

# Enclosure Cooling Equipment Prepared for the Worst

# NEMA



# 4/4X

*Integrity Series*  
NEMA 4/4X Air Conditioners and  
Heat Exchangers

# The Integrity Series



*Gasketed flanges on all four mounting edges for a positive leakproof seal.*

## A Harsh Environment is No Longer a Separate Set of Problems

Cooling sensitive components housed in NEMA 4/4X enclosures has always been a difficult issue. Until now, makeshift solutions such as oversized enclosures or field-constructed rain shields were the only options. But these efforts do not meet NEMA 4/4X standards and offer inadequate protection against environmental contamination, heat or water penetration.

These approaches can also increase installation costs, reduce component reliability and require frequent production stoppages for maintenance. Ultimately, there is the threat of production shutdown due to system failure.

## Kooltronic Introduces The Integrity Series of NEMA 4/4X Air Conditioners and Heat Exchangers: The Total Solution

Now Kooltronic, Inc. has introduced a line of air conditioners and heat exchangers designed and rated to reliably maintain the integrity and true configuration of NEMA 4/4X enclosures\* for heat-sensitive electrical and electronic equipment.

For the first time, effective enclosure cooling for NEMA 4/4X applications can be accomplished with a UL/CUL tested and approved Air Conditioner or Heat Exchanger. These units are so unique that Kooltronic has been awarded a patent by the US Government.

## About The Company

Kooltronic, Inc. was founded in 1956 to fill the growing need in the electronics industry for the cooling of heat-sensitive components. Due to innovative engineering and extensive product lines, Kooltronic is recognized as the major national manufacturer of enclosure cooling products.

### Air Conditioners



\* NEMA 4/4X interface between enclosure and air conditioner or heat exchanger maintained. Cooling equipment is rated 3R.

# Outdoors or on the plant floor

## Unparalleled Protection for The Most Challenging Environments

Kooltronic NEMA 4/4X stainless steel Air Conditioners and Heat Exchangers have been carefully designed and tested by both Kooltronic and Underwriters Laboratories to function in wash-down and outdoor applications where closed-loop cooling is required on NEMA 4/4X enclosures.

Their sealed high-compression interface, special sheet-metal design and stainless-steel construction provide indoor and outdoor protection against water hose-down and splashes, airborne dust and caustic or corrosive environments.

### Heat Exchangers



47"  
54W/°F Air In  
108W/°F Air Out



38"  
44W/°F Air In  
88W/°F Air Out



32"  
21W/°F Air In  
42W/°F Air Out

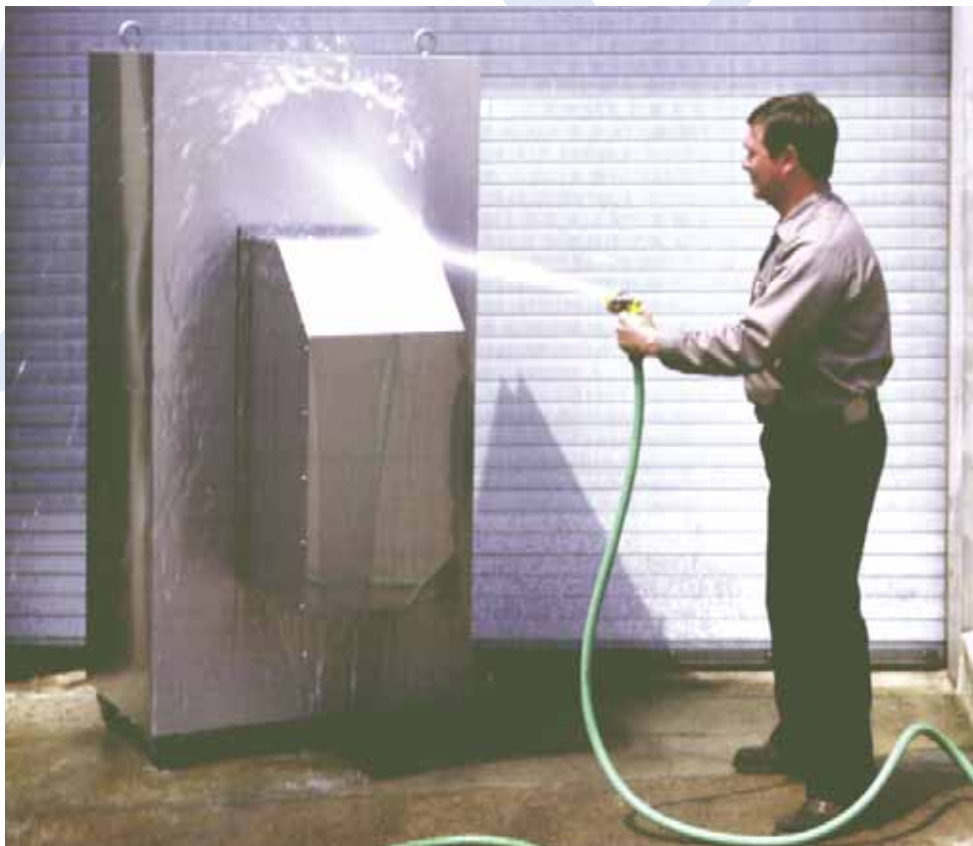
## Limitless Applications

Kooltronic NEMA 4/4X Air Conditioners and Heat Exchangers can be utilized in a wide range of OEM and end-user applications.

Because of the high degree of protection they offer, Kooltronic NEMA 4/4X Air Conditioners and Heat Exchangers are suitable for applications in processing and preparation plants for food, beverages, pharmaceuticals, chemicals and plastics, industrial process controls, communications equipment, anywhere water hose-downs and harsh cleaning agents are used, as well as in wastewater treatment or petrochemical applications.



*The Integrity Series is the only line of air conditioners and heat exchangers that are rated to meet NEMA 4/4X and awarded both UL and CUL Recognized status.*



*Designed specifically for the challenging indoor/outdoor environments where protection against dirt, liquids, splashing, dust, rain, snow and sleet are necessary.*

## Why Kooltronic NEMA 4/4X Cooling Equipment Performs Best:

- The ONLY units which have been tested and approved by Underwriters Laboratories to provide you with the total solution.
- Fully tested and recognized by UL/CUL to maintain the enclosure's NEMA 4/4X ratings.
- M/TAB Quick-Mounting System assures easy, accurate installation and allows for interchangeable mounting of Air Conditioners and Heat Exchangers of the same Series size.
- 32", 38", 47" and 59" heights allow optimal match to enclosure height and cooling requirements.
- Durable stainless steel construction maintains its attractive appearance in the harshest environments
- High Performance Blowers assure maximum airflow and efficient heat transfer in densely packed cabinets.
- Heat Exchanger elements are removable for easy cleaning.
- Air Conditioning units offer 1,000 to 10,000 BTU/H and feature the environmentally preferred CFC-free R134a refrigerant.
- Heat Exchangers are available with efficiencies to 65W/°F Air In, 130W/°F Air Out.

Wherever you need to cool sensitive electronic or electrical components and still protect them from airborne contaminants, water and corrosive chemicals and the enclosure is exposed to wash-down or installed outdoors, Kooltronic's Integrity Series NEMA 4/4X Air Conditioners and Heat Exchangers offer the ultimate assurance of performance and protection.

[www.kooltronic.com](http://www.kooltronic.com)

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*Unique Mounting Template and Assembly Bracket (M/TAB) for quick, easy installation.*



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