

## Single Package

(50Hz/R22)



5CUK2-08A

Replaces 5CUK2-07D

# **Introduction**

## **Preface**

Thank you very much for your special patronage of LG air conditioners.

LG's "Roof Top or Single Package" is an ideal choice when we talk about high load applications.

As the name Roof Top signifies, this unit is generally installed on the top of the roof. Also the Single Package signifies that both condenser and evaporator are enclosed in a single body(same as window type). The unit is used along with ducts and has flexible air flow as per installation conditions. The air flow can be horizontal or vertically downward which offers wider flexibility in the field applications. This unit has two ranges as per capacity. The small range goes from 3 to 5 Tons where as the bigger range goes from 6 to 30 Tons.

Apart from common features, this unit offers some unique features like High & Low static driver kit, Oversize motor option, Manual Hood for fresh air intake, Compact design etc.

This unit is ideal for Single story and Double story houses as they offer high static pressure.

With its easy installation and simple control system, this product is suitable for Factories, Shopping malls, Multiplex, Hotels etc.

A lot of information regarding the design & installation of this system is provided in this edition. This new product series contains data on the same pattern.

Please utilize all the information for conducting your business efficiently.

Make sure the specification, dimensions and other technical data are same as provided in engineering data book before you start the project.

We look forward to your continuing support.

**LG Electronics Inc.  
Air Conditioning Division**

## Publication history

Pub. No.	Frequency	Category	Type	Product name	Refrigerant	Models	Notes	Published in
5CUK2-07C	50Hz	CAC	Single	Single Package	R22	3~5RT(10SEER) 6.25~25RT(GEN I) 6~30RT(GEN II)	New edition of EPDB	May.2006
5CUK2-08A	50Hz	CAC	Single	Single Package	R22	LK-C0728H00	New chassis addition	January.2007

# ***Single Package***

## **Introduction**

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# Part 1 3~5RT (10 SEER/GEN I)

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# 1. Model line up

## 1.1 Cooling Only

Nominal Capacity	Model		Power Supply
Ton	Refrigerant	Model Name	Ø, V, Hz
3	R22	LK-0380*H	3Ø, 380-415V, 50Hz
4		LK-0480*H	
5		LK-0580*C	

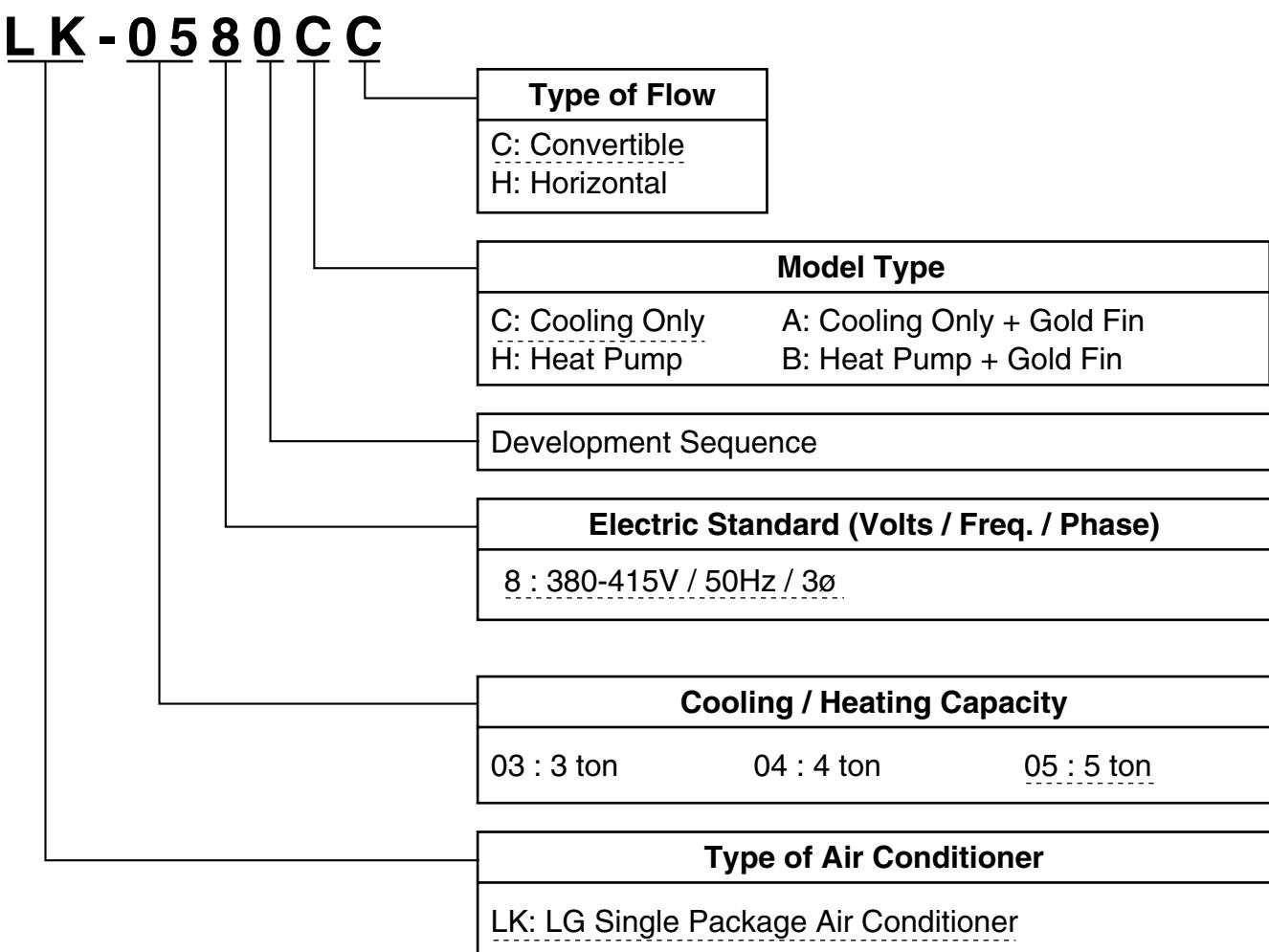
Notes : 1. "\*" corresponds to designation for different models such as  
C : Cooling only  
A : Cooling only with gold fin at the outdoor unit  
2. This product data book consist of "C" models only but "A" models have same product specifications as "C" for the corresponding capacities except the gold fin for outdoor unit.

## 1.2 Heat Pump

Nominal Capacity	Model		Power Supply
Ton	Refrigerant	Model Name	Ø, V, Hz
5	R22	LK-0580*C	3Ø, 380-415V, 50Hz

Notes : 1. "\*" corresponds to designation for different models such as  
H : Heat Pump  
B : Heat Pump with gold fin at the outdoor unit  
2. This product data book consist of "H" models only but "B" models have same product specifications as "H" for the corresponding capacities except the gold fin for outdoor unit.

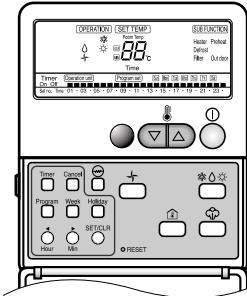
## 2. Nomenclature



### 3. Features & Benefits

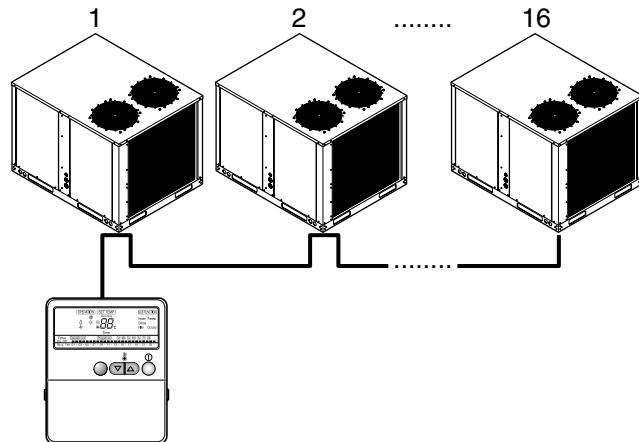
#### **LCD Wired Remote Control:**

- It can control all the functions of the unit. You can check/set temperature, change operation mode, set timer, holiday & also diagnose the error of the unit. It also has the option of weekly program.



#### **Group Control:**

- It enables to control up to 16 units with the help of one wired Remote Controller. All units will follow same setting of temperature & other sub functions.



#### **Two Thermistor Control(Return Air Control):(Accessory)**

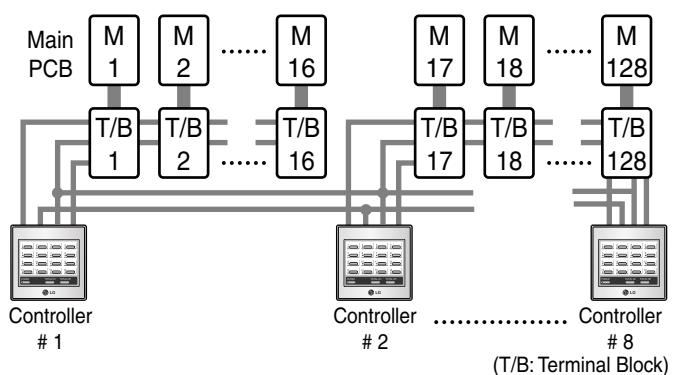
- There may be a significant difference between the return air temperature in the duct and the room temperature. Return air sensing temperature is designed to control temperature more accurately by applying additional thermistor which senses the return air temperature inside the duct specially.
- After selecting the duct thermistor, which is connected to the main PCB, the room temperature measurement by LCD wired remote control thermistor is neglected. It helps to control the room temperature more accurately.(Thermistor is a field-installed accessory)

#### **Time Delay Safety Function:**

- It delays restarting of the compressor by three minutes preventing damage to the compressor.

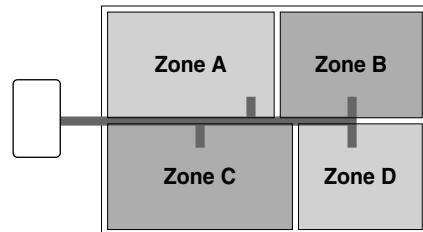
#### **Central Control :(Accessory)**

- It enables to control 16 x 8=128 units with the help of 8 controllers. All units can be put on/off from one Central Room. For setting temperature, fan speed and other sub functions, access the LCD wired remote controller of each unit.



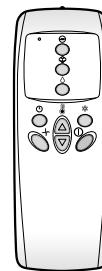
## **Zone Control:(Accessory)**

- It controls the temperature of each zone. Opening or closing of the damper is controlled by sensing the temperature of each zone. In the cooling mode, if the temperature of a particular zone is lower than set temperature then the damper is closed. On the other hand, if the temperature of a particular zone is higher than the set temperature damper is open to provide cooling to the zone & vice versa in the heating mode.



## **Wireless Remote Control:(Accessory)**

- It provides ease of control.



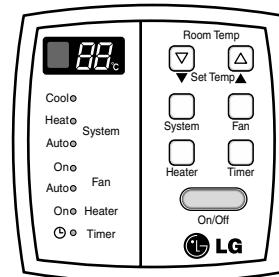
## **Electric Heater:(Accessory)**

- Electric Heater can be used to provide heat in addition to cycle heat. It also provides quick heating. It can also work as a stand alone heater with only fan operation.



## **Electronic Thermostat : (Accessory)**

- It provides on/off timer up to 8 hours. Also self-diagnose the problem.



## **Energy Saving Gold Fin:(Optional)**

- Single Package Heat Exchanger fins are coated with anticorrosive & hydrophilic layers. It prevents the corrosion of heat exchanger. Fins remain as new even after long time of operation and maintains efficiency of heat exchanger constant. It also saves Power & Maintenance Cost.

[Salt spray test for 15 days]



## 4. List of functions

Features	Model No.	LK-0380CH	LK-0480CH	LK-0580CC	LK-0580HC
LCD Wired Remote Control	-	-	-	O	O
Group Control	-	-	-	O	O
Two Thermistor Control	-	-	-	Accessory	Accessory
Time Delay Relay	O	O	O	O	O
Central Control	-	-	-	Accessory	Accessory
Zone Control	-	-	-	Accessory	Accessory
Wireless Remote Control	Accessory	Accessory	Accessory	Accessory	Accessory
Weekly Program	-	-	-	O	O
Electric Heater	Accessory	Accessory	Accessory	Accessory	Accessory
Electronic Thermostat	Accessory	Accessory	-	-	-
Energy Saving Gold Fin	Optional	Optional	Optional	Optional	Optional
Low Pressure Switch	O	O	O	O	Optional
High Pressure Switch	Optional	Optional	Optional	Optional	Optional
Phase Protection	Optional	Optional	Optional	Optional	Optional
Circuit Breaker	Optional	Optional	Optional	Optional	Optional

Notes:

- O: Basic
- Optional: Factory-installed
- Accessory: Field-installed
- -: Not available on this system
- Optional features depend on a customer's requirement.