

Board Agenda

Special Meeting

Wednesday, November 10, 2021 Camrosa Board Room 5:00 P.M.

Board of Directors

Al E. Fox Division 1 Jeffrey C. Brown Division 2 Timothy H. Hoag Division 3 Eugene F. West Division 4 Terry L. Foreman Division 5

General Manager Tony L. Stafford

TO BE HELD REMOTELY

In light of public health responses to COVID-19, the Camrosa office remains closed to the public. Board meetings are accessible to the public <u>only</u> via web-based teleconference, as described below.

To participate via the web to see the board meeting presentation, click https://us02web.zoom.us/j/9235309144 on your computer, tablet, or smartphone. You'll need to download and install the ZOOM app before logging on.

If you'd like to make a comment, you'll have to log in via the app so we can identify you and invite you to participate.

To listen in via phone, call (669) 900-6833; when prompted, enter the meeting ID: 923 530 9144.

Call to Order

Public Comments

At this time, the public may address the Board on any item <u>not</u> appearing on the agenda which is subject to the jurisdiction of the Board. Persons wishing to address the Board should inform the Zoom host prior to the meeting or make themselves known when the meeting chair asks for comments. All comments are subject to a <u>5-minute</u> time limit.

Matters appearing on the Consent Agenda are expected to be non-controversial and will be acted upon by the Board at one time, without discussion, unless a member of Board or the Staff requests an opportunity to address any given item. Items removed from the Consent Agenda will be discussed at the beginning of the Administrative Items. Approval by the Board of Consent Items means that the recommendation of the Staff is approved along with the terms and conditions described in the Board Memorandum.

Primary Agenda

CLOSED SESSION: The Board may enter a closed session to confidentially discuss litigation matters as authorized by Government code 54956.9.

1. Closed Session Conference with Legal Counsel – Pending Litigation

Objective: To confer with and receive advice from counsel regarding pending litigation.

Action Required: No action necessary; for information only.

Primary Agenda (Cont.)

2. **Purchase GAC Motor Control Centers

Objective: Procure a motor control center (MCC) for the granular activated carbon (GAC) treatment plant at the Conejo Wellfield.

Action Required: Authorize the General Manager to issue a purchase order to Royal Industrial Solutions in the amount of \$1,054,110.97 for the MCC for the Conejo Wellfield GAC treatment plant.

Comments by General Manager; Comments by Directors; Adjournment

PLEASE NOTE: The Board of Directors may hold a closed session to discuss personnel matters or litigation, pursuant to the attorney/client privilege, as authorized by Government Codes. Any of the items that involve pending litigation may require discussion in closed session on the recommendation of the Board's Legal Counsel.

Note: ** indicates agenda items for which a staff report has been prepared or backup information has been provided to the Board. Copies of the full agenda are available for review at the District Office and on our website at www.camrosa.com.



November 10, 2021 Special Meeting

Board of Directors Agenda Packet



Board Memorandum

November 10, 2021

To: Board of Directors

From: General Manager

Subject: Closed Session Conference with Legal Counsel – Pending Litigation

Objective: Confer with and receive advice from counsel regarding pending litigation.

Action Required: No action necessary; for information only.

Discussion: Pending litigation may be discussed in closed session pursuant to paragraph (1) of

subdivision (d) of Government Code section 54956.9.

Al E. Fox Division 1 Jeffrey C. Brown Division 2 Timothy H. Hoag Division 3 Eugene F. West Division 4 Terry L. Foreman Division 5

General Manager Tony L. Stafford



Board Memorandum

Terry L. Foreman Division 5 **General Manager** Tony L. Stafford

Division 4

Board of Directors

Division 2 Timothy H. Hoag Division 3 Eugene F. West

Al E. Fox Division 1 Jeffrey C. Brown

November 10, 2021

Board of Directors To:

From: Ian Prichard, Assistant General Manager

Subject: **Prepurchase GAC MCC**

Objective: Procure a motor control center (MCC) for the granular activated carbon (GAC) treatment plant at the Conejo Wellfield.

Action Required: Authorize the General Manager to issue a purchase order to Royal Industrial Solutions in the amount of \$1,054,110.97 for the MCC for the Conejo Wellfield GAC treatment plant.

Discussion: The MCC will house all the electrical, automation, and SCADA equipment for the Conejo Wellfield GAC treatment plant. The District has standardized MCCs across our infrastructure using Allen-Bradley equipment and Royal as sole-source distributor.

Prepurchasing allows the District to cut into what is expected to be significant lead time on this equipment, rather than waiting for the contractor to order it. District staff, our design engineers on the GAC plant from Provost & Pritchard, and their electrical subcontractor, Pezzoni Engineering, contributed all the necessary specifications for Royal to complete the proposal.

There are sufficient funds in the Conejo Wellfield Treatment (1,2,3,-TCP) capital project budget for this purchase.



Switchgear Bill of Material

November 3, 2021 Quoted By: Mason Luna

Project Name: Camrosa - Conejo Treatment Plant Royal Industrial Solutions

Proposal Number: 21-ML104_REV2 Ventura, CA

1. FREIGHT TERMS AND VALIDITY OF QUOTED PRICE:

A. FOB Destination.

B. Quote valid for 30 days. After 30 days, this quotation is subject to reevaluation and revision.

C. Payment: NET 10 Days upon delivery of equipment via ACH

D. Standard CED terms and conditions apply. Full terms and conditions available upon request.

2. NOT INCLUDED IN QUOTED PRICE:

A. Miscellaneous Materials that are not specifically identified on this bill of material.

B. Services and Labor that are not specifically identified on this bill of material.

3. CORONAVIRUS NOTE

Royal Industrial Solutions shall not be responsible for any failure to perform, or delay in performance of, its obligations resulting from the COVID-19 pandemic or any future epidemic, and Buyer shall not be entitled to any damages resulting thereof. Royal Industrial Solutions is not responsible for Acts of God.

Item Qty Description

- 1 MSB per attached IEM BOM (ASCO ATS Start Up is Included)
- 1 Integrated Power Center per attached IEM BOM

*PLC Components and Installation of those components are Included. See attached BOM.

*VersaView and Stratix Switch have been included

- 3 1 MCC-2 Per attached Rockwell BOM
- 4 1 MCC-3 _ Per attached Rockwell BOM
- 5 1 MCC-4 Per attached Rockwell BOM

^{*2} Year Warranty for VFD's is included.

	Total for items 1-5:	\$960,13	\$960,131.63	
		(Tax = \$65	,063.34)	
		(UNIT)	(TAX)	
6 1	Arc Flash / Short Circuit Study	\$4,720.00		
7 1	Arc Flash Label Installation	\$1,360.00		
8 1	Protective Device Coordination	\$10,640.00		
Includes	5: Data Collection & Remote Call Med	etings		
9 1	Electrical Safety Training 1	\$5,240.00		
10 1	NFPA 70E Books (5 Students)	\$800.00	\$58.00	
11 1	Electrical Safety Training 2	\$5,240.00		
12 1	NFPA 70E Books (5 Students)	\$800.00	\$58.00	

Total for Items 6-12:	\$28,800.00
	(Tax = \$116)

Total Lot for above BOM plus tax:	\$1,054,110.97

^{*}Estimated Startup and Freight pricing are included.



Project Specific Clarifications:

- (Studies) *Specification 260573-3.03 (Adjusting) These services are not included in above pricing.
 - *Label installation will be done one day prior to arc flash training. If more than one day is required between the install and training, there will be additioal travel and living expenses of \$625 perday
 - *Meetings will be via remote call.
 - *There are additional COVID-19 related protocols in place in regards to the training sessions. A safety waiver and list of safety protocols will be provided when the order is placed.
 - *PLC components and installation of those components into the PCM section of the ICP, (IEM) has been added to this proposal per the direction of Camrosa.

- (Rockwell) *Drawings show the MCC's as Main Lug Only. Main breakers have been added to each MCC per the direction of Camrosa, since MSB will not be in line of sight.
 - *The VFD's have been changed from PowerFlex 753 to PowerFlex 755 per the direction of Camrosa.
 - *2-Year Warranty for VFD'S has been added per the direction of Camrosa.
 - *A DV/DT Filter has been added to MCC-4 per the direction of Camrosa.
 - *Pricing for Class II Wiring was factored in previously, and is accounted for in this proposal as well.
 - *Qty:4 Eaton UPS's are included in this proposal
 - *Pricing for the UPS's to be mounted in PLC section has been added per the direction of Camrosa.
 - **Installation of the UPS's is by others.



BOM

dir 510.656.1600

fax 510.656.6250

Date: 10/22/2021 To: ROYAL

Project: CAMROSA WATER DISTRICT - CONEJO TREATMENT PLANT

IEM is pleased to offer the following quotation for your consideration. Any order resulting from this quotation will be accepted by IEM only on the basis of IEM's General Terms and Conditions of Sale. Notice of exception to any conflicting requirements is hereby given. This quotation will expire thirty calendar days from the date of issue and can be withdrawn by notice within that period. Any order is subject to credit review and/or arrangements for payment in a manner acceptable to IEM prior to acceptance by IEM. Specifically excluded from this quotation is any IEM warrant of merchantability or fitness for a particular purpose for the IEM equipment described.

ITEM QTY DESCRIPTION

- 1 MAIN / DISTRIBUTION SWBD NEMA 3R OUTDOOR ANSI #49 3PH-4W 277/480V UL 891 2000 AMP CU BUS BRACED FOR 65KA, CONSISTING OF:
 - 1 EURSERC UTILITY CABLE PULL, CT & METERING COMPARTMENT SECTION:
 - 1 MAIN BREAKER SECTION:
 - 1 2000A E.O. FIXED-MOUNT SIEMENS WL 65KAIC

INSULATED CASE POWER BREAKER

ETU776 LSIG (GRAPHICAL DISPLAY, GF ALARM & TRIP) PROGRAMMER

WITH 4A/4B AUX SW'S AND THESE ACCESSORIES:

EMO,ST,RCS,OC,PBC,MBCM

- 1 ARC FLASH MAINTENANCE SWITCH
- 1 VOLTAGE/CURRENT TEST SWITCH (10-PT)
- 1 POWER METER W/DISPLAY (ALLEN BRADLEY AB 5000)
- 1 CPT W/CLF
- 3 2000:5 CT'S
- 3 PT'S W/CLF
- 1 200KA/PH SPD W/DISCONNECT
- 1 ATS SECTION:
 - 1 ASCO 7000 SERIES BYPASS TRANSFER SWITCH AUTOMATIC DELAYED TRANSITION G FRAME 480V/60HZ, 3 POLE, 3P/4W G7ADTBA32000N5X0,31BG,37B,44G,82E,150B
- 1 WIREWAY SECTION:
- 1 DISTRIBUTION SECTION:
 - 2 1200A FRAME/3P 65KAIC MOLDED CASE BREAKER W/ LSI TRIP
 - 2 ARC FLASH MAINTENANCE SWITCHES

- 1 600A FRAME/3P 65KAIC MOLDED CASE BREAKER W/ LSI TRIP
- 1 ARC FLASH MAINTENANCE SWITCH
- 5 60A FRAME/3P 65KAIC MOLDED CASE BREAKER
- 1 (LOT) MTG HDWE
- 1 LOT MISCELLANEOUS COMPONENTS:
 - 1 LOT OF CRIMP LUGS
 - 4 STRIP HEATERS
 - 2 THERMOSTATS
 - 2 GCFI RECEPTACLE
 - 4 LED LIGHTS

DESIG:MSB

- 2 1 INTEGRAL POWER CENTER NEMA 3R OUTDOOR
 - 1 PMC SECTION 36"W X 30"D X 90"H
 - 1 TRANSFORMER AND LIGHTING PANEL SECTION 38"W X X36"D X 90"H
 - 1 480V 60A FRAME/3P 65KAIC MOLDED CASE BREAKER
 - 1 208/120V 150A FRAME/3P 65KAIC MOLDED CASE BREAKER
 - 1 (LOT) MTG HDWE
 - 1 PIU PANEL INDOOR 3PH-4W 120/208V 10KAIC MCB 42 CIRCUIT 150A CU "LP1" 42 15-60/1
 - 1 DRY TYPE XFMR INDOOR 3PH 480V-120/208V 150 DEG C RISE CU WOUND DOE 2016 RATED 45 KVA (TX-L1)
 - 1 MISCELLANEOUS COMPONENTS
 - 2 STRIP HEATERS
 - 1 THERMOSTAT

DESIG:POWER CENTER

3 1 DAY ASCO ATS START-UP

This quotation is per this bill of material only, any change to bill of material will result in a change in price. This quotation represents IEM's best interpretation.

Drawings: 4 – 5 weeks after receipt of order

Shipment: 28 - 30 weeks after release for manufacturing

Notes:

- 1. Safety switches, enclosed circuit breakers, starters, lighting contactors, or other miscellaneous equipment are not included unless listed as a separate item within this bill of material.
- 2. No field installation, testing, training, power study, arc flash study, or seismic calculations are included.
- 3. No fuses are provided with this bill of material.
- 4. No panel schedule were provided for this quotation. Any changes to the bill of material above will change the total package price.
- 5. IEM takes exception to Square D I-Line interior and breakers. IEM has provide a Siemens for this proposal.
- 6. MCC's are not included with this proposal and are by others.
- 7. Sales tax is not included; IEM only collects tax in California, Massachusetts and North Carolina
- 8. Quote is valid for 30 days.
- 9. Freight prepaid and allowed (F.O.B. Point of Shipment).

PLC Component BOM – PCM Section in Integrated Power Center

Ite	Product	Qty
m		
1	1769-L33ERM CompactLogix 5370 L3 Controllers, Dual Ethernet w/DLR capability, 2MB memory, 16 I/O Expansion, 32 Ethernet IP Nodes, 8 Axis CIP motion with Kinematics function. Controllers are shipped with 1GB SD card and can support up to 2GB SD card.	1
2	1769-IF8 8 Channel Analog Current/Voltage Input Module	3
3	1769-OF8C 8 Channel Analog Current Output Module	1
4	1769-IA16 16 Point 120 VAC Input Module	5
5	1769-PA4 L3x & L3y CompactLogix Power Supplies 120/240 VAC Input 4A @ 5VDC, 2A @ 24VDC	1
6	1769-ECR Right End Cap/Terminator	1
7	1492-H4 1492-H Finger-Safe Terminal Blocks, H-Block, Single Circuit Fuse Block, Code 4, Neon Blown Fuse Indicator, #30 - #12 AWG, Black (Standard), No Bulk Pack (Single Block)	80
8	1492-N37 1492 Terminal Block Accessories End Barrier , Grey (Standard)	4
9	1492-EAHJ35 1492 Terminal Block Accessories End Anchor, End Anchor	4
10	1492-H5 1492-H Finger-Safe Terminal Blocks, H-Block, Single Circuit Fuse Block, Code 5,LED Blown Fuse Indicator, #30 - #12 AWG, Black (Standard),No Bulk Pack (Single Block)	32
11	1492-N37 1492 Terminal Block Accessories End Barrier , Grey (Standard)	10
12	1492-EAHJ35 1492 Terminal Block Accessories End Anchor, End Anchor	10
13	3 199-DR1 DIN Mounting Rail, Zinc Plated, Chromated Steel, 35mm x 7.5mm DIN Rail, 1 Meter (Pkg. Qty. 10)	
14	1492-J4 1492-J IEC Terminal Block, One-Circuit Feed-Through Block, 4 mm (# 22 AWG - # 10 AWG) or 2.5 mm (# 22 AWG - # 12 AWG), Standard Feedthrough, Gray (Standard),	250
15	1492-EBJ16 1492 Terminal Block Accessories , Grey (Standard)	6

16	1606-XLE240E 1606-XLE240E: Essential Power Supply, 24-28V DC, 240 W, 120/240V AC Input Voltage	1
17	1492-JG4 1492-J IEC Terminal Block, One-Circuit Feed-Through Ground Block, 4 mm (# 22 AWG - # 10 AWG) or 2.5 mm (# 22 AWG - # 12 AWG), Standard Feedthrough, Green / Yellow Stripe (Standard),	80
18	1497-K-BASX-0-N 1497 - CCT Standard Transformer, 1000VA, 240/480V 60Hz / 220/440V 50Hz Primary, 110V 50Hz / 120V 60Hz Secondary, 0 Pri - 0 Sec Fuse Blocks, No Cover/ No Sec. Fuse	2
19	DRUB15 5-15R Din Rail mounted recepticle	2

Added Components for PCM Section – 11/3/2021

Item	Product	Qty
1	6200P-22WS3C1 Industrial Computer, 21.5-inch Widescreen Display, Projected Capacitive Multi-Touch Screen, 128GB SSD, Dual Port Ethernet, Windows 10 IoT Enterprise (64-bit), Single Display Output, No Pre-Installed Software, 24 VDC	1
2	1783-BMS20CGN Stratix 5700 Switch, Managed, 16 Fast Ethernet Copper Ports, 2 Gigabit Ethernet Combo Ports, 2 Fast Ethernet Fiber SFP Slots, Full Software, CIP Sync, NAT, DLR	1
2.1	1 1585J-M8TBJM-1M9 Male RJ45 to Male RJ45 Patchcord, Unshielded Twisted Pair, Teal TPE Cable, 1.9 m	
3	1783-SFP100LX Stratix Fiber SFP, 100 Mbit connectivity over single-mode fiber	2
4	1783-SFP1GLX Stratix Fiber SFP, 1000 Mbit connectivity over single-mode fiber	

Centerline 2100 Motor Control Center MCC Details

Project Name: CWD - Conejo Wells
Project Item: MCC-2 - N3R
Project ID #: 5271772/4

Salesperson: Juan Campos Created By: Juan Campos Date/Time: 10/25/21 - 21:02

The details of the proposed motor control center are as follows:

Category	Description
Total Section(s)	9
Total Shipping Block(s)	8
Section Depth	Front Mounted, 20" Deep
Section Height	90" High
Enclosure	3R - Outdoor Non-Walk-In
Designed For Use With	Power System Type: Wye, 3-phase, 4-wire with solidly grounded neutral
MCC Connection Type	Main Circuit Breaker
Incoming Cable Entry	Bottom, Section 1
Main Bus Rating	1200A
Main Bus Material	Copper / Tin Plated
Main Bus Bracing	65kA (rms symmetrical)
Horizontal Neutral Bus Rating	Half of Main Bus Rating
Horizontal Neutral Bus Location	Below Main Bus
Horizontal Neutral Bus Supplied	In Section(s): 1, 2
Horizontal Ground Bus	1/4" X 1", Bottom, Unplated Copper
Vertical Ground Bus	Unit Load Copper and Plug-in Copper
Stab Opening Protection	Automatic Shutters
Master Nameplate	No

Centerline 2100 Motor Control Center Basic Structure Information

Project Name:CWD - Conejo WellsSalesperson:Juan CamposProject Item:MCC-2 - N3RCreated By:Juan CamposProject ID #:5271772/4Date/Time:10/25/21 - 21:02

Motor Control Center Details

This MCC(s) was developed using an available fault current of 50,001 to 65,000 A. MCC configuration & pricing subject to change, if actual Available Fault Current differs.

Motor Control Center Details

Power System Type: Wye, 3-phase, 4-wire with solidly

grounded neutral

Voltage: 480 Volts / 60 Hertz

Available Fault Current: 50,001 to 65,000 A Unit Nameplate Type: Acrylic - Black letters on white Wiring Type: B-T Control and Power Terminal Blocks

Wiring Diagram Location: Central location

Class II Diagram: TBD Class II Wire Count: 1

Class II Wire Through: Top Wireway

Arc Resistant MCC: No IntelliCENTER Network: Ethernet

IMC Device Firmware: Upgraded to latest available version (saves up to 1 hour of customer configuration time per

section)

Incoming Line Details

MCC Connection Type: Main Circuit Breaker Incoming Line Cable Entry: Bottom Mounted

Bus Details

Main Bus Rating: 1200A

Main Bus Material: Copper / Tin Plated
Main Bus Bracing: 65kA (rms symmetrical)

Insulated Bus: None Selected

Horizontal Ground Bus Size: 1/4" X 1"

Horizontal Ground Bus Plating: Unplated Copper

Horizontal Ground Bus Location: Bottom

Vertical Ground Bus Type: Unit Load Copper and Plug-in

Copper

Incoming Ground Lug Size: #6 AWG - 250 kcmil (2

Supplied as Standard)

Incoming Ground Cable Size: None Selected

Horizontal Neutral Bus Rating: Half of Main Bus Rating Horizontal Neutral Bus Location): Below Main Bus

Enclosure Details

Enclosure Type: 3R - Outdoor Non-Walk-In

NEMA 3R/4 Lifting Angle: No

Section Depth: Front Mounted, 20" Deep Enclosure Depth: Front Mounted, 30.12" Deep

Section Height: 90" High

Stab Opening Protection: Automatic Shutters

Wireway Tie Bar: Yes Space Heater Voltage: 120V

Space Heater Thermostat: 1 Per Section

Total Shipping Block(s): 8 Total Section(s): 9 Total Unit(s): 17

Ethernet Network Information

Full Ethernet Network Information can be found on the One Line Diagram associated with this project item. This drawing can be obtained by requesting Pre-order drawings through PowerControl Builder.

Section Modifications (Qty/Mods)

MCC Level Mods:

Class II interwiring or Limited Class II between units in MCC (30 wires max; a 15% adder is applied if more than 30 wires) (List price is per wire 30 and under).

Section 1 Modifications (Quantity/Mods)

(1) NEMA 3R/4 fluorescent lighting fixture

- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 2 Modifications (Quantity/Mods)

- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 3 Modifications (Quantity/Mods)

- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.
- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 4 Modifications (Quantity/Mods)

- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.
- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 5 Modifications (Quantity/Mods)

- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.
- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 6 Modifications (Quantity/Mods)

- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.
- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 7 Modifications (Quantity/Mods)

- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.
- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 8 Modifications (Quantity/Mods)

- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.
- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 9 Modifications (Quantity/Mods)

- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.
- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section Number	Section Width (inches)	Options/Modifications
1	20"	600A Vertical Bus Horizontal Neutral Bus

2	20"	600A Vertical Bus Horizontal Neutral Bus
3	25"	N/A
4	25"	N/A
5	25"	N/A
6	25"	N/A
7	25"	N/A
8	20"	N/A
9	30"	N/A

Centerline 2100 Motor Control Center Unit List

Project Name:CWD - Conejo WellsSalesperson:Juan CamposProject Item:MCC-2 - N3RCreated By:Juan CamposProject ID #:5271772/4Date/Time:10/25/21 - 21:02

ID	QTY	Catalog Number / Unit Description	
1	1	2100-EPS8KB-30TGM-79U-751M-751S-768C / Ethernet Power Supply Unit with Circuit Breaker Thermal Magnetic (15A Trip)	
2	1	2190-CKB-56M-79U-86W54CXB-751M-751S / Metering Unit - Bul 1426-M5 PM 5000 w/Ethernet	
3	1	2100-SPKB-3-751M-751S / Surge Protective Device Unit - Wye w/solidly grd neut, 4-wire	
4	2	2193F-AKB-79L-79U-751M-4031TGM / Feeder Circuit Breaker - 125A Frame Rating with 100A/20A Trip	
5	1	2193F-AKB-79L-79U-751M-3434TGM / Feeder Circuit Breaker - 125A Frame Rating with 40A/40A Trip	
6	5	2163VB-186HKB-3F-5LRG-14DA2R3-14FCT-14GER-14HBA6-14RLX-51TJM-751M-751S-790A / PowerFlex 755 AC Drive w/CB - 125 HP with Circuit Breaker Thermal Magnetic (250A Trip)	
-	1	Customer Load Cables Exit(Bottom)	
7	1	2197-WKBH-37TGM-79L-79U-751M-790A / Control & Lighting Transformer w/CB - 45.0 kVA with Circuit Breaker Thermal Magnetic (70A Trip)	
8	1	2193LE-AKB327-40WT-31A27-111-751M / Lighting Panel Unit with Main Circuit Breaker - 100A - 27 Total Circuits	
9	1	2100-GKC2X3B-31TGM-120-751M / Full Sect Blank Mtg Plate w/ or w/o Disc with Circuit Breaker Thermal Magnetic (20A Trip)	
-	1	Customer Load Cables Exit(Bottom)	
10	1	2100-ESW20K-T10FDP-114-751M-751S / Stratix 5700 20-Port	
11	1	2100-BK05 / Blank Unit Door - 0.5 Space Factor	
12	1	2193MB-GKC-56TNMG-88HN-751M / Main Circuit Breaker - 1200A Frame Rating - Bottom Mounted with 1200A Trip w/ Maintenance Mode	

Centerline 2100 Motor Control Center Unit Description

Project Name:CWD - Conejo WellsSalesperson:Juan CamposProject Item:MCC-2 - N3RCreated By:Juan CamposProject ID #:5271772/4Date/Time:10/25/21 - 21:02

General Information

Line Voltage / Frequency: 480 Volts / 60 Hertz

Power System Configuration: Wye, 3-phase, 4-wire with solidly grounded neutral

Class I Wiring Type: B-T Control and Power Terminal Blocks

NEMA Enclosure Type: 3R - Outdoor Non-Walk-In Available Fault Current: 50,001 to 65,000 A

Unit Nameplate Type: Acrylic - Black letters on white

Delivery Program: ENG

Unit Information

Description	Unit Features	
Unit Loc: 01A Del Prog: SCII Unit ID: 4 FCB - Feeder Circuit Breaker	Catalog Number: 2193F-AKB-79L-79U-751M-4031TGM Total Space Factor = 1 Circuit Breaker: Thermal Magnetic, 65kA at 480V (100) with Frame Rating of 125A (G6C Frame), Plug-In Unit, Dual 100A/20A Trip Lugs Supplied: Std Mech/Lug Pads, 1/0 AWG Size Wire, 1 Cables per Phase	
Rating Dual 100A/20A	Features Included	
<u>Wiring Diagram</u> 10006415294	Unit Ground Load Connector Unplated Cu (-79L) Unit Grd Stab Unplated Cu (-79U) Mylar Device Markers (-751M)	
Name Plate Information SPARE		
<u>Dual Unit</u> SPARE		
Overload Relay(s) Motor Full Load Current (FLC) = Not Available		
Unit Loc: 01C Del Prog: PEII Unit ID: 3 SPD - Surge Protective Device Unit	Catalog Number: 2100-SPKB-3-751M-751S Total Space Factor = 0.5 Surge Protector Type: Wye w/solidly grd neut, 4-wire	
<u>Wiring Diagram</u> 10006415263	Features Included Mylar Device Markers (-751M) Sleeve Type Markers (-751S)	
Name Plate Information SPD		

Unit Loc: 01D Del Prog: FT1 Catalog Number: 2193MB-GKC-56TNMG-88HN-751M Unit ID: 12 Total Space Factor = 4.5 MCB - Main Circuit Breaker Circuit Breaker: Electronic (LSIG) - Maint. Mode, 65kA at 480V (1200) with Frame Rating of 1200A (N6I Frame) w/ Maintenance Mode, Bottom Mounted, 1200A Trip, with Internal Ground Fault Protection Rating Lugs Supplied: Std Mech/Lug Pads, 500 kcmil Size Wire, 4 Cables per Phase 1200A **Features Included** INC NEUT BUS Half-rated (-88HN) Engineered Spec(s)/Modification(s) (1) 140G Maintenance Mode - Switch Mode Selector Switch, Blue Indicator Light, & Control components for K,M,N & R Frame. (1) Engineered Modification and/or Custom Diagram Unit Loc: 02A Del Prog: PEII Catalog Number: 2100-ESW20K-T10FDP-114-751M-751S Unit ID: 10 Total Space Factor = 1 ENSW - Stratix 5700 20-Port Full Stratix 5700 Firmware NAT (CIP Sync & Gigabit Ports) Power Adapters (w/Unit Mtg) Wiring Diagram 10006415251 Features Included Locking Latch Provision (-114) Name Plate Information Mylar Device Markers (-751M) ETHERNET SWITCH Sleeve Type Markers (-751S) **Ethernet Information** IP Address Subnet Mask Device Type 2100-ESW 192.168.1.3 255.255.255.0 No Cable Length Ethernet Switch Firmware Version: LATEST Unit Loc: 02C Del Prog: SCII Catalog Number: 2100-EPS8KB-30TGM-79U-751M-751S-768C Unit ID: 1 Total Space Factor = 1.5 ENPS - Ethernet Power Supply Unit Circuit Breaker: Thermal Magnetic, 65kA at 480V (G6C Frame) (15A Trip) Disconnect Type = Circuit Breaker Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, Rating V/60Hz 125A Control Wiring: #16 AWG MTW(TEW) Cu Wiring Diagram **Features Included** 10006415245 Unit Grd Stab Unplated Cu (-79U) Mylar Device Markers (-751M) **Name Plate Information**

Sleeve Type Markers (-751S)

Redundant ENet Power Supply (-768C)

ETHERNET

POWER SUPPLY

Unit Loc: 02F Del Prog: ENG

Unit ID: 2

METR - Metering Unit

Wiring Diagram

10006415275

Name Plate Information

POWER METER

Ethernet Information

 Device Type
 IP Address
 Subnet Mask

 2190
 192.168.1.1
 255.255.255.0

 2190
 192.168.1.2
 255.255.255.0

Cable Length: 2.49 m

Power Monitor Firmware Version: LATEST

Unit Loc: 02J Del Prog: SCII

Unit ID: 5

FCB - Feeder Circuit Breaker

Rating

Dual 40A/40A

Wiring Diagram

10006415287

Name Plate Information

SPARE

Dual Unit

SPARE

Overload Relay(s)

Motor Full Load Current (FLC) = Not Available

Unit Loc: 02L Del Prog: SCII

Unit ID: 4

FCB - Feeder Circuit Breaker

Rating

Dual 100A/20A

Wiring Diagram

10006415294

Name Plate Information

SPARE

Dual Unit

SPARE

Overload Relay(s)

Motor Full Load Current (FLC) = Not Available

Catalog Number: 2190-CKB-56M-79U-86W54CXB-751M-751S

Total Space Factor = 1.5

Metering Type: Bul 1426-M5 PM 5000 w/Ethernet

Ammeter Scale 1200

Features Included

Unit Grd Stab Unplated Cu (-79U) Mylar Device Markers (-751M) Sleeve Type Markers (-751S)

Engineered Spec(s)/Modification(s)

(1) Upgrade PM 5000 from M5 to M6,1426-M6E

(1) Engineered Modification and/or Custom Diagram

Catalog Number: 2193F-AKB-79L-79U-751M-3434TGM

Total Space Factor = 1

Circuit Breaker: Thermal Magnetic, 65kA at 480V (40) with Frame Rating of 125A

(G6C Frame), Plug-In Unit, Dual 40A/40A Trip

Lugs Supplied: Std Mech/Lug Pads, 1/0 AWG Size Wire, 1 Cables per Phase

Features Included

Unit Ground Load Connector Unplated Cu (-79L)

Unit Grd Stab Unplated Cu (-79U) Mylar Device Markers (-751M)

Catalog Number: 2193F-AKB-79L-79U-751M-4031TGM

Total Space Factor = 1

Circuit Breaker: Thermal Magnetic, 65kA at 480V (100) with Frame Rating of 125A

(G6C Frame), Plug-In Unit, Dual 100A/20A Trip

Lugs Supplied: Std Mech/Lug Pads, 1/0 AWG Size Wire, 1 Cables per Phase

Features Included

Unit Ground Load Connector Unplated Cu (-79L)

Unit Grd Stab Unplated Cu (-79U) Mylar Device Markers (-751M) Unit Loc: 03A Del Prog: ENG

Unit ID: 6

VFD - PowerFlex 755 AC Drive w/CB

Rating

125 HP

(Heavy Duty)

Wiring Diagram

10006435909

Name Plate Information

WELL NO. 4

Ethernet Information

Device Type IP Address Subnet Mask 2163V 192.168.1.4 255.255.255.0

Cable Length: 2.9 m

PowerFlex 755 Firmware Version: LATEST

Catalog Number: 2163VB-186HKB-3F-5LRG-14DA2R3-14FCT-14GER-14HBA6-14RLX-51TJM-751M-751S-790A

Total Space Factor = 6
Wiring: NEMA Type B wiring

Output Current Rating: 156A

Circuit Breaker: Thermal Magnetic, 65kA at 480V (J6F Frame) (250A Trip)

Human Interface Module: LCD full numeric keypad - Door Mounted

 ${\bf Control: Transformer\ with\ Secondary\ Fuse,\ Standard\ Capacity,\ Primary\ Fusing,}$

120V/60Hz

Control Wiring: #16 AWG MTW(TEW) Cu

Features Included

Selector Switch: HAND-OFF-AUTO (-3F)

Pilot Light(s): RUN-AT SPEED Type: LED Push To Test, Color(s): Red, Green (-

5LRG)

(2) Drive 120VAC w/ I/O (-14DA2R3)

Thermostat Door Mounted (-14FCT)

Dualport Ethernet (for VFD) (-14GER)

Drive Line Reactor (-14RLX)

Mylar Device Markers (-751M)

Sleeve Type Markers (-751S)

1 Aux and 1 Alarm-Internal-CB (-790A)

- (1) Customer Load Cables Exit(Bottom)
- (1) Bulletin 700-HA Tube Base Relay, 3PDT, 3-pole, 3 Form C, Single AgNi Contact, 700-HA33?
- (1) Engineered Modification and/or Custom Diagram
- (1) 200 watt extra capacity to Standard Control Transformer Fusing/Fuse Block Included
- (1) Hobbs Elapsed Time Meter, 2.08"w x 1.02"h, 6 digit, 99999.9, non-reset (Option -85T),20001U-17
- (1) Bulletin 800T/H, Contact block, addition to standard number of contacts,800T-
- (1) Change 3% to 5% 160 amp reactor (125 HP),1321-3R160-C
- (3) Convert (1) 800F Pilot Light or Selector Switch to (1) 800H Pilot Light or Selector Switch
- (1) Control Wire Color, Non-Standard, Standard Colors: Red-AC, Blue-DC, Redneutral, Green/Yellow-ground (per unit)

Unit Loc: 04A Del Prog: ENG

Unit ID: 6

VFD - PowerFlex 755 AC Drive w/CB

Rating

125 HP (Heavy Duty)

Wiring Diagram

10006435909

Name Plate Information

BOOSTER PUMP 2A-BSTR-PMP

Ethernet Information

Device Type IP Address Subnet Mask 2163V 192.168.1.5 255.255.255.0

Cable Length: 3.66 m

PowerFlex 755 Firmware Version: LATEST

Catalog Number: 2163VB-186HKB-3F-5LRG-14DA2R3-14FCT-14GER-14HBA6-14RLX-51TJM-751M-751S-790A

Total Space Factor = 6
Wiring: NEMA Type B wiring

Output Current Rating: 156A

Circuit Breaker: Thermal Magnetic, 65kA at 480V (J6F Frame) (250A Trip)

Human Interface Module: LCD full numeric keypad - Door Mounted

 ${\bf Control: Transformer\ with\ Secondary\ Fuse,\ Standard\ Capacity,\ Primary\ Fusing,}$

120V/60Hz

Control Wiring: #16 AWG MTW(TEW) Cu

Features Included

Selector Switch: HAND-OFF-AUTO (-3F)

Pilot Light(s): RUN-AT SPEED Type: LED Push To Test, Color(s): Red, Green (-5LRG)

(2) Drive 120VAC w/ I/O (-14DA2R3) Thermostat Door Mounted (-14FCT) Dualport Ethernet (for VFD) (-14GER)

Drive Line Reactor (-14RLX)

Mylar Device Markers (-751M) Sleeve Type Markers (-751S)

1 Aux and 1 Alarm-Internal-CB (-790A)

- (1) Customer Load Cables Exit(Bottom)
- (1) Bulletin 700-HA Tube Base Relay, 3PDT, 3-pole, 3 Form C, Single AgNi Contact, 700-HA33?
- (1) Engineered Modification and/or Custom Diagram
- (1) 200 watt extra capacity to Standard Control Transformer Fusing/Fuse Block Included
- (1) Hobbs Elapsed Time Meter, 2.08"w x 1.02"h, 6 digit, 99999.9, non-reset (Option -85T),20001U-17
- (1) Bulletin 800T/H, Contact block, addition to standard number of contacts,800T-
- (1) Change 3% to 5% 160 amp reactor (125 HP),1321-3R160-C
- (3) Convert (1) 800F Pilot Light or Selector Switch to (1) 800H Pilot Light or Selector Switch
- (1) Control Wire Color, Non-Standard, Standard Colors: Red-AC, Blue-DC, Redneutral, Green/Yellow-ground (per unit)

Unit Loc: 05A Del Prog: ENG

Unit ID: 6

VFD - PowerFlex 755 AC Drive w/CB

Rating

125 HP (Heavy Duty)

Wiring Diagram

10006435909

Name Plate Information

BOOSTER PUMP 2B-BSTR-PMP

Ethernet Information

Device Type IP Address Subnet Mask 2163V 192.168.1.6 255.255.255.0

Cable Length: 4.42 m

PowerFlex 755 Firmware Version: LATEST

Catalog Number: 2163VB-186HKB-3F-5LRG-14DA2R3-14FCT-14GER-14HBA6-14RLX-51TJM-751M-751S-790A

Total Space Factor = 6
Wiring: NEMA Type B wiring

Output Current Rating: 156A

Circuit Breaker: Thermal Magnetic, 65kA at 480V (J6F Frame) (250A Trip)

Human Interface Module: LCD full numeric keypad - Door Mounted Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing,

120V/60Hz

Control Wiring: #16 AWG MTW(TEW) Cu

Features Included

Selector Switch: HAND-OFF-AUTO (-3F)

Pilot Light(s): RUN-AT SPEED Type: LED Push To Test, Color(s): Red, Green (-

5LRG)

(2) Drive 120VAC w/ I/O (-14DA2R3)

Thermostat Door Mounted (-14FCT)

Dualport Ethernet (for VFD) (-14GER)

Drive Line Reactor (-14RLX)

Mylar Device Markers (-751M)

Sleeve Type Markers (-751S)

1 Aux and 1 Alarm-Internal-CB (-790A)

- (1) Customer Load Cables Exit(Bottom)
- (1) Bulletin 700-HA Tube Base Relay, 3PDT, 3-pole, 3 Form C, Single AgNi Contact, 700-HA33?
- (1) Engineered Modification and/or Custom Diagram
- (1) 200 watt extra capacity to Standard Control Transformer Fusing/Fuse Block Included
- (1) Hobbs Elapsed Time Meter, 2.08"w x 1.02"h, 6 digit, 99999.9, non-reset (Option -85T),20001U-17
- (1) Bulletin 800T/H, Contact block, addition to standard number of contacts,800T-
- (1) Change 3% to 5% 160 amp reactor (125 HP),1321-3R160-C
- (3) Convert (1) 800F Pilot Light or Selector Switch to (1) 800H Pilot Light or Selector Switch
- (1) Control Wire Color, Non-Standard, Standard Colors: Red-AC, Blue-DC, Redneutral, Green/Yellow-ground (per unit)

Unit Loc: 06A Del Prog: ENG

Unit ID: 6

VFD - PowerFlex 755 AC Drive w/CB

Rating

125 HP (Heavy Duty)

Wiring Diagram

10006435909

Name Plate Information

BOOSTER PUMP 40-PMP-01

Ethernet Information

Device Type IP Address Subnet Mask 2163V 192.168.1.7 255.255.255.0

Cable Length: 5.18 m

PowerFlex 755 Firmware Version: LATEST

Catalog Number: 2163VB-186HKB-3F-5LRG-14DA2R3-14FCT-14GER-14HBA6-14RLX-51TJM-751M-751S-790A

Total Space Factor = 6
Wiring: NEMA Type B wiring

Output Current Rating: 156A

Circuit Breaker: Thermal Magnetic, 65kA at 480V (J6F Frame) (250A Trip)

Human Interface Module: LCD full numeric keypad - Door Mounted

Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing,

120V/60Hz

Control Wiring: #16 AWG MTW(TEW) Cu

Features Included

Selector Switch: HAND-OFF-AUTO (-3F)

Pilot Light(s): RUN-AT SPEED Type: LED Push To Test, Color(s): Red, Green (-5LRG)

(2) Drive 120VAC w/ I/O (-14DA2R3)

Thermostat Door Mounted (-14FCT)

Dualport Ethernet (for VFD) (-14GER)

Drive Line Reactor (-14RLX)

Mylar Device Markers (-751M)

Sleeve Type Markers (-751S)

1 Aux and 1 Alarm-Internal-CB (-790A)

- (1) Customer Load Cables Exit(Bottom)
- (1) Bulletin 700-HA Tube Base Relay, 3PDT, 3-pole, 3 Form C, Single AgNi Contact, 700-HA33?
- (1) Engineered Modification and/or Custom Diagram
- (1) 200 watt extra capacity to Standard Control Transformer Fusing/Fuse Block Included
- (1) Hobbs Elapsed Time Meter, 2.08"w x 1.02"h, 6 digit, 99999.9, non-reset (Option -85T),20001U-17
- (1) Bulletin 800T/H, Contact block, addition to standard number of contacts,800T-
- (1) Change 3% to 5% 160 amp reactor (125 HP),1321-3R160-C
- (3) Convert (1) 800F Pilot Light or Selector Switch to (1) 800H Pilot Light or Selector Switch
- (1) Control Wire Color, Non-Standard, Standard Colors: Red-AC, Blue-DC, Redneutral, Green/Yellow-ground (per unit)

Unit Loc: 07A Del Prog: ENG Catalog Number: 2163VB-186HKB-3F-5LRG-14DA2R3-14FCT-14GER-Unit ID: 6 14HBA6-14RLX-51TJM-751M-751S-790A VFD - PowerFlex 755 AC Drive w/CB Total Space Factor = 6 Wiring: NEMA Type B wiring Output Current Rating: 156A Rating Circuit Breaker: Thermal Magnetic, 65kA at 480V (J6F Frame) (250A Trip) 125 HP Human Interface Module: LCD full numeric keypad - Door Mounted (Heavy Duty) Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz Wiring Diagram Control Wiring: #16 AWG MTW(TEW) Cu 10006435909 Features Included Name Plate Information Selector Switch: HAND-OFF-AUTO (-3F) **BOOSTER PUMP** Pilot Light(s): RUN-AT SPEED Type: LED Push To Test, Color(s): Red, Green (-40-PMP-02 5LRG) (2) Drive 120VAC w/ I/O (-14DA2R3) **Ethernet Information** Thermostat Door Mounted (-14FCT) Subnet Mask Device Type IP Address Dualport Ethernet (for VFD) (-14GER) 255.255.255.0 2163V 192.168.1.8 Drive Line Reactor (-14RLX) Mylar Device Markers (-751M) Sleeve Type Markers (-751S) Cable Length: 5.95 m 1 Aux and 1 Alarm-Internal-CB (-790A) PowerFlex 755 Firmware Version: LATEST Engineered Spec(s)/Modification(s) (1) Customer Load Cables Exit(Bottom) (1) Bulletin 700-HA Tube Base Relay, 3PDT, 3-pole, 3 Form C, Single AgNi Contact,700-HA33? (1) Engineered Modification and/or Custom Diagram (1) 200 watt extra capacity to Standard Control Transformer Fusing/Fuse Block (1) Hobbs Elapsed Time Meter, 2.08"w x 1.02"h, 6 digit, 99999.9, non-reset (Option -85T),20001U-17 (1) Bulletin 800T/H, Contact block, addition to standard number of contacts,800T-(1) Change 3% to 5% 160 amp reactor (125 HP),1321-3R160-C (3) Convert (1) 800F Pilot Light or Selector Switch to (1) 800H Pilot Light or Selector Switch (1) Control Wire Color, Non-Standard, Standard Colors: Red-AC, Blue-DC, Redneutral, Green/Yellow-ground (per unit) Unit Loc: 08A Del Prog: SCII Catalog Number: 2100-BK05 Unit ID: 11 Total Space Factor = 0.5 DOOR - Blank Unit Door Unit Loc: 08B Del Prog: ENG Catalog Number: 2193LE-AKB327-40WT-31A27-111-751M Unit ID: 8 Total Space Factor = 2.5 LPAN - Lighting Panel Unit Panel Type & Rating: Three Phase, 4-Wire, 120/208V, 100A, 27 total circuits Bolt-On Branch Breakers: None Wiring Diagram 10005989973 **Features Included** (27) 20A 1-P CB (-31A27)

Engineered Spec(s)/Modification(s)

(1) Engineered Modification and/or Custom Diagram
(1) 2193LE, Lighting Panel - Wire panel to transformer, 100A

(30 circuit maximum, 1or 3 phase)

(1) 2193LE, Lighting Panel - Copper bus, unplated (Aluminum is standard), 100A

Name Plate Information

LP2

Unit Loc: 08G Del Prog: SCII

Unit ID: 7

XFMR - Control & Lighting Transformer w/CB

Wiring Diagram

10006415299

Name Plate Information

TX-LP2

Unit Loc: 09A Del Prog: ENG

Unit ID: 9

PLAT - Full Sect Blank Mtg Plate w/ or w/o Disc

Rating

20A

Wiring Diagram

10006415257

Catalog Number: 2197-WKBH-37TGM-79L-79U-751M-790A

Total Space Factor = 3

Secondary Wiring Fusing & Rating: 3-Phase, 120/208V, 3 Fuse, 45.0 kVA

Circuit Breaker: Thermal Magnetic, 65kA at 480V (G6C Frame) (70A Trip)

Features Included

Unit Ground Load Connector Unplated Cu (-79L)

Unit Grd Stab Unplated Cu (-79U)

1 Aux and 1 Alarm-Internal-CB (-790A)

Catalog Number: 2100-GKC2X3B-31TGM-120-751M

Total Space Factor = 6

Rating: 20A

Circuit Breaker: Thermal Magnetic, 65kA at 480V (G6C Frame) (20A Trip)

Disconnect Type = Circuit Breaker Required Section Width 30" Wide

Working Depth 14" Deep

Features Included

Omit horizontal power bus (-120)

Engineered Spec(s)/Modification(s)

(1) Customer Load Cables Exit(Bottom)

(1) Compact Logix 2MB Motion Controller, 1769-L33ERM

(1) Engineered Modification and/or Custom Diagram

(4) 120V AC INPUT MODULE, 1769-IA16

(2) 8 ANALOG INPUTS,1769-IF8

(1) POWER SUPPLY, 1769-PA4

(2) Power Supply, 120W, 24VDC, 5A output, 120-240VAC input, 1606-XLS120E

Note - 1606-XLE240E

(1) END CAP RIGHT, 1769-ECR

(2) 1000VA Control Transformer-Fusing/Fuse Block Included ,1497-K-BASX-0-N

Note - 1.6KVA XFMR

(30) IEC Terminal Blocks, 1492-JG4, 6, 10?

(200) I/O Wiring to terminal blocks within a PLC, SLC or ControlLogix unit (per

wire)

(200) Finger-Safe High Density Terminal Blocks, 1492-H1, 2, 4, 5, 6, 7?

(2) Receptacle, Duplex, GFI, 120V, 15A maximum, mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power

source not included

(4) Panduit Wiring Duct and Covers (White, 6 ft length) (Width, Height determined

by adding PCBr Note)

(2) 8 CURRENT ANALOG OUTPUTS,1769-OF8C

(2) 120/240V AC OUTPUT MODULE,1769-OA16

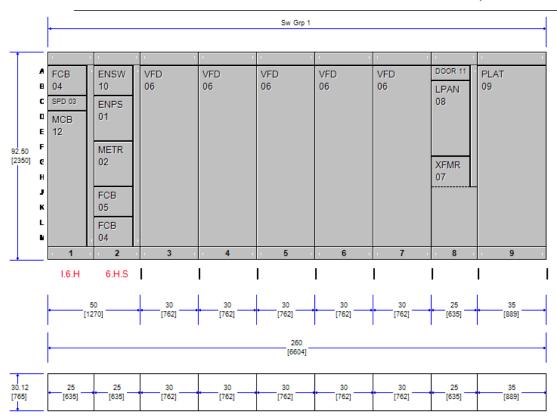
(1) Control Wire Color, Non-Standard, Standard Colors: Red-AC, Blue-DC, Red-

neutral, Green/Yellow-ground (per unit)

Centerline 2100 Motor Control Center Front Elevation

Project Name: CWD - Conejo Wells Project Item: MCC-2 - N3R Project ID #: 5271772/4 Salesperson: Juan Campos Created By: Juan Campos Date/Time: 10/25/21 - 21:02

Rockwell Automation/Allen-Bradley
PowerControl Builder Lineup



NOTE: Dimensions are subject to change after design review.

ENCLOSURE: NEMA Type 3R (Outdoor Non-Walk-In: the external width of each NEMA Type 3R cabinet is 5" wider and 10" deeper than its internal section)

Estimated Heat Loss: 13583 watts

BTU/hr Required: 46348
Air Conditioning Tons: 3.88
Estimated Weight: 6750 lb (3062 kg)

Heat loss values are for estimating purposes only.

Centerline 2100 Motor Control Center Unit Nameplate Report

Project Name: CWD - Conejo Wells Salesperson: Juan Campos
Project Item: MCC-2 - N3R Created By: Juan Campos
Project ID #: 5271772/4 Date/Time: 10/25/21 - 21:02

Master Nameplate Type - No Master Nameplate Supplied

Unit Nameplate Type - Acrylic - Black letters on white (3 lines) (Maximum characters per line is 17 / 15 / 17)		
IP Address - IP Address Not Included on Nameplate		
Section 1		
Location: 01A FCB Left Space Factor: 1 Wiring Diagram Number: 10006415294	Location: 01C SPD Space Factor: 0.5 Wiring Diagram Number: 10006415263	
SPARE	SPD	
Location: 01A FCB Right	Location: 01D MCB	
Space Factor: 1 Wiring Diagram Number: 10006415294	Space Factor: 4.5 Wiring Diagram Number: N/A	
SPARE		

Section 2

Location: 02A ENSW Space Factor: 1 Wiring Diagram Number: 10006415251				
ETHERNET SWITCH				

Location: 02C ENPS Space Factor: 1.5 Wiring Diagram Number: 10006415245
ETHERNET
POWER SUPPLY

Location: 02F METR Space Factor: 1.5 Wiring Diagram Number: 10006415275	Location: 02L FCB Left Space Factor: 1 Wiring Diagram Number: 10006415294
POWER	SPARE
METER	

Location: 02J FCB Left
Space Factor: 1
Wiring Diagram Number: 10006415287

SPARE

Location: 02L FCB Right Space Factor: 1 Wiring Diagram Number: 10006415294				
SPARE				

Location: 02J FCB Right
Space Factor: 1
Wiring Diagram Number: 10006415287

SPARE

Section 3

Location: 03A VFD (125 HP)
Space Factor: 6
Wiring Diagram Number: 10006435909
WELL NO. 4

Section 4

Location: 04A VFD (125 HP)
Space Factor: 6
Wiring Diagram Number: 10006435909

BOOSTER PUMP

2A-BSTR-PMP

Section 5

Location: 05A VFD (125 HP) Space Factor: 6 Wiring Diagram Number: 10006435909	
BOOSTER PUMP	7
2B-BSTR-PMP	
Section 6 Location: 06A VFD (125 HP) Space Factor: 6 Wiring Diagram Number: 10006435909 BOOSTER PUMP 40-PMP-01	
Section 7 Location: 07A VFD (125 HP) Space Factor: 6 Wiring Diagram Number: 10006435909	
BOOSTER PUMP	7
40-PMP-02	
Section 8 Location: 08A DOOR Space Factor: 0.5 Wiring Diagram Number: 10002277146	Location: 08G XFMR Space Factor: 3 Wiring Diagram Number: 10006415299
Location: 08B LPAN Space Factor: 2.5 Wiring Diagram Number: 10005989973	TX-LP2
LP2	

Section 9

Location: 09A PLAT Space Factor: 6 Wiring Diagram Number: 10006415257

Unit Details - CWD - Conejo Wells

Master Nameplate Type: No Master Nameplate

Unit Nameplate Type: Acrylic - Black letters on white (3 lines)

Location	Туре	НР	KW	Rating	Nameplate L1	Nameplate L2	Nameplate L3	Nameplate L4	Switch Location	IP/Subnet Address	Dual IP Address	Switch Port	Dual Switch Port
1A	FCB	0	0	100	SPARE								
1C	SPD	0	0	0	SPD								
1D	MCB	0	0	1200									
2C	ENPS	0	0	30	ETHERNET	POWER SUPPLY							
2F	METR	0	0	0	POWER	METER			02A-R	192.168.1.1	192.168.1.2	01	02
2J	FCB	0	0	40	SPARE								
2L	FCB	0	0	100	SPARE								
3A	VFD	125	0	250.0	WELL NO. 4				02A-R	192.168.1.4 255.255.255.0		03	
4A	VFD	125	0	250.0	BOOSTER PUMP	2A-BSTR- PMP			02A-R	192.168.1.5 255.255.255.0		04	
5A	VFD	125	0	250.0	BOOSTER PUMP	2B-BSTR- PMP			02A-R	192.168.1.6 255.255.255.0		05	
6A	VFD	125	0	250.0	BOOSTER PUMP	40-PMP-01			02A-R	192.168.1.7 255.255.255.0		06	
7A	VFD	125	0	250.0	BOOSTER PUMP	40-PMP-02			02A-R	192.168.1.8 255.255.255.0		07	
8A	DOOR	0	0	0									
8B	LPAN	0	0	0	LP2								
8G	XFMR	0	0	70	TX-LP2								
9A	PLAT	0	0	20									
2A	ENSW	0	0	0	ETHERNET SWITCH				2A-R	192.168.1.3 255.255.255.0			

Ethernet Switch Port Capacity

Uplink	Switch group	Section	Consumed S	Switch Ports	Available Switch Ports				
		1	0						
		2	2						
		3	1						
		4	1						
1	1	5	1	7	9				
		6	1						
		7	1						
		8	0						
		9	0						

Centerline 2100 Motor Control Center MCC Details

Project Name: CWD - Conejo Wells Project Item: MCC-3 - N3R Project ID #: 5271772/5 Salesperson: Juan Campos Created By: Juan Campos Date/Time: 10/25/21 - 21:03

The details of the proposed motor control center are as follows:

Category	Description
Total Section(s)	9
Total Shipping Block(s)	8
Section Depth	Front Mounted, 20" Deep
Section Height	90" High
Enclosure	3R - Outdoor Non-Walk-In
Designed For Use With	Power System Type: Wye, 3-phase, 4-wire with solidly grounded neutral
MCC Connection Type	Main Circuit Breaker
Incoming Cable Entry	Bottom, Section 1
Main Bus Rating	1200A
Main Bus Material	Copper / Tin Plated
Main Bus Bracing	65kA (rms symmetrical)
Horizontal Neutral Bus Rating	Half of Main Bus Rating
Horizontal Neutral Bus Location	Below Main Bus
Horizontal Neutral Bus Supplied	In Section(s): 1, 2
Horizontal Ground Bus	1/4" X 1", Bottom, Unplated Copper
Vertical Ground Bus	Unit Load Copper and Plug-in Copper
Stab Opening Protection	Automatic Shutters
Master Nameplate	No

Centerline 2100 Motor Control Center Basic Structure Information

Project Name:CWD - Conejo WellsSalesperson:Juan CamposProject Item:MCC-3 - N3RCreated By:Juan CamposProject ID #:5271772/5Date/Time:10/25/21 - 21:03

Motor Control Center Details

This MCC(s) was developed using an available fault current of 50,001 to 65,000 A. MCC configuration & pricing subject to change, if actual Available Fault Current differs.

Motor Control Center Details

Power System Type: Wye, 3-phase, 4-wire with solidly

grounded neutral

Voltage: 480 Volts / 60 Hertz

Available Fault Current: 50,001 to 65,000 A Unit Nameplate Type: Acrylic - Black letters on white Wiring Type: B-T Control and Power Terminal Blocks

Wiring Diagram Location: Central location

Class II Diagram: TBD Class II Wire Count: 1

Class II Wire Through: Top Wireway

Arc Resistant MCC: No IntelliCENTER Network: Ethernet

IMC Device Firmware: Upgraded to latest available version (saves up to 1 hour of customer configuration time per

section)

Incoming Line Details

MCC Connection Type: Main Circuit Breaker Incoming Line Cable Entry: Bottom Mounted

Bus Details

Main Bus Rating: 1200A

Main Bus Material: Copper / Tin Plated
Main Bus Bracing: 65kA (rms symmetrical)

Insulated Bus: None Selected

Horizontal Ground Bus Size: 1/4" X 1"

Horizontal Ground Bus Plating: Unplated Copper

Horizontal Ground Bus Location: Bottom

Vertical Ground Bus Type: Unit Load Copper and Plug-in

Copper

Incoming Ground Lug Size: #6 AWG - 250 kcmil (2

Supplied as Standard)

Incoming Ground Cable Size: None Selected

Horizontal Neutral Bus Rating: Half of Main Bus Rating Horizontal Neutral Bus Location): Below Main Bus

Enclosure Details

Enclosure Type: 3R - Outdoor Non-Walk-In

NEMA 3R/4 Lifting Angle: No

Section Depth: Front Mounted, 20" Deep Enclosure Depth: Front Mounted, 30.12" Deep

Section Height: 90" High

Stab Opening Protection: Automatic Shutters

Wireway Tie Bar: Yes Space Heater Voltage: 120V

Space Heater Thermostat: 1 Per Section

Total Shipping Block(s): 8 Total Section(s): 9 Total Unit(s): 17

Ethernet Network Information

Full Ethernet Network Information can be found on the One Line Diagram associated with this project item. This drawing can be obtained by requesting Pre-order drawings through PowerControl Builder.

Section Modifications (Qty/Mods)

MCC Level Mods:

Class II interwiring or Limited Class II between units in MCC (30 wires max; a 15% adder is applied if more than 30 wires) (List price is per wire 30 and under).

Section 1 Modifications (Quantity/Mods)

(1) NEMA 3R/4 fluorescent lighting fixture

- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 2 Modifications (Quantity/Mods)

- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 3 Modifications (Quantity/Mods)

- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.
- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 4 Modifications (Quantity/Mods)

- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.
- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 5 Modifications (Quantity/Mods)

- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.
- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 6 Modifications (Quantity/Mods)

- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.
- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 7 Modifications (Quantity/Mods)

- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.
- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 8 Modifications (Quantity/Mods)

- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.
- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 9 Modifications (Quantity/Mods)

- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.
- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section Number	Section Width (inches)	Options/Modifications		
1	20"	600A Vertical Bus Horizontal Neutral Bus		

2	20"	600A Vertical Bus Horizontal Neutral Bus
3	25"	N/A
4	25"	N/A
5	25"	N/A
6	25"	N/A
7	25"	N/A
8	20"	N/A
9	30"	N/A

Centerline 2100 Motor Control Center Unit List

Project Name:CWD - Conejo WellsSalesperson:Juan CamposProject Item:MCC-3 - N3RCreated By:Juan CamposProject ID #:5271772/5Date/Time:10/25/21 - 21:03

ID	QTY	Catalog Number / Unit Description
1	1	2100-EPS8KB-30TGM-79U-751M-751S-768C / Ethernet Power Supply Unit with Circuit Breaker Thermal Magnetic (15A Trip)
2	1	2190-CKB-56M-79U-86W54CXB-751M-751S / Metering Unit - Bul 1426-M5 PM 5000 w/Ethernet
3	1	2100-SPKB-3-751M-751S / Surge Protective Device Unit - Wye w/solidly grd neut, 4-wire
4	2	2193F-AKB-79L-79U-751M-4031TGM / Feeder Circuit Breaker - 125A Frame Rating with 100A/20A Trip
5	1	2193F-AKB-79L-79U-751M-3434TGM / Feeder Circuit Breaker - 125A Frame Rating with 40A/40A Trip
6	5	2163VB-186HKB-3F-5LRG-14DA2R3-14FCT-14GER-14HBA6-14RLX-51TJM-751M-751S-790A / PowerFlex 755 AC Drive w/CB - 125 HP with Circuit Breaker Thermal Magnetic (250A Trip)
-	1	Customer Load Cables Exit(Bottom)
7	1	2197-WKBH-37TGM-79L-79U-751M-790A / Control & Lighting Transformer w/CB - 45.0 kVA with Circuit Breaker Thermal Magnetic (70A Trip)
8	1	2193LE-AKB327-40WT-31A27-111-751M / Lighting Panel Unit with Main Circuit Breaker - 100A - 27 Total Circuits
9	1	2100-GKC2X3B-31TGM-120-751M / Full Sect Blank Mtg Plate w/ or w/o Disc with Circuit Breaker Thermal Magnetic (20A Trip)
-	1	Customer Load Cables Exit(Bottom)
10	1	2100-ESW20K-T10FDP-114-751M-751S / Stratix 5700 20-Port
11	1	2100-BK05 / Blank Unit Door - 0.5 Space Factor
12	1	2193MB-GKC-56TNMG-88HN-751M / Main Circuit Breaker - 1200A Frame Rating - Bottom Mounted with 1200A Trip w/ Maintenance Mode

Centerline 2100 Motor Control Center Unit Description

Project Name:CWD - Conejo WellsSalesperson:Juan CamposProject Item:MCC-3 - N3RCreated By:Juan CamposProject ID #:5271772/5Date/Time:10/25/21 - 21:03

General Information

Line Voltage / Frequency: 480 Volts / 60 Hertz

Power System Configuration: Wye, 3-phase, 4-wire with solidly grounded neutral

Class I Wiring Type: B-T Control and Power Terminal Blocks

NEMA Enclosure Type: 3R - Outdoor Non-Walk-In Available Fault Current: 50,001 to 65,000 A

Unit Nameplate Type: Acrylic - Black letters on white

Delivery Program: ENG

Unit Information

Description	Unit Features
Unit Loc: 01A Del Prog: SCII	Catalog Number: 2193F-AKB-79L-79U-751M-4031TGM
Unit ID: 4	Total Space Factor = 1
FCB - Feeder Circuit Breaker	Circuit Breaker: Thermal Magnetic, 65kA at 480V (100) with Frame Rating of 125A
	(G6C Frame), Plug-In Unit, Dual 100A/20A Trip
Rating	Lugs Supplied: Std Mech/Lug Pads, 1/0 AWG Size Wire, 1 Cables per Phase
Dual 100A/20A	
	Features Included
Wiring Diagram	Unit Ground Load Connector Unplated Cu (-79L)
10006415294	Unit Grd Stab Unplated Cu (-79U)
	Mylar Device Markers (-751M)
Name Plate Information	
PANEL CHEM	
FEED BUILDING	
Dual Unit	
SPARE	
3171112	
Overload Relay(s)	
Motor Full Load Current (FLC) = Not Available	
INIDIOI I UII LOAG CUITETII (I LC) - NOI AVAIIADIE	
Unit Loc: 01C Del Prog: PEII	Catalog Number: 2100-SPKB-3-751M-751S
Unit ID: 3	Total Space Factor = 0.5
SPD - Surge Protective Device Unit	Surge Protector Type: Wye w/solidly grd neut, 4-wire
Wiring Diagram	Features Included
10006415263	Mylar Device Markers (-751M)
	Sleeve Type Markers (-751S)
Name Plate Information	
SPD	

Unit Loc: 01D Del Prog: FT1 Catalog Number: 2193MB-GKC-56TNMG-88HN-751M Unit ID: 12 Total Space Factor = 4.5 MCB - Main Circuit Breaker Circuit Breaker: Electronic (LSIG) - Maint. Mode, 65kA at 480V (1200) with Frame Rating of 1200A (N6I Frame) w/ Maintenance Mode, Bottom Mounted, 1200A Trip, with Internal Ground Fault Protection Rating Lugs Supplied: Std Mech/Lug Pads, 500 kcmil Size Wire, 4 Cables per Phase 1200A **Features Included** INC NEUT BUS Half-rated (-88HN) Engineered Spec(s)/Modification(s) (1) 140G Maintenance Mode - Switch Mode Selector Switch, Blue Indicator Light, & Control components for K,M,N & R Frame. (1) Engineered Modification and/or Custom Diagram Unit Loc: 02A Del Prog: PEII Catalog Number: 2100-ESW20K-T10FDP-114-751M-751S Unit ID: 10 Total Space Factor = 1 ENSW - Stratix 5700 20-Port Full Stratix 5700 Firmware NAT (CIP Sync & Gigabit Ports) Power Adapters (w/Unit Mtg) Wiring Diagram 10006415251 Features Included Locking Latch Provision (-114) Name Plate Information Mylar Device Markers (-751M) ETHERNET SWITCH Sleeve Type Markers (-751S) **Ethernet Information** IP Address Subnet Mask Device Type 2100-ESW 192.168.1.3 255.255.255.0 No Cable Length Ethernet Switch Firmware Version: LATEST Unit Loc: 02C Del Prog: SCII Catalog Number: 2100-EPS8KB-30TGM-79U-751M-751S-768C Unit ID: 1 Total Space Factor = 1.5 ENPS - Ethernet Power Supply Unit Circuit Breaker: Thermal Magnetic, 65kA at 480V (G6C Frame) (15A Trip) Disconnect Type = Circuit Breaker Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, Rating V/60Hz 125A Control Wiring: #16 AWG MTW(TEW) Cu Wiring Diagram **Features Included** 10006415245 Unit Grd Stab Unplated Cu (-79U) Mylar Device Markers (-751M) **Name Plate Information** Sleeve Type Markers (-751S)

Redundant ENet Power Supply (-768C)

ETHERNET

POWER SUPPLY

Unit Loc: 02F Del Prog: ENG

Unit ID: 2

METR - Metering Unit

Wiring Diagram

10006415275

Name Plate Information

POWER METER

Ethernet Information

 Device Type
 IP Address
 Subnet Mask

 2190
 192.168.1.1
 255.255.255.0

 2190
 192.168.1.2
 255.255.255.0

Cable Length: 2.49 m

Power Monitor Firmware Version: LATEST

Unit Loc: 02J Del Prog: SCII

Unit ID: 5

FCB - Feeder Circuit Breaker

Rating

Dual 40A/40A

Wiring Diagram

10006415287

Name Plate Information

SPARE

Dual Unit

SPARE

Overload Relay(s)

Motor Full Load Current (FLC) = Not Available

Unit Loc: 02L Del Prog: SCII

Unit ID: 4

FCB - Feeder Circuit Breaker

Rating

Dual 100A/20A

Wiring Diagram

10006415294

Name Plate Information

SPARE

Dual Unit

SPARE

Overload Relay(s)

Motor Full Load Current (FLC) = Not Available

Catalog Number: 2190-CKB-56M-79U-86W54CXB-751M-751S

Total Space Factor = 1.5

Metering Type: Bul 1426-M5 PM 5000 w/Ethernet

Ammeter Scale 1200

Features Included

Unit Grd Stab Unplated Cu (-79U) Mylar Device Markers (-751M) Sleeve Type Markers (-751S)

Engineered Spec(s)/Modification(s)

(1) Upgrade PM 5000 from M5 to M6,1426-M6E

(1) Engineered Modification and/or Custom Diagram

Catalog Number: 2193F-AKB-79L-79U-751M-3434TGM

Total Space Factor = 1

Circuit Breaker: Thermal Magnetic, 65kA at 480V (40) with Frame Rating of 125A

(G6C Frame), Plug-In Unit, Dual 40A/40A Trip

Lugs Supplied: Std Mech/Lug Pads, 1/0 AWG Size Wire, 1 Cables per Phase

Features Included

Unit Ground Load Connector Unplated Cu (-79L)

Unit Grd Stab Unplated Cu (-79U) Mylar Device Markers (-751M)

Catalog Number: 2193F-AKB-79L-79U-751M-4031TGM

Total Space Factor = 1

Circuit Breaker: Thermal Magnetic, 65kA at 480V (100) with Frame Rating of 125A

(G6C Frame), Plug-In Unit, Dual 100A/20A Trip

Lugs Supplied: Std Mech/Lug Pads, 1/0 AWG Size Wire, 1 Cables per Phase

Features Included

Unit Ground Load Connector Unplated Cu (-79L)

Unit Grd Stab Unplated Cu (-79U) Mylar Device Markers (-751M) Unit Loc: 03A Del Prog: ENG

Unit ID: 6

VFD - PowerFlex 755 AC Drive w/CB

Rating

125 HP (Heavy Duty)

Wiring Diagram

10006435909

Name Plate Information

WELL NO. 2

Ethernet Information

Device Type IP Address Subnet Mask 2163V 192.168.1.4 255.255.255.0

Cable Length: 2.9 m

PowerFlex 755 Firmware Version: LATEST

Catalog Number: 2163VB-186HKB-3F-5LRG-14DA2R3-14FCT-14GER-14HBA6-14RLX-51TJM-751M-751S-790A

Total Space Factor = 6
Wiring: NEMA Type B wiring

Output Current Rating: 156A

Circuit Breaker: Thermal Magnetic, 65kA at 480V (J6F Frame) (250A Trip)

Human Interface Module: LCD full numeric keypad - Door Mounted

Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing,

120V/60Hz

Control Wiring: #16 AWG MTW(TEW) Cu

Features Included

Selector Switch: HAND-OFF-AUTO (-3F)

Pilot Light(s): RUN-AT SPEED Type: LED Push To Test, Color(s): Red, Green (-

5LRG)

(2) Drive 120VAC w/ I/O (-14DA2R3)

Thermostat Door Mounted (-14FCT)

Dualport Ethernet (for VFD) (-14GER)

Drive Line Reactor (-14RLX)

Mylar Device Markers (-751M)

Sleeve Type Markers (-751S)

1 Aux and 1 Alarm-Internal-CB (-790A)

- (1) Customer Load Cables Exit(Bottom)
- (1) Bulletin 700-HA Tube Base Relay, 3PDT, 3-pole, 3 Form C, Single AgNi Contact, 700-HA33?
- (1) Engineered Modification and/or Custom Diagram
- (1) 200 watt extra capacity to Standard Control Transformer Fusing/Fuse Block Included
- (1) Hobbs Elapsed Time Meter, 2.08"w x 1.02"h, 6 digit, 99999.9, non-reset (Option -85T),20001U-17
- (1) Bulletin 800T/H, Contact block, addition to standard number of contacts,800T-
- (1) Change 3% to 5% 160 amp reactor (125 HP),1321-3R160-C
- (3) Convert (1) 800F Pilot Light or Selector Switch to (1) 800H Pilot Light or Selector Switch
- (1) Control Wire Color, Non-Standard, Standard Colors: Red-AC, Blue-DC, Redneutral, Green/Yellow-ground (per unit)

Unit Loc: 04A Del Prog: ENG

Unit ID: 6

VFD - PowerFlex 755 AC Drive w/CB

Rating

125 HP (Heavy Duty)

Wiring Diagram

10006435909

Name Plate Information

BOOSTER PUMP P4-BSTR-PMP

Ethernet Information

Device Type IP Address Subnet Mask 2163V 192.168.1.5 255.255.255.0

Cable Length: 3.66 m

PowerFlex 755 Firmware Version: LATEST

Catalog Number: 2163VB-186HKB-3F-5LRG-14DA2R3-14FCT-14GER-14HBA6-14RLX-51TJM-751M-751S-790A

Total Space Factor = 6 Wiring: NEMA Type B wiring

Output Current Rating: 156A

Circuit Breaker: Thermal Magnetic, 65kA at 480V (J6F Frame) (250A Trip)

Human Interface Module: LCD full numeric keypad - Door Mounted

Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz

Control Wiring: #16 AWG MTW(TEW) Cu

Features Included

Selector Switch: HAND-OFF-AUTO (-3F)

Pilot Light(s): RUN-AT SPEED Type: LED Push To Test, Color(s): Red, Green (-5LRG)

(2) Drive 120VAC w/ I/O (-14DA2R3)
Thermostat Door Mounted (-14FCT)
Dualport Ethernet (for VFD) (-14GER)

Drive Line Reactor (-14RLX) Mylar Device Markers (-751M) Sleeve Type Markers (-751S)

1 Aux and 1 Alarm-Internal-CB (-790A)

- (1) Customer Load Cables Exit(Bottom)
- (1) Bulletin 700-HA Tube Base Relay, 3PDT, 3-pole, 3 Form C, Single AgNi Contact, 700-HA33?
- (1) Engineered Modification and/or Custom Diagram
- (1) 200 watt extra capacity to Standard Control Transformer Fusing/Fuse Block Included
- (1) Hobbs Elapsed Time Meter, 2.08"w x 1.02"h, 6 digit, 99999.9, non-reset (Option -85T),20001U-17
- (1) Bulletin 800T/H, Contact block, addition to standard number of contacts,800T-
- (1) Change 3% to 5% 160 amp reactor (125 HP),1321-3R160-C
- (3) Convert (1) 800F Pilot Light or Selector Switch to (1) 800H Pilot Light or Selector Switch
- (1) Control Wire Color, Non-Standard, Standard Colors: Red-AC, Blue-DC, Redneutral, Green/Yellow-ground (per unit)

Unit Loc: 05A Del Prog: ENG

Unit ID: 6

VFD - PowerFlex 755 AC Drive w/CB

Rating

125 HP (Heavy Duty)

Wiring Diagram

10006435909

Name Plate Information

BOOSTER PUMP P5-BSTR-PMP

Ethernet Information

IP Address Subnet Mask Device Type 192.168.1.6 255.255.255.0 2163V

Cable Length: 4.42 m

PowerFlex 755 Firmware Version: LATEST

Catalog Number: 2163VB-186HKB-3F-5LRG-14DA2R3-14FCT-14GER-14HBA6-14RLX-51TJM-751M-751S-790A

Total Space Factor = 6

Wiring: NEMA Type B wiring Output Current Rating: 156A

Circuit Breaker: Thermal Magnetic, 65kA at 480V (J6F Frame) (250A Trip)

Human Interface Module: LCD full numeric keypad - Door Mounted

Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing,

120V/60Hz

Control Wiring: #16 AWG MTW(TEW) Cu

Features Included

Selector Switch: HAND-OFF-AUTO (-3F)

Pilot Light(s): RUN-AT SPEED Type: LED Push To Test, Color(s): Red, Green (-5LRG)

(2) Drive 120VAC w/ I/O (-14DA2R3)

Thermostat Door Mounted (-14FCT)

Dualport Ethernet (for VFD) (-14GER)

Drive Line Reactor (-14RLX)

Mylar Device Markers (-751M)

Sleeve Type Markers (-751S)

1 Aux and 1 Alarm-Internal-CB (-790A)

- (1) Customer Load Cables Exit(Bottom)
- (1) Bulletin 700-HA Tube Base Relay, 3PDT, 3-pole, 3 Form C, Single AgNi Contact,700-HA33?
- (1) Engineered Modification and/or Custom Diagram
- (1) 200 watt extra capacity to Standard Control Transformer Fusing/Fuse Block
- (1) Hobbs Elapsed Time Meter, 2.08"w x 1.02"h, 6 digit, 99999.9, non-reset (Option -85T),20001U-17
- (1) Bulletin 800T/H, Contact block, addition to standard number of contacts,800T-
- (1) Change 3% to 5% 160 amp reactor (125 HP),1321-3R160-C
- (3) Convert (1) 800F Pilot Light or Selector Switch to (1) 800H Pilot Light or Selector Switch
- (1) Control Wire Color, Non-Standard, Standard Colors: Red-AC, Blue-DC, Redneutral, Green/Yellow-ground (per unit)

Unit Loc: 06A Del Prog: ENG

Unit ID: 6

VFD - PowerFlex 755 AC Drive w/CB

Rating

125 HP (Heavy Duty)

Wiring Diagram

10006435909

Name Plate Information

BOOSTER PUMP P6-BSTR-PMP

Ethernet Information

Device Type IP Address Subnet Mask 2163V 192.168.1.7 255.255.255.0

Cable Length: 5.18 m

PowerFlex 755 Firmware Version: LATEST

Catalog Number: 2163VB-186HKB-3F-5LRG-14DA2R3-14FCT-14GER-14HBA6-14RLX-51TJM-751M-751S-790A

Total Space Factor = 6
Wiring: NEMA Type B wiring

Output Current Rating: 156A

Circuit Breaker: Thermal Magnetic, 65kA at 480V (J6F Frame) (250A Trip)

Human Interface Module: LCD full numeric keypad - Door Mounted

Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing,

120V/60Hz

Control Wiring: #16 AWG MTW(TEW) Cu

Features Included

Selector Switch: HAND-OFF-AUTO (-3F)

Pilot Light(s): RUN-AT SPEED Type: LED Push To Test, Color(s): Red, Green (-

5LRG)

(2) Drive 120VAC w/ I/O (-14DA2R3)

Thermostat Door Mounted (-14FCT)

Dualport Ethernet (for VFD) (-14GER)

Drive Line Reactor (-14RLX)

Mylar Device Markers (-751M)

Sleeve Type Markers (-751S)

1 Aux and 1 Alarm-Internal-CB (-790A)

- (1) Customer Load Cables Exit(Bottom)
- (1) Bulletin 700-HA Tube Base Relay, 3PDT, 3-pole, 3 Form C, Single AgNi Contact, 700-HA33?
- (1) Engineered Modification and/or Custom Diagram
- (1) 200 watt extra capacity to Standard Control Transformer Fusing/Fuse Block Included
- (1) Hobbs Elapsed Time Meter, 2.08"w x 1.02"h, 6 digit, 99999.9, non-reset (Option -85T),20001U-17
- (1) Bulletin 800T/H, Contact block, addition to standard number of contacts,800T-
- (1) Change 3% to 5% 160 amp reactor (125 HP),1321-3R160-C
- (3) Convert (1) 800F Pilot Light or Selector Switch to (1) 800H Pilot Light or Selector Switch
- (1) Control Wire Color, Non-Standard, Standard Colors: Red-AC, Blue-DC, Redneutral, Green/Yellow-ground (per unit)

Unit Loc: 07A Del Prog: ENG Catalog Number: 2163VB-186HKB-3F-5LRG-14DA2R3-14FCT-14GER-Unit ID: 6 14HBA6-14RLX-51TJM-751M-751S-790A VFD - PowerFlex 755 AC Drive w/CB Total Space Factor = 6 Wiring: NEMA Type B wiring Output Current Rating: 156A Rating Circuit Breaker: Thermal Magnetic, 65kA at 480V (J6F Frame) (250A Trip) 125 HP Human Interface Module: LCD full numeric keypad - Door Mounted (Heavy Duty) Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz Wiring Diagram Control Wiring: #16 AWG MTW(TEW) Cu 10006435909 Features Included Name Plate Information Selector Switch: HAND-OFF-AUTO (-3F) BOOSTER PUMP Pilot Light(s): RUN-AT SPEED Type: LED Push To Test, Color(s): Red, Green (-P7-BSTR-PMP 5LRG) (2) Drive 120VAC w/ I/O (-14DA2R3) **Ethernet Information** Thermostat Door Mounted (-14FCT) Subnet Mask Device Type IP Address Dualport Ethernet (for VFD) (-14GER) 255.255.255.0 2163V 192.168.1.8 Drive Line Reactor (-14RLX) Mylar Device Markers (-751M) Sleeve Type Markers (-751S) Cable Length: 5.95 m 1 Aux and 1 Alarm-Internal-CB (-790A) PowerFlex 755 Firmware Version: LATEST Engineered Spec(s)/Modification(s) (1) Customer Load Cables Exit(Bottom) (1) Bulletin 700-HA Tube Base Relay, 3PDT, 3-pole, 3 Form C, Single AgNi Contact,700-HA33? (1) Engineered Modification and/or Custom Diagram (1) 200 watt extra capacity to Standard Control Transformer Fusing/Fuse Block (1) Hobbs Elapsed Time Meter, 2.08"w x 1.02"h, 6 digit, 99999.9, non-reset (Option -85T),20001U-17 (1) Bulletin 800T/H, Contact block, addition to standard number of contacts,800T-(1) Change 3% to 5% 160 amp reactor (125 HP),1321-3R160-C (3) Convert (1) 800F Pilot Light or Selector Switch to (1) 800H Pilot Light or Selector Switch (1) Control Wire Color, Non-Standard, Standard Colors: Red-AC, Blue-DC, Redneutral, Green/Yellow-ground (per unit) Unit Loc: 08A Del Prog: SCII Catalog Number: 2100-BK05 Unit ID: 11 Total Space Factor = 0.5 DOOR - Blank Unit Door Unit Loc: 08B Del Prog: ENG Catalog Number: 2193LE-AKB327-40WT-31A27-111-751M Unit ID: 8 Total Space Factor = 2.5 LPAN - Lighting Panel Unit Panel Type & Rating: Three Phase, 4-Wire, 120/208V, 100A, 27 total circuits Bolt-On Branch Breakers: None Wiring Diagram 10005989973 **Features Included** (27) 20A 1-P CB (-31A27)

Engineered Spec(s)/Modification(s)

(1) Engineered Modification and/or Custom Diagram
(1) 2193LE, Lighting Panel - Wire panel to transformer, 100A

(30 circuit maximum, 1or 3 phase)

(1) 2193LE, Lighting Panel - Copper bus, unplated (Aluminum is standard), 100A

Name Plate Information

LP3

Unit Loc: 08G Del Prog: SCII

Unit ID: 7

XFMR - Control & Lighting Transformer w/CB

Wiring Diagram 10006415299

Name Plate Information

TX-LP3

Unit Loc: 09A Del Prog: ENG

Unit ID: 9

PLAT - Full Sect Blank Mtg Plate w/ or w/o Disc

Rating

20A

Wiring Diagram

10006415257

Catalog Number: 2197-WKBH-37TGM-79L-79U-751M-790A

Total Space Factor = 3

Secondary Wiring Fusing & Rating: 3-Phase, 120/208V, 3 Fuse, 45.0 kVA Circuit Breaker: Thermal Magnetic, 65kA at 480V (G6C Frame) (70A Trip)

Features Included

Unit Ground Load Connector Unplated Cu (-79L)

Unit Grd Stab Unplated Cu (-79U)

1 Aux and 1 Alarm-Internal-CB (-790A)

Catalog Number: 2100-GKC2X3B-31TGM-120-751M

Total Space Factor = 6

Rating: 20A

Circuit Breaker: Thermal Magnetic, 65kA at 480V (G6C Frame) (20A Trip)

Disconnect Type = Circuit Breaker Required Section Width 30" Wide Working Depth 14" Deep

Features Included

Omit horizontal power bus (-120)

Engineered Spec(s)/Modification(s)

(1) Customer Load Cables Exit(Bottom)

(1) Compact Logix 2MB Motion Controller, 1769-L33ERM

(1) Engineered Modification and/or Custom Diagram

(4) 120V AC INPUT MODULE, 1769-IA16

(2) 8 ANALOG INPUTS, 1769-IF8

(1) POWER SUPPLY, 1769-PA4

(2) Power Supply, 120W, 24VDC, 5A output, 120-240VAC input,1606-XLS120E

Note - 1606-XLE240E

(1) END CAP RIGHT, 1769-ECR

(2) 1000VA Control Transformer-Fusing/Fuse Block Included ,1497-K-BASX-0-N

Note - 1.6KVA XFMR

(30) IEC Terminal Blocks, 1492-JG4, 6, 10?

(200) I/O Wiring to terminal blocks within a PLC, SLC or ControlLogix unit (per

wire)

(200) Finger-Safe High Density Terminal Blocks,1492-H1,2,4,5,6,7?

(2) Receptacle, Duplex, GFI, 120V, 15A maximum, mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power

source not included

(4) Panduit Wiring Duct and Covers (White, 6 ft length) (Width, Height determined

by adding PCBr Note)

(2) 8 CURRENT ANALOG OUTPUTS,1769-OF8C

(2) 120/240V AC OUTPUT MODULE,1769-OA16

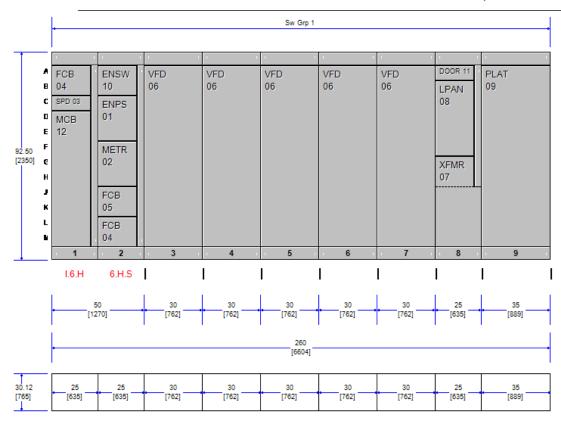
(1) Control Wire Color, Non-Standard, Standard Colors: Red-AC, Blue-DC, Red-

neutral, Green/Yellow-ground (per unit)

Centerline 2100 Motor Control Center Front Elevation

Project Name: CWD - Conejo Wells Project Item: MCC-3 - N3R Project ID #: 5271772/5 Salesperson: Juan Campos Created By: Juan Campos Date/Time: 10/25/21 - 21:03

Rockwell Automation/Allen-Bradley
PowerControl Builder Lineup



NOTE: Dimensions are subject to change after design review.

ENCLOSURE: NEMA Type 3R (Outdoor Non-Walk-In: the external width of each NEMA Type 3R cabinet is 5" wider and 10" deeper than its internal section)

Estimated Heat Loss: 13583 watts

BTU/hr Required: 46348 Air Conditioning Tons: 3.88 Estimated Weight: 6750 lb (3062 kg)

Heat loss values are for estimating purposes only.

Centerline 2100 Motor Control Center Unit Nameplate Report

Project Name: CWD - Conejo Wells Project Item: MCC-3 - N3R Juan Campos Juan Campos Salesperson: Created By: Project ID #: 5271772/5 Date/Time: 10/25/21 - 21:03

Master Nameplate Type - No Master Nameplate Supplied

Unit Nameplate Type - Acrylic - Black letters on white (3 li (Maximum cha	ines) rracters per line is 17 / 15 / 17)
IP Address - IP Address Not Included on Nameplate Section 1	
Location: 01A FCB Left Space Factor: 1 Wiring Diagram Number: 10006415294	Location: 01C SPD Space Factor: 0.5 Wiring Diagram Number: 10006415263
PANEL CHEM	SPD
FEED BUILDING	
Location: 01A FCB Right Space Factor: 1 Wiring Diagram Number: 10006415294	Location: 01D MCB Space Factor: 4.5 Wiring Diagram Number: N/A
SPARE	
	<u> </u>

Location: 02C ENPS Space Factor: 1.5 Wiring Diagram Number: 10006415245
ETHERNET
POWER SUPPLY

Location: 02F METR Space Factor: 1.5 Wiring Diagram Number: 10006415275	Location: 02L FCB Left Space Factor: 1 Wiring Diagram Number: 10006415294
POWER	SPARE
METER	

Location: 02J FCB Left
Space Factor: 1
Wiring Diagram Number: 10006415287

SPARE

Location: 02L FCB Right Space Factor: 1 Wiring Diagram Number: 10006415294						
SPARE						

Location: 02J FCB Right
Space Factor: 1
Wiring Diagram Number: 10006415287

SPARE

Section 3

Location: 03A VFD (125 HP)
Space Factor: 6
Wiring Diagram Number: 10006435909

WELL NO. 2

Section 4

Location: 04A VFD (125 HP)
Space Factor: 6
Wiring Diagram Number: 10006435909

BOOSTER PUMP
P4-BSTR-PMP

Location: 05A VFD (125 HP) Space Factor: 6 Wiring Diagram Number: 10006435909	
BOOSTER PUMP	
P5-BSTR-PMP	_
PO-DOTR-PWIP	
ection 6	
Location: 06A VFD (125 HP)	
Space Factor: 6 Wiring Diagram Number: 10006435909	
BOOSTER PUMP	
P6-BSTR-PMP	
	_
ection 7	
Location: 07A VFD (125 HP)	
Space Factor: 6	
Wiring Diagram Number: 10006435909	
BOOSTER PUMP	
P7-BSTR-PMP	
ection 8	
Location: 08A DOOR	Location: 08G XFMR
Space Factor: 0.5 Wiring Diagram Number: 10002277146	Space Factor: 3 Wiring Diagram Number: 10006415299
Trining Diagram Rumber. 10002277 140	TX-LP3
Location: 08B LPAN	
Space Factor: 2.5	
Wiring Diagram Number: 10005989973	
LP3	
<u> </u>	1

Location: 09A PLAT Space Factor: 6 Wiring Diagram Number: 10006415257

Unit Details - CWD - Conejo Wells

Master Nameplate Type: No Master Nameplate

Unit Nameplate Type: Acrylic - Black letters on white (3 lines)

Location	Туре	HP	KW	Rating	Nameplate L1	Nameplate L2	Nameplate L3	Nameplate L4	Switch Location	IP/Subnet Address	Dual IP Address	Switch Port	Dual Switch Port
1A	FCB	0	0	100	PANEL CHEM	FEED BUILDING							
1C	SPD	0	0	0	SPD								
1D	MCB	0	0	1200									
2C	ENPS	0	0	30	ETHERNET	POWER SUPPLY							
2F	METR	0	0	0	POWER	METER			02A-R	192.168.1.1	192.168.1.2	01	02
2J	FCB	0	0	40	SPARE								
2L	FCB	0	0	100	SPARE								
3A	VFD	125	0	250.0	WELL NO. 2				02A-R	192.168.1.4 255.255.255.0		03	
4A	VFD	125	0	250.0	BOOSTER PUMP	P4-BSTR- PMP			02A-R	192.168.1.5 255.255.255.0		04	
5A	VFD	125	0	250.0	BOOSTER PUMP	P5-BSTR- PMP			02A-R	192.168.1.6 255.255.255.0		05	
6A	VFD	125	0	250.0	BOOSTER PUMP	P6-BSTR- PMP			02A-R	192.168.1.7 255.255.255.0		06	
7A	VFD	125	0	250.0	BOOSTER PUMP	P7-BSTR- PMP			02A-R	192.168.1.8 255.255.255.0		07	
8A	DOOR	0	0	0									
8B	LPAN	0	0	0	LP3								
8G	XFMR	0	0	70	TX-LP3								
9A	PLAT	0	0	20									
2A	ENSW	0	0	0	ETHERNET SWITCH				2A-R	192.168.1.3 255.255.255.0			

Ethernet Switch Port Capacity

Uplink	Switch group	Section	Consumed S	Switch Ports	Available Switch Ports
		1	0		
		2	2		
		3	1		
		4	1		
1	1	5	1	7	9
		6	1		
		7	1		
		8	0		
		9	0		

Centerline 2100 Motor Control Center MCC Details

Project Name: CWD - Conejo Wells
Project Item: MCC-4 - N3R
Project ID #: 5271772/6

Salesperson: Juan Campos Created By: Juan Campos Date/Time: 10/25/21 - 21:03

The details of the proposed motor control center are as follows:

Category	Description
Total Section(s)	7
Total Shipping Block(s)	6
Section Depth	Front Mounted, 20" Deep
Section Height	90" High
Enclosure	3R - Outdoor Non-Walk-In
Designed For Use With	Power System Type: Wye, 3-phase, 4-wire with solidly grounded neutral
MCC Connection Type	Main Circuit Breaker
Incoming Cable Entry	Bottom, Section 1
Main Bus Rating	600A
Main Bus Material	Copper / Tin Plated
Main Bus Bracing	65kA (rms symmetrical)
Horizontal Neutral Bus Rating	Half of Main Bus Rating
Horizontal Neutral Bus Location	Below Main Bus
Horizontal Neutral Bus Supplied	In Section(s): 1, 2
Horizontal Ground Bus	1/4" X 1", Bottom, Unplated Copper
Vertical Ground Bus	Unit Load Copper and Plug-in Copper
Stab Opening Protection	Automatic Shutters
Master Nameplate	No

Centerline 2100 Motor Control Center Basic Structure Information

Project Name:CWD - Conejo WellsSalesperson:Juan CamposProject Item:MCC-4 - N3RCreated By:Juan CamposProject ID #:5271772/6Date/Time:10/25/21 - 21:03

Motor Control Center Details

This MCC(s) was developed using an available fault current of 50,001 to 65,000 A. MCC configuration & pricing subject to change, if actual Available Fault Current differs.

Motor Control Center Details

Power System Type: Wye, 3-phase, 4-wire with solidly

grounded neutral

Voltage: 480 Volts / 60 Hertz

Available Fault Current: 50,001 to 65,000 A Unit Nameplate Type: Acrylic - Black letters on white Wiring Type: B-T Control and Power Terminal Blocks

Wiring Diagram Location: Central location

Class II Diagram: TBD Class II Wire Count: 1

Class II Wire Through: Top Wireway

Arc Resistant MCC: No IntelliCENTER Network: Ethernet

IMC Device Firmware: Upgraded to latest available version (saves up to 1 hour of customer configuration time per

section)

Incoming Line Details

MCC Connection Type: Main Circuit Breaker Incoming Line Cable Entry: Bottom Mounted

Bus Details

Main Bus Rating: 600A

Main Bus Material: Copper / Tin Plated
Main Bus Bracing: 65kA (rms symmetrical)

Insulated Bus: None Selected

Horizontal Ground Bus Size: 1/4" X 1"

Horizontal Ground Bus Plating: Unplated Copper

Horizontal Ground Bus Location: Bottom

Vertical Ground Bus Type: Unit Load Copper and Plug-in

Copper

Incoming Ground Lug Size: #6 AWG - 250 kcmil (2

Supplied as Standard)

Incoming Ground Cable Size: None Selected

Horizontal Neutral Bus Rating: Half of Main Bus Rating Horizontal Neutral Bus Location): Below Main Bus

Enclosure Details

Enclosure Type: 3R - Outdoor Non-Walk-In

NEMA 3R/4 Lifting Angle: No

Section Depth: Front Mounted, 20" Deep Enclosure Depth: Front Mounted, 30.12" Deep

Section Height: 90" High

Stab Opening Protection: Automatic Shutters

Wireway Tie Bar: Yes Space Heater Voltage: 120V

Space Heater Thermostat: 1 Per Section

Total Shipping Block(s): 6 Total Section(s): 7 Total Unit(s): 20

Ethernet Network Information

Full Ethernet Network Information can be found on the One Line Diagram associated with this project item. This drawing can be obtained by requesting Pre-order drawings through PowerControl Builder.

Section Modifications (Qty/Mods)

MCC Level Mods:

Class II interwiring or Limited Class II between units in MCC (30 wires max; a 15% adder is applied if more than 30 wires) (List price is per wire 30 and under).

Custom Shipping Block (Per Block)

Note - SECTIONS 4 & 5.

Section 1 Modifications (Quantity/Mods)

- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 2 Modifications (Quantity/Mods)

- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

Section 3 Modifications (Quantity/Mods)

- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included
- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.

Section 4 Modifications (Quantity/Mods)

- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included
- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.

Section 6 Modifications (Quantity/Mods)

- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included

(1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.

Section 7 Modifications (Quantity/Mods)

- (1) NEMA 3R/4 fluorescent lighting fixture
- (1) Light Switch, 120V, 15A maximum, Mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12, power source not included
- (1) Door Switch, 120V, mounted on door flange, power source not included
- (1) Vented 3R door with hood (Hurricane Vent) AND/OR filtered exhaust fan(s) as needed for SMC, VFD and lighting transformers wired to TB"S for customer use or internal power source.

Section Number	Section Width (inches)	Options/Modifications
1	20"	600A Vertical Bus Horizontal Neutral Bus
2	20"	600A Vertical Bus Horizontal Neutral Bus
3	25"	N/A
4	25"	N/A
5	20"	N/A
6	20"	N/A
7	30"	N/A

Centerline 2100 Motor Control Center Unit List

Project Name:CWD - Conejo WellsSalesperson:Juan CamposProject Item:MCC-4 - N3RCreated By:Juan CamposProject ID #:5271772/6Date/Time:10/25/21 - 21:03

ID	QTY	Catalog Number / Unit Description
1	1	2100-EPS8KB-30TGM-79U-751M-751S-768C / Ethernet Power Supply Unit with Circuit Breaker Thermal Magnetic (15A Trip)
2	1	2190-CKB-56M-79U-86W54CXB-751M-751S / Metering Unit - Bul 1426-M5 PM 5000 w/Ethernet
3	1	2100-SPKB-3-751M-751S / Surge Protective Device Unit - Wye w/solidly grd neut, 4-wire
4	2	2193F-AKB-79L-79U-751M-4031TGM / Feeder Circuit Breaker - 125A Frame Rating with 100A/20A Trip
5	1	2193F-AKB-79L-79U-751M-3434TGM / Feeder Circuit Breaker - 125A Frame Rating with 40A/40A Trip
6	2	2163VB-186HKB-3F-5LRG-14DA2R3-14FCT-14GER-14HBA6-14RLX-51TJM-751M-751S-790A / PowerFlex 755 AC Drive w/CB - 125 HP with Circuit Breaker Thermal Magnetic (250A Trip)
-	1	Customer Load Cables Exit(Bottom)
7	1	2197-WKBH-37TGM-79L-79U-751M-790A / Control & Lighting Transformer w/CB - 45.0 kVA with Circuit Breaker Thermal Magnetic (70A Trip)
8	1	2193LE-AKB327-40WT-31A27-111-751M / Lighting Panel Unit with Main Circuit Breaker - 100A - 27 Total Circuits
9	1	2100-GKC2X3B-31TGM-120-751M / Full Sect Blank Mtg Plate w/ or w/o Disc with Circuit Breaker Thermal Magnetic (20A Trip)
-	1	Customer Load Cables Exit(Bottom)
10	1	2100-ESW10K-T10FDP-114-751M-751S / Stratix 5700 10-Port
11	4	2100-BK10 / Blank Unit Door - 1.0 Space Factor
12	2	2100-BK05 / Blank Unit Door - 0.5 Space Factor
13	1	2193MB-EKC-52TMM-88HN-751M / Main Circuit Breaker - 800A Frame Rating - Bottom Mounted with 600A Trip
14	1	2100-NK30-79L-79U / Empty Unit Insert - 3.0 Space Factor

Centerline 2100 Motor Control Center Unit Description

Project Name:CWD - Conejo WellsSalesperson:Juan CamposProject Item:MCC-4 - N3RCreated By:Juan CamposProject ID #:5271772/6Date/Time:10/25/21 - 21:03

General Information

Line Voltage / Frequency: 480 Volts / 60 Hertz

Power System Configuration: Wye, 3-phase, 4-wire with solidly grounded neutral

Class I Wiring Type: B-T Control and Power Terminal Blocks

NEMA Enclosure Type: 3R - Outdoor Non-Walk-In Available Fault Current: 50,001 to 65,000 A

Unit Nameplate Type: Acrylic - Black letters on white

Delivery Program: ENG

Unit Information

Description	Unit Features			
Unit Loc: 01A Del Prog: SCII Unit ID: 11 DOOR - Blank Unit Door	Catalog Number: 2100-BK10 Total Space Factor = 1			
Unit Loc: 01C Del Prog: ENG Unit ID: 2 METR - Metering Unit	Catalog Number: 2190-CKB-56M-79U-86W54CXB-751M-751S Total Space Factor = 1.5 Metering Type: Bul 1426-M5 PM 5000 w/Ethernet Ammeter Scale 1200			
Wiring Diagram 10006415275 Name Plate Information POWER METER	Features Included Unit Grd Stab Unplated Cu (-79U) Mylar Device Markers (-751M) Sleeve Type Markers (-751S)			
Ethernet Information Device Type IP Address Subnet Mask 2190 192.168.1.1 255.255.255.0 2190 192.168.1.2 255.255.255.0	Engineered Spec(s)/Modification(s) (1) Upgrade PM 5000 from M5 to M6,1426-M6E (1) Engineered Modification and/or Custom Diagram			
Cable Length : 2.12 m				
Power Monitor Firmware Version : LATEST				
Unit Loc: 01F Del Prog: PEII Unit ID: 3 SPD - Surge Protective Device Unit	Catalog Number: 2100-SPKB-3-751M-751S Total Space Factor = 0.5 Surge Protector Type: Wye w/solidly grd neut, 4-wire			
Wiring Diagram 10006415263	Features Included Mylar Device Markers (-751M) Sleeve Type Markers (-751S)			
Name Plate Information SPD				

Unit Loc: 01G Del Prog: PEII Catalog Number: 2193MB-EKC-52TMM-88HN-751M Unit ID: 13 Total Space Factor = 3 MCB - Main Circuit Breaker Circuit Breaker: Electronic (LSI), 65kA at 480V (600) with Frame Rating of 800A (M6H Frame), Bottom Mounted, 600A Trip Lugs Supplied: Std Mech/Lug Pads, 350 kcmil Size Wire, 2 Cables per Phase Rating 600A **Features Included** INC NEUT BUS Half-rated (-88HN) Wiring Diagram 10006130039 Unit Loc: 02A Catalog Number: 2100-ESW10K-T10FDP-114-751M-751S Del Prog: PEII Total Space Factor = 1 Unit ID: 10 ENSW - Stratix 5700 10-Port Full Stratix 5700 Firmware NAT (CIP Sync & Gigabit Ports) Power Adapters (w/Unit Mtg) Wiring Diagram 10006415249 Features Included Locking Latch Provision (-114) Name Plate Information Mylar Device Markers (-751M) ETHERNET SWITCH Sleeve Type Markers (-751S) **Ethernet Information** Device Type IP Address Subnet Mask 2100-ESW 192.168.1.3 255.255.255.0 No Cable Length Ethernet Switch Firmware Version: LATEST Unit Loc: 02C Del Prog: SCII Catalog Number: 2100-EPS8KB-30TGM-79U-751M-751S-768C Unit ID: 1 Total Space Factor = 1.5 ENPS - Ethernet Power Supply Unit Circuit Breaker: Thermal Magnetic, 65kA at 480V (G6C Frame) (15A Trip) Disconnect Type = Circuit Breaker Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, Rating V/60Hz 125A Control Wiring: #16 AWG MTW(TEW) Cu Wiring Diagram Features Included 10006415245 Unit Grd Stab Unplated Cu (-79U) Mylar Device Markers (-751M) **Name Plate Information** Sleeve Type Markers (-751S) **ETHERNET** Redundant ENet Power Supply (-768C) **POWER SUPPLY** Unit Loc: 02F Del Prog: SCII Catalog Number: 2100-BK05 Unit ID: 12 Total Space Factor = 0.5 DOOR - Blank Unit Door

Unit Loc: 02G Del Prog: SCII

Unit ID: 4

FCB - Feeder Circuit Breaker

Rating

Dual 100A/20A

Wiring Diagram

10006415294

Name Plate Information

SPARE

Dual Unit

SPARE

Overload Relay(s)

Motor Full Load Current (FLC) = Not Available

Unit Loc: 02J Del Prog: SCII

Unit ID: 5

FCB - Feeder Circuit Breaker

Rating

Dual 40A/40A

Wiring Diagram

10006415287

Name Plate Information

SPARE

Dual Unit

SPARE

Overload Relay(s)

Motor Full Load Current (FLC) = Not Available

Unit Loc: 02L Del Prog: SCII

Unit ID: 4

FCB - Feeder Circuit Breaker

Rating

Dual 100A/20A

Wiring Diagram

10006415294

Name Plate Information

SPARE

Dual Unit

SPARE

Overload Relav(s)

Motor Full Load Current (FLC) = Not Available

Catalog Number: 2193F-AKB-79L-79U-751M-4031TGM

Total Space Factor = 1

Circuit Breaker: Thermal Magnetic, 65kA at 480V (100) with Frame Rating of 125A

(G6C Frame), Plug-In Unit, Dual 100A/20A Trip

Lugs Supplied: Std Mech/Lug Pads, 1/0 AWG Size Wire, 1 Cables per Phase

Features Included

Unit Ground Load Connector Unplated Cu (-79L)

Unit Grd Stab Unplated Cu (-79U)

Mylar Device Markers (-751M)

Catalog Number: 2193F-AKB-79L-79U-751M-3434TGM

Total Space Factor = 1

Circuit Breaker: Thermal Magnetic, 65kA at 480V (40) with Frame Rating of 125A

(G6C Frame), Plug-In Unit, Dual 40A/40A Trip

Lugs Supplied: Std Mech/Lug Pads, 1/0 AWG Size Wire, 1 Cables per Phase

Features Included

Unit Ground Load Connector Unplated Cu (-79L)

Unit Grd Stab Unplated Cu (-79U)

Mylar Device Markers (-751M)

Catalog Number: 2193F-AKB-79L-79U-751M-4031TGM

Total Space Factor = 1

Circuit Breaker: Thermal Magnetic, 65kA at 480V (100) with Frame Rating of 125A

(G6C Frame), Plug-In Unit, Dual 100A/20A Trip

Lugs Supplied: Std Mech/Lug Pads, 1/0 AWG Size Wire, 1 Cables per Phase

Features Included

Unit Ground Load Connector Unplated Cu (-79L)

Unit Grd Stab Unplated Cu (-79U)

Mylar Device Markers (-751M)

Unit Loc: 03A Del Prog: ENG

Unit ID: 6

VFD - PowerFlex 755 AC Drive w/CB

Rating

125 HP (Heavy Duty)

Wiring Diagram

10006435909

Name Plate Information

WELL NO. 3 CONEJO

Ethernet Information

Device Type IP Address Subnet Mask 2163V 192.168.1.4 255.255.255.0

Cable Length: 2.9 m

PowerFlex 755 Firmware Version: LATEST

Catalog Number: 2163VB-186HKB-3F-5LRG-14DA2R3-14FCT-14GER-14HBA6-14RLX-51TJM-751M-751S-790A

Total Space Factor = 6
Wiring: NEMA Type B wiring

Output Current Rating: 156A

Circuit Breaker: Thermal Magnetic, 65kA at 480V (J6F Frame) (250A Trip)

Human Interface Module: LCD full numeric keypad - Door Mounted

Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing,

120V/60Hz

Control Wiring: #16 AWG MTW(TEW) Cu

Features Included

Selector Switch: HAND-OFF-AUTO (-3F)

Pilot Light(s): RUN-AT SPEED Type: LED Push To Test, Color(s): Red, Green (-

5LRG)

(2) Drive 120VAC w/ I/O (-14DA2R3)

Thermostat Door Mounted (-14FCT)

Dualport Ethernet (for VFD) (-14GER)

Drive Line Reactor (-14RLX)

Mylar Device Markers (-751M)

Sleeve Type Markers (-751S)

1 Aux and 1 Alarm-Internal-CB (-790A)

- (1) Customer Load Cables Exit(Bottom)
- (1) Bulletin 700-HA Tube Base Relay, 3PDT, 3-pole, 3 Form C, Single AgNi Contact, 700-HA33?
- (1) Engineered Modification and/or Custom Diagram
- (1) 200 watt extra capacity to Standard Control Transformer Fusing/Fuse Block Included
- (1) Hobbs Elapsed Time Meter, 2.08"w x 1.02"h, 6 digit, 99999.9, non-reset (Option -85T),20001U-17
- (1) Bulletin 800T/H, Contact block, addition to standard number of contacts,800T-
- (1) Change 3% to 5% 160 amp reactor (125 HP),1321-3R160-C
- (3) Convert (1) 800F Pilot Light or Selector Switch to (1) 800H Pilot Light or Selector Switch
- (1) Control Wire Color, Non-Standard, Standard Colors: Red-AC, Blue-DC, Redneutral, Green/Yellow-ground (per unit)

Unit Loc: 04A Del Prog: ENG Catalog Number: 2163VB-186HKB-3F-5LRG-14DA2R3-14FCT-14GER-Unit ID: 6 14HBA6-14RLX-51TJM-751M-751S-790A VFD - PowerFlex 755 AC Drive w/CB Total Space Factor = 6 Wiring: NEMA Type B wiring Output Current Rating: 156A Rating Circuit Breaker: Thermal Magnetic, 65kA at 480V (J6F Frame) (250A Trip) 125 HP Human Interface Module: LCD full numeric keypad - Door Mounted (Heavy Duty) Control: Transformer with Secondary Fuse, Standard Capacity, Primary Fusing, 120V/60Hz Wiring Diagram Control Wiring: #16 AWG MTW(TEW) Cu 10006435909 **Features Included** Name Plate Information Selector Switch: HAND-OFF-AUTO (-3F) WELL NO. 8 Pilot Light(s): RUN-AT SPEED Type: LED Push To Test, Color(s): Red, Green (-SANTA ROSA 5LRG) (2) Drive 120VAC w/ I/O (-14DA2R3) **Ethernet Information** Thermostat Door Mounted (-14FCT) IP Address Subnet Mask Device Type Dualport Ethernet (for VFD) (-14GER) 255.255.255.0 2163V 192.168.1.5 Drive Line Reactor (-14RLX) Mylar Device Markers (-751M) Sleeve Type Markers (-751S) Cable Length: 3.66 m 1 Aux and 1 Alarm-Internal-CB (-790A) PowerFlex 755 Firmware Version: LATEST Engineered Spec(s)/Modification(s) (1) Customer Load Cables Exit(Bottom) (1) Bulletin 700-HA Tube Base Relay, 3PDT, 3-pole, 3 Form C, Single AgNi Contact,700-HA33? (1) Engineered Modification and/or Custom Diagram (1) 200 watt extra capacity to Standard Control Transformer Fusing/Fuse Block (1) Hobbs Elapsed Time Meter, 2.08"w x 1.02"h, 6 digit, 99999.9, non-reset (Option -85T),20001U-17 (1) Bulletin 800T/H, Contact block, addition to standard number of contacts,800T-(1) Change 3% to 5% 160 amp reactor (125 HP),1321-3R160-C (3) Convert (1) 800F Pilot Light or Selector Switch to (1) 800H Pilot Light or Selector Switch (1) Control Wire Color, Non-Standard, Standard Colors: Red-AC, Blue-DC, Redneutral, Green/Yellow-ground (per unit) Unit Loc: 05A Del Prog: SCII Catalog Number: 2100-BK10 Unit ID: 11 Total Space Factor = 1 DOOR - Blank Unit Door Unit Loc: 05C Del Prog: SCII Catalog Number: 2100-BK10 Unit ID: 11 Total Space Factor = 1 DOOR - Blank Unit Door Unit Loc: 05E Del Prog: SCII Catalog Number: 2100-BK10 Unit ID: 11 Total Space Factor = 1

DOOR - Blank Unit Door

Unit Loc: 05G Del Prog: ENG Unit ID: 14 INSR - Empty Unit Insert	Catalog Number: 2100-NK30-79L-79U Total Space Factor = 3 Without disconnecting means.
	Disconnect Type = No Disconnect Means
Name Plate Information WELL 8 DV/DT FILTER	Features Included Unit Ground Load Connector Unplated Cu (-79L) Unit Grd Stab Unplated Cu (-79U)
	Engineered Spec(s)/Modification(s) (1) Power Interwiring - 225A, Max Wire Size: #3/0 AWG (Max 1 per phase) (1) Engineered Modification and/or Custom Diagram (1) Filter,dv/dt,200A,480-600V,60Hz,Open (Nema 1 & 1G Only),V1K200A00 (1) Venting on 3.0 to 6.0 space factor single NEMA type 1 unit door.
Unit Loc: 06A Del Prog: SCII Unit ID: 12 DOOR - Blank Unit Door	Catalog Number: 2100-BK05 Total Space Factor = 0.5
Unit Loc: 06B Del Prog: ENG Unit ID: 8 LPAN - Lighting Panel Unit	Catalog Number: 2193LE-AKB327-40WT-31A27-111-751M Total Space Factor = 2.5 Panel Type & Rating: Three Phase, 4-Wire, 120/208V, 100A, 27 total circuits Bolt-On Branch Breakers: None
Wiring Diagram 10005989973	Features Included (27) 20A 1-P CB (-31A27)
Name Plate Information LP4	Engineered Spec(s)/Modification(s) (1) 2193LE, Lighting Panel - Copper bus, unplated (Aluminum is standard), 100A (30 circuit maximum, 1or 3 phase) (1) Engineered Modification and/or Custom Diagram (1) 2193LE, Lighting Panel - Wire panel to transformer, 100A
Unit Loc: 06G Del Prog: SCII Unit ID: 7 XFMR - Control & Lighting Transformer w/CB	Catalog Number: 2197-WKBH-37TGM-79L-79U-751M-790A Total Space Factor = 3 Secondary Wiring Fusing & Rating: 3-Phase, 120/208V, 3 Fuse, 45.0 kVA Circuit Breaker: Thermal Magnetic, 65kA at 480V (G6C Frame) (70A Trip)
Wiring Diagram 10006415299 Name Plate Information	Features Included Unit Ground Load Connector Unplated Cu (-79L) Unit Grd Stab Unplated Cu (-79U)
TX-LP4	1 Aux and 1 Alarm-Internal-CB (-790A)

Unit Loc: 07A Del Prog: ENG

Unit ID: 9

PLAT - Full Sect Blank Mtg Plate w/ or w/o Disc

Rating

20A

Wiring Diagram

10006415257

Catalog Number: 2100-GKC2X3B-31TGM-120-751M

Total Space Factor = 6

Rating: 20A

Circuit Breaker: Thermal Magnetic, 65kA at 480V (G6C Frame) (20A Trip)

Disconnect Type = Circuit Breaker Required Section Width 30" Wide Working Depth 14" Deep

Features Included

Omit horizontal power bus (-120)

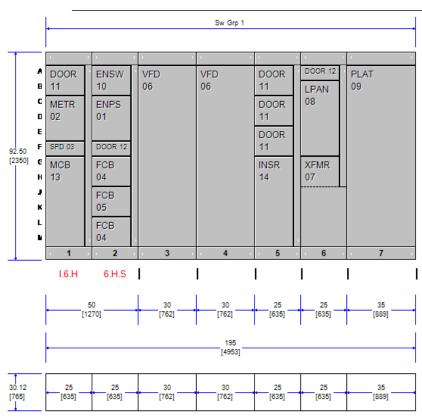
- (1) Customer Load Cables Exit(Bottom)
- (1) Compact Logix 2MB Motion Controller,1769-L33ERM
- (1) Engineered Modification and/or Custom Diagram
- (2) 120V AC INPUT MODULE,1769-IA16
- (1) 8 ANALOG INPUTS, 1769-IF8
- (1) POWER SUPPLY, 1769-PA4
- (2) Power Supply, 120W, 24VDC, 5A output, 120-240VAC input, 1606-XLS120E Note 1606-XLE240E
- (1) END CAP RIGHT, 1769-ECR
- (2) 1000VA Control Transformer-Fusing/Fuse Block Included ,1497-K-BASX-0-N Note 1.6KVA XFMR
- (30) IEC Terminal Blocks, 1492-JG4, 6, 10?
- (200) I/O Wiring to terminal blocks within a PLC, SLC or ControlLogix unit (per wire)
- (200) Finger-Safe High Density Terminal Blocks, 1492-H1, 2, 4, 5, 6, 7?
- (2) Receptacle, Duplex, GFI, 120V, 15A maximum, mounted on door behind 3R door (for 3R only enclosures) or inside unit behind door Nema 1/1g or 12 , power source not included
- (4) Panduit Wiring Duct and Covers (White, 6 ft length) (Width, Height determined by adding PCBr Note)
- (1) 8 CURRENT ANALOG OUTPUTS,1769-OF8C
- (1) 120/240V AC OUTPUT MODULE,1769-OA16
- (1) Control Wire Color, Non-Standard, Standard Colors: Red-AC, Blue-DC, Redneutral, Green/Yellow-ground (per unit)

Centerline 2100 Motor Control Center Front Elevation

Project Name: CWD - Conejo Wells
Project Item: MCC-4 - N3R
Project ID #: 5271772/6

Salesperson: Juan Campos Created By: Juan Campos Date/Time: 10/25/21 - 21:04

Rockwell Automation/Allen-Bradley
PowerControl Builder Lineup



NOTE: Dimensions are subject to change after design review.

ENCLOSURE: NEMA Type 3R (Outdoor Non-Walk-In: the external width of each NEMA Type 3R cabinet is 5" wider and 10" deeper than its internal section)

Estimated Heat Loss: 6593 watts BTU/hr Required: 22497 Air Conditioning Tons: 1.88

Estimated Weight: 5250 lb (2381 kg)

Heat loss values are for estimating purposes only.

Centerline 2100 Motor Control Center Unit Nameplate Report

Project Name: CWD - Conejo Wells Salesperson: Juan Campos
Project Item: MCC-4 - N3R Created By: Juan Campos
Project ID #: 5271772/6 Date/Time: 10/25/21 - 21:04

Master Nameplate Type - No Master Nameplate Supplied

Unit Nameplate Type - Acrylic - Black letters on white (3 lines) (Maximum characters per line is 17 / 15 / 17)								
IP Address - IP Address Not Included on Nameplate								
Section 1								
Location: 01A DOOR Space Factor: 1 Wiring Diagram Number: 10002277148	Location: 01F SPD Space Factor: 0.5 Wiring Diagram Number: 10006415263							
	SPD							
Location: 01C METR Space Factor: 1.5 Wiring Diagram Number: 10006415275	Location: 01G MCB Space Factor: 3 Wiring Diagram Number: 10006130039							
POWER								
METER								

Location: 02A ENSW Space Factor: 1 Wiring Diagram Number: 10006415249	
ETHERNET SWITCH	

Location: 02C ENPS Space Factor: 1.5 Wiring Diagram Number: 10006415245
ETHERNET
POWER SUPPLY

Location: 02F DOOR	Location: 02J FCB Right
Space Factor: 0.5	Space Factor: 1
Wiring Diagram Number: 10002277146	Wiring Diagram Number: 10006415287
	SPARE
Location: 02G FCB Left	Location: 02L FCB Left
Space Factor: 1	Space Factor: 1
Wiring Diagram Number: 10006415294	Wiring Diagram Number: 10006415294
SPARE	SPARE
Lacations 200 FOR Birth	Location: 02L FCB Right
Location: 02G FCB Right Space Factor: 1	Space Factor: 1
Wiring Diagram Number: 10006415294	Wiring Diagram Number: 10006415294
SPARE	SPARE
Location: 02J FCB Left	
Space Factor: 1	
Wiring Diagram Number: 10006415287	
SPARE	

Section 3

Location: 03A VFD (125 HP)
Space Factor: 6
Wiring Diagram Number: 10006435909

WELL NO. 3

CONEJO

Location: 04A VFD (125 HP) Space Factor: 6	
Wiring Diagram Number: 10006435909	
WELL NO. 8	
SANTA ROSA	
Section 5	1 0 27 222
Location: 05A DOOR Space Factor: 1 Wiring Diagram Number: 10002277148	Location: 05E DOOR Space Factor: 1 Wiring Diagram Number: 10002277148
Location: 05C DOOR	Location: 05G INSR
Space Factor: 1 Wiring Diagram Number: 10002277148	Space Factor: 3 Wiring Diagram Number: 10003296377
33	WELL 8
	DV/DT FILTER
Section 6	
Location: 06A DOOR Space Factor: 0.5 Wiring Diagram Number: 10002277146	Location: 06G XFMR Space Factor: 3 Wiring Diagram Number: 10006415299
	TX-LP4
Location: 06B LPAN	
Space Factor: 2.5 Wiring Diagram Number: 10005989973	
LP4	
	-

Location: 07A PLAT Space Factor: 6 Wiring Diagram Number: 10006415257

Unit Details - CWD - Conejo Wells

Master Nameplate Type: No Master Nameplate

Unit Nameplate Type: Acrylic - Black letters on white (3 lines)

Location	Туре	НР	KW	Rating	Nameplate L1	Nameplate L2	Nameplate L3	Nameplate L4	Switch Location	IP/Subnet Address	Dual IP Address	Switch Port	Dual Switch Port
1A	DOOR	0	0	0									
1C	METR	0	0	0	POWER	METER			02A-R	192.168.1.1	192.168.1.2	01	02
1F	SPD	0	0	0	SPD								
1G	MCB	0	0	600									
2C	ENPS	0	0	30	ETHERNET	POWER SUPPLY							
2F	DOOR	0	0	0									
2G	FCB	0	0	100	SPARE								
2J	FCB	0	0	40	SPARE								
2L	FCB	0	0	100	SPARE								
3A	VFD	125	0	250.0	WELL NO. 3	CONEJO			02A-R	192.168.1.4 255.255.255.0		03	
4A	VFD	125	0	250.0	WELL NO. 8	SANTA ROSA			02A-R	192.168.1.5 255.255.255.0		04	
5A	DOOR	0	0	0									
5C	DOOR	0	0	0									
5E	DOOR	0	0	0									
5G	INSR	0	0	0	WELL 8	DV/DT FILTER							
6A	DOOR	0	0	0									
6B	LPAN	0	0	0	LP4								
6G	XFMR	0	0	70	TX-LP4							_	
7A	PLAT	0	0	20									

2A	ENSW	0	0	0	ETHERNET		2A-R	192.168.1.3		
i					SWITCH			255.255.255.0		

Ethernet Switch Port Capacity

Uplink	Switch group	Section	Consumed S	Switch Ports	Available Switch Ports
		1	2		
		2	0		
		3	1		
1	1	4	1	4	4
		5	0		
		6	0		
		7	0		



Read File

The following material is provided to members of the Board for information only and is not formally a part of the published agenda.

A. 2021 Board Calendar

2021 Camrosa Board Calendar

JANUARY					FEBRUARY									- 37	MARC	H			2021 Observed Holidays		
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	January 1 st - New Year's Day
					1	2	19	1	2	3	4	5	6	f	1	2	3	4	5	6	February 15 th - President's Day
3	4	5	6	7	8	9	7	8	9	10	11	12	13	7	8	9	10	11	12	13	May 31 st - Memorial Day
10	11	12	13	14	15	16	14	15	16	17	18	19	20	14	15	16	17	18	19	20	July 5 th - Independence Day (Observed)
17	18	19	20	21	22	23	21	22	23	24	25	26	27	21	22	23	24	25	26	27	September 6 th - Labor Day
24	25	26	27	28	29	30	28							28	29	30	31				November 11 th - Veteran's Day
31																					November 25 th & 26 th - Thanksgiving
																					December 23 rd & 24 th - Christmas
			APRIL							MAY							JUNE	E)			December 31 st - New Year's Eve
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
				1	2	3							1			- 1	2	3	4	5	2021 Conferences
4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12	CASA Winter Conf. (**Virtual Event**) - Jan. 27 th - 28 th
11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19	ACWA Spring Conf. (Monterey) - May 4 th - 7 th
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26	CASA 66th Annual Conf. (San Diego) - Aug. 11th - 13th
25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30				ACWA Fall Conf. (Pasadena) - Nov. 30 th - Dec. 3 rd
							30	31													
						- 9	7														2021 AWA Meetings
			JULY						А	UGU:	ST					SE	PTEM	BER			"Water Issues" Third Tuesday (except Apr., Aug., Dec.)
S	М	Т	W	T	F	S	S	M	T	W	T	F	S	S	M	Т	W	T	F	S	Waterwise Breakfast (See yellow on calendar)
				1	2	3	1	2	3	4	5	6	7				1	2	3	4	AWA Board Meetings (See orange on calendar)
4	5	6	7	8	9	10	8	9	10	11	12	13	14	5	6	7	8	9	10	11	August - DARK (No Meetings or Events)
11	12	13	14	15	16	17	15	16	17	18	19	20	21	12	13	14	15	16	17	18	September 30 th - Reagan Library Reception
18	19	20	21	22	23	24	22	23	24	25	26	27	28	19	20	21	22	23	24	25	October 21st - Annual Symposium
25	26	27	28	29	30	31	29	30	31					26	27	28	29	30			December 9 th - Holiday Mixer
																					2021 VCSDA Meetings
		00	тов	ER					NO	VEM	BER					DE	CEMI	BER			February 2 nd - Annual Dinner
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	April 6 th
					1	2		1	2	3	4	5	6				1	2	3	4	June 1 st
3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11	August 3 rd
10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18	October 5 th
17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25	December 7 th
24	25	26	27	28	29	30	28	29	30					26	27	28	29	30	31		
31																					
Camr	osa V	Vater	Distric	t		j.															
7385	Santa	a Rosa	Roa	d			Note	: Boar	rd of I	Direct	ors m	eetin	gs are	highlight	ed in	RED.	Board	Mee	tings	are	
Camarillo, CA 93012					held on the 2nd & 4th Thursday of each month at 5pm unless indicated.																
															,,,,,,						
																1					
							Calle	guas	Board	Meet	ings a	re hei	d 1st	& 3rd Wed	nesda	y - 5.0	00 PM				