

Branch to fill in below:

Sect.	Structure Type	Horizontal Bus	Vertical Bus	Horizontal Gnd. Bus (NMG1-1/4x1/4)	
A	MCBB-NF3-080x050	W23-E3-25FR-H25-FR0x050		50/65F080-BT	
B, C, D, E	NP3-050x050+PMT	H25-65PV050	NV04-65	50/65P050-BT	
Unit Qty.	Drawer Type	Fixed Mounting Plate Type	Door Type	Hole Code	"PP" Code
1		FPF080-8W-SP	NDF080-6+P		
2			NDF080-18+P		
3	DUR4		NDP038-4+P		
4	DUR4		NDP038-4+P		184
6	DUR4	FPF050-3W/12W	NDP050-18+P		
7	DUR4		NDP038-4+P		
8	DUR4		NDP038-4+P		184
10		FPF050-3W/12W	NDP050-18+P		
11	DUR4		NDP038-4+P		
12	DUR4		NDP038-4+P		
14		FPF050-3W/12W	NDP050-18+P		
15			NDP038-4+P		
16	DUR4		NDP038-4+P		
18		FPF050-3W/12W	NDP050-18+P		

Busbars: Tin-plated Copper (Standard)

Main Bus: 800A 1200A 1800A 2000A 2500A 3000A

Vertical Bus: Std. 400A 600A Ground Bus: 400A

Short Circuit Bracing: 65kA

Incoming Entry: Top Bottom Incoming Section: A No./Phase: 5

Outgoing Lines: Top Bottom Cable Size: 500MCM A/Cu

Unit Mounting: Front Only Enclosure Type: Enamec 1A

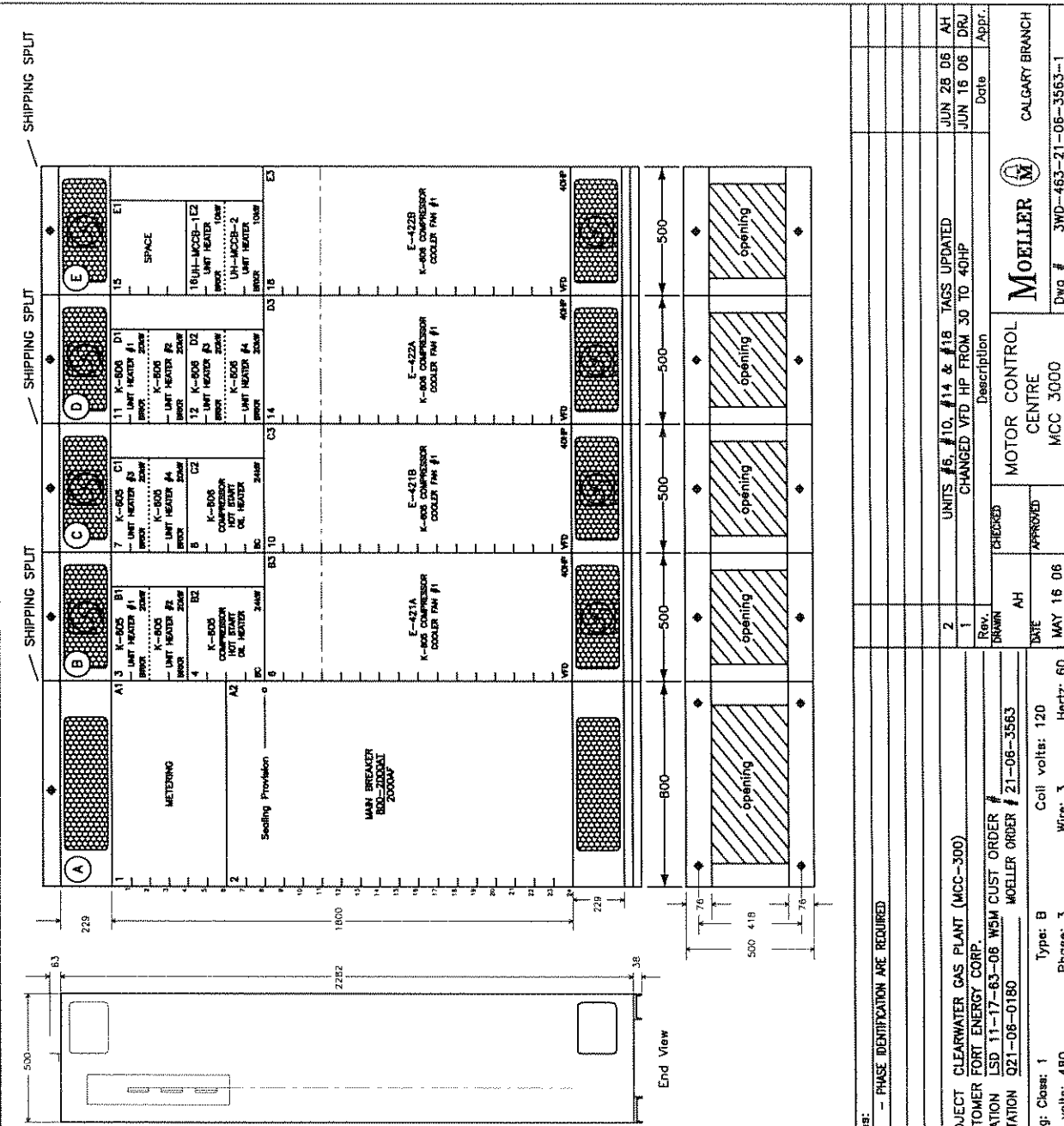
Finish: Standard Gray Back Access: Yes No

Notes - Factory Only:

- UNIT #2 DOOR c/w SEALING PROMISION

- UNITS #6, #10, #14 & #18 DOORS c/w TOC 4035

- SECTIONS 'B', 'C', 'D' & 'E' c/w AIB-500, TR-P55x050 & VERTICAL BUS CUT AT 10MCO



Notes:

- PHASE IDENTIFICATION ARE REQUIRED

PROJECT CLEARWATER GAS PLANT (MCC-300)
CUSTOMER FORT ENERGY CORP.
LOCATION LSD 11-17-63-06 WSM CUST ORDER #
QUOTATION Q21-08-0180 MOELLER ORDER # 21-06-3563


Wiring: Class: 1 Type: B Coil volts: 120 Hertz: 60
Line volts: 480 Phase: 3 Wire: 3

Checked: Description
Rev. 1 UNITS #6, #10, #14 & #18 TAGS UPDATED
2 CHANGED VFD HP FROM 30 TO 40HP
DATE MAY 16 06
DATE JUN 16 06
APPROVED
MOTOR CONTROL CENTRE
MCC 3000
CALGARY BRANCH
Dwg # 3WD-463-21-06-3563-1

Unit No.	Qty.	HP	FLA	Mag trip setting (A)	Power wire size (awg)	MPA	Starter Type	Catalogue Number		Notes	Unit Height (mod)	Unit Wiring Diagram	Unit Layout Drawing No.						
								Contactor DIL	Circuit Protective Device										
													Pilot Devices			Control Transformer			
													Pushbuttons Selector or Switch	Lights R G SP	VA	Amps			
													Overload Relay						
1	1						METERING				75	0.75	SEE DRAWING FOR PARTS INFORMATION	6	21-06-3563-A				
2	1		2000	24000			MAIN BRKR		ABB E3S-A20-LSI				SEE DRAWING FOR PARTS INFORMATION	18	21-06-3563-A				
3	1	20/200	30/30	30/30	2x6		DUAL BRKR		2x NZMH2-AF30-NA					4	21-06-3563-G				
4	1	24kW	40	480	8	6	BRKR CONTACTOR	M40/22	NZMH2-AF40-NA				SEE DRAWING FOR PARTS INFORMATION	4	21-06-3563-B				
6	1	40	50	600	6	4	VFD		NZMH2-AF90-NA				SEE DRAWING FOR PARTS INFORMATION	12	21-06-3563-E				
7	1	20/200	30/30	30/30	2x6		DUAL BRKR		2x NZMH2-AF30-NA				SEE DRAWING FOR PARTS INFORMATION	4	21-06-3563-G				
8	1	24kW	40	480	8	6	BRKR CONTACTOR	M40/22	NZMH2-AF40-NA				SEE DRAWING FOR PARTS INFORMATION	4	21-06-3563-B				
9	1													4					
10	1	40	50	600	6	4	VFD		NZMH2-AF90-NA				SEE DRAWING FOR PARTS INFORMATION	12	21-06-3563-E				
11	1	20/200	30/30	30/30	2x6		DUAL BRKR		2x NZMH2-AF30-NA				SEE DRAWING FOR PARTS INFORMATION	4	21-06-3563-G				
12	1	20/200	30/30	30/30	2x6		DUAL BRKR		2x NZMH2-AF30-NA				SEE DRAWING FOR PARTS INFORMATION	4	21-06-3563-G				
13	1													4					
14	1	40	50	600	6	4	VFD		NZMH2-AF90-NA				SEE DRAWING FOR PARTS INFORMATION	12	21-06-3563-E				
15	1						SPACE							4					
16	1	10/100	15/15	30/30	2x6		DUAL BRKR		2x NZMH2-AF15-NA					4	21-06-3563-G				
17	1													4					
18	1	40	50	600	6	4	VFD		NZMH2-AF90-NA				SEE DRAWING FOR PARTS INFORMATION	12	21-06-3563-E				
19	1	3	4.8	350	10	10	VFD		NZMH2-AF15-NA				SEE DRAWING FOR PARTS INFORMATION	12	21-06-3563-C				
20	1	7.5	11	350	10	10	VFD		NZMH2-AF15-NA				SEE DRAWING FOR PARTS INFORMATION	12	21-06-3563-D				
21	1	3	4.8	350	10	10	VFD		NZMH2-AF15-NA				SEE DRAWING FOR PARTS INFORMATION	12	21-06-3563-C				
22	1	7.5	11	350	10	10	VFD		NZMH2-AF15-NA				SEE DRAWING FOR PARTS INFORMATION	12	21-06-3563-D				
23	1	9kW	15	350	10	10	BRKR CONTACTOR	M25-10/22	NZMH2-AF15-NA				SEE DRAWING FOR PARTS INFORMATION	4	21-06-3563-B				
24	1	9kW	15	350	10	10	BRKR CONTACTOR	M25-10/22	NZMH2-AF15-NA				SEE DRAWING FOR PARTS INFORMATION	4	21-06-3563-B				
25	1	20/200	30/30	30/30	2x6		DUAL BRKR		2x NZMH2-AF30-NA				SEE DRAWING FOR PARTS INFORMATION	4	21-06-3563-G				
26	1		15/60	30/30	2x6		DUAL BRKR		NZMH2-AF15-NA/AF60-NA					4	21-06-3563-G				
27	1						SPACE							4					
28	1						SPACE							4					
29	1						LTG PNL						SEE DRAWING FOR PARTS INFORMATION	14	21-06-3563-F				
30	1		70	800			XFMR/BRKR		NZMH2-AF70-NA				SEE DRAWING FOR PARTS INFORMATION	10	21-06-3563-F				
31	1						PLC PANEL							24					
32	1						PLC PANEL							24					
33	1						PLC PANEL							24					

Wiremarkers: Yes No
 Wiremarker Type: PVC Heatshrink
 Control Wire Size: 16AWG 14AWG
 Tin Plated Control: Yes No

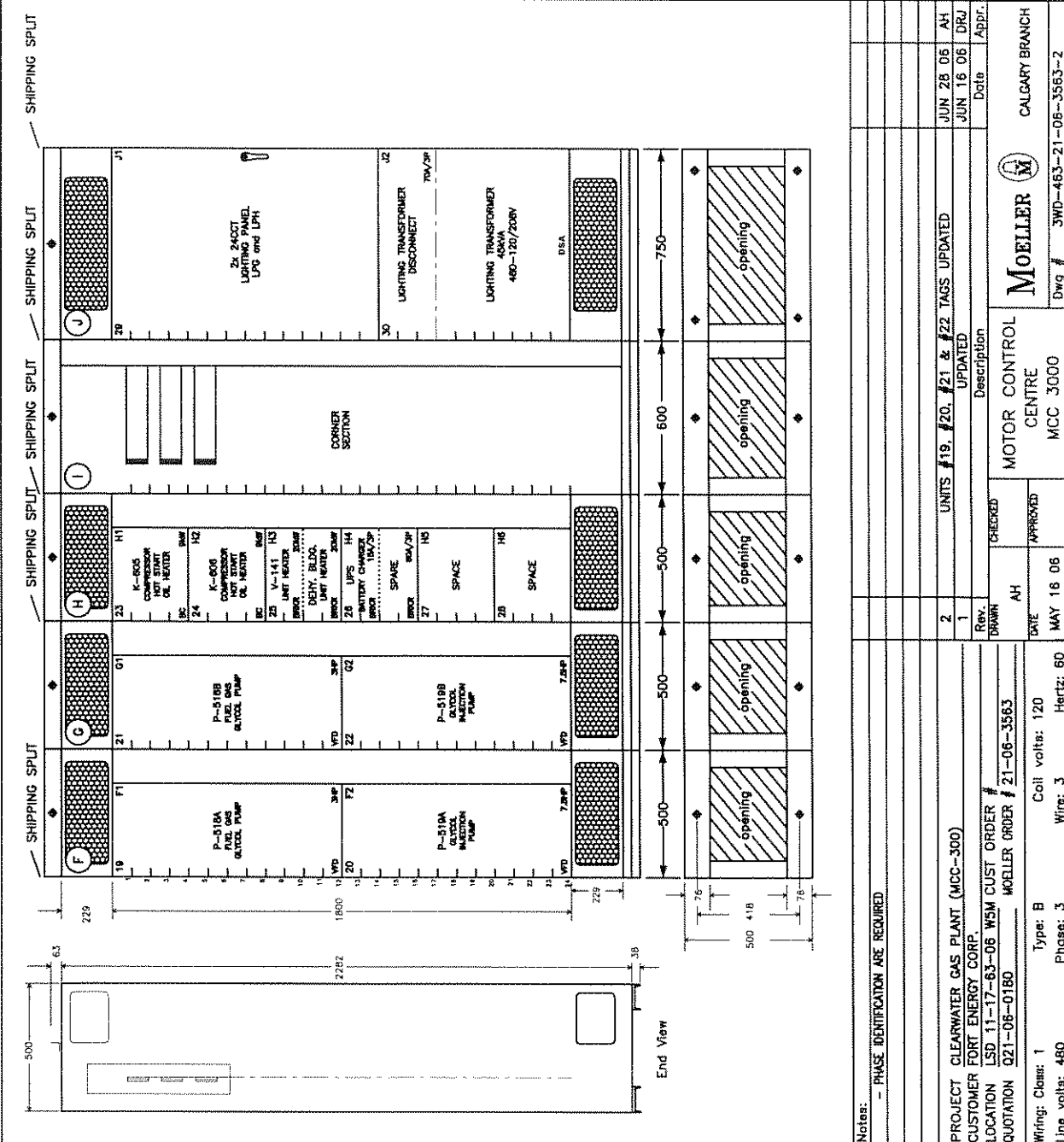
Customer order #
 MCC NOTES
 CLEARWATER GAS PLANT (MCC-300)
 FORT ENERGY CORP.

Moeller order # 21-06-3563

 Moeller
 Dwg # 3WD-463-21-06-3563-1A

Rev. 1
 Description: UPDATED AS BUILT
 Date: JUL 17 06
 Appr. DRJ

Moeller order #
 CUST. ORDER #
 DATE
 MAY 17 06
 APPR

CALGARY BRANCH



Branch to fill in below:		Structure Type:		Horizontal Bus		Vertical Bus		Horizontal Grid Bus (NRG1-14x14)	
Sect:	F, G, H	NP3-050x050+VM	H25-65P050	NVD4-65	50/65P050-B				
	I	CORNER SECTION	H25-65P075						
	J	NP3-075x030	H25-65P075		50/65P075-BT				
Unit	Qty.	Drawer Type	Fixed Mounting Plate Type	Door Type	Hole Code	"PP" Code			
19	1	DUR12	NDP038-12+P	NDP038-12+P					
20	1	DUR12	NDP038-12+P	NDP038-12+P					
21	1	DUR12	NDP038-12+P	NDP038-12+P					
22	1	DUR4	NDP038-4+P	NDP038-4+P		184			
23	1	DUR4	NDP038-4+P	NDP038-4+P		184			
24	1	DUR4	NDP038-4+P	NDP038-4+P		184			
25	1	DUR4	NDP038-4+P	NDP038-4+P		184			
26	1	DUR4	NDP038-4+P	NDP038-4+P		184			
27	1		NDP038-4+P	NDP038-4+P					
28	1		NDP038-4+P	NDP038-4+P					
29	1		FPP075-14W-SP	NDP075-14+P					
30	1		FPP075-3W	NDP075-10+P					

Busbars: Tin-plated Copper (Standard)

Main Bus: 800A 1200A 1600A 2000A 2500A 3000A

Vertical Bus: Std. 400A 600A Ground Bus: 800A

Short Circuit Bracing: 65kA Neutral Bus: N/A

Incoming Entry: Top Bottom Incoming Section: A No./Phase: B

Outgoing Lines: Top Bottom Cable Size: 500MCM A Cu

Unit Mounting: Front Only Enclosure Type: Emax 1A Back Access: Yes No

Finish: Standard Grey

Note - Factory Only:

- SECTION 'J' c/w TOC #3485 & TR-P075x050

- UNIT #28 DOOR c/w K13

Notes: - PHASE IDENTIFICATION ARE REQUIRED

PROJECT CLEARWATER GAS PLANT (MCC-300)
 CUSTOMER FORT ENERGY CORP.
 LOCATION LSD 11-17-63-06 W5M CUST ORDER #
 QUOTATION Q21-06-0180 MOELLER ORDER # 21-06-3563

Wiring: Class: 1 Type: B Coil volts: 120 Hertz: 60
 Line volts: 480 Phase: 3 Wire: 3

2 UNITS #19, #20, #21 & #22 TAGS UPDATED
 1 UNITS #20, #21 & #22 TAGS UPDATED
 R.V. DRAWN DATE MAY 16 06
 CHECKED APPROVED

MOTOR CONTROL CENTRE
 MCC 3000

MOELLER
 Dwg # 3WD-463-21-06-3563-2

JUN 28 06 AH
 JUN 16 06 DRJ
 Date Appr.

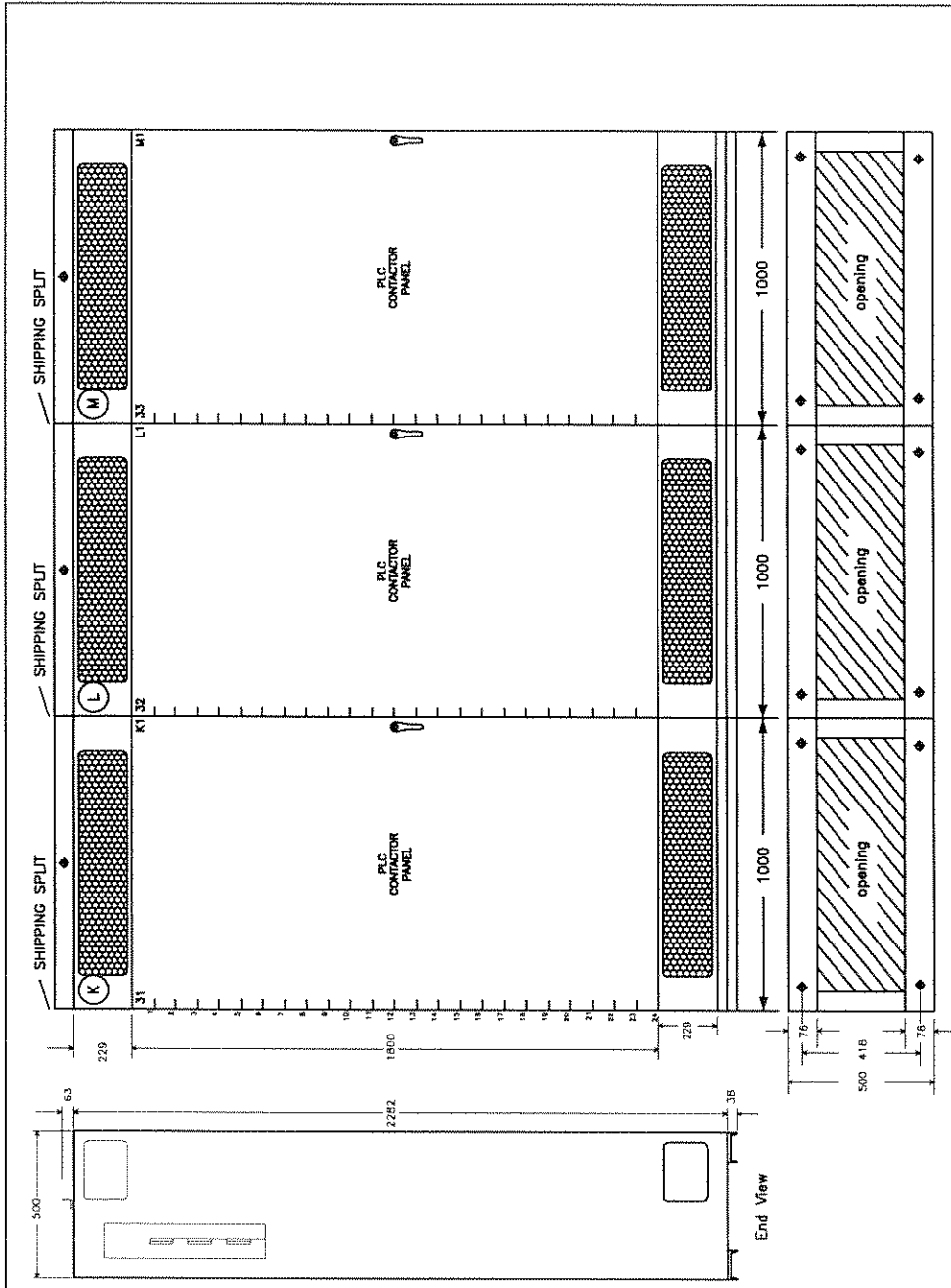
CALGARY BRANCH

Branch to fill in below:

Sect:	Structure Type:	Horizontal Bus	Vertical Bus	Horizontal Gnd. Bus (NHG1-1/4x1/4)
K, L, M	NF3-100x050	H25-65F100		50/65F100-B

Unit	Qty.	Drawer Type	Fixed Mounting Plate Type	Door Type	Mole Code	"TP" Code
	31		FPF100-24W-SP	NDF100-24+P		
	32		FPF100-24W-SP	NDF100-24+P		
	33		FPF100-24W-SP	NDF100-24+P		

Busbars: Tin-plated Copper (Standard)
 Main Bus: 800A 1200A 1800A 2000A 2500A 3000A
 Vertical Bus: Std. 400A 600A Ground Bus: 400A
 Short Circuit Bracing: 65kA Neutral Bus: N/A
 Incoming Entry: Top Bottom Incoming Section: A No./Phase: B
 Outgoing Lines: Top Bottom Cable Size: 500MCM AI Cu
 Unit Mounting: Front Only Enclosure Type: Earmac 1A
 Finish: Standard Grey Back Access: Yes No
 Notes - Factory Only:
 - UNITS #31, #32 & #33 DOORS c/w KL3



Notes:
 - PHASE IDENTIFICATION ARE REQUIRED

PROJECT CLEARWATER GAS PLANT (MCC-300)
 CUSTOMER FORT ENERGY CORP.
 LOCATION LSD 11-17-63-06 WSM CUST ORDER #
 QUOTATION Q21-06-0180 MOELLER ORDER # 21-06-3563

Wiring: Class: 1 Type: B Coil volts: 120 Wire: 3 Phase: 3 Hertz: 60
 Line volts: 480

Rev. 00000	DATE	DESCRIPTION	DATE
	AH	MOTOR CONTROL CENTRE	
	MAY 18 06	MCC 3000	

MOELLER
 Dwg # 3WD-463-21-06-3563-3
 CALGARY BRANCH

Branch to fill in below:

Sect.:	Structure Type:	Horizontal Bus	Vertical Bus	Horizontal Gnd. Bus (NHG1.1/4x1/4)
A	NP3-050X050-4-PWB	425-6SPV050	WV04-65	50/6SP050-B

Unit	Qty	Drawer Type	Fixed Mounting Plate Type	Door Type	Hole Code	"Pp" Code
1	1		FPP050-12W-SP	NDP050-12+P		
2	1			NDP038-4+P		
3	1			NDP038-4+P		
4	1			NDP038-4+P		

Busbars: Tin-plated Copper (Standard)

Main Bus: 800A 1200A 1600A 2000A 2500A 3000A

Vertical Bus: 400A 600A Ground Bus: 400A

Short Circuit Bracing: 65KA Neutral Bus: N/A

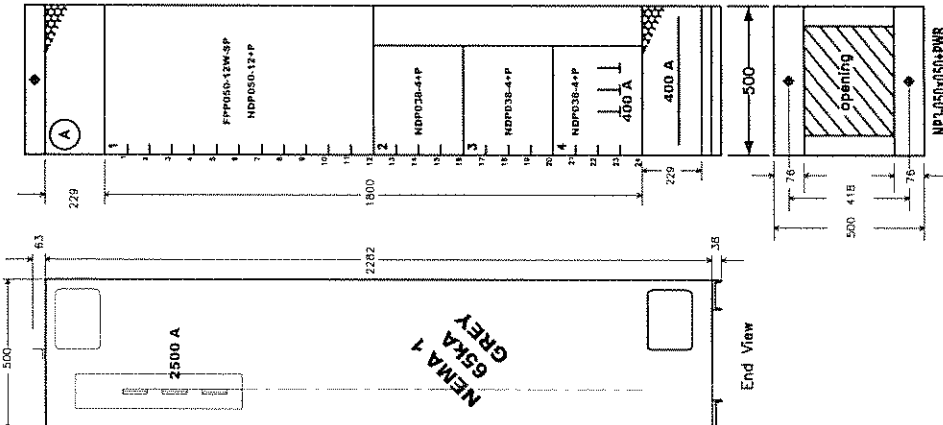
Incoming Entry: Top Bottom Incoming Section: No./Phase: AI Cu

Outgoing Line: Top Bottom Cable Size: AI Cu

Unit Mounting: Front Only Enclosure Type: Ename 1A Back Access: Yes No

Finish: Standard Grey

Notes - Factory Only:



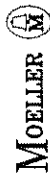
Notes:

- PHASE IDENTIFICATION ARE REQUIRED
- TO BE BOLTED ON EXISTING MCC w/ BUS COUPLERS

PROJECT CLEARWATER GAS PLANT (MCC-100) ADD SECTION
 CUSTOMER FORT ENERGY CORP.
 LOCATION LSD 11-17-63-06 WSM CUST ORDER #
 QUOTATION 021-06-0180 MOELLER ORDER # 21-06-3563

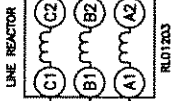
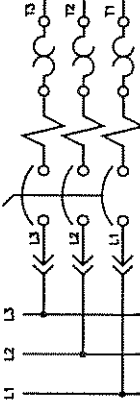
Line volts: 480 Phase: 3 Type: B Coil volts: 120 Hertz: 60
 Wire: 3

Rev.	DESCRIPTION	DATE	BY
1	ISSUED	MAY 17 06	AH
	CHECKED		
	APPROVED		
Description		Date	Appr.
MOTOR CONTROL CENTRE			
MCC 3000			

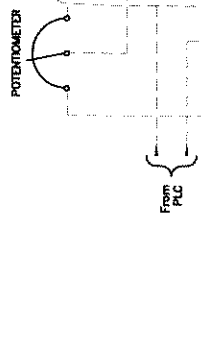
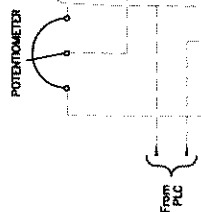
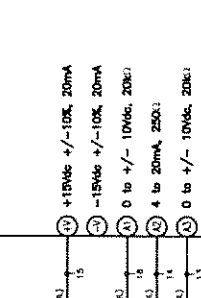
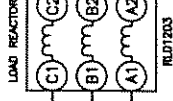
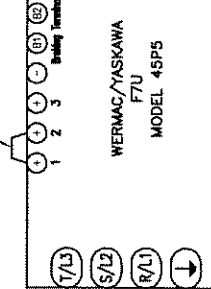


MOELLER
 Dwg # 3WD-463-21-06-3563-10
 CALGARY BRANCH

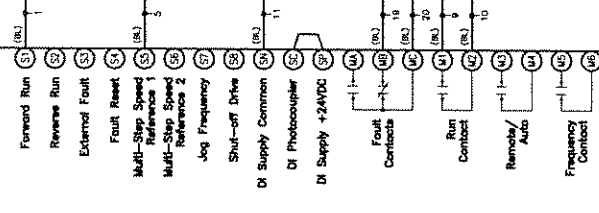
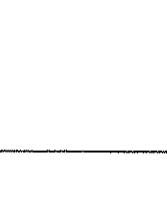
480V 3PH 60HZ



Remove if adding External DC Line Choke



- (1) +10Vdc +/-10%, 20mA
- (2) -15Vdc +/-10%, 20mA
- (3) 0 to +/- 10Vdc, 20mA
- (4) 4 to 20mA, 250:1
- (5) 0 to +/- 10Vdc, 20mA
- (6) 0 to 32kHz, 5 to 12Vdc 5kV Pulse Input
- (7) Analog Common
- (8) SHIELD
- (9) Modbus RTU Communications RS-485/422 19.2 Kbps



LEGEND:
 ——— CABLE/PAISE WIRING
 - - - - - INTERCABEL WIRING
 ——— LINE - FIELD WIRING
 - - - - - WIRE
 - - - - - RED
 - - - - - BLACK
 - - - - - GREEN
 - - - - - YELLOW (ABSENT)
 - - - - - BLUE
 - - - - - WHITE

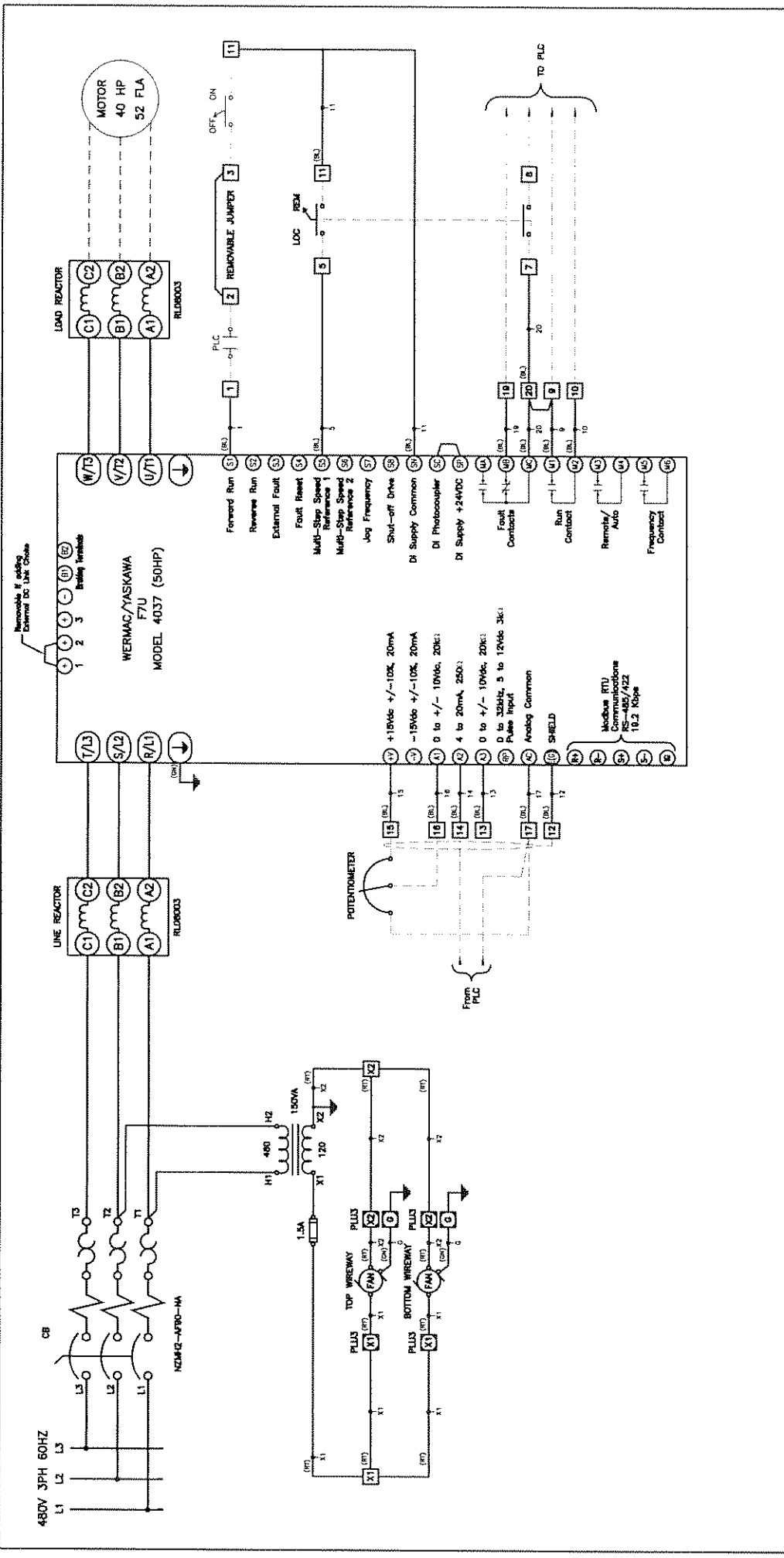
NOTE:
 - STV2/10 CONTROL TERMINALS

* NOTE, AP - STV2 PLATES NEEDS TO BE LOOSE IN VERTICAL WIREWAY *

Rev.	Description	Date	Appr.	Rev.	Description	Date	Appr.

Moeller Order # 21-06-3563
MOELLER CALGARY BRANCH
 Dwg # 3WD-463-21-06-3563-D

Cust. order # 7.5HP VARIABLE FREQUENCY DRIVE
 CLEARWATER GAS PLANT
 FORT ENERGY CORP.
 DRAWN AH DATE MAY 17 06
 APRR



NOTE - SAK BEN CONTROL TERMINALS c/w 4 SPARE

LEGEND:	CABLE/HANEL WIRING
INTERLOCK WIRING	RED
FIELD WIRING	WHITE
RUN	BLUE
STOP	YELLOW
YELLOW (ARREST)	YELLOW (ARREST)
BLUE (ARREST)	BLUE (ARREST)
WHITE	WHITE

Rev.	Description	Date	Appr.	Rev.	Description	Date	Appr.
1	CHANGED HP FROM 40 TO 50	JUN 16 05	DRU				
				Drawn	30HP VARIABLE FREQUENCY DRIVE	Cust. order #	
				DATE			
				APR	MAY 17 06	Moeller Order #	21-06-3563
				APR			
					FORT ENERGY CORP.		
					CALGARY BRANCH		

MOELLER
 Calgary Branch
 Dwg # 3WD-463-21-06-3563-E

