EXAIR®

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Atto Super Air Nozzle

Liquid Atomizing Nozzles

25 CATALOG

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Of course, this is in addition to our "Built To Last" Warranty.

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OSHA and CE Compliance: EXAIR compressed air products comply with OSHA's Safety Requirements, the EU General Product Safety Directive (2001/95/EC) and meet the noise limitation requirements of the EU Machinery Directive (98/37/EC). They help companies comply with the Noise Directive (86/188/EEC) along with pending changes to the workplace noise requirements due to the implementation of the Physical Agents Directive (2003/10/EC). These directives are non-marking directives and do not allow display of the CE mark. Some EXAIR products display the CE mark where there are applicable directives. All sound level measurements are taken at 3 feet away.

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Reach: Per Regulation (EC) No 1907/2006 Title I, Article 3, paragraph 3, the European Union has recently enacted legislation to register chemicals and substances imported into the EU to ensure a high level of protection of human health and the environment.

Per Title II, Article 7, paragraph 1, articles (products) must be registered when a substance is intended to be released under normal or reasonably foreseeable conditions of use and it is present in those articles in quantities totaling over 1 metric ton per producer or importer per year. Registration of EXAIR products is not required since they do not contain substances that are intentionally released.

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An INTELLIGENT COMPRESSED AIR® Product

Intelligent Compressed Air® products are identified throughout this catalog that can help your plant save tens of thousands of dollars over the course of a single year. *The Best Practices for Compressed Air Systems* manual published by the Compressed Air Challenge® recommends products like the Super Air Knife™, Super Air Amplifier™, and the family of Super Air Nozzles™ for energy conservation. Many of the products shown offer unique ways to solve common industrial problems using compressed air. Compressed Air Challenge is a registered trademark of Compressed Air Challenge, Inc.

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EXAIR has partnered with Energy Star, a voluntary program of the U.S. Department of Energy and the Environmental Protection Agency. Energy Star offers energy efficient solutions to help save money while protecting the environment for future generations. EXAIR has implemented improved energy management practices and technologies throughout our facility, including energy efficient lighting, HVAC systems, and electronic thermostats. EXAIR's participation in this program underscores our commitment to conserving energy.

EXAIR products are subject to ongoing development. Specifications are subject to change without notice.
Some products in this catalog are covered by U.S. Patent #5402938 and others may be U.S. Patent Pending. Copyright ©2012 EXAIR Corporation. All Rights Reserved.

Cabinet Cooler® Systems

Stop electronic control downtime due to heat, dirt, and moisture!

Cabinet Coolers maintain NEMA 4, 4X, and 12 integrity. All Cabinet Coolers are UL and CE compliant!

EXAIR Cabinet Cooler Systems accurately maintain the temperature inside the enclosure.

What is an EXAIR Cabinet Cooler System?

A low cost, reliable way to cool and purge electronic control panels. EXAIR Cabinet Coolers incorporate a vortex tube to produce cold air from compressed air - **with no moving parts.** The compact Cabinet Cooler can be installed in minutes through a standard electrical knockout. NEMA 12, 4, and 4X Cabinet Coolers that match the NEMA rating of the enclosure are available in many cooling capacities for large and small control panels.

A Model 4830 NEMA 4 Cabinet Cooler cools a panel with 20°F air while keeping the inside dry.

Why EXAIR Cabinet Cooler Systems?

The vortex tubes incorporated in the EXAIR Cabinet Coolers are constructed of **stainless steel.** The wear, corrosion and oxidation resistance of stainless steel assures long life and maintenance free operation. **All Cabinet Coolers are UL Listed and CE compliant.**

Applications

- Programmable controllers
- Line control cabinets
- Motor control centers
- Relay panels
- NC/CNC systems
- Modular control centers
- CCTV cameras
- Computer cabinets
- Laser housings
- Electronic scales
- Food service equipment

Advantages

- Low cost
- Compact
- Cooling capacities to 5,600 Btu/hr. (1,411 Kcal/hr.)
- Quiet
- Install in minutes
- Maintain NEMA 12, 4 and 4X integrity (IP54 and 66)
- Stabilize enclosure temperature and humidity
- No CFC's
- No moving parts-maintenance free
- Mount in standard electrical knockout
- Stop nuisance tripping
- Stop heat damage
- Eliminate fans and filters
- Eliminate lost production
- Stop circuit drift
- Stop dirt contamination
- Provide washdown protection

Special Cabinet Coolers

- High temp. models for ambients up to 200°F (93°C) available
- Type 316 stainless steel available
- Purge models for non-hazardous locations available

How The Cabinet Cooler Works

Compressed air enters the vortex tube powered Cabinet Cooler and is converted into two streams, one hot and one cold. (For more information on vortex tube operation, see page 134.) Hot air from the vortex tube is muffled and exhausted through the vortex tube exhaust. The cold air is discharged into the control cabinet through the cold air distribution kit. The displaced hot air in the cabinet rises and exhausts to atmosphere through the cabinet air exhaust at a slight positive pressure. Thus, the control cabinet is both cooled and purged with cool, clean air. Outside air is never allowed to enter the control panel.

A dangerous shock hazard exists when the panel door is opened to let a fan blow hot, dirty shop air at the electronics.

Selecting The Right Model

EXAIR Cabinet Cooler® Systems are available with or without thermostat control. The continuous coolers (Model 4200 and 4700 series) are recommended when constant cooling and a constant positive purge are desirable. The thermostatically controlled systems (Model 4300 and 4800 series) save air by activating the cooler only when internal temperatures approach critical levels. The adjustable thermostat is factory set at 95°F (35°C). Thermostatic systems are recommended where heat load fluctuates and continual purge is not required.

All EXAIR Cabinet Cooler® Systems contain a 5 micron **Automatic Drain Filter** for the compressed air supply and a **Cold Air Distribution Kit** to circulate the cold air throughout the enclosure. See page 154 for details.

Heat Can Stop Your Machines

When hot weather causes the electronics inside a control cabinet to fail, there is a panic to get the machinery up and running again. There are several cooling options out there and it's important to know the facts.

A. Heat Exchangers and Heat Pipes

These have serious limitations. On hot summer days when the temperatures of the room and inside of the enclosure are about equal, there's not enough difference for effective heat exchange.

- **They fail when dust and dirt clog the filter**
- **The cooling capacity is limited due to ambient conditions**

B. Refrigerant Panel Air Conditioners

These coolers are prone to failure in dirty, industrial environments when dust and dirt clog the filter.

- **It takes almost a day to install**
- **Vibration from machinery causes refrigerant leaks and component failures**

C. "Plastic Box" Coolers

The "plastic box" cooler from a competitor uses an inaccurate mechanical thermostat that's designed for liquids. This thermostat has a poor ability to react quickly to changes in air temperature. **It costs up to 85% more to operate than EXAIR's ETC Cabinet Cooler® System with the same SCFM rating and Btu/hr. output.**

- **Electronics can overheat before it turns on**
- **It runs far longer than necessary before shutting off**

EXAIR Cabinet Cooler® Systems

EXAIR has a complete line of Cabinet Cooler Systems to dependably cool and purge your electrical enclosures. They convert an ordinary supply of compressed air into clean, cold 20°F air. They mount in minutes through an ordinary electrical knockout and have no moving parts to wear out. The compressed air filtration that is provided keeps water, oil and other contaminants out of the enclosure.

- **There is no room air filter to clog**
- **An accurate electrical thermostat control minimizes compressed air use**
- **All Cabinet Coolers are UL Listed to US and Canadian safety standards**
- **They are the only compressed air powered coolers that are CE compliant**

Cabinet Cooler® System Specifications

	Model #	Capacity* Btu/hr.	Capacity* Kcal/hr.	Thermostat Control	Sound Level dBA
NEMA 12 (IP54) (Dust, Oil resistant)	4208	550	139	No	67**
	4215	1,000	252	No	73**
	4225	1,700	428	No	74**
	4230	2,000	504	No	74**
	4240	2,800	706	No	78**
	4250	3,400	857	No	75**
	4260	4,000	1,007	No	77**
	4270	4,800	1,209	No	77**
	4280	5,600	1,411	No	79**
	4308	550	139	Yes	67**
	4315	1,000	252	Yes	73**
	4325	1,700	428	Yes	74**
	4330	2,000	504	Yes	74**
	4340	2,800	706	Yes	78**
	4350	3,400	857	Yes	75**
	4360	4,000	1,007	Yes	77**
	4370	4,800	1,209	Yes	77**
	4380	5,600	1,411	Yes	79**
NEMA 4 (IP66) (Splash resistant)	4708	550	139	No	67**
	4715	1,000	252	No	73
	4725	1,700	428	No	80
	4730	2,000	504	No	80
	4740	2,800	706	No	82
	4750	3,400	857	No	84
	4760	4,000	1,007	No	84
	4770	4,800	1,209	No	84
	4780	5,600	1,411	No	85
	4808	550	139	Yes	67**
	4815	1,000	252	Yes	73
	4825	1,700	428	Yes	80
	4830	2,000	504	Yes	80
	4840	2,800	706	Yes	82
	4850	3,400	857	Yes	84
	4860	4,000	1,007	Yes	84
	4870	4,800	1,209	Yes	84
	4880	5,600	1,411	Yes	85
NEMA 4X (IP66) (Corrosion resistant) (Available in 316SS)	4708SS	550	139	No	67**
	4715SS	1,000	252	No	73
	4725SS	1,700	428	No	80
	4730SS	2,000	504	No	80
	4740SS	2,800	706	No	82
	4750SS	3,400	857	No	84
	4760SS	4,000	1,007	No	84
	4770SS	4,800	1,209	No	84
	4780SS	5,600	1,411	No	85
	4808SS	550	139	Yes	67**
	4815SS	1,000	252	Yes	73
	4825SS	1,700	428	Yes	80
	4830SS	2,000	504	Yes	80
	4840SS	2,800	706	Yes	82
	4850SS	3,400	857	Yes	84
	4860SS	4,000	1,007	Yes	84
	4870SS	4,800	1,209	Yes	84
	4880SS	5,600	1,411	Yes	85

*Cooling Capacity at 100 PSIG (6.9 BAR) Supply Pressure.
**with optional cold muffler installed.

Environmental Considerations

NEMA 12 (IP54) Cabinet Coolers (dust-tight, oil-tight) are ideal for general industrial environments where no liquids or corrosives are present.

NEMA 4 (IP66) Cabinet Coolers (dust-tight, oil-tight, splash resistant, indoor/outdoor service) incorporate a low pressure relief valve for both the vortex tube and cabinet air exhaust. This valve closes and seals when the cooler is not operating, **to maintain the integrity of a NEMA 4 enclosure.**

NEMA 4X (IP66) Cabinet Coolers offer the same protection as NEMA 4 but are **constructed of stainless steel for food service and corrosive environments.**

See page 156 for a complete description of each Cabinet Cooler and Cabinet Cooler System.

Dimensions

DOWNLOAD drawings at EXAIR.com

Model #'s NEMA 12 (IP54)
4008
4208
4308

Model #'s NEMA 12 (IP54)
4015
4025
4030
4040
4215
4225
4230
4240
4315
4325
4330
4340

DOWNLOAD drawings at EXAIR.com

Model #'s NEMA 4 (IP66)	NEMA 4X (IP66)
4608	4608SS
4708	4708SS
4808	4808SS

DOWNLOAD drawings at EXAIR.com

Model #'s NEMA 4 (IP66)	NEMA 4X (IP66)
4615	4615SS
4625	4625SS
4630	4630SS
4640	4640SS
4715	4715SS
4725	4725SS
4730	4730SS
4740	4740SS
4815	4815SS
4825	4825SS
4830	4830SS
4840	4840SS

NEMA 4X AVAILABLE IN 316SS

Cabinet Coolers

Sizing Guide - How To Calculate Heat Load For Your Enclosure

To determine the correct model for your application, it is first necessary to determine the **total heat load** to which the control panel is subjected. This total heat load is the combination of two factors - heat dissipated within the enclosure and heat transfer from outside into the enclosure.

To Calculate Btu/hr.:

1. First, determine the approximate watts of heat generated within the enclosure. Watts x 3.41 = Btu/hr.
2. Then, calculate outside heat transfer as follows:
   a. Determine the area in square feet exposed to the air, ignoring the top of the cabinet.
   b. Determine the temperature differential between maximum surrounding temperature and desired internal temperature. Then, using the Temperature Conversion Table *(below)*, determine the Btu/hr./ft.^{2} for that differential. Multiplying the cabinet surface area times Btu/hr./ft.^{2} provides external heat transfer in Btu/hr.
3. Add internal and external heat loads for total heat load.

To Calculate Kcal/hr.:

1. First, determine the approximate watts of heat generated within the enclosure. Watts x .86 = Kcal/hr.
2. Then, calculate outside heat transfer as follows:
   a. Determine the area in square meters exposed to the air, ignoring the top of the cabinet.
   b. Determine the temperature differential between maximum surrounding temperature and desired internal temperature. Then, using the Metric Temperature Conversion Table *(below)*, determine the Kcal/hr./m^2 for that differential. Multiplying the cabinet surface area times Kcal/hr./m^2 provides external heat transfer in Kcal/hr.
3. Add internal and external heat loads for total heat load.

Temperature Conversion Table

Temperature Differential °F	Btu/hr./ft.^{2}
5	1.5
10	3.3
15	5.1
20	7.1
25	9.1
30	11.3
35	13.8
40	16.2

Need Help Sizing EXAIR Cabinet Coolers?

1. Fill out and fax us the "Cabinet Cooler Sizing Guide" on page 153.
2. For answers NOW, call our Application Engineering Department at 1-800-903-9247.

Temperature Conversion Table (METRIC)

Temperature Differential °C	Kcal/hr./m^2
3	4.5
6	9.7
9	15.1
12	21.0
15	27.0
18	34.0
21	41.0

Example:

Internal heat dissipation: 471 Watts or 1606 Btu/hr.

Cabinet area: 40 ft.^{2}

Maximum outside temperature: 110°F

Desired internal temperature: 95°F

The conversion table (*above*) shows that a 15°F temperature differential inputs 5.1 Btu/hr./ft.^{2}

40 sq. ft. x 5.1 Btu/hr./ft.^{2} = 204 Btu/hr. external heat load.

Therefore, 204 Btu/hr. external heat load plus 1606 Btu/hr. internal heat load = 1810 Btu/hr. total heat load or Btu/hr. refrigeration required to maintain desired temperature.

In this example, the correct choice is a 2,000 Btu/hr. Cabinet Cooler System. Choose a Cabinet Cooler model by determining the NEMA rating of the enclosure (type of environment), and with or without thermostat control.

Example:

Internal heat dissipation: 471 Watts or 405 Kcal/hr.

Cabinet area: 3.7m^2

Maximum outside temperature: 44°C

Desired internal temperature: 35°C

The conversion table (*above*) shows that a 9°C temperature differential inputs 15.1 Kcal/hr./m^2.

3.7m^2 x 15.1 Kcal/hr./m^2 = 56 Kcal/hr. external heat load.

Therefore, 56 Kcal/hr. external heat load plus 405 Kcal/hr. internal heat load = 461 Kcal/hr. total heat load or Kcal/hr. refrigeration required to maintain desired temperature.

In this example, the correct choice is a 504 Kcal/hr. Cabinet Cooler System. Choose a Cabinet Cooler model by determining the NEMA rating of the enclosure (type of environment), and with or without thermostat control.

Special Cabinet Coolers

EXAIR manufactures special NEMA 12 (IP54), 4 (IP66), and 4X (IP66) Cabinet Coolers suited to specific environmental requirements:

High Temperature Cabinet Coolers *(shown top right)* for ambients of 125° to 200°F (52° to 93°C) are available. Internal components can withstand high temperatures (like those near furnaces, ovens, etc.).

Non-Hazardous Purge Cabinet Cooler Systems *(shown middle right)* are ideal for dirty areas where contaminants might normally pass through small holes or conduits. Under normal conditions, the NHP Cabinet Cooler Systems provide a slight positive pressure in the enclosure by passing 1 SCFM (28 SLPM) of air through the cooler, when the solenoid valve is in the closed position. When the thermostat detects high temperature, it energizes the solenoid valve to pass full line pressure to the Cabinet Cooler, giving it full cooling capability.

Type 316 Stainless Steel NEMA 4X Cabinet Coolers *(shown bottom right)* are suitable for food service, pharmaceutical, harsh and corrosive environments, and other applications where 316SS is preferred. Capacities from 650 to 2,800 Btu/hr. (164 to 706 Kcal/hr.) are available.

Fax Us The Facts!

Cabinet Cooler Sizing Guide

Use this form to fax us information about your control panel cooling problem. **We'll fax back our recommended solution within 24 hours.**

To: Application Engineering Department, EXAIR® Corporation

From: **Name**_____

Company_____

FAX number_____

Phone number_____ **Ext.#**_____

E-mail_____

In a hurry? For help NOW, call our Application Engineering Department at 1-800-903-9247

You can fill this form out online at: www.exair.com/sizing.htm

☐ I have completed the information below. I want to know which EXAIR Cabinet Cooler System is the best choice for my control panel.

1. Height_____ 2. Width_____ 3. Depth_____
4. External air temperature now?_____°F or °C
5. Internal air temperature now?_____°F or °C
6. Maximum external air temperature possible?_____°F or °C
7. Maximum internal air temperature desired?_____°F or °C
8. My cabinet rating is:
   - ☐ NEMA 12 ☐ NEMA 4 ☐ NEMA 4X
   - ☐ Other (explain)_____
9. My cabinet is (check all that apply):
   - ☐ Vented - outside air circulates through the enclosure
   - ☐ Not vented - outside air does not circulate through the enclosure
   - ☐ Free standing
   - ☐ Wall mounted
   - ☐ Fan(s)
   - Indicate diameter or SCFM_____
   - Number of fans_____

Our Toll Free Fax Number Is (866) 329-3924 (U.S. and Canada)
(513) 671-3363 for International Faxes

Cabinet Cooler® Systems

Cold Air Distribution Kit:
The kit includes a length of flexible vinyl tubing used to direct the cold air for circulation, or to hot spots. Tubing connectors and adhesive backed clips to hold the tubing in place are provided.

Systems for continuous operation include a Cabinet Cooler, cold air distribution kit and filter.

Filtration: EXAIR Cabinet Cooler Systems include a 5 micron automatic drain water and dirt filter. This filter **is critical** for protection of electronics from water in the compressed air line. If oil is present in the compressed air, a coalescing (oil removal) filter, such as EXAIR Model 9005 is recommended.

Systems with thermostat control include a Cabinet Cooler, thermostat, solenoid valve, cold air distribution kit and filter.

Humidity: For a continuous operating Cabinet Cooler, relative humidity inside the enclosure stabilizes at 45%. No moisture condenses inside the enclosure. (The enclosure must be sealed to prevent condensation.)

Inlet Air Temperature: Cabinet Cooler Systems provide a 50°F (28°C) temperature drop from supply air temperature when the inlet pressure is 80 PSIG (5.5 BAR). Elevated inlet temperature will produce a corresponding rise in cold air temperature and reduction in cooling capacity. Low air pressures will also reduce the cooling capacity.

Mounting: The Cabinet Cooler mounts to the enclosure through a drilled hole or electrical knockout. The NEMA 12 (IP54) Cabinet Coolers may be mounted on the top or side of the panel. NEMA 4 and 4X (IP66) Cabinet Coolers must be mounted on the top of the panel, or on the side of the panel using one of our Side Mount Kits (see page 157).

Solenoid Valve and Thermostat.

Solenoid Valve and Thermostat:
Cabinet Cooler Systems with thermostat control include a solenoid valve and thermostat that limit the flow of compressed air to only when cooling is needed. The solenoid valve is rated 120V, 60Hz or 110V, 50Hz. It is UL Listed, CSA Certified.
See page 157 for more options.

The thermostat is factory set at 95°F (35°C). It will normally hold ±2°F (1°C) inside the cabinet. It is rated 24V-240V, 50/60Hz and is UL Recognized, CSA Certified.

ETC™ Electronic Temperature Control

Model 9238 - 120VAC, 50/60Hz
Model 9239 - 240VAC, 50/60Hz

Setting Temperature:	Membrane push button control
Power Supply Current:	165 mA max
Sensor:	Type J Thermocouple
ETC enclosure:	Polycarbonate NEMA 4X, IP 65, UL508, UL94-5V
Temperature Sampling Rate:	1 Reading/second
Max. Temp.:	158°F (70°C)
Solenoid Valve:	1/4 NPT
RoHS and CE Compliant	

EXAIR's digital ETC (Electronic Temperature Control) provides precise temperature control for your electrical enclosure. It can accurately maintain a constant temperature that is slightly under the maximum rating of the electronics, permitting just enough cooling for the electronics without going so cold as to waste compressed air. The LED readout of the ETC displays the internal temperature of the electrical enclosure (°F or °C) that is constantly being monitored by a quick response thermocouple. The control activates the solenoid valve (included) when the temperature setting is exceeded. The polycarbonate plastic enclosure of the ETC is suitable for NEMA 12, 4 and 4X environments. (Cabinet Cooler not included.)

Cooling Control Panels In A Glass Plant

The Problem: Few companies contend with more heat-related problems than do glass manufacturers. Control panels in close proximity to molten glass are particularly susceptible. High ambient temperatures caused constant "nuisance tripping" of the circuit breakers. The "quick fix" solution -opening the panel doors -allowed dirt to enter the panels and created a potential safety hazard.

The Solution: EXAIR **Model 4330 Cabinet Cooler Systems** were installed on each control panel. Cold air was directed through the Cold Air Distribution Kit over the circuit breakers. Thermostat control assured that the **Cabinet Coolers would activate only when internal temperatures approached critical levels.** The panel doors were closed to prevent dirt infiltration and shock hazard. Downtime was eliminated.

Comment: The inherent reliability of the vortex tube operated Cabinet Cooler was the important advantage in this application. Because they have no moving parts, **EXAIR Cabinet Coolers are virtually impervious to hostile environments.** Glass plants, steel mills, foundries, and casting plants are just a few of the facilities benefiting from this simple, yet effective technology.

Cooling And Purging A Pultrusion Control

The Problem: In the pultrusion process, resin coated fibers are assembled by a forming guide, then drawn through a heated die. Residual heat from the die caused electronic malfunctions at the control station located immediately downstream.

The Solution: In minutes, a **Model 4730 NEMA 4 (IP66) Cabinet Cooler System** was installed on the control module. **Its 2,000 Btu/hr. (504 Kcal/hr.) cooling capacity more than offset the additional heat load produced by the die.** Heat related malfunctions and downtime were eliminated.

Comment: The ability of EXAIR's Cabinet Cooler System to maintain a slight positive pressure within the enclosure was an important additional benefit in this application. **This purging feature assured that dust from the surroundings would not infiltrate the enclosure and compromise the sensitive electronic components.** The Cabinet Cooler also maintained the NEMA 4 (IP66) integrity of the enclosure which was necessary for the occasional washdown of the die and surrounding surfaces.

Cabinet Cooler® Systems

NEMA 12 (IP54) Cabinet Cooler Systems

The following Continuous Operation Systems include the NEMA 12 Cabinet Cooler, automatic drain filter and cold air distribution kit.

Model #	Description
4208	550 Btu/hr. (139 Kcal/hr.)
4215	1,000 Btu/hr. (252 Kcal/hr.)
4225	1,700 Btu/hr. (428 Kcal/hr.)
4230	2,000 Btu/hr. (504 Kcal/hr.)
4240	2,800 Btu/hr. (706 Kcal/hr.)
4250	3,400 Btu/hr. (857 Kcal/hr.)
4260	4,000 Btu/hr. (1,007 Kcal/hr.)
4270	4,800 Btu/hr. (1,209 Kcal/hr.)
4280	5,600 Btu/hr. (1,411 Kcal/hr.)

The following Thermostat Control Systems include the NEMA 12 Cabinet Cooler, automatic drain filter, cold air distribution kit, thermostat and solenoid valve.

Model #	Description
4308	550 Btu/hr. (139 Kcal/hr.)
4315	1,000 Btu/hr. (252 Kcal/hr.)
4325	1,700 Btu/hr. (428 Kcal/hr.)
4330	2,000 Btu/hr. (504 Kcal/hr.)
4340	2,800 Btu/hr. (706 Kcal/hr.)
4350	3,400 Btu/hr. (857 Kcal/hr.)
4360	4,000 Btu/hr. (1,007 Kcal/hr.)
4370	4,800 Btu/hr. (1,209 Kcal/hr.)
4380	5,600 Btu/hr. (1,411 Kcal/hr.)

NEMA 4 (IP66) Cabinet Cooler Systems

The following Continuous Operation Systems include the NEMA 4 Cabinet Cooler, automatic drain filter and cold air distribution kit.

Model #	Description
4708	550 Btu/hr. (139 Kcal/hr.)
4715	1,000 Btu/hr. (252 Kcal/hr.)
4725	1,700 Btu/hr. (428 Kcal/hr.)
4730	2,000 Btu/hr. (504 Kcal/hr.)
4740	2,800 Btu/hr. (706 Kcal/hr.)
4750	3,400 Btu/hr. (857 Kcal/hr.)
4760	4,000 Btu/hr. (1,007 Kcal/hr.)
4770	4,800 Btu/hr. (1,209 Kcal/hr.)
4780	5,600 Btu/hr. (1,411 Kcal/hr.)

The following Thermostat Control Systems include the NEMA 4 Cabinet Cooler, automatic drain filter, cold air distribution kit, NEMA 4/4X solenoid valve and thermostat.

Model #	Description
4808	550 Btu/hr. (139 Kcal/hr.)
4815	1,000 Btu/hr. (252 Kcal/hr.)
4825	1,700 Btu/hr. (428 Kcal/hr.)
4830	2,000 Btu/hr. (504 Kcal/hr.)
4840	2,800 Btu/hr. (706 Kcal/hr.)
4850	3,400 Btu/hr. (857 Kcal/hr.)
4860	4,000 Btu/hr. (1,007 Kcal/hr.)
4870	4,800 Btu/hr. (1,209 Kcal/hr.)
4880	5,600 Btu/hr. (1,411 Kcal/hr.)

NEMA 4X (IP66) Stainless Steel Cabinet Cooler Systems

The following Continuous Operation Systems include the NEMA 4X Cabinet Cooler, automatic drain filter and cold air distribution kit.

Model #	Description
4708SS	550 Btu/hr. (139 Kcal/hr.)
4715SS	1,000 Btu/hr. (252 Kcal/hr.)
4725SS	1,700 Btu/hr. (428 Kcal/hr.)
4730SS	2,000 Btu/hr. (504 Kcal/hr.)
4740SS	2,800 Btu/hr. (706 Kcal/hr.)
4750SS	3,400 Btu/hr. (857 Kcal/hr.)
4760SS	4,000 Btu/hr. (1,007 Kcal/hr.)
4770SS	4,800 Btu/hr. (1,209 Kcal/hr.)
4780SS	5,600 Btu/hr. (1,411 Kcal/hr.)

The following Thermostat Control Systems include the NEMA 4X Cabinet Cooler, automatic drain filter, cold air distribution kit, NEMA 4/4X solenoid valve and thermostat.

Model #	Description
4808SS	550 Btu/hr. (139 Kcal/hr.)
4815SS	1,000 Btu/hr. (252 Kcal/hr.)
4825SS	1,700 Btu/hr. (428 Kcal/hr.)
4830SS	2,000 Btu/hr. (504 Kcal/hr.)
4840SS	2,800 Btu/hr. (706 Kcal/hr.)
4850SS	3,400 Btu/hr. (857 Kcal/hr.)
4860SS	4,000 Btu/hr. (1,007 Kcal/hr.)
4870SS	4,800 Btu/hr. (1,209 Kcal/hr.)
4880SS	5,600 Btu/hr. (1,411 Kcal/hr.)

NEMA 12, 4, and 4X Cabinet Coolers are available in many cooling capacities for large and small control panels.

NEMA 4X models are available in Type 316 stainless steel.

High Temperature and Non-Hazardous Purge Cabinet Coolers are described on page 153.

24VDC and 240VAC Solenoid Valves are available.

If you have special requirements, please contact an Application Engineer.

Cabinet Cooler Only

NEMA 12 Cabinet Coolers Only

Model #	Description
4008	550 Btu/hr. (139 Kcal/hr.), 1/8 NPT
4015	1,000 Btu/hr. (252 Kcal/hr.), 1/4 NPT
4025	1,700 Btu/hr. (428 Kcal/hr.), 1/4 NPT
4030	2,000 Btu/hr. (504 Kcal/hr.), 1/4 NPT
4040	2,800 Btu/hr. (706 Kcal/hr.), 1/4 NPT

NEMA 4 Cabinet Coolers Only

Model #	Description
4608	550 Btu/hr. (139 Kcal/hr.), 1/8 NPT
4615	1,000 Btu/hr. (252 Kcal/hr.), 1/4 NPT
4625	1,700 Btu/hr. (428 Kcal/hr.), 1/4 NPT
4630	2,000 Btu/hr. (504 Kcal/hr.), 1/4 NPT
4640	2,800 Btu/hr. (706 Kcal/hr.), 1/4 NPT

NEMA 4X Cabinet Coolers Only

Model #	Description
4608SS	550 Btu/hr. (139 Kcal/hr.), 1/8 NPT
4615SS	1,000 Btu/hr. (252 Kcal/hr.), 1/4 NPT
4625SS	1,700 Btu/hr. (428 Kcal/hr.), 1/4 NPT
4630SS	2,000 Btu/hr. (504 Kcal/hr.), 1/4 NPT
4640SS	2,800 Btu/hr. (706 Kcal/hr.), 1/4 NPT

Order Direct
We Ship From Stock

Upgrade your Thermostat Control System

Upgrade your Thermostat Control System to EXAIR's ETC™ Electronic Temperature Control (shown on page 154)

Simply add a:

"-ETC120" (for 120V, 50/60Hz) or "-ETC240" (for 240V, 50/60Hz) to your Thermostat Control Cabinet Cooler System model number.

Example:
Model 4330-ETC120 replaces the standard thermostat and solenoid valve with the ETC.

Dual Cabinet Cooler Systems are available with cooling capacities up to 5,600 Btu/hr. (1,411 Kcal/hr.).

Accessories and Components			
Model #	**Description**	**Model #**	**Description**
4902	Cold Muffler only	**9044**	Valve and Thermostat Kit (240V, 50/60Hz)
4904	Cold Air Distribution Kit (For all Cabinet Coolers except 550 Btu/hr. output)	**9016**	NEMA 4-4X Valve and Thermostat Kit (120V, 50/60Hz)
4905	Cold Air Distribution Kit (For Cabinet Coolers with 550 Btu/hr. output only)	**9045**	NEMA 4-4X Valve and Thermostat Kit (240V, 50/60Hz)
9004	Automatic Drain Filter Separator, 1/4 NPT, 43 SCFM (1,359 SLPM)	**9017**	Thermostat Only (24V-240V, 50/60Hz)
9027	Oil Removal Filter (For Cabinet Coolers with 550 Btu/hr. output), 1/4 NPT, 7-24 SCFM (198-680 SLPM)	**9018**	NEMA 4-4X Solenoid Valve Only (120V, 50/60Hz), 1/4 NPT, 40 SCFM (1,133 SLPM)
9005	Oil Removal Filter (For all Cabinet Coolers except 550 Btu/hr. output), 3/8 NPT, 15-37 SCFM (425-1,048 SLPM)	**9024**	NEMA 4-4X Solenoid Valve Only (240V, 50/60Hz), 1/4 NPT, 40 SCFM (1,133 SLPM)
9006	Oil Removal Filter, 3/4 NPT, 50-150 SCFM (1,415-4,248 SLPM)	**9020**	Solenoid Valve Only (120V, 50/60Hz), 1/4 NPT, 40 SCFM (1,133 SLPM)
9008	Pressure Regulator with Gauge, 1/4 NPT, 50 SCFM (1,415 SLPM)	**9021**	Solenoid Valve Only (200-240V, 50/60Hz), 1/4 NPT, 40 SCFM (1,133 SLPM)
9238	ETC - Electronic Temperature Control (120V, 50/60Hz), 1/4 NPT	**9031**	Solenoid Valve Only, 24VDC, 1/4 NPT, 40 SCFM (1,133 SLPM)
9239	ETC - Electronic Temperature Control (240V, 50/60Hz), 1/4 NPT	**9065**	Solenoid Valve Only, 24VDC, 1 NPT, 350 SCFM (9,911 SLPM)
9015	Valve and Thermostat Kit (120V, 50/60Hz)		

EXAIR's Side Mount Kits for NEMA 12, 4 and 4X Cabinet Coolers offer convenient mounting to the side of an electrical enclosure.

Side Mount Kits

EXAIR's Side Mount Kits make mounting on the side of an electrical enclosure possible when there is limited space on the top or side. (NEMA 4 and 4X Cabinet Cooler Systems must be mounted vertically.) The Side Mount Kits maintain the NEMA rating of large and small NEMA Type 12, 4 and 4X enclosures. They mount in a standard electrical knockout (1-1/2 NPS). Side Mount Kits for NEMA 12 Cabinet Cooler Systems have an aluminum construction. Those for NEMA 4 and 4X Cabinet Cooler Systems are Type 303 or Type 316 stainless steel.

Accessories and Components	
Model #	**Description**
4909	Side Mount Kit for NEMA 12 Cabinet Coolers up to 550 Btu/hr. (139 Kcal/hr.)
4910	Side Mount Kit for NEMA 12 Cabinet Coolers, 650 Btu/hr. (165 Kcal/hr.) and higher
4906	Side Mount Kit for NEMA 4 and 4X Cabinet Coolers up to 550 Btu/hr. (139 Kcal/hr.)
4907	Side Mount Kit for NEMA 4 and 4X Cabinet Coolers, 650 Btu/hr. (165 Kcal/hr.) and higher
4907-316	Type 316 Stainless Steel Side Mount Kit for NEMA 4 and 4X Cabinet Coolers, 650 Btu/hr. (165 Kcal/hr.) and higher

Built to Last 5 yr. WARRANTY

See page 2 for complete details.

90 Degree Side Mount Kit Dimensions								
Model		**A**	**B**	**C**	**D**	**E**	**F**	**G**
4906	**in**	2.50	2.50	1.50	3.50	3.03	1 NPS	1-1/2 NPS
	mm	64	64	38	89	77		
4907	**in**	2.50	2.50	1.50	3.50	3.03	1-1/2 NPS	1-1/2 NPS
	mm	64	64	38	89	77		
4909	**in**	2.50	2.50	1.50	2.19	1.73	1/2 NPS	1-1/2 NPS
	mm	64	64	38	56	44		
4910	**in**	2.50	2.50	1.50	2.19	1.73	3/4 NPS	1-1/2 NPS
	mm	64	64	38	56	44		

Side Mount Kit Dimensions

DOWNLOAD drawings at EXAIR.com