



CoolBot: AC Unit Size and Brand Recommendations

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

- ✚ Size of your cooler
- ✚ Size of air conditioner in BTU's
- ✚ Type of air-conditioning unit
- ✚ Brand of air conditioner

Regardless of model, a **digital display is a must**. Some air conditioners work better than others but it must have a digital display. 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 closed cell foam (rigid foam) in the walls, ceiling, and floor (minimum insulation value of R-24). Check the R value of your insulation and add up the layers. 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 many brands of mini-split, including some off-brand units. Please visit our A/C tutorial page at www.storeitcold.com for a list of recommended and unsupported brands. Ask the mini-split manufacturer what is the lowest outside air temperature the unit will function while on the "Cool Mode" 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 ***

CoolBot does not recommend portable A/C units. There are single- and double-hose models. Single-hose models do not work at all with the CoolBot. Some double-hose models work but only for low 50s°F / 10°C or above.



RV Rooftop Units

RV type units are not recommended to use with the CoolBot.

Dual Heating and Cooling Units ***

"Heating and Cooling" window air conditioners are more expensive than normal air conditioners. They are still compatible with the CoolBot though, so if you have one you can use it.

BRANDS:

The success of the CoolBot installation not only depends on the type and size 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. Be sure window air conditioners are installed on a slant to the back so condensation can drain out freely.

WINDOW A/C BRANDS

LG Electronics:

- Highly recommended **#1 Choice for the CoolBot**. LG is one of the few brands with no smart sensors to work around, it offers the easiest installation of all.

Danby®:

- Recommended models: Any post-2011 model with a digital display.
- Avoid models: Pre-2011 models
- Units above 12,000 BTU have a secondary sensor which needs to be located before using your CoolBot

Haier:

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

Frigidaire:

- Recommended models: Most post-2015 models with an automatic restart function.
- Avoid models: Any model pre-2015.
- IMPORTANT! The Frigidaire has a minimum run time of 5 minutes. In a well-insulated cooler, or a cooler with an up-sized A/C this can cause the cooler to go beyond its set temperature and can cause freeze up problems. Stick to the recommended size air conditioner to mitigate these problems if you decide to use a Frigidaire A/C.
- Units above 12,000 BTU have a secondary sensor which needs to be located before using your CoolBot

Samsung Electronics:

- Although not as many units in the field as the top three brands, so far, feedback on Samsung has been extremely positive.
- Make sure you choose one with the "auto-restart" function in case of an electrical failure.

General Electric (GE):

- CoolBot compatibility with GE AC units is very specific by model.
- Please visit our A/C selection page at www.storeitcold.com for a list of GE models.
- Most units above 12,000 BTU have a secondary sensor which needs to be located before using your CoolBot

MINI-SPLIT A/C BRANDS

LG Electronics:

- Highly recommended **#1 Choice for the CoolBot**. LG has given excellent results.

Fujitsu

- Feedback on Fujitsu has been extremely positive so far.

Mitsubishi

- The “Mr. Slim” series have worked great with the CoolBot.

Samsung Electronics:

- Feedback on Samsung Mini Splits has been positive so far.

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