



## CoolBot: AC Unit Size and Brand Recommendations

Important variables to keep in mind when deciding which air-conditioner unit to couple with the CoolBot:

- ✚ Size of your cooler
- ✚ How many BTUs (British Thermal Units) the air conditioner is capable of
- ✚ Type of air-conditioner unit
- ✚ What company is producing the AC unit

Regardless of model, a **digital display is a must**. Not only does this aid in accurately reading the temperature of your cooler, the CoolBot will not function properly without this feature on an air-conditioning unit.

### SIZE:

The industry standard insulation for a walk-in cooler is at least 4 inches of Styrofoam in the walls, ceiling, and floor (minimum insulation value of R-24). The figures below are well suited for a range of temperatures in a properly insulated room, where the door is opened no more than 4 times per hour. This range encompasses the ideal 38°F/3°C for most vegetable storage, and 42–45°F/6–7°C for florists.

Dimensions of the Walk-In Cooler	Size of Air-Conditioner
6' x 8' x 8'	10,000 BTU
8' x 8' x 8'	12,000 BTU
8' x 10' x 8'	15,000 BTU
8' x 12' x 8'	18,000 BTU
10' x 14' x 8'	24,000 BTU

**Florists** with display coolers (glass doors) should upsize at least 2 sizes. Glass leaks a lot of cold. Florists should consider upsizing one level anyway to allow for a lower fan speed.

For anyone who enters their cooler more than 6 times an hour, always upsize the AC by 2 sizes.

If the temperatures of your cooler can be kept at 50°F/10°C or higher, then you can use an air conditioner with lower BTUs and achieve your desired temperatures.

### TYPE:

There are different types of air conditioners with varying degrees of compatibility with the CoolBot. Those listed below are in order from best to worst performing. If you already own one of the types lower on the list, it is still a viable option should you wish to use



### Window

Durable and efficient, the window unit is the preferred type of air conditioner. Whether it's installed in a walk-in cooler, truck, trailer, or boat, the window unit has the best performance rate.

### Mini-Split

If you lack the space for a window unit, mini-splits work wonderfully with the CoolBot. International customers often find these units to be more available and affordable. In the United States, mini-splits can cost twice as much as a window unit, but they're also more efficient.

CoolBots work with almost any brand of mini-split, including multiple off-brand units, with the exception of Panasonic. Ask the mini-split manufacturer what is the lowest outside air temperature the unit will function in and compare that with your climate.



### Through-the-Wall Unit

Only necessary if the walls are more than 11" thick. If you have a through-the-wall unit, don't hesitate to use it, though.

### Portable AC \*\*\*

Any and all brands of "portable" AC units. There are single- and double-hose models. Single-hose models do not work at all with the CoolBot. Double-hose models work, but they are extremely inefficient and you won't be able to get the room very cold; 50°F / 10°C or above.



### **Dual Heating and Cooling Units \*\*\***

We don't recommend the "heating and cooling" window air conditioners because they are more expensive than normal air conditioners. They do work with the CoolBot though, so if you have one you can use it.

### **BRAND:**

The success of the CoolBot installation not only depends on the type of air conditioner used, but also the brand. Not all brands are compatible, so it is important to select one listed below, while taking into account some of the characteristics specific to each and your needs.

### **LG Electronics:**

- Highly recommended ***#1 Choice for the CoolBot***

### **Danby®:**

- Pre-2011 models have functional compressors, but numerous electrical problems.
- Use post-2011 models with digital displays.
- These models have a 2<sup>nd</sup> temperature sensor, which needs to be unplugged, but adding only 5-10 minutes to the installation. The details are outlined in the installation manual.

### **Haier:**

- All models except for those with the model number beginning with "HWE"

### **Frigidaire:**

- 2015 -16 models with "auto restart" 15,000 BTU's and larger.
- These models have a 2<sup>nd</sup> temperature sensor, which needs to be unplugged, but adding only 5-10 minutes to the installation. The details are outlined in the installation manual.

### **Samsung Electronics:**

- Also a great choice; although not as many units in the field as the top three brands. So far, feedback on Samsung has been extremely positive.
- Many do not have the "auto-restart" function, in case of an electrical failure.

**Store it Cold, LLC does not guarantee or provide support for any brand that is not listed above.**