

NOVA Energy & Automation



Product Specifications

480 VAC, 70A Main Power Distribution Panel

Model NEAS-43070-ST

29 July 2012

Product Description

1. Standard Applications

The Nova NEAS-43070-ST 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 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.

2. System Compatibility

The Nova NEAS-43070-ST is compatible with the following medical imaging equipment:

Elekta Inc. Medical Systems: Synergy with XVI and several other related projects

Toshiba Medical Systems: Radrex-*i* and several other related projects

3. Identification

Elekta Inc. Medical Systems: The proper distribution panel can be identified in the Elekta site planning drawings:

Electrical Planning Sheet E2 → Electrical Legend item symbol SD

Electrical Planning sheet E1 → Linear Accelerator or with PCDU Power Supply Configuration →
Primary circuit breaker → 3 Pole, 70Amps 480VAC; Application Block Diagram item SD (ED included)

Toshiba Medical Systems: The proper distribution panel can be identified in the Toshiba site planning drawings:

Electrical Planning Sheet E1 → Electrical Legend item symbol CB

Electrical Planning sheet E2 → Circuit Breaker/ "PDU" Wiring Diagram → Primary circuit breaker: 3 Pole, 70 Amps 480VAC; with Shunt Trip and Emergency Power Off



Figure 1 Nova 70A Main Disconnect Panel

4. Features/ Benefits

Features

- UL and cUL listed to conform to NEC
- 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 22kAIC
- Single point main disconnect and termination point
- American Disabilities Act (ADA) approved through the door disconnect handle provides one hand ON/OFF operation. The ADA handle makes turning the imaging equipment on and off during emergencies or power failures easy for technicians and nursing staff.
- 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 Overload protection is provided by heat sensitive bimetals.
- Short Circuit protection is accomplished using a precise magnetic coil.
- Factory wired to match medical imaging equipment and tested
- Manufactured in the USA

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 Elekta equipment.
- Easy to view LED indicator lights for System ON
- 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

5. Specifications

Model	NEAS-43070-ST	
Application	70 Amp Main Disconnect with Shunt Trip and Internal Controls	
Input Voltage	480VAC (please specify if other voltage is required)	
Output Voltage	480VAC (please specify if other voltage is required)	
Control Voltage	Internally derived 24VAC for controls	
Emergency Power Off Controls	24 VAC Shunt Trip	
Operator Controls	Compatible with 24 VAC and Low Voltage EPO operator devices	
Compatible Estop Buttons	Normally Open Contacts Elekta Linear Accelerator: 6 Estops-2 NO Contacts	Normally Open Contacts Toshiba X-ray: 2 Estops-2 NO Contacts
Overload Current Protection	Factory set to 70A, (please specify if other current rating is required)	
Short Circuit Current Protection	22 KAIC	
Instantaneous Trip Settings	Field adjustable	
Approvals	UL/cUL	

6. Weights and Dimensions

Mounting	Main disconnect is provided in a steel enclosure suitable for surface or semi flush installations.
Dimensions	Height: 19.68" (500mm) Width: 15.77" (400mm) Depth: 5.9" (150mm)
Weight	39 lbs. (17.69 kg)
Mounting	Rear wall mounting holes (4). Spaced 0.79" (20mm) from enclosure edge. Optional mounting brackets are available
Enclosure	16 Gauge Carbon Steel, all rounded corners 1 gland plate in the enclosure base.
Enclosure Sealing	Foamed-in place polyurethane door gasket
Finish	Dip coat primed, powder coated in textured RAL 7035
Latching Mechanism	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.
Interior Panel	Zinc-Plated subpanel
Protection Category	IP 66 to EN60 529/09:2000, complies with NEMA 4 Enclosure Approvals: UL, CSA, TUV, GL, Lloyds, VDE, Bureau Veritas

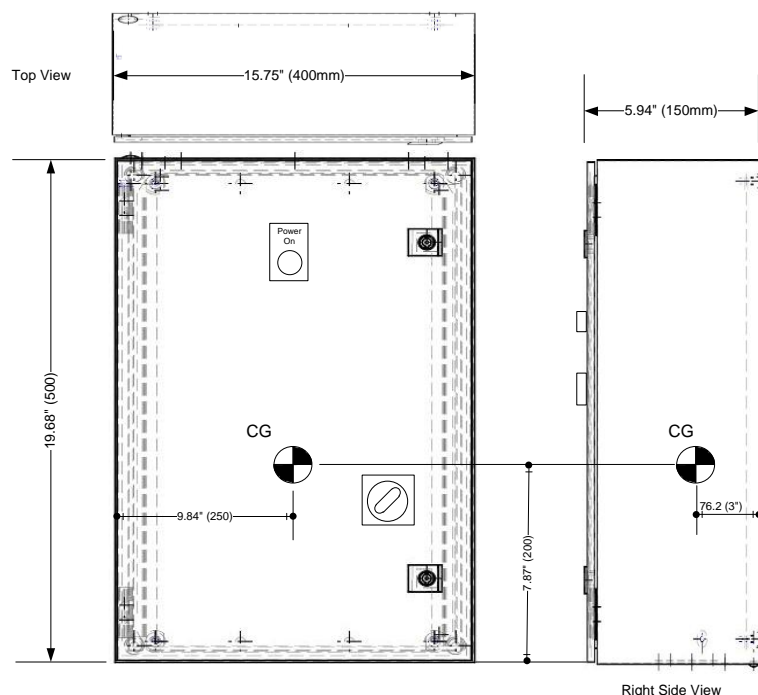


Figure 2 Enclosure Dimensions: Outside, Mounting, Depth

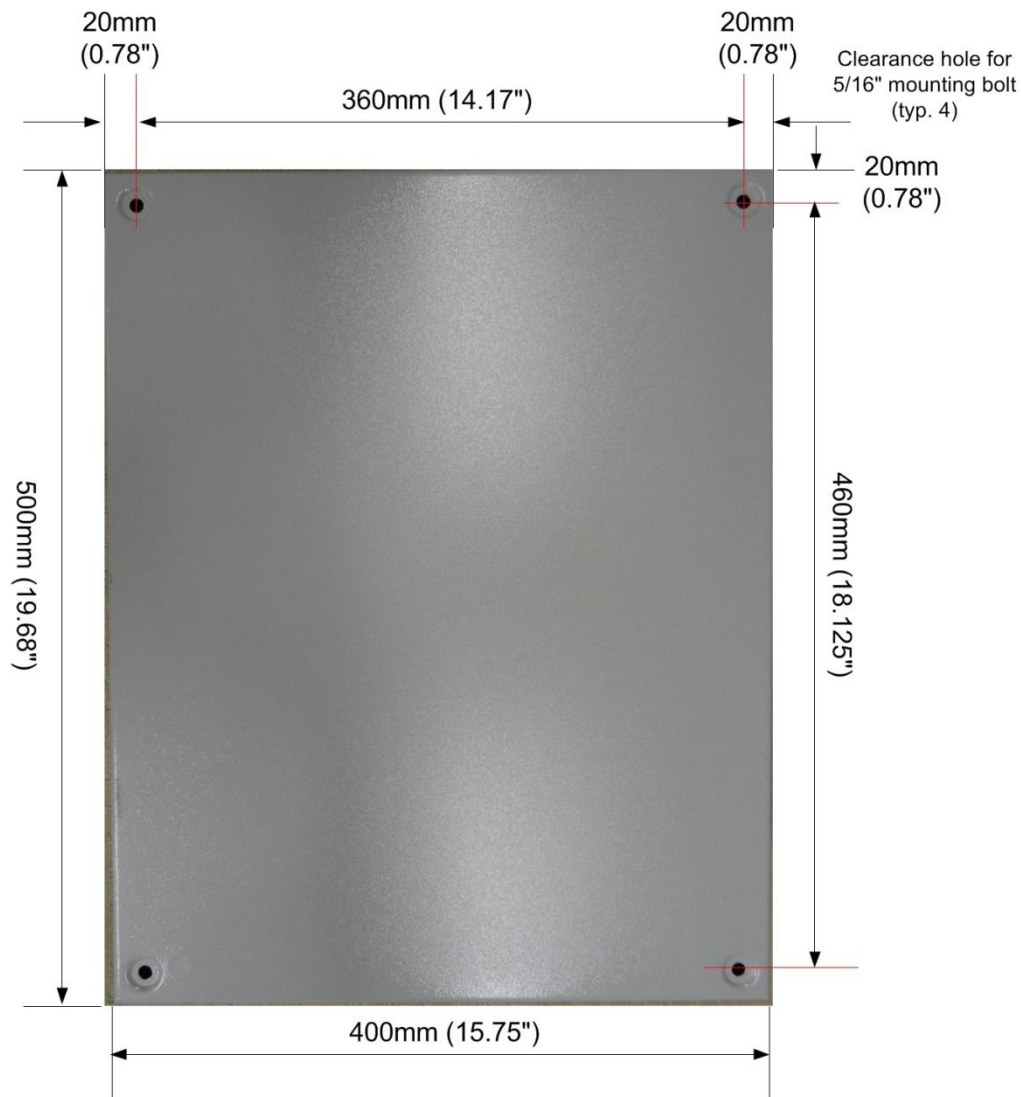


Figure 3 Enclosure Mounting Holes on back

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
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Milwaukee WI 53210
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Website: www.Novaautomation.net

9. Approvals

Prepared By _____
([Job Title])

This document requires the following approvals

Approved By _____
([Job Title])

([Job Title])

Approval Date _____