remote Control








#### Wireless Remote Control



# Solving Common Problems

**Before contacting the after-sales service, perform the following simple checks.  
They may save you the time and expense of an unnecessary call.**

Problem	Explanation/Solution
The air conditioner does not operate at all.	<ul style="list-style-type: none"> <li>◆ Check if power is on and operate the air conditioner again.</li> <li>◆ Check if the circuit breaker is switched off.</li> </ul>
The temperature is not adjusted.	<ul style="list-style-type: none"> <li>◆ Check if you selected the FAN mode.</li> </ul>
The air conditioner does not operate in the HEAT mode.	<ul style="list-style-type: none"> <li>◆ Check if the air conditioner is cooling only model.</li> <li>◆ Check if the remote control is for cooling only model.</li> </ul>
The cool(warm) air does not come out from the air conditioner.	<ul style="list-style-type: none"> <li>◆ Check if set temperature is higher(lower) than current temperature.</li> <li>◆ Check if you selected the FAN mode. Select the COOL, HEAT, AUTO or DRY mode.</li> <li>◆ Check if the air filter is blocked by dirt. Clean the air filter regularly.</li> <li>◆ Check if there is cover on the outdoor unit or any obstacle. Remove the cover or obstacle.</li> <li>◆ Check if you installed the air conditioner under direct sunlight.</li> <li>◆ The window or door may be opened.</li> <li>◆ Check if you turn on the air conditioner just now. It takes about 3 minutes to cool or heat the room.</li> <li>◆ Check if the refrigerant pipe is too long.</li> </ul>
The fan speed is not adjusted.	<ul style="list-style-type: none"> <li>◆ In AUTO or DRY mode, the fan speed is selected automatically.</li> </ul>
The remote control does not operate.	<ul style="list-style-type: none"> <li>◆ Check if the battery is discharged. Replace the battery.</li> <li>◆ Check if the remote control sensor is blocked.</li> <li>◆ Check if the air conditioner is placed near strong light.</li> </ul>
The wired remote control does not operate.	<ul style="list-style-type: none"> <li>◆ Check if  is displayed on the wired remote control. Turn off the air conditioner and switch off the circuit breaker. Contact the service center.</li> </ul>
The Timer is not set.	<ul style="list-style-type: none"> <li>◆ Check if you pressed the  button after selecting time.</li> </ul>
The air conditioner does not turn on or off with the wired remote control.	<ul style="list-style-type: none"> <li>◆ Check if you set the wired remote control for group control.</li> </ul>
Odor is permeated in the room during operation	<ul style="list-style-type: none"> <li>◆ Check if you use the air conditioner in smoky area or there is a smell. Ventilate the room or select the FAN mode for 1~2 hours.</li> </ul>
The indoor unit indicator flashes.	<ul style="list-style-type: none"> <li>◆ Press the  button to turn on the air conditioner again. Switch the circuit breaker off and switch on it again.</li> </ul>
Strange sound is heard from the air conditioner.	<ul style="list-style-type: none"> <li>◆ The sound is heard when the refrigerant gas flow is changed depending on the use of the air conditioner.</li> <li>◆ When you press the  button, noise may be heard from the drain pump inside of the air conditioner.</li> <li>◆ When you press the  button, noise may be heard that the air conditioner sense the airflow blade.</li> </ul>
Water drops from the outdoor unit connection part.	<ul style="list-style-type: none"> <li>◆ Water may form due to the difference of the temperature.</li> </ul>



## Contact SAMSUNG WORLD WIDE

If you have any comments or questions regarding a Samsung product, contact the SAMSUNG customer care center.

Country	Customer Care Center 	Web Site
BELGIUM	0032 (0)2 201 24 18	<a href="http://www.samsung.com/be">www.samsung.com/be</a>
CZECH REPUBLIC	844 000 844 Distributor pro Českou republiku: Samsung Zrt., česká organizační složka Vyskočilova 4, 14000 Praha 4	<a href="http://www.samsung.com/cz">www.samsung.com/cz</a>
DENMARK	70 70 19 70	<a href="http://www.samsung.com/dk">www.samsung.com/dk</a>
FINLAND	030-6227 515	<a href="http://www.samsung.com/fi">www.samsung.com/fi</a>
FRANCE	3260 SAMSUNG(726-7864) 08 25 08 65 65 (€ 0,15/Min)	<a href="http://www.samsung.com/fr">www.samsung.com/fr</a>
GERMANY	01805-SAMSUNG(726-7864)	<a href="http://www.samsung.de">www.samsung.de</a>
HUNGARY	06-80-SAMSUNG(726-7864)	<a href="http://www.samsung.com/hu">www.samsung.com/hu</a>
ITALIA	800-SAMSUNG(726-7864)	<a href="http://www.samsung.com/it">www.samsung.com/it</a>
LUXEMBURG	0035 (0)2 261 03 710	<a href="http://www.samsung.com/be">www.samsung.com/be</a>
NETHERLANDS	0900 SAMSUNG(726-7864)	<a href="http://www.samsung.com/nl">www.samsung.com/nl</a>
NORWAY	815-56 480	<a href="http://www.samsung.com/no">www.samsung.com/no</a>
POLAND	0 801 801 881 022-607-93-33	<a href="http://www.samsung.com/pl">www.samsung.com/pl</a>
PORTUGAL	80 8 200 128	<a href="http://www.samsung.com/pt">www.samsung.com/pt</a>
SLOVAKIA	0800-SAMSUNG(726-7864)	<a href="http://www.samsung.com/sk">www.samsung.com/sk</a>
SPAIN	902 10 11 30	<a href="http://www.samsung.com/es">www.samsung.com/es</a>
SWEDEN	0771-400 200	<a href="http://www.samsung.com/se">www.samsung.com/se</a>
U.K	0870-SAMSUNG(726-7864)	<a href="http://www.samsung.com/uk">www.samsung.com/uk</a>
Republic of Ireland	0818 717 100	<a href="http://www.samsung.com/ie">www.samsung.com/ie</a>
AUSTRIA	0800-SAMSUNG(726-7864)	<a href="http://www.samsung.com/at">www.samsung.com/at</a>
Switzerland	0800-SAMSUNG(726-7864)	<a href="http://www.samsung.com/ch">www.samsung.com/ch</a>
RUSSIA	8-800-555-55-55	<a href="http://www.samsung.ru">www.samsung.ru</a>
KAZAHSTAN	8-10-800-500-55-500	<a href="http://www.samsung.kz">www.samsung.kz</a>
UZBEKISTAN	8-800-120-0-400	<a href="http://www.samsung.uz">www.samsung.uz</a>
KYRGYZSTAN	00-800-500-55-500	
UKRAINE	8-800-502-0000	<a href="http://www.samsung.ua">www.samsung.ua</a>
LITHUANIA	8-800-77777	<a href="http://www.samsung.lt">www.samsung.lt</a>
LATVIA	800-7267	<a href="http://www.samsung.com/lv">www.samsung.com/lv</a>
ESTONIA	800-7267	<a href="http://www.samsung.ee">www.samsung.ee</a>





## Duct Type Series

**DH\*\*\*EAV\***

**DH\*\*\*EAS**

ENGLISH

ESPAÑOL

FRANÇAIS

ITALIANO

PORTUGUÊS

DEUTSCH

ΕΛΛΗΝΙΚΑ

## System Air Conditioner (Cooling and Heating)

