

# HOW MUCH AIR CONDITIONING DOES YOUR HOME NEED?

It is important to properly size air conditioning systems. Air conditioners cool warm air, then absorb excess moisture. The level of moisture in the air (humidity) determines how comfortable you feel. An undersized air conditioner is inefficient because it cycles on and off too often; this irregular cycling is known as rapid cycling. Rapid cycling wastes energy, money, and is ineffective at removing humidity. Let's learn how to determine the correct size for an air conditioner.

Air conditioners are sized by tonnage. One ton of air conditioning is equal to 12,000 Btu's (British thermal units) of ability to remove heat. On the factory data label on air conditioners, the model number lets you know what size air conditioner you have. As an example, the model number will be something like this, XXXXX48XXXX. In this example the 48 represents the Btu capacity. This means that the air conditioner is a four-ton unit, and 48 means 48,000 Btu's (48 divided by 12 equals 4, or four tons).

Home (residential) air conditioning units only go up to five tons, in half-ton increments beginning at 1 (e.g. 1, 1.5, 2, 2.5, 3, 3.5, 4, 5 tons), but there is no 4.5-ton unit.

It takes one ton of air conditioning for every 600 square feet of interior space, depending on your climate zone. Based on the information above, determine the size of air conditioner(s) that are needed for each of the following. Include tonnage and Btu.

1. 1,200-square-foot house

2. 5,000-square-foot house

3. 1,022-square-foot condominium

4. A/C Model Number: AB2-24-FT-075

5. A/C Model Number: H2CA420A58D


LENNOX  
DALLAS, TEXAS


ASSEMBLED  
IN MEXICO



M/N 13HPX-048-230-18

S/N 1913H18804

CONTAINS HFC - 410A		DESIGN PRESSURE	
FACTORY CHARGE		HI 446 PSIG	
9 LBS 11 OZS		LO 236 PSIG	
ELECTRICAL RATING		NOMINAL VOLTS: 208/230	
1 PH	60 HZ	MIN 197	MAX 253
COMPRESSOR		FAN MOTOR	
PH	1	PH	1
RLA	21.8	FLA	1.7
LRA	99.0	HP	1/4
MIN. CKT. AMPACITY AMPERAGE MINIMUM		MAX FUSE OR CKT. BKR. FUSIBLE/COUPE CIRCUIT (HACR PER NEC)	
28.8		50	

  
1913H18804

  
AHRI CERTIFIED  
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1.1kW Small HP  
AHRI Standard 215/240  
Manufactured under AHRI Quality Assurance  
A/C Unit 075

  
ETL US  
Intertek  
4062783  
CONFORMS TO UL STD 1995  
CERTIFIED TO CSA STD C22.2 NO. 236  
FOR  
OUTDOOR  
USE  
  
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