

NOVA Energy & Automation



## Product Specifications

# 3 Breaker Main Disconnect Panel with Undervoltage Trip

Model NEAS-XXXX-G-UVR

A 3D perspective rendering of a blue electrical panel. The panel is shown from a low angle, looking into its interior. The interior is divided into three main sections by vertical dividers. The panel has a metallic, slightly reflective finish. The date "03 January 2012" is printed in white on the right-hand side of the panel's interior.

03 January 2012

# Product Description

## 1. Standard Applications

The Nova 3 Breaker Main Disconnect is an integrated Main Circuit Breaker Panel with Undervoltage trip specifically designed to meet the requirements Siemens medical imaging installations. The low voltage internal control panel provide a safe, low voltage interface between the imaging equipment, control, and room line voltage.

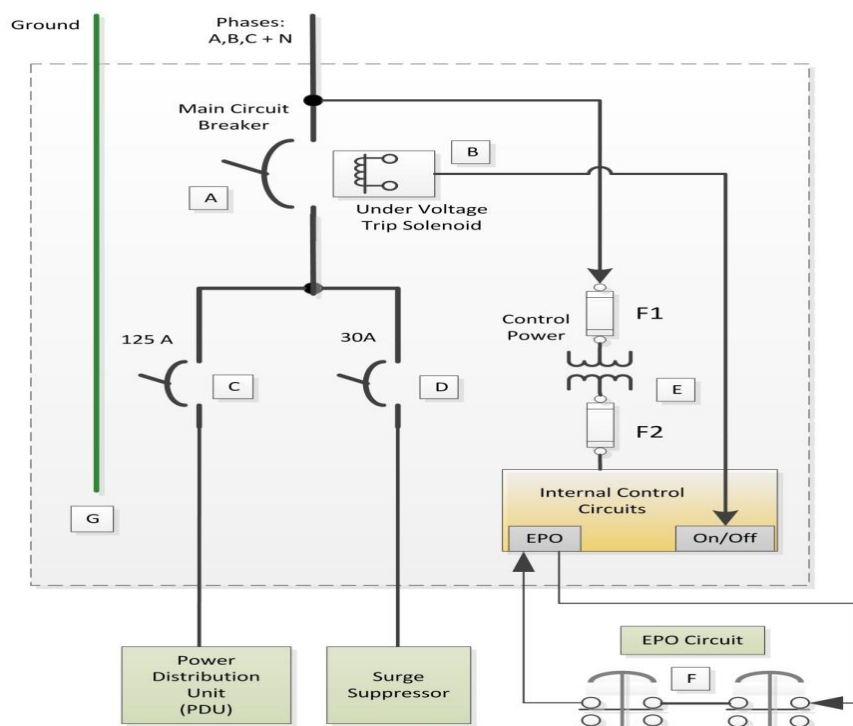


Figure 1 Main Disconnect Panel One Line

### Under Voltage Release Details

The Under voltage release mechanism trips the circuit breaker by removing power from an internal coil. Power must be present and applied to the UVR coil before the main disconnect can be energized. If power is not provided to the UVR coil the breaker will continue to trip while one attempts to turn it on. UVR coils are designed to trip when its applied voltage falls between 35 to 70% of nominal rating.

The UVR mechanism is best suited for “interlocking” a number of other equipment safety checks, as all circuits would need to be satisfied and all normally closed contacts would be wired in series. Any one of the contacts could open thereby tripping the circuit breaker.

Another benefit of the UVR is that it will not automatically restart the equipment after a power outage. It would require that a person would go to the breaker panel and manually energize it after checking to see that conditions are safe to do so.

## 2. System Compatibility

Siemens Medical Solutions CT: Somatom Definition AS 64 and several other related installations

Please select item **NEAS-43125-G-UVR -A**

## 3. Identification

Siemens Medical Solutions CT: The proper distribution panel can be identified in the Siemens Constructions Drawings → sheet E-102 → Somatom Definition AS → Power Diagram → item MP

**NEAS-43125-G-UVR** Equal to item P2E18FD63B125ATS with related components A, B, C, D, E, F, G: 120VAC U.V. trip, ground bus bar, 125A 3P feeder (to PDC), 30A 3P feeder (to surge suppressor), 480-120 transformer

## 4. Features/ Benefits

### Features

- Integrated design provides all of the Main Disconnect Panel's controls into an easy to configured panel with Undervoltage Trip mechanism integrated into the main Circuit Breaker
- Utilizes heavy duty ABB Circuit Breaker to handle inrush currents.
- UL and cUL listed to conform to NEC.
- Labeled to conform to NFPA99, NFPA-70.
- Provides Short Circuit and Overload Protection
- Provides differential protection
- Internally derived 120 Vac Under Voltage Release
- Neutral Block and Ground Block
- Factory wired and tested.
- Single point main disconnect and termination point
- Factory wired to match Siemens equipment and tested

### Benefits

- Designed, tested, and installed on several projects worldwide
- 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 Siemens equipment.
- Field adjustable overload and instantaneous trip
- Reduced weight- all components are within a small 40lb enclosure
- Field adjustable ranges allow for coordination with the facility distribution coordination.
- Eliminated the need for multiple control panels for short circuit, overload and Emergency Power Off
- 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.

## 5. Specifications

<b>Model</b>	NEAS-43125-G-UVR-A
<b>Application</b>	Main Disconnect Panel for Medical Imaging Equipment
<b>Input Voltage</b>	480/277 VAC, 3 Phase 5-wire: 3 Phase Conductors + Neutral + Ground
<b>Input Current</b>	NEAS-43125-G-UVR –A 125 Amps
<b>Output Voltage</b>	480/277 VAC, 3 Phase (follows input voltage)
<b>Output over current protection</b>	NEAS-43125-G-UVR 125A 3P Main 125A 3P for PDC 30A 3P for surge suppressor
<b>Control Voltage</b>	Internally derived 120VAC 250VA for Undervoltage Trip Circuit
<b>Emergency Power Off Controls</b>	120VAC Undervoltage release (N.O)
<b>Operator Controls</b>	Compatible with 120 VAC and Low Voltage EPO operator devices
<b>Compatible Estop Buttons</b>	Normally closed contacts Siemens CT: 2 ESTOPS- 2 N.C. contacts
<b>Door Mounted Devices</b>	Direct -Mount Circuit Breaker Operating Mechanism with OSHA Lockout
<b>Grounding</b>	Isolated and non isolated ground bar
<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 2 Main Disconnect Panel**

## 6. Weights and Dimensions

<b>Mounting</b>	Main Disconnect panel is provided in a steel enclosure suitable for surface, wall or flush mounting.
<b>Dimensions</b>	Height: 600mm (24"); Width: 500mm (20"); Depth: 150mm (6")  (Other enclosure options and sizes are available upon request)
<b>Weight</b>	18.14 kg(40lbs.) Approximate, varies with Circuit Breaker rating and size
<b>Mounting</b>	Rear wall mounting holes (4). Spaced 0.79" (20mm) from enclosure edge
<b>Enclosure</b>	16 Gauge Carbon Steel, all rounded corners and 16 Gauge Door
<b>Enclosure Sealing</b>	Foamed-in place polyurethane door gasket
<b>Finish</b>	Dip coat primed, powder-coated in textured RAL 7035
<b>Cover</b>	Left Hand Hinged with 2 ¼ turn latches
<b>Interior Panel</b>	Zinc-Plated subpanel
<b>Ratings</b>	IP 66 to UL/cUL Type 1, 12, 3R,

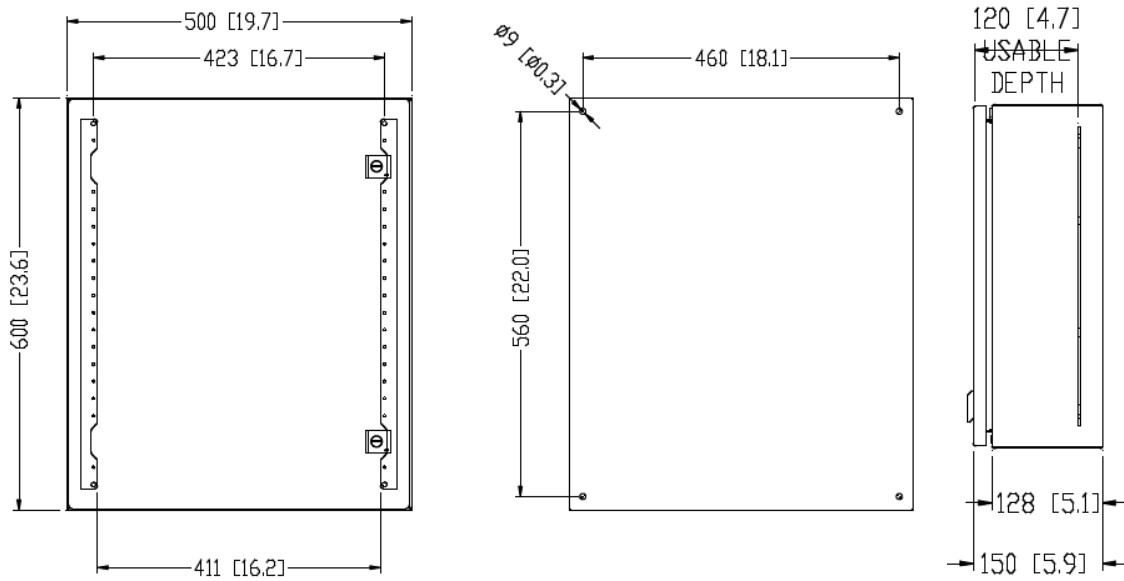


Figure 3 Enclosure Dimensions: Outside, Mounting, Depth

## 7. 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.**

## 8. 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)

## 9. Approvals

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

**([Job Title])**

This document requires the following approvals

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

**([Job Title])**

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**([Job Title])**

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