

NOVA Energy & Automation



Product Specifications

4 Breaker Main Disconnect Panel with Undervoltage Trip

Model NEAS-44125-G-UVR-A

A 3D perspective rendering of a blue electrical panel, likely the 4 Breaker Main Disconnect Panel mentioned in the title. The panel is shown from a low angle, highlighting its depth and the various compartments or sections it contains. The color is a dark, metallic blue. The rendering is set against a white background with soft shadows.

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Product Description

1. Standard Applications

The Nova 4 Breaker Main Disconnect Panel is an integrated Main Circuit Breaker Panel with Undervoltage trip specifically designed to meet the requirements of 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.

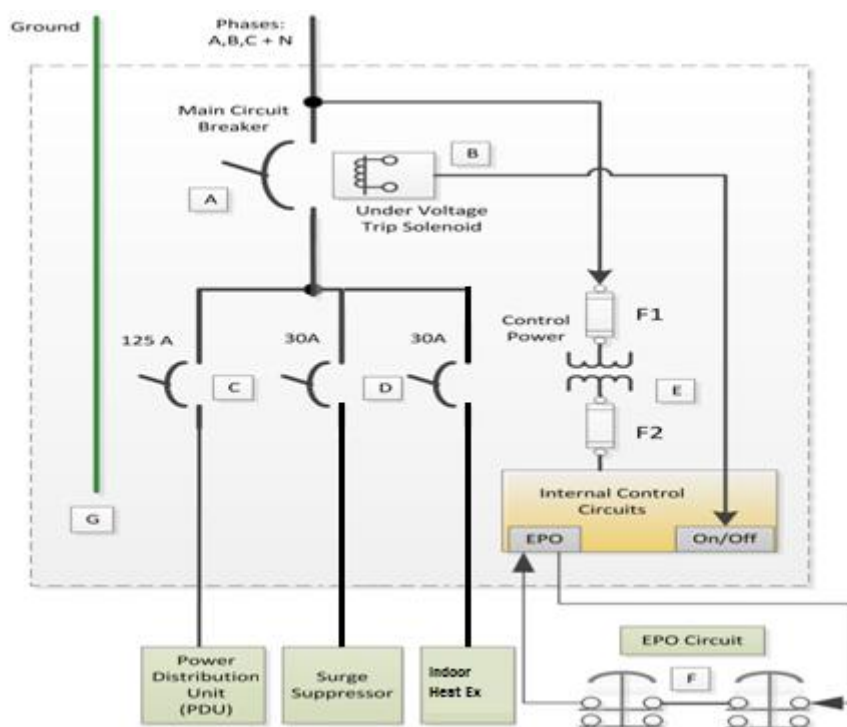


Figure 1 Main Disconnect Panel One Line

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 with indoor heat exchange cabinet and several other related installations

Please select item **NEAS44125G-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-44125-G-UVR-A Equal to item P2E18FD63B125ATS with related components A, B, C, D, E, F, G, H: 120VAC U.V. trip, ground bus bar, 125A 3P feeder (to PDC), 30A 3P feeder (to surge suppressor), 30A 3P feeder (to heat exchanger), 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.



Figure 2 Main Disconnect Panel Front View

5. Specifications

Model	NEAS-44125-G-UVR-A
Application	Main Disconnect Panel for Medical Imaging Equipment
Input Voltage	480/277 VAC, 3 Phase 5-wire: 3 Phase Conductors + Neutral + Ground
Input Current	AC input (maximum): 125 A (other Amp ratings are available)
Output Voltage	480/277 VAC, 3 Phase (follows input voltage)
Output over current protection	125A 3P Main 125A 3P for PDC 30A 3P for surge suppressor 30A 3P for indoor heat exchanger
Control Voltage	Internally derived 120VAC 250VA for Undervoltage Trip Circuit

Emergency Power Off Controls	120VAC Undervoltage release (N.O)
Operator Controls	Compatible with 120 VAC and Low Voltage EPO operator devices
Compatible Estop Buttons	Normally closed contacts Siemens CT: 2 ESTOPS- 2 N.C. contacts
Door Mounted Devices	Direct -Mount Circuit Breaker Operating Mechanism with OSHA Lockout
Grounding	Isolated and non isolated ground bar
Short Circuit Current Protection	25 kAIC
Instantaneous Trip Settings	Field adjustable from 1 - 10x of over current rating
Approvals	UL/cUL



Figure 3 Main Disconnect Panel Interior View

6. 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.

7. Product Service and Technical Assistance

Nova Automation, LLC
2722 N. Avondale Blvd
Milwaukee WI 53210
PH# 262-309-2950

Website: www.NovaAutomation.net

8. Approvals

Prepared By _____

([Job Title])

This document requires the following approvals

Approved By _____

([Job Title])

([Job Title])

Approval Date _____