ltem No.	Qty.	Catalog Number / Details
001-00	1	MEDIUMVOLTAGEEQUIPMENT MEDIUM VOLTAGE EQUIPMENT PRICED BY PSEC
		Markings: FOR SQUARE D COMPANY USE ONLY
002-00	1	Designation: BRYAN FOODS - PSEC MEDIUM VOLTAGE MCC Motor Control Center > 1000 Volts
		4 Section (Unit Sequence) Line-up Consisting of the following: RS485 Modbus Comms Wired Out Free-Standing Lineup Configuration Front and Rear Access Indoor Gasketed Enclosure (NEMA 1A) Label Requirements: cULus (Std.) NEMA Standard/Design Ambient Air Temperature: >-30C(-22F) & <40C(104F) (Std.) No Known Existing Conduit or Concrete Pad
		Altitude: 0 - 3299 feet above sea level (Std)
		General Equipment Ratings
		For Proper System Loading Not To Exceed Main Bus Rating.
		General Structure Information
		1200A Tin Plated CU Main Bus (Std.) Exterior Color: ANSI #61, Light Gray (Std.) Line-up Indicating Light Type: LED (Std) Low Voltage Control Wiring THHN (Std.) Power Cable Lugs: Supplied By Customer (Std.) Relays: Communications Required Relays: Drawout Case Style Terminal Block and Lug Type: Two-Tier, Compression Box Unplated CU Ground Bus Fuse Brand: Square D Class R and Class E, DIN Factory Determined Shipping Splits (75" Max) Touch-up Paint included in carton pack
		The Auto-transformer will be shipped separately for horsepower's
		above 250HP. The installer will be responsible for the correct installation of the transformer at the job site. See IB46032-700-06B ""Field Installation" section for further instruction for the RVAT.
		Overall Dimensions:

Overall Dimensions:

Catalog Number / Details Qty.

Width: 206.50" 5245mm Height: 90.60" 2300mm

Depth: 37.25" 946mm (foot print) Approximate Weight: 12932 lbs 5878 kg

Special Features or TAG Items (per line-up)

If Special Features are included in this Bill of Material, they will NOT appear on the Front-Elev or One-line Drawing and may alter the final layout and dimensions.

Detailed Bill of Material

Controller Type Key for abbreviations: FVNR = Full Voltage Non-Reversing FVNR Latched = FV Non-Reversing Latched FVR = Full Voltage Reversing RVNR AT = RV Non-Reversing Autotransformer RVNR Reactor = RV Non-Reversing Reactor RVR AT = RV Reversing Autotransformer RVR Reactor = RV Reversing Reactor Sync = Synchronous Type Controller SS = Soft Start Type Controller

This MV Motor Control Lineup shall be depicted in the attached drawing and shall include the following:

SEQ # 1, RVNR AUTOTRANSFORMER 1250Hp

Induction Motor Application Preliminary User Data User Entered Horsepower: 01250 System Calculated Motor FLA: 169 System Calculated Motor LRA: 1064 User Entered LR Code: G (5.60-6.29) Motor Acceleration Time: 0-10 sec (Std.) Motor Service Factor: 1.15 Fuse Manufacturer: Ferraz Shawmut Sys. Calc. Class R Fuses, DIN 16R Contactor Cat. No. CBD225NB0MN Contactor Size: System Calculated 1 - RV AT Controller, 200A, Drawout 1 Basic Control Package: (1) Start Pushbutton, (1) Stop Pushbutton, (1)

- Red Run Pilot, (1) Green Off Pilot Light (Std)
- 1 GE/Multilin SR469 Motor Protection Relay 1 - Single Open Delta 3-Phase VT
- 1 = 0.30 KVA CPT (Std)
- 1 System Calculated 3-Phase 250/5 CT
- 1 Zero Sequence CT
- 1 3-Phase 150 KVAR PFCC (4160 V Max.)
- 2 250 kcmil Cables (per phase) Loadside
- 1 Contactor Open/Close Status Window

SEQ # 2, FVNR 800 Hp

Induction Motor Application Preliminary User Data

Item No.

Qty. Catalog Number / Details

User Entered Horsepower: 00800
System Calculated Motor FLA: 108
System Calculated Motor LRA: 681
User Entered LR Code: G (5.60-6.29)
Motor Acceleration Time: 0-10 sec (Std.)
Motor Service Factor: 1.00 (Std.)
Fuse Manufacturer: Ferraz Shawmut
Sys. Calc. Class R Fuses, DIN 9R
Contactor Cat. No. _ CBD225NB0MN
Contactor Size: System Calculated
1 - FVNR Controller, 200A, Drawout
1 - Basic Control Package: (1) Start
Pushbutton, (1) Stop Pushbutton, (1)
Red Run Pilot, (1) Green Off Pilot
Light (Std)

- 1 ... GE/Multilin SR469 Motor Protection Relay
- 1 0.30 KVA CPT (Std)
- 1 System Calculated 3-Phase 200/5 CT
- 1 *Zero Sequence CT
- 1 = 3-Phase 100 KVAR PFCC (4160 V Max.)
- 2 = 4/0 AWG Cables (per phase) Loadside

SEQ # 3, FVNR 800 Hp

Induction Motor Application Preliminary User Data User Entered Horsepower: 00800 System Calculated Motor FLA: 108 System Calculated Motor LRA: 681 User Entered LR Code: G (5.60-6.29) Motor Acceleration Time: 0-10 sec (Std.) Motor Service Factor: 1 00 (Std.) Fuse Manufacturer: Ferraz Shawmut Sys. Calc. Class R Fuses, DIN 9R Contactor Cat. No.: CBD225NB0MN Contactor Size: System Calculated 1 FVNR Controller, 200A, Drawout 1 - Basic Control Package: (1) Start Pushbutton, (1) Stop Pushbutton, (1) Red Run Pilot, (1) Green Off Pilot Light (Std) 1 GE/Multilin SR469 Motor Protection Relay 1 - 0.30 KVA CPT (Std) 1 - System Calculated 3-Phase 200/5 CT 1 - Zero Sequence CT

SEQ # 4, RVNR AUTOTRANSFORMER 1250Hp

1 - 3-Phase 100 KVAR PFCC (4160 V Max.) 2 - 4/0 AWG Cables (per phase) Loadside

Induction Motor Application
Preliminary User Data
User Entered Horsepower: 01250
System Calculated Motor FLA: 169
System Calculated Motor LRA: 1064
User Entered LR Code: G (5.60-6.29)
Motor Acceleration Time: 0-10 sec (Std.)
Motor Service Factor: 1.15
Fuse Manufacturer: Ferraz Shawmut
Sys. Calc. Class R Fuses, DIN 16R
Contactor Cat. No. _ CBD225NB0MN
Contactor Size: System Calculated
1 - RV AT Controller, 200A, Drawout

Item No.

Qty. Catalog Number / Details

- 1 ... Connection to New HVL/Visi-Vac on Right
- 1 Basic Control Package: (1) Start Pushbutton, (1) Stop Pushbutton, (1) Red Run Pilot, (1) Green Off Pilot Light (Std)
- 1 GE/Multilin SR469 Motor Protection Relay
- 1 Single Open Delta 3-Phase VT
- 1 0.30 KVA CPT (Std)
- 1 System Calculated 3-Phase 250/5 CT
- 1 "Zero Sequence CT
- 1 3-Phase 150 KVAR PFCC (4160 V Max.)
- 2 250 kcmil Cables (per phase) Loadside
- 1 Contactor Open/Close Status Window

003-00

METAL ENCLOSED SWITCHGEAR

METAL ENCLOSED SWITCHGEAR > 1000 VOLTS

GENERAL PRODUCT INFORMATION

PRODUCT TYPE: HVL 3 SECTION LINE-UP INDOOR (Type1) 2 - 38.00 DUAL MAIN SECTIONS

1 - 14.75 EXTERNAL TRANSITION

OVERALL DIMENSIONS: 90.75" 2305mm WIDE

90.00" 2286mm HIGH 54.50" 1384mm DEEP

APPROXIMATE WEIGHT: 2600 LBS 1182 KG

SWITCHGEAR RATINGS

SWITCHGEAR MAXIMUM VOLTAGE RATING: 4.76 KV MAIN BUS: 1200A TIN-PLATED COPPER **GROUND BUS: TIN-PLATED COPPER**

BIL: 60 KV

INTEGRATED SHORT CIRCUIT CURRENT RATINGS FOR SWITCHES WITH FUSES:

THE INTEGRATED SHORT CIRCUIT CURRENT RATINGS FOR SWITCHES WITH FUSES CAN BE FOUND IN THE INTEGRATED RATINGS TABLES. REFER TO THE CATALOG SECTIONS FOR EACH PRODUCT LINE.

NON-FUSED SWITCH RATINGS

MOMENTARY CURRENT: 40 KA ASYM (25 KA SYM) FAULT CLOSE CURRENT: 40KA ASYM (25KA SYM) SHORT TIME CURRENT 2 SEC: 25 KA SYM (40 KA ASYM)

SPECIFIC APPLICATION INFORMATION

NOMINAL SYSTEM VOLTAGE: 4160 VOLTS SYSTEM GROUNDING: 3 WIRE WYE **SOLIDLY GROUNDED** FREQUENCY: 60 HZ MAX AVAILABLE SHORT CKT CURRENT: 25KA SYM (40 KA ASYM) FRONT AND REAR ACCESS AMBIENT AIR TEMP: > -30C, <40 DEG C

No. Qty. Catalog Number / Details

STANDARD & OPTIONAL ITEMS COMMON TO LINEUP

EXTERIOR PAINT COLOR: ANSI 61 LIGHT GREY INSULATORS : GLASS POLYESTER HOT STICK WITH FUSE HANDLING TOOL TOUCH UP PAINT PROVIDED STANDARD ENCLOSURE HARDWARE APPLIES TO CATEGORY B APPLICATIONS WHERE THE GENERAL PUBLIC WILL NOT HAVE ACCESS TO THE SWITCHGEAR PADLOCK PROVISIONS FOR UP TO 3 PADLOCKS ON SWITCH HANDLE CASTING LABEL REQUIREMENTS: UL STANDARDS: ANSI **GASKET PANELS INDOOR** PROVISIONS ONLY FOR CABLE LUGS ARE PROVIDED PROVISIONS FOR LUGS ARE SUITABLE FOR COPPER OR ALUMINUM CABLES (UL LISTED)

IF UNKNOWN ANSWERS ARE LISTED BELOW IN THIS BILL OF MATERIAL ** DEFAULT ASSUMPTIONS WERE MADE.
THESE ASSUMPTIONS MAY ALTER THE FINAL PRICE, FINAL LAYOUT AND DIMENSIONS.

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THIS HVL METAL-ENCLOSED SWITCHGEAR SHALL BE DEPICTED IN THE ATTACHED DRAWINGS AND SHALL INCLUDE THE FOLLOWING:

SECTION # 1, EXTERNAL TRANSITION SECTION -

1 - Type1 LOADSIDE BUS XTION TO MOTORPACT MV MCC 14.75 " WIDE

SECTION # 2, DUAL MAIN SECTION
Main

1 * 4.76KV, 600A, 25KA HVL SWITCH Type1 MULTIPLE

600A CONTINUOUS & INTERRUPTING CURRENT

- 3 SQUARE D CURRENT LIMITING 5.5 KV 400E FUSES
- 1 KEY INTERLOCK SWITCH TO SWITCH
- 1 » PROVISIONS FOR 2 250 KCMIL COPPER OR ALUMINUM (UL LISTED) LUGS PER PHASE ON LINESIDE
- LINESIDE, BOTTOM CABLE ENTRY

SECTION # 3, DUAL MAIN SECTION Main

- 1 4.76KV, 600A, 25KA HVL SWITCH Type1 MULTIPLE
 - 600A CONTINUOUS & INTERRUPTING CURRENT
- 3 SQUARE D CURRENT LIMITING 5.5 KV 400E FUSES
- 1 KEY INTERLOCK SWITCH TO SWITCH
- 1 PROVISIONS FOR 2 250 KCMIL COPPER OR ALUMINUM (UL LISTED) LUGS PER PHASE ON

Item No.

Qty. Catalog Number / Details

LINESIDE - LINESIDE, BOTTOM CABLE ENTRY

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