







Modern agriculture depends heavily on electric motors and motor controls as vital components to support efficient and sustainable farming practices, offering automation, remote operation, system protection, and energy and water conservation. The motors power agricultural machinery, optimizing performance and reducing energy waste. The controls enable precise adjustment, allowing farmers to achieve optimal speed, torque, and operation for tasks such as planting, harvesting, and irrigation.

NAE manufactures a diverse range of motors and motor controls for agriculture — purpose-built to withstand the harsh demands of farm environments to provide rugged, long-term performance. See our complete catalog of motors and motor controls, available as a PDF download from our website, for more information on the many available options.



Our customer service, technical support, and engineering teams are available to assist you with product selection from our large inventory of standard products — ready to ship for fast delivery — or to work with you on custom-designed solutions to meet your specific agricultural application needs.

We build our electric motors and motor controls with exceptional performance, reliability, and efficiency to help farmers enhance operations, optimize productivity, and maximize yield. At NAE, our goal is to give you the best quality, the best performance, and the best value.



General Purpose Motors

NAE understands the diverse needs of the agricultural industry. From powering farm machinery, irrigation systems, livestock equipment, grain handling and storage systems, general farm use, and other specialized agricultural processes, our general and special purpose motors provide the performance and versatility you need to support efficient and productive farming practices.

	Rolled Steel Farm Duty	Rolled Steel	Heavy Duty Cast Iron
Single Phase			3 Phase
HP	.33 – 10	1 – 10	1 – 600
Poles	4, 2	4, 2	6, 4, 2
RPM	1800 – 3600	1800 – 3600	1200 – 3600
Frame:	56C – 215T	143T – 215T	143T – 586/7UZ
Volts	115/208-230 – 208-230/460	208-230/460	208-230/460 – 575
Enclosure	TEFC	TEFC	TEFC
NEMA Design	L	В	В
Applications			
Pumps	•	•	•
Fans	•	•	•
Blowers	•	•	•
Compressors	•	•	•
Conveyors	•	•	•
Farm Equipment	•	•	•
Material Handling Equipment	•	•	•
Poultry Equipment	•	•	
Refrigeration Equipment		•	
Industrial Equipment	•	•	•
Other Commercial Machinery		•	•
Other Industrial Machinery	•	•	•
Associated Control I	Panel		
	Across the Line Starter Panel NEMA 3R	Variable Frequency Drive Panel NEMA 3R	Variable Frequency Drive Panel NEMA 3R



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Special Purpose Motors

If your application involves deep well pumping for agriculture, including irrigation, livestock watering, aquaculture, water transfer and distribution, NAE's vertical hollow shaft (VHS) motors are the perfect fit. Their vertical design and reliable performance make them essential components for efficient water management and maintaining a steady water supply in various agricultural applications.

	Vertical Hollow Shaft V1 & V2 Series Cast Iron	Close Coupled JM or JP Frame Cast Iron
3 Phase		
HP	10 – 500	1 – 75
RPM	1800	1800 – 3600
Frame:	215TP – 5008P	143JM-365JM – 143JP-365JP
Volts	230/460	208-230/460
Enclosure	Type 1 – WP1	TEFC
NEMA Design	В	В
Applications		
Suitable for VFD Use	•	
Deep Well Turbine Pumps	•	
Industrial / Commercial Pumping units		•
Pumps		•
Associated Control	Panel	
	Irrigation Pump Panel NEMA 3R	Variable Frequency Drive Panel NEMA 3R

VHS Replacement Parts

Need a replacement part? NAE has you covered. We offer replacement parts to help keep your vertical hollow shaft (VHS) motor up and running all season.

			STIR S	LUBRIADORT	
	VHS Replacement Parts Top Cover	VHS Replacement Parts Alternative Base	VHS Replacement Parts Ratchet Assembly	VHS Replacement Parts Lubriport Sight Glass	VHS Replacement Parts Motor Couplings
Accessories					
HP	10 – 300	10 – 250	10 – 500	40 –500	10 – 500
Frame:	215TP – 5008P	215TP – 5008P	215TP – 5006/8P	ALL	215TP – 5008P
Base Size	-	10" – 20"	_	_	_
BX Dim (in.)	-	-	-	-	.75" – 2.25"



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Safety Switch / Disconnect Panels

In agricultural settings, safety switches are crucial for maintaining electrical safety, protecting personnel and livestock, preventing fires, safeguarding equipment, and complying with regulations. Implement proper safety measures and use safety switches to create a safer working environment, minimizing risks, and protecting the well-being of everyone involved in your agricultural operations. NAE offers fused and non-fused options to help safeguard you and your equipment.







Across The Line (ATL) Control Panels

In agriculture, ATL starters are important for motor protection, energy efficiency, reliable equipment operation, enhanced equipment lifespan, flexibility, adaptability, and compliance with safety regulations. By using ATLs, farmers can ensure smooth motor starting, protect their equipment investment, optimize energy usage, and maintain a safe and efficient working environment on the farm. NAE's ATL panels are simple and straightforward to operate, helping your motors run all growing season.

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	Irrigation General Purpose General Purpose Applications	
	(9)	
HP	2 – 200	
Volts	240, 480 w/ 120V Transformer	
AMPS	5.7 – 270	
Enclosure	NEMA 3R	
Disconnect	Circuit Breaker & Fused (Both w/ Flange)	
NEMA Sizes Available	NEMA 1 - NEMA 5	
Applications		
Mechanical Presses	•	
Mixers	•	
Oil Pump Jacks	•	
Commercial/ Industrial Pumping	•	
Waste Water	•	
Associated Motors		
	Vertical Hollow Shaft	





Part Wind Starter (PWS) Control Panels

Due to their energy efficiency, reduced mechanical stress, smooth motor starting, equipment protection features and application suitability for specific agricultural equipment, part wind starters are important in agricultural applications. Using PWS can save energy, extend the service life of motors and equipment, ensure reliable operation, and comply with regulatory requirements, contributing to efficient and sustainable agricultural practices.

	Irrigation Irrigation Pump Applications 🛞	
HP	10 – 200	
Volts	240, 480 w/ 120V Transformer	
AMPS	10 – 300	
Enclosure	NEMA 3R	
Disconnect	Combination Circuit Breaker & Fused w/ Through Door	
Applications		
Commercial/ Industrial Pumping	•	
Farming	•	
Associated Motors		
	Vertical Hollow Shaft	
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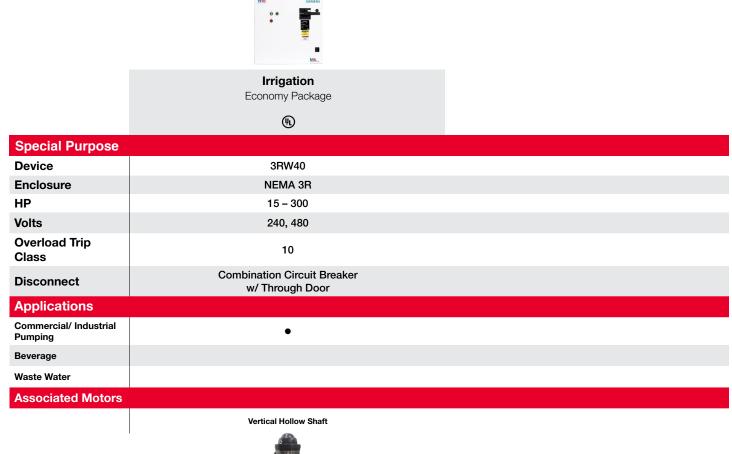






Soft Starter Control Panels

Soft starters are important for agriculture due to their ability to reduce electrical stress, provide smooth motor starting, enhance energy efficiency, reduce mechanical wear and tear, and offer application flexibility. NAE's soft starter solutions can help achieve reliable and efficient operation of agricultural machinery, reduce energy consumption, extend equipment lifespan, and optimize productivity on the farm.









Variable Frequency Drive (VFD) Control Panels

VFDs deliver numerous benefits to agriculture. They provide energy-saving capabilities, enhanced motor control, improved process control, equipment protection, and noise reduction. The control - combined with overload and fault protection offered by VFDs improves motor operation and minimizes wear and tear on equipment, reducing maintenance costs and extending the duration of service life.

	Special Purpose / Irrigation Standard	Special Purpose Standard	Special Purpose Submersible
	(U)	(4)	9)
Special Purpose			
Drive	Siemens G120X	Siemens G120X	Siemens G120X
Enclosure	NEMA 3R	NEMA 3R	NEMA 3R
HP	1 –700	1 – 700	.5 – 200
Volts	240, 480	240, 480	240, 480
Disconnect	Combination Circuit Breaker, Fused	Combination Circuit Breaker, Fused	Combination Circuit Breaker
Torque	Variable, Constant	Variable, Constant	Variable, Constant
Phase	3	3	3
Applications			
Conveyor Systems	•		
Blowers	•		
Pumps	•		
Machine Tool Speeds	•		
Submersibles			•
Irrigation Center Pivots	•	•	
Cattle Feeding	•		
Commercial/ Industrial Pumping		•	
Associated Motors			
	Vertical Hollow Shaft	General Purpose Rolled Steel	







Variable Frequency Drive (VFD) Control Panels

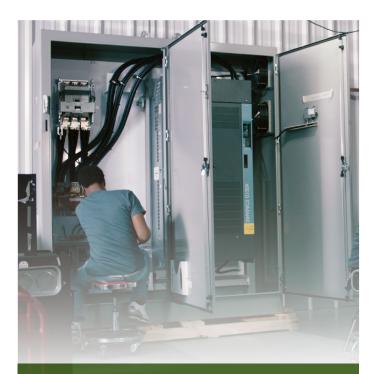
By optimizing process control, farmers can automate and fine-tune motor-driven equipment to meet specific load demands, ensuring efficient, productive, and sustainable farming operations. The noise reduction feature of VFDs creates a quieter operating environment, benefiting workers, livestock, and neighboring communities.

	General Purpose Economy	Special Purpose / Irrigation Standard	Special Purpose Submersible
	(h)	(9)	(!)
General Purpose		Special Purpose	
Drive	LS Electric S100, iS7	LS Electric S100, iS7	LS Electric S100, iS7
Enclosure	NEMA 3R	NEMA 3R	NEMA 3R
HP	1 –150	1 – 150	0.5 – 125
Volts	240, 480	240, 480	240, 480
Disconnect	Combination Circuit Breaker	Combination Circuit Breaker	Combination Circuit Breaker
Torque	Variable, Constant	Variable, Constant	Variable, Constant
Phase	1-3	1-3	1-3
Applications			
Conveyor Systems	•		
Blowers	•		
Pumps	•		
Machine Tool Speeds	•		
Submersibles			•
Irrigation Center Pivots	•	•	
Cattle Feeding	•		
Commercial/ Industrial Pumping		•	
Associated Motors			
	Heavy Duty Cast Iron	Vertical Hollow Shaft	









Quality Products & Testing

Since 1993, NAE has been sourcing and supplying high-quality, high-performance electric motors and gearing. We stand behind our products and take pride in having established ourselves as a reputable distributor on a national level.

Our extensive range of motors are designed and manufactured to meet the highest standards of precision and quality. With a strong focus on industry standards and customer requirements, we ensure that you receive the best motor available to fit your needs.

At NAE, we excel in the production of control panels. We craft our panels using top-notch enclosures and premium components. Each one is meticulously built to engineering specifications within our UL508A panel shop. To guarantee accuracy and performance, each panel undergoes rigorous live system testing before being shipped to our valued customers.



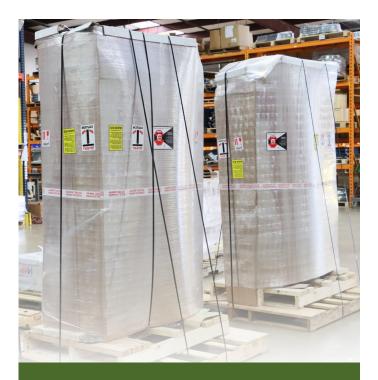
Inventory & Custom Orders

NAE is well-prepared to meet your supply demands with our expansive inventory and strategically located warehouse facilities across the United States.

We prioritize customer satisfaction by ensuring that we have a wide range of instock motors and motor controls readily available to fulfill your specific customer and application needs.

Need a custom panel? NAE offers customers the ability to custom-configure and order their control panel to meet their specific needs.





Fast Delivery

NAE offers efficient order processing with the ability to provide 24-hour to 2-week delivery on select in-stock catalog models. Recognizing that downtime translates into loss of business and revenue, we prioritize quick delivery to help ensure continuous operation.

To further safeguard your order, NAE takes extra precautions when shipping motors and motor controls. We crate and wrap each motor for protection. With smaller motors, we box, wrap, and place foam on each end. Each panel undergoes a meticulous packaging process, starting with shrink and bubble wrapping. It is then carefully enclosed in double-walled cardboard and subjected to an additional layer of shrink wrapping. Finally, to ensure utmost security during transit, each panel is securely strapped to a heavy-duty pallet.

By employing these comprehensive packaging measures, we ensure that your motor and motor control panels arrive in optimal condition, ready for immediate use.



Warranty & Repair

NAE understands the importance of providing comprehensive warranty coverage for our motors. Our standard limited motor warranty policy offers a range of options, including two (2) and three (3) year warranties, with the possibility of extended warranties on selected motors. For motors with frame sizes 215T and smaller, we offer a specialized "No-Fault Warranty." At NAE, we take pride in prioritizing customer satisfaction and ensuring that our warranties and policies help to facilitate hassle-free motor repairs or replacements in unexpected situations.

NAE's motor control panels come standard with a 2-year warranty and are eligible for up to 6 years of protection. In addition, we are proud to offer our innovative "No Hassle" Chassis Exchange Program, which aims to minimize unplanned downtime. With this innovative motor control panel warranty, NAE simplifies the process of obtaining motor controls, making it easy and convenient for our customers.



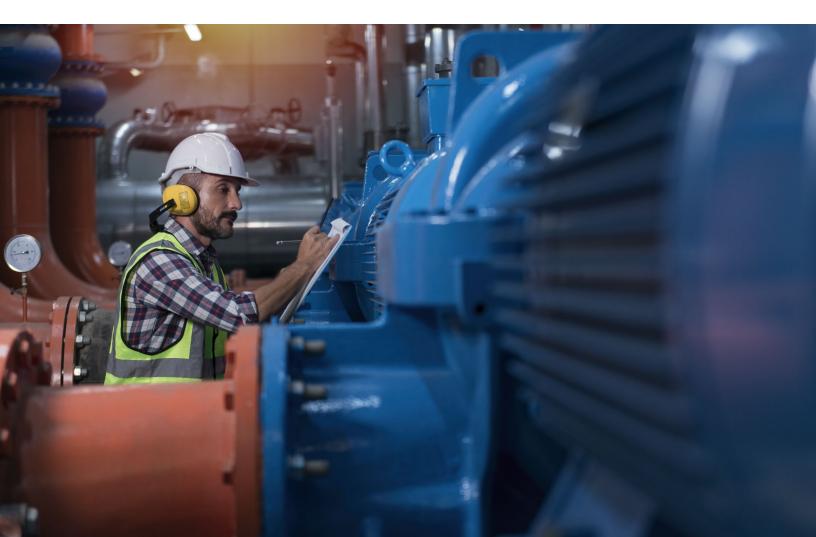
Need to keep your operation up and running?

Choose NAE for top-quality motors. With a diverse inventory of single phase and three-phase, General Purpose and Special Purpose options, our motors are available in a variety of configurations to meet the requirements of the specifications and certifications you need.

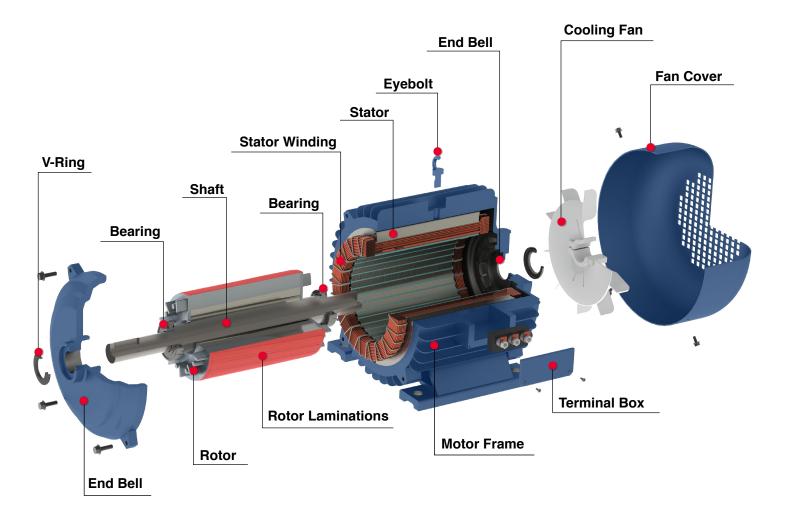
Our dedicated customer and technical service representatives will guide you to the perfect motor for your application and assist you with a quote or an order. In-stock motors can ship as quick as same day to 24 hours on select catalog models.

Need something a little different? NAE can provide our modification services to modify the motor to meet your requirements and get you what you need.

Make Motors Easy with NAE as your preferred provider for General and Special Purpose motors.



NEMA motors, designed for performance.



A few performance and protection features for NAE's motors are:

Corrosion-resistant epoxy paint and zince plated hardware

Applications

- Pumps
- Fans
- Blowers
- Compressors
- Farm Equipment
- Material Handling Equipment
- Poultry Equipment
- Air Compressors

- Class F insulation system; Class B rise at full load; Class H vacuum pressure impregnation (VPI) resin for all windings
- Refrigeration Equipment
- Industrial Equipment
- Aeration Equipment
- Milling Machines
- Crushing / Pulverizing Equipment
- Chemical Processing
- Dairy Applications
- Pharmaceutical

- Hign starting torque
- Food Processing / Bakeries
- Bottling & Extremely Corrosive
 Environments
- Industrial / Commercial Pumping
 Units
- Other Commercial Machinery
- Other Industrial Machinery



Motor Control Panel Customization Made Easy!



NAE Motor Controls offers customers the ability to custom configure and order their control panel to meet their specific needs and have it shipped quickly. We offer control panels from across the line panels to variable frequency drives and everything in between.

NAE Motor Controls can package the most common controls to the most complex control systems. All NAE packaged panels are backed by our two (2) year warranty and eligible for up to six (6) years of protection with our "No Hassle" Chassis Exchange Program.

Contact customer service at 800.884.0404 to get your order started today!







Why choose NAE for you custom panel needs?





Safety is Standard! UL 508A certified motor control panels.

NAE is a certified UL 508A panel shop building panels to meet customer requirements and provide UL safety standards that assures we take every step necessary to make our products safe.

We provide standard solutions to custom designs that are engineer reviewed and factory tested to meet all UL standards.

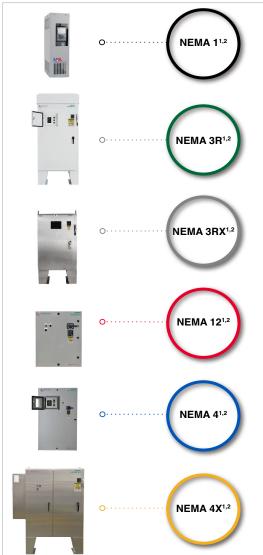
Choose North American Electric for your control panels where we make Motor Controls Easy and Safety Standard!



Do You Have the Right NEMA Enclosure?

A NEMA enclosure is rated to provide protection against environmental hazards such as water, dust, oil, coolant or atmospheres containing corrosive agents. At NAE we offer a wide range of NEMA Enclosures to fit the needs of your applications. Make sure you have the right NEMA enclosure for your disconnect, ATL, part wind starer, soft starter, and variable frequency drive panels. To view a full list of our NEMA enclosure panels visit our website at www.naemotors.com or contact your customer service agent at 800.884.0404.





General-purpose.

- Protects against dust, light, and indirect splashing but not dust-tight; primarily prevents contact with live parts.
- General indoor use and under normal atmospheric conditions.

Weather-resistant.

- Protects against falling dirt, rain, sleet and snow.
- General outdoor use for electrical components, power distribution, switch gears, etc.

Weather-resistant.

- Protects against falling dirt, rain, sleet and snow.
- Protects against external ice formation that can cause corrosion
- General indoor or outdoor use for electrical components, power distribution, switch gears, etc.

General-purpose.

- Protects against dust, falling dirt, and dripping non-corrosive liquids.
- General indoor use for Industrial, manufacturing, and machining applications.

Watertight and dustproof.

- Protects against falling dirt, rain, sleet, snow, windblown and circulating dust, and dripping.
- General indoors or outdoors use for ship docks, dairies, breweries, and wastewater treatment plants.

Corrosion resistant, watertight, and dust proof.

- Protects against falling dirt, rain, sleet, snow, windblown and circulating dust, dripping and corrosive agents.
- General indoors or outdoors use for ship docks, dairies, breweries, and wastewater treatment plants.

* Notes:

1. NEMA Enclosure Types (from NEMA 250-2013)

2. NEMA/IEC enclosure ratings, Cole-Parmer Technic



No-Fault Motor Warranty

Motors with frame sizes 215T and smaller are covered under our "No-Fault Warranty". The warranty period is 24 months from the date of invoice. This special limited warranty is offered one time per end-user, per application. If there is more than one failure, please follow our standard limited warranty policy and procedure and contact our warranty department for assistance. For information regarding this warranty policy you may contact our customer service department at (800) 884-0404 or visit our website at www.naemotors.com.

North American Electric's liability under this warranty or any other warranty, expressed or implied, in law or fact, shall be limited to the replacement of the motor, and in no event shall North American Electric, LLC be liable for consequential or indirect damages, including freight.

Standard Limited Warranty			
	36 Months (from date of invoice)	24 Months (from date of invoice)	
General Purpose Cast Iron Motors (TEFC & ODP)	•		
General Purpose, Aluminum Motors	•		
Rolled Steel Motors, Single-Phase		•	
Rolled Steel Motors, Three-Phase	•		
Crusher Duty Motors	•		
Stainless Steel Motors		•	
Close Coupled Pump Motors	•		
Explosion-Proof Motors		•	
Oil Well Pump Motors	•		
Vertical Hollow Shaft Motors		•	
Rotary Phase Converters		•	
Shaft Mount Reducers		•	
Motor Slide Bases	•		



Motor Controls Warranty Policy

North American Electric, LLC warrants to that all products will conform to final specifications and/or drawings and will be free from defects in materials and workmanship. Special build panels will require the final specifications and drawings to be approved in writing by the Buyer before being released for production. The warranty shall remain in effect for a period specified for each product line (24, 36 or 60 months) from the date of the invoice.

Warranty Period For Product Line				
	60 Months (from date of invoice)	36 Months (from date of invoice)	24 Months (from date of invoice)	
Chassis				
Siemens Soft Starter Chassis: – 3RW30 Series, 3RW40 Series, 3RW44 Series			•	
LSis VFD Chassis - C100 Series, S100 Series, S100-4X Series, H100 Series, iS7 Series			•	
Siemens VFD Chassis: - V20 Series, G120 Series, G120X Series, G130 Series			•	
Enclosed Panel Packages				
Heavy Duty Safety Switches			•	
Heavy Duty Safety Switches with "Lightning & Surge" Protection		•		
Across the Line Starter Panels			•	
Part Wind Starter Panels			•	
General Purpose & Washdown Duty Soft Starters – Normal Duty and Heavy Duty			•	
SAF Crusher/Ultra Heavy Duty Soft Starters (SAF Opal Pro M6 Series; Warranty Includes SCRs)	•			
SAF Ultra Heavy Duty Soft Starters (SAF Opal Pro M6 Series; Warranty Includes SCRs)	•			
General Purpose & Washdown Duty – Non-Combo & Economy Panel Pkg – Variable Torque and Constant Torque			•	
General Purpose & Washdown Duty – Standard Panel Packages – Variable Torque and Constant Torque			•	
General Purpose – Integrator Packages – Variable Torque and Constant Torque			•	
Special Purpose – Irrigation Pump Panel Packages with "Lightning & Surge" Protection INCLUDING "No Hassle" Chassis Exchange Program		•		
Special Purpose – Positive Displacement Pump Panel Packages: Standard, Advanced and Deluxe Panel Packages with "Lightning & Surge" Protection INCLUDING "No Hassle" Chassis Exchange Program		•		
Special Purpose – Beam Pump Panel Package with "Lightning & Surge" Protection INCLUDING "No Hassle" Chassis Exchange Program		•		
Special Purpose – Custom / Build To Order Panel Package (Customer must review, approve and sign drawings prior to panel being released for production)			•	







"No Hassle" Chassis Exchange Program



"Providing reliable control panel service for up to six (6) years!"

NAE "NO HASSLE" CHASSIS EXCHANGE PROGRAM

North American Electric's "No Hassle" Chassis Exchange Program is a revolutionary motor control panel warranty designed to keep you up and running. Our "No Hassle" Chassis Exchange Program makes it easy to exchange your soft starter or VFD chassis without needlessly having to purchase a chassis while at the same time minimizing unplanned downtime.

"BUMPER TO BUMPER" COVERAGE

Your entire panel is further protected with our three (3) year "Bumper to Bumper" coverage, and includes "Lightning & Surge" Protection covering momentary anomaly including line side events such as lightning, surge and severe over voltage, and load side events such as single phasing, phase reversal and voltage unbalance.

"NO HASSLE" CHASSIS EXCHANGE PROGRAM WARRANTY

NAE's "No Hassle" Chassis Exchange Program Warranty period is three (3) years from the date of delivery, and must be activated by an NAE Authorized or Certified Installer. This warranty protection may be extended to cover the chassis or the entire panel for up to six (6) years!

Program warranty benefits include:

- Lightning, surge and severe over voltage protection
- Single phasing, phase reversal and voltage unbalance protection
- "Bumper to Bumper" panel coverage
- Same day shipment of exchange chassis (Next Day Air, Second Day Air and Hot Shot Service is available for an additional charge)

Visit our website at https://www.naemotors.com/No_Hassle_Chassis/ for complete terms and conditions.



UNIVERSITY

Continuing Education

North American Electric's continuing education courses were created with you in mind to provide information, tools, technical support, and training to sell, install, and support low voltage AC drives.

powered by SIEMENS

> At NAE University, we provide you with an in-depth, hands on training designed for the beginner to the expert. The class will consist of a general overview and lab exercises of motor controls and their applications.

Our class will range from basic control programming training to in-depth product information. You'll get one on one time with our engineers who will be demonstrating how to solve complex issues in the field for your applications.

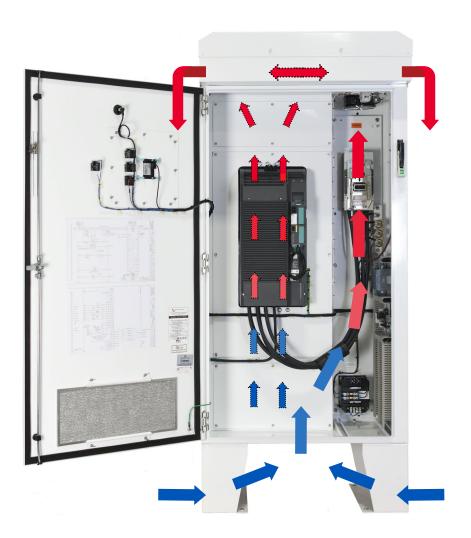
NSE



Advanced Tunnel Design for Maximum Cooling

NAE's Vortex[™] Cooling Tunnel is designed for select Variable Frequency Drive NEMA 3R Enclosures. This innovative design efficiently maximizes cooling of drive components and significantly reduces contamination inside the Enclosure.

Contact customer service at 800.884.0404 for more information





Side

Back

Bottom









SIEMENS

Features:

- 53" and up
- NEMA 3R only
- 40°C / 104°F VT; 50°C / 122°F CT (V20 and G120)
- 45°C / 113°F VT and CT (G120X)
- Significantly reduces contaminants





NAE Automation provides complete system integration capabilities.



NAE Automation specializes in electrical control system design for warehouse and distribution facilities that include robotic integration, PLC programming, and panel fabrication systems for material handling, food and beverage, oil and gas, wastewater, aquaculture and aggregate industries.

NAE Automation has an in-house engineering staff and provides the financial strength that is required to handle extremely large extensive control projects and we'll be there to support you for the long term.

NAE Automation offers a UL 508A certified panel shop where panels can be designed to customer supplied drawings. We also offer field wiring, startup and commissioning services and training. Visit the website to see more about NAE Automation at naeautomation.com.



Industries We Service

- Distribution
- Manufacturing
- Food & Beverage
- Tire & Automotive
- Baggage Handling
- Parcel Handling

Areas of Expertise

- Conveyor Systems -Package, Pallet & Tote
- Vertical Lifts
- Sorting
- Palleting
- Stretch Wrapping
- Check Weighing
- Strapping Machines
- AS/AR
- Product and Bar-Code
 Identification
- Order Picking
- Que and Buffering
- Robotics





Contact Us

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naemotors.com

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Technical Support / Warranty Toll Free: (800) 884-0404 Main: (662) 429-8049 Fax: (662) 429-8546 **Reno Warehouse**

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