

NOVA Energy & Automation



**Product Specifications**  
**Auto Restart Main Power**  
**Distribution Panel**

**Model NEA090AR/RTC**

03 January 2012

# Product Description

## 1. Standard Application

The Nova Auto Restart system Main Disconnect Panel (MDP) serves as the main facility power disconnect source installed ahead of the medical imaging equipment. Each MDP is sold with 2 remote Emergency stop Buttons. The MDP saves time, installation labor, and valuable mounting space by consolidating the main circuit breaker and the feeder over current devices into one integrated panel. The panel design includes short circuit, overload, Undervoltage release, and emergency shutdown of the system. All power is controlled by an ADA approved through the door disconnect or by the remote emergency operator control station.

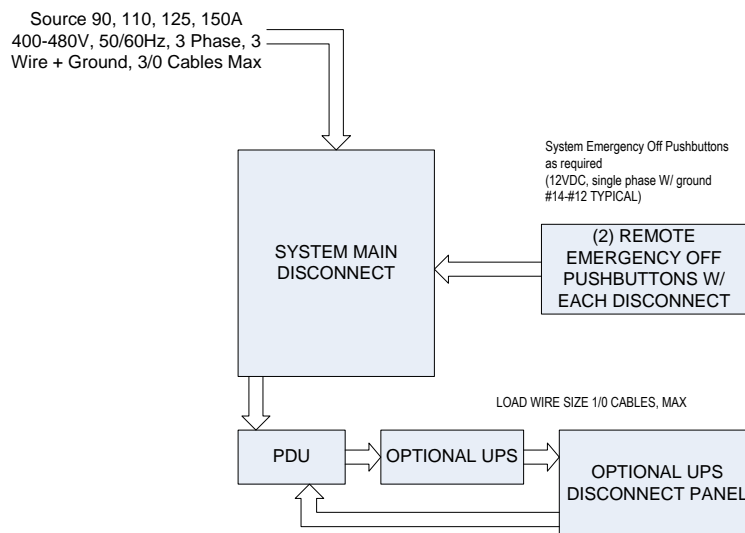


Figure 1 Nova Auto Restart Main Disconnect Application Diagram

## 2. Application of Auto Restart

The MDP includes an automatic restart control circuit which restores power to the imaging equipment after any power outage due to storms, poor power quality or generator testing.

Imaging equipment that is installed in a facility with emergency power will benefit from autorestart each month when the emergency power is tested (NFPA 110). During the emergency power test the power will cycle on and off several times to test the generators and transfer switches. This cycling will disrupt the power to the main disconnect and power down temporarily. Once the power has been restored- the main disconnect will automatically restart to its previous state (ON/OFF) at full functionality.

Imaging equipment used in large imaging centers requiring a heavy power load, locations with heavy construction nearby, or locations with a history of poor power will also benefit from auto restart.

The Auto restart feature in the panel also provides built in controls for a main modality UPS and a operators console UPS.

### 3. System Compatibility

Imaging Equipment Manufacturer	Equipment Description	Equipment Model Number	Nova Panel
GE Healthcare	CT 90 Amp models	Optima CT 660 HD Brivo CT 315/325 Brightspeed Elite Brightspeed Select And related installations	NEA090AR/RTC

### 4. Identification

GE Healthcare- The proper panel can be identified on GE Healthcare Drawings:

Sheet E1 → Right Column → Junction Point Descriptions → A, A1, or MDP → Main Disconnect:

E4502AB Equal to NEA090AR/RTC

### 5. Features/ Benefits

#### Features

- UL and cUL listed to conform to NEC
- Available from stock
- Supports modality UPS and operators console UPS
- Labeled to conform with NFPA99, NFPA-70, NEC 100, NEC 110-3, NEC 660.5
- Provides over current and short circuit protections
- Short circuit current rated at 25kAIC
- Undervoltage Circuit protection
- Single point main disconnect and termination point
- American Disabilities Act (ADA) approved through the door disconnect handle provides one hand ON/OFF operation.
- Lock Out/ Tag Out lockable operating handle provides added safety during maintenance and OSHA requirements.
- Interlocked ON/OFF hinged door prevents access to the panel while the disconnect is in the ON position.
- Door may be locked closed with customer provided padlock.
- ¼ turn slotted door latch provides additional security.
- Isolated Neutral lugs
- Oversized ground lugs for parity sizing of ground wire
- Compact size for easy installation
- Thermal protection

- Factory wired to match GE equipment and tested
- Disconnect automatically shuts down during first loss of power, preventing damage to system components
- Electronic based auto restart
- Manufactured in the USA

## Benefits

- Designed, tested, and installed on hundreds of projects worldwide
- Acceptable low cost alternative to GE
- Manufactured using the highest quality components for high reliability and long life
- Provides protection for sensitive electronic equipment
- Manufactured to a tolerance which exceeds the specifications of GE Medical equipment.
- Easy to view LED indicator lights for System ON
- Field adjustable overload and instantaneous trip
- Reduced weight- all components are within a small 45lb enclosure
- Reduces installation time and cost by eliminating delays in obtaining individually enclosed components and by eliminating on site assembly
- Provides a standardized platform for other future modifications or upgrades
- Maintenance free design does not require battery
- Electronic auto restart resets the system to the previous state (ON/OFF) preventing the system from restarting after the system has been intentionally shut down.
- The ADA handle makes turning the imaging equipment on and off during emergencies or power failures easy for technicians and nursing staff.



**Figure 2 Nova Auto Restart Main Disconnect Panel**

## 6. Specifications

<b>Model</b>	NEA090AR/RTC
<b>Application</b>	Auto Restart Main Disconnect Panel for medical imaging installations
<b>Input Voltage</b>	480VAC (please specify if other voltage is required)
<b>Output Voltage</b>	480VAC (please specify if other voltage is required)
<b>Control Voltage</b>	Internally derived 120VAC and 24VDC for controls
<b>Emergency Power Off Controls</b>	120VAC Undervoltage release (N.O)
<b>Operators Controls</b>	Compatible with EPO and Remote Start
<b>Compatible Estop Buttons</b>	Normally closed contacts GE CT: 2 ESTOPS- 1 N.O, 1 N.C. contacts
<b>Grounding</b>	Isolated and non isolated ground bar
<b>Overload Current Protection</b>	CT NEA090AR/RTC Factory set to 90A
<b>Short Circuit Current Protection</b>	25 kAIC
<b>Instantaneous Trip Settings</b>	Field adjustable from 1 - 10x of over current rating
<b>Approvals</b>	UL/cUL



Figure 3 Nova Auto Restart Main Disconnect Panel- Inside

## 7. Weights and Dimensions

<b>Mounting</b>	Main disconnect is provided in a steel enclosure suitable for surface or semi flush installations.
<b>Dimensions</b>	Height: 29.92" (760mm) Width:23.62" (600mm) Depth: 5.9" (150mm)
<b>Weight</b>	105 lbs. (47.3 kg)
<b>Mounting</b>	Rear wall mounting holes (4). Spaced 0.79" (20mm) from enclosure edge. Optional mounting brackets are available
<b>Enclosure</b>	16 Gauge Carbon Steel, all rounded corners 1 gland plate in the enclosure base.
<b>Enclosure Sealing</b>	Foamed-in place polyurethane door gasket
<b>Finish</b>	Dip coat primed, powder coated in textured RAL 7035
<b>Latching Mechanism</b>	Two ¼ turn latches with double-bit inserts (cam lock). Door is hinged on the left side but can be swapped if specified when order is placed.
<b>Interior Panel</b>	Zinc-Plated subpanel
<b>Protection Category</b>	IP 66 to EN60 529/09:2000, complies with NEMA 4 Enclosure Approvals: UL, CSA, TUV, GL, Lloyds, VDE, Bureau Veritas

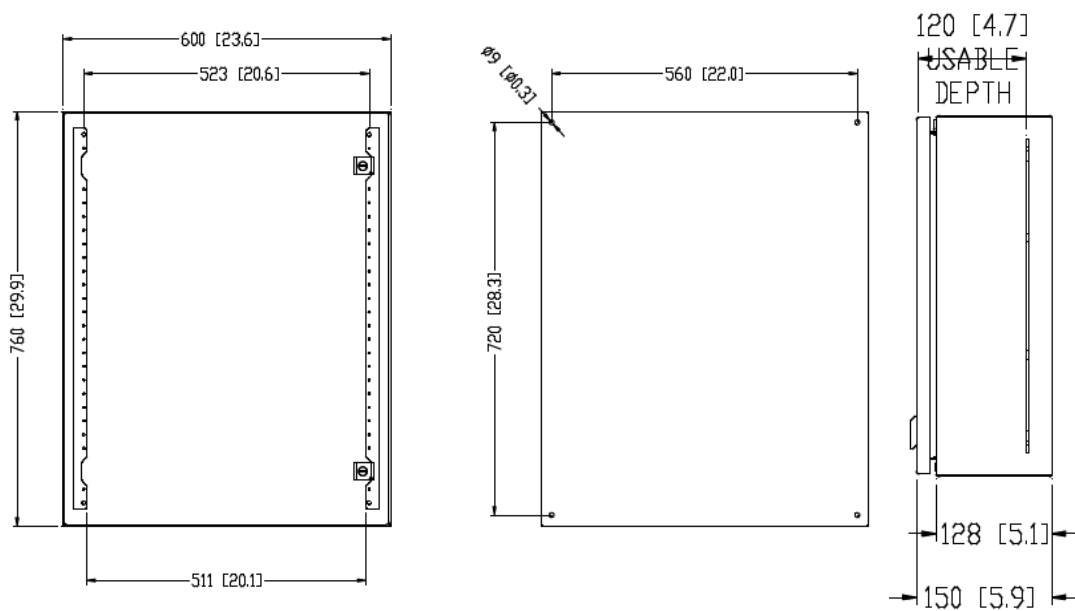


Figure 4 Enclosure Dimensions: Outside, Mounting, Depth

## 8. Warranty

This limited warranty set forth below is given by Nova Automation (“Seller”) with respect to the electrical equipment (“Product”) packaged with this limited warranty. The Product, when delivered to you in new condition in its original packaging, is warranted against defects in materials or workmanship as follows: For a period of one (1) year from the date of original purchase, defective parts or a defective Product returned to a Seller, or its authorized service providers, as applicable, and proven to be defective upon inspection, will be repaired, or exchanged for a new Product, as determined by the Seller, or the authorized service provider.

This limited warranty covers all defects encountered in normal use of the Product, and does not apply in the following cases: Loss of or damage to the Product due to abuse, mishandling, alteration, accident, electrical current fluctuations, failure to follow operating, maintenance or environmental instructions prescribed by Seller, failure to follow Sellers installation instructions, or service performed by someone other than Seller or its authorized service provider.

Nova assumes no responsibility for labor or freight costs incurred in connection with the installation, removal, or replacement of products determined to be defective or any consequential or incidental damages arising from the use of the product. Nova Automations entire liability on any claim of loss or damage resulting from a defective product is limited to the replacement of the product.

WARRANTY IS VOID IF PRODUCT IS NOT USED FOR THE PURPOSE FOR WHICH IT WAS MANUFACTURED.

## 9. Product Service and Technical Assistance

Nova Automation, LLC  
2722 N. Avondale Blvd  
Milwaukee WI 53210  
PH# 262-309-2950  
Website: [www.NovaAutomation.net](http://www.NovaAutomation.net)

## 10. Approvals

**Prepared By** \_\_\_\_\_

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This document requires the following approvals

**Approved By** \_\_\_\_\_

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\_\_\_\_\_

**([Job Title])**

**Approval Date** \_\_\_\_\_