### **HOW TO CHOOSE THE RIGHT SIZE OF AIRCON**

- 1. Determine the area (in square meters) to be cooled using the following formula:
  - For square and rectangular rooms, multiply the length (L) of the area by its width (W) or (L x W)
  - For a triangular area, multiply the length of the area by the width and divide by 2 or (<u>L x W</u>)

2

- Measure the size of the room to be cooled.
  - a unit whose cooling capacity is too small for the room will not cool adequately.
  - a unit whose cooling capacity is too large will overcool before the thermostat can react.
- 3. Buy the aircon unit with the highest Energy Efficiency Ratio or EER you can afford.

#### **ENERGY SAVING TIPS**

- 1. Install the air conditioning unit in the coolest part of the room, if possible, on a shady side where maximum air circulation is available.
- 2. Air conditioned rooms should be well-insulated from direct sunlight. Block out the sun's rays with curtains and drapes and close of unused rooms.
- 3. Make sure the thermostat is working efficiently. Set the temperature at a comfortable level. Don't overcool the room.
- 4. Avoid frequent changing of thermostat settings to reduce operating costs.
- 5. Avoid placing any electrical appliances that will generate heat in the room.
- Clean the filter and vacuum the outdoor coil regularly to keep the unit working efficiently.

Consumer Welfare and Promotion Office Ground Floor, Annex Building Energy Center, Fort Bonifacio, Taguig City Telefax:840 -2267

> Trunkline: 479-2900 local 329 Mobile No. 09175560759

You may also text in your suggestions, comments, queries and complaints.

Please type: DOE <space> <message> and then send to 2920 (for Globe and Smart subscribers only)

Check our website at: www.doe.gov.ph



**DEPARTMENT OF ENERGY** 

# CONSUMER GUIDE IN BUYING ROOM AIR CONDITIONER



A consumer reminder from



Serving the Public.....
Serving the Nation

## **Energy Label for Locally-made Air Conditioners**

# **AIR CONDITIONERS ENERGY GUIDE**

for cooling capacity of 12,000 kJ/h and above. This model is classified as:







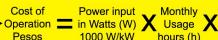


MORE STARS MEANS HIGHER EFFICIENCY

### **ENERGY EFFICIENCY RATIO** For this model, the minimum EER standard set

by the government for the year 2006 is 8.8





1000 W/kW hours (h) Pesos/kW-h

# **Electrical Appliances Philippines Corporation**

Brand: Room Air conditioner

Model:

Type: WINDOW

Approximate monthly cost of operating this unit

> Cooling Capacity: Power Input

Frequency : 60 Hz : 230 V Voltage







REMOVAL OF THIS LABEL **BEFORE CONSUMER PURCHASE IS A VIOLATION** OF REPUBLIC ACT NO. 7394

For additional information ask your dealer or write / call the Department of Energy, Lighting and Appliance Testing Laboratory, PNOC-ERDC Compound, Commonwealth Avenue, Diliman, Quezon City. Tel. Nos. 929-54-43, 927-72-01 or Fax 929-54-74. website: www.doe.gov.ph

4709228003649 DOE CONTROL NO.

kJ/h

W

AH-197510

### Sizing of Air-conditioner: Rough Estimate\*\*

Load Calculation: Rough Estimate Method

Cooling Capacity = Size of room (in sq. meter) x 500

Note: Use the next higher size available (standard)

Applicable Standard:



PNS 396 Part 1: 1995—Household appliances—Energy Efficiency Ratio (EER) and Labeling Requirements

Motor Compressor	Manufacturer's Equivalent Cooling		
Rating, hp	Cap. Rating, kJ/hr,		
3/4	7,385 - 8,440		
1.0	9,495-10,550		
1.5	12,660-13,290		
2.0	18,990-20,045		
2.5	25,320-26,580		

<sup>\*\*</sup> Source: ERTLS-LATL

### Operating Cost (PhP/Hour)

Energy Efficiency Ratio (kJ/Wh)							
Cooling Cap. (kJ/h)							
	Energy Cost* per hour of use						
5,040	-	5.17	4.91	4.68	4.46	4.20	
7,910.	-	8.11	7.70	7.34	7.00	6.58	
9,500.	-	9.74	9.25	8.81	8.41	7.91	
10,550	-	10.82	10.28	9.79	9.34	8.78	
11,520	-	11.81	11.22	10.69	10.20	9.59	
12,660	14.17	12.98	12.33	11.74	11.21	10.54	
16,200	18.14	16.61	15.78	15.03	14.34	13.49	
18,990	21.26	19.47	18.50	17.62	16.81	15.81	
19.600	21.94	20.10	19.09	18.18	17.35	16.32	
25,000	27.99	25.63	24.35	23.19	22.14	20.81	
31,800	35.60	32.60	30.97	29.50	28.16	26.47	

<sup>\*</sup>Energy Cost is based on the average residential rate for September 2007 @ P9.74/kWh