VORTEC Enclosure Coolers

The VORTEC Advantage

- Easy to Install
- Quiet, Efficient, Reliable
- No ambient, dirty, or humid air enters the cabinet
- Can be used on all cabinets, even in tight spaces
- Operate in environments up to 175° F (80° C)
- Low cost, compared to Freon air conditioners
- Use no refrigerants
- Multiple cooling capacities available
- Optimize performance and operating cost.
- NEMA 12, 4, and 4X solutions
- Only UL Classified Hazardous Location enclosure cooler

www.newmantools.com. Tel 1-800-465-1384

The VORTEC Enclosure Cooler Family

Vortec enclosure coolers keep electrical and electronic enclosures cool, clean and protected and are a low cost alternative to expensive, high-maintenance air conditioners. With almost no moving parts, Vortec enclosure coolers are highly reliable and virtually maintenance free cooling solutions.

A slight pressurization is maintained in the enclosure to keep electrical and electronic components clean and dry. Most models are also thermostatically controlled to maintain cabinet temperatures within a specified range ensuring that electrical and electronic components remain cool and operational.

VORTEX A/C

The Vortex A/C coolers incorporate the most up-to-date features into Vortec's line of highly reliable, cost effective coolers.

- Sleek modern design
- Noise reduction of 78%, when compared to other vortex enclosure coolers
- Energy use reduction through its integral mechanical thermostat
- Flexible installation: top, side, or front (door) mount.
- Available in NEMA 12, NEMA 4, NEMA 4X, and Hazardous Location models

Panel Guard

Vortec's Panel Guard Coolers offer an inexpensive, easy to install and maintain solution for all your enclosure cooling needs.

- Mechanical thermostat, no wiring needed
- Easy to install, requires only a 1-1/2" knockout hole
- Available in three different cooling capacities
- NEMA 4 rated

VORTEX Coolers

Vortec's Vortex Coolers offer a wide range of cooling options to protect sensitive electronic control boards and electrical components

- Available in electric thermostat or non-thermostat models
- Maintain enclosure temperatures within +/- 3°F (1.6°C) with electric thermostat models
- Cooling capacities ranging from 400 BTU/hr to 5000 BTU/hr (117 to 1465 watts)
- Available in NEMA 12, NEMA 4, and NEMA 4X models.

Product Features

	HazLoc VORTEX A/C	VORTEX A/C	Panel Guard	VORTEX Cooler
Maintain temperature between 80-90°F	●	●		●
Mechanical Thermostat	●	●	●	
Electric Thermostat				●
Small mounting footprint for confined areas	●	●	●	●
Top Mount	●	●	●	●
Side Mount	●	●		●**
Front Mount	●	●		
Maintains slight pressurization in enclosure	●	●	●	●
UL Listed and CE compliant		●	●	●
UL Classified*	●			
NEMA 12 Models		●		●
NEMA 4 Models		●	●	●
NEMA 4X Models		●		●
Quiet	●	●		
Supplied with air filter and ducting kit	●	●	●	●
10 Year Warranty	●	●	●	●

*Class I Div 2 Groups A&B, Class II Div 2 Groups F&G, Class III
**NEMA 12 Models only

Compare the Differences

	VORTEC Coolers	Refrigerant-based A/C	Thermoelectric Cooler
Physical Size	Small	Large	Medium
Mounting Footprint	Small	Very Large	Large
Weight	< 9 lbs	> 75 lbs	> 23 lbs
Initial Cost	Low	Very High	High
Maintenance Costs	Low	High	Low
Contaminant in Cabinet	No	Yes	Yes
Warranty	10 years	1 year	1 year
Average Installation	< 15 minutes (mechanical thermostat) ~1 hour (electric thermostat)	> 2 hours	> 2 hours

Vortex A/C Systems						
Rating	Model No.		Cooling Capacity		Air Consumption	
	System	Cooler Only	BTU/hr	Watts	SCFM	SLPM
HazLoc	7515	7215	900	264	15	425
HazLoc	7525	7225	1500	440	25	708
HazLoc	7535	7235	2500	733	35	991
HazLoc	7570	7270	5000	1465	70	1981
NEMA12	7615	7115	900	264	15	425
NEMA12	7625	7125	1500	440	25	708
NEMA12	7635	7135	2500	733	35	991
NEMA12	7670	7170	5000	1465	70	1981
NEMA 4/4X	7715	7015	900	264	15	425
NEMA 4/4X	7725	7025	1500	440	25	708
NEMA 4/4X	7735	7035	2500	733	35	991
NEMA 4/4X	7770	7070	5000	1465	70	1981

Vortex Cooler Systems						
Rating	Model No.		Cooling Capacity		Air Consumption	
	With Thermostat	Without Thermostat	BTU/hr	Watts	SCFM	SLPM
NEMA 12	750 [1]	760 [1]	400	117	8	227
NEMA 12	740 [2]	730 [2]	900	264	15	425
NEMA 12	790 [2]	780 [2]	1500	440	25	708
NEMA 12	795 [2]	785 [2]	2500	733	35	991
NEMA 12	7970	7870	5000	1465	70	1981
NEMA 4	747 [3]	737 [3]	900	264	15	425
NEMA 4	797 [3]	787 [3]	1700	498	25	708
NEMA 4	797-35H [3]	787-35H [3]	2500	733	35	991
NEMA 4	7975	7875	5000	1465	70	1981
NEMA 4X	747SS [4]	737SS [4]	900	264	15	425
NEMA 4X	797SS [4]	787SS [4]	1700	498	25	708
NEMA 4X	797SS-35H [4]	787SS-35H [4]	2500	733	35	991
NEMA 4X	7975SS	7875SS	5000	1465	70	1981

[1] 711 is Cooler Only solution [2] 721 series is Cooler Only solution [3] 727 series is Cooler Only solution [4] 727SS series is Cooler Only solution

Panel Guard Systems						
Rating	Model No.		Cooling Capacity		Air Consumption	
	System	Cooler Only	BTU/hr	Watts	SCFM	SLPM
NEMA 4	770-15H	Mechanical	900	264	15	425
NEMA 4	770	Mechanical	1500	440	25	708
NEMA 4	770-35H	Mechanical	2500	733	35	991

Keep sensitive electronic equipment dirt and dust free, safe from environmental elements

Protect from critical temperature spikes that can increase electronics failure rate to 40%

Trouble-free operation in ambient temperatures up to 175°F (80°C)

Prevent costly shutdowns and massive production loss

Protect control panels subject to the rigors of frequent wash-downs and extreme temperatures

Lower initial cost and lowest maintenance costs, compared to air conditioners, fans, or thermoelectric coolers

Reduce or eliminate the high maintenance costs of refrigerant-based cooling solutions

Mount in 1/10th the space required for comparable air conditioner units

Highly reliable and includes an industry leading 10 year warranty

About Vortec

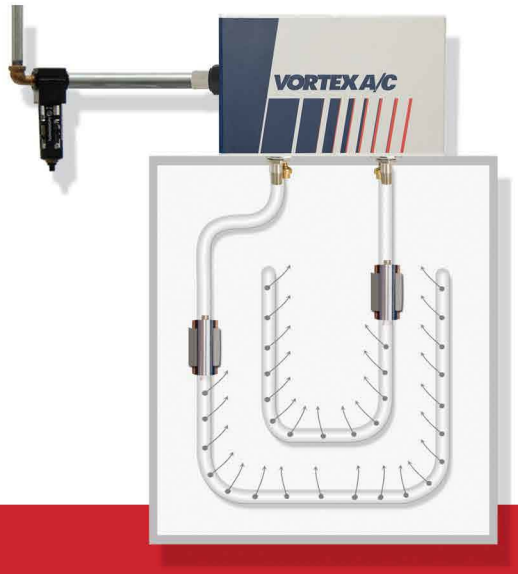
In 1961, Vortec became the first company to develop technology for converting the vortex tube phenomenon into practical, effective industrial cooling solutions. Since then, Vortec has continued to refine and expand vortex tube applications, as well as develop air amplification products for more efficient use of compressed air in cleaning and conveying applications.

With over 50 years of industry experience combined with the strong global foundation of ITW, Vortec is the preferred solution for compressed air applications around the world.

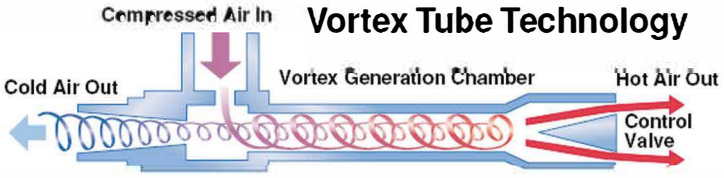
BEST IN CLASS!

10 YEAR warranty

Enclosure Cooling Solutions



How Enclosure Coolers Create Cold Air



A vortex tube spins compressed air to produce hot and cold air streams, generating temperatures down to 100°F below inlet temperature

Vortec Enclosure Coolers are powered by a vortex tube – a unique device that creates a vortex from compressed air and separates it into hot and cold air stream. Here's how it works: the vortex tube's cylindrical generator causes the input compressed air to rotate at speeds up to 1,000,000 rpm, as it is forced down the inner walls of the hot (longer) end of the vortex tube. At the end of the hot tube, a small portion of this air exits through a needle valve as hot air exhaust. The remaining air is forced back through the center of the incoming air stream at a slower speed. The heat in the slower moving air is transferred to the faster moving incoming air. This super-cooled air flows through the center of the generator and exits through the cold air port.

VORTEC
Innovative Compressed Air Technologies