PURCHASE ORDER

Columbia Pulp

P.O. NO. 17-0040
DATE: MARCH 17, 2018

164 East Main Street
Dayton, WA 99328
Phone 509-288-4892

VENDOR WESCO Distribution, Inc.
2025 E Trent Ave
Spokane, WA 99202
CONTACT: Mike Chilton
Phone: 509-456-7501
Email: mchilton@wescodist.com

SHIP TO Ralph Raymond
Columbia Pulp
1351 Highway 261
Starbuck, WA 99359
Phone: 253-468-8722

SHIPPING METHOD	SHIPPING TERMS	DELIVERY DATE
Truck	FOB Point of Shipment – Freight Prepaid and Added	As stated

QTY	ITEM #	DESCRIPTION	JOB	UNIT PRICE	LINE TOTAL
1		MCC-101 as per Vendor Quote - wooddj000_01081800_01_00_M00 dated 03/16/18		$32,266.75	$32,266.75
2		MCC-102 as per Vendor Proposal - wooddj000_01081800_01_00_M00 dated 03/16/18		$41,318.16	$41,318.16
3		MCC-301 as per Vendor Proposal - wooddj000_01081800_01_00_M00 dated 03/16/18		$58,885.71	$58,885.71
4		MCC-302 as per Vendor Proposal - wooddj000_01081800_01_00_M00 dated 03/16/18		$55,314.66	$55,314.66
5		MCC-310 as per Vendor Proposal - wooddj000_01081800_01_00_M00 dated 03/16/18		$42,208.66	$42,208.66
6		MCC-311 as per Vendor Proposal - wooddj000_01081800_01_00_M00 dated 03/16/18		$29,408.78	$29,408.78
7		MCC-312 as per Vendor Proposal - wooddj000_01081800_01_00_M00 dated 03/16/18		$55,304.68	$55,304.68
8		MCC-313 as per Vendor Proposal - wooddj000_01081800_01_00_M00 dated 03/16/18		$41,392.19	$41,392.19
9		Approval drawings as indicated in Vendor Proposal - wooddj000_01081800_01_00_M00 dated 03/16/18		$32,266.75	$32,266.75

		Attachments: • Allnorth Material Requisition 15NA0050-ES-027-1 • Siemens/WESCO Distribution Bid wooddj000_0108 1800_01_00_M00 dated 3-16-2018 • Master Supply Agreement – WESCO – Columbia Pulp Terms and Conditions of Sale, Nov 1, 2017 • Wesco offer letter – Starbuck Facility Pricing dated September 22, 2017			
This Purchase Oder is directed to: Siemens Industry, Inc. 7000 Siemens Road Wendell, NC 27591					
Terms of Delivery: The Plant is site at 1351 State Highway 261, Starbuck, WA. All deliveries are to be coordinated through Ralph Raymond, Pacific Civil and Infrastructure Project Manager (Phone: 253-468-8722, email: rraymond@paccivil.com) No deliveries will be accepted without the prior consent to delivery time and date from Ralph Raymond.					
Terms of Payment - Invoice 100% of total upon shipment. Payment within 30 days of invoice date.					
All Engineering Information must be sent to: Allnorth Consultants Ltd. Attention: Erin Branchi, Document Control Email: ebranchi@allnorth.com Ph: 250-753-7472 Note - Please quote project number 15NA0050 in the subject line of any e-mail submissions					
Columbia Pulp – WESCO Master Supply Agreement terms and conditions of sale apply to this purchase order. These terms and conditions supersede and replace all other terms and condition in other documents. The Lyons Ferry Straw Pulp Plant Project is sales tax exempt in the state of Washington. Columbia's Manufacturer's Sales and Use Tax Exemption Certificate is available upon request.					

SUBTOTAL	$356,099.59
SALES TAX	Non-Taxable
TOTAL	$356,099.59

1. Please send two copies of your invoice.
2. Enter this order in accordance with the prices, terms, delivery method, and specifications listed above.
3. Please notify us immediately if you are unable to ship as specified.
4. Send all correspondence to:
   Loren Monroe, Controller; and,
   Larry Tantalo, Project Manager
   Columbia Pulp, LLC
   164 E Main St
   Dayton, WA 99328

John Begley (Mar 17, 2018)

Authorized by *Date*

MATERIAL REQUISITION

Equipment:	Motor Control Centers
Client:	Columbia Pulp
Project Name:	Lyons Ferry Straw Processing Plant
Project Number:	15NA0050
Requisition Number:	15NA0050-ES-027-1
Date:	3/16/2018
Vendor:	Wesco Distribution
Contact:	Mike Chilton P: 509-456-7501 mchilton@wesco.com 2025 E Trent Ave, Spokane WA 99202

Requistion for:	☐ Quote ☑ Purchase ☐ Change Order
Total Cost:	$ 356,099.59
Shipping Terms	FOB Plant
3rd Party Inspection:	None
Attachments:	☐ Datasheets ☐ Specifications ☑ Drawings ☐ Scope of Work ☐ Sole Source Justification

Line	Qty	Description	Unit Price	Subtotal
1	1	MCC-101 as per Vendor Quote - wooddj000_01081800_01_00_M00 dated 03/16/18	$ 32,266.75	$ 32,266.75
2	1	MCC-102 as per Vendor Proposal - wooddj000_01081800_01_00_M00 dated 03/16/18	$ 41,318.16	$ 41,318.16
3	1	MCC-301 as per Vendor Proposal - wooddj000_01081800_01_00_M00 dated 03/16/18	$ 58,885.71	$ 58,885.71
4	1	MCC-302 as per Vendor Proposal - wooddj000_01081800_01_00_M00 dated 03/16/18	$ 55,314.66	$ 55,314.66
5	1	MCC-310 as per Vendor Proposal - wooddj000_01081800_01_00_M00 dated 03/16/18	$ 42,208.66	$ 42,208.66
6	1	MCC-311 as per Vendor Proposal - wooddj000_01081800_01_00_M00 dated 03/16/18	$ 29,408.78	$ 29,408.78
7	1	MCC-312 as per Vendor Proposal - wooddj000_01081800_01_00_M00 dated 03/16/18	$ 55,304.68	$ 55,304.68
8	1	MCC-313 as per Vendor Proposal - wooddj000_01081800_01_00_M00 dated 03/16/18	$ 41,392.19	$ 41,392.19
9	1	Approval drawings as indicated in Vendor Proposal - wooddj000_01081800_01_00_M00 dated 03/16/18		
			Total Cost:	$ 356,099.59

Approvals

Initiator:	Christopher Mathie, P. Eng	Date:	3/16/2018
ACL Approval:	Jaco Krüger, P.Eng	Date:	3/16/2018
	Billy Tan, P.Eng	Date:	3/16/2018
Client Approval:		Date:	

SIEMENS

Proposal

To: Allnorth

From: WESCO DISTRIBUTION, INC.

Attention: Chris Mathie

Tel. No.: 208-995-3241

REVISED MCC QUOTE PER YOUR REQUEST OF 3/15/18
MCC'S 101, 102, 301, 302, 310, 311, 312 AND 313.

Job Name: Lyons Ferry Plant
Quote Name: Lyons Ferry Plant MCC R3_ MCC-100 300 R4
Quote #: wooddj000_01081800_01_00_M00
Bid Date: 03/16/2018

Siemens Industry, Inc. (Company) agrees to sell to Purchaser and Purchaser agrees to purchase from the Company the goods described below. Written quotations are valid for 30 calendar days from price approval date unless otherwise stated in the quotation. Quotations are subject to change by Siemens Industry, Inc. at any time upon written notice to Purchaser. Quoted Lead times refer to the manufacturing cycles, in working days, at time of quotations and are subject to change.

Quote Notes:

- **Approval Drawings adds 4weeks to the lead times listed per MCC.**
- **When there was a conflict between the SLD and the Equipment list, the SLD took priority.**
- **All FCB units under 125AT were changed to High Density 6" tall units.**
- **MLO was changed to 3X 350mcm per phase lugs.**
- **MCC-302 20HP VFD in Section 03 was changed to 25HP VFD**

Line #:	Qty	Description
20000	**1**	**MCC-101--MCC**

MCC-101, TIASTAR, 20 (Front Only), Circuit Breaker, 480 3Ø3W Delta AC, 60 Hz, 42,000, 1A - Indoor gasketed, 800, Tin, Copper, I (Std. Unit Diagrams Only), Bd (Unit control tb).
Quoted Lead Time : 65 Working Days

1 - SECTION
- 1 - Encl. 20IN D Front Only 20IN W
- 1 - Type 1 Gasketing
- 1 - Ethernet Topology STAR
- 1 - 800A Tin Plated H. Bus Copper
- 1 - 42,000A Bus Bracing
- 1 - 600A Tin Plated V. Bus
- 1 - 300A Unplated Horizontal Ground Bus Copper
- 1 - Ground Lug, (1) 6-300Kcmil
- 1 - Master Nameplate

1 - 800A Main Lug Only.
- 1 - MLO 800A, Top

1 - METER UNIT.
- 1 - Meter Unit Base Price
- 1 - DIGITAL, POWER METER, PAC3200, M26

- 1 - PAC3200 Meter Compression Terminals
- 3 - CT For Local Meter 800:5
- 2 - PT For Local Meter Line Voltage 480

1 - FVNR, CB, SZ 1, 7.5HP.
- 1 - FVNR Size 1, CB 7.5 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

3 - 125AF 70AT HED4 FCB.
- 1 - High Density FCB, 100A Max, HED4 Trip Amperage 70

2 - 125AF 60AT HED4 FCB.
- 1 - High Density FCB, 100A Max, HED4 Trip Amperage 60

1 - 125AF 125AT HED4 FCB.
- 1 - FCB, 125A Max, HED4 Trip Amperage 125

4 - 125AF 45AT HED4 FCB.
- 1 - High Density FCB, 50A Max, HED4 Trip Amperage 45

3 - SECTION
- 1 - Encl. 20IN D Front Only 20IN W
- 1 - Type 1 Gasketing
- 1 - 800A Tin Plated H. Bus Copper
- 1 - 42,000A Bus Bracing
- 1 - 600A Tin Plated V. Bus
- 1 - 300A Unplated Horizontal Ground Bus Copper

2 - COMMUNICATION.
- 1 - Communication Unit
- 1 - Ethernet Switch SCALANCE XC216 16 Ports Managed With C-Plug
- 1 - Pull-Apart Control Terminals

2 - 125AF 15AT HED4 FCB.
- 1 - High Density FCB, 50A Max, HED4 Trip Amperage 15
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - POWER SUPPLY, PS1
  - 1 - Power Supply Input: 100-240VAC, 110-300VDC Output: 24 VDC/1.3 A, Class II

1 - FVNR, CB, SZ 3, 50HP.SPARE
- 1 - FVNR Size 3, CB 50 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red

1 - Legend = RUNNING
1 - Led Bulb

2 - 12 X 16 SPACE.
1 - Prepared Space Height 12

1 - FVNR, CB, SZ 2, 25HP.SPARE
1 - FVNR Size 2, CB 25 HP
1 - Simocode Pro V
1 - Current and Voltage Module
1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
1 - Software for configuration is not included, and should be entered as a separate line item
1 - SIMOCODE Communication PROFINET
1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
1 - Pull-Apart Control Terminals
1 - Pilot Light, RED, RUNNING, R
1 - Pilot Light, 30mm Red
1 - Legend = RUNNING
1 - Led Bulb

3 - FVNR, CB, SZ 4, 40HP.
1 - FVNR Size 4, CB 40 HP
1 - Simocode Pro V
1 - Current and Voltage Module
1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
1 - Software for configuration is not included, and should be entered as a separate line item
1 - SIMOCODE Communication PROFINET
1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
1 - Pull-Apart Control Terminals
1 - Pilot Light, RED, RUNNING, R
1 - Pilot Light, 30mm Red
1 - Legend = RUNNING
1 - Led Bulb

1 - 6 X 16 SPACE.
1 - Prepared Space Height 6

1 - FVNR, CB, SZ 1, 10HP.SPARE
1 - FVNR Size 1, CB 10 HP
1 - Simocode Pro V
1 - Current and Voltage Module
1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
1 - Software for configuration is not included, and should be entered as a separate line item
1 - SIMOCODE Communication PROFINET
1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
1 - Pull-Apart Control Terminals
1 - Pilot Light, RED, RUNNING, R
1 - Pilot Light, 30mm Red
1 - Legend = RUNNING
1 - Led Bulb

Net Price **$32,266.75**

21000 **1** **MCC-102--MCC**

MCC-102, TIASTAR, 20 (Front Only), Circuit Breaker, 480 3Ø3W Delta AC, 60 Hz, 42,000, 1A - Indoor gasketed, 800, Tin, Copper, I (Std. Unit Diagrams Only), Bd (Unit control tb).

SIEMENS

Proposal

Quoted Lead Time : 65 Working Days

- 1 - SECTION
  - 1 - Encl. 20IN D Front Only 20IN W
  - 1 - Type 1 Gasketing
  - 1 - Ethernet Topology STAR
  - 1 - 800A Tin Plated H. Bus Copper
  - 1 - 42,000A Bus Bracing
  - 1 - 600A Tin Plated V. Bus
  - 1 - 300A Unplated Horizontal Ground Bus Copper
  - 1 - Ground Lug, (1) 6-300Kcmil
  - 1 - Master Nameplate
- 1 - 800A Main Lug Only.
  - 1 - MLO 800A, Top
- 1 - METER UNIT.
  - 1 - Meter Unit Base Price
  - 1 - DIGITAL, POWER METER, PAC3200, M26
    - 1 - PAC3200 Meter Compression Terminals
    - 3 - CT For Local Meter 800:5
    - 2 - PT For Local Meter Line Voltage 480
- 7 - FVNR, CB, SZ 1, 10HP.
  - 1 - FVNR Size 1, CB 10 HP
  - 1 - Simocode Pro V
  - 1 - Current and Voltage Module
  - 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
  - 1 - Software for configuration is not included, and should be entered as a separate line item
  - 1 - SIMOCODE Communication PROFINET
  - 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
  - 1 - Pull-Apart Control Terminals
  - 1 - Pilot Light, RED, RUNNING, R
    - 1 - Pilot Light, 30mm Red
    - 1 - Legend = RUNNING
    - 1 - Led Bulb
- 2 - FVNR, CB, SZ 1, 1HP.
  - 1 - FVNR Size 1, CB 1 HP
  - 1 - Simocode Pro V
  - 1 - Current and Voltage Module
  - 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
  - 1 - Software for configuration is not included, and should be entered as a separate line item
  - 1 - SIMOCODE Communication PROFINET
  - 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
  - 1 - Pull-Apart Control Terminals
  - 1 - Pilot Light, RED, RUNNING, R
    - 1 - Pilot Light, 30mm Red
    - 1 - Legend = RUNNING
    - 1 - Led Bulb
- 2 - 6 X 16 SPACE.
  - 1 - Prepared Space Height 6
- 4 - SECTION
  - 1 - Encl. 20IN D Front Only 20IN W
  - 1 - Type 1 Gasketing
  - 1 - 800A Tin Plated H. Bus Copper
  - 1 - 42,000A Bus Bracing

- 1 - 600A Tin Plated V. Bus
- 1 - 300A Unplated Horizontal Ground Bus Copper

1 - COMMUNICATION.
- 1 - Communication Unit
- 1 - Ethernet Switch SCALANCE XC216 16 Ports Managed With C-Plug
- 1 - Pull-Apart Control Terminals

2 - 125AF 15AT HED4 FCB.
- 1 - High Density FCB, 50A Max, HED4 Trip Amperage 15
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - POWER SUPPLY, PS1
  - 1 - Power Supply Input: 100-240VAC, 110-300VDC Output: 24 VDC/1.3 A, Class II

1 - COMMUNICATION.
- 1 - Communication Unit
- 1 - Ethernet Switch SCALANCE XC208 8 Ports Managed With C-Plug
- 1 - Pull-Apart Control Terminals

3 - FVNR, CB, SZ 2, 15HP.
- 1 - FVNR Size 2, CB 15 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - FVNR, CB, SZ 2, 25HP.
- 1 - FVNR Size 2, CB 25 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

3 - 125AF 60AT HED4 FCB.
- 1 - High Density FCB, 100A Max, HED4 Trip Amperage 60

4 - 125AF 70AT HED4 FCB.
- 1 - High Density FCB, 100A Max, HED4 Trip Amperage 70

1 - FVNR, CB, SZ 1, 7.5HP.
- 1 - FVNR Size 1, CB 7.5 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a

separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - FVNR, CB, SZ 2, 20HP.
- 1 - FVNR Size 2, CB 20 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - FVNR, CB, SZ 4, 100HP.SPARE
- 1 - FVNR Size 4, CB 100 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - 125AF 25AT HED4 FCB.
- 1 - High Density FCB, 50A Max, HED4 Trip Amperage 25

1 - 30 X 16 SPACE.
- 1 - Prepared Space Height 30

Net Price **$41,318.16**

22000 **1** **MCC-301--MCC**

MCC-301, TIASTAR, 20 (Front Only), Circuit Breaker, 480 3Ø3W Delta AC, 60 Hz, 42,000, 1A - Indoor gasketed, 800, Tin, Copper, I (Std. Unit Diagrams Only), Bd (Unit control tb).
Quoted Lead Time : 65 Working Days

1 - SECTION
- 1 - Encl. 20IN D Front Only 20IN W
- 1 - Type 1 Gasketing
- 1 - Ethernet Topology STAR
- 1 - 800A Tin Plated H. Bus Copper
- 1 - 42,000A Bus Bracing
- 1 - 600A Tin Plated V. Bus

- 1 - 300A Unplated Horizontal Ground Bus Copper
- 1 - Ground Lug, (1) 6-300Kcmil
- 1 - Master Nameplate

1 - 800A Main Lug Only.
- 1 - MLO 800A, Top

1 - METER UNIT.
- 1 - Meter Unit Base Price
- 1 - DIGITAL, POWER METER, PAC3200, M26
  - 1 - PAC3200 Meter Compression Terminals
  - 3 - CT For Local Meter 800:5
  - 2 - PT For Local Meter Line Voltage 480

1 - FVNR, CB, SZ 3, 40HP.
- 1 - FVNR Size 3, CB 40 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - FVNR, CB, SZ 2, 20HP.
- 1 - FVNR Size 2, CB 20 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - 125AF 25AT HED4 FCB.
- 1 - High Density FCB, 50A Max, HED4 Trip Amperage 25

2 - 6 X 16 SPACE.
- 1 - Prepared Space Height 6

1 - SECTION
- 1 - Encl. 20IN D Front Only 20IN W
- 1 - Type 1 Gasketing
- 1 - 800A Tin Plated H. Bus Copper
- 1 - 42,000A Bus Bracing
- 1 - 600A Tin Plated V. Bus
- 1 - 300A Unplated Horizontal Ground Bus Copper

1 - COMMUNICATION.
- 1 - Communication Unit
- 1 - Ethernet Switch SCALANCE XC216 16 Ports Managed With C-Plug
- 1 - Pull-Apart Control Terminals

Proposal

- 1 - 125AF 15AT HED4 FCB.
  - 1 - High Density FCB, 50A Max, HED4 Trip Amperage 15
  - 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
  - 1 - POWER SUPPLY, PS1
    - 1 - Power Supply Input: 100-240VAC, 110-300VDC Output: 24 VDC/1.3 A, Class II
- 2 - 125AF 45AT HED4 FCB.
  - 1 - High Density FCB, 50A Max, HED4 Trip Amperage 45
- 1 - FVNR, CB, SZ 4, 100HP.SPARE
  - 1 - FVNR Size 4, CB 100 HP
  - 1 - Simocode Pro V
  - 1 - Current and Voltage Module
  - 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
  - 1 - Software for configuration is not included, and should be entered as a separate line item
  - 1 - SIMOCODE Communication PROFINET
  - 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
  - 1 - Pull-Apart Control Terminals
  - 1 - Pilot Light, RED, RUNNING, R
    - 1 - Pilot Light, 30mm Red
    - 1 - Legend = RUNNING
    - 1 - Led Bulb
- 1 - FVNR, CB, SZ 1, 10HP.SPARE
  - 1 - FVNR Size 1, CB 10 HP
  - 1 - Simocode Pro V
  - 1 - Current and Voltage Module
  - 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
  - 1 - Software for configuration is not included, and should be entered as a separate line item
  - 1 - SIMOCODE Communication PROFINET
  - 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
  - 1 - Pull-Apart Control Terminals
  - 1 - Pilot Light, RED, RUNNING, R
    - 1 - Pilot Light, 30mm Red
    - 1 - Legend = RUNNING
    - 1 - Led Bulb
- 4 - SECTION
  - 1 - Encl. 20IN D Front Only 20IN W No V. Bus
  - 1 - Type 1 Gasketing
  - 1 - 800A Tin Plated H. Bus Copper
  - 1 - 42,000A Bus Bracing
  - 1 - 300A Unplated Horizontal Ground Bus Copper
- 2 - VFD, CB, 60HP, G120, , 90.0A, .
  - 1 - VFD, CB, G120, PM240, HO, 90A 60 HP
  - 1 - Control Unit CU230P-2 PN Communication PROFINET
  - 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
  - 1 - Pull-Apart Control Terminals
  - 1 - Intelligent Operator Panel
  - 1 - Operator Panel On VFD Unit Door
  - 1 - PROFINET Communication Wiring
  - 1 - Pilot Light, RED, RUNNING, R
    - 1 - Pilot Light, 30mm Red
    - 1 - Legend = RUNNING
    - 1 - Led Bulb

2 - VFD, CB, 75HP, G120, , 110A, .
- 1 - VFD, CB, G120, PM240, HO, 110A 75 HP
- 1 - Control Unit CU230P-2 PN Communication PROFINET
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Intelligent Operator Panel
- 1 - Operator Panel On VFD Unit Door
- 1 - PROFINET Communication Wiring
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

Net Price **$58,885.71**

23000 **1** **MCC-302--MCC**

MCC-302, TIASTAR, 20 (Front Only), Circuit Breaker, 480 3Ø3W Delta AC, 60 Hz, 42,000, 1A - Indoor gasketed, 800, Tin, Copper, I (Std. Unit Diagrams Only), Bd (Unit control tb).
Quoted Lead Time : 65 Working Days

1 - SECTION
- 1 - Encl. 20IN D Front Only 20IN W
- 1 - Type 1 Gasketing
- 1 - Ethernet Topology STAR
- 1 - 800A Tin Plated H. Bus Copper
- 1 - 42,000A Bus Bracing
- 1 - 600A Tin Plated V. Bus
- 1 - 300A Unplated Horizontal Ground Bus Copper
- 1 - Ground Lug, (1) 6-300Kcmil
- 1 - Master Nameplate

1 - 800A Main Lug Only.
- 1 - MLO 800A, Top

1 - METER UNIT.
- 1 - Meter Unit Base Price
- 1 - DIGITAL, POWER METER, PAC3200, M26
  - 1 - PAC3200 Meter Compression Terminals
  - 3 - CT For Local Meter 800:5
  - 2 - PT For Local Meter Line Voltage 480

3 - FVNR, CB, SZ 3, 50HP.
- 1 - FVNR Size 3, CB 50 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

3 - FVNR, CB, SZ 2, 25HP.SPARE
- 1 - FVNR Size 2, CB 25 HP
- 1 - Simocode Pro V

- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - FVNR, CB, SZ 1, 10HP.
- 1 - FVNR Size 1, CB 10 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

6 - SECTION
- 1 - Encl. 20IN D Front Only 20IN W
- 1 - Type 1 Gasketing
- 1 - 800A Tin Plated H. Bus Copper
- 1 - 42,000A Bus Bracing
- 1 - 600A Tin Plated V. Bus
- 1 - 300A Unplated Horizontal Ground Bus Copper

1 - COMMUNICATION.
- 1 - Communication Unit
- 1 - Ethernet Switch SCALANCE XC216 16 Ports Managed With C-Plug
- 1 - Pull-Apart Control Terminals

1 - 125AF 15AT HED4 FCB.
- 1 - High Density FCB, 50A Max, HED4 Trip Amperage 15
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - POWER SUPPLY, PS1
  - 1 - Power Supply Input: 100-240VAC, 110-300VDC Output: 24 VDC/1.3 A, Class II

1 - FVNR, CB, SZ 4, 75HP.
- 1 - FVNR Size 4, CB 75 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red

- 1 - Legend = RUNNING
- 1 - Led Bulb

1 - FVR, CB, SZ 2, 25HP.
- 1 - FVR Size 2, CB 25 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - VFD, CB, 25HP, G120, , 38.0A, .
- 1 - VFD, CB, G120, PM240, HO, 38A 25 HP
- 1 - Control Unit CU230P-2 PN Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Intelligent Operator Panel
- 1 - Operator Panel On VFD Unit Door
- 1 - PROFINET Communication Wiring
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - FVNR, CB, SZ 2, 20HP.
- 1 - FVNR Size 2, CB 20 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

3 - VFD, CB, 40HP, G120, , 60.0A, .
- 1 - VFD, CB, G120, PM240, HO, 60A 40 HP
- 1 - Control Unit CU230P-2 PN Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Intelligent Operator Panel
- 1 - Operator Panel On VFD Unit Door
- 1 - PROFINET Communication Wiring
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - 12 X 16 SPACE.
  1 - Prepared Space Height 12
1 - 54 X 16 SPACE.
  1 - Prepared Space Height 54

Net Price **$55,314.66**

24000 **1** **MCC-310--MCC**

MCC-310, TIASTAR, 20 (Front Only), Circuit Breaker, 480 3Ø3W Delta AC, 60 Hz, 42,000, 1A - Indoor gasketed, 800, Tin, Copper, I (Std. Unit Diagrams Only), Bd (Unit control tb).
Quoted Lead Time : 65 Working Days

1 - SECTION
  1 - Encl. 20IN D Front Only 20IN W
  1 - Type 1 Gasketing
  1 - Ethernet Topology STAR
  1 - 800A Tin Plated H. Bus Copper
  1 - 42,000A Bus Bracing
  1 - 600A Tin Plated V. Bus
  1 - 300A Unplated Horizontal Ground Bus Copper
  1 - Ground Lug, (1) 6-300Kcmil
  1 - Master Nameplate
1 - 800A Main Lug Only.
  1 - MLO 800A, Top
1 - METER UNIT.
  1 - Meter Unit Base Price
  1 - DIGITAL, POWER METER, PAC3200, M26
    1 - PAC3200 Meter Compression Terminals
    3 - CT For Local Meter 800:5
    2 - PT For Local Meter Line Voltage 480
3 - FVNR, CB, SZ 1, 10HP.
  1 - FVNR Size 1, CB 10 HP
  1 - Simocode Pro V
  1 - Current and Voltage Module
  1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
  1 - Software for configuration is not included, and should be entered as a separate line item
  1 - SIMOCODE Communication PROFINET
  1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
  1 - Pull-Apart Control Terminals
  1 - Pilot Light, RED, RUNNING, R
    1 - Pilot Light, 30mm Red
    1 - Legend = RUNNING
    1 - Led Bulb
1 - FVNR, CB, SZ 2, 15HP.
  1 - FVNR Size 2, CB 15 HP
  1 - Simocode Pro V
  1 - Current and Voltage Module
  1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
  1 - Software for configuration is not included, and should be entered as a separate line item
  1 - SIMOCODE Communication PROFINET
  1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
  1 - Pull-Apart Control Terminals
  1 - Pilot Light, RED, RUNNING, R

- 1 - Pilot Light, 30mm Red
- 1 - Legend = RUNNING
- 1 - Led Bulb

2 - 6 X 16 SPACE.
- 1 - Prepared Space Height 6

3 - SECTION
- 1 - Encl. 20IN D Front Only 20IN W
- 1 - Type 1 Gasketing
- 1 - 800A Tin Plated H. Bus Copper
- 1 - 42,000A Bus Bracing
- 1 - 600A Tin Plated V. Bus
- 1 - 300A Unplated Horizontal Ground Bus Copper

2 - COMMUNICATION.
- 1 - Communication Unit
- 1 - Ethernet Switch SCALANCE XC216 16 Ports Managed With C-Plug
- 1 - Pull-Apart Control Terminals

2 - 125AF 15AT HED4 FCB.
- 1 - High Density FCB, 50A Max, HED4 Trip Amperage 15
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - POWER SUPPLY, PS1
  - 1 - Power Supply Input: 100-240VAC, 110-300VDC Output: 24 VDC/1.3 A, Class II

4 - 125AF 15AT HED4 FCB.
- 1 - High Density FCB, 50A Max, HED4 Trip Amperage 15

1 - FVR, CB, SZ 1, 10HP.
- 1 - FVR Size 1, CB 10 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - 18 X 16 SPACE.
- 1 - Prepared Space Height 18

2 - VFD, CB, 3HP, G120, , 5.9A, .
- 1 - VFD, CB, G120, PM240, HO, 5.9A 3 HP
- 1 - Control Unit CU230P-2 PN Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Intelligent Operator Panel
- 1 - Operator Panel On VFD Unit Door
- 1 - PROFINET Communication Wiring
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - 125AF 70AT HED4 FCB.
- 1 - High Density FCB, 100A Max, HED4 Trip Amperage 70

2 - FVNR, CB, SZ 1, 5HP.

- 1 - FVNR Size 1, CB 5 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - 24 X 16 SPACE.
- 1 - Prepared Space Height 24

1 - SECTION
- 1 - Encl. 20IN D Front Only 20IN W No V. Bus
- 1 - Type 1 Gasketing
- 1 - 800A Tin Plated H. Bus Copper
- 1 - 42,000A Bus Bracing
- 1 - 300A Unplated Horizontal Ground Bus Copper

1 - RVSS, CB, 250HP, 3RW44, 326A.
- 1 - RVSS, CB, 3RW44 326A 250 HP
- 1 - CPT 250VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Door Mounted Operator Panel
- 1 - PROFINET Communication on 3RW44 RVSS
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

Net Price **$42,208.66**

25000 **1** **MCC-311--MCC**

MCC-311, TIASTAR, 20 (Front Only), Circuit Breaker, 480 3Ø3W Delta AC, 60 Hz, 42,000, 1A - Indoor gasketed, 800, Tin, Copper, I (Std. Unit Diagrams Only), Bd (Unit control tb).
Quoted Lead Time : 65 Working Days

1 - SECTION
- 1 - Encl. 20IN D Front Only 20IN W
- 1 - Type 1 Gasketing
- 1 - Ethernet Topology STAR
- 1 - 800A Tin Plated H. Bus Copper
- 1 - 42,000A Bus Bracing
- 1 - 600A Tin Plated V. Bus
- 1 - 300A Unplated Horizontal Ground Bus Copper
- 1 - Ground Lug, (1) 6-300Kcmil
- 1 - Master Nameplate

1 - 800A Main Lug Only.
- 1 - MLO 800A, Top

1 - METER UNIT.
- 1 - Meter Unit Base Price
- 1 - DIGITAL, POWER METER, PAC3200, M26
  - 1 - PAC3200 Meter Compression Terminals

- 3 - CT For Local Meter 800:5
- 2 - PT For Local Meter Line Voltage 480

1 - FVNR, CB, SZ 2, 20HP.
- 1 - FVNR Size 2, CB 20 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - FVNR, CB, SZ 1, 5HP.
- 1 - FVNR Size 1, CB 5 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - 18 X 16 SPACE.
- 1 - Prepared Space Height 18

2 - SECTION
- 1 - Encl. 20IN D Front Only 20IN W
- 1 - Type 1 Gasketing
- 1 - 800A Tin Plated H. Bus Copper
- 1 - 42,000A Bus Bracing
- 1 - 600A Tin Plated V. Bus
- 1 - 300A Unplated Horizontal Ground Bus Copper

1 - COMMUNICATION.
- 1 - Communication Unit
- 1 - Ethernet Switch SCALANCE XC216 16 Ports Managed With C-Plug
- 1 - Pull-Apart Control Terminals

1 - 125AF 15AT HED4 FCB.
- 1 - High Density FCB, 50A Max, HED4 Trip Amperage 15
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - POWER SUPPLY, PS1
  - 1 - Power Supply Input: 100-240VAC, 110-300VDC Output: 24 VDC/1.3 A, Class II

1 - 125AF 25AT HED4 FCB.
- 1 - High Density FCB, 50A Max, HED4 Trip Amperage 25

1 - FVNR, CB, SZ 3, 50HP.
- 1 - FVNR Size 3, CB 50 HP
- 1 - Simocode Pro V

- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - FVNR, CB, SZ 4, 75HP.
- 1 - FVNR Size 4, CB 75 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - 6 X 16 SPACE.
- 1 - Prepared Space Height 6

1 - FVNR, CB, SZ 4, 100HP.SPARE
- 1 - FVNR Size 4, CB 100 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - RVSS, CB, 200HP, 3RW44, 243A.
- 1 - RVSS, CB, 3RW44 243A 200 HP
- 1 - CPT 250VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Door Mounted Operator Panel
- 1 - PROFINET Communication on 3RW44 RVSS
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

Net Price **$29,408.78**

SIEMENS

Proposal

26000 **1** **MCC-312--MCC**

MCC-312, TIASTAR, 20 (Front Only), Circuit Breaker, 480 3Ø3W Delta AC, 60 Hz, 42,000, 1A - Indoor gasketed, 800, Tin, Copper, I (Std. Unit Diagrams Only), Bd (Unit control tb).
Quoted Lead Time : 65 Working Days

- 1 - SECTION
  - 1 - Encl. 20IN D Front Only 20IN W
  - 1 - Type 1 Gasketing
  - 1 - Ethernet Topology STAR
  - 1 - 800A Tin Plated H. Bus Copper
  - 1 - 42,000A Bus Bracing
  - 1 - 600A Tin Plated V. Bus
  - 1 - 300A Unplated Horizontal Ground Bus Copper
  - 1 - Ground Lug, (1) 6-300Kcmil
  - 1 - Master Nameplate
- 1 - 800A Main Lug Only.
  - 1 - MLO 800A, Top
- 1 - METER UNIT.
  - 1 - Meter Unit Base Price
  - 1 - DIGITAL, POWER METER, PAC3200, M26
    - 1 - PAC3200 Meter Compression Terminals
    - 3 - CT For Local Meter 800:5
    - 2 - PT For Local Meter Line Voltage 480
- 2 - FVNR, CB, SZ 2, 25HP.SPARE
  - 1 - FVNR Size 2, CB 25 HP
  - 1 - Simocode Pro V
  - 1 - Current and Voltage Module
  - 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
  - 1 - Software for configuration is not included, and should be entered as a separate line item
  - 1 - SIMOCODE Communication PROFINET
  - 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
  - 1 - Pull-Apart Control Terminals
  - 1 - Pilot Light, RED, RUNNING, R
    - 1 - Pilot Light, 30mm Red
    - 1 - Legend = RUNNING
    - 1 - Led Bulb
- 1 - FVNR, CB, SZ 1, 10HP.SPARE
  - 1 - FVNR Size 1, CB 10 HP
  - 1 - Simocode Pro V
  - 1 - Current and Voltage Module
  - 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
  - 1 - Software for configuration is not included, and should be entered as a separate line item
  - 1 - SIMOCODE Communication PROFINET
  - 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
  - 1 - Pull-Apart Control Terminals
  - 1 - Pilot Light, RED, RUNNING, R
    - 1 - Pilot Light, 30mm Red
    - 1 - Legend = RUNNING
    - 1 - Led Bulb
- 2 - 6 X 16 SPACE.
  - 1 - Prepared Space Height 6
- 5 - SECTION
  - 1 - Encl. 20IN D Front Only 20IN W

- 1 - Type 1 Gasketing
- 1 - 800A Tin Plated H. Bus Copper
- 1 - 42,000A Bus Bracing
- 1 - 600A Tin Plated V. Bus
- 1 - 300A Unplated Horizontal Ground Bus Copper

2 - COMMUNICATION.
- 1 - Communication Unit
- 1 - Ethernet Switch SCALANCE XC216 16 Ports Managed With C-Plug
- 1 - Pull-Apart Control Terminals

2 - 125AF 15AT HED4 FCB.
- 1 - High Density FCB, 50A Max, HED4 Trip Amperage 15
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - POWER SUPPLY, PS1
  - 1 - Power Supply Input: 100-240VAC, 110-300VDC Output: 24 VDC/1.3 A, Class II

2 - FVNR, CB, SZ 3, 50HP.SPARE
- 1 - FVNR Size 3, CB 50 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

6 - FVNR, CB, SZ 1, 5HP.
- 1 - FVNR Size 1, CB 5 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

2 - 12 X 16 SPACE.
- 1 - Prepared Space Height 12

1 - FVNR, CB, SZ 2, 15HP.
- 1 - FVNR Size 2, CB 15 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.

- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - FVNR, CB, SZ 4, 60HP.
- 1 - FVNR Size 4, CB 60 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - FVNR, CB, SZ 2, 20HP.
- 1 - FVNR Size 2, CB 20 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - 125AF 70AT HED4 FCB.
- 1 - High Density FCB, 100A Max, HED4 Trip Amperage 70

2 - VFD, CB, 1HP, G120, , 2.2A, .
- 1 - VFD, CB, G120, PM240, HO, 2.2A 1 HP
- 1 - Control Unit CU230P-2 PN Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Intelligent Operator Panel
- 1 - Operator Panel On VFD Unit Door
- 1 - PROFINET Communication Wiring
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - RVSS, CB, 100HP, 3RW44, 134A.
- 1 - RVSS, CB, 3RW44 134A 100 HP
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Door Mounted Operator Panel
- 1 - PROFINET Communication on 3RW44 RVSS
- 1 - Pilot Light, RED, RUNNING, R

1 - Pilot Light, 30mm Red
1 - Legend = RUNNING
1 - Led Bulb

1 - VFD, CB, 40HP, G120, , 60.0A, .
1 - VFD, CB, G120, PM240, HO, 60A 40 HP
1 - Control Unit CU230P-2 PN Communication PROFINET
1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
1 - Pull-Apart Control Terminals
1 - Intelligent Operator Panel
1 - Operator Panel On VFD Unit Door
1 - PROFINET Communication Wiring
1 - Pilot Light, RED, RUNNING, R
1 - Pilot Light, 30mm Red
1 - Legend = RUNNING
1 - Led Bulb

Net Price **$55,304.68**

27000 **1** **MCC-313--MCC**

MCC-313, TIASTAR, 20 (Front Only), Circuit Breaker, 480 3Ø3W Delta AC, 60 Hz, 42,000, 1A - Indoor gasketed, 800, Tin, Copper, I (Std. Unit Diagrams Only), Bd (Unit control tb).
Quoted Lead Time : 65 Working Days

1 - SECTION
1 - Encl. 20IN D Front Only 20IN W
1 - Type 1 Gasketing
1 - Ethernet Topology STAR
1 - 800A Tin Plated H. Bus Copper
1 - 42,000A Bus Bracing
1 - 600A Tin Plated V. Bus
1 - 300A Unplated Horizontal Ground Bus Copper
1 - Ground Lug, (1) 6-300Kcmil
1 - Master Nameplate

1 - 800A Main Lug Only.
1 - MLO 800A, Top

1 - METER UNIT.
1 - Meter Unit Base Price
1 - DIGITAL, POWER METER, PAC3200, M26
1 - PAC3200 Meter Compression Terminals
3 - CT For Local Meter 800:5
2 - PT For Local Meter Line Voltage 480

1 - FVR, CB, SZ 2, 25HP.
1 - FVR Size 2, CB 25 HP
1 - Simocode Pro V
1 - Current and Voltage Module
1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
1 - Software for configuration is not included, and should be entered as a separate line item
1 - SIMOCODE Communication PROFINET
1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
1 - Pull-Apart Control Terminals
1 - Pilot Light, RED, RUNNING, R
1 - Pilot Light, 30mm Red
1 - Legend = RUNNING
1 - Led Bulb

3 - FVNR, CB, SZ 2, 25HP.SPARE
- 1 - FVNR Size 2, CB 25 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

2 - 6 X 16 SPACE.
- 1 - Prepared Space Height 6

4 - SECTION
- 1 - Encl. 20IN D Front Only 20IN W
- 1 - Type 1 Gasketing
- 1 - 800A Tin Plated H. Bus Copper
- 1 - 42,000A Bus Bracing
- 1 - 600A Tin Plated V. Bus
- 1 - 300A Unplated Horizontal Ground Bus Copper

1 - COMMUNICATION.
- 1 - Communication Unit
- 1 - Ethernet Switch SCALANCE XC216 16 Ports Managed With C-Plug
- 1 - Pull-Apart Control Terminals

1 - 125AF 15AT HED4 FCB.
- 1 - High Density FCB, 50A Max, HED4 Trip Amperage 15
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - POWER SUPPLY, PS1
  - 1 - Power Supply Input: 100-240VAC, 110-300VDC Output: 24 VDC/1.3 A, Class II

1 - RVSS, CB, 100HP, 3RW44, 134A.
- 1 - RVSS, CB, 3RW44 134A 100 HP
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Door Mounted Operator Panel
- 1 - PROFINET Communication on 3RW44 RVSS
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - FVNR, CB, SZ 3, 40HP.
- 1 - FVNR Size 3, CB 40 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 150VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R

- 1 - Pilot Light, 30mm Red
- 1 - Legend = RUNNING
- 1 - Led Bulb

1 - FVNR, CB, SZ 1, 0.75HP.
- 1 - FVNR Size 1, CB 0.75 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - 125AF 60AT HED4 FCB.
- 1 - High Density FCB, 100A Max, HED4 Trip Amperage 60

1 - 125AF 125AT HED4 FCB.
- 1 - FCB, 125A Max, HED4 Trip Amperage 125

1 - 125AF 40AT HED4 FCB.
- 1 - High Density FCB, 50A Max, HED4 Trip Amperage 40

1 - 18 X 16 SPACE.
- 1 - Prepared Space Height 18

1 - VFD, CB, 10HP, G120, , 19.0A, .
- 1 - VFD, CB, G120, PM240, HO, 19A 10 HP
- 1 - Control Unit CU230P-2 PN Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Intelligent Operator Panel
- 1 - Operator Panel On VFD Unit Door
- 1 - PROFINET Communication Wiring
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

1 - FVNR, CB, SZ 1, 10HP.SPARE
- 1 - FVNR Size 1, CB 10 HP
- 1 - Simocode Pro V
- 1 - Current and Voltage Module
- 1 - Standard Parameter Blocks Overload Relay w/ Remote I/O Any/Maintained Network Bits
- 1 - Software for configuration is not included, and should be entered as a separate line item
- 1 - SIMOCODE Communication PROFINET
- 1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
- 1 - Pull-Apart Control Terminals
- 1 - Pilot Light, RED, RUNNING, R
  - 1 - Pilot Light, 30mm Red
  - 1 - Legend = RUNNING
  - 1 - Led Bulb

2 - 12 X 16 SPACE.
- 1 - Prepared Space Height 12

1 - VFD, CB, 40HP, G120, , 60.0A, .

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Proposal

1 - VFD, CB, G120, PM240, HO, 60A 40 HP
1 - Control Unit CU230P-2 PN Communication PROFINET
1 - CPT 50VA 1 Sec. 2 Pri. Fuses Std. Cap.
1 - Pull-Apart Control Terminals
1 - Intelligent Operator Panel
1 - Operator Panel On VFD Unit Door
1 - PROFINET Communication Wiring
1 - Pilot Light, RED, RUNNING, R
  1 - Pilot Light, 30mm Red
  1 - Legend = RUNNING
  1 - Led Bulb

Net Price **$41,392.19**

Grand Total: **Net Price** **$356,099.60**

Global Notes:

Price Policy: Standard quote is valid for 30 days from price approval date.

Payment: Per Siemens distributor's terms.

Shipping: Shipment of goods will be made after receipt of all the following at Company's production facility: (a) Purchase Order / Electronic PO, (b) Technical Information, and if required (c) Drawing Approval.

Freight: Freight allowed on orders over $1000.00 provided Seller selects the Route Option: BESTRT - Best Route.

Delivery: FOB Shipping Point, unless stated otherwise.

Other: This proposal is subject to credit approval and US government regulation. It is also based on the Company's interpretation of the plans and specifications and is subject to correction for errors in such plans or specifications. This document and any other documents specifically referred to as being a part hereof constitute the entire agreement on the subject matter and it shall not be modified except in writing signed by both parties.
THIS PROPOSAL IS BASED UPON SIEMENS STANDARD TERMS AND CONDITIONS OF SALE ATTACHED HERETO AND INCLUDED HEREIN. Company hereby objects to any additional or different terms set forth in Purchaser's request for proposal, specifications, purchase order, or any other document of Purchaser. Acceptance of additional or different terms must be specifically assented to in writing by Company.

Federal Projects (This applies to Federal and Federally Funded Projects only):
Siemens represents that it is providing "commercial items" and services for sale within the definition of FAR 2.101. In keeping with its commercial market participation, Siemens is categorically exempt from any Cost & Pricing Data requirements. Siemens utilizes a commercial accounting system under International Financial Reporting Standards (IFRS); and is technically unable to comply with Federal Cost Accounting Standards & Certification and any FAR 31 requirements. Siemens Industry, Inc. is a Foreign Owned, Controlled, or Influenced ("FOCI") firm, under the definition contained in the National Industrial Security Program Operational Manual ("NISPOM") and cannot obtain a security clearance, or perform work requiring its compliance with the FAR 52.204-2 "Security Requirements." Siemens shall not be held responsible for determining, or providing, its compliance with any federal requirements including, but not limited to any Buy America/Buy American requirements, unless the contractor/customer has provided the SPECIFIC federal flow-down provisions to Siemens, and received Siemens affirmation of compliance with the same prior to issuance of any Purchase Order or Contract.

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Proposal

SIEMENS STANDARD TERMS AND CONDITIONS OF SALE FOR PRODUCTS

Version1.1/Restricted **Date: 07/01/2016**

1. APPLICABLE TERMS. This Agreement governs the sale of equipment, components, parts, and materials provided by Siemens ("Products"). Any applicable addenda, these terms, Siemens proposal, price quote, purchase order, or acknowledgement issued by Siemens form the parties' final agreement ("Agreement"). In the event of a conflict between these documents, precedence shall apply in accordance with the order listed in the previous sentence. Siemens' proposal, offer or acceptance is conditioned on Buyer's acceptance of this Agreement. Any additional or conflicting terms in Buyer's request for proposal, specifications, purchase order or any other written or oral communication are not binding on Siemens unless separately signed by Siemens. Siemens' failure to object to Buyer's additional or conflicting terms does not operate as a waiver of any terms contained in this Agreement.

2. PRICING & PAYMENT. Prices and payment terms are: (i) as stated in Siemens' proposal, or if none are stated; (ii) Siemens' standard prices in effect when Siemens receives Buyer's purchase order; or if neither (i) or (ii) apply, then Siemens' standard prices in effect when the Products ship.

(a) *Payment*. Unless stated in Siemens' proposal, all payments are due net thirty (30) days from the invoice date in United States Dollars.

(b) *Credit Approval.* All orders are subject to credit approval by Siemens. Siemens may modify, suspend or withdraw the credit amount or payment terms at any time. If there is doubt as to Buyer's financial condition, Siemens may withhold manufacturing or shipment, require cash payments, or require other satisfactory security. Siemens may recover shipped Products from the carrier pending such assurances.

(c) *Installment Shipment.* Where Products are delivered in shipments or only part of a shipment fails to comply with this Agreement, the Buyer may only reject the non-compliant portion. Buyer will separately pay for each shipment. If Siemens holds or stores Products for Buyer, it shall do so at Buyer's sole risk and expense.

(d) *Taxes, Shipping, Packing, Handling.* Unless stated in writing by Siemens, Siemens' prices exclude charges for freight, unloading, storage, insurance, taxes, excises, fees, duties or other government charges related to the Products. Buyer will pay these amounts or reimburse Siemens. If Buyer claims a tax or other exemption or direct payment permit, Buyer will provide a valid exemption certificate or permit and indemnify, defend and hold Siemens harmless from any taxes, costs and penalties arising from same. Siemens' prices include the costs of its standard domestic packing only. Any packing deviation, including U.S. Government sealed packing, will be charged to Buyer. Increases, changes (including in application), adjustments or surcharges which may be incurred are for Buyer's account.

(e) *Late Payments.* Late payments shall bear interest at an annual percentage rate of twelve percent (12%) or the highest rate allowed by law, whichever is lower.

(f) *Disputed Invoice.* If Buyer disputes all or any portion of an invoice, it must first deliver written notice to Siemens of the disputed amount and the basis for the dispute within twenty-one (21) days of receiving the invoice. Failure of Buyer to timely notify Siemens of any dispute constitutes a waiver of Buyer's claim. If Buyer only disputes a portion of the invoice, Buyer must pay the undisputed portion in accordance with Article 2(a). Upon resolution of the dispute, Buyer must pay the invoice or the remainder of the invoice, plus any accrued interest on the late payment.

(g) *Suspension/Termination Right.* Siemens may suspend work if an undisputed invoice is more than thirty (30) days past due. Siemens may terminate this Agreement if an undisputed invoice is more than sixty (60) days past due. Unless prohibited by law, Siemens may also terminate this Agreement immediately in the event of a material adverse change in Buyer's financial condition including, but not limited to, bankruptcy, insolvency, liquidation or similar financial condition.

3. DELIVERY; TITLE; RISK OF LOSS. Products will be delivered F.O.B. Siemens point of shipment with title and risk of loss or damage passing to Buyer at that point. Buyer is responsible for all transportation, insurance and related expenses. The related expenses shall include any taxes, duties or documentation fees. Siemens may make partial shipments. Any shipping, delivery and installation dates are estimated dates only. Siemens is not liable for any loss or expense incurred by Buyer or Buyer's customers if Siemens fails to meet its delivery schedule.

4. DEFERMENT AND CANCELLATION. Buyer has no right to defer shipment but may cancel this Agreement on thirty (30) days written notice if Siemens has not already performed. If Buyer cancels this Agreement, it shall pay all cancellation charges including, without limitation: (i) the full price for any finished Product; (ii) for partially completed product, the portion of the price determined to be due by Siemens based on its percentage of completion of the Product; (iii) reasonable overhead and profit; and (iv) any payments due subcontractors and/or suppliers for any materials, components or products ordered which cannot be cancelled, refunded, or redirected for other beneficial use.

5. TRANSPORTATION AND STORAGE. (a) When Products are ready for shipment, Siemens will: (i) inform Buyer, and Buyer will then promptly give shipping instructions to Siemens; (ii) determine the method of transportation and shipment routing; and (iii) ship the Products with freight prepaid by normal transportation. If Buyer fails to provide timely shipping instructions, Siemens will ship the Products by normal transportation means to Buyer or to a storage location selected by Siemens. Buyer will pay or reimburse any excess transportation charges for special or expedited transportation.

(b) If Products are placed into storage, delivery occurs and risk of loss transfers to Buyer when the Products are placed on the carrier for shipment to the storage location. If the Products are to be stored in the facility where manufactured, delivery occurs and risk of loss transfers to Buyer when placed in the storage location.

Buyer will pay all Siemens' storage expenses, including but not limited to, preparation for and placement into storage, handling, freight, storage, inspection, preservation, maintenance, taxes and insurance, upon receipt of an invoice(s) from Siemens. When conditions permit and upon payment to Siemens of all amounts due, Buyer must arrange, at its expense, to remove the Products from storage. Buyer bears the risk of loss, damage or destruction to Products in storage.

6. FORCE MAJEURE / DELAYS. If Siemens' performance is delayed by any cause beyond its reasonable control (regardless of whether the cause was foreseeable), including without limitation acts of God, strikes, labor shortage or disturbance, fire, accident, war or civil disturbance, delays of carriers, cyber-attacks, terrorist attacks, failure of normal sources of supply, or acts or inaction of government, Siemens' time of performance will be extended by a period equal to the length of the delay plus any consequences of the delay. Siemens will notify Buyer within a reasonable time after becoming aware of any such delay.

7. BUYER'S REQUIREMENTS. Siemens' performance is contingent upon Buyer timely fulfilling all of its obligations under this Agreement. These obligations include the Buyer supplying all documents and approvals needed for Siemens to perform, including but not limited to technical information and data, drawing and document approvals, and necessary commercial documentation. Siemens may request a change order for an equitable adjustment in prices and times for performance, as well as for any additional costs or any delay resulting from the failure of Buyer or Buyer's contractors, successors or assigns to meet these obligations.

8. INDEMNITY. Siemens and Buyer (each as an "Indemnitor") shall indemnify the other ("Indemnitee") from and against all third party claims alleging bodily injury, death or damage to a third party's tangible property, but only to the extent caused by the Indemnitor's negligent acts or omissions. If the injury or damage is caused by the parties' joint or contributory negligence, the loss and/or expenses shall be borne by each party in proportion to its degree of fault. No part of the Product(s) or Buyer's site is considered third party property.

Indemnitee shall provide the Indemnitor with prompt written notice of any third party claims covered by this Article. Indemnitor has the unrestricted right to select and hire counsel and the exclusive right to conduct the legal defense and/or settle the claim on the Indemnitee's behalf. The Indemnitee shall not make any admission(s) which might be prejudicial to the Indemnitor and shall not enter into a settlement without the express permission of the Indemnitor.

9. WARRANTIES. (a) Warranties. Siemens warrants that: (i) each Product is free from defects in material and workmanship; (ii) each Product materially conforms to Siemens' specifications that are attached to, or expressly incorporated into this Agreement; and (iii) at the time of delivery, Siemens has title to each Product free and clear of liens and encumbrances (collectively, the "Warranties"). The Warranties do not apply to software furnished by Siemens. The sole and exclusive warranties for any software are set forth in the applicable Software License/Warranty Addendum.

(b) Conditions to the Warranties. The Warranties are conditioned on: (i) no repairs, modifications or alterations being made to the Product other than by Siemens or its authorized representatives; (ii) Buyer handling, using, storing, installing, operating and maintaining the Product in compliance with any parameters or instructions in any specifications attached to, or incorporated into this Agreement; (iii) compliance with all generally accepted industry standards; (iv) Buyer discontinuing use of the Product after it has, or should have had, knowledge of any defect; (v) Buyer providing prompt written notice of any warranty claims within the warranty period described below; (vi) at Siemens' discretion, Buyer either removing and shipping the Product or non-conforming part thereof to Siemens, at Buyer's expense, or granting Siemens reasonable access to the Products to assess the warranty claims; (vii) Product not having been subjected to accident (including force majeure), alteration, abuse or misuse; and (viii) Buyer not being in default of any payment obligation.

(c) Exclusions from Warranty Coverage. The Warranties do not apply to any equipment not provided by Siemens under this Agreement.

Any Product that is described as being experimental, developmental, prototype, or pilot is specifically excluded from the Warranties and is provided to Buyer "as is" with no warranties of any kind. Normal wear and tear is excluded, including any expendable items that comprise part of the Product (such as fuses, light bulbs and lamps). Siemens does not warrant or guarantee that any Product will be secure from cyber threats, hacking or similar malicious activity. Products that are networked, connected to the internet, or otherwise connected to computers or other devices must be appropriately protected by Buyer and/or end user against unauthorized access.

(d) Warranty Period. Buyer must provide written notice of any claims for breach of Warranties by the earlier of twelve (12) months from initial operation of the Product or eighteen (18) months from shipment. Additionally, absent written notice within the warranty period, any use or possession of the Product after expiration of the warranty period is conclusive evidence that the Warranties have been satisfied.
(e) Remedies. Buyer's sole and exclusive remedies for breach of the Warranties are limited, at Siemens' discretion, to repair or replacement of the Product, or its non-conforming parts, within a reasonable time period, or refund of all or part of the purchase price. The warranty on repaired or replaced parts is limited to the remainder of the original warranty period. Unless Siemens agrees otherwise in writing, Buyer will be responsible for any costs associated with: (i) gaining access to the Product; (ii) removal, disassembly, replacement, installation, or reinstallation of any equipment, materials or structures to permit Siemens to perform its warranty obligations; (iii) transportation to and from the Siemens factory or repair facility; and (iv) damage to equipment components or parts resulting in whole or in part from non-compliance by the Buyer with Article 9(b) or from their deteriorated condition. All exchanged Products replaced under this Warranty will become the property of Siemens.

(f) Transferability. The Warranties are only transferable during the warranty period and only to the Product's initial end-user.

(g) THE WARRANTIES IN THIS ARTICLE 9 ARE SIEMENS' SOLE AND EXCLUSIVE WARRANTIES AND ARE SUBJECT TO THE LIMITS OF LIABILITY IN ARTICLE 10 BELOW. SIEMENS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, COURSE OF DEALING AND USAGE OF TRADE.

10. LIMITATION OF LIABILITY. NOTWITHSTANDING ANYTHING IN THIS AGREEMENT TO THE CONTRARY, SIEMENS IS NOT LIABLE, WHETHER BASED IN CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, INDEMNITY OR ANY OTHER LEGAL OR EQUITABLE THEORY, FOR: LOSS OF USE, REVENUE, SAVINGS, PROFIT, INTEREST, GOODWILL OR OPPORTUNITY, COSTS OF CAPITAL, COSTS OF REPLACEMENT OR SUBSTITUTE USE OR PERFORMANCE, LOSS OF INFORMATION AND DATA, LOSS OF POWER, VOLTAGE IRREGULARITIES OR FREQUENCY FLUCTUATION, CLAIMS ARISING FROM BUYER'S THIRD PARTY CONTRACTS, OR FOR ANY TYPE OF INDIRECT, SPECIAL, LIQUIDATED, PUNITIVE, EXEMPLARY, COLLATERAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR FOR ANY OTHER LOSS OR COST OF A SIMILAR TYPE.

SIEMENS' MAXIMUM LIABILITY UNDER THIS AGREEMENT IS THE ACTUAL PURCHASE PRICE RECEIVED BY SIEMENS FOR THE PRODUCT THAT GAVE RISE TO THE CLAIM.

BUYER AGREES THAT THE EXCLUSIONS AND LIMITATIONS IN THIS ARTICLE 10 WILL PREVAIL OVER ANY CONFLICTING TERMS AND CONDITIONS IN THIS AGREEMENT AND MUST BE GIVEN FULL FORCE AND EFFECT, WHETHER OR NOT ANY OR ALL SUCH REMEDIES ARE DETERMINED TO HAVE FAILED OF THEIR ESSENTIAL PURPOSE. THESE LIMITATIONS OF LIABILITY ARE EFFECTIVE EVEN IF SIEMENS HAS BEEN ADVISED BY BUYER OF THE POSSIBILITY OF SUCH DAMAGES. THE WAIVERS AND DISCLAIMERS OF LIABILITY, RELEASES FROM LIABILITY AND LIMITATIONS ON LIABILITY EXPRESSED IN THIS ARTICLE 10 EXTEND TO SIEMENS' AFFILIATES, PARTNERS, PRINCIPALS, SHAREHOLDERS, DIRECTORS, OFFICERS, EMPLOYEES, SUPPLIERS, AGENTS, AND SUCCESSORS AND ASSIGNS.

11. PATENT AND COPYRIGHT INFRINGEMENT. Siemens will, at its option and expense, defend or settle any suit or proceeding brought against Buyer based on an allegation that any Product or use thereof for its intended purpose constitutes an infringement of any Patent Cooperation Treaty country member's patent or misappropriation of a third party's trade secret or copyright in the country where the Product is delivered by Siemens. Buyer will promptly give Siemens written notice of the suit or proceeding and the authority, information, and assistance needed to defend the claims. Siemens shall have the full and exclusive authority to defend and settle such claim(s) and will pay the damages and costs awarded in any suit or proceeding so defended. Buyer shall not make any admission(s) which might be prejudicial to Siemens and shall not enter into a settlement without Siemens' consent. Siemens is not responsible for any settlement made without its prior written consent. If the Product, or any part thereof, as a result of any suit or proceeding so defended is held to constitute infringement or its use by Buyer is enjoined, Siemens will, at its option and expense, either: (i) procure for Buyer the right to continue using said Product; (ii) replace it with substantially equivalent non-infringing Product; or (iii) modify the Product so it is non-infringing.

Siemens will have no duty or obligation under this Article 11 if the Product is: (i) supplied according to Buyer's design or instructions and compliance therewith has caused Siemens to deviate from its normal course of performance; (ii) modified by Buyer or its contractors after delivery; or (iii) combined by Buyer or its contractors with devices, methods, systems or processes not furnished hereunder and by reason of said design, instruction, modification, or combination a suit is brought against Buyer. In addition, if by reason of such design, instruction, modification or combination, a suit or proceeding is brought against Siemens, Buyer must protect Siemens in the same manner and to the same extent that Siemens has agreed to protect Buyer under this Article 11.

THIS ARTICLE 11 IS AN EXCLUSIVE STATEMENT OF SIEMENS' DUTIES AND BUYER'S REMEDIES RELATING TO PATENTS, TRADE SECRETS AND COPYRIGHTS, AND DIRECT OR CONTRIBUTORY INFRINGEMENT THEREOF.

12. CONFIDENTIALITY. (a) Both during and after the term of this Agreement, the parties will treat as confidential all information obtained from the disclosing party and all information compiled or generated by the disclosing party under this Agreement for the receiving party, including but not limited to business information, manufacturing information, technical data, drawings, flow charts, program listings, software code, and other software, plans and projections. Neither party may disclose or refer to the work to be performed under this Agreement in any manner that identifies the other party without advance written permission. However, Siemens has the right to share confidential information with its affiliates and subcontractors, provided those recipients are subject to the same confidentiality obligations set forth herein.

(b) Nothing in this Agreement requires a party to treat as confidential any information which: (i) is or becomes generally known to the public, without the fault of the receiving party; (ii) is disclosed to the receiving party, without obligation of confidentiality, by a third party having the right to make such disclosure; (iii) was previously known to the receiving party, without obligation of confidentiality, which fact can be demonstrated by means of documents which are in the possession of the receiving party upon the date of this Agreement; (iv) was independently developed by receiving party or its representatives, as evidenced by written records, without the use of discloser's confidential information; or (v) is required to be disclosed by law, except to the extent eligible for special treatment under an appropriate protective order, provided that the party required to disclose by law will promptly advise the originating party of any requirement to make such disclosure to allow the originating party the opportunity to obtain a protective order and assist the originating party in so doing.

(c) It is Siemens' policy not to unlawfully or improperly receive or use confidential information, including trade secrets, belonging to others. This policy precludes Siemens from obtaining, directly or indirectly from any employee, contractor, or other individual rendering services to Siemens confidential information of a prior employer, client or any other person which such employee, contractor, or individual is under an obligation not to disclose. Buyer agrees to abide by this policy.

13. COMPLIANCE WITH LAWS. The parties agree to comply with all applicable laws and regulations, including but not limited to those relating to the manufacture, purchase, resale, exportation, transfer, assignment or use of the Products.

14. CHANGES IN WORK. No change will be made to the scope of work unless Buyer and Siemens agree in writing to the change and any resulting price, schedule or other contractual modifications. If any change to any law, rule, regulation, order, code, standard or requirement impacts Siemens' obligations or performance under this Agreement, Siemens may request a change order for an equitable adjustment in the price and time of performance.

15. NON-WAIVER. Any waiver by a party of strict compliance with this Agreement must be in writing, and any failure by the parties to require strict compliance in one instance will not waive its right to insist on strict compliance thereafter.

16. MODIFICATION OF TERMS. This Agreement may only be modified by a written instrument signed by authorized representatives of both parties.

17. ASSIGNMENT. Neither party may assign all or part of this Agreement, or any rights or obligations under this Agreement, without the prior written consent of the other; but either party may assign its rights and obligations, without recourse or consent, to any parent, wholly owned subsidiary, or affiliate or affiliate's successor organization (whether as a result of reorganization, restructuring or sale of substantially all of a party's assets). However, Buyer shall not assign this Agreement to: a competitor of Siemens; an entity in litigation with Siemens; or an entity lacking the financial capability to satisfy Buyer's obligations. Any assignee expressly assumes the performance of any obligation assigned. Siemens may grant a security interest in this Agreement and/or assign proceeds of this Agreement without Buyer's consent.

18. APPLICABLE LAW AND JURISDICTION. This Agreement is governed by and construed in accordance with the laws of the State of Delaware, without regard to its conflict of laws principles. The application of the United Nations Convention on Contracts for the International Sale of Goods is excluded. BOTH SIEMENS AND BUYER KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVE ALL RIGHTS TO A JURY TRIAL IN ANY ACTION OR PROCEEDING RELATED IN ANY WAY TO THIS AGREEMENT. Each party agrees that claims and disputes arising out of this Agreement must be decided exclusively in a federal or state court of competent jurisdiction located in a state in which either Buyer or Siemens maintains its principal place of business. Each party submits to the personal jurisdiction of such courts for the purpose of litigating any claims or disputes.

19. SEVERABILITY. If any provision of this Agreement is held invalid, illegal or unenforceable, the remaining provisions will not in any way be affected or impaired. A court may modify the invalid, illegal or unenforceable provision to reflect, as closely as possible, the parties' original intent.

20. EXPORT / IMPORT COMPLIANCE. Buyer acknowledges that Siemens is required to comply with applicable export / import laws and regulations relating to the sale, export, import, transfer, assignment, disposal and use of the Products, including any export / import license requirements. Buyer agrees that Products will not at any time directly or indirectly be used, exported, imported, sold, transferred, assigned or otherwise disposed of in a manner which will result in non-compliance with any export / import laws and regulations. Siemens' continuing performance hereunder is conditioned on compliance with such export / import laws and regulations at all times.

21. PRODUCT RETURNS. Prior to the return of any Product to Siemens, Buyer must identify the Product or portion thereof and obtain written authorization and shipping instructions from Siemens. Siemens has the right, in its sole discretion, to permit or reject any such return. Siemens' authorization to return any Product to Siemens does not relieve Buyer of its obligation to pay for such Product. Upon receipt, inspection, and acceptance of the Product by Siemens, Siemens will issue a credit memo to Buyer, less applicable re-stocking fees. Siemens reserves the right to reject any hazardous material.

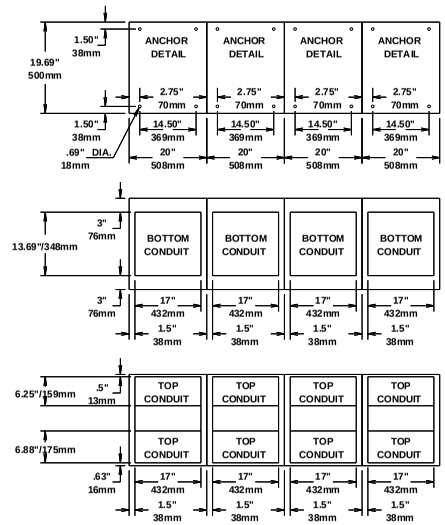
22. NUCLEAR. Unless expressly authorized in writing by Siemens, the Products must not be used in or in connection with a nuclear facility or application. If Buyer uses any Product in connection with any nuclear facility or activity, it does so at its own risk and Buyer will indemnify, defend and hold Siemens harmless, and waives and will require its insurers to waive all right of recovery against Siemens for any damage, loss, destruction, injury or death resulting from a "nuclear incident," as defined in the Atomic Energy Act of 1954, as amended, whether or not due to Siemens' negligence. Siemens' consent to Buyer's use of the Product in connection with any nuclear facility or application will be subject to additional terms and conditions that Siemens deems necessary to protect its interests.

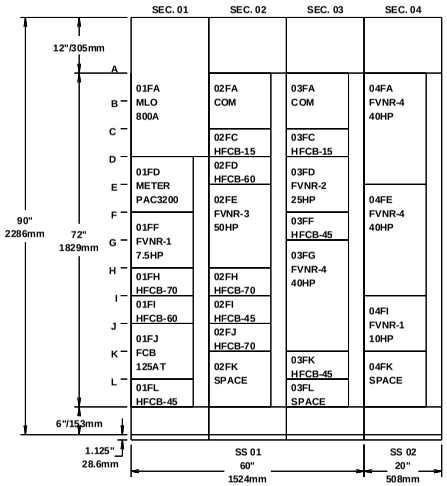
23. SURVIVAL. The articles titled "Patent and Copyright Infringement," "Limitation of Liability," "Confidentiality," "Delivery; Title; Risk of Loss," "Export / Import Compliance," and "Nuclear" survive termination, expiration or cancellation of this Agreement.

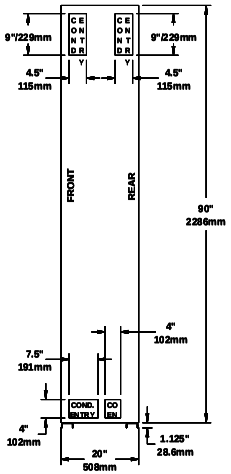
PURCHASER's ACCEPTANCE
The foregoing is hereby accepted.

_____
(Name of Purchaser)
By
_____
Title
_____
Date
_____

Siemens Industry, Inc.
By
_____







	SEC. 01	SEC. 02	SEC. 03	SEC. 04
CUSTOMER SECT. ID				
DEPTH (In/mm)	20/508	20/508	20/508	20/508
WIDTH (In/mm)	20/508	20/508	20/508	20/508
HORIZONTAL BUS	YES	YES	YES	YES
VERTICAL BUS TYPE	600A FRONT	600A FRONT	600A FRONT	600A FRONT
VB BARRIERS	ISOLATED	ISOLATED	ISOLATED	ISOLATED
VB SHUTTERS	-	-	-	-
VB WW ACCESS HOLES	NO	NO	NO	NO
DOUBLE DEEP BUS-THRU	-	-	-	-
THERMOSTAT	-	-	-	-
FLUORESCENT LIGHT	-	-	-	-
LIGHT SWITCH	-	-	-	-
DUPLEX RECEPTACLE	-	-	-	-
NEMA 3R DOOR FAN	-	-	-	-
OPTIONS	-	-	-	-
OPTIONS	-	-	-	-
OPTIONS	-	-	-	-
GENERAL NOTES				
GENERAL NOTES				
GENERAL NOTES				
SHOP NOTES	MN	MN	MN	MN
SHOP NOTES				
SHOP NOTES				
SHOP NOTES				
N1				
N2				
N3				
N4				

GENERAL

SERVICE	480 3Ø3W AC
SYSTEM GROUNDING	SOLIDLY GROUNDED
FREQUENCY	60 HZ
AVAIL FAULT CURR	42K AIC SYM
SERVICE ENTRANCE	NOT APPLICABLE
MCC TYPE	TIASTAR
LABELS	
UL	UL WHERE APPLICABLE
CSA	WAIVED
REGIONAL CODES	-
ALTITUDE RATINGS	UP TO 3000FT / 915M
CUST INSPECT REQD	NONE
CERTIFIED TEST RPTS	_
GENERAL NOTES	_ _ _ P6 E4 _
SHOP NOTES	_ _ _ _ _

BUS

BRACING	42K AIC SYM
BUS RATING	_
HORIZONTAL BUS	_
RATING	800A (3/16 X 2)
MATERIAL	COPPER
TEMP RATING	65 DEGREES C
PLATING	TIN
BARRIERS	STANDARD LEXAN
INSULATION	_
VERTICAL BUS	
RATING	SEE SECTION DETAILS
MATERIAL	COPPER
PLATING	TIN
STAB PLATING	TIN
NEUTRAL BUS	
RATING	_
MATERIAL	_
PLATING	_
LOCATION	_
LUGS	_
HORIZONTAL GROUND BUS	
RATING	300A (1/4 X 1)
MATERIAL	COPPER
PLATING	UNPLATED
LOCATION	FRONT BOTTOM
LUGS	(1) 6-300 KCMIL
LUG PAD	_
VERTICAL GROUND BUS	
RATING	_
MATERIAL	_
PLATING	_
MOTOR GND TERMINALS	_

STRUCTURE

NEMA TYPE	1A
EXTERNAL	_
HEIGHT	91.125" / 2315MM
DEPTH	20" / 508MM FRT ONLY
PAINT	GRAY ANSI 61
GENERAL OPTIONS	NONE
FISH-TAPE BARRIERS	_
REMOV BOT PLATES	_
BASE CHANNELS	_
SEISMIC	_
TWO-PC BACKPLATE	_
FUNGUS PROOFING	_
SPACE HEATERS	
SIZE	_
POWER SOURCE	_
BARRIER	_
THERMOSTAT	_
SPECIAL DIAGRAMS	_
INTERCONNECTION	_
COMMUNICATION	_
SPACE HEATER	_
LIGHT/SWITCH/RECEP	_
VENTILATION	_
MISC 1	_
MISC 2	_
MISC 3	_

UNITS

MIN WITHSTAND RATINGS	
CB COMBINATION	42K AIC SYM
CB FEEDER	42K AIC SYM
FUSIBLE COMBINATION	_
FUSIBLE FEEDER	_
WIRING CLASS	I
TYPE	BD (CTRL TERM BLKS)
CTRL TERM BLOCKS	PULL-APART
EXTRA UNUSED PTS	_
POWER TERM BLOCKS	NOT APPLICABLE
CONTROL WIRE	16 AWG MTW
POWER WIRE	STANDARD
CONTROL TERMINALS	_
POWER TERMINALS	_
WIRE MARKERS	_
TYPE	_
GENERAL OPTIONS	NONE
UNIT DIAG ON DOOR	_
HEATER TBLS ON DOOR	_
UNIT SIDE BARRIER	_

NAMEPLATES

UNIT	STANDARD
COLOR (FACE/TEXT)	YELLOW/BLACK
TEXT SIZE	3/16
TEXT	SEE NAMEPLATE INFO
ATTACHMENT	STANDARD
COMPONENT	_
MASTER	2X6
COLOR (FACE/TEXT)	YELLOW/BLACK
TEXT SIZE	1/2
SECTION	_
COLOR (FACE/TEXT)	_
TEXT SIZE	_
TEXT	_

INCOMING

MAIN ENTRY TYPE	CABLE ENTRY UNIT
LOCATION	TOP
SECTION	01
UNIT	01FA
INCOMING CABLES	(3)350 KCMIL
_	_
-	-
-	-
-	-
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NO.	REVISIONS	DRAWN BY:	DATE
1	0	wooddj	3-13-2018

JOB
Lyons Ferry Plant

P.O.	CUST.
-	WESCO DISTRIBUTION INC
CONTR	CONSLT
-	-
TIE	BY / ENG. LOC. / DESIGNATION
-	wooddj / - / MCC-101
S.O.	DATE
1000422408	3-13-2018
Siemens Industry, Inc.	DWG. NO.
	1000422408-20000-1
Norcross, Georgia	APP. / MFG. LOC. / -
	APP. / DWG. FILE
	SHEET 1 OF 5
	REV. 1

UNIT SCHEDULE

UNIT NO			UNIT DESCRIPTION				MOTOR DATA					CIRCUIT BREAKER/DISCONNECT SWITCH						OVERLOAD		WIRING	CONTROL CIRCUIT				TOT AUX		PILOT				FACTORY USE ONLY	
CUST	SII	L/R	TYPE	SUB	HT	SZ	HP/	KW	FLA	SF	RPM	FRAME or	DS	TRIP or	CLIP	RNG or	FUSE	TYPE	RNG/HTR	DIAGRAM	TY	FU	VOLT	CPT	NO	NC	DEVICES	UNIT OPTIONS	N	UNIT NOTES	NOTES	PUCX
_	01FA	-	MLO	-	18	800	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	_	_	_	_	_	_	FMNR
_	01FD	-	METER	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	_	_	M26	_	_	_	FMNR
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CCY	-	-
_	01FF	-	FVNR	-	12	1	7.5	HP	11.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	01FH	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	70	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	01FI	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	60	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	01FJ	-	FCB	-	12	-	-	-	-	-	-	HED4	125	125	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	01FL	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	45	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	02FA	-	COM	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	SS	0	24DC	-	_	_	_	ES5	_	_	_	FMNR
_	02FC	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	15	-	-	-	-	-	_	UT	2/1	120	150	_	_	_	PS1	_	_	_	UMNM
_	02FD	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	60	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	02FE	-	FVNR	-	18	3	50	HP	65.0	-	-	ETI	125	125	-	500-1250	-	3UF70	10-100	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	02FH	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	70	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	02FI	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	45	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	02FJ	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	70	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	02FK	-	SPACE	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	03FA	-	COM	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	SS	0	24DC	-	_	_	_	ES5	_	_	_	FMNR
_	03FC	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	15	-	-	-	-	-	_	UT	2/1	120	150	_	_	_	PS1	_	_	_	UMNM
_	03FD	-	FVNR	-	12	2	25	HP	34.0	-	-	ETI	125	100	-	315-1000	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	03FF	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	45	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	03FG	-	FVNR	-	24	4	40	HP	52.0	-	-	ETI	125	125	-	500-1250	-	3UF70	20-200	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	03FK	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	45	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	03FL	-	SPACE	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	04FA	-	FVNR	-	24	4	40	HP	52.0	-	-	ETI	125	125	-	500-1250	-	3UF70	20-200	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	04FE	-	FVNR	-	24	4	40	HP	52.0	-	-	ETI	125	125	-	500-1250	-	3UF70	20-200	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	04FI	-	FVNR	-	12	1	10	HP	14.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	04FK	-	SPACE	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL

JOB
Lyons Ferry Plant

P.O.: -	CUST.: WESCO DISTRIBUTION INC
CONTR: -	CONSLT: -
TIE: -	BY: wooddj; ENG. LOC.: -; DESIGNATION: MCC-101
S.O.: 1000422408	DATE: 3-13-2018
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-20000-2
	APP.; MFG. LOC.: -; APP.; DWG. FILE
	SHEET 2 OF 5
	REV.: 1

NAMEPLATE SCHEDULE

TYPE	UNIT NUMBER	DESCRIPTION	ENGRAVING1	ENGRAVING2	ENGRAVING3	ENGRAVING4	LEAVE BLANK
MASTER		MCC					No
Unit	01FA	800A Main Lug Only.					No
Unit	01FD	(1), METER UNIT.					No
Unit	01FF	(1), FVNR, CB, SZ 1, 7.5HP.					No
Unit	01FH	(3), 125AF 70AT HED4 FCB.					No
Unit	01FI	(2), 125AF 60AT HED4 FCB.					No
Unit	01FJ	(1), 125AF 125AT HED4 FCB.					No
Unit	01FL	(4), 125AF 45AT HED4 FCB.					No
Unit	02FA	(2), COMMUNICATION.					No
Unit	02FC	(2), 125AF 15AT HED4 FCB.					No
Unit	02FD	(2), 125AF 60AT HED4 FCB.					No
Unit	02FE	(1), FVNR, CB, SZ 3, 50HP.SPARE					No
Unit	02FH	(3), 125AF 70AT HED4 FCB.					No
Unit	02FI	(4), 125AF 45AT HED4 FCB.					No
Unit	02FJ	(3), 125AF 70AT HED4 FCB.					No
Unit	02FK	(1), 12 X 16 SPACE.					No
Unit	03FA	(2), COMMUNICATION.					No
Unit	03FC	(2), 125AF 15AT HED4 FCB.					No
Unit	03FD	(1), FVNR, CB, SZ 2, 25HP.SPARE					No
Unit	03FF	(4), 125AF 45AT HED4 FCB.					No
Unit	03FG	(3), FVNR, CB, SZ 4, 40HP.					No
Unit	03FK	(4), 125AF 45AT HED4 FCB.					No
Unit	03FL	(1), 6 X 16 SPACE.					No
Unit	04FA	(3), FVNR, CB, SZ 4, 40HP.					No
Unit	04FE	(3), FVNR, CB, SZ 4, 40HP.					No
Unit	04FI	(1), FVNR, CB, SZ 1, 10HP.SPARE					No
Unit	04FK	(1), 12 X 16 SPACE.					No

JOB
Lyons Ferry Plant

P.O. -	CUST. WESCO DISTRIBUTION INC		
CONTR -	CONSLT -		
TIE -	BY wooddj	ENG. LOC. -	DESIGNATION MCC-101
S.O. 1000422408	DATE 3-13-2018		
	DWG. NO. 1000422408-20000-3		
Siemens Industry, Inc. Norcross, Georgia	APP. APP.	MFG. LOC. DWG. FILE	SHEET 3 OF 5

REV. 1

ABBREVIATIONS

ES5 - ETHERNET SWITCH WITH 16 PORTS MANAGED WITH C-PLUG.

M26 - PAC3200 3 PHASE POWER-METER WITH CTS AND PTS.

OLV - 3UF70 PRO V OVERLOAD RELAY HAS CURRENT/VOLTAGE CT.

OV3 - SIMOCODE WITH PROFINET COMMUNICATIONS.

PS1 - POWER SUPPLY WITH 24V DC OUTPUT.

PS3 - STANDARD PARAMETER BLOCKS, OVERLOAD RELAY W/ REMOTE I/O, ANY/MAINTAINED NETWORK BITS.

R - PILOT LIGHT WITH RED LENS AND RUNNING LEGEND.

SS - SEPARATE SOURCE PROVIDES CONTROL POWER.

UT - UNIT TRANSFORMER PROVIDES CONTROL POWER; X/Y SHOWS PRIMARY/SECONDARY FUSES.

3UF70 - 3UF70 SIMOCODE OVERLOAD RELAY (SEE UNIT OPTIONS FOR FEATURES).

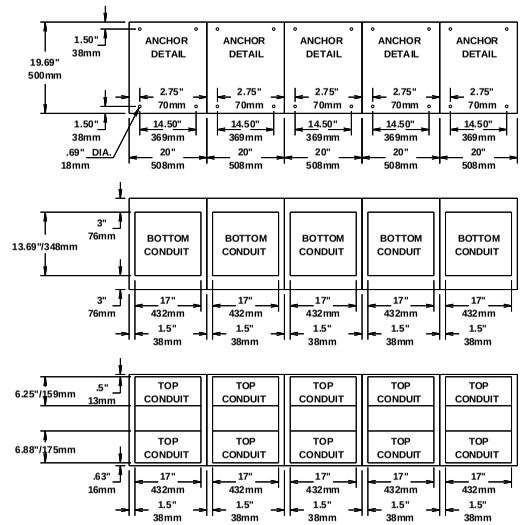
NOTES

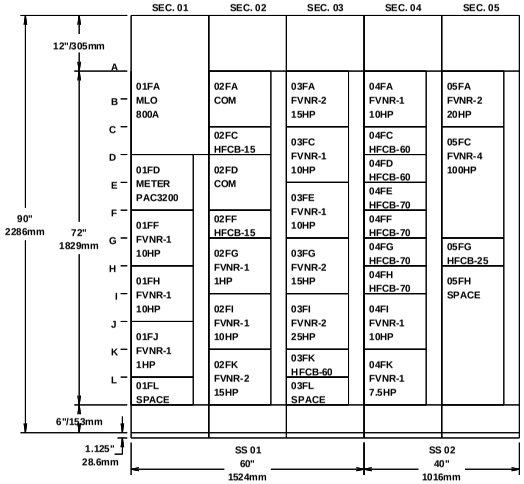
E4 - THIS MCC HAS STAR ETHERNET TOPOLOGY.
P6 - THIS MCC IS PROVIDED WITH A BOTTOM MOUNTED GROUND BUS. BOTTOM CONDUIT SPACE IS RESTRICTED; SEE DRAWING D79641 FIGURE 1.
CCY - POWER-METER WITH 800:5 CTS AND 1 PASS THROUGH CTS.
E2 - HIGH EFFICIENCY MOTOR APPLICATION.

JOB: **Lyons Ferry Plant**			
P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-101
S.O.: 1000422408	DATE: 3-13-2018		
	DWG. NO.: 1000422408-20000-4		
Siemens Industry, Inc. Norcross, Georgia	APP.:	MFG. LOC.: -	SHEET 4 OF 5
	APP.:	DWG. FILE:	REV.: 1

SHOP NOTES

JOB: **Lyons Ferry Plant**			
P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-101
S.O.: 1000422408	DATE: 3-13-2018		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-20000-5		
	APP.:	MFG. LOC.: -	SHEET 5 OF 5
	APP.:	DWG. FILE:	REV.: 1





	SEC. 01	SEC. 02	SEC. 03	SEC. 04	SEC. 05
CUSTOMER SECT. ID					
DEPTH (In/mm)	20/508	20/508	20/508	20/508	20/508
WIDTH (In/mm)	20/508	20/508	20/508	20/508	20/508
HORIZONTAL BUS	YES	YES	YES	YES	YES
VERTICAL BUS TYPE	600A FRONT	600A FRONT	600A FRONT	600A FRONT	600A FRONT
VB BARRIERS	ISOLATED	ISOLATED	ISOLATED	ISOLATED	ISOLATED
VB SHUTTERS	-	-	-	-	-
VB WW ACCESS HOLES	NO	NO	NO	NO	NO
DOUBLE DEEP BUS-THRU	-	-	-	-	-
THERMOSTAT	-	-	-	-	-
FLUORESCENT LIGHT	-	-	-	-	-
LIGHT SWITCH	-	-	-	-	-
DUPLEX RECEPTACLE	-	-	-	-	-
NEMA 3R DOOR FAN	-	-	-	-	-
OPTIONS	-	-	-	-	-
OPTIONS	-	-	-	-	-
OPTIONS	-	-	-	-	-
GENERAL NOTES					
GENERAL NOTES					
GENERAL NOTES					
SHOP NOTES	MN	MN	MN	MN	MN
SHOP NOTES					
SHOP NOTES					
SHOP NOTES					
N1					
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N3					
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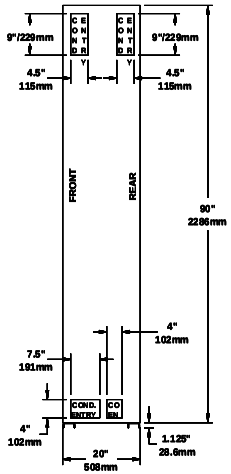

GENERAL

SERVICE	480 3Ø3W AC
SYSTEM GROUNDING	SOLIDLY GROUNDED
FREQUENCY	60 HZ
AVAIL FAULT CURR	42K AIC SYM
SERVICE ENTRANCE	NOT APPLICABLE
MCC TYPE	TIASTAR
LABELS	
UL	UL WHERE APPLICABLE
CSA	WAIVED
REGIONAL CODES	-
ALTITUDE RATINGS	UP TO 3000FT / 915M
CUST INSPECT REQD	NONE
CERTIFIED TEST RPTS	_
GENERAL NOTES	_
	_
	_
	P6 E4
	_
SHOP NOTES	_
	_
	_
	_
	_

BUS

BRACING	42K AIC SYM
BUS RATING	_
HORIZONTAL BUS	_
RATING	800A (3/16 X 2)
MATERIAL	COPPER
TEMP RATING	65 DEGREES C
PLATING	TIN
BARRIERS	STANDARD LEXAN
INSULATION	_
VERTICAL BUS	
RATING	SEE SECTION DETAILS
MATERIAL	COPPER
PLATING	TIN
STAB PLATING	TIN
NEUTRAL BUS	
RATING	_
MATERIAL	_
PLATING	_
LOCATION	_
LUGS	_
HORIZONTAL GROUND BUS	
RATING	300A (1/4 X 1)
MATERIAL	COPPER
PLATING	UNPLATED
LOCATION	FRONT BOTTOM
LUGS	(1) 6-300 KCMIL
LUG PAD	_
VERTICAL GROUND BUS	
RATING	_
MATERIAL	_
PLATING	_
MOTOR GND TERMINALS	_

STRUCTURE

NEMA TYPE	1A
EXTERNAL	_
HEIGHT	91.125" / 2315MM
DEPTH	20" / 508MM FRT ONLY
PAINT	GRAY ANSI 61
GENERAL OPTIONS	NONE
FISH-TAPE BARRIERS	_
REMOV BOT PLATES	_
BASE CHANNELS	_
SEISMIC	_
TWO-PC BACKPLATE	_
FUNGUS PROOFING	_
SPACE HEATERS	
SIZE	_
POWER SOURCE	_
BARRIER	_
THERMOSTAT	_
SPECIAL DIAGRAMS	_
INTERCONNECTION	_
COMMUNICATION	_
SPACE HEATER	_
LIGHT/SWITCH/RECEP	_
VENTILATION	_
MISC 1	_
MISC 2	_
MISC 3	_

UNITS

MIN WITHSTAND RATINGS	
CB COMBINATION	42K AIC SYM
CB FEEDER	42K AIC SYM
FUSIBLE COMBINATION	_
FUSIBLE FEEDER	_
WIRING CLASS	I
TYPE	BD (CTRL TERM BLKS)
CTRL TERM BLOCKS	PULL-APART
EXTRA UNUSED PTS	_
POWER TERM BLOCKS	NOT APPLICABLE
CONTROL WIRE	16 AWG MTW
POWER WIRE	STANDARD
CONTROL TERMINALS	_
POWER TERMINALS	_
WIRE MARKERS	_
TYPE	_
GENERAL OPTIONS	NONE
UNIT DIAG ON DOOR	_
HEATER TBLS ON DOOR	_
UNIT SIDE BARRIER	_

NAMEPLATES

UNIT	STANDARD
COLOR (FACE/TEXT)	YELLOW/BLACK
TEXT SIZE	3/16
TEXT	SEE NAMEPLATE INFO
ATTACHMENT	STANDARD
COMPONENT	_
MASTER	2X6
COLOR (FACE/TEXT)	YELLOW/BLACK
TEXT SIZE	1/2
SECTION	_
COLOR (FACE/TEXT)	_
TEXT SIZE	_
TEXT	_

INCOMING

MAIN ENTRY TYPE	CABLE ENTRY UNIT
LOCATION	TOP
SECTION	01
UNIT	01FA
INCOMING CABLES	(3)600 KCMIL
_	_
-	-
-	-
-	-
-	-
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NO.	REVISIONS	DRAWN BY:	DATE
1	0	wooddj	3-13-2018

JOB
Lyons Ferry Plant

P.O. - CONTR - TIE - S.O. 1000422408	CUST. WESCO DISTRIBUTION INC CONSLT - BY wooddj / ENG. LOC. - / DESIGNATION MCC-102 DATE 3-13-2018
Siemens Industry, Inc. Norcross, Georgia	DWG. NO. 1000422408-21000-1 APP. / MFG. LOC. - APP. / DWG. RLE SHEET 1 OF 6 REV. 1

UNIT SCHEDULE

UNIT NO			UNIT DESCRIPTION				MOTOR DATA					CIRCUIT BREAKER/DISCONNECT SWITCH						OVERLOAD		WIRING	CONTROL CIRCUIT				TOT AUX		PILOT				FACTORY USE ONLY	
CUST	SII	L/R	TYPE	SUB	HT	SZ	HP/	KW	FLA	SF	RPM	FRAME or	DS	TRIP or	CLIP	RNG or	FUSE	TYPE	RNG/HTR	DIAGRAM	TY	FU	VOLT	CPT	NO	NC	DEVICES	UNIT OPTIONS	N	UNIT NOTES	NOTES	PUCX
_	01FA	-	MLO	-	18	800	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	_	_	_	_	_	_	FMNR
_	01FD	-	METER	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	_	_	M26	_	_	_	FMNR
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	01FF	-	FVNR	-	12	1	10	HP	14.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	01FH	-	FVNR	-	12	1	10	HP	14.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	01FJ	-	FVNR	-	12	1	1	HP	2.1	-	-	ETI	125	5	-	16-54	-	3UF70	.3- 3	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	01FL	-	SPACE	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	02FA	-	COM	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	SS	0	24DC	-	_	_	_	ES5	_	_	_	FMNR
_	02FC	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	15	-	-	-	-	-	_	UT	2/1	120	150	_	_	_	PS1	_	_	_	UMNM
_	02FD	-	COM	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	SS	0	24DC	-	_	_	_	ES4	_	_	_	FMNR
_	02FF	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	15	-	-	-	-	-	_	UT	2/1	120	150	_	_	_	PS1	_	_	_	UMNM
_	02FG	-	FVNR	-	12	1	1	HP	2.1	-	-	ETI	125	5	-	16-54	-	3UF70	.3- 3	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	02FI	-	FVNR	-	12	1	10	HP	14.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	02FK	-	FVNR	-	12	2	15	HP	21.0	-	-	ETI	125	50	-	180-600	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
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_	03FA	-	FVNR	-	12	2	15	HP	21.0	-	-	ETI	125	50	-	180-600	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
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_	03FC	-	FVNR	-	12	1	10	HP	14.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	03FE	-	FVNR	-	12	1	10	HP	14.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
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_	03FG	-	FVNR	-	12	2	15	HP	21.0	-	-	ETI	125	50	-	180-600	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
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_	03FI	-	FVNR	-	12	2	25	HP	34.0	-	-	ETI	125	100	-	315-1000	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	03FK	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	60	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	03FL	-	SPACE	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	04FA	-	FVNR	-	12	1	10	HP	14.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	04FC	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	60	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	04FD	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	60	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	04FE	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	70	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	04FF	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	70	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	04FG	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	70	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	04FH	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	70	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	04FI	-	FVNR	-	12	1	10	HP	14.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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JOB

Lyons Ferry Plant

P.O.: -	CUST.: WESCO DISTRIBUTION INC
CONTR: -	CONSLT: -
TIE: -	BY: wooddj; ENG. LOC.: -; DESIGNATION: MCC-102
S.O.: 1000422408	DATE: 3-13-2018
DWG. NO.: 1000422408-21000-2	
Siemens Industry, Inc. Norcross, Georgia	APP.; MFG. LOC.: -; APP.; DWG. FILE; SHEET 2 OF 6; REV. 1

UNIT SCHEDULE

UNIT NO			UNIT DESCRIPTION				MOTOR DATA					CIRCUIT BREAKER/DISCONNECT SWITCH						OVERLOAD		WIRING	CONTROL CIRCUIT				TOT AUX		PILOT				FACTORY USE ONLY	
CUST	SII	L/R	TYPE	SUB	HT	SZ	HP/	KW	FLA	SF	RPM	FRAME or	DS	TRIP or	CLIP	RNG or	FUSE	TYPE	RNG/HTR	DIAGRAM	TY	FU	VOLT	CPT	NO	NC	DEVICES	UNIT OPTIONS	N	UNIT NOTES	NOTES	PUCX
_	04FK	-	FVNR	-	12	1	7.5	HP	11.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	05FA	-	FVNR	-	12	2	20	HP	27.0	-	-	ETI	125	50	-	180-600	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	05FC	-	FVNR	-	24	4	100	HP	124.0	-	-	ETI	250	250	-	1.1K-2.5K	-	3UF70	20-200	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	05FG	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	25	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	05FH	-	SPACE	-	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL

JOB: Lyons Ferry Plant			
P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-102
S.O.: 1000422408	DATE: 3-13-2018		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-21000-3		
	APP.:	MFG. LOC.: -	SHEET 3 OF 6
	APP.:	DWG. FILE	REV.: 1

NAMEPLATE SCHEDULE

TYPE	UNIT NUMBER	DESCRIPTION	ENGRAVING1	ENGRAVING2	ENGRAVING3	ENGRAVING4	LEAVE BLANK
MASTER		MCC					No
Unit	01FA	800A Main Lug Only.					No
Unit	01FD	(1), METER UNIT.					No
Unit	01FF	(5), FVNR, CB, SZ 1, 10HP.					No
Unit	01FH	(5), FVNR, CB, SZ 1, 10HP.					No
Unit	01FJ	(2), FVNR, CB, SZ 1, 1HP.					No
Unit	01FL	(1), 6 X 16 SPACE.					No
Unit	02FA	(1), COMMUNICATION.					No
Unit	02FC	(2), 125AF 15AT HED4 FCB.					No
Unit	02FD	(1), COMMUNICATION.					No
Unit	02FF	(2), 125AF 15AT HED4 FCB.					No
Unit	02FG	(2), FVNR, CB, SZ 1, 1HP.					No
Unit	02FI	(5), FVNR, CB, SZ 1, 10HP.					No
Unit	02FK	(3), FVNR, CB, SZ 2, 15HP.					No
Unit	03FA	(3), FVNR, CB, SZ 2, 15HP.					No
Unit	03FC	(5), FVNR, CB, SZ 1, 10HP.					No
Unit	03FE	(5), FVNR, CB, SZ 1, 10HP.					No
Unit	03FG	(3), FVNR, CB, SZ 2, 15HP.					No
Unit	03FI	(1), FVNR, CB, SZ 2, 25HP.					No
Unit	03FK	(3), 125AF 60AT HED4 FCB.					No
Unit	03FL	(1), 6 X 16 SPACE.					No
Unit	04FA	(2), FVNR, CB, SZ 1, 10HPSPARE					No
Unit	04FC	(3), 125AF 60AT HED4 FCB.					No
Unit	04FD	(3), 125AF 60AT HED4 FCB.					No
Unit	04FE	(4), 125AF 70AT HED4 FCB.					No
Unit	04FF	(4), 125AF 70AT HED4 FCB.					No
Unit	04FG	(4), 125AF 70AT HED4 FCB.					No
Unit	04FH	(4), 125AF 70AT HED4 FCB.					No
Unit	04FI	(2), FVNR, CB, SZ 1, 10HPSPARE					No
Unit	04FK	(1), FVNR, CB, SZ 1, 7.5HP.					No
Unit	05FA	(1), FVNR, CB, SZ 2, 20HP.					No
Unit	05FC	(1), FVNR, CB, SZ 4, 100HP.SPARE					No
Unit	05FG	(1), 125AF 25AT HED4 FCB.					No
Unit	05FH	(1), 30 X 16 SPACE.					No

JOB
Lyons Ferry Plant

P.O. -	CUST. WESCO DISTRIBUTION INC		
CONTR -	CONSLT -		
TIE -	BY wooddj	ENG. LOC. -	DESIGNATION MCC-102
S.O. 1000422408	DATE 3-13-2018		
	DWG. NO. 1000422408-21000-4		
Siemens Industry, Inc. Norcross, Georgia	APP. APP.	MFG. LOC. DWG. FILE	SHEET 4 OF 6

REV. 1

ABBREVIATIONS

ES4 - ETHERNET SWITCH WITH 8 PORTS MANAGED WITH C-PLUG.

ES5 - ETHERNET SWITCH WITH 16 PORTS MANAGED WITH C-PLUG.

M26 - PAC3200 3 PHASE POWER-METER WITH CTS AND PTS.

OLV - 3UF70 PRO V OVERLOAD RELAY HAS CURRENT/VOLTAGE CT.

OV3 - SIMOCODE WITH PROFINET COMMUNICATIONS.

PS1 - POWER SUPPLY WITH 24V DC OUTPUT.

PS3 - STANDARD PARAMETER BLOCKS, OVERLOAD RELAY W/ REMOTE I/O, ANY/MAINTAINED NETWORK BITS.

R - PILOT LIGHT WITH RED LENS AND RUNNING LEGEND.

SS - SEPARATE SOURCE PROVIDES CONTROL POWER.

UT - UNIT TRANSFORMER PROVIDES CONTROL POWER; X/Y SHOWS PRIMARY/SECONDARY FUSES.

3UF70 - 3UF70 SIMOCODE OVERLOAD RELAY (SEE UNIT OPTIONS FOR FEATURES).

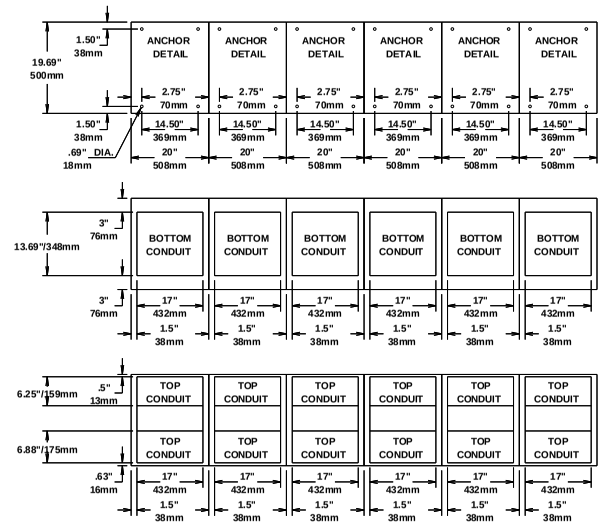
NOTES

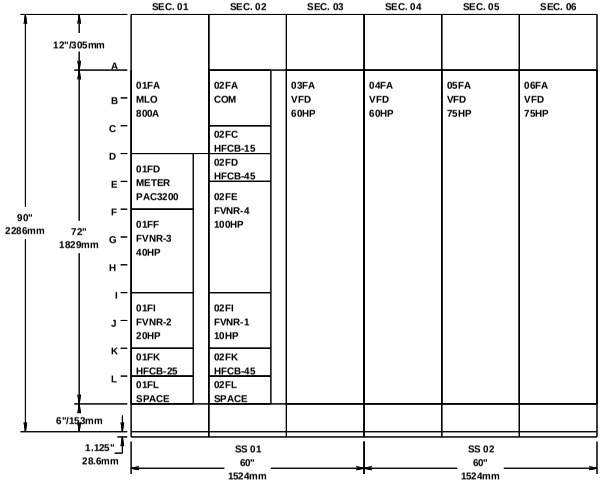
E4 - THIS MCC HAS STAR ETHERNET TOPOLOGY.
P6 - THIS MCC IS PROVIDED WITH A BOTTOM MOUNTED GROUND BUS. BOTTOM CONDUIT SPACE IS RESTRICTED; SEE DRAWING D79641 FIGURE 1.
CCY - POWER-METER WITH 800:5 CTS AND 1 PASS THROUGH CTS.
E2 - HIGH EFFICIENCY MOTOR APPLICATION.

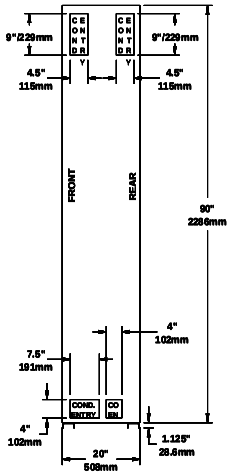
JOB: **Lyons Ferry Plant**			
P.O.: -	CUST.: **WESCO DISTRIBUTION INC**		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: **MCC-102**
S.O.: **1000422408**	DATE: **3-13-2018**		
	DWG. NO.: **1000422408-21000-5**		
Siemens Industry, Inc. Norcross, Georgia	APP.:	MFG. LOC.: -	SHEET **5** OF **6**
	APP.:	DWG. FILE	REV.: **1**

SHOP NOTES

JOB: **Lyons Ferry Plant**			
P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-102
S.O.: 1000422408	DATE: 3-13-2018		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-21000-6		
	APP.:	MFG. LOC.: -	SHEET 6 OF 6
	APP.:	DWG. FILE:	REV.: 1







	SEC. 01	SEC. 02	SEC. 03	SEC. 04	SEC. 05	SEC. 06
CUSTOMER SECT. ID						
DEPTH (In/mm)	20/508	20/508	20/508	20/508	20/508	20/508
WIDTH (In/mm)	20/508	20/508	20/508	20/508	20/508	20/508
HORIZONTAL BUS	YES	YES	YES	YES	YES	YES
VERTICAL BUS TYPE	600A FRONT	600A FRONT	NONE	NONE	NONE	NONE
VB BARRIERS	ISOLATED	ISOLATED	-	-	-	-
VB SHUTTERS	-	-	-	-	-	-
VB WW ACCESS HOLES	NO	NO	NO	NO	NO	NO
DOUBLE DEEP BUS-THRU	-	-	-	-	-	-
THERMOSTAT	-	-	-	-	-	-
FLUORESCENT LIGHT	-	-	-	-	-	-
LIGHT SWITCH	-	-	-	-	-	-
DUPLEX RECEPTACLE	-	-	-	-	-	-
NEMA 3R DOOR FAN	-	-	-	-	-	-
OPTIONS	-	-	-	-	-	-
OPTIONS	-	-	-	-	-	-
OPTIONS	-	-	-	-	-	-
GENERAL NOTES						
GENERAL NOTES						
GENERAL NOTES						
SHOP NOTES	MN	MN	MN	MN	MN	MN
SHOP NOTES						
SHOP NOTES						
SHOP NOTES						
N1						
N2						
N3						
N4						

GENERAL

SERVICE	480 3Ø3W AC
SYSTEM GROUNDING	SOLIDLY GROUNDED
FREQUENCY	60 HZ
AVAIL FAULT CURR	42K AIC SYM
SERVICE ENTRANCE	NOT APPLICABLE
MCC TYPE	TIASTAR
LABELS	
UL	UL WHERE APPLICABLE
CSA	WAIVED
REGIONAL CODES	-
ALTITUDE RATINGS	UP TO 3000FT / 915M
CUST INSPECT REQD	NONE
CERTIFIED TEST RPTS	_
GENERAL NOTES	_
	_
	_
	P6 E4
	_
SHOP NOTES	_
	_
	_
	_
	_

BUS

BRACING	42K AIC SYM
BUS RATING	_
HORIZONTAL BUS	_
RATING	800A (3/16 X 2)
MATERIAL	COPPER
TEMP RATING	65 DEGREES C
PLATING	TIN
BARRIERS	STANDARD LEXAN
INSULATION	_
VERTICAL BUS	
RATING	SEE SECTION DETAILS
MATERIAL	COPPER
PLATING	TIN
STAB PLATING	TIN
NEUTRAL BUS	
RATING	_
MATERIAL	_
PLATING	_
LOCATION	_
LUGS	_
HORIZONTAL GROUND BUS	
RATING	300A (1/4 X 1)
MATERIAL	COPPER
PLATING	UNPLATED
LOCATION	FRONT BOTTOM
LUGS	(1) 6-300 KCMIL
LUG PAD	_
VERTICAL GROUND BUS	
RATING	_
MATERIAL	_
PLATING	_
MOTOR GND TERMINALS	_

STRUCTURE

NEMA TYPE	1A
EXTERNAL	_
HEIGHT	91.125" / 2315MM
DEPTH	20" / 508MM FRT ONLY
PAINT	GRAY ANSI 61
GENERAL OPTIONS	NONE
FISH-TAPE BARRIERS	_
REMOV BOT PLATES	_
BASE CHANNELS	_
SEISMIC	_
TWO-PC BACKPLATE	_
FUNGUS PROOFING	_
SPACE HEATERS	
SIZE	_
POWER SOURCE	_
BARRIER	_
THERMOSTAT	_
SPECIAL DIAGRAMS	_
INTERCONNECTION	_
COMMUNICATION	_
SPACE HEATER	_
LIGHT/SWITCH/RECEP	_
VENTILATION	_
MISC 1	_
MISC 2	_
MISC 3	_

UNITS

MIN WITHSTAND RATINGS	
CB COMBINATION	42K AIC SYM
CB FEEDER	42K AIC SYM
FUSIBLE COMBINATION	_
FUSIBLE FEEDER	_
WIRING CLASS	I
TYPE	BD (CTRL TERM BLKS)
CTRL TERM BLOCKS	PULL-APART
EXTRA UNUSED PTS	_
POWER TERM BLOCKS	NOT APPLICABLE
CONTROL WIRE	16 AWG MTW
POWER WIRE	STANDARD
CONTROL TERMINALS	_
POWER TERMINALS	_
WIRE MARKERS	_
TYPE	_
GENERAL OPTIONS	NONE
UNIT DIAG ON DOOR	_
HEATER TBLS ON DOOR	_
UNIT SIDE BARRIER	_

NAMEPLATES

UNIT	STANDARD
COLOR (FACE/TEXT)	YELLOW/BLACK
TEXT SIZE	3/16
TEXT	SEE NAMEPLATE INFO
ATTACHMENT	STANDARD
COMPONENT	_
MASTER	2X6
COLOR (FACE/TEXT)	YELLOW/BLACK
TEXT SIZE	1/2
SECTION	_
COLOR (FACE/TEXT)	_
TEXT SIZE	_
TEXT	_

INCOMING

MAIN ENTRY TYPE	CABLE ENTRY UNIT
LOCATION	TOP
SECTION	01
UNIT	01FA
INCOMING CABLES	(3)600 KCMIL
_	_
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

NO.	REVISIONS	DRAWN BY:	DATE
1	0	wooddj	3-13-2018

JOB
Lyons Ferry Plant

P.O. - CONTR - TIE - S.O. 1000422408	CUST. WESCO DISTRIBUTION INC CONSLT - BY wooddj ENG. LOC. - DESIGNATION MCC-301 DATE 3-13-2018
Siemens Industry, Inc. Norcross, Georgia	DWG. NO. 1000422408-22000-1 APP. MFG. LOC. - APP. DWG. RLE SHEET 1 OF 5 REV. 1

UNIT SCHEDULE

UNIT NO			UNIT DESCRIPTION				MOTOR DATA					CIRCUIT BREAKER/DISCONNECT SWITCH						OVERLOAD		WIRING	CONTROL CIRCUIT				TOT AUX		PILOT				FACTORY USE ONLY	
CUST	SII	L/R	TYPE	SUB	HT	SZ	HP/	KW	FLA	SF	RPM	FRAME or	DS	TRIP or	CLIP	RNG or	FUSE	TYPE	RNG/HTR	DIAGRAM	TY	FU	VOLT	CPT	NO	NC	DEVICES	UNIT OPTIONS	N	UNIT NOTES	NOTES	PUCX
_	01FA	-	MLO	-	18	800	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	_	_	_	_	_	_	FMNR
_	01FD	-	METER	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	_	_	M26	_	_	_	FMNR
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CCY	-	-
_	01FF	-	FVNR	-	18	3	40	HP	52.0	-	-	ETI	125	125	-	500-1250	-	3UF70	10-100	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	01FI	-	FVNR	-	12	2	20	HP	27.0	-	-	ETI	125	50	-	180-600	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	01FK	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	25	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	01FL	-	SPACE	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	02FA	-	COM	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	SS	0	24DC	-	_	_	_	ES5	_	_	_	FMNR
_	02FC	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	15	-	-	-	-	-	_	UT	2/1	120	150	_	_	_	PS1	_	_	_	UMNM
_	02FD	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	45	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	02FE	-	FVNR	-	24	4	100	HP	124.0	-	-	ETI	250	250	-	1.1K-2.5K	-	3UF70	20-200	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	02FI	-	FVNR	-	12	1	10	HP	14.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	02FK	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	45	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	02FL	-	SPACE	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	03FA	-	VFD	G120H	72	90.0	60	HP	77.0	-	-	HFD6	250	150	-	-	-	-	_	D68500G40	UT	2/1	120	150	-	-	R	CM2 CM8 CU4	_	_	_	FMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PM1 V41 V45	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V4	-	-
_	04FA	-	VFD	G120H	72	90.0	60	HP	77.0	-	-	HFD6	250	150	-	-	-	-	_	D68500G40	UT	2/1	120	150	-	-	R	CM2 CM8 CU4	_	_	_	FMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PM1 V41 V45	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V4	-	-
_	05FA	-	VFD	G120H	72	110	75	HP	96.0	-	-	HFD6	250	175	-	-	-	-	_	D68500G40	UT	2/1	120	150	-	-	R	CM2 CM8 CU4	_	_	_	FMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PM1 V41 V45	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V4	-	-
_	06FA	-	VFD	G120H	72	110	75	HP	96.0	-	-	HFD6	250	175	-	-	-	-	_	D68500G40	UT	2/1	120	150	-	-	R	CM2 CM8 CU4	_	_	_	FMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PM1 V41 V45	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V4	-	-

JOB
Lyons Ferry Plant

P.O.: -	CUST.: WESCO DISTRIBUTION INC
CONTR: -	CONSLT: -
TIE: -	BY: wooddj; ENG. LOC.: -; DESIGNATION: MCC-301
S.O.: 1000422408	DATE: 3-13-2018
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-22000-2
	APP.; MFG. LOC.: -; APP.; DWG. FILE
	SHEET 2 OF 5
	REV.: 1

NAMEPLATE SCHEDULE

TYPE	UNIT NUMBER	DESCRIPTION	ENGRAVING1	ENGRAVING2	ENGRAVING3	ENGRAVING4	LEAVE BLANK
MASTER		MCC					No
Unit	01FA	800A Main Lug Only.					No
Unit	01FD	(1), METER UNIT.					No
Unit	01FF	(1), FVNR, CB, SZ 3, 40HP.					No
Unit	01FI	(1), FVNR, CB, SZ 2, 20HP.					No
Unit	01FK	(1), 125AF 25AT HED4 FCB.					No
Unit	01FL	(1), 6 X 16 SPACE.					No
Unit	02FA	(1), COMMUNICATION.					No
Unit	02FC	(1), 125AF 15AT HED4 FCB.					No
Unit	02FD	(2), 125AF 45AT HED4 FCB.					No
Unit	02FE	(1), FVNR, CB, SZ 4, 100HP.SPARE					No
Unit	02FI	(1), FVNR, CB, SZ 1, 10HP.SPARE					No
Unit	02FK	(2), 125AF 45AT HED4 FCB.					No
Unit	02FL	(1), 6 X 16 SPACE.					No
Unit	03FA	(2), VFD, CB, 60HP, G120, 90.0A, .					No
Unit	04FA	(2), VFD, CB, 60HP, G120, 90.0A, .					No
Unit	05FA	(2), VFD, CB, 75HP, G120, 110A, .					No
Unit	06FA	(2), VFD, CB, 75HP, G120, 110A, .					No

JOB
Lyons Ferry Plant

P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-301
S.O.: 1000422408	DATE: 3-13-2018		
	DWG. NO.: 1000422408-22000-3		
Siemens Industry, Inc. Norcross, Georgia	APP.:	MFG. LOC.: -	SHEET 3 OF 5
	APP.:	DWG. FILE:	REV. 1

ABBREVIATIONS

CM2 - PROFINET COMMUNICATIONS.

CM8 - COMMUNICATION WIRING.

CU4 - CONTROL UNIT CU230P-2 PN.

ES5 - ETHERNET SWITCH WITH 16 PORTS MANAGED WITH C-PLUG.

M26 - PAC3200 3 PHASE POWER-METER WITH CTS AND PTS.

OLV - 3UF70 PRO V OVERLOAD RELAY HAS CURRENT/VOLTAGE CT.

OV3 - SIMOCODE WITH PROFINET COMMUNICATIONS.

PM1 - POWER MODULE PM240.

PS1 - POWER SUPPLY WITH 24V DC OUTPUT.

PS3 - STANDARD PARAMETER BLOCKS, OVERLOAD RELAY W/ REMOTE I/O, ANY/MAINTAINED NETWORK BITS.

V41 - KEYPAD ON DOOR.

V45 - INTELLIGENT OPERATOR PANEL.

R - PILOT LIGHT WITH RED LENS AND RUNNING LEGEND.

SS - SEPARATE SOURCE PROVIDES CONTROL POWER.

UT - UNIT TRANSFORMER PROVIDES CONTROL POWER; X/Y SHOWS PRIMARY/SECONDARY FUSES.

3UF70 - 3UF70 SIMOCODE OVERLOAD RELAY (SEE UNIT OPTIONS FOR FEATURES).

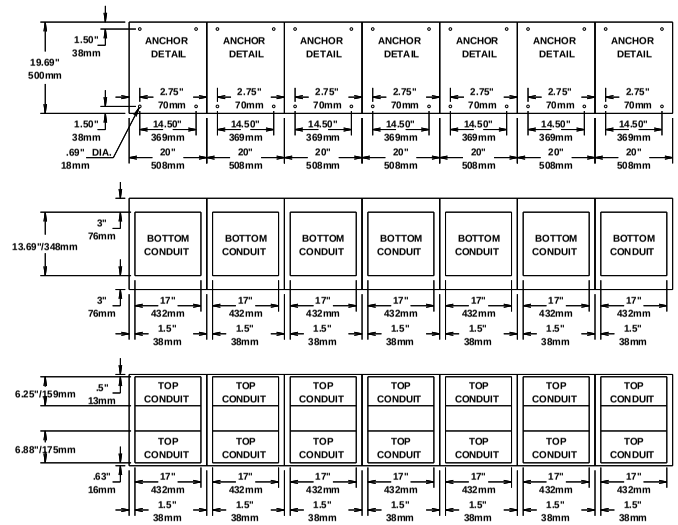
NOTES

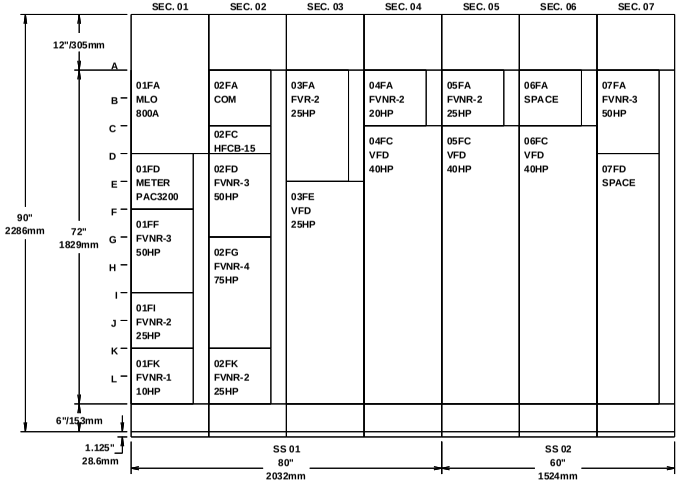
E4 - THIS MCC HAS STAR ETHERNET TOPOLOGY.
P6 - THIS MCC IS PROVIDED WITH A BOTTOM MOUNTED GROUND BUS. BOTTOM CONDUIT SPACE IS RESTRICTED; SEE DRAWING D79641 FIGURE 1.
CCY - POWER-METER WITH 800:5 CTS AND 1 PASS THROUGH CTS.
E2 - HIGH EFFICIENCY MOTOR APPLICATION.
V4 - CONTROL WIRES AT THE VFD CONTROL UNIT TERMINALS WILL BE 18 GAUGE.

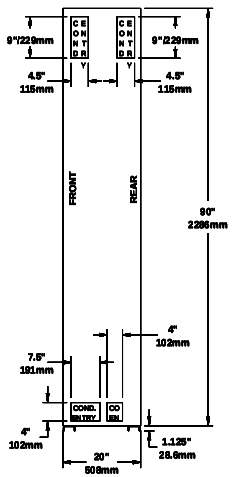
JOB: Lyons Ferry Plant			
P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-301
S.O.: 1000422408	DATE: 3-13-2018		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-22000-4		
	APP.:	MFG. LOC.: -	SHEET 4 OF 5
	APP.:	DWG. FILE:	REV.: 1

SHOP NOTES

JOB: **Lyons Ferry Plant**			
P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-301
S.O.: 1000422408	DATE: 3-13-2018		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-22000-5		
	APP.:	MFG. LOC.: -	SHEET 5 OF 5
	APP.:	DWG. FILE:	REV.: 1







CUSTOMER SECT. ID	01	02	03	04	05	06	07
DEPTH (In/mm)	20/508	20/508	20/508	20/508	20/508	20/508	20/508
WIDTH (In/mm)	20/508	20/508	20/508	20/508	20/508	20/508	20/508
HORIZONTAL BUS	YES	YES	YES	YES	YES	YES	YES
VERTICAL BUS TYPE	600A FRONT	600A FRONT	600A FRONT	600A FRONT	600A FRONT	600A FRONT	600A FRONT
VB BARRIERS	ISOLATED	ISOLATED	ISOLATED	ISOLATED	ISOLATED	ISOLATED	ISOLATED
VB SHUTTERS	-	-	-	-	-	-	-
VB WW ACCESS HOLES	NO	NO	NO	NO	NO	NO	NO
DOUBLE DEEP BUS-THRU	-	-	-	-	-	-	-
THERMOSTAT	-	-	-	-	-	-	-
FLUORESCENT LIGHT	-	-	-	-	-	-	-
LIGHT SWITCH	-	-	-	-	-	-	-
DUPLEX RECEPTACLE	-	-	-	-	-	-	-
NEMA 3R DOOR FAN	-	-	-	-	-	-	-
OPTIONS	-	-	-	-	-	-	-
OPTIONS	-	-	-	-	-	-	-
OPTIONS	-	-	-	-	-	-	-
GENERAL NOTES							
GENERAL NOTES							
GENERAL NOTES							
SHOP NOTES	MN	MN	MN	MN	MN	MN	MN
SHOP NOTES							
SHOP NOTES							
SHOP NOTES							
N1							
N2							
N3							
N4							

GENERAL

SERVICE	480 3Ø3W AC
SYSTEM GROUNDING	SOLIDLY GROUNDED
FREQUENCY	60 HZ
AVAIL FAULT CURR	42K AIC SYM
SERVICE ENTRANCE	NOT APPLICABLE
MCC TYPE	TIASTAR
LABELS	
UL	UL WHERE APPLICABLE
CSA	WAIVED
REGIONAL CODES	-
ALTITUDE RATINGS	UP TO 3000FT / 915M
CUST INSPECT REQD	NONE
CERTIFIED TEST RPTS	_
GENERAL NOTES	_
	_
	_
	P6 E4
	_
SHOP NOTES	_
	_
	_
	_
	_

BUS

BRACING	42K AIC SYM
BUS RATING	_
HORIZONTAL BUS	_
RATING	800A (3/16 X 2)
MATERIAL	COPPER
TEMP RATING	65 DEGREES C
PLATING	TIN
BARRIERS	STANDARD LEXAN
INSULATION	_
VERTICAL BUS	
RATING	SEE SECTION DETAILS
MATERIAL	COPPER
PLATING	TIN
STAB PLATING	TIN
NEUTRAL BUS	
RATING	_
MATERIAL	_
PLATING	_
LOCATION	_
LUGS	_
HORIZONTAL GROUND BUS	
RATING	300A (1/4 X 1)
MATERIAL	COPPER
PLATING	UNPLATED
LOCATION	FRONT BOTTOM
LUGS	(1) 6-300 KCMIL
LUG PAD	_
VERTICAL GROUND BUS	
RATING	_
MATERIAL	_
PLATING	_
MOTOR GND TERMINALS	_

STRUCTURE

NEMA TYPE	1A
EXTERNAL	_
HEIGHT	91.125" / 2315MM
DEPTH	20" / 508MM FRT ONLY
PAINT	GRAY ANSI 61
GENERAL OPTIONS	NONE
FISH-TAPE BARRIERS	_
REMOV BOT PLATES	_
BASE CHANNELS	_
SEISMIC	_
TWO-PC BACKPLATE	_
FUNGUS PROOFING	_
SPACE HEATERS	
SIZE	_
POWER SOURCE	_
BARRIER	_
THERMOSTAT	_
SPECIAL DIAGRAMS	_
INTERCONNECTION	_
COMMUNICATION	_
SPACE HEATER	_
LIGHT/SWITCH/RECEP	_
VENTILATION	_
MISC 1	_
MISC 2	_
MISC 3	_

UNITS

MIN WITHSTAND RATINGS	
CB COMBINATION	42K AIC SYM
CB FEEDER	42K AIC SYM
FUSIBLE COMBINATION	_
FUSIBLE FEEDER	_
WIRING CLASS	I
TYPE	BD (CTRL TERM BLKS)
CTRL TERM BLOCKS	PULL-APART
EXTRA UNUSED PTS	_
POWER TERM BLOCKS	NOT APPLICABLE
CONTROL WIRE	16 AWG MTW
POWER WIRE	STANDARD
CONTROL TERMINALS	_
POWER TERMINALS	_
WIRE MARKERS	_
TYPE	_
GENERAL OPTIONS	NONE
UNIT DIAG ON DOOR	_
HEATER TBLS ON DOOR	_
UNIT SIDE BARRIER	_

NAMEPLATES

UNIT	STANDARD
COLOR (FACE/TEXT)	YELLOW/BLACK
TEXT SIZE	3/16
TEXT	SEE NAMEPLATE INFO
ATTACHMENT	STANDARD
COMPONENT	_
MASTER	2X6
COLOR (FACE/TEXT)	YELLOW/BLACK
TEXT SIZE	1/2
SECTION	_
COLOR (FACE/TEXT)	_
TEXT SIZE	_
TEXT	_

INCOMING

MAIN ENTRY TYPE	CABLE ENTRY UNIT
LOCATION	TOP
SECTION	01
UNIT	01FA
INCOMING CABLES	(3)600 KCMIL
_	_
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

NO.	REVISIONS	DRAWN BY:	DATE
1	0	wooddj	3-16-2018

JOB
Lyons Ferry Plant

P.O. =	CUST. WESCO DISTRIBUTION INC
CONTR =	CONSLT =
TIE =	BY wooddj / ENG. LOC. - / DESIGNATION MCC-302
S.O. 1000422408	DATE 3-16-2018
Siemens Industry, Inc. Norcross, Georgia	DWG. NO. 1000422408-23000-1
	APP. / MFG. LOC. -
	APP. / DWG. RLE
	SHEET 1 OF 5
	REV. 1

UNIT SCHEDULE

UNIT NO			UNIT DESCRIPTION				MOTOR DATA					CIRCUIT BREAKER/DISCONNECT SWITCH						OVERLOAD		WIRING	CONTROL CIRCUIT				TOT AUX		PILOT				FACTORY USE ONLY	
CUST	SII	L/R	TYPE	SUB	HT	SZ	HP/	KW	FLA	SF	RPM	FRAME or	DS	TRIP or	CLIP	RNG or	FUSE	TYPE	RNG/HTR	DIAGRAM	TY	FU	VOLT	CPT	NO	NC	DEVICES	UNIT OPTIONS	N	UNIT NOTES	NOTES	PUCX
_	01FA	-	MLO	-	18	800	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	_	_	_	_	_	_	FMNR
_	01FD	-	METER	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	_	_	M26	_	_	_	FMNR
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CCY	-	-
_	01FF	-	FVNR	-	18	3	50	HP	65.0	-	-	ETI	125	125	-	500-1250	-	3UF70	10-100	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	01FI	-	FVNR	-	12	2	25	HP	34.0	-	-	ETI	125	100	-	315-1000	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	01FK	-	FVNR	-	12	1	10	HP	14.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	02FA	-	COM	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	SS	0	24DC	-	_	_	_	ES5	_	_	_	FMNR
_	02FC	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	15	-	-	-	-	-	_	UT	2/1	120	150	_	_	_	PS1	_	_	_	UMNM
_	02FD	-	FVNR	-	18	3	50	HP	65.0	-	-	ETI	125	125	-	500-1250	-	3UF70	10-100	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	02FG	-	FVNR	-	24	4	75	HP	96.0	-	-	ETI	250	150	-	800-1500	-	3UF70	20-200	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	02FK	-	FVNR	-	12	2	25	HP	34.0	-	-	ETI	125	100	-	315-1000	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	03FA	-	FVR	-	24	2	25	HP	34.0	-	-	ETI	125	100	-	315-1000	-	3UF70	10-100	_	UT	2/1	120	50	1/1	1/1	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	03FE	-	VFD	G120H	48	38.0	25	HP	34.0	-	-	HED4	125	60	-	-	-	-	_	D68500G40	UT	2/1	120	50	-	-	R	CM2 CM8 CU4	_	_	_	FMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PM1 V41 V45	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V4	-	-
_	04FA	-	FVNR	-	12	2	20	HP	27.0	-	-	ETI	125	50	-	180-600	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	04FC	-	VFD	G120H	60	60.0	40	HP	52.0	-	-	HED4	125	100	-	-	-	-	_	D68500G40	UT	2/1	120	50	-	-	R	CM2 CM8 CU4	_	_	_	FMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PM1 V41 V45	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V4	-	-
_	05FA	-	FVNR	-	12	2	25	HP	34.0	-	-	ETI	125	100	-	315-1000	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	05FC	-	VFD	G120H	60	60.0	40	HP	52.0	-	-	HED4	125	100	-	-	-	-	_	D68500G40	UT	2/1	120	50	-	-	R	CM2 CM8 CU4	_	_	_	FMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PM1 V41 V45	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V4	-	-
_	06FA	-	SPACE	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	06FC	-	VFD	G120H	60	60.0	40	HP	52.0	-	-	HED4	125	100	-	-	-	-	_	D68500G40	UT	2/1	120	50	-	-	R	CM2 CM8 CU4	_	_	_	FMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PM1 V41 V45	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V4	-	-
_	07FA	-	FVNR	-	18	3	50	HP	65.0	-	-	ETI	125	125	-	500-1250	-	3UF70	10-100	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	07FD	-	SPACE	-	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL

JOB
Lyons Ferry Plant

P.O.: -	CUST.: WESCO DISTRIBUTION INC
CONTR: -	CONSLT: -
TIE: -	BY: wooddj; ENG. LOC.: -; DESIGNATION: MCC-302
S.O.: 1000422408	DATE: 3-16-2018
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-23000-2
	APP.; MFG. LOC.: -; APP.; DWG. FILE
	SHEET 2 OF 5
	REV.: 1

NAMEPLATE SCHEDULE

TYPE	UNIT NUMBER	DESCRIPTION	ENGRAVING1	ENGRAVING2	ENGRAVING3	ENGRAVING4	LEAVE BLANK
MASTER		MCC					No
Unit	01FA	800A Main Lug Only.					No
Unit	01FD	(1), METER UNIT.					No
Unit	01FF	(2), FVNR, CB, SZ 3, 50HP.					No
Unit	01FI	(1), FVNR, CB, SZ 2, 25HP.SPARE					No
Unit	01FK	(1), FVNR, CB, SZ 1, 10HP.					No
Unit	02FA	(1), COMMUNICATION.					No
Unit	02FC	(1), 125AF 15AT HED4 FCB.					No
Unit	02FD	(1), FVNR, CB, SZ 3, 50HP.SPARE					No
Unit	02FG	(1), FVNR, CB, SZ 4, 75HP.					No
Unit	02FK	(2), FVNR, CB, SZ 2, 25HP.					No
Unit	03FA	(1), FVR, CB, SZ 2, 25HP.					No
Unit	03FE	(1), VFD, CB, 25HP, G120, 38.0A, .					No
Unit	04FA	(1), FVNR, CB, SZ 2, 20HP.					No
Unit	04FC	(3), VFD, CB, 40HP, G120, 60.0A, .					No
Unit	05FA	(2), FVNR, CB, SZ 2, 25HP.					No
Unit	05FC	(3), VFD, CB, 40HP, G120, 60.0A, .					No
Unit	06FA	(1), 12 X 16 SPACE.					No
Unit	06FC	(3), VFD, CB, 40HP, G120, 60.0A, .					No
Unit	07FA	(2), FVNR, CB, SZ 3, 50HP.					No
Unit	07FD	(1), 54 X 16 SPACE.					No

JOB
Lyons Ferry Plant

P.O. -	CUST. WESCO DISTRIBUTION INC		
CONTR -	CONSLT -		
TIE -	BY wooddj	ENG. LOC. -	DESIGNATION MCC-302
S.O. 1000422408	DATE 3-16-2018		
	DWG. NO. 1000422408-23000-3		
Siemens Industry, Inc. Norcross, Georgia	APP. APP.	MFG. LOC. DWG. FILE	SHEET 3 OF 5 REV. 1

ABBREVIATIONS

CM2 - PROFINET COMMUNICATIONS.

CM8 - COMMUNICATION WIRING.

CU4 - CONTROL UNIT CU230P-2 PN.

ES5 - ETHERNET SWITCH WITH 16 PORTS MANAGED WITH C-PLUG.

M26 - PAC3200 3 PHASE POWER-METER WITH CTS AND PTS.

OLV - 3UF70 PRO V OVERLOAD RELAY HAS CURRENT/VOLTAGE CT.

OV3 - SIMOCODE WITH PROFINET COMMUNICATIONS.

PM1 - POWER MODULE PM240.

PS1 - POWER SUPPLY WITH 24V DC OUTPUT.

PS3 - STANDARD PARAMETER BLOCKS, OVERLOAD RELAY W/ REMOTE I/O, ANY/MAINTAINED NETWORK BITS.

V41 - KEYPAD ON DOOR.

V45 - INTELLIGENT OPERATOR PANEL.

R - PILOT LIGHT WITH RED LENS AND RUNNING LEGEND.

SS - SEPARATE SOURCE PROVIDES CONTROL POWER.

UT - UNIT TRANSFORMER PROVIDES CONTROL POWER; X/Y SHOWS PRIMARY/SECONDARY FUSES.

3UF70 - 3UF70 SIMOCODE OVERLOAD RELAY (SEE UNIT OPTIONS FOR FEATURES).

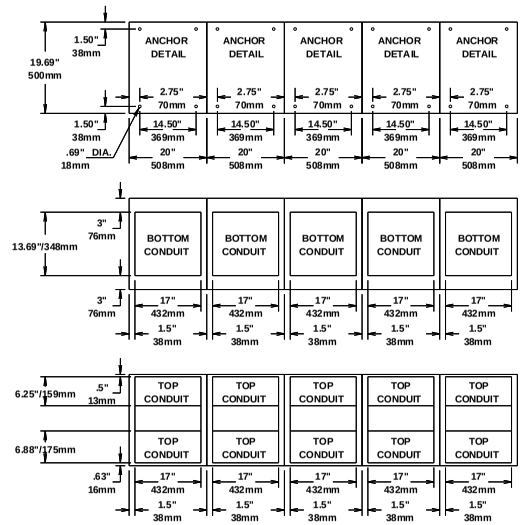
NOTES

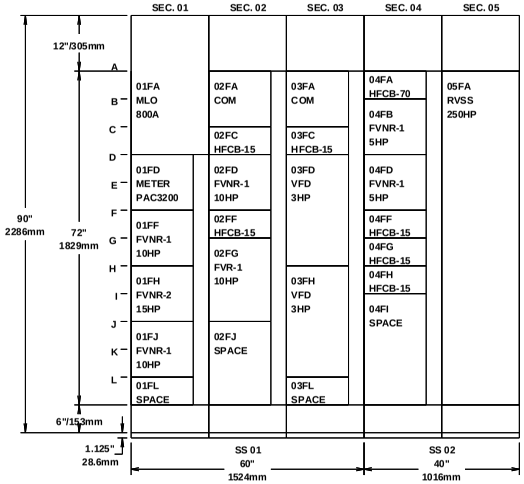
E4 - THIS MCC HAS STAR ETHERNET TOPOLOGY.
P6 - THIS MCC IS PROVIDED WITH A BOTTOM MOUNTED GROUND BUS. BOTTOM CONDUIT SPACE IS RESTRICTED; SEE DRAWING D79641 FIGURE 1.
CCY - POWER-METER WITH 800:5 CTS AND 1 PASS THROUGH CTS.
V4 - CONTROL WIRES AT THE VFD CONTROL UNIT TERMINALS WILL BE 18 GAUGE.
E2 - HIGH EFFICIENCY MOTOR APPLICATION.

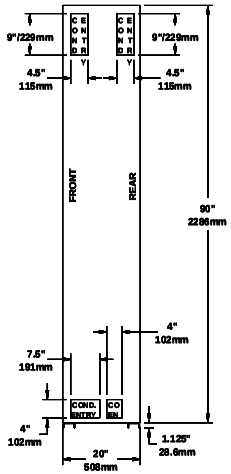
JOB: Lyons Ferry Plant			
P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-302
S.O.: 1000422408	DATE: 3-16-2018		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-23000-4		
	APP.:	MFG. LOC.: -	SHEET 4 OF 5
	APP.:	DWG. FILE:	REV.: 1

SHOP NOTES

JOB: **Lyons Ferry Plant**			
P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-302
S.O.: 1000422408	DATE: 3-16-2018		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-23000-5		
	APP.:	MFG. LOC.: -	SHEET 5 OF 5
	APP.:	DWG. FILE:	REV.: 1







CUSTOMER SECT. ID			
DEPTH (In/mm)	20/508	20/508	20/508	20/508	20/508
WIDTH (In/mm)	20/508	20/508	20/508	20/508	20/508
HORIZONTAL BUS	YES	YES	YES	YES	YES
VERTICAL BUS TYPE	600A FRONT	600A FRONT	600A FRONT	600A FRONT	NONE
VB BARRIERS	ISOLATED	ISOLATED	ISOLATED	ISOLATED	-
VB SHUTTERS	-	-	-	-	-
VB WW ACCESS HOLES	NO	NO	NO	NO	NO
DOUBLE DEEP BUS-THRU	-	-	-	-	-
THERMOSTAT	-	-	-	-	-
FLUORESCENT LIGHT	-	-	-	-	-
LIGHT SWITCH	-	-	-	-	-
DUPLEX RECEPTACLE	-	-	-	-	-
NEMA 3R DOOR FAN	-	-	-	-	-
OPTIONS	-	-	-	-	-
OPTIONS	-	-	-	-	-
OPTIONS	-	-	-	-	-
GENERAL NOTES					
GENERAL NOTES					
GENERAL NOTES					
SHOP NOTES	MN	MN	MN	MN	MN
SHOP NOTES					
SHOP NOTES					
SHOP NOTES					
N1					
N2					
N3					
N4					

GENERAL

SERVICE	480 3Ø3W AC
SYSTEM GROUNDING	SOLIDLY GROUNDED
FREQUENCY	60 HZ
AVAIL FAULT CURR	42K AIC SYM
SERVICE ENTRANCE	NOT APPLICABLE
MCC TYPE	TIASTAR
LABELS	
UL	UL WHERE APPLICABLE
CSA	WAIVED
REGIONAL CODES	-
ALTITUDE RATINGS	UP TO 3000FT / 915M
CUST INSPECT REQD	NONE
CERTIFIED TEST RPTS	_
GENERAL NOTES	_
	_
	_
	P6 E4
	_
SHOP NOTES	_
	_
	_
	_
	_

BUS

BRACING	42K AIC SYM
BUS RATING	_
HORIZONTAL BUS	_
RATING	800A (3/16 X 2)
MATERIAL	COPPER
TEMP RATING	65 DEGREES C
PLATING	TIN
BARRIERS	STANDARD LEXAN
INSULATION	_
VERTICAL BUS	
RATING	SEE SECTION DETAILS
MATERIAL	COPPER
PLATING	TIN
STAB PLATING	TIN
NEUTRAL BUS	
RATING	_
MATERIAL	_
PLATING	_
LOCATION	_
LUGS	_
HORIZONTAL GROUND BUS	
RATING	300A (1/4 X 1)
MATERIAL	COPPER
PLATING	UNPLATED
LOCATION	FRONT BOTTOM
LUGS	(1) 6-300 KCMIL
LUG PAD	_
VERTICAL GROUND BUS	
RATING	_
MATERIAL	_
PLATING	_
MOTOR GND TERMINALS	_

STRUCTURE

NEMA TYPE	1A
EXTERNAL	_
HEIGHT	91.125" / 2315MM
DEPTH	20" / 508MM FRT ONLY
PAINT	GRAY ANSI 61
GENERAL OPTIONS	NONE
FISH-TAPE BARRIERS	_
REMOV BOT PLATES	_
BASE CHANNELS	_
SEISMIC	_
TWO-PC BACKPLATE	_
FUNGUS PROOFING	_
SPACE HEATERS	
SIZE	_
POWER SOURCE	_
BARRIER	_
THERMOSTAT	_
SPECIAL DIAGRAMS	_
INTERCONNECTION	_
COMMUNICATION	_
SPACE HEATER	_
LIGHT/SWITCH/RECEP	_
VENTILATION	_
MISC 1	_
MISC 2	_
MISC 3	_

UNITS

MIN WITHSTAND RATINGS	
CB COMBINATION	42K AIC SYM
CB FEEDER	42K AIC SYM
FUSIBLE COMBINATION	_
FUSIBLE FEEDER	_
WIRING CLASS	I
TYPE	BD (CTRL TERM BLKS)
CTRL TERM BLOCKS	PULL-APART
EXTRA UNUSED PTS	_
POWER TERM BLOCKS	NOT APPLICABLE
CONTROL WIRE	16 AWG MTW
POWER WIRE	STANDARD
CONTROL TERMINALS	_
POWER TERMINALS	_
WIRE MARKERS	_
TYPE	_
GENERAL OPTIONS	NONE
UNIT DIAG ON DOOR	_
HEATER TBLS ON DOOR	_
UNIT SIDE BARRIER	_

NAMEPLATES

UNIT	STANDARD
COLOR (FACE/TEXT)	YELLOW/BLACK
TEXT SIZE	3/16
TEXT	SEE NAMEPLATE INFO
ATTACHMENT	STANDARD
COMPONENT	_
MASTER	2X6
COLOR (FACE/TEXT)	YELLOW/BLACK
TEXT SIZE	1/2
SECTION	_
COLOR (FACE/TEXT)	_
TEXT SIZE	_
TEXT	_

INCOMING

MAIN ENTRY TYPE	CABLE ENTRY UNIT
LOCATION	TOP
SECTION	01
UNIT	01FA
INCOMING CABLES	(3)600 KCMIL
_	_
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

NO.	REVISIONS	DRAWN BY:	DATE
1	0	wooddj	3-13-2018

JOB
Lyons Ferry Plant

P.O.	CUST.
-	WESCO DISTRIBUTION INC
CONTR	CONSLT
-	-
TIE	BY: wooddj
-	ENG. LOC.: -
S.O.	DESIGNATION: MCC-310
1000422408	DATE: 3-13-2018
Siemens Industry, Inc.	DWG. NO.: 1000422408-24000-1
Norcross, Georgia	APP. / MFG. LOC. -
	APP. / DWG. RLE
	SHEET 1 OF 5
	REV. 1

UNIT SCHEDULE

UNIT NO			UNIT DESCRIPTION				MOTOR DATA					CIRCUIT BREAKER/DISCONNECT SWITCH						OVERLOAD		WIRING	CONTROL CIRCUIT				TOT AUX		PILOT				FACTORY USE ONLY	
CUST	SII	L/R	TYPE	SUB	HT	SZ	HP/	KW	FLA	SF	RPM	FRAME or	DS	TRIP or	CLIP	RNG or	FUSE	TYPE	RNG/HTR	DIAGRAM	TY	FU	VOLT	CPT	NO	NC	DEVICES	UNIT OPTIONS	N	UNIT NOTES	NOTES	PUCX
_	01FA	-	MLO	-	18	800	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	_	_	_	_	_	_	FMNR
_	01FD	-	METER	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	_	_	M26	_	_	_	FMNR
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CCY	-	-
_	01FF	-	FVNR	-	12	1	10	HP	14.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	01FH	-	FVNR	-	12	2	15	HP	21.0	-	-	ETI	125	50	-	180-600	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	01FJ	-	FVNR	-	12	1	10	HP	14.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	01FL	-	SPACE	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	02FA	-	COM	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	SS	0	24DC	-	_	_	_	ES5	_	_	_	FMNR
_	02FC	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	15	-	-	-	-	-	_	UT	2/1	120	150	_	_	_	PS1	_	_	_	UMNM
_	02FD	-	FVNR	-	12	1	10	HP	14.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	02FF	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	15	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	02FG	-	FVR	-	18	1	10	HP	14.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1/1	1/1	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	02FJ	-	SPACE	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	03FA	-	COM	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	SS	0	24DC	-	_	_	_	ES5	_	_	_	FMNR
_	03FC	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	15	-	-	-	-	-	_	UT	2/1	120	150	_	_	_	PS1	_	_	_	UMNM
_	03FD	-	VFD	G120H	24	5.9	3	HP	4.8	-	-	HED4	125	15	-	-	-	-	_	D68500G40	UT	2/1	120	50	-	-	R	CM2 CM8 CU4	_	_	_	PMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PM1 V41 V45	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V4	-	-
_	03FH	-	VFD	G120H	24	5.9	3	HP	4.8	-	-	HED4	125	15	-	-	-	-	_	D68500G40	UT	2/1	120	50	-	-	R	CM2 CM8 CU4	_	_	_	PMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PM1 V41 V45	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V4	-	-
_	03FL	-	SPACE	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	04FA	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	70	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	04FB	-	FVNR	-	12	1	5	HP	7.6	-	-	ETI	125	30	-	80-270	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	04FD	-	FVNR	-	12	1	5	HP	7.6	-	-	ETI	125	30	-	80-270	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	04FF	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	15	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	04FG	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	15	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	04FH	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	15	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	04FI	-	SPACE	-	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	05FA	-	RVSS	3RW44	72	326A	250	HP	302.0	-	-	LD6	600	500	-	-	-	-	_	D69015H16	UT	2/1	120	250	-	-	R	RI1 V41 V59	_	_	_	FMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D68500H91	-	-	-	-	-	-	-	-	-	-	-	-

JOB	**Lyons Ferry Plant**
P.O. -	CUST. WESCO DISTRIBUTION INC
CONTR -	CONSLT -
TIE -	BY wooddj / ENG. LOC. - / DESIGNATION MCC-310
S.O. 1000422408	DATE 3-13-2018
Siemens Industry, Inc. Norcross, Georgia	DWG. NO. 1000422408-24000-2
	APP. / MFG. LOC. -
	APP. / DWG. FILE
	SHEET 2 OF 5
	REV. 1

NAMEPLATE SCHEDULE

TYPE	UNIT NUMBER	DESCRIPTION	ENGRAVING1	ENGRAVING2	ENGRAVING3	ENGRAVING4	LEAVE BLANK
MASTER		MCC					No
Unit	01FA	800A Main Lug Only.					No
Unit	01FD	(1), METER UNIT.					No
Unit	01FF	(3), FVNR, CB, SZ 1, 10HP.					No
Unit	01FH	(1), FVNR, CB, SZ 2, 15HP.					No
Unit	01FJ	(3), FVNR, CB, SZ 1, 10HP.					No
Unit	01FL	(1), 6 X 16 SPACE.					No
Unit	02FA	(2), COMMUNICATION.					No
Unit	02FC	(2), 125AF 15AT HED4 FCB.					No
Unit	02FD	(3), FVNR, CB, SZ 1, 10HP.					No
Unit	02FF	(4), 125AF 15AT HED4 FCB.					No
Unit	02FG	(1), FVR, CB, SZ 1, 10HP.					No
Unit	02FJ	(1), 18 X 16 SPACE.					No
Unit	03FA	(2), COMMUNICATION.					No
Unit	03FC	(2), 125AF 15AT HED4 FCB.					No
Unit	03FD	(2), VFD, CB, 3HP, G120, 5.9A, .					No
Unit	03FH	(2), VFD, CB, 3HP, G120, 5.9A, .					No
Unit	03FL	(1), 6 X 16 SPACE.					No
Unit	04FA	(1), 125AF 70AT HED4 FCB.					No
Unit	04FB	(2), FVNR, CB, SZ 1, 5HP.					No
Unit	04FD	(2), FVNR, CB, SZ 1, 5HP.					No
Unit	04FF	(4), 125AF 15AT HED4 FCB.					No
Unit	04FG	(4), 125AF 15AT HED4 FCB.					No
Unit	04FH	(4), 125AF 15AT HED4 FCB.					No
Unit	04FI	(1), 24 X 16 SPACE.					No
Unit	05FA	(1), RVSS, CB, 250HP, 3RW44, 326A.					No

JOB
Lyons Ferry Plant

P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-310
S.O.: 1000422408	DATE: 3-13-2018		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-24000-3		
	APP.:	MFG. LOC.: -	SHEET 3 OF 5
	APP.:	DWG. FILE:	REV.: 1

ABBREVIATIONS

CM2 - PROFINET COMMUNICATIONS.

CM8 - COMMUNICATION WIRING.

CU4 - CONTROL UNIT CU230P-2 PN.

ES5 - ETHERNET SWITCH WITH 16 PORTS MANAGED WITH C-PLUG.

M26 - PAC3200 3 PHASE POWER-METER WITH CTS AND PTS.

OLV - 3UF70 PRO V OVERLOAD RELAY HAS CURRENT/VOLTAGE CT.

OV3 - SIMOCODE WITH PROFINET COMMUNICATIONS.

PM1 - POWER MODULE PM240.

PS1 - POWER SUPPLY WITH 24V DC OUTPUT.

PS3 - STANDARD PARAMETER BLOCKS, OVERLOAD RELAY W/ REMOTE I/O, ANY/MAINTAINED NETWORK BITS.

RI1 - INTERPOSING RELAY.

V41 - KEYPAD ON DOOR.

V45 - INTELLIGENT OPERATOR PANEL.

V59 - PROFINET COMMUNICATIONS.

R - PILOT LIGHT WITH RED LENS AND RUNNING LEGEND.

SS - SEPARATE SOURCE PROVIDES CONTROL POWER.

UT - UNIT TRANSFORMER PROVIDES CONTROL POWER; X/Y SHOWS PRIMARY/SECONDARY FUSES.

3UF70 - 3UF70 SIMOCODE OVERLOAD RELAY (SEE UNIT OPTIONS FOR FEATURES).

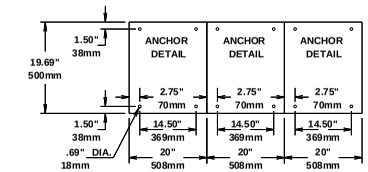
NOTES

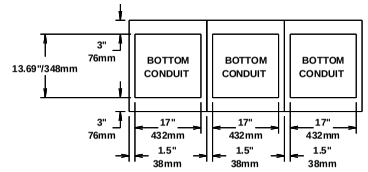
E4 - THIS MCC HAS STAR ETHERNET TOPOLOGY.
P6 - THIS MCC IS PROVIDED WITH A BOTTOM MOUNTED GROUND BUS. BOTTOM CONDUIT SPACE IS RESTRICTED; SEE DRAWING D79641 FIGURE 1.
CCY - POWER-METER WITH 800:5 CTS AND 1 PASS THROUGH CTS.
V4 - CONTROL WIRES AT THE VFD CONTROL UNIT TERMINALS WILL BE 18 GAUGE.
E2 - HIGH EFFICIENCY MOTOR APPLICATION.

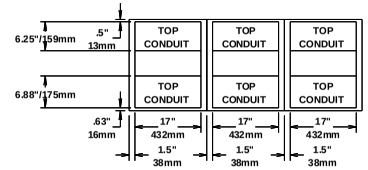
JOB: **Lyons Ferry Plant**			
P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-310
S.O.: 1000422408	DATE: 3-13-2018		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-24000-4		
	APP.: / MFG. LOC.: -	SHEET 4 OF 5	REV.: 1
	APP.: / DWG. FILE:		

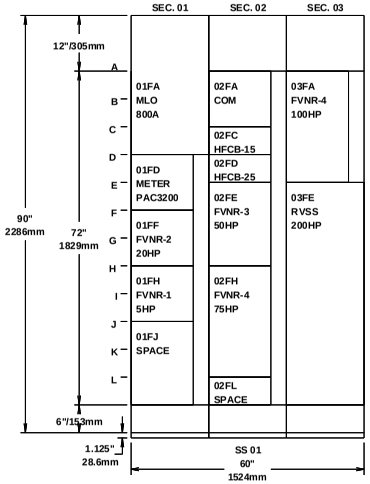
SHOP NOTES

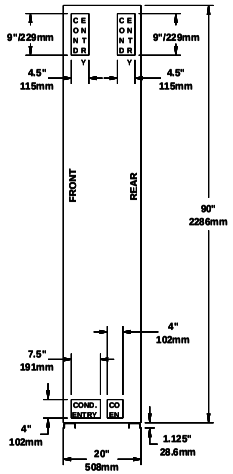
JOB: **Lyons Ferry Plant**			
P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-310
S.O.: 1000422408	DATE: 3-13-2018		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-24000-5		
	APP.:	MFG. LOC.: -	SHEET 5 OF 5
	APP.:	DWG. FILE:	REV.: 1











CUSTOMER SECT. ID					
DEPTH (In/mm)	20/508	20/508	20/508		
WIDTH (In/mm)	20/508	20/508	20/508		
HORIZONTAL BUS	YES	YES	YES		
VERTICAL BUS TYPE	600A FRONT	600A FRONT	600A FRONT		
VB BARRIERS	ISOLATED	ISOLATED	ISOLATED		
VB SHUTTERS	-	-	-		
VB WW ACCESS HOLES	NO	NO	NO		
DOUBLE DEEP BUS-THRU	-	-	-		
THERMOSTAT	-	-	-		
FLUORESCENT LIGHT	-	-	-		
LIGHT SWITCH	-	-	-		
DUPLEX RECEPTACLE	-	-	-		
NEMA 3R DOOR FAN	-	-	-		
OPTIONS	-	-	-		
OPTIONS	-	-	-		
OPTIONS	-	-	-		
GENERAL NOTES					
GENERAL NOTES					
GENERAL NOTES					
SHOP NOTES	MN	MN	MN		
SHOP NOTES					
SHOP NOTES					
SHOP NOTES					
N1					
N2					
N3					
N4					

GENERAL

SERVICE	480 3Ø3W AC
SYSTEM GROUNDING	SOLIDLY GROUNDED
FREQUENCY	60 HZ
AVAIL FAULT CURR	42K AIC SYM
SERVICE ENTRANCE	NOT APPLICABLE
MCC TYPE	TIASTAR
LABELS	
UL	UL WHERE APPLICABLE
CSA	WAIVED
REGIONAL CODES	-
ALTITUDE RATINGS	UP TO 3000FT / 915M
CUST INSPECT REQD	NONE
CERTIFIED TEST RPTS	_
GENERAL NOTES	_
	_
	_
	P6 E4
	_
SHOP NOTES	_
	_
	_
	_
	_

BUS

BRACING	42K AIC SYM
BUS RATING	_
HORIZONTAL BUS	_
RATING	800A (3/16 X 2)
MATERIAL	COPPER
TEMP RATING	65 DEGREES C
PLATING	TIN
BARRIERS	STANDARD LEXAN
INSULATION	_
VERTICAL BUS	
RATING	SEE SECTION DETAILS
MATERIAL	COPPER
PLATING	TIN
STAB PLATING	TIN
NEUTRAL BUS	
RATING	_
MATERIAL	_
PLATING	_
LOCATION	_
LUGS	_
HORIZONTAL GROUND BUS	
RATING	300A (1/4 X 1)
MATERIAL	COPPER
PLATING	UNPLATED
LOCATION	FRONT BOTTOM
LUGS	(1) 6-300 KCMIL
LUG PAD	_
VERTICAL GROUND BUS	
RATING	_
MATERIAL	_
PLATING	_
MOTOR GND TERMINALS	_

STRUCTURE

NEMA TYPE	1A
EXTERNAL	_
HEIGHT	91.125" / 2315MM
DEPTH	20" / 508MM FRT ONLY
PAINT	GRAY ANSI 61
GENERAL OPTIONS	NONE
FISH-TAPE BARRIERS	_
REMOV BOT PLATES	_
BASE CHANNELS	_
SEISMIC	_
TWO-PC BACKPLATE	_
FUNGUS PROOFING	_
SPACE HEATERS	
SIZE	_
POWER SOURCE	_
BARRIER	_
THERMOSTAT	_
SPECIAL DIAGRAMS	_
INTERCONNECTION	_
COMMUNICATION	_
SPACE HEATER	_
LIGHT/SWITCH/RECEP	_
VENTILATION	_
MISC 1	_
MISC 2	_
MISC 3	_

UNITS

MIN WITHSTAND RATINGS	
CB COMBINATION	42K AIC SYM
CB FEEDER	42K AIC SYM
FUSIBLE COMBINATION	_
FUSIBLE FEEDER	_
WIRING CLASS	I
TYPE	BD (CTRL TERM BLKS)
CTRL TERM BLOCKS	PULL-APART
EXTRA UNUSED PTS	_
POWER TERM BLOCKS	NOT APPLICABLE
CONTROL WIRE	16 AWG MTW
POWER WIRE	STANDARD
CONTROL TERMINALS	_
POWER TERMINALS	_
WIRE MARKERS	_
TYPE	_
GENERAL OPTIONS	NONE
UNIT DIAG ON DOOR	_
HEATER TBLS ON DOOR	_
UNIT SIDE BARRIER	_

NAMEPLATES

UNIT	STANDARD
COLOR (FACE/TEXT)	YELLOW/BLACK
TEXT SIZE	3/16
TEXT	SEE NAMEPLATE INFO
ATTACHMENT	STANDARD
COMPONENT	_
MASTER	2X6
COLOR (FACE/TEXT)	YELLOW/BLACK
TEXT SIZE	1/2
SECTION	_
COLOR (FACE/TEXT)	_
TEXT SIZE	_
TEXT	_

INCOMING

MAIN ENTRY TYPE	CABLE ENTRY UNIT
LOCATION	TOP
SECTION	01
UNIT	01FA
INCOMING CABLES	(3)600 KCMIL
_	_
-	-
-	-
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NO.	REVISIONS	DRAWN BY:	DATE
1	0	wooddj	3-13-2018

JOB
Lyons Ferry Plant

P.O. =	CUST. WESCO DISTRIBUTION INC
CONTR =	CONSLT =
TIE =	BY wooddj / ENG. LOC. - / DESIGNATION MCC-311
S.O. 1000422408	DATE 3-13-2018
Siemens Industry, Inc. Norcross, Georgia	DWG. NO. 1000422408-25000-1
	APP. / MFG. LOC. -
	APP. / DWG. RLE
	SHEET 1 OF 5
	REV. 1

UNIT SCHEDULE

UNIT NO			UNIT DESCRIPTION				MOTOR DATA					CIRCUIT BREAKER/DISCONNECT SWITCH						OVERLOAD		WIRING	CONTROL CIRCUIT				TOT AUX		PILOT			FACTORY USE ONLY	
CUST	SII	L/R	TYPE	SUB	HT	SZ	HP/	KW	FLA	SF	RPM	FRAME or	DS	TRIP or	CLIP	RNG or	FUSE	TYPE	RNG/HTR	DIAGRAM	TY	FU	VOLT	CPT	NO	NC	DEVICES	UNIT OPTIONS	N	UNIT NOTES	NOTES	PUCX
_	01FA	-	MLO	-	18	800	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	_	_	_	_	_	_	FMNR
_	01FD	-	METER	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	_	_	M26	_	_	_	FMNR
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_	01FF	-	FVNR	-	12	2	20	HP	27.0	-	-	ETI	125	50	-	180-600	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	01FH	-	FVNR	-	12	1	5	HP	7.6	-	-	ETI	125	30	-	80-270	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	01FJ	-	SPACE	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	02FA	-	COM	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	SS	0	24DC	-	_	_	_	ES5	_	_	_	FMNR
_	02FC	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	15	-	-	-	-	-	_	UT	2/1	120	150	_	_	_	PS1	_	_	_	UMNM
_	02FD	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	25	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	02FE	-	FVNR	-	18	3	50	HP	65.0	-	-	ETI	125	125	-	500-1250	-	3UF70	10-100	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	02FH	-	FVNR	-	24	4	75	HP	96.0	-	-	ETI	250	150	-	800-1500	-	3UF70	20-200	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	02FL	-	SPACE	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	03FA	-	FVNR	-	24	4	100	HP	124.0	-	-	ETI	250	250	-	1.1K-2.5K	-	3UF70	20-200	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	03FE	-	RVSS	3RW44	48	243A	200	HP	240.0	-	-	JD6	400	400	-	-	-	-	_	D69015H16	UT	2/1	120	250	-	-	R	RI1 V41 V59	_	_	_	FMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D68500H93	-	-	-	-	-	-	-	-	-	-	-	-

JOB
Lyons Ferry Plant

P.O.: -	CUST.: WESCO DISTRIBUTION INC
CONTR: -	CONSLT: -
TIE: -	BY: wooddj; ENG. LOC.: -; DESIGNATION: MCC-311
S.O.: 1000422408	DATE: 3-13-2018
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-25000-2; APP.: ; MFG. LOC.: -; APP.: ; DWG. FILE: ; SHEET 2 OF 5; REV.: 1

NAMEPLATE SCHEDULE

TYPE	UNIT NUMBER	DESCRIPTION	ENGRAVING1	ENGRAVING2	ENGRAVING3	ENGRAVING4	LEAVE BLANK
MASTER		MCC					No
Unit	01FA	800A Main Lug Only.					No
Unit	01FD	(1), METER UNIT.					No
Unit	01FF	(1), FVNR, CB, SZ 2, 20HP.					No
Unit	01FH	(1), FVNR, CB, SZ 1, 5HP.					No
Unit	01FJ	(1), 18 X 16 SPACE.					No
Unit	02FA	(1), COMMUNICATION.					No
Unit	02FC	(1), 125AF 15AT HED4 FCB.					No
Unit	02FD	(1), 125AF 25AT HED4 FCB.					No
Unit	02FE	(1), FVNR, CB, SZ 3, 50HP.					No
Unit	02FH	(1), FVNR, CB, SZ 4, 75HP.					No
Unit	02FL	(1), 6 X 16 SPACE.					No
Unit	03FA	(1), FVNR, CB, SZ 4, 100HP.SPARE					No
Unit	03FE	(1), RVSS, CB, 200HP, 3RW44, 243A.					No

JOB: **Lyons Ferry Plant**

P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-311
S.O.: 1000422408	DATE: 3-13-2018		
	DWG. NO.: 1000422408-25000-3		
Siemens Industry, Inc. Norcross, Georgia	APP.:	MFG. LOC.: -	SHEET 3 OF 5
	APP.:	DWG. FILE:	REV.: 1

ABBREVIATIONS

ES5 - ETHERNET SWITCH WITH 16 PORTS MANAGED WITH C-PLUG.

M26 - PAC3200 3 PHASE POWER-METER WITH CTS AND PTS.

OLV - 3UF70 PRO V OVERLOAD RELAY HAS CURRENT/VOLTAGE CT.

OV3 - SIMOCODE WITH PROFINET COMMUNICATIONS.

PS1 - POWER SUPPLY WITH 24V DC OUTPUT.

PS3 - STANDARD PARAMETER BLOCKS, OVERLOAD RELAY W/ REMOTE I/O, ANY/MAINTAINED NETWORK BITS.

RI1 - INTERPOSING RELAY.

V41 - KEYPAD ON DOOR.

V59 - PROFINET COMMUNICATIONS.

R - PILOT LIGHT WITH RED LENS AND RUNNING LEGEND.

SS - SEPARATE SOURCE PROVIDES CONTROL POWER.

UT - UNIT TRANSFORMER PROVIDES CONTROL POWER; X/Y SHOWS PRIMARY/SECONDARY FUSES.

3UF70 - 3UF70 SIMOCODE OVERLOAD RELAY (SEE UNIT OPTIONS FOR FEATURES).

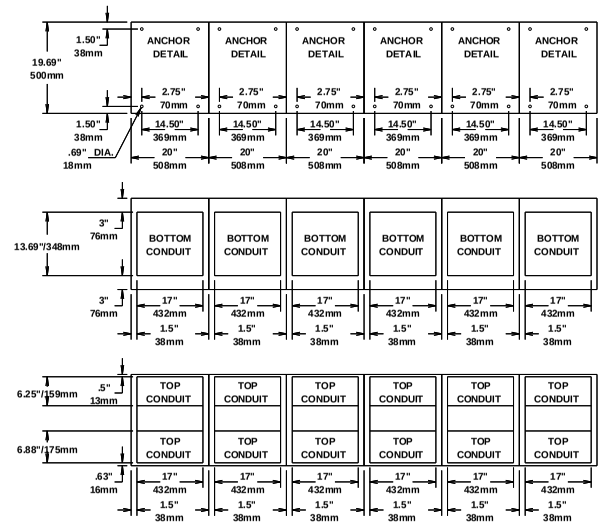
NOTES

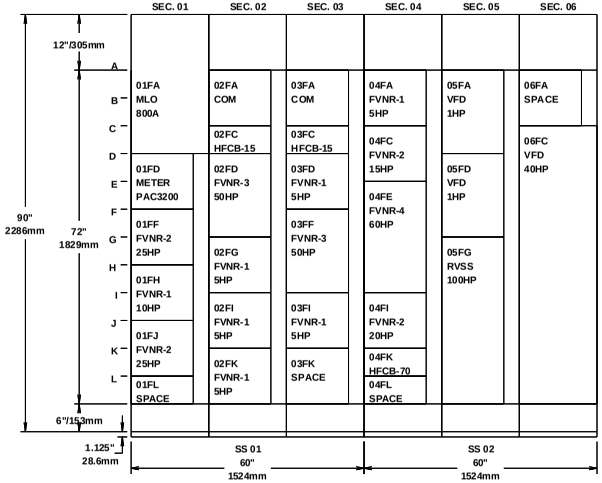
E4 - THIS MCC HAS STAR ETHERNET TOPOLOGY.
P6 - THIS MCC IS PROVIDED WITH A BOTTOM MOUNTED GROUND BUS. BOTTOM CONDUIT SPACE IS RESTRICTED; SEE DRAWING D79641 FIGURE 1.
CCY - POWER-METER WITH 800:5 CTS AND 1 PASS THROUGH CTS.
E2 - HIGH EFFICIENCY MOTOR APPLICATION.

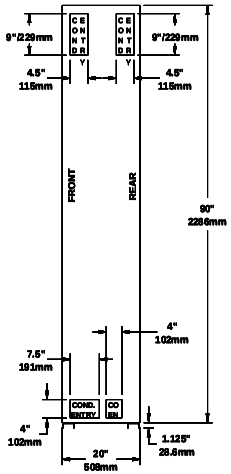
JOB: Lyons Ferry Plant			
P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-311
S.O.: 1000422408	DATE: 3-13-2018		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-25000-4		
	APP.:	MFG. LOC.: -	SHEET 4 OF 5
	APP.:	DWG. FILE:	REV.: 1

SHOP NOTES

JOB: **Lyons Ferry Plant**			
P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-311
S.O.: 1000422408	DATE: 3-13-2018		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-25000-5		
	APP.:	MFG. LOC.: -	SHEET 5 OF 5
	APP.:	DWG. FILE:	REV.: 1







	SEC. 01	SEC. 02	SEC. 03	SEC. 04	SEC. 05	SEC. 06
CUSTOMER SECT. ID						
DEPTH (In/mm)	20/508	20/508	20/508	20/508	20/508	20/508
WIDTH (In/mm)	20/508	20/508	20/508	20/508	20/508	20/508
HORIZONTAL BUS	YES	YES	YES	YES	YES	YES
VERTICAL BUS TYPE	600A FRONT	600A FRONT	600A FRONT	600A FRONT	600A FRONT	600A FRONT
VB BARRIERS	ISOLATED	ISOLATED	ISOLATED	ISOLATED	ISOLATED	ISOLATED
VB SHUTTERS	-	-	-	-	-	-
VB WW ACCESS HOLES	NO	NO	NO	NO	NO	NO
DOUBLE DEEP BUS-THRU	-	-	-	-	-	-
THERMOSTAT	-	-	-	-	-	-
FLUORESCENT LIGHT	-	-	-	-	-	-
LIGHT SWITCH	-	-	-	-	-	-
DUPLEX RECEPTACLE	-	-	-	-	-	-
NEMA 3R DOOR FAN	-	-	-	-	-	-
OPTIONS	-	-	-	-	-	-
OPTIONS	-	-	-	-	-	-
OPTIONS	-	-	-	-	-	-
GENERAL NOTES						
GENERAL NOTES						
GENERAL NOTES						
SHOP NOTES	MN	MN	MN	MN	MN	MN
SHOP NOTES						
SHOP NOTES						
SHOP NOTES						
N1						
N2						
N3						
N4						

GENERAL

SERVICE	480 3Ø3W AC
SYSTEM GROUNDING	SOLIDLY GROUNDED
FREQUENCY	60 HZ
AVAIL FAULT CURR	42K AIC SYM
SERVICE ENTRANCE	NOT APPLICABLE
MCC TYPE	TIASTAR
LABELS	
UL	UL WHERE APPLICABLE
CSA	WAIVED
REGIONAL CODES	-
ALTITUDE RATINGS	UP TO 3000FT / 915M
CUST INSPECT REQD	NONE
CERTIFIED TEST RPTS	_
GENERAL NOTES	_
	_
	_
	P6 E4
	_
SHOP NOTES	_
	_
	_
	_
	_

BUS

BRACING	42K AIC SYM
BUS RATING	_
HORIZONTAL BUS	_
RATING	800A (3/16 X 2)
MATERIAL	COPPER
TEMP RATING	65 DEGREES C
PLATING	TIN
BARRIERS	STANDARD LEXAN
INSULATION	_
VERTICAL BUS	
RATING	SEE SECTION DETAILS
MATERIAL	COPPER
PLATING	TIN
STAB PLATING	TIN
NEUTRAL BUS	
RATING	_
MATERIAL	_
PLATING	_
LOCATION	_
LUGS	_
HORIZONTAL GROUND BUS	
RATING	300A (1/4 X 1)
MATERIAL	COPPER
PLATING	UNPLATED
LOCATION	FRONT BOTTOM
LUGS	(1) 6-300 KCMIL
LUG PAD	_
VERTICAL GROUND BUS	
RATING	_
MATERIAL	_
PLATING	_
MOTOR GND TERMINALS	_

STRUCTURE

NEMA TYPE	1A
EXTERNAL	_
HEIGHT	91.125" / 2315MM
DEPTH	20" / 508MM FRT ONLY
PAINT	GRAY ANSI 61
GENERAL OPTIONS	NONE
FISH-TAPE BARRIERS	_
REMOV BOT PLATES	_
BASE CHANNELS	_
SEISMIC	_
TWO-PC BACKPLATE	_
FUNGUS PROOFING	_
SPACE HEATERS	
SIZE	_
POWER SOURCE	_
BARRIER	_
THERMOSTAT	_
SPECIAL DIAGRAMS	_
INTERCONNECTION	_
COMMUNICATION	_
SPACE HEATER	_
LIGHT/SWITCH/RECEP	_
VENTILATION	_
MISC 1	_
MISC 2	_
MISC 3	_

UNITS

MIN WITHSTAND RATINGS	
CB COMBINATION	42K AIC SYM
CB FEEDER	42K AIC SYM
FUSIBLE COMBINATION	_
FUSIBLE FEEDER	_
WIRING CLASS	I
TYPE	BD (CTRL TERM BLKS)
CTRL TERM BLOCKS	PULL-APART
EXTRA UNUSED PTS	_
POWER TERM BLOCKS	NOT APPLICABLE
CONTROL WIRE	16 AWG MTW
POWER WIRE	STANDARD
CONTROL TERMINALS	_
POWER TERMINALS	_
WIRE MARKERS	_
TYPE	_
GENERAL OPTIONS	NONE
UNIT DIAG ON DOOR	_
HEATER TBLS ON DOOR	_
UNIT SIDE BARRIER	_

NAMEPLATES

UNIT	STANDARD
COLOR (FACE/TEXT)	YELLOW/BLACK
TEXT SIZE	3/16
TEXT	SEE NAMEPLATE INFO
ATTACHMENT	STANDARD
COMPONENT	_
MASTER	2X6
COLOR (FACE/TEXT)	YELLOW/BLACK
TEXT SIZE	1/2
SECTION	_
COLOR (FACE/TEXT)	_
TEXT SIZE	_
TEXT	_

INCOMING

MAIN ENTRY TYPE	CABLE ENTRY UNIT
LOCATION	TOP
SECTION	01
UNIT	01FA
INCOMING CABLES	(3)600 KCMIL
_	_
-	-
-	-
-	-

UNIT SCHEDULE

UNIT NO			UNIT DESCRIPTION				MOTOR DATA					CIRCUIT BREAKER/DISCONNECT SWITCH						OVERLOAD		WIRING	CONTROL CIRCUIT				TOT AUX		PILOT			FACTORY USE ONLY	
CUST	SII	L/R	TYPE	SUB	HT	SZ	HP/	KW	FLA	SF	RPM	FRAME or	DS	TRIP or	CLIP	RNG or	FUSE	TYPE	RNG/HTR	DIAGRAM	TY	FU	VOLT	CPT	NO	NC	DEVICES	UNIT OPTIONS	N	UNIT NOTES	NOTES	PUCX
_	01FA	-	MLO	-	18	800	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	_	_	_	_	_	_	FMNR
_	01FD	-	METER	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	_	_	M26	_	_	_	FMNR
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	01FF	-	FVNR	-	12	2	25	HP	34.0	-	-	ETI	125	100	-	315-1000	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	01FH	-	FVNR	-	12	1	10	HP	14.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	01FJ	-	FVNR	-	12	2	25	HP	34.0	-	-	ETI	125	100	-	315-1000	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
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_	01FL	-	SPACE	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	02FA	-	COM	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	SS	0	24DC	-	_	_	_	ES5	_	_	_	FMNR
_	02FC	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	15	-	-	-	-	-	_	UT	2/1	120	150	_	_	_	PS1	_	_	_	UMNM
_	02FD	-	FVNR	-	18	3	50	HP	65.0	-	-	ETI	125	125	-	500-1250	-	3UF70	10-100	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
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_	02FG	-	FVNR	-	12	1	5	HP	7.6	-	-	ETI	125	30	-	80-270	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
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_	02FI	-	FVNR	-	12	1	5	HP	7.6	-	-	ETI	125	30	-	80-270	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	02FK	-	FVNR	-	12	1	5	HP	7.6	-	-	ETI	125	30	-	80-270	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	03FA	-	COM	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	SS	0	24DC	-	_	_	_	ES5	_	_	_	FMNR
_	03FC	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	15	-	-	-	-	-	_	UT	2/1	120	150	_	_	_	PS1	_	_	_	UMNM
_	03FD	-	FVNR	-	12	1	5	HP	7.6	-	-	ETI	125	30	-	80-270	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	03FF	-	FVNR	-	18	3	50	HP	65.0	-	-	ETI	125	125	-	500-1250	-	3UF70	10-100	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	03FI	-	FVNR	-	12	1	5	HP	7.6	-	-	ETI	125	30	-	80-270	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	03FK	-	SPACE	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	04FA	-	FVNR	-	12	1	5	HP	7.6	-	-	ETI	125	30	-	80-270	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	04FC	-	FVNR	-	12	2	15	HP	21.0	-	-	ETI	125	50	-	180-600	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	04FE	-	FVNR	-	24	4	60	HP	77.0	-	-	ETI	250	150	-	800-1500	-	3UF70	20-200	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	04FI	-	FVNR	-	12	2	20	HP	27.0	-	-	ETI	125	50	-	180-600	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	04FK	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	70	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	04FL	-	SPACE	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	05FA	-	VFD	G120H	18	2.2	1	HP	2.1	-	-	HED4	125	15	-	-	-	-	_	D68500G40	UT	2/1	120	50	-	-	R	CM2 CM8 CU4	_	_	_	PMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PM1 V41 V45	-	-	-	-

JOB	Lyons Ferry Plant
P.O.	-
CUST.	WESCO DISTRIBUTION INC
CONTR	-
CONSLT	-
TIE	-
BY	wooddj
ENG. LOC.	-
DESIGNATION	MCC-312
S.O.	1000422408
DATE	3-13-2018
DWG. NO.	1000422408-26000-2
Siemens Industry, Inc.	Norcross, Georgia
APP.	
MFG. LOC.	-
APP.	
DWG. FILE	
SHEET	2 OF 6
REV.	1

UNIT SCHEDULE

UNIT NO			UNIT DESCRIPTION				MOTOR DATA					CIRCUIT BREAKER/DISCONNECT SWITCH						OVERLOAD		WIRING	CONTROL CIRCUIT				TOT AUX		PILOT			FACTORY USE ONLY	
CUST	SII	L/R	TYPE	SUB	HT	SZ	HP/	KW	FLA	SF	RPM	FRAME or	DS	TRIP or	CLIP	RNG or	FUSE	TYPE	RNG/HTR	DIAGRAM	TY	FU	VOLT	CPT	NO	NC	DEVICES	UNIT OPTIONS	N	UNIT NOTES	NOTES	PUCX
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V4	-	-
_	05FD	-	VFD	G120H	18	2.2	1	HP	2.1	-	-	HED4	125	15	-	-	-	-	_	D68500G40	UT	2/1	120	50	-	-	R	CM2 CM8 CU4	_	_	_	PMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PM1 V41 V45	-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V4	-	-
_	05FG	-	RVSS	3RW44	36	134A	100	HP	124.0	-	-	FD6	250	200	-	-	-	-	_	D68500H89	UT	2/1	120	150	-	-	R	RI1 V41 V59	_	_	_	PMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D69015H16	-	-	-	-	-	-	-	-	-	-	-	-
_	06FA	-	SPACE	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	06FC	-	VFD	G120H	60	60.0	40	HP	52.0	-	-	HED4	125	100	-	-	-	-	_	D68500G40	UT	2/1	120	50	-	-	R	CM2 CM8 CU4	_	_	_	FMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PM1 V41 V45	-		-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	V4	-	-

JOB: **Lyons Ferry Plant**			
P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-312
S.O.: 1000422408	DATE: 3-13-2018		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-26000-3		
	APP.:	MFG. LOC.: -	SHEET 3 OF 6
	APP.:	DWG. FILE:	REV.: 1

NAMEPLATE SCHEDULE

TYPE	UNIT NUMBER	DESCRIPTION	ENGRAVING1	ENGRAVING2	ENGRAVING3	ENGRAVING4	LEAVE BLANK
MASTER		MCC					No
Unit	01FA	800A Main Lug Only.					No
Unit	01FD	(1), METER UNIT.					No
Unit	01FF	(2), FVNR, CB, SZ 2, 25HP.SPARE					No
Unit	01FH	(1), FVNR, CB, SZ 1, 10HP.SPARE					No
Unit	01FJ	(2), FVNR, CB, SZ 2, 25HP.SPARE					No
Unit	01FL	(1), 6 X 16 SPACE.					No
Unit	02FA	(2), COMMUNICATION.					No
Unit	02FC	(2), 125AF 15AT HED4 FCB.					No
Unit	02FD	(2), FVNR, CB, SZ 3, 50HP.SPARE					No
Unit	02FG	(6), FVNR, CB, SZ 1, 5HP.					No
Unit	02FI	(6), FVNR, CB, SZ 1, 5HP.					No
Unit	02FK	(6), FVNR, CB, SZ 1, 5HP.					No
Unit	03FA	(2), COMMUNICATION.					No
Unit	03FC	(2), 125AF 15AT HED4 FCB.					No
Unit	03FD	(6), FVNR, CB, SZ 1, 5HP.					No
Unit	03FF	(2), FVNR, CB, SZ 3, 50HP.SPARE					No
Unit	03FI	(6), FVNR, CB, SZ 1, 5HP.					No
Unit	03FK	(1), 12 X 16 SPACE.					No
Unit	04FA	(6), FVNR, CB, SZ 1, 5HP.					No
Unit	04FC	(1), FVNR, CB, SZ 2, 15HP.					No
Unit	04FE	(1), FVNR, CB, SZ 4, 60HP.					No
Unit	04FI	(1), FVNR, CB, SZ 2, 20HP.					No
Unit	04FK	(1), 125AF 70AT HED4 FCB.					No
Unit	04FL	(1), 6 X 16 SPACE.					No
Unit	05FA	(2), VFD, CB, 1HP, G120, 2.2A, .					No
Unit	05FD	(2), VFD, CB, 1HP, G120, 2.2A, .					No
Unit	05FG	(1), RVSS, CB, 100HP, 3RW44, 134A.					No
Unit	06FA	(1), 12 X 16 SPACE.					No
Unit	06FC	(1), VFD, CB, 40HP, G120, 60.0A, .					No

JOB
Lyons Ferry Plant

P.O. -	CUST. WESCO DISTRIBUTION INC		
CONTR -	CONSLT -		
TIE -	BY wooddj	ENG. LOC. -	DESIGNATION MCC-312
S.O. 1000422408	DATE 3-13-2018		
	DWG. NO. 1000422408-26000-4		
Siemens Industry, Inc. Norcross, Georgia	APP. APP.	MFG. LOC. - DWG. FILE	SHEET 4 OF 6

REV. 1

ABBREVIATIONS

CM2 - PROFINET COMMUNICATIONS.

CM8 - COMMUNICATION WIRING.

CU4 - CONTROL UNIT CU230P-2 PN.

ES5 - ETHERNET SWITCH WITH 16 PORTS MANAGED WITH C-PLUG.

M26 - PAC3200 3 PHASE POWER-METER WITH CTS AND PTS.

OLV - 3UF70 PRO V OVERLOAD RELAY HAS CURRENT/VOLTAGE CT.

OV3 - SIMOCODE WITH PROFINET COMMUNICATIONS.

PM1 - POWER MODULE PM240.

PS1 - POWER SUPPLY WITH 24V DC OUTPUT.

PS3 - STANDARD PARAMETER BLOCKS, OVERLOAD RELAY W/ REMOTE I/O, ANY/MAINTAINED NETWORK BITS.

RI1 - INTERPOSING RELAY.

V41 - KEYPAD ON DOOR.

V45 - INTELLIGENT OPERATOR PANEL.

V59 - PROFINET COMMUNICATIONS.

R - PILOT LIGHT WITH RED LENS AND RUNNING LEGEND.

SS - SEPARATE SOURCE PROVIDES CONTROL POWER.

UT - UNIT TRANSFORMER PROVIDES CONTROL POWER; X/Y SHOWS PRIMARY/SECONDARY FUSES.

3UF70 - 3UF70 SIMOCODE OVERLOAD RELAY (SEE UNIT OPTIONS FOR FEATURES).

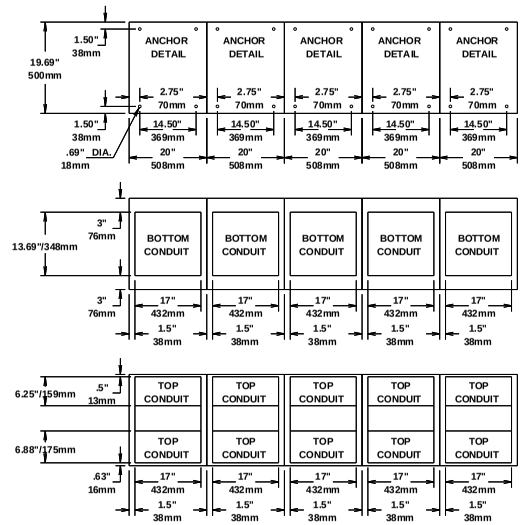
NOTES

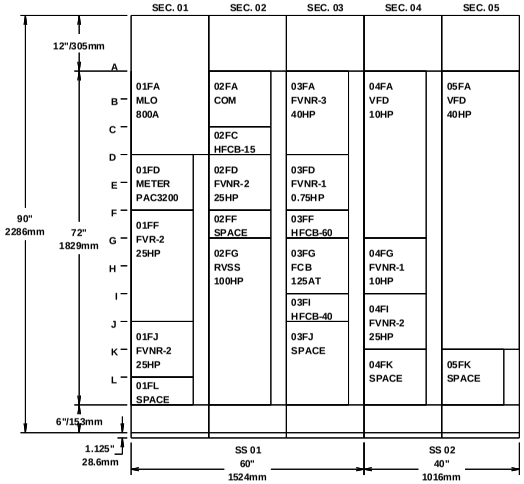
E4 - THIS MCC HAS STAR ETHERNET TOPOLOGY.
P6 - THIS MCC IS PROVIDED WITH A BOTTOM MOUNTED GROUND BUS. BOTTOM CONDUIT SPACE IS RESTRICTED; SEE DRAWING D79641 FIGURE 1.
CCY - POWER-METER WITH 800:5 CTS AND 1 PASS THROUGH CTS.
E2 - HIGH EFFICIENCY MOTOR APPLICATION.
V4 - CONTROL WIRES AT THE VFD CONTROL UNIT TERMINALS WILL BE 18 GAUGE.

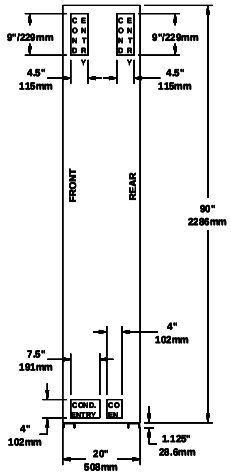
JOB: Lyons Ferry Plant			
P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-312
S.O.: 1000422408	DATE: 3-13-2018		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-26000-5		
	APP.:	MFG. LOC.: -	SHEET 5 OF 6
	APP.:	DWG. FILE:	REV.: 1

SHOP NOTES

JOB: **Lyons Ferry Plant**			
P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-312
S.O.: 1000422408	DATE: 3-13-2018		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-26000-6		
	APP.:	MFG. LOC.: -	SHEET 6 OF 6
	APP.:	DWG. FILE:	REV.: 1







	SEC. 01	SEC. 02	SEC. 03	SEC. 04	SEC. 05
CUSTOMER SECT. ID					
DEPTH (In/mm)	20/508	20/508	20/508	20/508	20/508
WIDTH (In/mm)	20/508	20/508	20/508	20/508	20/508
HORIZONTAL BUS	YES	YES	YES	YES	YES
VERTICAL BUS TYPE	600A FRONT	600A FRONT	600A FRONT	600A FRONT	600A FRONT
VB BARRIERS	ISOLATED	ISOLATED	ISOLATED	ISOLATED	ISOLATED
VB SHUTTERS	-	-	-	-	-
VB WW ACCESS HOLES	NO	NO	NO	NO	NO
DOUBLE DEEP BUS-THRU	-	-	-	-	-
THERMOSTAT	-	-	-	-	-
FLUORESCENT LIGHT	-	-	-	-	-
LIGHT SWITCH	-	-	-	-	-
DUPLEX RECEPTACLE	-	-	-	-	-
NEMA 3R DOOR FAN	-	-	-	-	-
OPTIONS	-	-	-	-	-
OPTIONS	-	-	-	-	-
OPTIONS	-	-	-	-	-
GENERAL NOTES					
GENERAL NOTES					
GENERAL NOTES					
SHOP NOTES	MN	MN	MN	MN	MN
SHOP NOTES					
SHOP NOTES					
SHOP NOTES					
N1					
N2					
N3					
N4					

GENERAL

SERVICE	480 3Ø3W AC
SYSTEM GROUNDING	SOLIDLY GROUNDED
FREQUENCY	60 HZ
AVAIL FAULT CURR	42K AIC SYM
SERVICE ENTRANCE	NOT APPLICABLE
MCC TYPE	TIASTAR
LABELS	
UL	UL WHERE APPLICABLE
CSA	WAIVED
REGIONAL CODES	-
ALTITUDE RATINGS	UP TO 3000FT / 915M
CUST INSPECT REQD	NONE
CERTIFIED TEST RPTS	_
GENERAL NOTES	_
	_
	_
	P6 E4
	_
SHOP NOTES	_
	_
	_
	_
	_

BUS

BRACING	42K AIC SYM
BUS RATING	_
HORIZONTAL BUS	_
RATING	800A (3/16 X 2)
MATERIAL	COPPER
TEMP RATING	65 DEGREES C
PLATING	TIN
BARRIERS	STANDARD LEXAN
INSULATION	_
VERTICAL BUS	
RATING	SEE SECTION DETAILS
MATERIAL	COPPER
PLATING	TIN
STAB PLATING	TIN
NEUTRAL BUS	
RATING	_
MATERIAL	_
PLATING	_
LOCATION	_
LUGS	_
HORIZONTAL GROUND BUS	
RATING	300A (1/4 X 1)
MATERIAL	COPPER
PLATING	UNPLATED
LOCATION	FRONT BOTTOM
LUGS	(1) 6-300 KCMIL
LUG PAD	_
VERTICAL GROUND BUS	
RATING	_
MATERIAL	_
PLATING	_
MOTOR GND TERMINALS	_

STRUCTURE

NEMA TYPE	1A
EXTERNAL	_
HEIGHT	91.125" / 2315MM
DEPTH	20" / 508MM FRT ONLY
PAINT	GRAY ANSI 61
GENERAL OPTIONS	NONE
FISH-TAPE BARRIERS	_
REMOV BOT PLATES	_
BASE CHANNELS	_
SEISMIC	_
TWO-PC BACKPLATE	_
FUNGUS PROOFING	_
SPACE HEATERS	
SIZE	_
POWER SOURCE	_
BARRIER	_
THERMOSTAT	_
SPECIAL DIAGRAMS	_
INTERCONNECTION	_
COMMUNICATION	_
SPACE HEATER	_
LIGHT/SWITCH/RECEP	_
VENTILATION	_
MISC 1	_
MISC 2	_
MISC 3	_

UNITS

MIN WITHSTAND RATINGS	
CB COMBINATION	42K AIC SYM
CB FEEDER	42K AIC SYM
FUSIBLE COMBINATION	_
FUSIBLE FEEDER	_
WIRING CLASS	I
TYPE	BD (CTRL TERM BLKS)
CTRL TERM BLOCKS	PULL-APART
EXTRA UNUSED PTS	_
POWER TERM BLOCKS	NOT APPLICABLE
CONTROL WIRE	16 AWG MTW
POWER WIRE	STANDARD
CONTROL TERMINALS	_
POWER TERMINALS	_
WIRE MARKERS	_
TYPE	_
GENERAL OPTIONS	NONE
UNIT DIAG ON DOOR	_
HEATER TBLS ON DOOR	_
UNIT SIDE BARRIER	_

NAMEPLATES

UNIT	STANDARD
COLOR (FACE/TEXT)	YELLOW/BLACK
TEXT SIZE	3/16
TEXT	SEE NAMEPLATE INFO
ATTACHMENT	STANDARD
COMPONENT	_
MASTER	2X6
COLOR (FACE/TEXT)	YELLOW/BLACK
TEXT SIZE	1/2
SECTION	_
COLOR (FACE/TEXT)	_
TEXT SIZE	_
TEXT	_

INCOMING

MAIN ENTRY TYPE	CABLE ENTRY UNIT
LOCATION	TOP
SECTION	01
UNIT	01FA
INCOMING CABLES	(3)600 KCMIL
_	_
-	-
-	-
-	-
-	-
-	-
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-	-

NO.	REVISIONS	DRAWN BY:	DATE
1	0	wooddj	3-13-2018

JOB
Lyons Ferry Plant

P.O.	CUST.
-	WESCO DISTRIBUTION INC
CONTR	CONSLT
-	-
TIE	BY / ENG. LOC. / DESIGNATION
-	wooddj / - / MCC-313
S.O.	DATE
1000422408	3-13-2018
Siemens Industry, Inc.	DWG. NO.
	1000422408-27000-1
Norcross, Georgia	APP. / MFG. LOC. / -
	APP. / DWG. RLE
	SHEET 1 OF 5
	REV. 1

UNIT SCHEDULE

UNIT NO			UNIT DESCRIPTION				MOTOR DATA					CIRCUIT BREAKER/DISCONNECT SWITCH						OVERLOAD		WIRING	CONTROL CIRCUIT				TOT AUX		PILOT				FACTORY USE ONLY	
CUST	SII	L/R	TYPE	SUB	HT	SZ	HP/	KW	FLA	SF	RPM	FRAME or	DS	TRIP or	CLIP	RNG or	FUSE	TYPE	RNG/HTR	DIAGRAM	TY	FU	VOLT	CPT	NO	NC	DEVICES	UNIT OPTIONS	N	UNIT NOTES	NOTES	PUCX
_	01FA	-	MLO	-	18	800	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	_	_	_	_	_	_	FMNR
_	01FD	-	METER	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	-	-	-	-	_	_	_	M26	_	_	_	FMNR
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	CCY	-	-
_	01FF	-	FVR	-	24	2	25	HP	34.0	-	-	ETI	125	100	-	315-1000	-	3UF70	10-100	_	UT	2/1	120	50	1/1	1/1	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E2	-	-
_	01FJ	-	FVNR	-	12	2	25	HP	34.0	-	-	ETI	125	100	-	315-1000	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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_	01FL	-	SPACE	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	02FA	-	COM	-	12	-	-	_	-	-	-	-	-	-	-	-	-	-	-	_	SS	0	24DC	-	_	_	_	ES5	_	_	_	FMNR
_	02FC	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	15	-	-	-	-	-	_	UT	2/1	120	150	_	_	_	PS1	_	_	_	UMNM
_	02FD	-	FVNR	-	12	2	25	HP	34.0	-	-	ETI	125	100	-	315-1000	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
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_	02FF	-	SPACE	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	02FG	-	RVSS	3RW44	36	134A	100	HP	124.0	-	-	FD6	250	200	-	-	-	-	_	D68500H89	UT	2/1	120	150	-	-	R	RI1 V41 V59	_	_	_	PMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D69015H16	-	-	-	-	-	-	-	-	-	-	-	-
_	03FA	-	FVNR	-	18	3	40	HP	52.0	-	-	ETI	125	125	-	500-1250	-	3UF70	10-100	_	UT	2/1	120	150	1	0	R	OLV OV3 PS3	_	_	_	UMNM
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_	03FD	-	FVNR	-	12	1	0.75	HP	1.6	-	-	ETI	125	5	-	16-54	-	3UF70	.3- 3	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
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_	03FF	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	60	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	03FG	-	FCB	-	12	-	-	-	-	-	-	HED4	125	125	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	03FI	-	HFCB	-	6	-	-	-	-	-	-	HED4	125	40	-	-	-	-	-	D68500FDR	-	-	-	-	_	_	_	_	_	_	_	UMNM
_	03FJ	-	SPACE	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	04FA	-	VFD	G120H	36	19.0	10	HP	14.0	-	-	HED4	125	30	-	-	-	-	_	D68500G40	UT	2/1	120	50	-	-	R	CM2 CM8 CU4	_	_	_	PMNM
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_	04FG	-	FVNR	-	12	1	10	HP	14.0	-	-	ETI	125	40	-	115-375	-	3UF70	2.4-25	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
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_	04FI	-	FVNR	-	12	2	25	HP	34.0	-	-	ETI	125	100	-	315-1000	-	3UF70	10-100	_	UT	2/1	120	50	1	0	R	OLV OV3 PS3	_	_	_	UMNM
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_	04FK	-	SPACE	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL
_	05FA	-	VFD	G120H	60	60.0	40	HP	52.0	-	-	HED4	125	100	-	-	-	-	_	D68500G40	UT	2/1	120	50	-	-	R	CM2 CM8 CU4	_	_	_	FMNM
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	PM1 V41 V45	-	-	-	-
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_	05FK	-	SPACE	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	_	-	_	_	_	_	_	_	_	FMNL

JOB
Lyons Ferry Plant

P.O.: -	CUST.: WESCO DISTRIBUTION INC
CONTR: -	CONSLT: -
TIE: -	BY: wooddj; ENG. LOC.: -; DESIGNATION: MCC-313
S.O.: 1000422408	DATE: 3-13-2018
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-27000-2; APP.; MFG. LOC.: -; APP.; DWG. FILE; SHEET 2 OF 5; REV.: 1

NAMEPLATE SCHEDULE

TYPE	UNIT NUMBER	DESCRIPTION	ENGRAVING1	ENGRAVING2	ENGRAVING3	ENGRAVING4	LEAVE BLANK
MASTER		MCC					No
Unit	01FA	800A Main Lug Only.					No
Unit	01FD	(1), METER UNIT.					No
Unit	01FF	(1), FVR, CB, SZ 2, 25HP.					No
Unit	01FJ	(1), FVNR, CB, SZ 2, 25HP.SPARE					No
Unit	01FL	(1), 6 X 16 SPACE.					No
Unit	02FA	(1), COMMUNICATION.					No
Unit	02FC	(1), 125AF 15AT HED4 FCB.					No
Unit	02FD	(2), FVNR, CB, SZ 2, 25HP.					No
Unit	02FF	(1), 6 X 16 SPACE.					No
Unit	02FG	(1), RVSS, CB, 100HP, 3RW44, 134A.					No
Unit	03FA	(1), FVNR, CB, SZ 3, 40HP.					No
Unit	03FD	(1), FVNR, CB, SZ 1, 0.75HP.					No
Unit	03FF	(1), 125AF 60AT HED4 FCB.					No
Unit	03FG	(1), 125AF 125AT HED4 FCB.					No
Unit	03FI	(1), 125AF 40AT HED4 FCB.					No
Unit	03FJ	(1), 18 X 16 SPACE.					No
Unit	04FA	(1), VFD, CB, 10HP, G120, 19.0A, .					No
Unit	04FG	(1), FVNR, CB, SZ 1, 10HP.SPARE					No
Unit	04FI	(2), FVNR, CB, SZ 2, 25HP.					No
Unit	04FK	(1), 12 X 16 SPACE.					No
Unit	05FA	(1), VFD, CB, 40HP, G120, 60.0A, .					No
Unit	05FK	(1), 12 X 16 SPACE.					No

JOB
Lyons Ferry Plant

P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-313
S.O.: 1000422408	DATE: 3-13-2018		
	DWG. NO.: 1000422408-27000-3		
Siemens Industry, Inc. Norcross, Georgia	APP.:	MFG. LOC.: -	SHEET 3 OF 5
	APP.	DWG. FILE	REV.: 1

ABBREVIATIONS

CM2 - PROFINET COMMUNICATIONS.

CM8 - COMMUNICATION WIRING.

CU4 - CONTROL UNIT CU230P-2 PN.

ES5 - ETHERNET SWITCH WITH 16 PORTS MANAGED WITH C-PLUG.

M26 - PAC3200 3 PHASE POWER-METER WITH CTS AND PTS.

OLV - 3UF70 PRO V OVERLOAD RELAY HAS CURRENT/VOLTAGE CT.

OV3 - SIMOCODE WITH PROFINET COMMUNICATIONS.

PM1 - POWER MODULE PM240.

PS1 - POWER SUPPLY WITH 24V DC OUTPUT.

PS3 - STANDARD PARAMETER BLOCKS, OVERLOAD RELAY W/ REMOTE I/O, ANY/MAINTAINED NETWORK BITS.

RI1 - INTERPOSING RELAY.

V41 - KEYPAD ON DOOR.

V45 - INTELLIGENT OPERATOR PANEL.

V59 - PROFINET COMMUNICATIONS.

R - PILOT LIGHT WITH RED LENS AND RUNNING LEGEND.

SS - SEPARATE SOURCE PROVIDES CONTROL POWER.

UT - UNIT TRANSFORMER PROVIDES CONTROL POWER; X/Y SHOWS PRIMARY/SECONDARY FUSES.

3UF70 - 3UF70 SIMOCODE OVERLOAD RELAY (SEE UNIT OPTIONS FOR FEATURES).

NOTES

E4 - THIS MCC HAS STAR ETHERNET TOPOLOGY.
P6 - THIS MCC IS PROVIDED WITH A BOTTOM MOUNTED GROUND BUS. BOTTOM CONDUIT SPACE IS RESTRICTED; SEE DRAWING D79641 FIGURE 1.
CCY - POWER-METER WITH 800:5 CTS AND 1 PASS THROUGH CTS.
E2 - HIGH EFFICIENCY MOTOR APPLICATION.
V4 - CONTROL WIRES AT THE VFD CONTROL UNIT TERMINALS WILL BE 18 GAUGE.

JOB: **Lyons Ferry Plant**			
P.O.: -	CUST.: **WESCO DISTRIBUTION INC**		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: **MCC-313**
S.O.: **1000422408**	DATE: **3-13-2018**		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: **1000422408-27000-4**		
	APP.:	MFG. LOC.: -	SHEET 4 OF 5
	APP.:	DWG. FILE:	REV.: 1

SHOP NOTES

JOB: **Lyons Ferry Plant**			
P.O.: -	CUST.: WESCO DISTRIBUTION INC		
CONTR: -	CONSLT: -		
TIE: -	BY: wooddj	ENG. LOC.: -	DESIGNATION: MCC-313
S.O.: 1000422408	DATE: 3-13-2018		
Siemens Industry, Inc. Norcross, Georgia	DWG. NO.: 1000422408-27000-5		
	APP.:	MFG. LOC.: -	SHEET 5 OF 5
	APP.:	DWG. FILE:	REV.: 1

WESCO DISTRIBUTION, INC. TERMS AND CONDITIONS OF SALE - 010107

1. WESCO'S Terms and Conditions Control the Agreement.

A. These terms and conditions are incorporated into and made a part of the agreement or proposal ("Agreement") by WESCO Distribution, Inc. and any of its domestic subsidiaries, unincorporated divisions or affiliates ("WESCO") to sell to the named Buyer the goods referenced on the face of this document ("Goods") and services (including, without limitation, any material management, assembly and kitting services, and engineering and design services (whether performed by WESCO or a subcontractor)) referenced on the face of this document ("Services"). The Agreement expressly limits Buyer's acceptance to these terms and conditions. Buyer may reject the Agreement by not ordering or receiving any Goods or Services. The Agreement does not constitute an acceptance by WESCO of any offer or counteroffer of Buyer, and WESCO hereby rejects any additional, different, or inconsistent terms, conditions or limitations contained in or incorporated by reference in any forms, purchase orders or other documents of Buyer that already have been or hereafter may be presented to WESCO with respect to the Agreement.

B. If Buyer has submitted or will submit additional and/or different terms and conditions to WESCO, or submit a counteroffer to WESCO, WESCO's subsequent performance will not be construed as either acceptance of Buyer's additional and/or different terms and conditions or Buyer's counteroffer, nor will WESCO's subsequent performance be viewed as a willingness to accept any provision of the Uniform Commercial Code, as adopted by any State or Commonwealth, that is contrary or in addition to any of the terms and conditions hereof.

2. Prices.

A. Unless otherwise agreed to by WESCO in writing, WESCO's prices for the Goods and Services will be the prices stated on the face of this document or WESCO's standard prices for such Goods and Services as of the date hereof, provided that, where standard prices for Goods in the quantities ordered as calculated by WESCO extend beyond two decimal places, WESCO shall round such prices for Goods to the nearest two decimal places for purposes of determining Buyer's payment obligation with respect to such Goods; provided, however, that WESCO may change the price for the Goods and Services in accordance with any change to its standard pricing for such Goods and Services prior to the date of shipment of Goods or performance of Services, as the case may be.

B. The prices of any and all Goods and Services shall be confidential, and Buyer shall not disclose such prices to any unrelated third party. WESCO and Buyer acknowledge and agree that money damages for any and all breaches of Buyer's obligation not to disclose the price of any Goods or Services is both incalculable and insufficient and that any such breach would irreparably harm WESCO. Therefore, in the event of an actual or prospective breach of the obligation of Buyer not to disclose the prices of any Goods and Services, WESCO shall be entitled to a permanent and/or a preliminary injunction to prevent or remedy such breach and shall have the right to specific enforcement of this Agreement against Buyer in addition to any other remedies to which WESCO may be entitled at law or in equity.

3. Specifications. Unless WESCO has expressly agreed otherwise in writing, it is Buyer's responsibility to ensure that the Goods and Services are the ones that it has requested and that all specifications and quantities are correct. **WESCO HEREBY EXPRESSLY DISCLAIMS ANY AND ALL REPRESENTATIONS AND WARRANTIES THAT GOODS AND SERVICES CONFORM TO ANY SPECIFICATIONS, DRAWINGS, DESIGNS, OR SAMPLES.**

4. Shipment of Goods; Performance of Services.

A. Shipment of all Goods shall be made F.O.B. point of shipment (Ex Works WESCO's facility per INCOTERMS 2000 for international shipments). Buyer shall bear the risk of loss and damage to Goods after delivery to the point of shipment.

B. Any shipping dates for Goods or performance dates for Services given in advance of actual shipment of Goods or performance of Services are WESCO's best estimates for informational purposes only, and deliveries of Goods and performance of Services will be made subject to prior orders on file with WESCO. Unless otherwise agreed to by WESCO in writing, WESCO may, in its sole discretion, use any commercial carriers for shipment of the Goods. WESCO will use its reasonable efforts to comply with Buyer's requests as to method and route of transportation, but WESCO reserves the right to use an alternate method or route of transportation, whether or not at a higher rate.

C. Unless otherwise agreed to by WESCO in writing, Buyer will pay all insurance costs in connection with delivery of the Goods, if any, and be responsible for filing and pursuing claims with carriers for loss of, or damage to, Goods in transit.

D. Buyer is responsible for obtaining at its sole cost and expense any and all necessary licenses and permits for the Goods and Services, including, without limitation, any licenses and permits for transportation.

E. If Buyer is unable to receive the Goods when they are tendered, Buyer will be liable to WESCO for any losses, damages, or additional expenses incurred or suffered by WESCO as a result of Buyer's inability to receive the Goods.

F. Buyer immediately will inspect all Goods upon its receipt of them and will be deemed to accept the Goods upon receipt. Any claims for shortages or discrepancies will be waived by Buyer unless made in writing to WESCO within five days of receipt of the Goods.

G. WESCO may cancel in whole or in part any order for Goods or Services under the Agreement at any time.

H. Until Buyer has fully and finally paid all amounts owed to WESCO for any Goods, Buyer shall hold such Goods in trust for WESCO, and WESCO may repossess them if Buyer fails to pay for them in a timely fashion.

5. Payment.

A. All payments for Goods and Services must be made in United States currency unless specified in writing by WESCO. Payments for Goods and Services will be made by such means as WESCO may specify, such as by check or wire transfer, provided that WESCO may refuse, in its sole discretion, payment by any means, including, without limitation, credit cards.

B. Payment for Goods and Services is due within 30 days from the date of WESCO's invoice; provided, however, that WESCO reserves the right, in its sole discretion, to require full payment in cash before order entry, shipment, or delivery.

C. WESCO shall have the right to offset any and all amounts due and owing from WESCO to Buyer under this Agreement, including, without limitation, any chargebacks or rebates, against any amounts due and owing from Buyer to WESCO under this Agreement.

D. If Buyer defaults in payment, Buyer will be liable for all collection costs incurred by WESCO including, but not limited to, attorneys' and collection agency fees, and all related disbursements.

E. If Buyer does not pay when payment is due, past due amounts are subject to service charges of one and a half percent (1 ½%) per month or the maximum percentage rate permitted by law, whichever is less.

6. Taxes. The purchase price of the Goods and Services does not include transportation taxes and sales, use, excise, import or any similar tax or other governmental charge arising pursuant to or in connection with the sale, purchase, processing, delivery, storage, use, consumption, performance or transportation of the Goods and Services. Buyer is responsible for payment of any transportation taxes, and any present or future sales, use, excise, import or any similar tax or other governmental charge applicable to the Agreement and to the sale and/or furnishing of the Goods and Services.

7. Cancellation. Buyer may cancel its order for Goods and/or Services, but only if WESCO agrees to such cancellation in writing and only after Buyer pays reasonable charges for expenses already incurred and commitments made by WESCO in connection with the placement of such order(s).

8. Disclaimer of Warranties. WESCO HEREBY EXPRESSLY DISCLAIMS AND EXCLUDES ANY AND ALL REPRESENTATIONS AND WARRANTIES, WHETHER WRITTEN OR ORAL, WHETHER EXPRESS OR IMPLIED, WHETHER ARISING BY CONTRACT, AT LAW, IN EQUITY, BY STRICT LIABILITY OR OTHERWISE, WITH RESPECT TO THE GOODS AND SERVICES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY, ANY WARRANY AGAINST DEFECTS IN DESIGN, MATERIALS AND WORKMANSHIP, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, ANY WARRANTY AGAINST REDHIBITORY DEFECTS, ANY WARRANTY OF GOOD TITLE, AND ANY WARRANTY AGAINST INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY, INCLUDING, WITHOUT LIMITATION, ANY PATENTS, TRADEMARKS, OR COPYRIGHTS. WESCO shall, however, if given prompt written notice by Buyer of any claim of alleged patent, trademark or copyright infringement with respect to any Goods use its reasonable efforts to secure for Buyer such indemnity rights as the manufacturer may offer with respect to such Goods.

9. Exclusive Remedy. Buyer's **EXCLUSIVE** remedy against WESCO for any claim for, or arising out of, any Good tendered to Buyer is the repair or replacement of the Good, or alternatively, at WESCO's sole election, a refund of the purchase price of the Good. Buyer's **EXCLUSIVE** remedy against WESCO arising out of any defect in, or in connection with, any Service provided hereunder is the re-performance of that Service or, at WESCO's sole election, a refund of the purchase price of the Service. These remedies only will only be available to Buyer for one year after the Good is tendered or Service is provided to Buyer, and WESCO's obligations under this Section 9 will be void unless Buyer provides WESCO with notice of the defect in the Good or Service within 30 days of discovery of the defect. Any Good returned to WESCO for repair, replacement or refund under this Section 9 will be returned by Buyer in accordance with WESCO's return material authorization procedures then in effect.

10. Limitation of Liability. NOTWITHSTANDING ANYTHING ELSE CONTAINED HEREIN TO THE CONTRARY, IN NO EVENT WILL: (A) WESCO BE LIABLE TO BUYER FOR ANY CIRCUMSTANTIAL, CONSEQUENTIAL, CONTINGENT, EXEMPLARY, INCIDENTAL, INDIRECT, LIQUIDATED, MATERIAL, PUNITIVE, SPECIAL, SPECULATIVE OR OTHER DAMAGES, INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOST PROFITS, SALES OR REVENUES, COST OF REPLACEMENT GOODS, LOST BUSINESS OR BUSINESS INTERRUPTIONS, OR ATTORNEYS FEES OR COURT COSTS ARISING IN ANY MANNER PURSUANT TO OR IN CONNECTION WITH THE AGREEMENT, THE GOODS OR THE SERVICES (EVEN IF WESCO IS MADE AWARE OF THE POTENTIAL FOR SUCH DAMAGES); AND (B) WESCO'S TOTAL LIABILITY RELATED TO ANY GOOD OR SERVICE EXCEED THE PURCHASE PRICE OF SUCH GOOD OR SERVICE.

11. Indemnification.

A. Upon prompt notice by Buyer of any claim of U.S. patent, copyright, or trademark infringement with respect to any Goods or Services, WESCO will use its reasonable efforts to secure for Buyer such indemnity rights as the manufacturer may customarily give with respect to such Goods. This Section 11 sets forth Buyer's sole and exclusive remedy against WESCO regarding the infringement by any Goods or Services of any third party intellectual property rights, including, without limitation, any patents or trademarks.

B. Buyer will indemnify, defend and hold harmless WESCO, its shareholders, officers, directors, employees, agents and representatives from and against all losses, damages, liabilities, costs, and expenses including, but not limited to, property damage, loss of profits or revenue, loss of use of any property, cost of capital, cost of purchased or replacement power or temporary equipment, personal or bodily injury, or death ("Losses"), that may arise pursuant to or in connection with the Agreement, the Goods, or the Services (including, without limitation, Losses arising in connection with the performance of Services on Buyer's premises by WESCO's employees, representatives, agents, or subcontractors), regardless of whether such Losses are suffered directly by Buyer or arise pursuant to or in connection with a third-party suit, claim, counterclaim, demand, judgment or other action (each a "Claim") and regardless of whether or not WESCO or any third-party is proportionately negligent with respect to such Losses and/or Claim, provided that Buyer need not indemnify WESCO for WESCO's obligation, if any, to Buyer under Section 9 above. For the avoidance of doubt and without limitation, this indemnification obligation requires Buyer to pay any judgments against WESCO or any other indemnified party resulting from any Claim, any court costs of WESCO or any other indemnified party in connection with any Claim, and any reasonable attorneys' fees and disbursements incurred by WESCO or any other indemnified party in WESCO's defense of any Claim. WESCO will have the sole and exclusive right to conduct the defense of any Claim at Buyer's sole and exclusive cost and expense. Buyer's indemnification obligation does not depend on the truth or accuracy of any allegations made against WESCO, Buyer or any third party.

12. Product Suitability. Goods sold by WESCO are designed to meet stated U.S. safety standards and regulations. Because local safety standards and regulations may vary significantly, WESCO cannot guarantee that the Goods meet all applicable requirements in each locality. Buyer assumes responsibility for compliance with such safety standards and regulations in the localities in which the Goods will be shipped, sold and used. Before purchase and use of any Goods, Buyer should review the product application, and national and local codes and regulations, and verify that the use and installation of the Goods will comply with them.

13. Ownership. WESCO shall have and retain all right, title, and interest in and to any and all trade secrets, technical data, sales service and product plans, methodologies, techniques, designs, molds, tools, samples, systems, know-how, expertise and other proprietary information that it may use pursuant to or in connection with any Services, and Buyer shall not obtain a license to, or any other property rights in, any such WESCO property pursuant to or in connection with this Agreement.

14. Export Controls; Availability; Laws.

A. Certain Goods may be subject to export controls under the laws, regulations and/or directives of the United States and various other countries. Buyer must comply with such laws and regulations and not export, re-export or transfer these Goods to any country to which such export, re-export, or transfer is forbidden or without first obtaining all required authorizations or licenses.

B. Due to government regulations and product availability, not all goods sold by WESCO may be available in every area.

C. Buyer hereby warrants and represents that it will comply with any and all Laws with respect to the purchase, use, and operation of any and all Goods and Services. For purposes hereof, "Laws" means any international, multinational, national, foreign, federal, state, municipal, local (or other political subdivision) or administrative laws, constitutions, statutes, codes, ordinances, rules, regulations, requirements, standards, policies or guidances having the force of law, treaties, judgments or orders of any kind or nature whatsoever, including, without limitation, any judgment or principle of common law.

15. Interpretation of the Agreement. None of WESCO's or Buyer's shareholders, directors, officers, partners, managers, employees, agents or representatives have any authority to orally modify or alter in any way the terms and conditions of the Agreement. The terms, conditions, and limitations set forth in the Agreement can be modified, altered, or added to only by a subsequent written instrument signed by an authorized representative of WESCO or by language included on the face hereof. Regardless of how many times Buyer purchases, or has purchased, goods and services from WESCO by whatever means, each time Buyer accepts the Agreement, Buyer and WESCO enter into a separate agreement that will be interpreted without reference to any other agreement between Buyer and WESCO, or what Buyer may claim to be a course of dealing or course of performance that has arisen between Buyer and WESCO. No inconsistent usage of trade or industry custom, if any, prior to, contemporaneous with or subsequent to the making of the Agreement will waive, vary, serve to explain or serve to interpret any of the terms, conditions and limitations of the Agreement. The Agreement is the sole and exclusive agreement with respect to the matters discussed herein and the provision of Goods and Services hereunder, (except for any contemporaneous writing agreed to in writing by WESCO expressly modifying the terms and conditions hereof, which is hereby incorporated herein by reference and made a part hereof) and supersedes all prior and contemporaneous agreements and understandings, negotiations, inducements, representations or conditions, whether oral or written, whether express or implied, with respect to such matters. Failure by WESCO to enforce any of the terms, conditions and limitations of the Agreement will not constitute a waiver of those terms, conditions and limitations or a waiver of any other terms, conditions or limitations of the Agreement, and the failure of WESCO to exercise any right (whether provided by the Agreement, law, equity, or otherwise) arising from Buyer's default under the Agreement will not constitute a waiver of that right or any other rights.

16. Force Majeure. WESCO will not be liable for its failure to perform under the Agreement (including, without limitation, the failure to deliver any Goods or perform any Services) due to circumstances beyond its control, including, without limitation, fire, flood, earthquake, pestilence or similar catastrophe; war, act of terrorism, or strike; lack or failure of transportation facilities, shortage of suitable parts, materials or labor; any existing or future law, rule, regulation, decree, treaty, proclamation, or order of any governmental agency; inability to secure fuel, materials, supplies, equipment or power at reasonable prices or in sufficient amounts; act of God or the public enemy; or any other event or cause beyond WESCO's reasonable control, including, without limitation, any delay caused by Buyer (each, a "Force Majeure Event"). If any Force Majeure Event prevents WESCO's performance of any of its obligations under the Agreement, WESCO will have the right to (a) change, terminate or cancel the Agreement, or (b) omit during the period of the Force Majeure Event all or any portion of the quantity of the Goods deliverable during that period, whereupon the total quantity deliverable under the Agreement will be reduced by the quantity omitted. If WESCO is unable to supply the total demands for any Goods to be delivered under the Agreement due to a Force Majeure Event, WESCO will have the right to allocate its available supply among its customers in whatever manner WESCO deems to be fair and equitable. In no event will WESCO be obligated to purchase materials from other than its regular sources of supply in order to enable it to supply Goods to Buyer under the Agreement. No change, cancellation or proration by WESCO will be deemed to be a breach of any clause, provision, term, condition, or covenant of the Agreement.

17. Choice of Law; Choice of Venue. The negotiation, execution, performance, termination, interpretation and construction of the Agreement will be governed by the law of the Commonwealth of Pennsylvania, except for Pennsylvania's choice of law rules, and expressly excluding the United Nations Convention on Contracts for the International Sale of Goods. If either WESCO or Buyer brings a lawsuit or any other action arising out of the Agreement against the other party, such party must file its lawsuit or other action in a state or federal court located in Pittsburgh, Pennsylvania. WESCO and Buyer expressly submit to the exclusive jurisdiction of those courts and consent to venue in those courts, and WESCO and Buyer consent to extra-territorial service of process on WESCO and Buyer. In the event of litigation pertaining to any matter covered by the Agreement, each of WESCO and Buyer hereby agree to waive any right that it may have to a jury trial of any or all issues that may be raised in such litigation. Nothing contained in the Agreement will be construed to limit or waive any rights of WESCO under applicable United States federal, state, or local laws. Any provision of the Agreement held to be invalid, illegal or unenforceable will be ineffective to the extent of such invalidity, illegality or unenforceability without affecting the validity, legality and enforceability of the remaining provisions hereof.

18. Binding Authority. Any director, officer, employee, representative, or agent of Buyer signing or otherwise entering into this Agreement hereby represents and warrants that he or she is duly authorized to execute and enter into this Agreement on behalf of Buyer.

MASTER SUPPLY AGREEMENT

THIS MASTER SUPPLY AGREEMENT ("Agreement") is dated November 1, 2017 ("**Effective Date**") and is between WESCO Distribution, Inc. (**"WESCO"**) and Columbia Pulp, LLC (**"Buyer"**).

RECITALS

WHEREAS, WESCO is primarily in the business of selling electrical goods ("**Goods**") and providing services related to the supply, maintenance and operation of such Goods (**"Services"**);

WHEREAS, Buyer purchases Goods and/or Services for use in the conduct of its business; and

WHEREAS; WESCO desires to sell to Buyer, and Buyer desires to purchase from WESCO, certain Goods and/or Services subject to the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual warranties, representations, promises and covenants contained in this Agreement and intending to be legally bound hereby, the parties agree as follows:

1. Term and Termination.

1.1 Unless otherwise terminated in accordance with this section, this Agreement shall have a term of two (2) years from the Effective Date (the "**Term**").

1.2 During the Term, either party may terminate this Agreement upon the occurrence of any of the following events: (i) if a party is in material breach of its representations, warranties, duties or obligations under this Agreement, the other party has provided written notice of such breach to the breaching party, and the breaching party has not cured within 30 days of its receipt of such notice; (ii) for its convenience after providing 60 days prior written notice to the other party; or (iii) immediately upon the institution by or against the other party of proceedings under bankruptcy, insolvency, or any other procedures for the settlement of debts; upon the other party's making an assignment for the benefit of its creditors; upon the appointment of a receiver for the other party or its property; or upon the other party's voluntary or involuntary dissolution or liquidation.

1.3 In the event of termination for any reason, in addition to other rights and remedies provided for at law, Buyer shall pay WESCO for all outstanding invoices and all costs and expenses associated with orders placed by Buyer up to the date of termination.

2. Supply and Purchase of Goods and Services.

2.1 During the Term of this Agreement, WESCO shall sell to Buyer Goods or Services that Buyer may order, subject to the terms of this Agreement.

2.2 The parties acknowledge and agree that "Columbia Pulp, LLC – WESCO Distribution, Inc., Lyons Ferry Straw Pulp Plant Purchase Order Terms and Conditions," attached hereto and incorporated herein as Annex A, shall govern and control all transactions between the parties except as otherwise provided for in this Agreement or mutually agreed upon in writing.

3. Miscellaneous.

3.1 The parties are and shall remain independent contractors. No provision of this Agreement creates or contemplates any association, partnership, joint venture, agency, or employment relationship between the parties. Neither party shall have any authority to employ any person as an employee or agent for or on behalf of the other party or to take any action binding or purporting to bind the other party.

3.2 This Agreement may not be amended, supplemented, changed or modified in any manner, orally or otherwise (including, without limitation, by prior course of dealing or course of performance between the parties, industry custom or usage of trade), except by an instrument in writing of subsequent date, signed by a duly authorized representative of each party.

3.3 This Agreement (including any and all Annexes) constitutes the entire agreement between the parties with respect to the matters specified in this Agreement and supersedes all prior and contemporaneous agreements, negotiations, inducements or representations. While this Agreement is in effect, additional or conflicting terms and conditions contained in quotations, purchase orders, order acknowledgements or other like documents that may be exchanged between the parties shall have no force or effect.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed and delivered by their duly authorized officers, as of the Effective Date.

WESCO Distribution, Inc.

By:_____

Name:_____

Title:_____

Columbia Pulp, LLC

By:_____

Name: Michele McCarthy

Title: CFO

Annex A
Columbia Pulp, LLC - WESCO Distribution, Inc.
Lyons Ferry Straw Pulp Plant
Purchase Order Terms and Conditions November 1, 2017

SECTION 1 - DEFINITIONS

Agreement – shall mean this Purchase Order and these Terms and Conditions, all attachments and exhibits and any changes to this agreement approved according to Section 3.
As Sold Proposal – shall mean the Seller's proposal as attached to the purchase order, if any.
Delivery Point – shall mean Facility Site unloading area located at 1403 State Highway 261, Starbuck Washington, 99359 or, as specified in the Purchase Order.
Delivery Dates – shall mean, collectively, the Drawing and Data Document Delivery Dates and the Equipment Delivery Dates.
Effective Date – shall have the meaning as set forth in Section 9.
Engineering Requisition – shall mean any supplemental requirements or specifications attached to this purchase order and labeled "Engineering Requisition'.
Engineering Specification – shall mean the specification attached to the Purchase Order and any attachments thereto.
Equipment – shall have the meaning as set forth in the Purchase Order or in the As Sold Proposal.
Facility – shall mean the Lyons Ferry Straw Pulp Plant near Starbuck, WA.

Notice – shall mean a written correspondence between the Parties. Notices to the Owner shall be presented to:

Columbia Pulp I, LLC
164 East Main Street
Dayton, WA 99328

Attention:
Larry Tantalo
Phone: 206-940-9527

Email: larry.tantalo@columbiapulp.com

Notices to the Seller shall be presented to the Seller at the address shown under 'Sold By:' in the Purchase Order.
Owner – shall mean the Columbia Pulp, LLC, Lyons Ferry Straw Pulp Plant, its successors and assigns (which may include a lessor of premises upon which the Facility is situated, a lender or its trustee, or a guarantor of loans for the construction of the Facility, or who has entered into contract with the issuer of the Construction Contract to acquire the Facility), who has contracted with Owner to provide a Facility for which Owner is entering into this Agreement with Seller to supply the Work covered by this Agreement.
Party(ies) – shall mean individually and/or collectively the Owner and Seller as named Named in the Purchase Order.
Agreement Price – shall have the meaning as set forth in in the Purchase Order.
Remedy - shall mean correction of a Warranty nonconformity or defect by Seller.
Seller – shall mean the party named in the Purchase Order under 'Sold By'..
Services – shall include start-up and commissioning requirements for the Acceptance Test which shall be billed at Seller's published rates at the date of this contract.
Subcontractors – shall mean Seller's suppliers and subcontractors of any tier.
Warranty – shall mean the Mechanical and Performance warranty terms as presented in the Seller's As Sold Proposal.
Work – shall mean the Equipment and Services for which Owner is entering into this Agreement.

SECTION 2 - SCOPE OF WORK

Seller shall furnish, design, fabricate, test, as required, and deliver to the Delivery Point, the goods and services as specified in the Purchase Order and as further detailed in the Engineering Requisition, if attached, (collectively the "Work").

SECTION 3 - DOCUMENTS AND ORDER OF PRECEDENCE

The following list of documents shall be the sole documents that comprise this Agreement and contain all of the terms, conditions and provisions of this Agreement. The documents have been listed in order of precedence in the event of a conflict. Any conflict arising in any single document shall be brought to the other Party's attention as soon as practical. In the case of a conflict, the conflicting item(s) having the highest order of precedence shall prevail.
Any Change Order to this Agreement as per Section 12,
The Purchase Order,
The Engineering Requisition, if attached,
These Purchase Order Terms and Conditions,
Seller's As -Sold Proposal as attached to the Purchase Order
The Engineering Specification for the Work,

SECTION 4 – AGREEMENT MILESTONES AND SCHEDULE

4.1- Drawing and Data Document Schedule
Drawing and Data Document Delivery Dates shall be as outlined in the As Sold Proposal.
4.2- Equipment Delivery
Equipment Delivery Dates shall be as stated in the As Sold Proposal.
4.3- Force Majeure:
Shipment dates are based upon the Seller's commitment at the date of the As Sold Proposal. The Seller will exercise its best efforts to ship on schedule, but shall not be liable for any damages or losses caused by any delay in delivery caused by strikes, floods, fires, accidents or any legislative, administrative or exclusive law, order, or requisition of the Federal Government or any State or Municipal Government or any subdivision, department or office thereof.

SECTION 5 - AGREEMENT PRICE

The price to be paid for the Work the Seller is to perform under this Agreement is as shown on the Purchse Order. Shipping and Halding charges between the FOB point, as shown in the Purchase Order, and the Delivery Point will be as shown on the Purchase Order.
The terms of payents shall be as shown in the purchase order, or if not shown, payment of the net invoice amount in 30 days.

SECTION 6 - DELIVERY

Seller shall deliver the Equipment F.O.B. point of shipment. Title and risk of loss for Equipment, whether shipped by Seller or direct shipped from the manufacturer, shall transfer to Owner at the time Equipment is delivered to a common carrier or other

delivery service. Seller will use its commercially reasonable efforts to comply with Owner's request as to method and route of transportation, but Seller reserves the right to use any commercial carrier for shipment, or an alternate method or route of transportation.
The facility address for the Lyons Ferry Straw Pulp Plant is:
Facility Site: 1403 Highway 261
Starbuck, WA 99359
6.4 – Partial Shipments
The Seller will not accept partial shipments made by third parties to the Delivery Point except under the following conditions:

1. The shipment is accompanied by paperwork that clearly identifies the Seller and the component of the Work being shipped.
2. The items(s) being shipped are clearly identified with tags, labels or identifying marks indicating which components of the Work the item(s) are part of.
3. Clear instructions regarding how these components are to be incorporated into the Work including, as appropriate, drawings, lists, installation manuals and/or operating and maintenance manuals.
4. The notice specified in 6.3 above has been given including the origin and shipment method of delivery of the items(s).

SECTION 7 – INVOICING AND PAYMENT

7.1 Invoicing
Invoice(s) relative to this Agreement shall be identified with Owner's identifying Purchase Order number and directed to
Columbia Pulp, LLC
164 E. Main Street
P.O. Box 183
Dayton, Washington 99328
Or as directed in the purchase order. Invoices without a Purchase Order numberclearly identified will be returned without payment to the Seller.

7.2 Payment

Payment for Goods and Services is due within 30 days from the date of Supplier's invoice. Owner shall payinvoices that are accompanied by documentation that demonstrates that the Work for which payment is requested has been completed If the Owner cannot confirm that the work has been completed as specified by evidence from the receiving staff at the site or by the Owner's engineer(s), the invoice will be returned to the Seller with and explaniation of the deficiencies.
In no event will the Owner pay any interest, late fees or any other additional amounts claimed on invoices arriving without the required documentation.

SECTION 8 - TERMINATION

The Owner may cancel this Agreement upon the written notice to the Seller. If this Agreement is terminated by the Owner, the Seller is entitled to reasonable cancellation charges including but not limited to labor expended, materials obtained or expended, reasonable overhead and profit.

Seller may terminate upon the occurrence of the following events: (i) if Owner is in material breach of its duties or obligations under this Agreement, and the breach has not been cured within 30 days of written notice of such breach; or (ii) immediately upon the institution by or against the Owner of proceedings under bankruptcy, insolvency, or any other procedures for the settlement of debts; upon the Owner making an assignment for the benefit of its creditors; upon the appointment of a receiver for the Owner or its property; or upon the Owners voluntary or involuntary dissolution or liquidation.

SECTION 9 - EFFECTIVE DATE OF THIS AGREEMENT

Effective date of this Agreement shall be the shown on the Purchaser Order and 'P.O. Date', or as modified by the text of the Purchaser Order or any subquent change orders.
Equipment and documentation schedules shall be predicated upon the Effective Date of this Agreement.

SECTION 10 - COMPLETION AND ACCEPTANCE

Completion and Acceptance of the Equipment shall be granted to Seller, unless within 5 business days of delivery, Seller receives notice, followed by written confirmation, that Owner does not accept the Equipment. Such notification shall include Owner's reason for non-acceptance, including any defects or damages in the Equipment, and/or any variance in the number and type of Equipment delivered from the number and type of Equipment ordered.

Owner's exclusive remedy with respect to any Equipment that it believes to be, and Seller reasonably determines to be, not in conformity with any applicable warranties set forth herein, shall be, at Seller's election, the repair, replacement, or refund of the purchase price of any such non-conforming Equipment, provided that such remedies shall only be available for 1 year from the date of shipment. With respect to any shortage in the number and type of Equipment delivered in comparison with the number and type ordered, Owner's exclusive remedy shall be Seller's prompt shipment of the number and type of Equipment ordered or, if Equipment of the number and type ordered are not available, the refund of the purchase price, solely to the extent that Equipment of the type and number ordered by Buyer are not available. This Section sets forth Owner's sole and exclusive remedy against Seller with respect to any defective or non-conforming Equipment or any shortages, and Owner expressly waives any and all other applicable rights and remedies with respect to non-conforming Equipment whether arising at law, in equity, or otherwise.

SECTION 11 - DISPUTE RESOLUTION

Any dispute between the parties shall be handled in the following manner:

a. Mediation. In the event that any dispute ("Dispute") arises between the parties related to this Agreement, the parties agree to submit the Dispute to non-binding mediation upon either party providing the other with written notice describing the Dispute in detail within 3 days after the Dispute is identified. The parties shall cooperate in selecting the mediator, and the mediation shall occur within 30 days of a party providing written notice to the other party of the Dispute. The mediation shall take place in Seattle, Washington.
b. Arbitration. If mediation does not take place and resolve the Dispute within 30 days after the notice of the Dispute is given, such Dispute shall be submitted to final and binding arbitration pursuant to the Washington version of the Uniform Arbitration Act (RCW 7.04A). The arbitration shall be conducted pursuant to the American Arbitration Associations Construction Industry Arbitration Rules, and it shall take place in Seattle, Washington. The arbitrator does

not have to be an American Arbitration Association arbiter. The substantially prevailing party in any such arbitration shall be entitled to recover its reasonable costs and attorney fees.

SECTION 12 – CHANGE ORDERS

Changes to this Agreement shall be in written form and signed by both the Owner and Seller.

SECTION 13 – MECHANICAL WARRANTY

The Seller warrants that, upon delivery to the point of shipment, it will convey to Owner good title to any Equipment free and clear of any liens or encumbrances. Seller shall use its best reasonable efforts to obtain from its vendors or manufacturers, for the benefit of both Seller and Owner, such warranties as are normally offered for such Equipment. Seller will assist Owner in the process of filing and pursuing any warranty claims with the third party vendor or manufacturer. Seller warrants that any services will be performed in a competent manner and in accordance with industry standards. EXCEPT FOR THE FOREGOING, SELLER HEREBY DISCLAIMS AND EXCLUDES ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR AGAINST DEFECTS IN DESIGN, MATERIALS AND WORKMANSHIP.

SECTION 14 - SECURITY INTEREST

Seller hereby grants to Owner a first priority security interest (the "Security Interest") in all of Owner's right, title, and interest in and to the Work and related accessories, including but not limited to all parts, drawings, documents, manuals, inventory, appurtenances or materials relating to the construction, furnishing, designing, fabricating or testing such equipment and accessories, identified by this Agreement (the "Collateral"). From time to time at Owner's request, Seller shall execute and deliver all further instruments and documents and take all further action as may be reasonably necessary to perfect the first priority security interest granted in the Collateral pursuant to this Agreement or to enable the Owner to exercise and enforce its rights and remedies with respect to the aforementioned Collateral. Seller authorizes the Owner or the Owner's Lender to file a financing statement describing the Owner's Security Interest in the Collateral

SECTION 15 - ASSIGNMENT AND COOPERATION WITH COMPANY'S LENDER.

The Owner may assign its rights or delegate its obligations under this Agreement and its Security Interest in the Collateral to any lender ("Lender") which is financing the Owner's acquisition of the Collateral as collateral security for the performance of the Owner's obligations to the Lender upon prior written notice to Seller. Seller shall cooperate with the Owner and the Owner's Lender in satisfying any reasonable requirements for financing of the Work. Seller shall, upon request, execute in favor of the Owner's Lender a waiver and right of entry to Supplier's premises, permitting the Lender party to inspect Collateral and the Work under construction pursuant to this Agreement and enforce Lender's security interests in the equipment and related accessories to be provided by Seller to the Owner pursuant to this Agreement. Seller shall subordinate Seller's lien rights in and to the equipment and related accessories to the Security Interest and any security interest of the Owner's Lender.

SECTION 16 - TECHNICAL ADVISORY SERVICES

Seller shall make available and provide, upon request of Owner, the services of competent, qualified field personnel to assist Owner in the unloading, installation/erection and commissioning of the Equipment furnished hereunder. Owner will compensate Seller for said services in accordance with Seller's, and Seller's subcontractors, published rate sheet in effect as of the Effective Date of this contract.

SECTION 17 - TAXES

This Agreement is exempt from Washington State Sales Tax. Tax Purchase Exemption Certificate will be provided.

SECTION 18 – APPLICABLE LAW

This Agreement shall be governed by and construed in accordance with the laws of the State of Washington.

SECTION 19 - AGREEMENT ACCEPTANCE

This Agreement shall be deemed to be accepted by both parties upon signature by authorized representatives of both Parties.

SECTION 20 – Limitation of Liability

Notwithstanding anything else contained herein to the contrary, in no event shall (i) either Party be liable to the other for any indirect, special, punitive, exemplary, speculative, consequential, contingent, liquidated, incidental or other similar damages, including without limitation, damages for lost revenues, lost profits, lost business or business interruptions arising in any manner pursuant to or in connection with this Agreement, the Equipment or Services; and (ii) Seller's maximum liability, whether such liability is claimed as a result of breach of contract, indemnity, warranty, tort (including negligence), strict liability or otherwise, pursuant to or in connection with any and all claims arising under this Agreement, exceed the purchase price of the Equipment or Service giving rise to the claim.

September 22, 2017

WESCO Distribution
E 2025 Trent Avenue
Spokane, WA 99202

COLUMBIA PULP
164 East main
Dayton, WA. 99328

Attn: Larry Tantalo

Re: Starbucks Facility Terms/Conditions

Larry,
In regards to the above mentioned topics for the upcoming Starbucks project, as well as future sites please refer the following thoughts:

- Prices established today for Columbia Pulp will not change during the construction of the first project.
- Product with established part numbers will have a discount against published list, that discount will stay consistent with annual increases on November 1st annually.
- Products without part numbers (MV/LV/MCC) will have a maximum increase per year of 4%, this is barring any unforeseen change in commodities. This change would be discussed and agreed to in advance of any order.
- Standard designs for any product can be established to reduce lead times and the approval process for subsequent mills.
- Services rates for labor will be negotiated on an annual basis with a maximum rate per hour. Discounting for embedded service, or blocks of hours will be offered per project.
- The same engineering and design capabilities that have been demonstrated to date would be offered for other items such as lighting, cable tray, etc. Firm pricing for items supplied for the first project can be extended, with the exception of commodities.
- Upon selection of agreed upon manufacturers, maximum annual increases can also be obtained.
- The attached WESCO terms and conditions are standard. It would be our intent to negotiate mutually acceptable terms and conditions with Columbia Pulp that would be utilized for this and any subsequent projects.

WESCO appreciates this opportunity to provide the services discussed thus far and any additional that would assist in making this project the success that it is going to be. If you have any questions or concerns feel free to contact me here at the office or on my cell @ 208-512-4276.

Best Regards

Tony Rinaldi
Account Representative
Office 509-456-7501, Ext. 16

PURCHASE ORDER

Columbia Pulp

Columbia Pulp PO170040 - Wesco - MCCs Group 1

Adobe Sign Document History 03/17/2018

Created:	03/17/2018
By:	Larry Tantalo (larry.tantalo@columbiapulp.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAA1_bH23SmgiJ0lGzoGxU2Qj4gy6gTo0fs

"Columbia Pulp PO170040 - Wesco - MCCs Group 1" History

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Document e-signed by John Begley (john.begley@columbiapulp.com)

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