

AC Assist Spot Cooler



*Any Tempest
Cyclone or Blizzard
Outdoor Projector Enclosure*



*Outdoor rated
spot cooler
in Tempest
NEMA3R (IP54)
outer enclosure*

- *Projector inlet temperature 10-12° Celsius below ambient*
- *Automatic operation*
- *Dehumidifier*
- *Vibration isolation*
- *ETL indoor/outdoor rating*

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

Tempest Cyclone and Blizzard enclosures have been protecting sensitive equipment for years, in the most extreme climates, 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. The new generation of laser projectors may also need lower ambient temperatures to achieve maximum life and/or brightness.

The active cooling unit is shock-mounted in a separate weatherproof enclosure, eliminating compressor vibration. Tempest AC Assist dries the cooled air, and blends it through the enclosure inlet filter, only when the projector lamp is on.

Tempest AC Assist reduces projector inlet temperature 10-12°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 (normally 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.

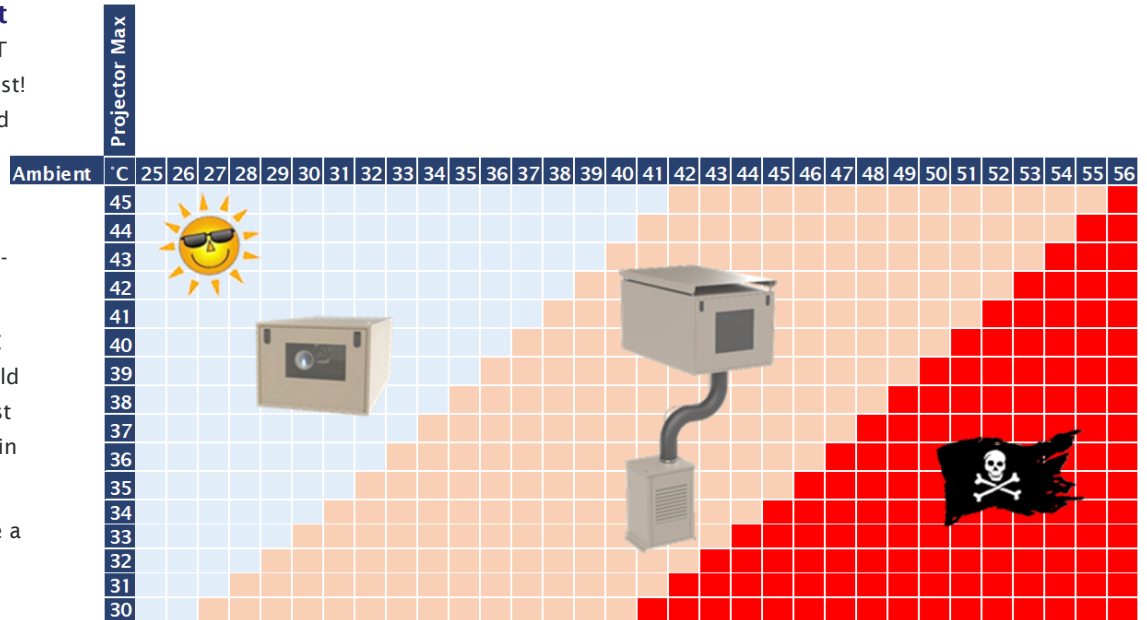
Above that, AC Assist may be a good idea.

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 strongly recommended.

Laser Phosphor Projectors

Laser engines are sensitive to heat, and their life may be reduced by operating them for long periods towards the higher end of their environmental limits. If such temperatures are expected for a few nights of the year, the impact may be minimal. But if a significant amount of the laser engine's life will be in the upper ranges, then AC Assist would be recommended. Please consult your projector manufacturer in making this determination.



How Much Cooling?

As a rule of thumb, we suggest cooling to approximately 40-50% the projector's btu rating, for a temperature reduction of 10-12°C.

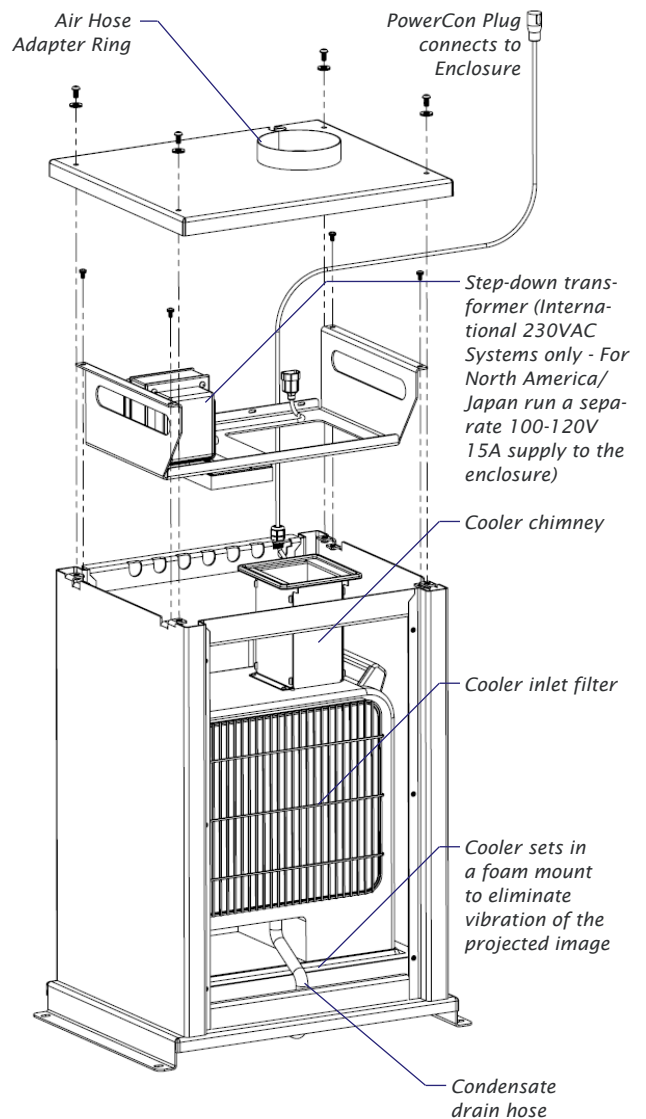
The Tempest AC Assist Cooler is rated at 6,250btu, and is recommended for projectors rated up to 15,500btu.

Configuration

The AC Assist unit is plug and play: Set it next to the enclosure, connect the air hose and power connector to the enclosure, and run the condensate drain hose to a convenient location - that's it!

Control

Enclosures equipped with AC Assist will automatically turn on the cooling unit whenever the controller senses power going to the lamp/light engine. In locations with cold seasons a simple disable function prevents winter operation.



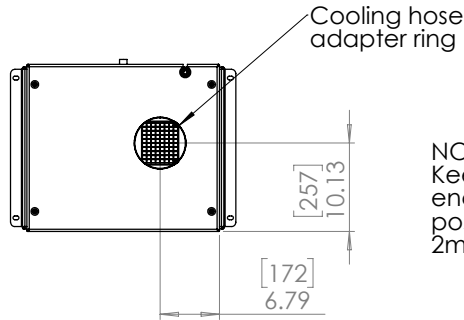
Order Guide

Part #	Supply Voltage
55.AC1.IN	200-240VAC, 50/60Hz
55.AC1.US	100-120VAC, 50/60Hz

Note: 55.AC1.xx part number includes cooler, flexible air hose, control and power connector and drain hose.

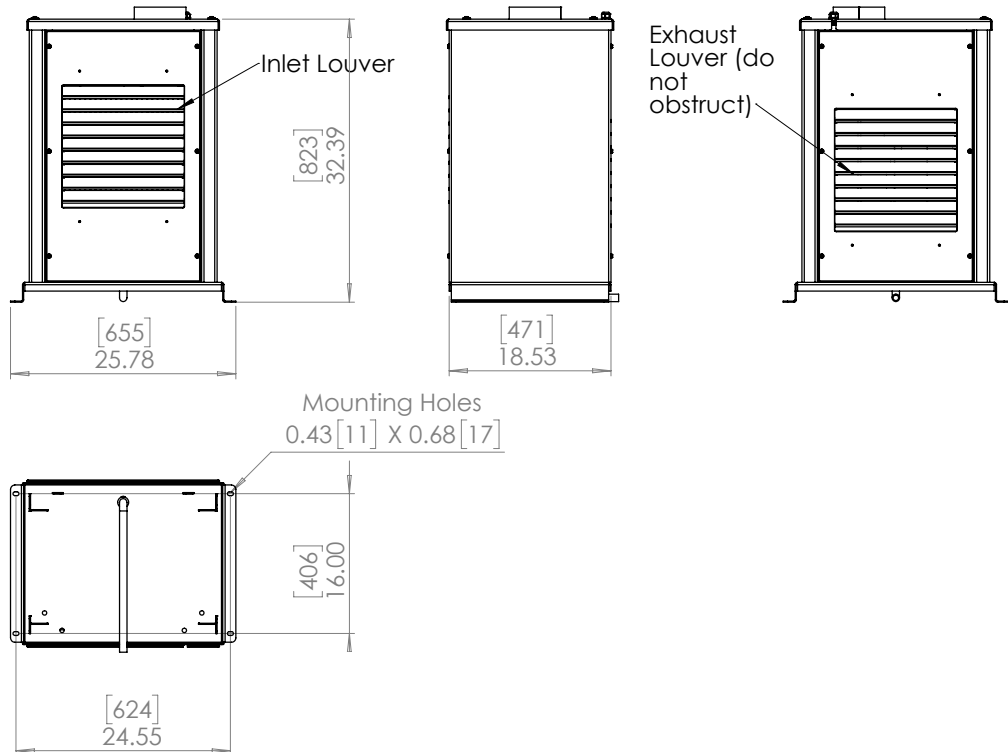
Specification

Cooling Capacity:	6,250btu/hr*
Electrical:	100-250VAC
	700W
	50/60Hz
Weight:	120lb/55kg
Filter:	Aluminum/Vinylchloride
Refrigerant:	R-410A
Dehumidifier:	Standard



NOTE:
Keep hose length to enclosure as short as possible, preferably < 2m/6ft.

* For projectors up to 15,500btu/hr



Made in the USA

©Tempest Lighting, Inc., June 2019

In the interest of continuous product improvement, specifications are subject to change without notice

Tempest Lighting, Inc

11845 Wicks Street, Sun Valley, CA 91352, USA

www.tempest.biz info@tempest.biz

t: +1 818 787 8984 f: +1 818 982 5510

