TEMPEST

AC Assist Spot Cooler

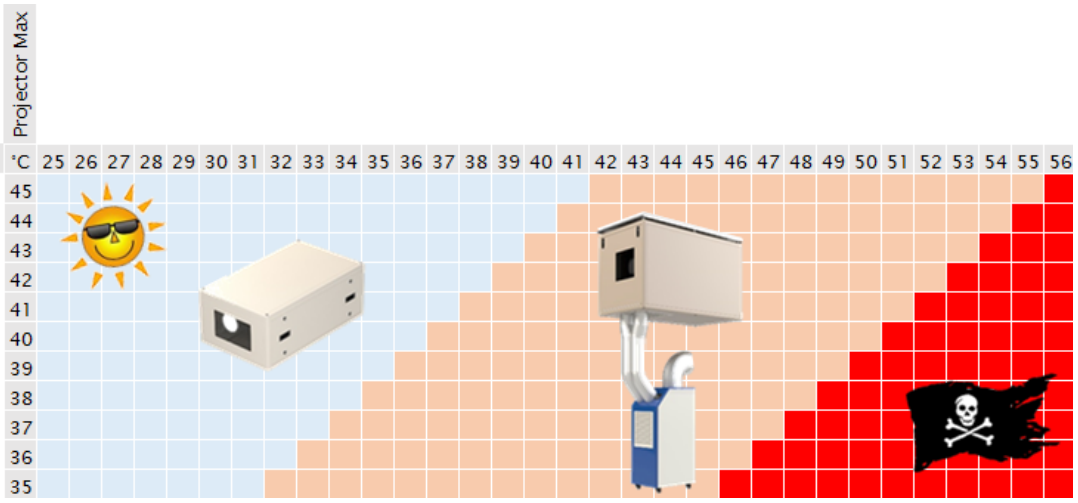
Now you can run your projector cool in even the most extreme outdoor temperatures. Tempest AC Assist blends cooled, de-humidifid air with filtered outside air to deliver operating temperatures within limits for even the most sensitive projectors, in the hottest parts of the world.

Tempest Cyclone and Blizzard enclosures have been protecting sensitive equipment for years, in all parts of the world, and in most cases the standard enclosure does a fine job. But there are times — and places — where the only way to keep a projector within its operating limits is to cool the air it breathes. This can be problematic, and condensation is a particular concern. Tempest AC Assist solves traditional active cooling problems by drying the cooled air, and blending it through the enclosure inlet filter, only when the projector lamp is on.

Tempest AC Assist reduces projector inlet temperature 10-15˚C, assuring perfect operating conditions in even the hottest locations.

When to Use AC Assist

Most of the time you will NOT need to use Tempest AC Assist! This chart compares expected maximum ambient temperatures at showtime (usually after sunset) and projector maximum operating temperature.



So for a projector with a 40˚C environmental limit, you would be very safe without AC Assist with an outside temperature in the high 30s at show time. Above that, AC Assist may be a good idea.

Different projectors react in different ways when they reach their operating temperature limit. Some do nothing, while some may reduce brightness, and others shut down. These are important considerations when planning an installation. If high temperatures are rare, and if the projector does nothing or reduces brightness when hot, it is not unreasonable to accept some minor inconvenience rather than add AC Assist to a project.

If the maximum operating temperature will be exceeded often, and especially with a projector that will shut down when this happens, then AC Assist is stronly recommended.

How Much Cooling?

As a rule of thumb, we suggest cooling to approximately half the projector's btu rating, for a temperature reduction of 10-12˚C.

The AC Assist Cooler is rated at 16,000btu, and it may be used with more than one projector enclosure. For example:

- Projectors ≈ 30,000btu: one AC Assist per enclosure
- Projectors 12-16,000btu: One AC Assist per two enclosures
- Projectors 6-8,000btu: One AC Assist per four enclosures

The illustration below shows four Blizzard 52.150 enclosures connected to a single AC Assist cooler.

Configuration

Tempest will configure your AC Assist system to suit your project, including cool air manifolds and flexible insulated hoses.

Control

Each AC Assist unit requires a 51.AC control card plugged into the enclosure's DEC4 controller. This monitors internal temperature and projector lamp status, and switches on the AC Assist cooler when (a) the projector lamp is on, and (b) the internal temperature is above a preset limit.

Note that when multiple enclosures are fed by a single AC Assist unit control is dependent on the status of the first enclosure.

Four Blizzard 52.150 enclosures connected to a single AC Assist Cooler. Note that control is based on the status of the first enclosure in the group.

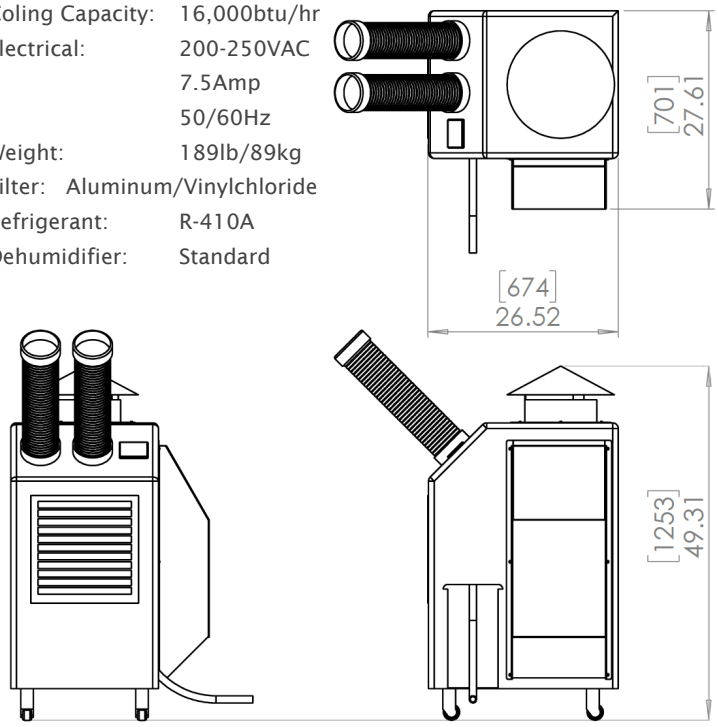
Order Guide

Part #	No. of Projectors	Max btu per projector
55.AC1	1	32,000
55.AC2	2	16,000
55.AC3	3	11,000
55.AC4	4	8,000

Note: 55.ACx part number includes cooler, flexible ductwork, control and power connector added to one enclosure.

Specification

Coling Capacity: 16,000btu/hr
Electrical: 200-250VAC
7.5Amp
50/60Hz
Weight: 189lb/89kg
Filter: Aluminum/Vinylchloride
Refrigerant: R-410A
Dehumidifier: Standard



Made in the USA

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