

# MEPNN Supplier Scouting Opportunity Synopsis

## Section 1: General Information

Scouting Number	2024-366
Item to be Scouted	Panelboards (three different types)
Days to be scouted	30
Response Due By	12/20/2024
Description	United States manufacturers of BABAA-compliant Panelboards for use in an addition and remodel of an existing single story Critical Access Hospital located in Iowa.
Notify Requester Immediately	No
State item to be used in	Iowa

## Section 2: Technical Information

Type of supplier being sought	Manufacturer
Reason	BABA
Describe the manufacturing processes (elaborate to provide as much detail as possible)	Electronic Assembly.  Domestic components in each of the BABAA compliant manufactured products must exceed 55% of the total component cost and be assembled in the United States.
Provide dimensions / size / tolerances / performance specifications for the item	Panelboards (three different types).  Section 260526 - Grounding and Bonding for Electrical System Section 260553 - Identification for Electrical Systems Section 264313 - Surge Protective Device  See attached construction project technical specification.
List required materials needed to make the product, including materials of product components	See attached construction project technical specification.
Are there applicable certification requirements?	Yes
Details	Build America, Buy America Act (BABAA) compliant.  Must be able to submit BABAA manufactured product self-certification manufactured product letter for each product that details a compliant product.
Are there applicable regulations?	Yes
Details	See attached construction project technical specification.
Are there any other standards, requirements, etc.?	No
NAICS 1	
NAICS 2	

Additional Technical Comments	<p>See attached construction project technical specification.</p> <p>Manufacturers shall specialize and have experience in the manufacturing of the designated components.</p> <p>It is also industry practice (and highly beneficial) to source all of this equipment from a single BABAA compliant manufacturer, to ensure warranty coverage and proper operation between all the various parts. This would include the ability of the manufacturer to make smaller voltage panelboards not included in this request.</p>
-------------------------------	---

## Section 4: Business Information

Estimated potential business volume	Eight total (three different types)
Estimated target price / unit cost information (if unavailable explain)	Best available, as this is related to BABA, acceptable pricing is to be determined in negotiation.
When is it needed by?	2025
Describe packaging requirements	Best available to be delivered undamaged. Specific requirements to be determined in negotiation.
Where will this item be shipped?	Iowa

## Additional Comments

Is there other information you would like to include?	<p>Nationwide Search Provide written documentation in response to the Supplier Scouting request of being a current Build America Buy America Act compliant electrical equipment manufacturer with experience manufacturing the system components meeting the product performance requirements. Information on BABAA compliance requirements can be found at Made in America Office link <a href="https://www.madeinamerica.gov/">https://www.madeinamerica.gov/</a>.</p> <p>Agency – USDA  Submitted by Chickasaw Business Solutions  POC – Phil Plyler  PPlyler@ArkansasEDC.com</p>
---	--

# CF024 IA HOSPITAL PANELBOARD PRODUCT DESCRIPTIONS

## 3 Types (2 each NF/ 5 each NQ/1 each I- Line) 8 Total Quantity

Seq	Qty	Product Description
1	1	<p><b>Designation :</b> PANEL PHN2  <b>Product Details :</b>            1 - NF MB Panel (INTERIOR)-NF Panelboard            Consisting of            480Y/277V 3Ph 4W 60Hz SCCR: 22kA            Fully Rated</p> <p>Single Main: 400A/3P LA Circuit Breaker Incoming Conductors: 1 - #1 - 600,(2)#1 - 250 kcmil            Bus: 400A Rated Copper: Silver/Tin Plated CU Ground Bar            42 Circuit Interior            Type 1,Box: 68H x 20W x 5.75D Incoming: Bottom Trim: Surface - Hinged            Box Cat No: MH68BE Front Cat No: NC68VSHR Ref. Drawing: PBA554HR            Feeders:            1 - 125A/3P EGB            21 - 20A/1P EGB            15 - 20A/1P EGB Prepared Space 1 - 20A/3P EGB            Optional Features:            Standard Panel (Box Ahead),Blank Endwalls,Copper Solid Neutral,Copper Ground Bar            Branch User Placement</p> <p>1 - MH68BE-PANELBOARD ENCLOSURE/BOX TYPE 1 68H 20W</p> <p>1 - NC68VSHR-PNLBD COVER/TRIM NOQD T-1 68H 26W</p>

Seq #	Qty	Product Description
2	1	<p><b>Designation :</b> PANEL PHN3  <b>Product Details :</b>            1 - NF ML Panel (INTERIOR)-NF Panelboard Consisting of            480Y/277V 3Ph 4W 60Hz SCCR: 10kA            Fully Rated            Main Lug Only: 225A            Incoming Conductors: 1 - #6 - 350 kcmil Bus: 250A Rated Copper: Silver/Tin Plated CU Ground Bar            42 Circuit Interior            Type 1,Box: 44H x 20W x 5.75D Incoming: Bottom Trim: Surface - Hinged            Box Cat No: MH44BE Front Cat No: NC44SHR Ref. Drawing: PBA550HR            Feeders:            1 - 20A/3P EDB            22 - 20A/1P EGB            14 - 20A/1P EDB Prepared Space 1 - 125A/3P EDB            Optional Features:            Standard Panel (Box Ahead),Blank Endwalls,Copper Solid Neutral,Copper Ground Bar            1 - MH44BE-PANELBOARD ENCLOSURE/BOX TYPE 1 44H 20W</p> <p>1 - NC44SHR-PNLBD COVER/TRIM NF T-1 S 44H 20W</p>

Seq #	Qty	Product Description
3	1	<p><b>Designation :</b> PANEL PLN9  <b>Product Details :</b>            1 - NQ MB Panel (INTERIOR)-NQ Panelboard Consisting of            208Y/120V 3Ph 4W 60Hz SCCR: 10kA            Fully Rated</p> <p>Single Main: 225A/3P QB Circuit Breaker            Incoming Conductors: 1 - #4 - 300 kcmil            Bus: 225A Rated Copper: Silver/Tin Plated            CU Ground Bar            84 Circuit Interior            Type 1,Box: 62H x 20W x 5.75D            Incoming: Bottom Trim: Surface - Hinged            Box Cat No: MH62BE Front Cat No: NC62SHR            Ref. Drawing: PBA707HR            Feeders:            83 - 20A/1P QOB            1 - 20A/1P QOB-GFI            Optional Features:            Standard Panel (Box Ahead),Blank            Endwalls,Copper Solid Neutral,Copper            Ground Bar</p> <p>1 - MH62BE-PANELBOARD ENCLOSURE/BOX TYPE 1 62H 20W</p> <p>1 - NC62SHR-PNLBD COVER/TRIM NF T-1 S 62H 20W</p>

**Seq # Qty Product Description** I

4 1 **Designation :** PANEL PLN10  
**Product Details :**  
1 - NQ MB Panel (INTERIOR)-NQ Panelboard Consisting of  
208Y/120V 3Ph 4W 60Hz SCCR: 10kA  
Fully Rated  
Single Main: 225A/3P QB Circuit Breaker Incoming Conductors: 1 - #4 - 300 kcmil Bus: 225A Rated Copper:  
Silver/Tin Plated CU Ground Bar  
84 Circuit Interior  
Type 1,Box: 62H x 20W x 5.75D Incoming: Bottom Trim: Surface - Hinged  
Box Cat No: MH62BE Front Cat No: NC62SHR Ref. Drawing: PBA707HR  
Feeders:  
64 - 20A/1P QOB  
13 - 20A/1P QOB Prepared Space 7 - 20A/1P QOB-GFI  
Optional Features:  
Standard Panel (Box Ahead),Blank Endwalls,Copper Solid Neutral,Copper Ground Bar  
1 - MH62BE-PANELBOARD ENCLOSURE/BOX TYPE 1 62H 20W  
  
1 - NC62SHR-PNLBD COVER/TRIM NF T-1 S 62H 20W

**Seq # Qty Product Description**

5 1 **Designation :** PANEL D  
**Product Details :**  
1 - NQ MB Panel (INTERIOR)-NQ Panelboard Consisting of  
208Y/120V 3Ph 4W 60Hz SCCR: 10kA  
Fully Rated  
Single Main: 125A/3P QB Circuit Breaker Incoming Conductors: 1 - #4 - 300 kcmil Bus: 225A Rated Copper: Silver/Tin Plated CU  
Ground Bar  
54 Circuit Interior  
Type 1,Box: 50H x 20W x 5.75D Incoming: Bottom Trim: Surface - Hinged  
Box Cat No: MH50BE Front Cat No: NC50SHR Ref. Drawing: PBA707HR  
Feeders:  
2 - 15A/3P QOB  
1 - 30A/2P QOB  
36 - 20A/1P QOB  
10 - 20A/1P QOB Prepared Space  
Optional Features:  
Standard Panel (Box Ahead),Blank  
Endwalls,Copper Solid Neutral,Copper  
Ground Bar  
1 - MH50BE-PANELBOARD ENCLOSURE/BOX TYPE 1 50H 20W  
  
1 - NC50SHR-PANELBOARD COVER/TRIM NF TYPE 1 S HR 50H

**Seq # Qty Product Description**

6 1 **Designation :** PANEL PLC5  
**Product Details :**  
1 - NQ MB Panel (INTERIOR)-NQ Panelboard Consisting of  
208Y/120V 3Ph 4W 60Hz SCCR: 10kA  
Fully Rated  
Single Main: 125A/3P QB Circuit Breaker Incoming Conductors: 1 - #4 - 300 kcmil Bus: 225A Rated Copper: Silver/Tin  
Plated CU Ground Bar  
84 Circuit Interior  
Type 1,Box: 62H x 20W x 5.75D Incoming: Bottom Trim: Surface - Hinged  
Box Cat No: MH62 Front Cat No: NC62SHR Ref. Drawing: PBA707HR  
Feeders:  
1 - 20A/2P QOB  
62 - 20A/1P QOB  
18 - 20A/1P QOB Prepared Space 1 - 25A/1P QOB  
1 - 15A/1P QOB  
Optional Features:  
Standard Panel (Box Ahead),Copper Solid Neutral,Copper Ground Bar  
1 - MH62-PANELBOARD ENCLOSURE/BOX TYPE 1 62H 20W  
  
1 - NC62SHR-PNLBD COVER/TRIM NF T-1 S 62H 20W

Seq #	Qty	Product Description
7	1	<p><b>Designation :</b> PANEL PLL2</p> <p><b>Product Details :</b></p> <p>1 - NQ MB Panel (INTERIOR)-NQ Panelboard Consisting of 208Y/120V 3Ph 4W 60Hz SCCR: 10kA Fully Rated Single Main: 50A/3P HD Circuit Breaker Incoming Conductors: 1 - #14 - 3/0 AWG Bus: 100A Rated Copper: Silver/Tin Plated CU Ground Bar 30 Circuit Interior Type 1,Box: 44H x 20W x 5.75D Incoming: Bottom Trim: Surface - Hinged Box Cat No: MH44BE Front Cat No: NC44SHR Ref. Drawing: PBA705HR Feeders: 1 - 30A/3P QOB 16 - 20A/1P QOB 11 - 20A/1P QOB Prepared Space Optional Features: Standard Panel (Box Ahead),Blank Endwalls,Copper Solid Neutral,Copper Ground Bar 1 - MH44BE-PANELBOARD ENCLOSURE/BOX TYPE 1 44H 20W</p> <p>1 - NC44SHR-PNLBD COVER/TRIM NF T-1 S 44H 20W</p>

Seq #	Qty	Product Description
8	1	<p><b>Designation :</b> PANEL DH01</p> <p><b>Product Details :</b></p> <p>1 - I-Line SPD Panel (INTERIOR)-I-Line Panelboard Consisting of 480Y/277V 3Ph 4W 60Hz SCCR: 42kA Fully Rated SPD 240kA per Phase/120kA per Mode SPD line to grd protect w/SPD Surge Counter w/SPD Dry Contacts Single Main: 400AS/400AT/3P LJ Circuit Breaker 80% Rated Main Trip Function: LSI Main Trip Unit: Standard Trip Unit Incoming Conductors: 1 - (2) 2/0 - 500 kcmil Bus: 400A Rated Copper: Tin Plated CU Ground Bar 72" of Mounting Inches Type 1,Box: 91H x 32W x 9.5D Incoming: Bottom Trim: Surface - Hinged Box Cat No: HC3291DB9 Front Cat No: HC3291TSHR Ref. Drawing: PBA471HR Type: HCJ Feeders: 1 - 35A/3P BJ 3 - 45A/3P BJ 1 - 50A/3P BJ 1 - 20A/3P BJ 1 - 100A/3P BJ ST 1 - 125A/3P BJ ST 1 - 150A/3P HJ ST Optional Features: Standard Panel (Box Ahead),Copper Solid Neutral,Copper Ground Bar,Standard Mains and Feeders Mechanically Restrained 1 - HC3291DB9-PNLBD ENCLOSURE I-LINE 32W 91H 9D</p> <p>1 - HC3291TSHR-PNLBD COVER/TRIM ILINE T-1 S 32W91H HR</p>

## **SECTION 262416 PANELBOARDS**

### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. Distribution panelboards
- B. Branch circuit panelboards
- C. **RELATED SECTIONS**
- D. Specification Section 260526 - Grounding and Bonding for Electrical System
- E. Specification Section 260553 - Identification for Electrical Systems
- F. Specification Section 264313 - Surge Protective Device

#### **1.02 REFERENCES**

- A. NECA Standard of Installation (published by the National Electrical Contractors Association)
- B. NEMA AB1 - Molded Case Circuit Breakers
- C. NEMA ICS 2 - Industrial Control Devices, Controllers and Assemblies
- D. NEMA KS1 - Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum)
- E. NEMA PB 1 - Panelboards
- F. NEMA PB 1.1 - Instructions for Safe Installation, Operation and Maintenance of Panelboards Rated 600 Volts or Less
- G. NETA ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment (published by the International Electrical Testing Association)
- H. NFPA 70 - National Electrical Code

#### **1.03 SUBMITTALS**

- A. Shop Drawings: Indicate outline and support point dimensions, voltage, main bus ampacity, integrated short circuit ampere rating, circuit breaker and fusible switch arrangement and sizes.
- B. Submit manufacturer's installation instructions. Indicate application conditions and limitations of use stipulated by product testing agency specified under Regulatory Requirements. Include instructions for storage, handling, protection, examination, preparation, and installation of product.
- C. Record actual locations of panelboards and record actual circuiting arrangements in project record documents.
- D. Maintenance Data: Include spare parts listing; source and current prices of replacement parts and supplies; and recommended maintenance procedures and intervals.
- E. It is the electrical contractors and suppliers responsibility to confirm the appropriate size and quantity of circuit breakers in the submitted panelboards with the information shown on the plan sheets, including the panelboard schedule, and the mechanical contractor prior to releasing the panelboards for construction.

#### **1.04 QUALIFICATIONS**

- A. Manufacturer: Company specializing in manufacturing the products specified in this section with minimum three years experience.

#### **1.05 REGULATORY REQUIREMENTS**

- A. Conform to requirements of NFPA 70.
- B. Products: Listed and classified by Underwriters Laboratories, Inc. as suitable for the purpose specified and indicated.

## 1.06 RATINGS

- A. Definitions:
  - 1. Fully rated equipment shall be defined as equipment where all devices in that equipment shall carry a minimum of the AIC rating that is specified. The distribution panels, panelboards, and load centers for this project shall be fully rated unless otherwise specifically noted in the Drawings or Specifications.

## 1.07 MAINTENANCE MATERIALS

- A. Furnish two of each panelboard key.

## PART 2 PRODUCTS

### 2.01 DISTRIBUTION PANELBOARDS

- A. Manufacturers:
  - 1. Square D. I-Line
  - 2. Engineer approved equal.
- B. Description: NEMA PB1, circuit breaker type.
- C. Service Conditions:
  - 1. Temperature: 40 deg F.
  - 2. Altitude: 1000 feet.
- D. Panelboard Bus: Copper, ratings as indicated. Provide copper ground bus in each panelboard.
- E. Minimum Integrated Short Circuit Rating: See schedule on the drawings.
- F. Fusible Switch Assemblies: NEMA KS 1, quick-make, quick-break, load interrupter enclosed knife switch with externally operable handle. Provide interlock to prevent opening front cover with switch in ON position. Handle lockable in OFF position.
- G. Molded Case Circuit Breakers: NEMA AB 1, bolt-on type thermal magnetic trip circuit breakers with common trip handle for all poles, listed as type #SWD for lighting circuits, type #HACR for air conditioning equipment circuits, Class A ground fault interrupter circuit breakers where scheduled. Provide arc fault circuit breakers in all dwelling units as required by NEC Code. Do not use tandem circuit breakers. Handle ties to make multiple pole breakers are NOT permitted.
- H. Molded Case Circuit Breakers with Current Limiters: NEMA AB 1, circuit breakers with replaceable current limiting elements, in addition to integral thermal and instantaneous magnetic trip in each pole. Handle ties to make multiple pole breakers are NOT permitted.
- I. Current Limiting Molded Case Circuit Breakers: NEMA AB 1, circuit breakers with integral thermal and instantaneous magnetic trip in each pole, coordinated with automatically resetting current limiting elements in each pole. Interrupting rating 100,000 symmetrical amperes, let through current and energy level less than permitted for same size Class RK-5 fuse. Handle ties to make multiple pole breakers are NOT permitted.
- J. Circuit Breaker Accessories: Trip units and auxiliary switches as indicated.
- K. Enclosure: NEMA PB 1, type #1, cabinet box in accordance with code.
- L. Cabinet Front: Surface type, fastened with concealed trim clamps. Finish in manufacturer's standard gray enamel. Concealed hinge. Flush lock all keyed alike.
- M. Surge Protection Devices shall comply with Specification Section 26 4313 - Surge Protection Devices
- N. Provide space for four future 200 amps, 3-phase circuit breakers unless more space is noted on the drawings.
- O. If the system voltage is less than 150V and the equipment is neither grounded nor double insulated, a Class A GFCI with 4 to 6 mA trip current is required per the NEC. However, if the equipment is considered "specialty" or "special-purpose" and either grounded or double-insulated, a Class C GFCI with 20 mA trip level shall be acceptable.

## 2.02 BRANCH CIRCUIT PANELBOARDS

- A. Manufacturers:
  - 1. Square D. #NQ or NF
  - 2. Engineer approved equal.
- B. Description: NEMA PB1, circuit breaker type, lighting and appliance branch circuit panelboard.
- C. Panelboard Bus: Copper, ratings as indicated. Provide copper ground bus in each panelboard.
- D. Minimum Integrated Short Circuit Rating: See schedule on the drawings.
- E. Molded Case Circuit Breakers: NEMA AB 1, bolt-on type thermal magnetic trip circuit breakers with common trip handle for all poles, listed as type #SWD for lighting circuits, type #HACR for air conditioning equipment circuits, Class A ground fault interrupter circuit breakers where scheduled. Provide arc fault circuit breakers in all dwelling units as required by NEC Code. Do NOT use tandem circuit breakers. Handle ties to make multiple pole breakers are NOT permitted.
- F. Current Limiting Molded Case Circuit Breakers: NEMA AB 1, circuit breakers with integral thermal and instantaneous magnetic trip in each pole, coordinated with automatically resetting current limiting elements in each pole. Interrupting rating 100,000 symmetrical amperes, let through current and energy level less than permitted for same size Class RK-5 fuse. Handle ties to make multiple pole breakers are NOT permitted.
- G. Enclosure: NEMA PB 1, type #1.
- H. Cabinet box is to be 6" D x 20" W for 240 volt and less panelboards.
- I. Cabinet Front: Flush or surface cabinet front with concealed trim clamps, concealed hinge, metal directory frame, and flush lock all keyed alike. Finish in manufacturer's standard gray enamel.
- J. Door: Provide hinged door-in-door trim.
- K. Surge Protection Devices shall comply with Specification Section 26 4313.
- L. All panelboards 225 amp or less, are to have either intermediate supports on the bus bars to prevent deflection, or are required to have 800 amp/square inch bus bars if the bus bars are only supported at each end of the bus.
- M. Each section of multi-section panels shall have the same dimensions.
- N. If the system voltage is less than 150V and the equipment is neither grounded nor double insulated, a Class A GFCI with 4 to 6 mA trip current is required per the NEC. However, if the equipment is considered "specialty" or "special-purpose" and either grounded or double-insulated, a Class C GFCI with 20 mA trip level shall be acceptable.

## PART 3 EXECUTION

### 3.01 INSTALLATION

- A. Install panelboards in accordance with NEMA PB 1.1 and the NECA "Standard of Installation."
- B. Install panelboards plumb. Install recessed panelboards flush with wall finishes.
- C. Height is to be six feet (6') to top of the panelboard. Install panelboards taller than six feet (6') with bottom no more than four inch (4") above floor.
- D. Provide filler plates for unused spaces in panelboards.
- E. Provide typed circuit directory for each branch circuit panelboard. Use actual room numbers and not plan room numbers. Coordinate with owner. Revise directory to reflect circuiting changes required to balance phase loads. Typed circuit directories shall be completed in Microsoft Excel. The electrical contractor shall submit a CD with all directories included.
- F. Provide engraved plastic nameplates under the provisions of Specification Section 260553 - Identification for Electrical Systems.



- G. Provide spare conduits out of each recessed panelboard to an accessible location above ceiling and to the floor below. Minimum spare conduits: Five empty one inch (1") at each recessed panel location. Identify each as SPARE.
- H. Ground and bond the panelboard enclosure.
- I. Any panel field modifications and associated means and methods shall be approved by the Authority Having Jurisdiction and the equipment manufacturer. Any costs associated shall be included in the bid.
- J. It shall be the responsibility of the electrical contractor to verify all wire sizes with existing and new circuit breakers prior to ordering and installing so that specified wire will properly fit into the corresponding circuit breaker.
- K. Verify lug size of electrical equipment and mechanical equipment is properly sized to receive specified conductor size. Refer to one-line and the conduit/conductor chart for additional information.

### **3.02 FIELD QUALITY CONTROL**

- A. Inspect in accordance with NETA ATS.
- B. Perform inspections listed in NETA ATS.

### **3.03 ADJUSTING**

- A. Measure steady state load currents at each panelboard feeder; rearrange circuits in the panelboard to balance the phase loads to within 20% of each other. Maintain proper phasing for multi-wire branch circuits.

### **3.04 COORDINATION STUDY**

- A. Manufacturer shall provide all necessary circuit breaker coordination studies to determine required settings of their equipment.
- B. Contractor shall coordinate any breaker settings and adjust per the manufacturers recommended adjustable breaker settings.

**END OF SECTION 262416**