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Enclosures

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NEMA Enclosures For Every Application

You've invested time, talent, and money in your control system. Protect it with a quality enclosure.

A quality enclosure in an industrial environment not only maintains a better appearance over time, it also does a better job protecting the components in it.

What is a NEMA enclosure?

NEMA enclosures meet the National Electrical Manufacturers Association standards for performance and protection of the electrical equipment installed within them. NEMA enclosures range in size from small pushbutton boxes to room-size panels. Enclosures are given a NEMA rating according to the types of applications the enclosure serves.

What are NEMA enclosures used for?

NEMA enclosures house all kinds of electrical components from simple terminal blocks, to industrial automation systems, to high voltage switchgear. In industrial automation systems, NEMA enclosures often house motor controls, drives, PLC/PC control systems, pushbuttons, and termination systems. Some enclosures are configured to be operator consoles, while others are designed with flanges for mounting disconnects.

Do we have the enclosure you need?

AUTOMATIONDIRECT offers over 6,900 enclosure part numbers across NEMA 1, 3, 3R, 3S, 4, 4X, 5, 6, 6P, 12, and 13 standards.

AUTOMATIONDIRECT has teamed up with name brand enclosure manufacturers to offer you quality NEMA enclosures at great Prices.

Our wide selection of quality Saginaw, Wiegmann, AttaBox, Stahlin, Hammond, Quadritalia, and Integra enclosures should allow you to find the perfect one for your industrial automation application. All brands offer a full line of subpanels and accessories to allow you to tailor the enclosure to your application.

30-day money-back guarantee

Order with the assurance of our unconditional 30-day money-back guarantee on enclosures. See terms and conditions for details.



Robroy Enclosures is a well-known US manufacturer of non-metallic enclosures under two brands: AttaBox, their polycarbonate enclosure line; and Stahlin, their fiberglass-reinforced polyester enclosure line.

We offer same-day shipping on most enclosures and accessories direct from the Robroy manufacturing facility in Belding, Michigan. Non-stock models can be shipped within 20 business days.



Hammond Manufacturing Company, Limited, manufactures a broad range of carbon steel, galvanized steel, stainless steel, and aluminum enclosure products for electrical and electronic applications at their facilities in Guelph, Ontario, Canada.

We offer same-day shipping on most enclosures and accessories direct from Hammond's US headquarters in Cheektowaga, New York. Non-stock models can be shipped within 15 business days.



Integra is a manufacturer of top-quality polycarbonate enclosures that are well suited for a wide range of outdoor applications, such as remote monitoring, alternative energy, water treatment, and marine and marina. All Integra enclosures are stocked at AUTOMATIONDIRECT for immediate shipping.



Quadritalia is a leader in the modular enclosure industry and manufactures high quality modular products that are easy to assemble while maintaining NEMA ratings.

Quadritalia modular enclosure kits make it easy to cut holes on an individual panel before assembly, replace damaged panels and can be expanded to meet future needs by combining panels or replacing them with larger ones.



Saginaw Control & Engineering manufactures a broad range of carbon steel, galvanized/galvannealed steel, and stainless steel enclosures at two state-of-the-art manufacturing plants in Saginaw, Michigan.

All Saginaw parts are stocked for same-day shipment at each of their five distribution warehouses around the country - Ohio, Wisconsin, Tennessee, Oklahoma, and Nevada. These warehouses are strategically located to ensure that all their products are within two-day delivery windows for 99% of the zip codes in the contiguous 48 United States and parts of Canada - even large enclosures that ship via freight.



Wiegmann is one of the largest enclosure manufacturers in North America. Their enclosure line includes a wide variety of carbon steel, galvanized steel, stainless steel, and aluminum enclosures, including enclosures for disconnects, pushbuttons, and operator consoles.

We offer same-day shipping on most enclosures and accessories direct from the Wiegmann manufacturing facility in Freiburg, Illinois. Non-stock models can be shipped within 20 days.

What Do The NEMA Ratings Mean?

The National Electrical Manufacturers Association (NEMA) is a US Manufacturers Organization which actively promotes standardized product specifications for electrical apparatus. While NEMA does not actually test products, it establishes the performance criteria for enclosures intended for specific environments.

NEMA standards describe each type of enclosure in general and functional terms, and specifically omits reference to construction details. In other words, NEMA specifies what an enclosure must do, not how to manufacture it. This is also true about the EN 60.529/IEC 529.

NEMA Classifications

NEMA 1 enclosures are typically used for protecting controls and terminations from objects and personnel. This style of enclosure, while offering a latching door, does not have a gasketed sealing surface. NEMA 1 enclosures are used in applications where sealing out dust, oil, and water is not required.

NEMA 2 enclosures are intended for indoor use primarily to provide a degree of protection against limited amounts of falling water and dirt.

NEMA 3 enclosures are intended for outdoor use primarily to provide a degree of protection against windblown dust, rain, sleet, and external ice formation.

NEMA 3R enclosures are typically used in outdoor applications for wiring and junction boxes. This style of enclosure provides protection against falling rain, sleet, snow, and external ice formation. Indoors they protect against dripping water. This style of enclosure does not have a gasketed sealing surface. Some models have hasps for padlocking.

NEMA 3RX enclosures are typically used in outdoor applications for wiring and junction boxes. This style of enclosure provides protection against falling rain, sleet, snow, and external ice formation and provides an additional level of protection against corrosion. Indoors they protect against dripping water. This style of enclosure does not have a gasketed sealing surface. Some models have hasps for padlocking.

NEMA 3S enclosures are intended for outdoor use primarily to provide a degree of protection against windblown dust, rain, sleet, and to provide for operation of external mechanisms when ice laden.

NEMA 4 enclosures are used in many applications where an occasional washdown occurs or where machine tool cutter coolant is used. They also serve in applications where a pressurized stream of water will be used. NEMA 4 enclosures are gasketed and the door is clamped for maximum sealing.

NEMA performance criteria and test methods are used by Underwriters Laboratories (UL) and the Canadian Standards Association (CSA) as guidelines for investigation and listing of electrical enclosures. The tested enclosures are then authorized to carry a label by UL or CSA to prove it has passed the required tests and meets the applicable UL and CSA standard. required.

NEMA 4X enclosures are made of stainless steel, aluminum, fiberglass, or polycarbonate. NEMA 4X enclosures are used in harsh environments where corrosive materials and caustic cleaners are used. Applications include food, such as meat/poultry processing facilities, where total washdown with disinfectants occur repeatedly, and petro-chemical facilities, including offshore petroleum sites.

NEMA 5 enclosures are intended for indoor use primarily to provide a degree of protection against settling airborne dust, falling dirt, and dripping non-corrosive liquids.

NEMA 6 enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against the entry of water during occasional, temporary submersion at a limited depth.

NEMA 6P enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against the entry of water during prolonged submersion at a limited depth.

NEMA 11 enclosures are intended for indoor use primarily to provide, by oil submersion, a degree of protection to enclosed equipment against the corrosive effects of liquids and gases.

NEMA 12 enclosures are intended for indoor use to provide a degree of protection against drips, falling dirt, and dripping non-corrosive liquids. NEMA 12 enclosures are most commonly used for indoor applications of automation control and electronic drives systems, including packaging, material handling, non-corrosive process control, and manufacturing applications. Gasketed doors seal the enclosure's contents from airborne contaminants and non-pressurized water and oil.

NEMA 12K enclosures with knock-outs are intended for indoor use primarily to provide a degree of protection against dust, falling dirt, and dripping non-corrosive liquids other than at knock-outs.

NEMA 13 enclosures are intended for indoor use primarily to provide a degree of protection against dust, spraying of water, oil, and non-corrosive coolant.

What Do The NEMA Ratings Mean?

Comparison of Non-Hazardous Applications

Provides a Degree of Protection Against the Following Environmental Conditions	Enclosure NEMA Type												
	1*	2*	3	3R	3RX	3S	4	4X	5	6	6P	12	13
Incidental contact with the enclosed equipment	X	X	X	X	X	X	X	X	X	X	X	X	X
Ingress of solid foreign objects / falling	X	X	X	X	X	X	X	X	X	X	X	X	X
Windblown dust			X			X	X	X					
Circulating/settling dust, lint, fibers and flyings									X			X	X
Dripping/light splashing water		X	X	X	X	X	X	X	X	X	X	X	X
Rain, sleet, snow, external ice formation			X	X	X	X	X	X		X	X		
Operation of external mechanisms when ice laden						X							
Hose-directed/splashing water							X	X		X	X		
Occasional temporary submersion at limited depth										X	X		
Prolonged submersion at limited depth											X		
Corrosive agents					X			X					
Spraying/splashing/seepage of oil and non-corrosive coolant													X

*These enclosures may be ventilated. However, Type 1 may not provide protection against small particles of falling dirt when ventilation is provided in the enclosure top.

The European IP Code

European Union members use the EN60.529/IEC 529 standard to classify an enclosure's protection against various hazards. This system has been adopted by many other countries outside of Europe. The ingress protection (IP) system uses a two-digit code to describe the enclosure's protection capabilities. The first digit signifies the protection level against solid objects, including dust. The second digit represents the enclosure's degree of protection against ingress of water. The two-digit code is preceded by the prefix "IP."

The cross-referenced table on the next pages is an approximate comparison of NEMA and International Electrotechnical Commission (IEC) classifications. It is offered for reference only. Please consult the appropriate standards for a full description of the requirements for each classification.

NEMA to IEC - Enclosure Rating Cross Reference*

NEMA Type	IP23	IP30	IP32	IP55	IP64	IP65	IP66	IP67
1	X							
2		X						
3					X			
3R			X					
4							X	
4X							X	
6								X
12				X				
13						X		

*Note: This cross-reference table is an approximation of NEMA and IEC classifications for reference only. Please consult the appropriate agency's requirements and test qualifications for complete information.

How to Select Your Enclosure

1. What kind of environment is your enclosure going to be in and what level of protection do you need?

Your enclosure's primary function is to protect the equipment inside it from the surrounding environment. Therefore, you need to understand the environment where the enclosure will be located and select the appropriate level of protection.

An enclosure's level of protection is defined by its NEMA rating. Refer to "What Do the NEMA Ratings Mean?" later in this section for more information.

Keep in mind that it is just as important not to over-specify the protection level of your enclosure as it is to under-specify, as increasing the protection level typically increases the cost of the enclosure.

2. Determine your security requirements.

Your enclosure may also need to protect its contents from unauthorized access to the components it houses.

AUTOMATIONDIRECT has options to meet a wide variety of security needs. For low-risk installations, a screw cover, lift-off cover, or Single Door with clamps may be sufficient. In higher risk installations, an enclosure with keylocking and/or padlocking capabilities may be needed.

If you cannot find a stock enclosure with the security features that you need, AUTOMATIONDIRECT offers replacement locks and latches that you can retrofit to your enclosure.

3. Determine the size enclosure you need.

Physical space for your components is not the only requirement. Considerations like heat dissipation and venting must be taken into account.

First, determine the height and width for your enclosure by laying out the footprint space needed for your control components on a standard subpanel size. Remember to consider the mounting holes for the subpanel when planning the required footprint space. The size of the enclosure will determine if you need a Single Door, two-door, or wall-mount. The height and width of your enclosure will determine whether it should be a wall-mount, floor-mount, or freestanding enclosure.

Next, you'll need to determine your panel depth. Remember that the subpanel mounting takes up a small portion of the depth. Also, any pushbuttons, operator interfaces, indicators, meters, etc., that you plan to mount on the enclosure door will occupy some enclosure depth.

Finally, you must allow for heat dissipation [see step 4]. If you have estimated component sizes or heat generation, it's always better to oversize the enclosure when you have the available space.

For assistance in finding the enclosure series that meets your needs, refer to the "Enclosure Attributes" chart later in this section.

4. Determine your thermal management needs.

Your enclosure must be able to dissipate the heat generated by the components inside of it either alone or by adding a cooling device. You might be able to side-step additional cooling by upsizing your enclosure to increase the surface area through which heat is transferred to the atmosphere.

If additional cooling is required, AUTOMATIONDIRECT has many devices to choose from. But always remember that the heat dissipation method you select must be compatible with the enclosure's NEMA rating.

For some applications, a simple louver plate will provide adequate heat dissipation. A fan kit and louver combination is your next most economical ventilation option. For small enclosures, a vortex cooler using compressed air is another option. A sealed enclosure may require a heat exchanger or an air conditioner controlling the internal temperature without introducing outside air and its contaminants.

If you need help with these calculations, go to: http://support.automationdirect.com/notes/enclosure_environment.html.

An enclosure may also require heating where environmental conditions are conducive to condensation and/or ice formation inside the enclosure.

Unfortunately, we cannot make these determinations for you as all control applications are different. Conservative choices increase your margin of safety and allow for future changes.

5. Choose your accessories.

AUTOMATIONDIRECT offers a wide range of accessories for our enclosures.

Subpanels - our enclosures do not come with subpanels unless specified in the product description.

Mounting alternatives - floor stand kits, mounting feet, casters, and pole-mounting kits

Drip shields for outdoor enclosures

Window kits

Folding shelves

Hole seals and hole plugs

Adapter plates for disconnects

Grounding accessories

Replacement locks and latches

Electrical interlocks

Print pockets

Panel-mounting accessories - swing-out panel kits, adjustable depth-mounting kits, panel supports for heavily-loaded panels, and dead front kits

Frames, channels and rails for rack-mounted equipment

Terminal brackets and straps, mounting channels, grid straps, and DIN-rails

Touch-up paint

Replacement gaskets

Wiegmann Enclosures Overview



Who is Wiegmann?

Hubbell Incorporated has been in business since the late 1800s. Like his contemporaries, Edison, Ford, and Westinghouse, Harvey Hubbell II contributed to both spheres of progress: new design and manufacturing innovation. Wiegmann has been building high quality industrial enclosures for over 75 years. In 1994, Hubbell Incorporated purchased the company from the Wiegmann family. The Wiegmann brand is now part of the Hubbell Commercial Construction division. With the resources and backing of Hubbell, millions of dollars have been injected into the Wiegmann manufacturing facility. Foamed-in-place gaskets, powder coating, and smooth plasma corner welding are only a few of their product innovations. The enclosures are

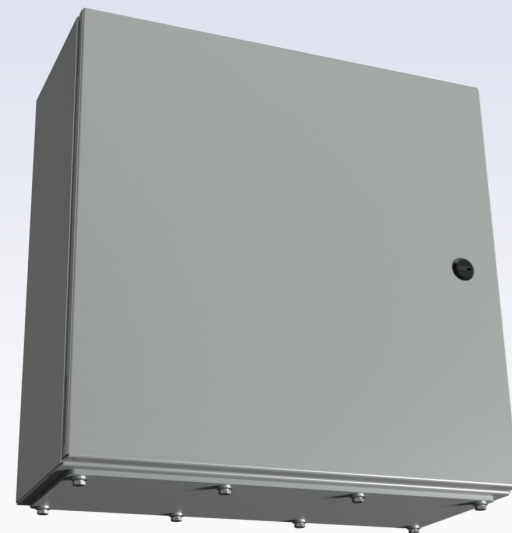
made in Freeburg, Illinois by skilled craftsmen with the aid of sophisticated Computer Numerical Controlled machinery. Wiegmann supplies enclosures for the OEM, commercial construction, and MRO markets. Wiegmann continues to modernize and automate their enclosure manufacturing facility. Wiegmann is one of the largest enclosure manufacturers in North America. Their enclosure line includes a wide variety of carbon steel, galvanized steel, stainless steel, aluminum, and fiberglass enclosures, including enclosures for disconnects, pushbuttons, and operator consoles.

It's not just a steel box!

Quality manufacturing processes

At a casual glance, many enclosures look pretty much alike – big gray metal boxes. However, all enclosures are not created equal. A quality enclosure not only maintains a better appearance over time in an industrial environment, it also does a better job of protecting the components within it. The reliability of a control system depends on a quality enclosure properly protecting its electronic control components no matter what the external environment. Following the legacy of Harvey Hubbell II, Wiegmann is constantly modernizing their

manufacturing facility in Freeburg, IL to produce enclosures of consistently high quality. CNC metal cutting, robotic plasma welding, and powder coating are just a few of the innovative steps the Wiegmann facility has taken in producing their enclosures. In addition, these processes also lower the cost for you, the user. Add our highly efficient operation, and you can enjoy "OEM-like" Prices on single-unit purchases. Just look at a few of the features provided by the modernized manufacturing processes.



Quadritalia Enclosures Overview



History and Objectives

Quadritalia is a family-owned business, run by founding partners in Brendola, in the Vicenza province in northern Italy.

Quadritalia started producing modular metal products for the electro-technical industry in 1988, and quickly distinguished itself for the high quality and wide range of its products.



Production

Current production operations use the latest completely automated robotic facilities, which are controlled by our technical department through CAD/CAM stations. Our R&D dept. develops the design and performs the research for all new projects.

Our production lines have been improved and customized over a period of more than 20 years to ensure a state-of-the-art level of efficiency. This allows us to offer a wide range of standard products and provide complete technical support for all users.



Quadritalia uses the best automatic production lines available. All welding stations and all the different production stages' machinery and plants are automatically controlled.

The painting process is carried out on a fully-automatic robotic system, including three spraying booths. The foamed polyurethane gasket is applied to all panels to ensure the ultimate protection against water and dust on all our products.



All our products are inspected by our quality assurance dept. to ensure all are finished with the utmost quality.



Hammond Enclosures Overview



Hammond Manufacturing is a global company with customers worldwide. Our 800 plus team members work together to deliver on our promise of quality products and service excellence. High performance manufacturing equipment and continuous improvement management techniques combine to enhance our reputation for quality. Ongoing efforts to differentiate ourselves through high levels of service and customer satisfaction are a key corporate focus. These are the cornerstones to our future success.

Service Excellence

Our difference is industry leading service you can trust. We know there are many enclosures supplier alternatives, but it's our service that make Hammond different. We've committed our people and resources to ensuring you get exactly what you need, when you need it.

Quality Products

Hammond understands that inconsistent quality can cost you valuable time and money – that's why quality is a priority for us. When enclosures protect very valuable equipment, or are a key component to an OEM's finished products, compromising on enclosure quality is not a valid option. Hammond products carry the industry recognized approvals and our facility is ISO9002:2015 certified. Our many years of experience developing and manufacturing enclosure solutions provides a confidence that Hammond will meet and exceed your quality expectations.



Saginaw Enclosures Overview



Your Enclosure Source

Saginaw Control & Engineering has been serving the electrical industry since 1963. We specialize in manufacturing top-quality carbon steel, galvanized steel, and stainless steel electrical enclosures built to accurate dimensions. Our 310,000 square

foot manufacturing facility, located in Saginaw, Michigan, uses state-of-the-art fabricating equipment, including the newest laser technology. All products are protected with the highest quality powder finish available in today's market.

Our standard stock electrical enclosures include:

- Freestanding Enclosures
- Floor-mount Enclosures
- Wall-mount Enclosures
- Disconnect Enclosures
- Modular Enclosures
- Operator System Enclosures
- Pushbutton Enclosures
- Junction Enclosures
- Wire Trough

We maintain stock of all of our enclosures and accessories, ready for immediate shipment, at all five of our warehouses:



- Aurora, OH
- Kenosha, WI
- Lenoir City, TN
- Tulsa, OK
- Sparks, NV

With this network of warehouses, we can deliver any in-stock enclosure to 99% of the 48 contiguous United States and parts

of Canada within two business days, even those large enough to require freight shipment!

Quality Policy

Saginaw Control & Engineering is committed to understanding and meeting or exceeding the quality needs and expectations of all of our customers, while striving for continual improvement at all times. We, at Saginaw Control and Engineering, affirm this commitment, and have established a comprehensive

quality assurance system, which will allow our company to meet all of the requirements of the ISO 9001:2015 quality management system standard.

ROBROY Enclosures Overview



Who is Robroy?

Robroy Enclosures, a subsidiary of Robroy Industries, is a pioneer of non-metallic electrical enclosures. They have manufactured Stahlin fiberglass-reinforced polyester enclosures under one roof in Belding, Michigan for over 70 years.

AttaBox began manufacturing polycarbonate enclosures in 2007, and quickly rose to prominence in the market due to their quality, performance, and innovative design.

In 2016, Robroy acquired AttaBox expand their offering of non-metallic enclosures, adding the AttaBox brand of polycarbonate enclosures to their Stahlin brand of fiberglass enclosures.

Selection

Every enclosure application is different. No single size, shape, or style meets every possible requirement. A range of materials, styles, shapes, and functions is necessary to accommodate the wide range of customer needs.

With the acquisition of AttaBox, Robroy now offers one of the largest available selections of non-metallic enclosures representing the varying benefits of polycarbonate, fiberglass-reinforced polyester, and polyvinyl chloride (PVC), ensuring that customers have the ability to achieve protection for a wide range of applications.

Robroy also offers the most contemporary product designs to meet the changing needs of mounted components, maintaining a balance between appealing aesthetics and stringent physical performance standards.

Capabilities

As a non-metallic enclosure pioneer, Robroy product concepts have led the enclosure industry in design innovation, producing unsurpassed and proven product performance. They mold every enclosure in-house using the highest processing standards, with hands-on control of the manufacturing process from the first step to the last touch assuring quality control in each step of the process.

All Stahlin fiberglass enclosures are manufactured from Robroy's SolarGuard® fiberglass system for unsurpassed ultraviolet (UV) resistance while meeting UL 94 5V fire retardancy standards. SolarGuard® is also a non-halogenated system (contains no bromine or antimony), reducing the risk of smoke-borne toxicity.

Value

Non-metallic enclosures offer significant economic savings over metallic alternatives such as stainless steel while providing comparable or superior physical properties. Robroy industrial enclosures from AutomationDirect are competitive with other non-metallic enclosure options while frequently offering better performance value.

Proven protection

Many factors may influence your purchase of an enclosure. But all enclosure purchases ultimately originate with the need for the enclosure to protect whatever you put inside them.

Whether your enclosure is intended to house an electrical connection, a control panel, or sensitive measurement systems, the demand for uncompromised protection against diverse forces – moisture, dust and dirt, UV radiation, temperature extremes, and/or impact – is the number one reason you can put your trust in Stahlin and AttaBox enclosures from AutomationDirect.

Get the proven protection you paid for.



Integra Polycarbonate Enclosures Overview



Integra Enclosures manufactures engineered thermoplastic enclosures for use in applications requiring enclosures that are non-corrosive, non-conductive, easy to install and modify, and competitively Priced.

Integra's superior design and polycarbonate construction provide an enclosure that is durable, seals tight, supports easy component installation, and looks great.

Polycarbonate Applications

Polycarbonate enclosures are a superior choice for a wide range of outdoor applications and environments:

Remote Monitoring - For remote placement of monitoring or networking devices/components.

Alternative Energy - From solar to wind, keep systems safe from the environment.

Water Treatment - Water/wastewater treatment and sprinkler systems are well protected in polycarbonate.

Utility and Electrical - Utility applications that are housed outdoors are ideally enclosed in polycarbonate.

Marine and Marina - Whether on ship or at the dock, guard against corrosive salt water and sun.

Advantages of Polycarbonate

Lighter Weight Than Other Enclosure Materials

The lighter weight makes polycarbonate enclosures easier to carry and install. The lighter weight may also save money on shipping costs.

Eco-friendly

Polycarbonate enclosures at the end of their service life can be recycled, as can all scrap polycarbonate generated during the manufacturing process.

Impact Resistance

Integra enclosures have been tested to UL-746 falling ball impact tests at 73°F. With their high impact resistance, Integra enclosures are rarely damaged from shipping and handling.

UV Light Resistance

Polycarbonate is a strong, durable material with an integral UV inhibitor that withstands the harsh conditions of the outdoors. Polycarbonate enclosures will maintain their shape, color and strength even when exposed to UV light.

Easily Modified

Polycarbonate enclosures are easy to modify because they cut easily and do not create hazardous dust, cause less wear on cutting tools, and leave a clean, attractive surface with no sharp edges.

Watertight and Marine Friendly

All Integra polycarbonate enclosures are NEMA 4X rated, which means that these enclosures are watertight and can withstand direct water spray. Many models are also NEMA 6P rated, which means that they can withstand prolonged submersion at shallow depths. Polycarbonate enclosures are salt water resistant, which means they are marine friendly.

Wide Operating Temperature Range

Polycarbonate is stable and holds its tensile strength over a temperature range from -40°F to 265°F.



Enclosure Thermal Management Overview

Industrial enclosures almost always require air cooling to protect equipment and components from harsh and hot factory floor environments and heat generated from electrical components housed within the enclosure. In some instances, such as for outdoor installations, enclosures may require heating, or if they are located where temperature fluctuates, cooling and/or heating are often required to maintain optimal operating temperatures, keep condensation from forming, and prevent components from overheating or freezing.

AutomationDirect offers a wide selection of enclosure thermal management equipment to provide optimal conditions to protect enclosure components and ensure continuous and safe operation, while extending the life of equipment and components, which result in operation costs savings.

Our lineup of quality thermal management products include air conditioners, coolers, heat exchangers, cooling fans, filter fans, heaters, thermostats, hygrometers, and vents, from top manufacturers.

AutomationDirect provides many educational and informative resources to help you make the best decisions for solutions to your specific needs. Take advantage of all this FREE information we provide.

Learn Library

Check out our Library site with thermal management resources at:

<https://go2adc.com/thermal>

How to Select and Size Enclosure Thermal Management Systems

Specifying Thermal Management Systems for a Control Enclosure

How to Select and Size Enclosure Thermal Management Systems
Follow the steps detailed in this white paper for optimal design for heating and cooling enclosure components and systems.

Thermal Management Systems | White Paper

Thermal Management

Enclosure Thermal Management: Product Types and Selection Overview

AutomationDirect Offers More Enclosure Thermal Management and Climate Control

Thermal Management: Enclosure Cooling Tips

Video Library

Or, check our video library with air conditioner and other thermal management information at:

<https://go2adc.com/VideosACs>

Search Videos:

air conditioner

Go to the: **AUTOMATION VIDEO COOKBOOK**

Clear search

Displaying 8 videos

480V Enclosure air conditioners
KickStart is Stratus™ line of enclosure air conditionals to include 480V models. Heat ...

Stratus Air-to-Air Heat Exchangers for Enclosures KickStart
... exchangers, I will give a little run down. Like our Stratus air conditioners, heat exchangers DO offer closed, similar to cooling fans, since there are

Stego Heaters for Enclosures KickStart
... temperature control including: thermostats, air conditioners, heaters and more! You may think that your, forget: we sell other enclosure accessories like thermostats, air

Stego LEDs for Enclosures KickStart
... enclosure accessories like heaters, air conditioners and more. Check back with us often on AutomationDirects ...

Enclosure Filter Fan Kits and Exhaust Grilles KickStart
www.automationdirect.com Don#39;t forget: we sell other Enclosure fans, air conditioners, enclosure environment controls, channeling outside air into the

STEGO Filter Fan Plus Installation & Overview DIY How To
www.automationdirect.com Don#39;t forget: we sell heaters, air conditioners, heat exchangers, vortex coolers, thermostats, operation of our STEGO enclosure Filter Fan Plus. The new filter

Stego Thermostats for Enclosures KickStart
... forget: we sell other enclosure accessories like heaters, air conditioners, lights and more. Check back, a circulating current of warm air Fan Heaters: DIN Rail and Screw

STEGO Adjustable Thermostats How They Operate
... CLOSE and we now see our BLUE LED and we can hear our audible alarm. Don't forget: we sell heaters, air conditioners, heat exchangers, vortex coolers,

Please check our Enclosure Thermal Management sections for more information about enclosure cooling and heating equipment and devices, at <https://go2adc.com/ThermalOverview>