SUZANNA'S KITCHEN
CECIL PROJECT

ELECTRICAL DRAWINGS
LINE 1 PACKOUT

WIRE COLOR CODES

ABOVE DISCONNECT	480VAC PHASE 1	BROWN
	480VAC PHASE 2	ORANGE
	480VAC PHASE 3	YELLOW
	120VAC HOT	RED
	120VAC NEUTRAL	WHITE
	24VDC	BLUE
	24VDC COMMON	BLUE / WHITE
BELOW DISCONNECT	480VAC PHASE 1	BROWN
	480VAC PHASE 2	ORANGE
	480VAC PHASE 3	YELLOW
	120VAC HOT	RED
	120VAC NEUTRAL	WHITE
	24VDC	BLUE
	24VDC COMMON	BLUE / WHITE
GENERAL	GROUND	GREEN or GREEN/YELLOW
	JUMPERS	PURPLE

WIRE GAGE CHART		
CONDUCTOR SIZE (AWG)	CONDUCTOR (METRIC) mm2	AMPACITY 60°
20	0.50	5
18	0.75	7
16	1.50	10
14	2.50	20
12	4	25
10	6	30
8	10	40
6	16	55
4	25	70
3		85
2	35	95
1	50	110
1/0		125
2/0	70	145
3/0	95	165
4/0	120	195
250		215

CABLE JACKET COLORS	
CABLE FUNCTION	CABLE COLOR
POWER CABLE	ORANGE
I/O BUS (e.g. PROFIBUS)	PURPLE
SENSORS/ACTUATORS	YELLOW
MEASUREMENT SYSTEM	GREEN
MULTI-CONDUCTOR	GRAY
PLANT ETHERNET	BLUE
PROFINET / ETHERNET/IP	GREEN
CONTROLS ETHERNET	GRAY

WARNING: ALL CIRCUITS THAT ARE NOT DE-ENERGIZED WITH E1 DISCONNECT "OFF" WILL BE LABELED AS SUCH. CHECK THE WIRE BEFORE TOUCHING!

CALDWELL ELECTRICAL CONTRACTORS
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submittals

No.	Date	Description

revisions

No.	Date	Description

engineer's seal

project name
CECIL PROJECT SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

site address
435 HORIZON DRIVE SUWANEE, GEORGIA

drawing title
COVER LINE 1 PACKOUT

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC001
2022-04-26

ELECTRICAL DRAWING INDEX

SHEET	DRAWING DESCRIPTION
EC000.pdf	FULL DRAWING SET
EC001.dwg	COVER LINE 1 PACK OUT
EC002.dwg	INDEX LINE 1
EC003.dwg	LEGEND, NOTES, AND SYMBOLS JIC
EC010.dwg	480VAC AND 120VAC POWER DIST. LINE 1
EC011.dwg	480VAC CONTROL WIRING FOR 5 VFDs LINE 1
EC012.dwg	480VAC CONTROL WIRING FOR 5 VFDs LINE 1
EC013.dwg	480VAC CONTROL WIRING FOR 5 VFDs LINE 1
EC014.dwg	480VAC CONTROL WIRING FOR 5 VFDs LINE 1
EC015.dwg	480VAC CONTROL WIRING FOR 5 CONTACTORS LINE 1
EC027.dwg	IO AND MEMORY MAP LINE 1
EC028.dwg	ETHERNET SWITCH A LINE 1
EC029.dwg	ETHERNET SWITCH B LINE 1
EC030.dwg	PLC RACK 0 LAYOUT LINE 1
EC031.dwg	PLC 120VAC INPUT MODULES 1 AND 2 WIRING LINE 1
EC032.dwg	PLC 120VAC OUTPUT MODULES 3 AND 4 WIRING LINE 1
EC033.dwg	PLC 24VDC IN-OUT MODULES 5 AND 6 WIRING LINE 1
EC034.dwg	PLC SPARE SLOTS 7 AND 8 WIRING LINE 1
EC035.dwg	PLC SPRE SLOTS 9 AND 10 LINE 1
EC036.dwg	PLC SPARE SLOT 11 LINE 1
EC039.dwg	ZL-P2-CBL18-1P IO MODULE TO PIGTAIL CABLE DETAILS LINE 1

SHEET	DRAWING DESCRIPTION
EC070.dwg	MAIN ENCLOSURE EXTERIOR LINE 1
EC071.dwg	MAIN ENCLOSURE INTERIOR LINE 1
EC073.dwg	TERMINAL ROTATION
EC074.dwg	HMI FOR MAIN ENCLOSURE
EC075.dwg	HMI CUT-OUT AND STOP PB
EC076.dwg	MAIN TAG ARC FLASH AND QR DETAILS
EC080.dwg	BOM, MAIN CONTROLS ENCLOSURE
EC099.docx	PLC PROGRAM AND SUPPORTING NOTES

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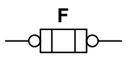
SUWANEE, GEORGIA

drawing title
INDEX
LINE 1

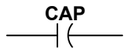
drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC002
2023-02-26

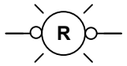
LEGEND, NOTES, AND SYMBOLS



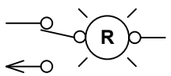
FUSE



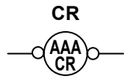
CAPACITOR



PILOT LIGHT



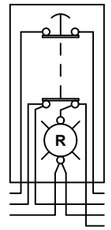
PILOT LIGHT PUSH TEST

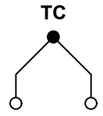


CONTROL RELAY

RELAY N.C.

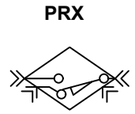
RELAY N.O.



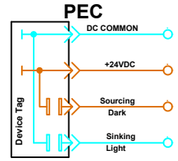


THERMOCOUPLE

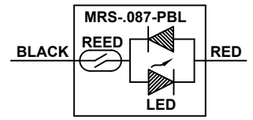
POTENTIOMETER



PROXIMITY SWITCH



PHOTOELECTRIC CELL

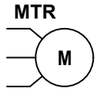


BIMBA REED SWITCH

HEATER ELEMENT

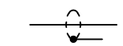
RESISTOR

MOTOR STARTER



MOTOR

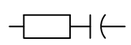
MASTER CONTROL RELAY



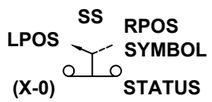
SHIELD CABLE

ARC SUPP AC

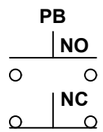
PLUG & RECEPTACLE



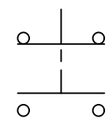
ARC SUPP AC/DC



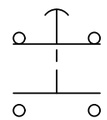
SELECTOR SWITCH



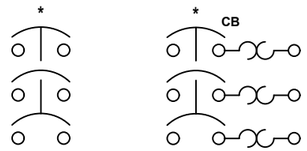
PUSHBUTTON



SW PB DBL CIRCUIT

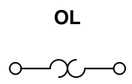


SW PB DBL CIRC. MUSH HEAD

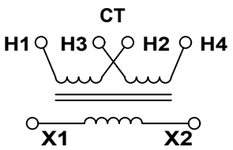


CIRCUIT INTERRUPTER

CIRCUIT BREAKER



MOTOR THERMAL OVERLOADS

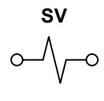


CURRENT TRANSFORMER

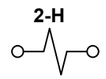
GROUND

GROUND - CHASSIS

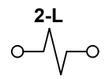
AMP	AMPERES
B	BRAKE
CTR	COUNTER
D	DIODE
DRS	DOOR SWITCH
DS	DISCONNECT SWITCH
EM	EMITTER
F	FUSE
FP	FOOT PEDAL SWITCH
FS	FLOAT SWITCH
FTS	FOOT SWITCH
GND	GROUND
HTR	HEATER ELEMENT
I/O	INPUT/OUTPUT
IL	INTERLOCK
IPB	ILLUMINATED PUSHBUTTON
ITR	INSTANTANEOUS TRIP RELAY
LED	LIGHT EMITTING DIODE
LL	LOCAL LIGHT
LR	LATCH RELAY
LS	LIMIT SWITCH
LTS	LIGHT SCREEN
LUB	LUBRICATOR
MCR	MASTER CONTROL RELAY
MF	MOTOR STARTER - FORWARD
MR	MOTOR STARTER - REVERSE
MS	MOTOR STARTER
MTR	MOTOR
OL	MOTOR THERMAL OVERLOAD
PB	PUSHBUTTON
PEC	PHOTOELECTRIC CELL
PL	PILOT LIGHT
POT	POTENTIOMETER
PRX	PROXIMITY SWITCH
PS	PRESSURE SWITCH POWER
PWS	SUPPLY
R	RESISTOR
REC	RECTIFITER
RECEPT	RECEPTACLE
RH	RHEOSTAT
RS	RUN/STOP STATION
SC	STATION CONNECTOR



SOLENOID VALVE

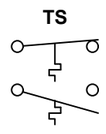


SOLENOID 2 POS HYDR

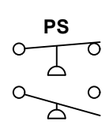


SOLENOID 2 POS LUB

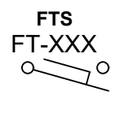
SOLENOID 3 POS PNEU



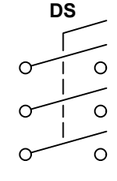
TEMPERATURE SWITCH



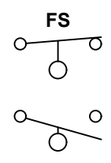
PRESSURE SWITCH



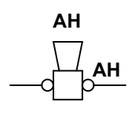
FOOT SWITCH



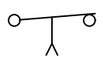
DISCONNECT SWITCH



FLOAT SWITCH

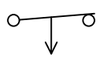


ALARM HORN



COIL E N.C. TIME DELAY

COIL E N.O. TIME DELAY

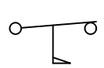


COIL DE N.C. TIME DELAY

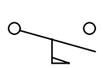
COIL DE N.O. TIME DELAY

TOGGLE SW.

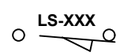
CABLE OPERATED SWITCH



FLOW SW. - N.C.



FLOW SW. - N.O.



LIMIT SWITCH N.O. Held Closed

LIMIT SW - N.C. N.C. Held Open

SS	SELECTOR SWITCH
SUPP	SUPPRESSOR
SV	SOLENOID VALVE
T	TRANSFORMER
TACH	TACHOMETER GENERATOR
TB	TERMINAL BLOCK
TC	THERMOCOUPLE
TDR	TIME DELAY RELAY
TP	TEST PROBE
TS	TEMPERATURE SWITCH
TW	THUMBWHEEL
U	UNLATCH RELAY
VAR	VARISTOR
VM	VOLT METER
VR	VOLTAGE REGULATOR

NOTES

1. ALL POWER WIRING TO BE PHASE A TAN, PHASE B ORANGE, PHASE C VIOLET.
2. ALL 120AC POWER AND CONTROL WIRING TO BE RED.
3. ALL AC NEUTRAL WIRING TO BE WHITE OR GRAY.
4. ALL DC POWER AND CONTROL WIRING TO BE BROWN.
5. ALL DC SIGNAL, PNP/SOURCE/SWITCHED+ WIRING TO BE BLACK.
6. ALL DC SIGNAL, NPN/SINKING/SWITCHED- WIRING TO BE WHITE.
7. ALL DC COMMON WIRING TO BE BLUE.
8. ALL INTERLOCK WIRING TO BE YELLOW.
9. ALL GROUND WIRING TO BE GREEN OR GREEN/YELLOW.
10. ALL WIRE TO BE MTW OR TEW EXCEPT AS NOTED.

LEGEND

— — — EXTERNAL FIELD WIRING

——— INTERNAL PANEL WIRING

◯ TERMINAL BLOCK

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CECIL PROJECT
SUZANNA'S KITCHEN

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SUWANEE, GEORGIA

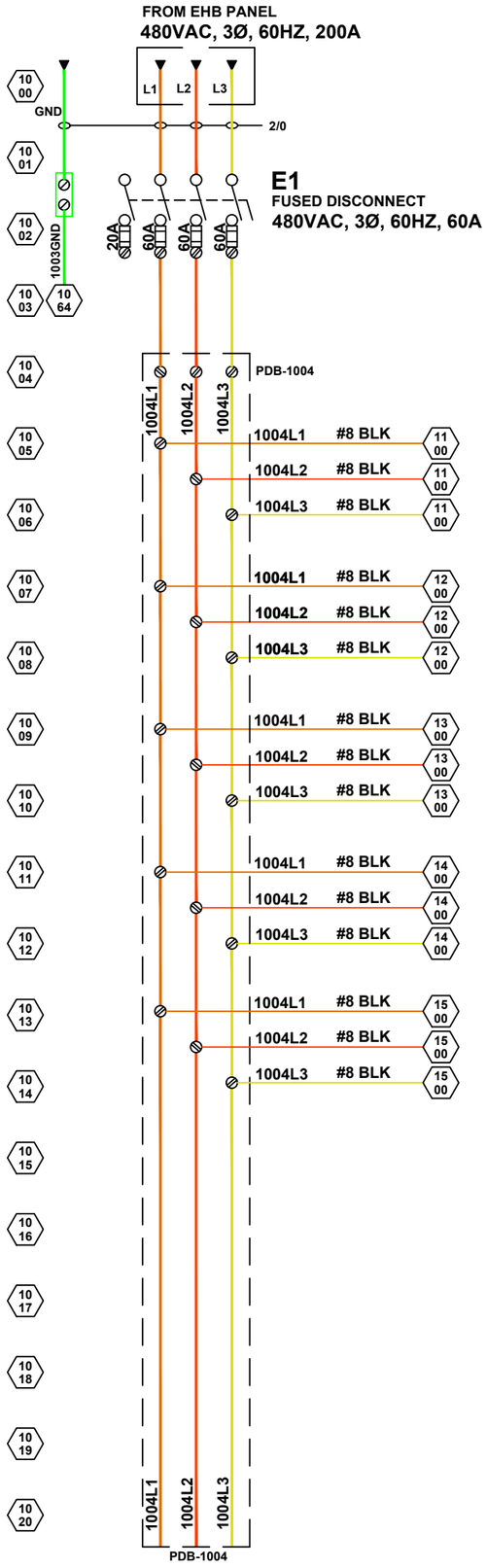
drawing title
LEGEND, NOTES, AND SYMBOLS

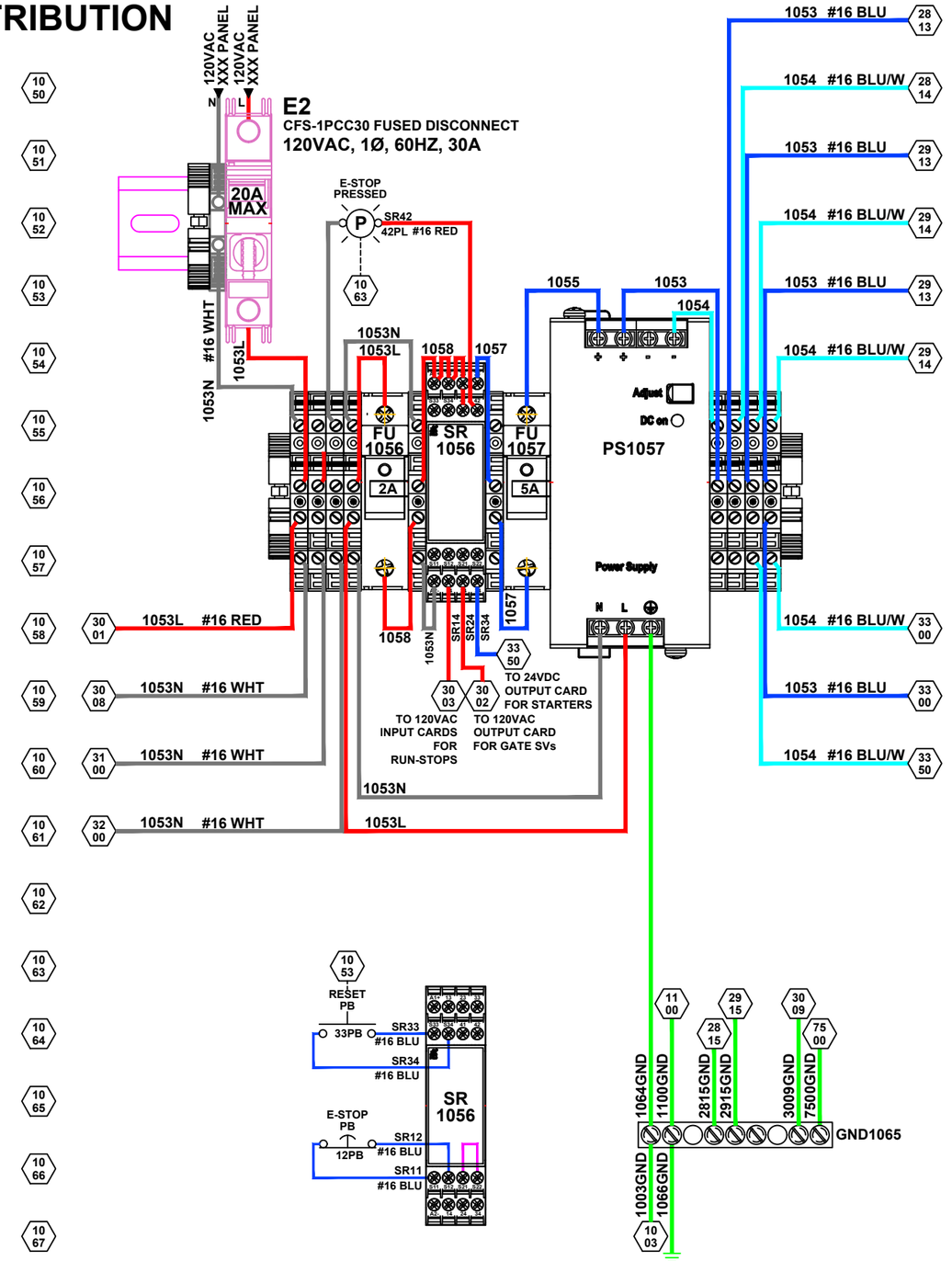
drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC003

2023-02-22

POWER DISTRIBUTION





CALDWELL ELECTRICAL CONTRACTORS
2334 DANBURY LANE
GAINESVILLE, GA 30507
PHONE: (770) 531-7890
FAX: (770) 531-7817

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consultant

submittals

No.	Date	Description

revisions

No.	Date	Description
1	22-01-04	LINE REFERENCES
.	.	.

engineer's seal

project name
CECIL PROJECT SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

site address
435 HORIZON DRIVE SUWANEE, GEORGIA

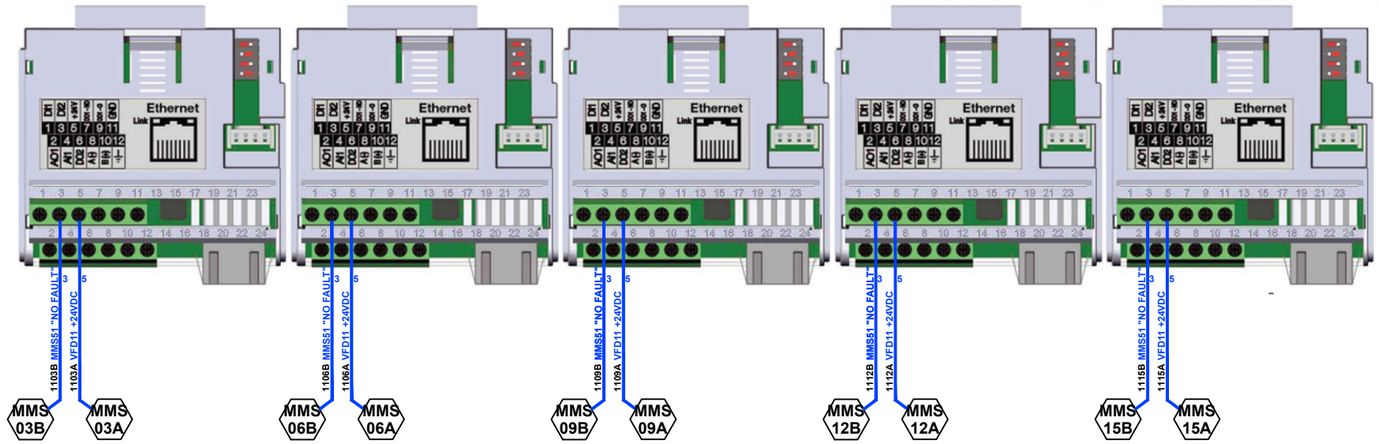
drawing title
POWER DISTRIBUTION LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC010

2023-02-25

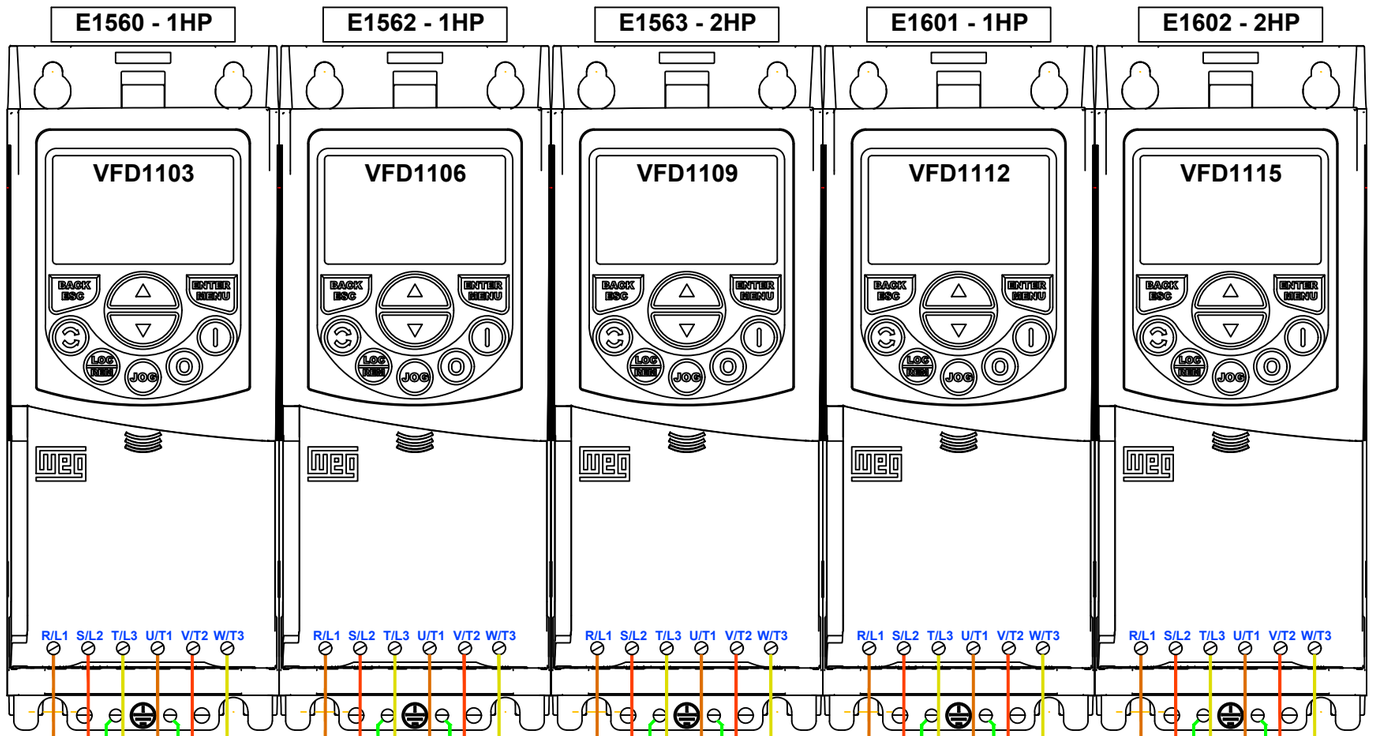
480VAC POWER DISTRIBUTION - VFDs



SET ALL DIP SWITCHES:
S1.1 RIGHT (ON)
S1.2 LEFT (OFF)
S1.3 LEFT (OFF)
S1.4 LEFT (OFF)

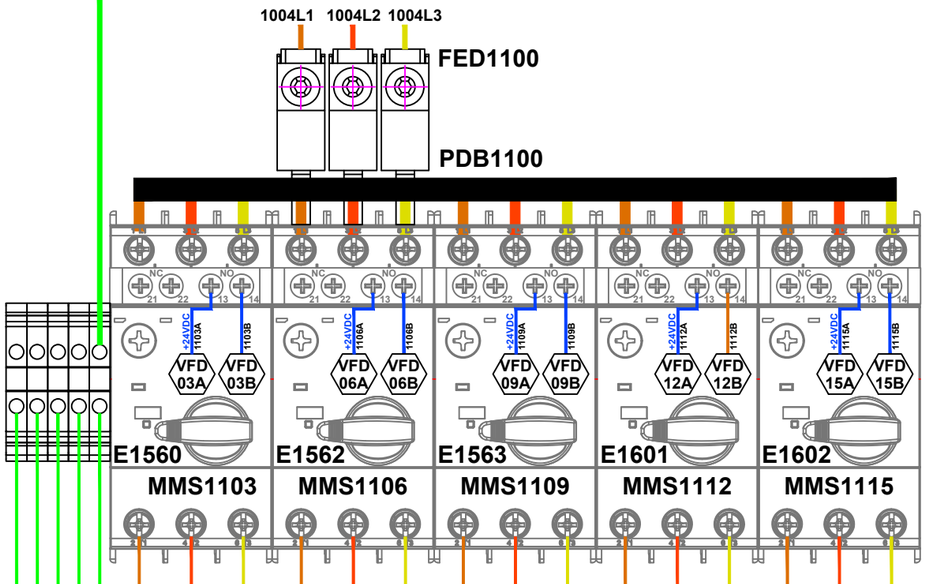
SPEED POT VFD PARAMETERS

PARAM	DEF.	USE	FUNCTION
P0220	2	1	LOC/REM SELECT, ALWAYS REM
P0263	1	0	Di1 FUNCTION, NOT USED
P0264	8	19	Di2 FUNCTION, NO EXTERNAL FAULT
P0271	0	8	Di1-Di8, NPN VS PNP (TO SW 24VDC)
P0296	4	4	LINE RATED VOLTAGE (4=480V)
P0400	460	(NP)	MOTOR RATED VOLTAGE
P0401	3.1	(NP)	MOTOR RATED CURRENT
P0402	1750	(NP)	MOTOR RATED RPM
P0403	60	(NP)	MOTOR RATED FREQUENCY (Hz)
P0404	0.75	(NP)	MOTOR RATED POWER (kW)
		NP =	MOTOR NAME PLATE
P0800	-	2	ETHERNET/IP
P0803	0	0	BAUD RATE=AUTO
P0810	1	0	SETTINGS
P0811	192	192	IP ADDRESS 1
P0812	168	168	IP ADDRESS 2
P0813	0	0	IP ADDRESS 3
P0814	14	14	IP ADDRESS 4
P0815	24	25	SUBNET 255.255.255.0



MAIN PDB TO MMS WIRE: MTW 10AWG

10
64



MMS TO VFD WIRE: MTW 14AWG

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submittals

No.	Date	Description

revisions

No.	Date	Description

engineer's seal

project name
CECIL PROJECT
SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

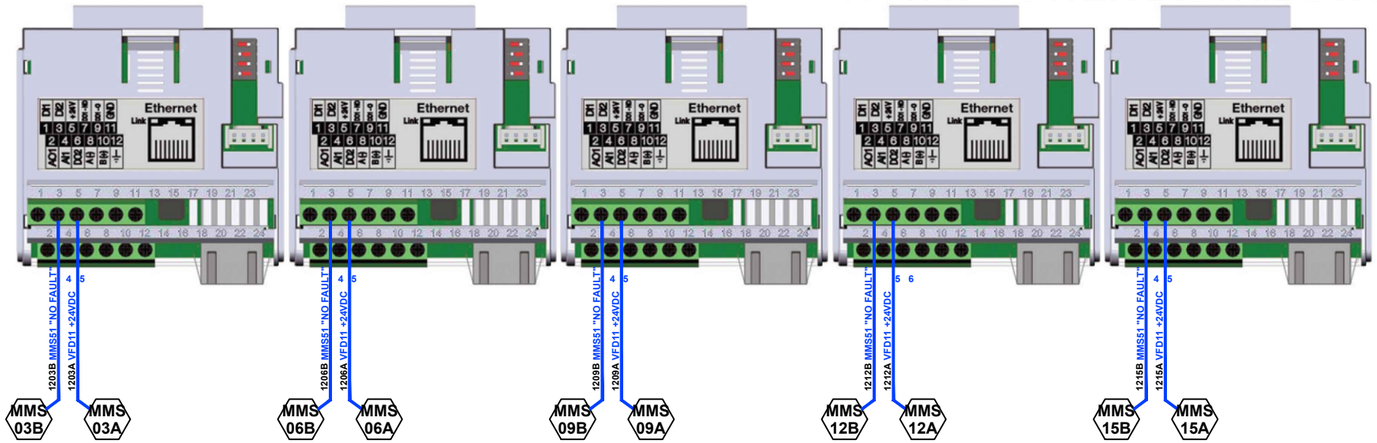
site address
435 HORIZON DRIVE
SUWANEE, GEORGIA

drawing title
480VAC FOR UP TO 5 VFDs LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC011
2023-02-24

480VAC POWER DISTRIBUTION - VFDs

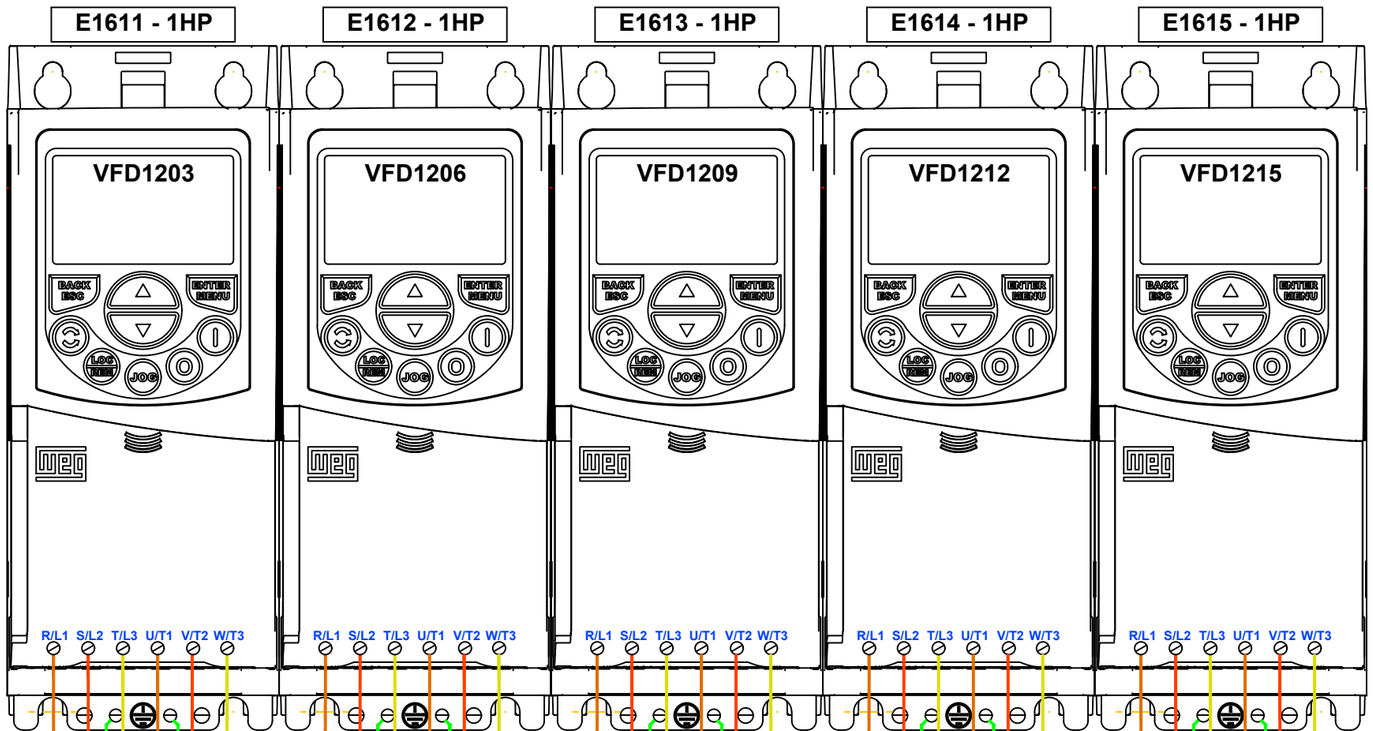


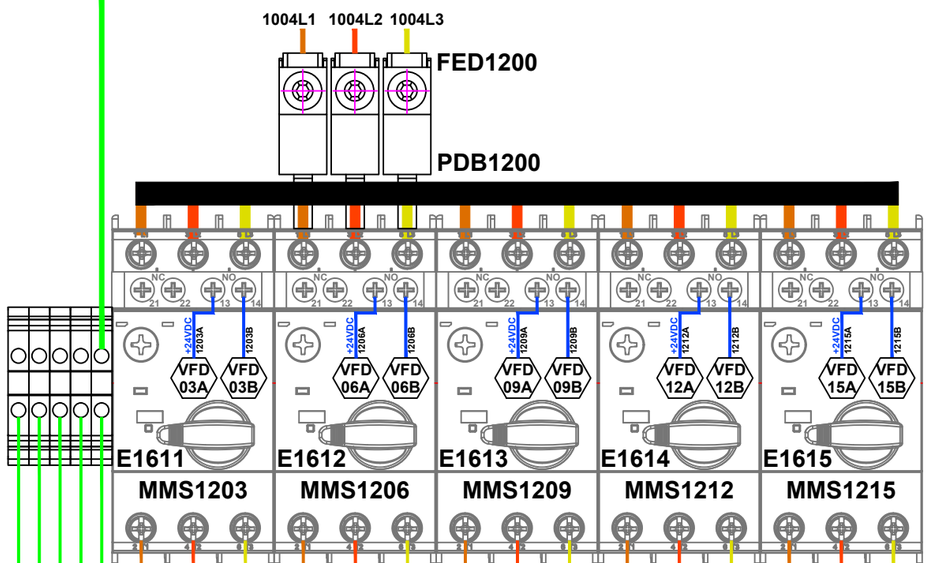
SET ALL DIP SWITCHES:
S1.1 RIGHT (ON)
S1.2 LEFT (OFF)
S1.3 LEFT (OFF)
S1.4 LEFT (OFF)

SPEED POT VFD PARAMETERS

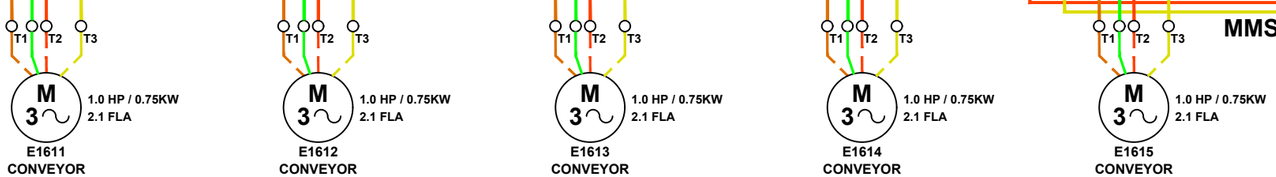
PARAM	DEF.	USE	FUNCTION
P0220	2	1	LOC/REM SELECT, ALWAYS REM
P0263	1	0	Di1 FUNCTION, NOT USED
P0264	8	19	Di2 FUNCTION, NO EXTERNAL FAULT
P0271	0	8	Di1-Di8, NPN VS PNP (TO SW 24VDC)
P0296	4	4	LINE RATED VOLTAGE (4=480V)
P0400	460	(NP)	MOTOR RATED VOLTAGE
P0401	3.1	(NP)	MOTOR RATED CURRENT
P0402	1750	(NP)	MOTOR RATED RPM
P0403	60	(NP)	MOTOR RATED FREQUENCY (Hz)
P0404	0.75	(NP)	MOTOR RATED POWER (kW)
		NP =	MOTOR NAME PLATE
P0800	-	2	ETHERNET/IP
P0803	0	0	BAUD RATE=AUTO
P0810	1	0	SETTINGS
P0811	192	192	IP ADDRESS 1
P0812	168	168	IP ADDRESS 2
P0813	0	0	IP ADDRESS 3
P0814	14	14	IP ADDRESS 4
P0815	24	25	SUBNET 255.255.255.0

MAIN PDB TO MMS WIRE: MTW 10AWG (10 / 64)





MMS TO VFD WIRE: MTW 14AWG



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submittals

No.	Date	Description

revisions

No.	Date	Description

engineer's seal

project name
CECIL PROJECT
SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

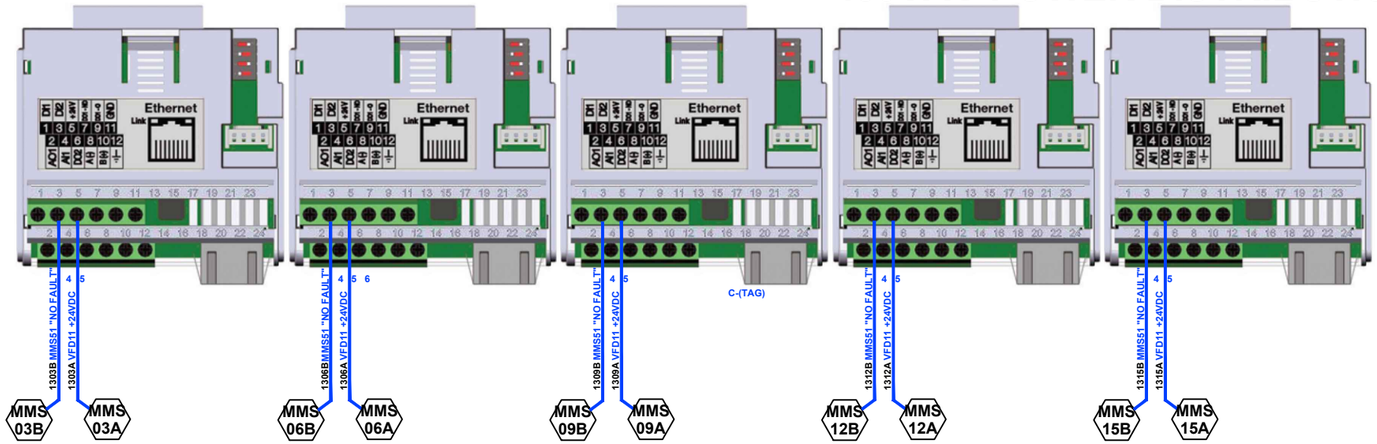
site address
435 HORIZON DRIVE
SUWANEE, GEORGIA

drawing title
480VAC FOR UP TO 5 VFDs LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC012
2023-02-24

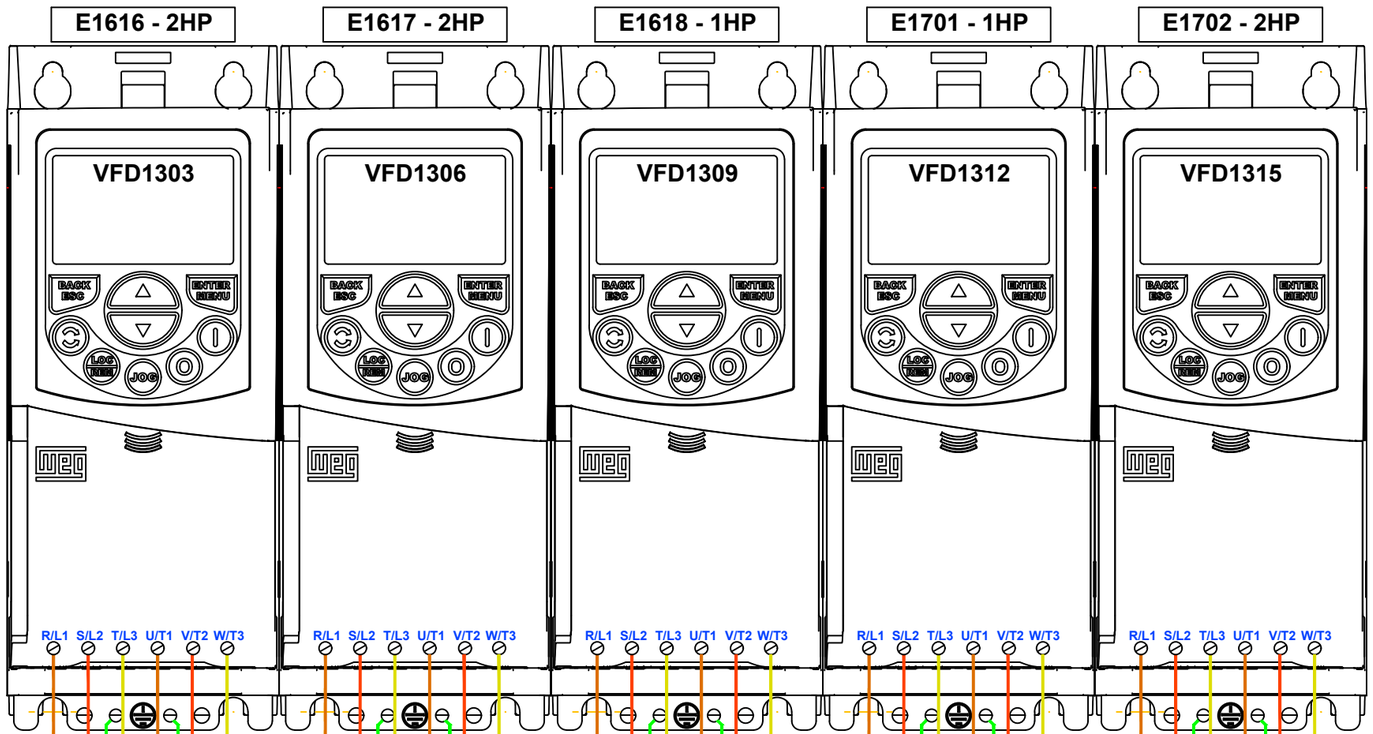
480VAC POWER DISTRIBUTION - VFDs



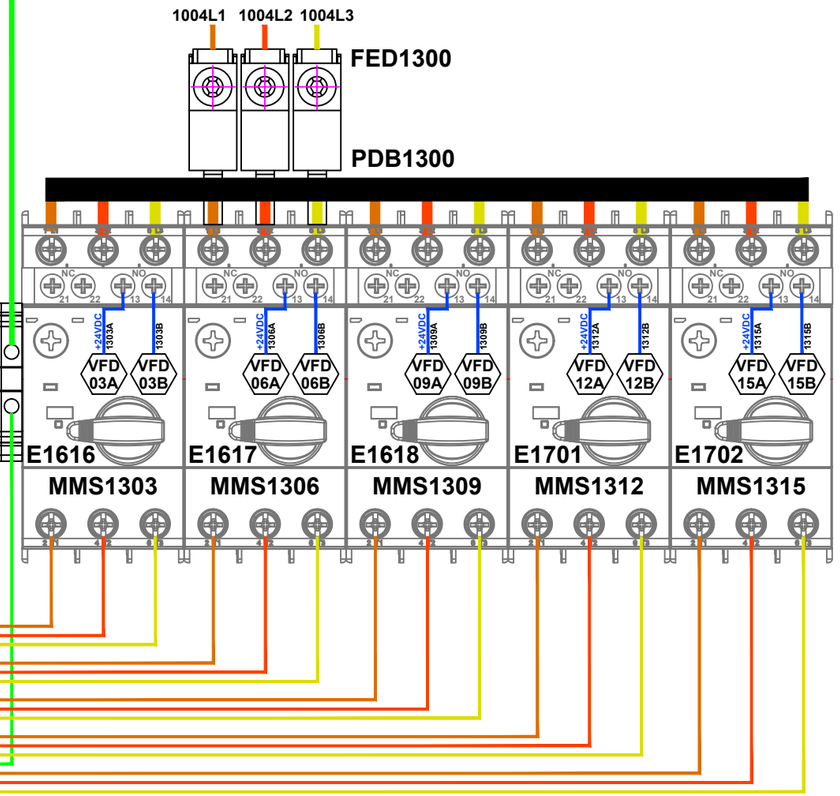
SET ALL DIP SWITCHES:
- S1.1 RIGHT (ON)
- S1.2 LEFT (OFF)
- S1.3 LEFT (OFF)
- S1.4 LEFT (OFF)

SPEED POT VFD PARAMETERS

PARAM	DEF.	USE	FUNCTION
P0220	2	1	LOC/REM SELECT, ALWAYS REM
P0263	1	0	DI1 FUNCTION, NOT USED
P0264	8	19	DI2 FUNCTION, NO EXTERNAL FAULT
P0271	0	8	DI1-DI8, NPN VS PNP (TO SW 24VDC)
P0296	4	4	LINE RATED VOLTAGE (4=480V)
P0400	460	(NP)	MOTOR RATED VOLTAGE
P0401	3.1	(NP)	MOTOR RATED CURRENT
P0402	1750	(NP)	MOTOR RATED RPM
P0403	60	(NP)	MOTOR RATED FREQUENCY (Hz)
P0404	0.75	(NP)	MOTOR RATED POWER (kW)
		NP =	MOTOR NAME PLATE
P0800	-	2	ETHERNET/IP
P0803	0	0	BAUD RATE=AUTO
P0810	1	0	SETTINGS
P0811	192	192	IP ADDRESS 1
P0812	168	168	IP ADDRESS 2
P0813	0	0	IP ADDRESS 3
P0814	14	14	IP ADDRESS 4
P0815	24	25	SUBNET 255.255.255.0



MAIN PDB TO MMS WIRE: MTW 10AWG (10 64)



MMS TO VFD WIRE: MTW 14AWG

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No.	Date	Description

revisions

No.	Date	Description

engineer's seal

project name
CECIL PROJECT SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

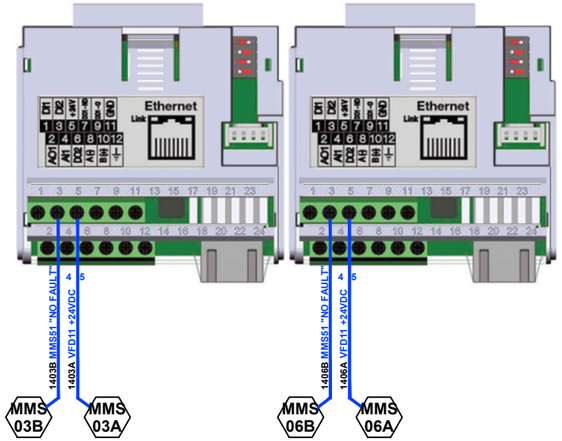
site address
435 HORIZON DRIVE SUWANEE, GEORGIA

drawing title
480VAC FOR UP TO 5 VFDs LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC013
2023-02-24

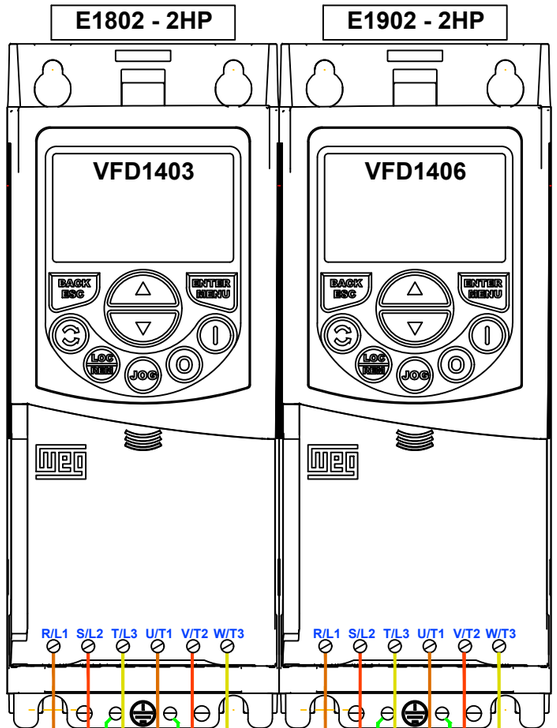
480VAC POWER DISTRIBUTION - VFDs

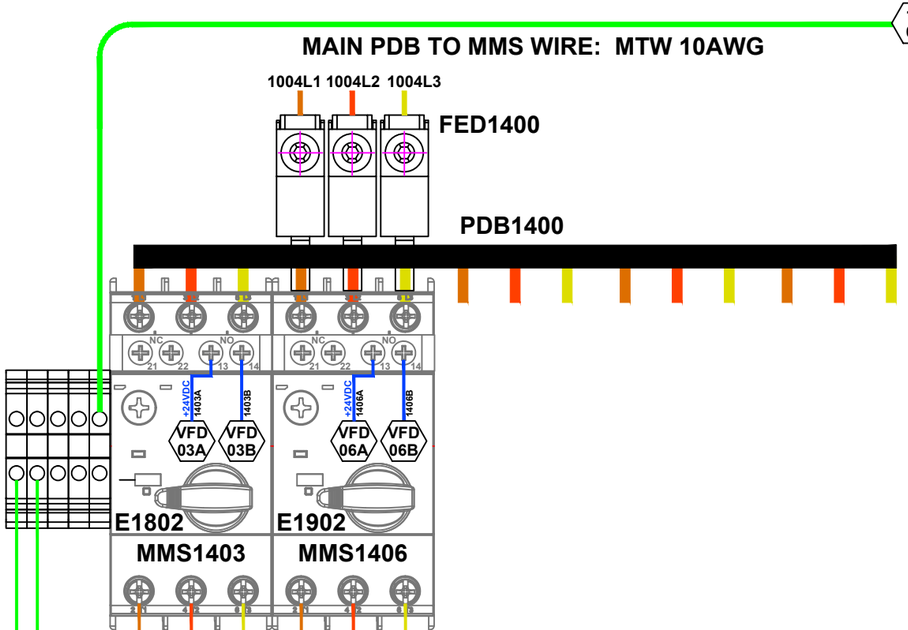


SET ALL DIP SWITCHES:
S1.1 RIGHT (ON)
S1.2 LEFT (OFF)
S1.3 LEFT (OFF)
S1.4 LEFT (OFF)

SPEED POT VFD PARAMETERS

PARAM	DEF.	USE	FUNCTION
P0220	2	1	LOC/REM SELECT, ALWAYS REM
P0263	1	0	Di1 FUNCTION, NOT USED
P0264	8	19	Di2 FUNCTION, NO EXTERNAL FAULT
P0271	0	8	Di1-Di8, NPN VS PNP (TO SW 24VDC)
P0296	4	4	LINE RATED VOLTAGE (4=480V)
P0400	460	(NP)	MOTOR RATED VOLTAGE
P0401	3.1	(NP)	MOTOR RATED CURRENT
P0402	1750	(NP)	MOTOR RATED RPM
P0403	60	(NP)	MOTOR RATED FREQUENCY (Hz)
P0404	0.75	(NP)	MOTOR RATED POWER (kW)
		NP =	MOTOR NAME PLATE
P0800	-	2	ETHERNET/IP
P0803	0	0	BAUD RATE=AUTO
P0810	1	0	SETTINGS
P0811	192	192	IP ADDRESS 1
P0812	168	168	IP ADDRESS 2
P0813	0	0	IP ADDRESS 3
P0814	14	14	IP ADDRESS 4
P0815	24	25	SUBNET 255.255.255.0





MMS TO VFD WIRE: MTW 14AWG

CALDWELL ELECTRICAL CONTRACTORS
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GAINESVILLE, GA 30507
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submittals

No.	Date	Description

revisions

No.	Date	Description

engineer's seal

project name
CECIL PROJECT
SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

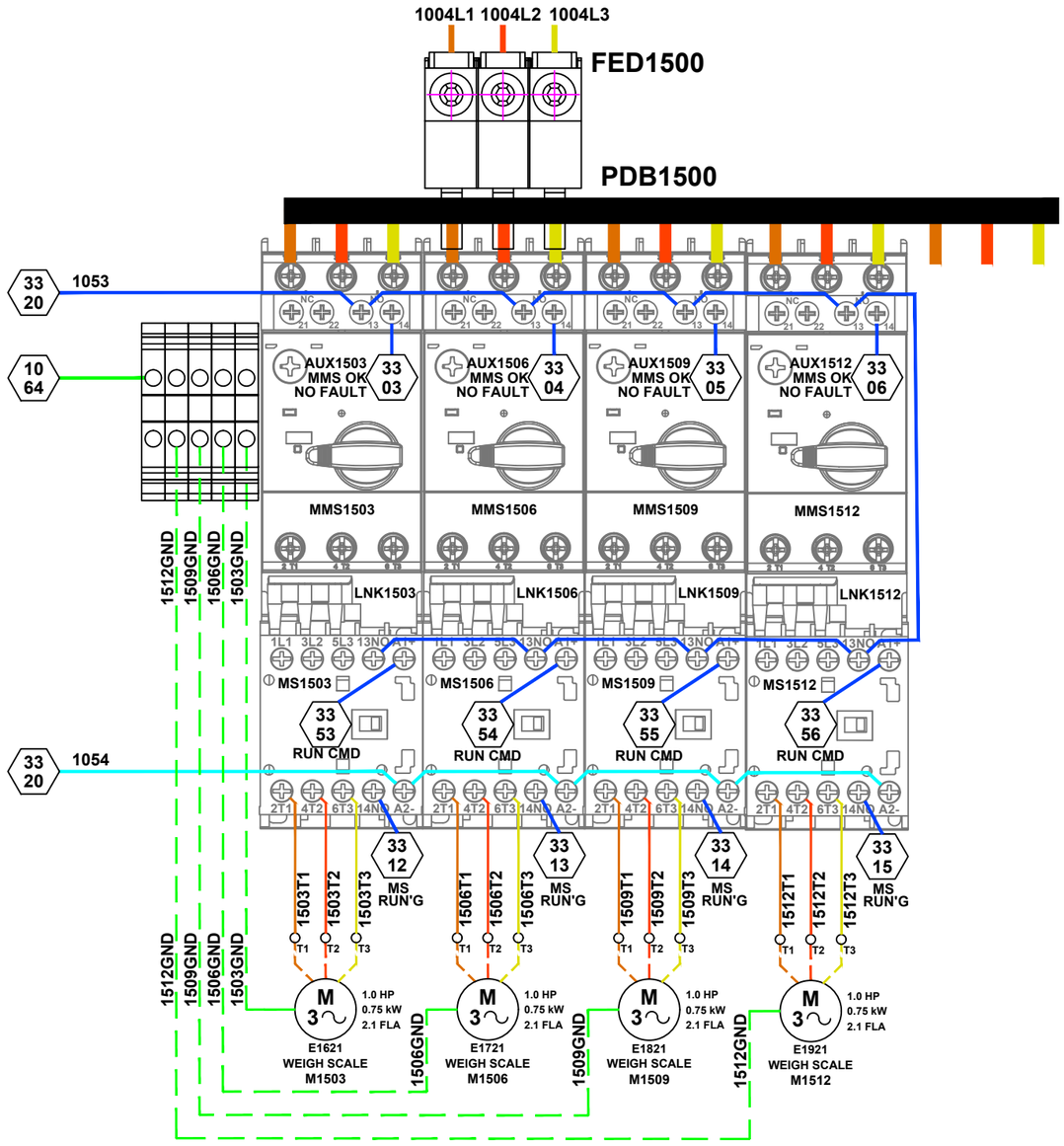
site address
435 HORIZON DRIVE
SUWANEE, GEORGIA

drawing title
480VAC FOR UP TO 5 VFDs
LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC014
2023-02-24

480VAC POWER DISTRIBUTION - MOTOR STARTERS



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FAX: (770) 531-7817

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submittals

No.	Date	Description

revisions

No.	Date	Description
.	.	.
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engineer's seal

project name
CECIL PROJECT SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

site address
435 HORIZON DRIVE SUWANEE, GEORGIA

drawing title
480VAC FOR UP TO 5 STARTERS LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC015

2023-02-24

I/O AND MEMORY MAP

CALDWELL
ELECTRICAL
CONTRACTORS
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GAINESVILLE, GA 30507
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submittals

No.	Date	Description

revisions

No.	Date	Description
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		.
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.	.	.

engineer's seal

project name
CECIL PROJECT
SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

site address
435 HORIZON DRIVE
SUWANEE, GEORGIA

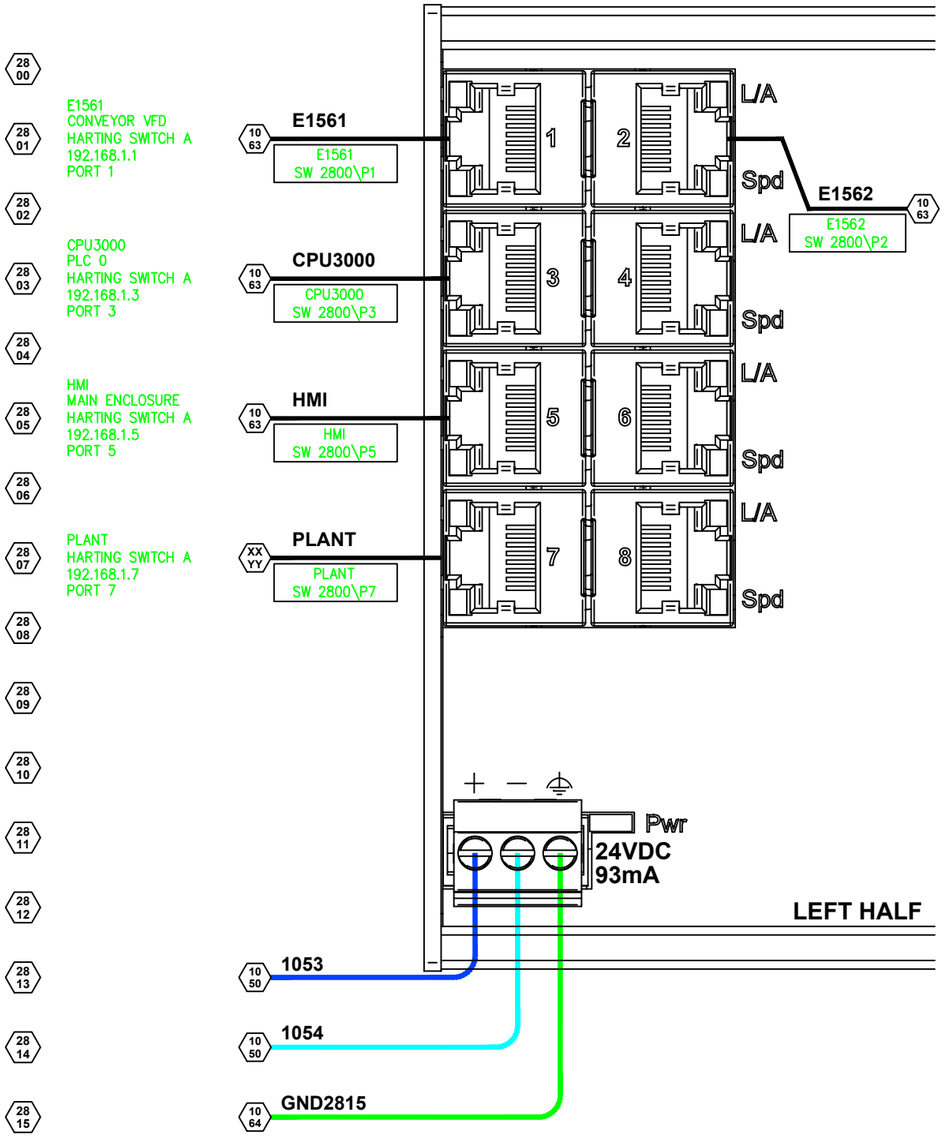
drawing title
I/O AND MEMORY MAP
LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

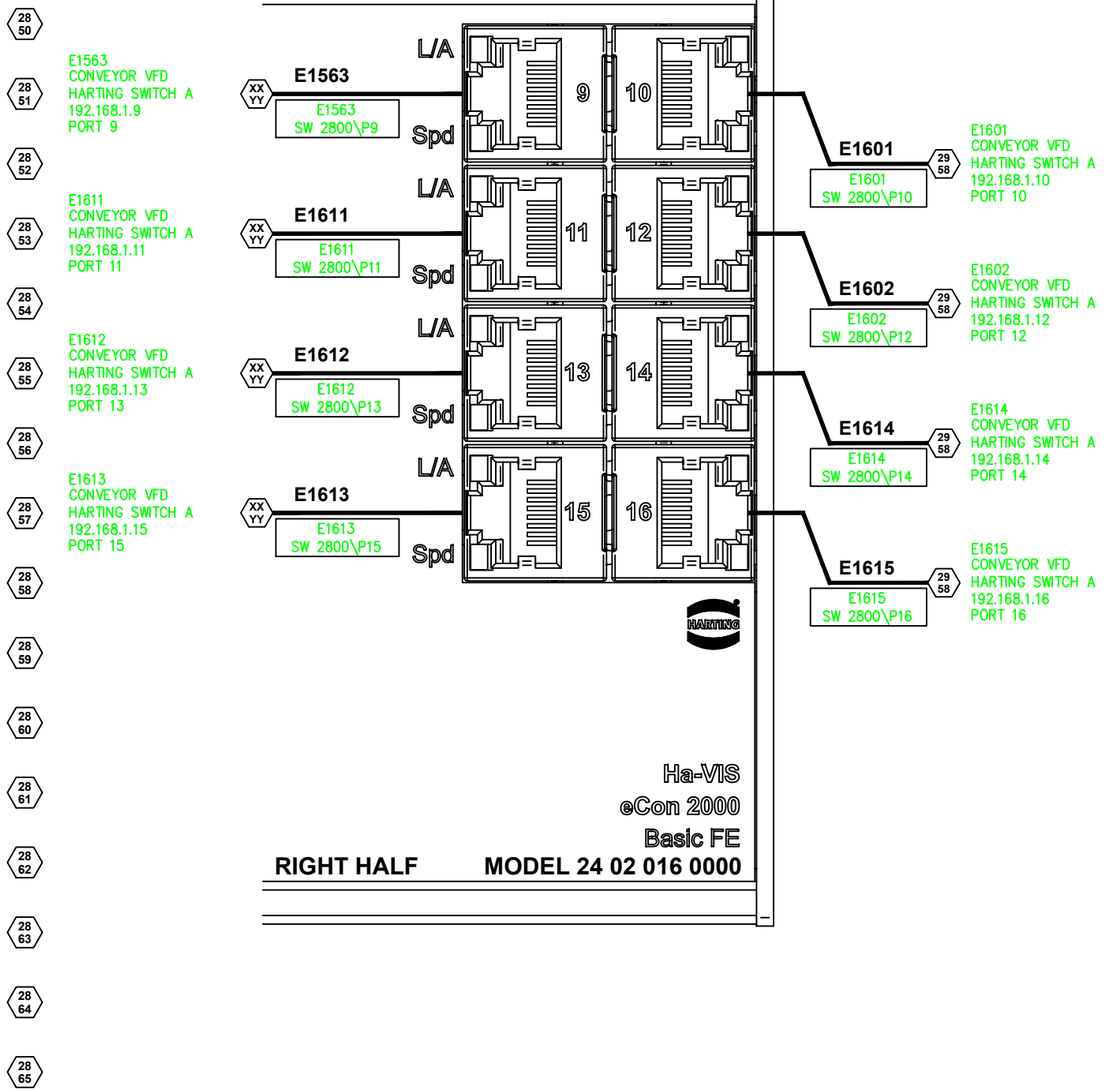
drawing no.
EC027
2023-02-24

ETHERNET SWITCH A

ESW 2800
Harting Unmanaged 16 Port Ethernet Switch



ESW 2800
Harting Unmanaged 16 Port Ethernet Switch



CALDWELL ELECTRICAL CONTRACTORS
2334 DANBURY LANE
GAINESVILLE, GA 30507
PHONE: (770) 531-7890
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submittals

No.	Date	Description

revisions

No.	Date	Description

engineer's seal

project name
CECIL PROJECT
SUZANNA'S
KITCHEN

designed for
SUZANNA'S
KITCHEN

site address
435 HORIZON DRIVE
SUWANEE, GEORGIA

drawing title
ETHERNET
SWITCH A
LINE 1

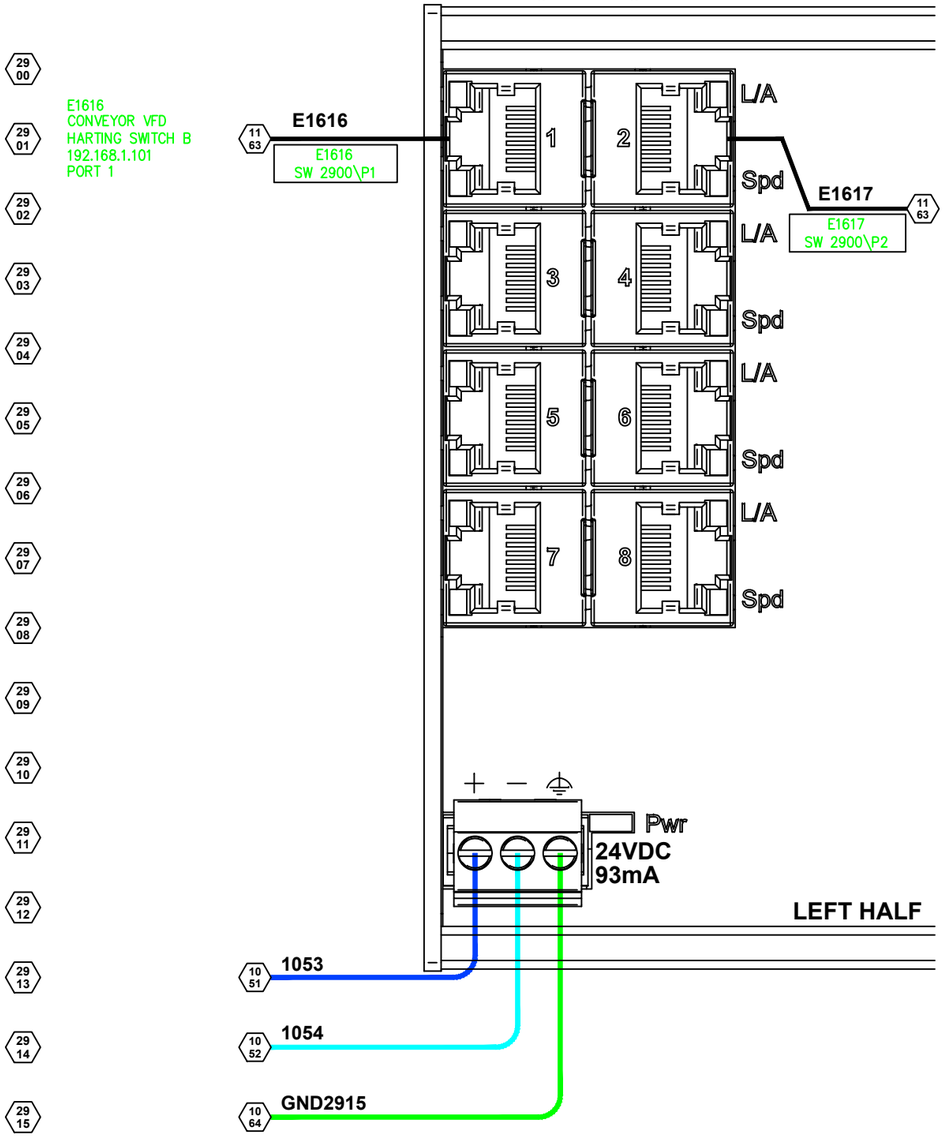
drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC028
2023-02-24

ETHERNET SWITCH B

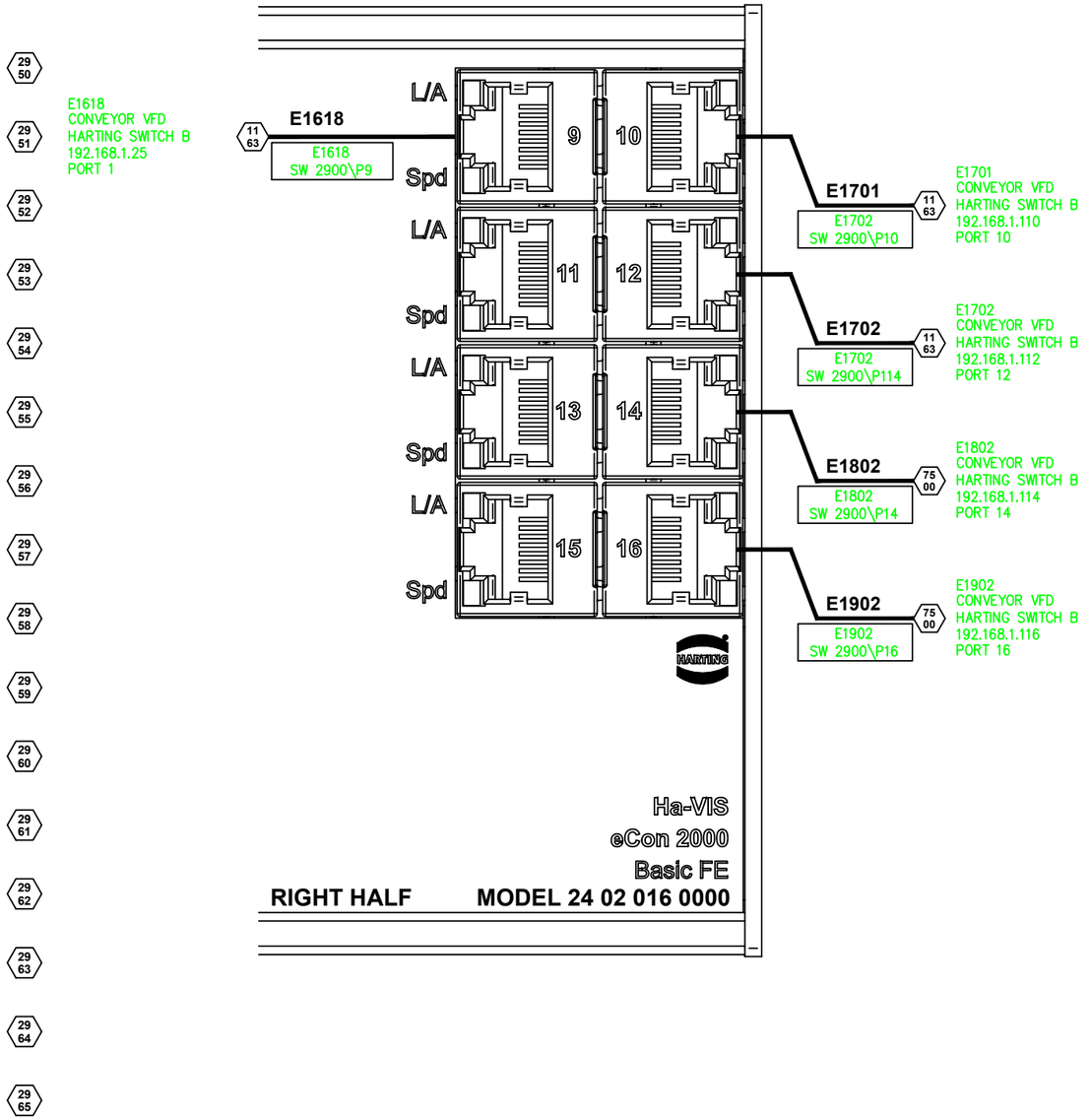
ESW 2900

Harting Unmanaged 16 Port Ethernet Switch



ESW 2900

Harting Unmanaged 16 Port Ethernet Switch



CALDWELL ELECTRICAL CONTRACTORS
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GAINESVILLE, GA 30507
PHONE: (770) 531-7890
FAX: (770) 531-7817

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submittals

No.	Date	Description

revisions

No.	Date	Description

engineer's seal

project name
CECIL PROJECT
SUZANNA'S
KITCHEN

designed for
SUZANNA'S
KITCHEN

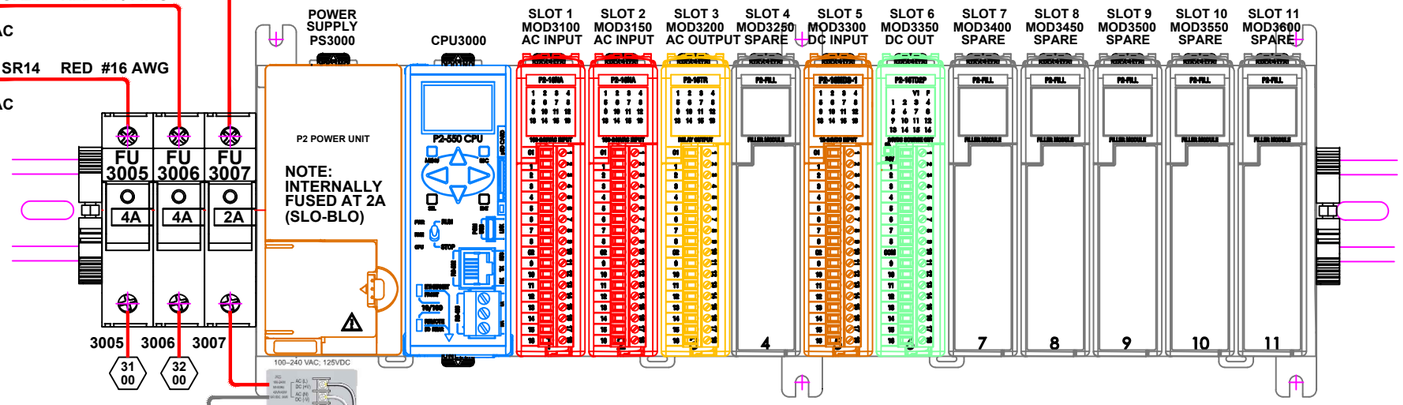
site address
435 HORIZON DRIVE
SUWANEE, GEORGIA

drawing title
ETHERNET
SWITCH B
LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC029
2023-02-24

PLC RACK LAYOUT
AUTOMATIONDIRECT P2000 SERIES



SEE SHEET 39 FOR TERMINAL CONNECTION CABLE DETAILS
SEE SHEET 73 FOR TERMINALS AND CONNECTION DETAILS

CALDWELL ELECTRICAL CONTRACTORS
2334 DANBURY LANE
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submittals

No.	Date	Description

revisions

No.	Date	Description
.	.	.

engineer's seal

project name
CECIL PROJECT SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

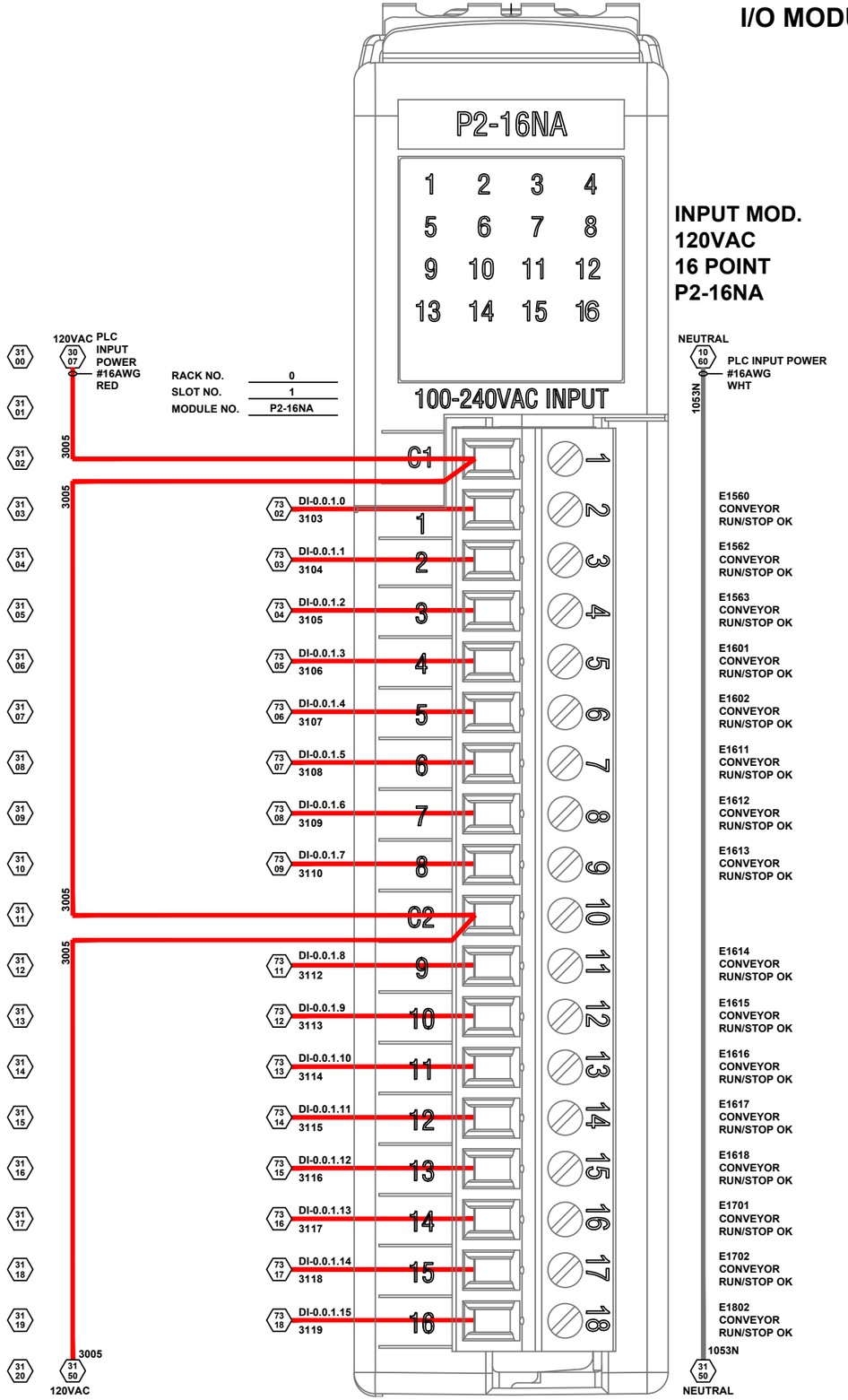
site address
435 HORIZON DRIVE SUWANEE, GEORGIA

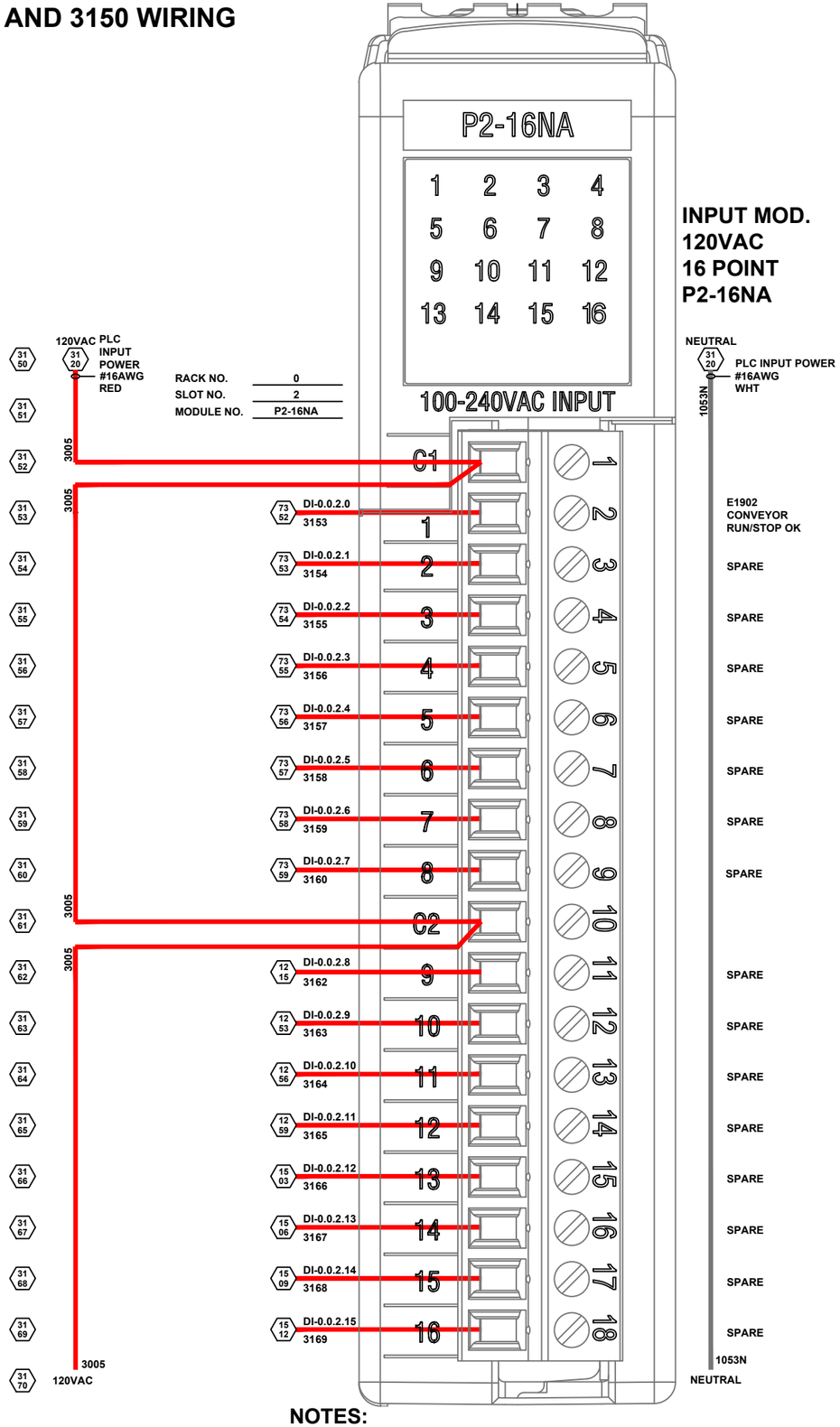
drawing title
PLC RACK LAYOUT LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC030
2023-02-24

I/O MODULES 3100 AND 3150 WIRING





NOTES:

1. Do not connect more than 2 wires to any single terminal.
2. This wiring example shows a single voltage source.

CALDWELL ELECTRICAL CONTRACTORS
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GAINESVILLE, GA 30507
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consultant

submittals

No.	Date	Description

revisions

No.	Date	Description

engineer's seal

project name
CECIL PROJECT SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

site address
435 HORIZON DRIVE SUWANEE, GEORGIA

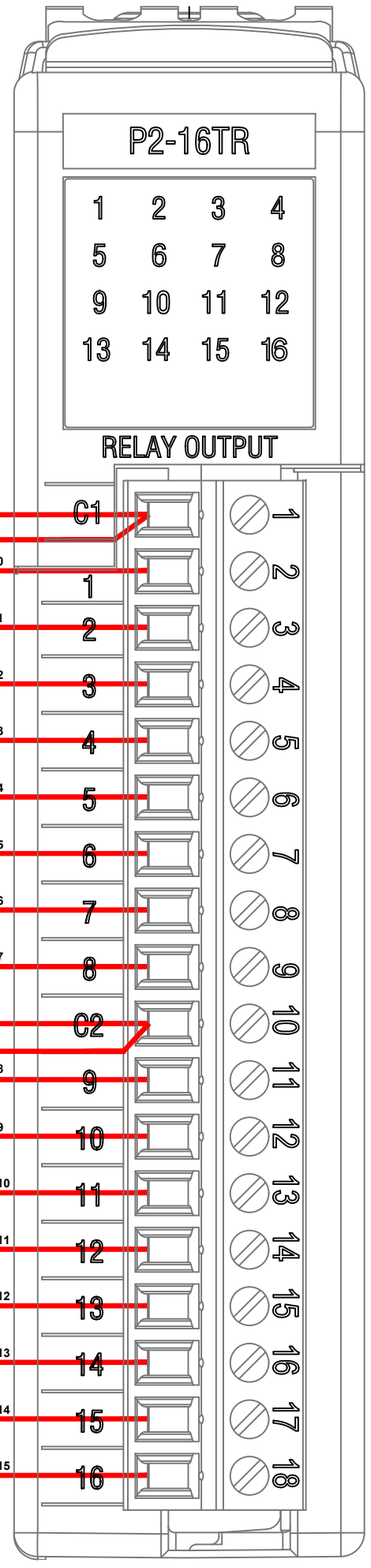
drawing title
TYPICAL I/O WIRING LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC031

2023-03-24

I/O MODULES 3200 AND 3250 WIRING



OUTPUT MOD.
120VAC
16 POINT
P2-16TR

RACK NO. 0
SLOT NO. 3
MODULE NO. P2-16TR

32 00 — 120VAC — 30 07 — PLC OUTPUT POWER #16AWG RED — 3006
32 01
32 02 — 3006
32 03 — 3006
32 04
32 05
32 06
32 07
32 08
32 09
32 10 — 3006
32 11
32 12 — 3006
32 13
32 14
32 15
32 16
32 17
32 18
32 19
32 20 — 32 50 — 120VAC — 3006

73 72	DO-0.0.3.0 3203	C1
73 73	DO-0.0.3.1 3204	1
73 74	DO-0.0.3.2 3205	2
73 75	DO-0.0.3.3 3206	3
73 76	DO-0.0.3.4 3207	4
73 77	DO-0.0.3.5 3208	5
73 78	DO-0.0.3.6 3209	6
73 79	DO-0.0.3.7 3210	7
		C2
73 81	DO-0.0.3.8 3212	8
73 82	DO-0.0.3.9 3213	9
73 83	DO-0.0.3.10 3214	10
73 84	DO-0.0.3.11 3215	11
73 85	DO-0.0.3.12 3216	12
73 86	DO-0.0.3.13 3217	13
73 87	DO-0.0.3.14 3218	14
73 88	DO-0.0.3.15 3219	15
		16

NEUTRAL — 10 61 — PLC INPUT POWER #16AWG WHT — 1053N

32 00	E1564 OPEN GATE 1 COMMAND	1
32 01	E1565 OPEN GATE 2 COMMAND	2
32 02	E1566 OPEN GATE 3 COMMAND	3
32 03	E1567 OPEN GATE 4 COMMAND	4
32 04	E1568 OPEN GATE 5 COMMAND	5
32 05	SPARE	6
32 06	SPARE	7
32 07	SPARE	8
		C2
32 08	SPARE	9
32 09	SPARE	10
32 10	SPARE	11
32 11	E1621A OPEN GATE 1A SV	12
32 12	E1621B OPEN GATE 1B SV	13
32 13	E1721 OPEN GATE 2 SV	14
32 14	E1821 OPEN GATE 3 SV	15
32 15	E1921 OPEN GATE 4 SV	16
		17
		18

1053N — 32 50 — NEUTRAL

32 50 — 120VAC — 32 20 — PLC OUTPUT POWER #16AWG RED — 3006
32 51 — 3006
32 52 — 3006
32 53 — 3006
32 54 — 3006
32 55 — 3006
32 56 — 3006
32 57 — 3006
32 58 — 3006
32 59 — 3006
32 60 — 3006
32 61 — 3006
32 62 — 3006
32 63 — 3006
32 64 — 3006
32 65 — 3006
32 66 — 3006
32 67 — 3006
32 68 — 3006
32 69 — 3006
32 70 — 120VAC — 15 00 — 3006

NEUTRAL — 32 20 — PLC INPUT POWER #16AWG WHT — 1053N
1053N — 15 00 — NEUTRAL

NOTES:

1. Do not connect more than 2 wires to any single terminal.
2. This wiring example shows a single voltage source.

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No.	Date	Description

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No.	Date	Description
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engineer's seal

project name
CECIL PROJECT SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

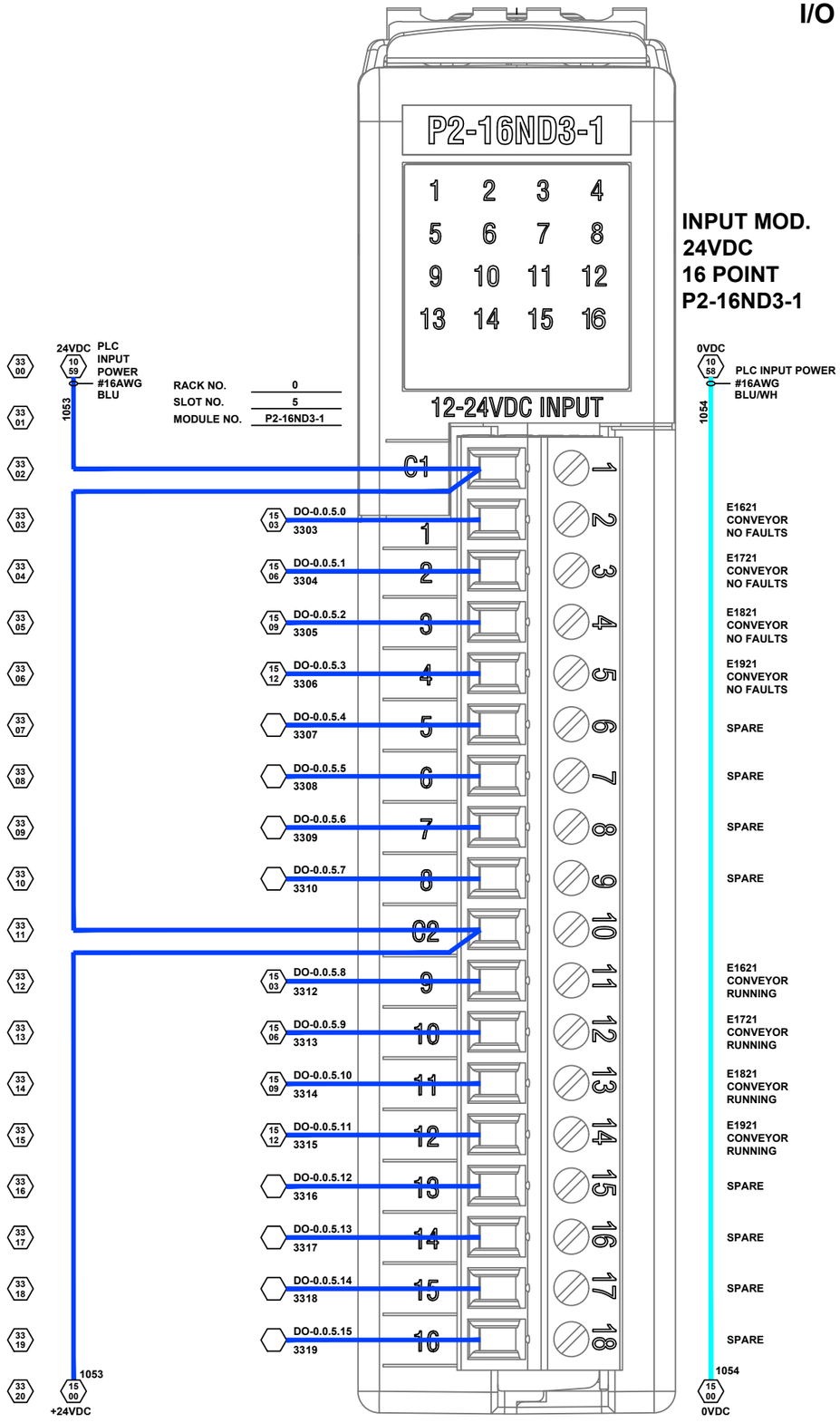
site address
435 HORIZON DRIVE SUWANEE, GEORGIA

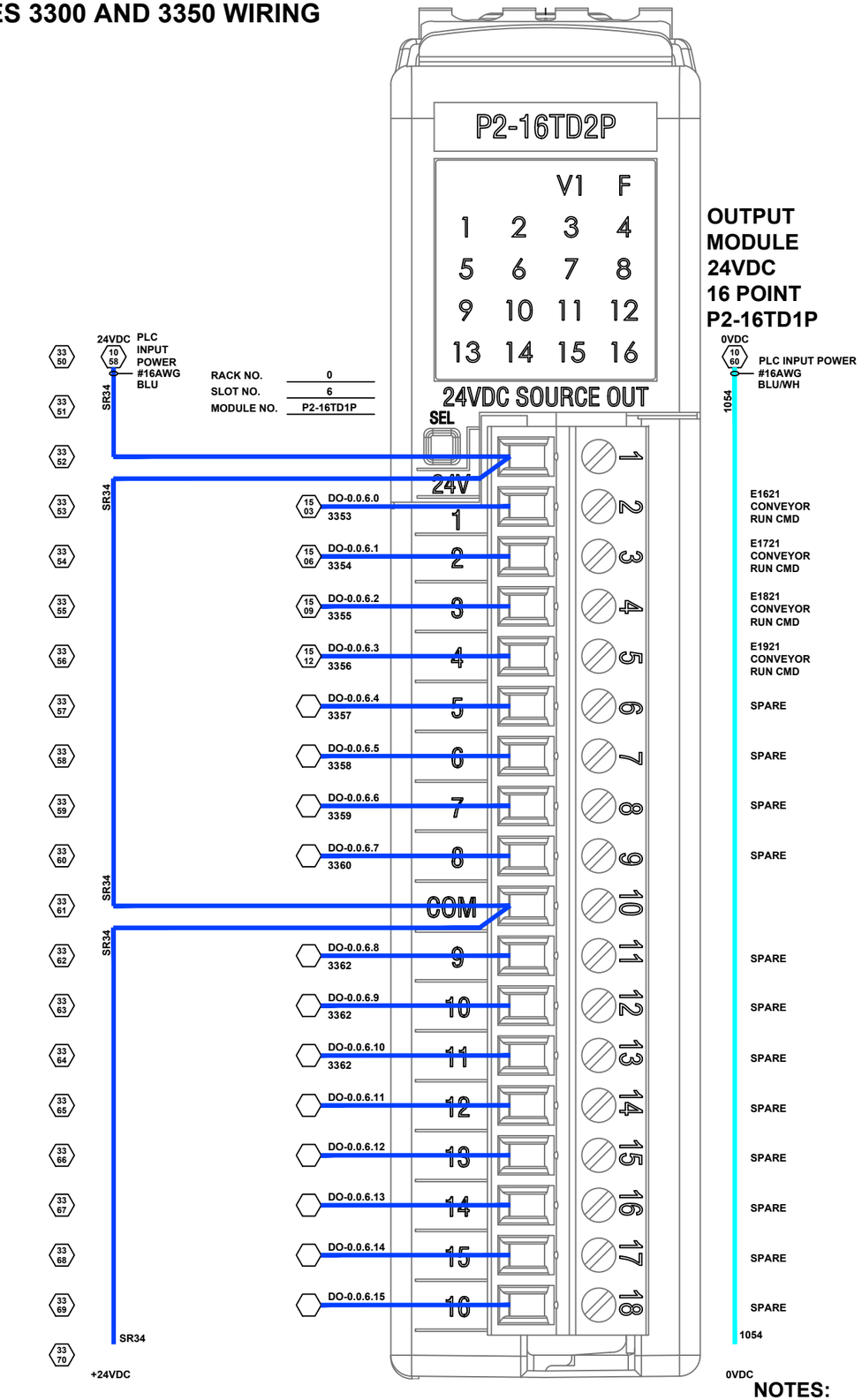
drawing title
TYPICAL I/O WIRING LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC032
2023-02-24

I/O MODULES 3300 AND 3350 WIRING





NOTES:

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engineer's seal

project name
CECIL PROJECT SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

site address
435 HORIZON DRIVE SUWANEE, GEORGIA

drawing title
TYPICAL I/O WIRING LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC033

2023-02-24

I/O MODULES 3400 AND 3450 WIRING

34 00

34 01

34 02

34 03

34 04

34 05

34 06

34 07

34 08

34 09

34 10

34 11

34 12

34 13

34 14

34 15

34 16

34 17

34 18

34 19

34 20

34 50

34 51

34 52

34 53

34 54

34 55

34 56

34 57

34 58

34 59

34 60

34 61

34 62

34 63

34 64

34 65

34 66

34 67

34 68

34 69

34 70

NOTES:

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2. This wiring example shows a single voltage source.

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engineer's seal

project name
CECIL PROJECT SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

site address
435 HORIZON DRIVE SUWANEE, GEORGIA

drawing title
TYPICAL I/O WIRING LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC034
2023-02-24

I/O MODULES 3500 AND 3550 WIRING

35 00

35 01

35 02

35 03

35 04

35 05

35 06

35 07

35 08

35 09

35 10

35 11

35 12

35 13

35 14

35 15

35 16

35 17

35 18

35 19

35 20

35 50

35 51

35 52

35 53

35 54

35 55

35 56

35 57

35 58

35 59

35 60

35 61

35 62

35 63

35 64

35 65

35 66

35 67

35 68

35 69

35 70

NOTES:

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2. This wiring example shows a single voltage source.

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engineer's seal

project name
CECIL PROJECT SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

site address
435 HORIZON DRIVE SUWANEE, GEORGIA

drawing title
TYPICAL I/O WIRING LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC035
2023-02-24

I/O MODULE 3600 WIRING

36 00

36 01

36 02

36 03

36 04

36 05

36 06

36 07

36 08

36 09

36 10

36 11

36 12

36 13

36 14

36 15

36 16

36 17

36 18

36 19

36 20

36 50

36 51

36 52

36 53

36 54

36 55

36 56

36 57

36 58

36 59

36 60

36 61

36 62

36 63

36 64

36 65

36 66

36 67

36 68

36 69

36 70

NOTES:

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2. This wiring example shows a single voltage source.

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revisions

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engineer's seal

project name
CECIL PROJECT SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

site address
435 HORIZON DRIVE SUWANEE, GEORGIA

drawing title
I/O MODULE WIRING LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC036
2023-02-24

ZL-P2-CBL18-1P IO MODULE TO PIGTAIL CABLE DETAILS

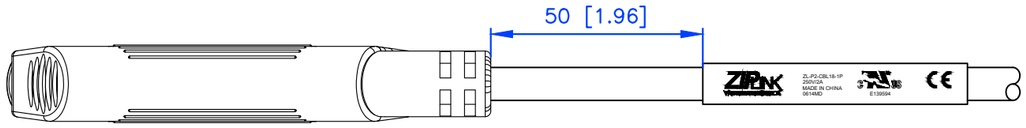
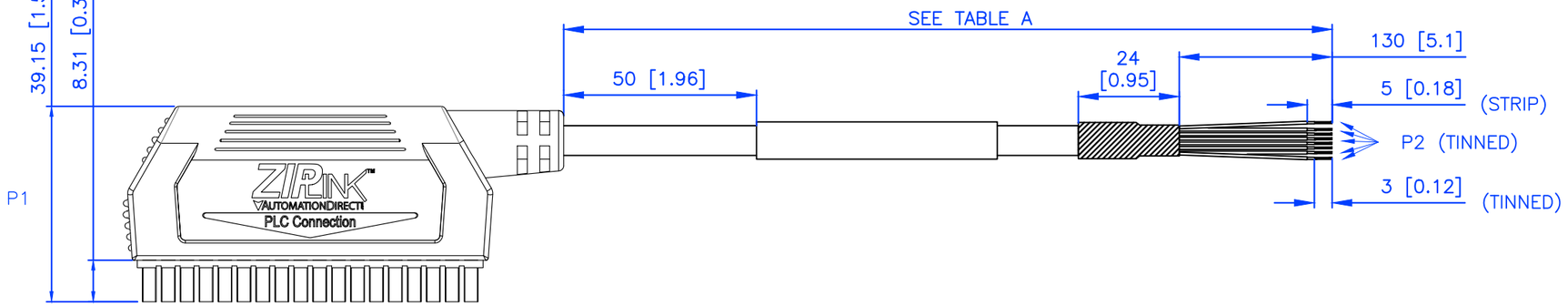


TABLE A

PART NO	LENGTH
ZL-P2-CBL18-1P	1.0m [3.3 ft]
ZL-P2-CBL18-2P	2.0m [6.6 ft]



PIN–OUT DIAGRAM

P1	P2	P1	P2
1	BLACK / BLACK/WHITE	10	YELLOW / YELLOW/BLACK
2	RED	11	LIGHT GREEN
3	ORANGE	12	LIGHT BLUE
4	GREEN	13	PINK
5	PURPLE	14	GRAY/BLACK
6	RED/WHITE	15	GREEN/BLACK
7	ORANGE/WHITE	16	WHITE
8	GREEN/WHITE	17	RED/BLACK
9	PURPLE/WHITE	18	ORANGE/BLACK

CUT AND INSULATE 4 WIRES

NOTES:
1. CABLE – 24 conductor, 24 AWG, PVC jacket insulation rating 80°C (176°F), 300V
2. CURRENT – 2A per conductor, 40A maximum cable current
3. VOLTAGE –
   240V AC/DC rated operating voltage
   265V AC/DC maximum voltage
4. OPERATING TEMPERATURE – 0–60°C (32–140°F)
5. P1 CONNECTOR – 18–pin terminal block for Productivity 2000 PLC
6. P2 CONNECTION – 24 tinned pig–tail leads (only 20 leads are connected to P1, per cable pin–out diagram)
7. MINIMUM BEND RADIUS – 65.6 mm [2.58 in]

NOTES:
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2. This wiring example shows a single voltage source.

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project name
CECIL PROJECT SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

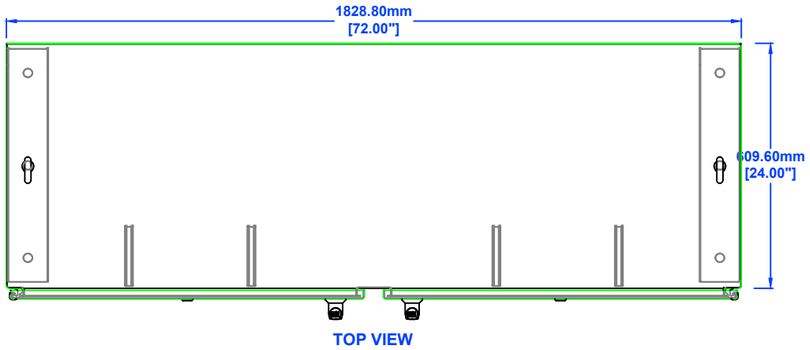
site address
435 HORIZON DRIVE SUWANEE, GEORGIA

drawing title
ZL-P2-CBL18-1P IO MODULE TO PIGTAIL CABLE DETAILS LINE 1

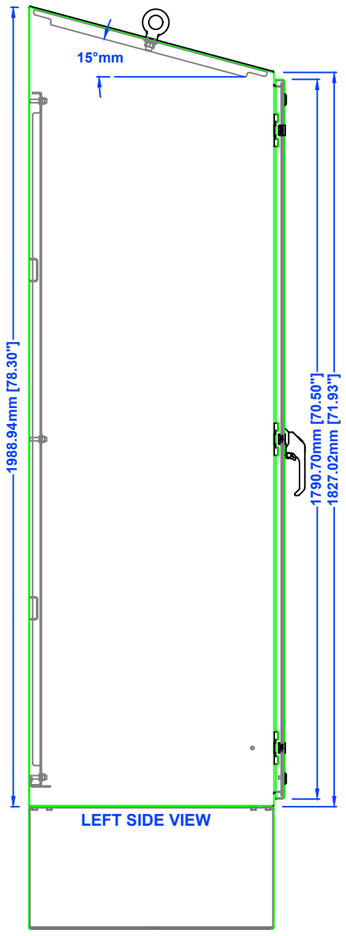
drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC039
2023-02-24

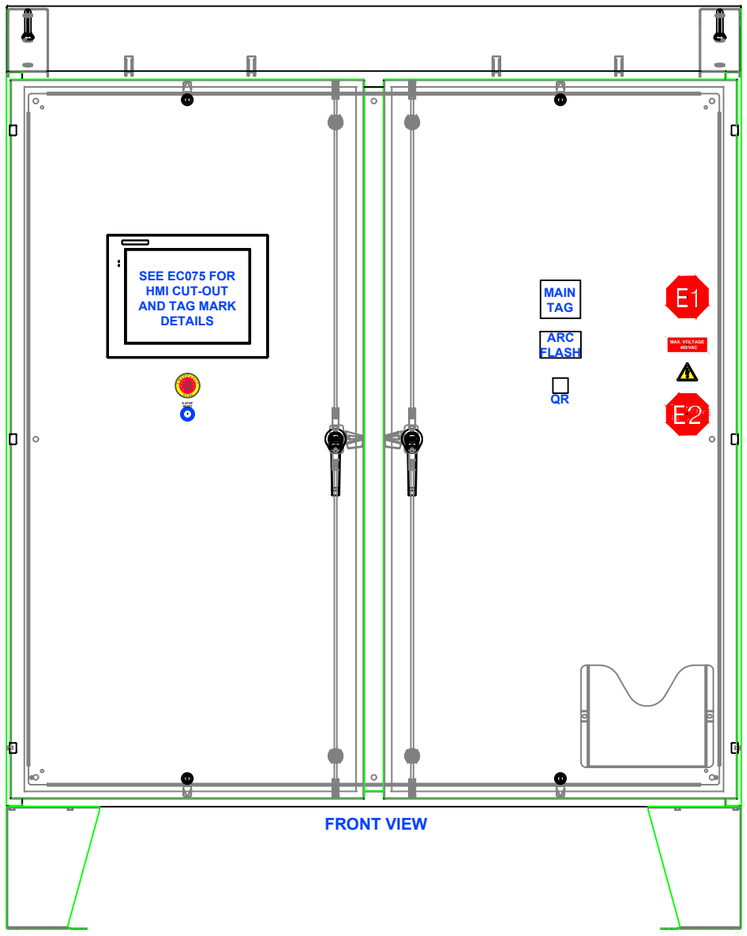
SAGINAW CONTROL & ENGINEERING
SCE-72EL7224SSST



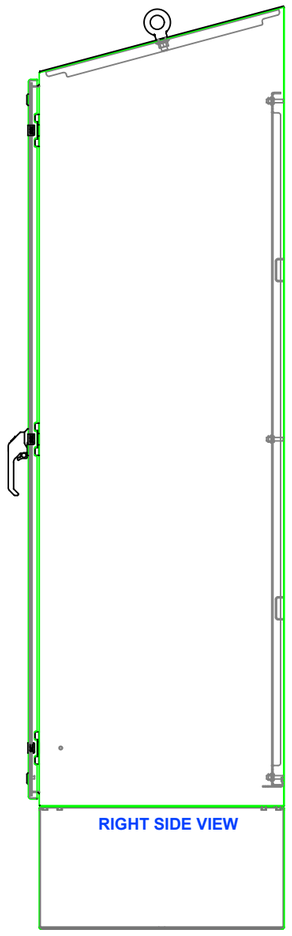
TOP VIEW



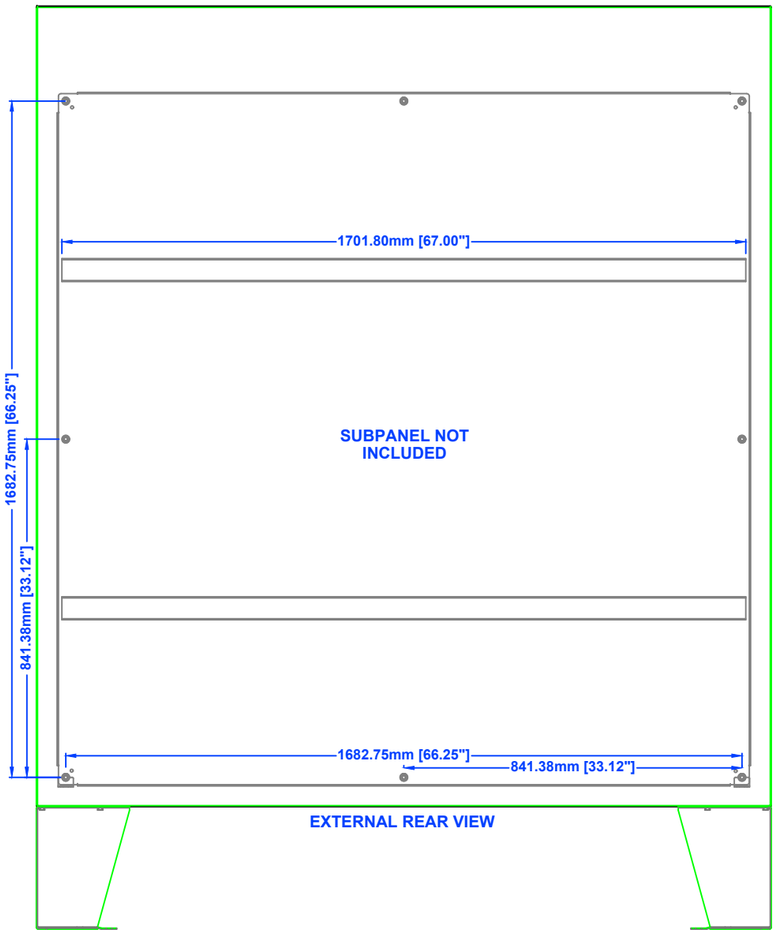
LEFT SIDE VIEW



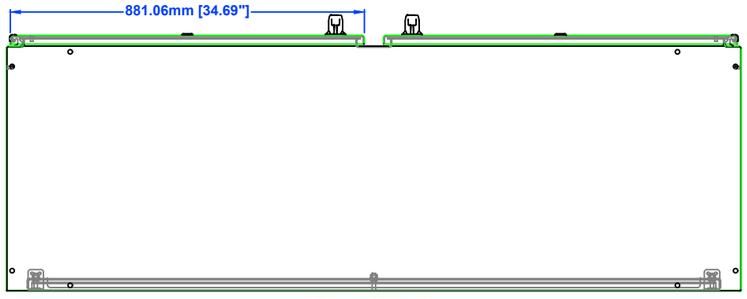
FRONT VIEW



RIGHT SIDE VIEW



EXTERNAL REAR VIEW



BOTTOM VIEW

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revisions

No.	Date	Description
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engineer's seal

project name
**CECIL PROJECT
SUZANNA'S
KITCHEN**

designed for
**SUZANNA'S
KITCHEN**

site address
**435 HORIZON DRIVE
SUWANEE, GEORGIA**

drawing title
**17 VFD + HMI
ENCLOSURE
EXTERIOR
LINE 1**

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC070
2023-02-24

ENCLOSURE HEAT CALCULATIONS

TOTAL SURFACE AREA:

FRONT-BACK	= 2 X 72 X 72 =	10,368
SIDE-SIDE	= 2 X 72 X 24 =	3,456
TOP-BOTTOM	= 1 X 72 X 24 =	1,728
SUBTOTAL	=	= 15,552 IN^2
BLOCKED SURFACE AREA, -60		= 15,492 IN^2
CONVERT TO SQ FT, /144		= 107.583 FT^2
CONVERT TO SQ METER, /10.762	=	9.997 M^2 = A

MAX PANEL INTERIOR TEMPERATURE:
Tmax = 122°F = 50.000°C

DISCONNECT SWITCH MOUNTED ON RIGHT WALL IN FRONT OF PDB

MAX PLANT AMBIENT TEMPERATURE:
Ta = 45.0°F = 7.222°C

HEAT DISSIPATED BY ENCLOSURE:
Pv = (Tmax - Ta) * 3.7 * A
Pv = (50.000 - 7.222) * 3.7 * 9.997
Pt = 42.778 * 3.7 * 9.997 = 1,582.247 WATTS
Pt = 1,582.247 WATTS * 3.41 = 5,395.461 BTU/HR

NOTE: 3.41 IS TO CONVERT WATTS TO BTU/HR
3.7 IS COEFFICIENT FOR STAINLESS STEEL
5.5 IS COEFFICIENT FOR PAINTED STEEL
12 IS COEFFICIENT FOR ALUMINUM

HEAT GENERATED BY EQUIPMENT/COMPONENTS:

1 x 24VDC, CS10.241	=	1 x 23.700W	=	23.70W
1 x PLC BASE, P2-04B	=	1 x 3.000W	=	3.00W
1 x PLC BASE, P2-11B	=	1 x 3.000W	=	3.00W
2 x PLC PS, P2-01AC	=	1 x 8.400W	=	16.80W
1 x PLC MODULE, P2-550	=	1 x 3.810W	=	3.81W
1 x REMOTE , P2-RS	=	1 x 3.800W	=	3.80W
4 x INPUT, P2-16ND3-1	=	4 x 0.400W	=	1.60W
2 x OUTPUT, P2-16TD2P	=	2 x 2.600W	=	5.20W
2 x mA OUT, P2-16DA-1	=	2 x 0.096W	=	0.19W
2 x INPUT, P2-16NA	=	2 x 0.600W	=	1.20W
1 x OUTPUT, P2-16TR	=	1 x 2.730W	=	2.73W
		PLC TOTAL WATTS	=	65.03W

PLC GENERATED HEAT = 65.03W * 3.41 = 221.752 BTU/HR

4 x 1HP WEG MMS	=	4 x 7.00W)	=	28.00W
4 x 1HP STARTER+POLE	=	4 x 2.70W+3(0.7W))	=	19.20W
		STARTER TOTAL WATTS	=	42.40W

STARTER GENERATED HEAT = 47.20W * 3.41 = 160.952 BTU/HR

10 x 1HP WEG VFD +MMS	=	10 x (45.00W+7.0W)	=	520.00W
7 x 2HP WEG VFD +MMS	=	7 x (65.00W+7.0W)	=	504.00W
		VFD TOTAL WATTS	=	1,024.00W

VFD GENERATED HEAT = 1,024.00W * 3.41 = 3,491.84 BTU/HR

GRAND TOTAL GENERATED HEAT
TOTAL GENERATED HEAT = 3,874.544 BTU/HR

NET HEAT DISSIPATION:
Pt = 5,395.461 BTU/HR - 3,874.544 BTU/HR = 1,520.917 BTU/HR
CLIMATE CONTROL REQUIRED = NO

NOTE:
IF 3 MORE 2HP VFDs ARE ADDED

3 x 2HP WEG VFD +MMS	=	3 x (65.0W+7.0W)	=	216.00W

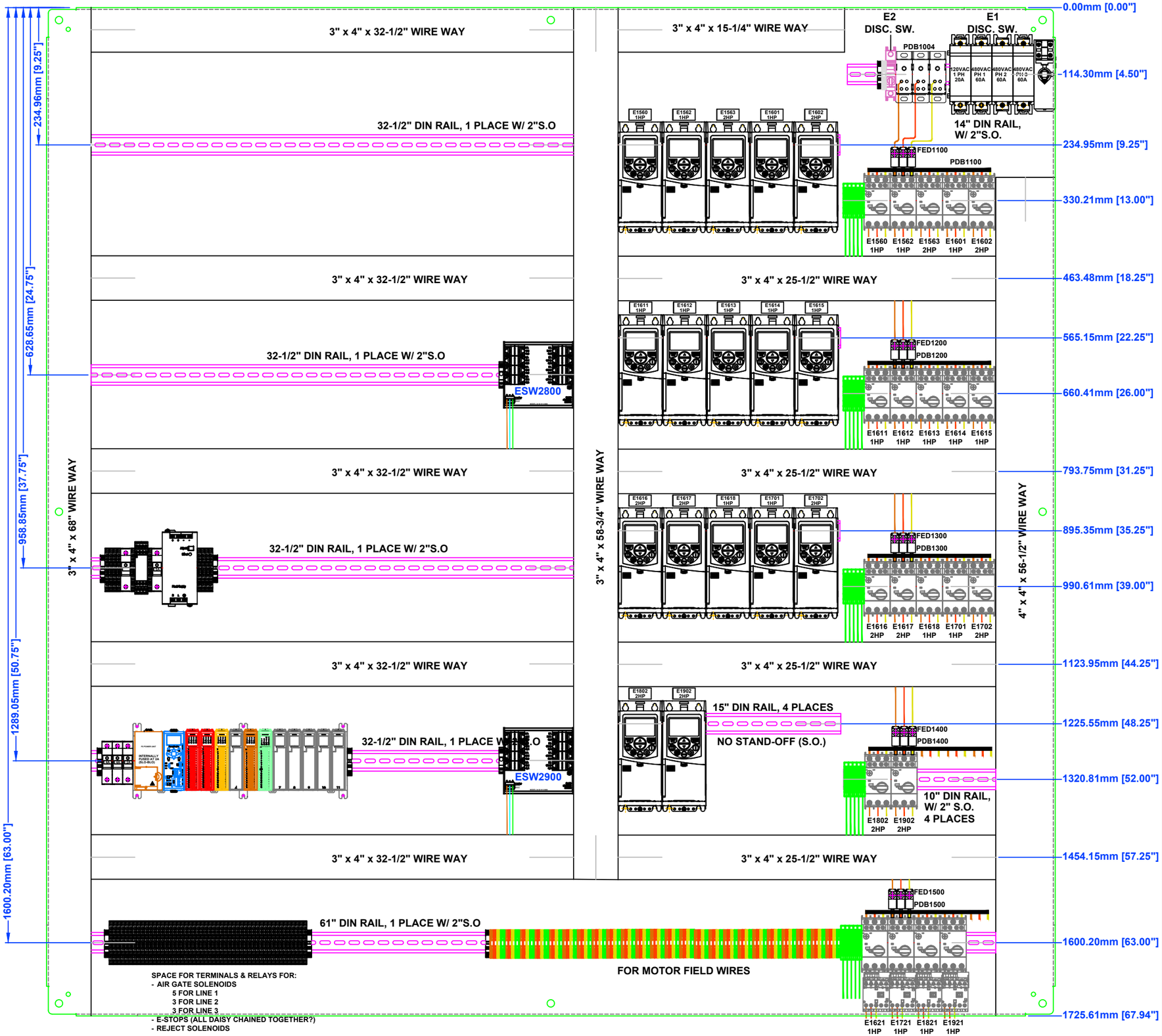
TOTAL GENERATED HEAT = 216.00W * 3.41 = 736.56 BTU/HR

GRAND TOTAL GENERATED HEAT =

ORIGINAL HEAT TOTAL	= 3,874.544 BTU/HR
FUTURE HEAT TOTAL	+ 736.560 BTU/HR
FUTURE GRAND TOTAL	= 4,611.104 BTU/HR

CLIMATE CONTROL REQUIRED = NO

NOTES:
- **EACH STARTER/VFD HAS ITS OWN GROUND TERMINAL SO THAT ALL FOUR FIELD WIRES CAN BE LANDED AT THEIR STARTER/VFD. THE FIELD CABLE CAN REMAIN JACKETED UP TO THE STARTER/VFD TO MAKE INSTALLATION AND TROUBLESHOOTING EASIER.**
- **IF A PLC, THE MANUFACTURER WILL HAVE GROUNDED IT THROUGH THE DIN RAIL.**
- **ALL DIN RAIL MUST BE ZINC-PLATED CHROMATE- PASSIVATED STEEL BECAUSE IT ALSO FUNCTIONS AS THE GROUND BAR EVERYWHERE !**
  ALUMINUM IS NOT ACCEPTABLE BECAUSE IT CORRODES. IT CAN BE CORRODED EVEN WHEN IT DOESN'T LOOK LIKE IT !



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revisions

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project name
CECIL PROJECT SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

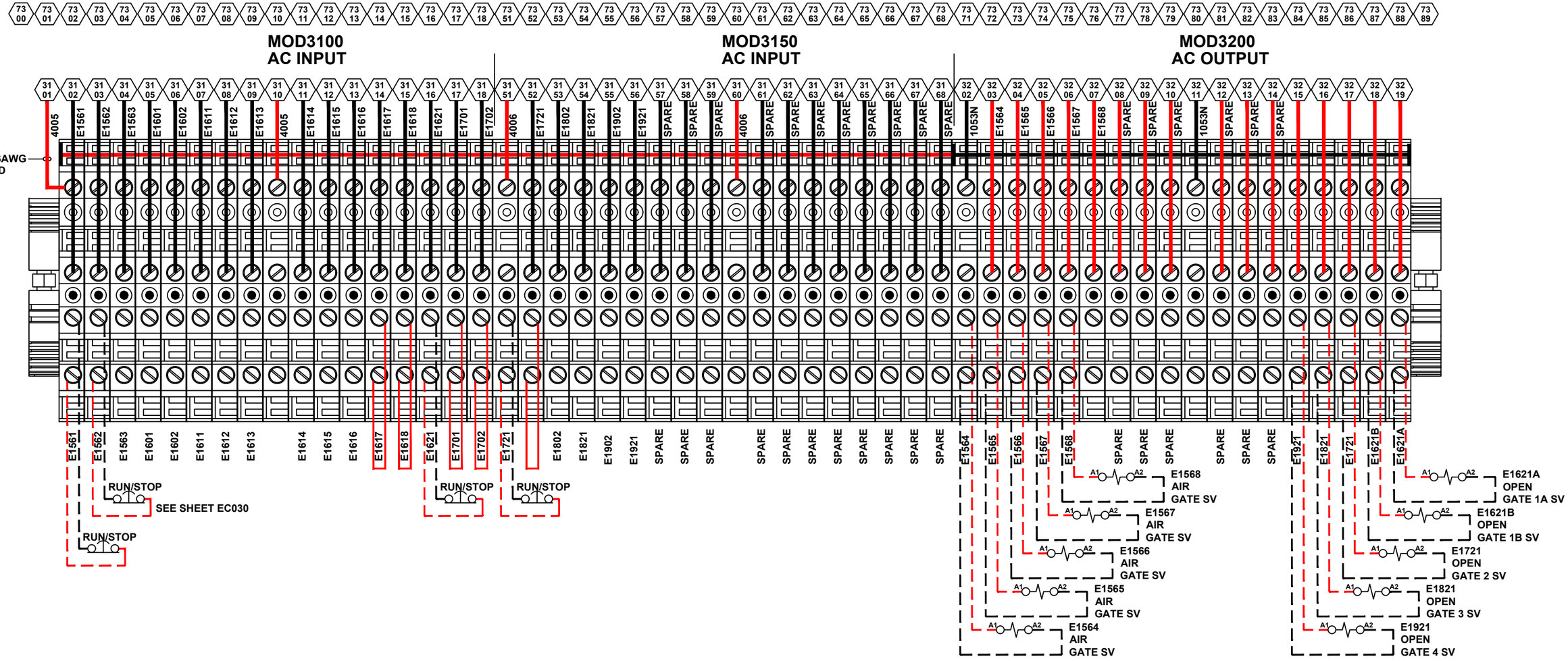
site address
435 HORIZON DRIVE SUWANEE, GEORGIA

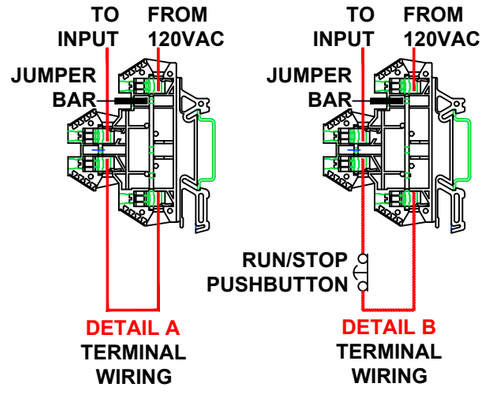
drawing title
17 VFD+PLC+ ENCLOSURE INTERIOR 90X36 PNL LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC071
2023-02-24

TERMINAL ROTATION





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engineer's seal

project name
**CECIL PROJECT
SUZANNA'S
KITCHEN**

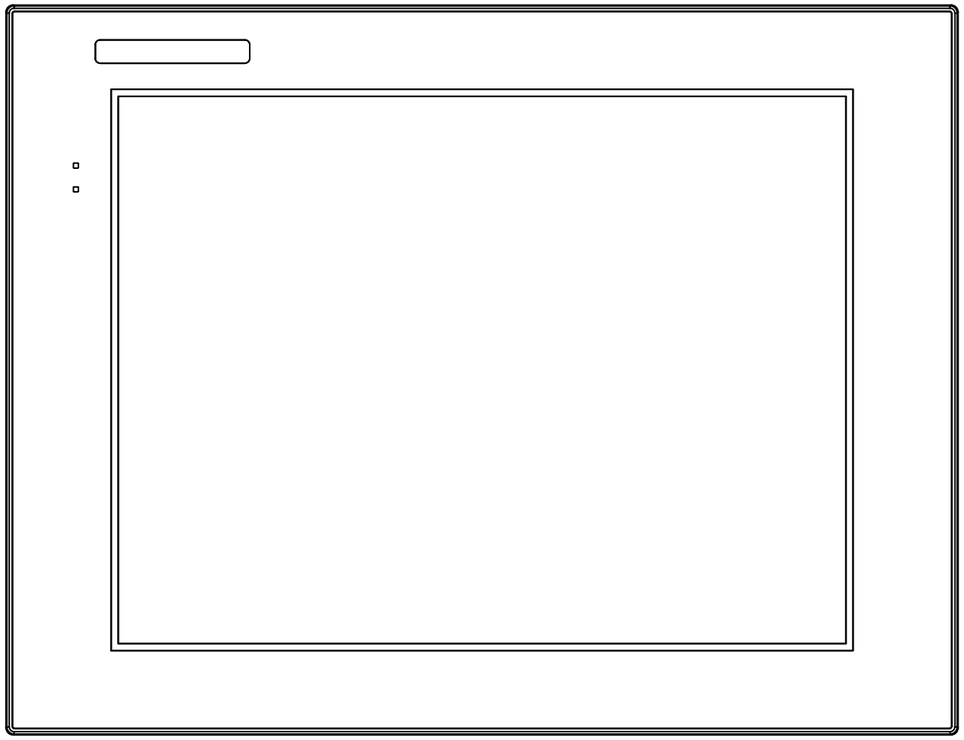
designed for
**SUZANNA'S
KITCHEN**

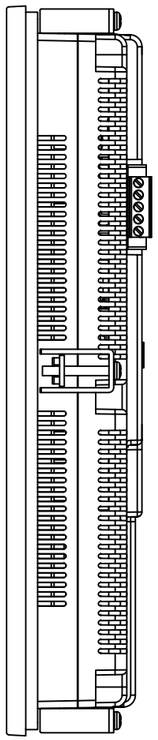
site address
**435 HORIZON DRIVE
SUWANEE, GEORGIA**

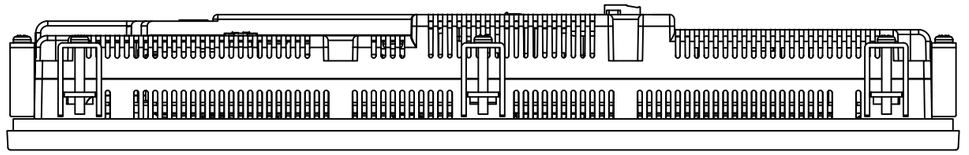
drawing title
**TERMINAL
ROTATION
LINE 1**

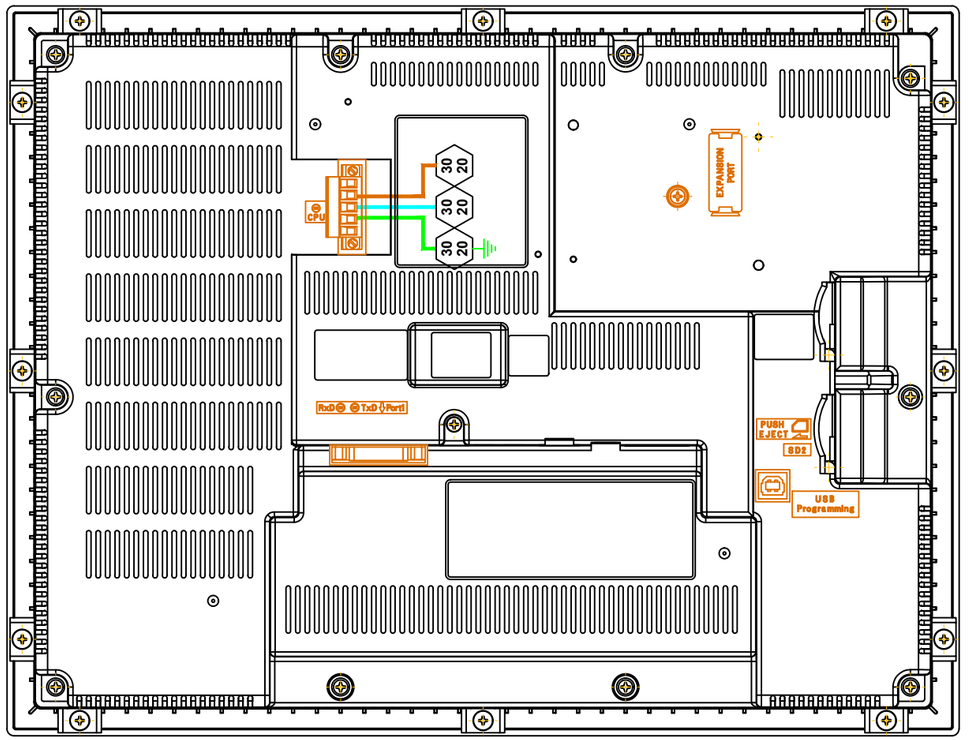
drawn by	chkd by	project no.
DAF	DAF	E22-3863

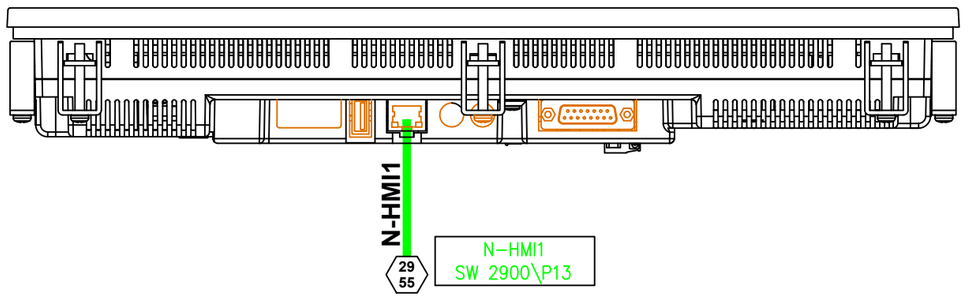
drawing no.
EC073
2023-02-24











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submittals

No.	Date	Description

revisions

No.	Date	Description
1	2022-02-23	Replaced 12" HMI with 15"

engineer's seal

project name
CECIL PROJECT
SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

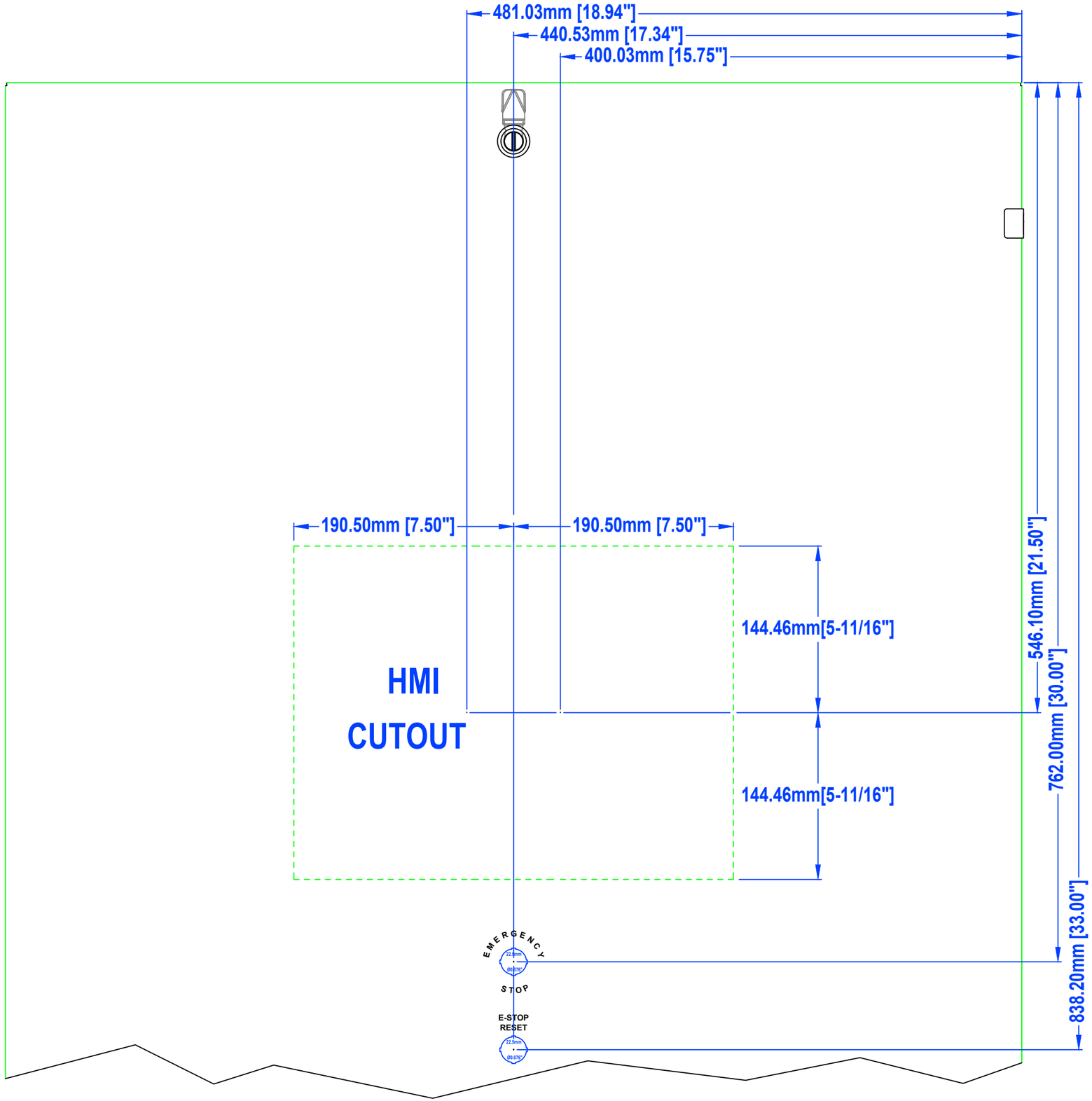
site address
435 HORIZON DRIVE
SUWANEE, GEORGIA

drawing title
HMI - MAIN ENCLOSURE

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC074
2022-05-03

LEFT DOOR HMI CUT-OUT DIMENSIONS



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KITCHEN

designed for
SUZANNA'S
KITCHEN

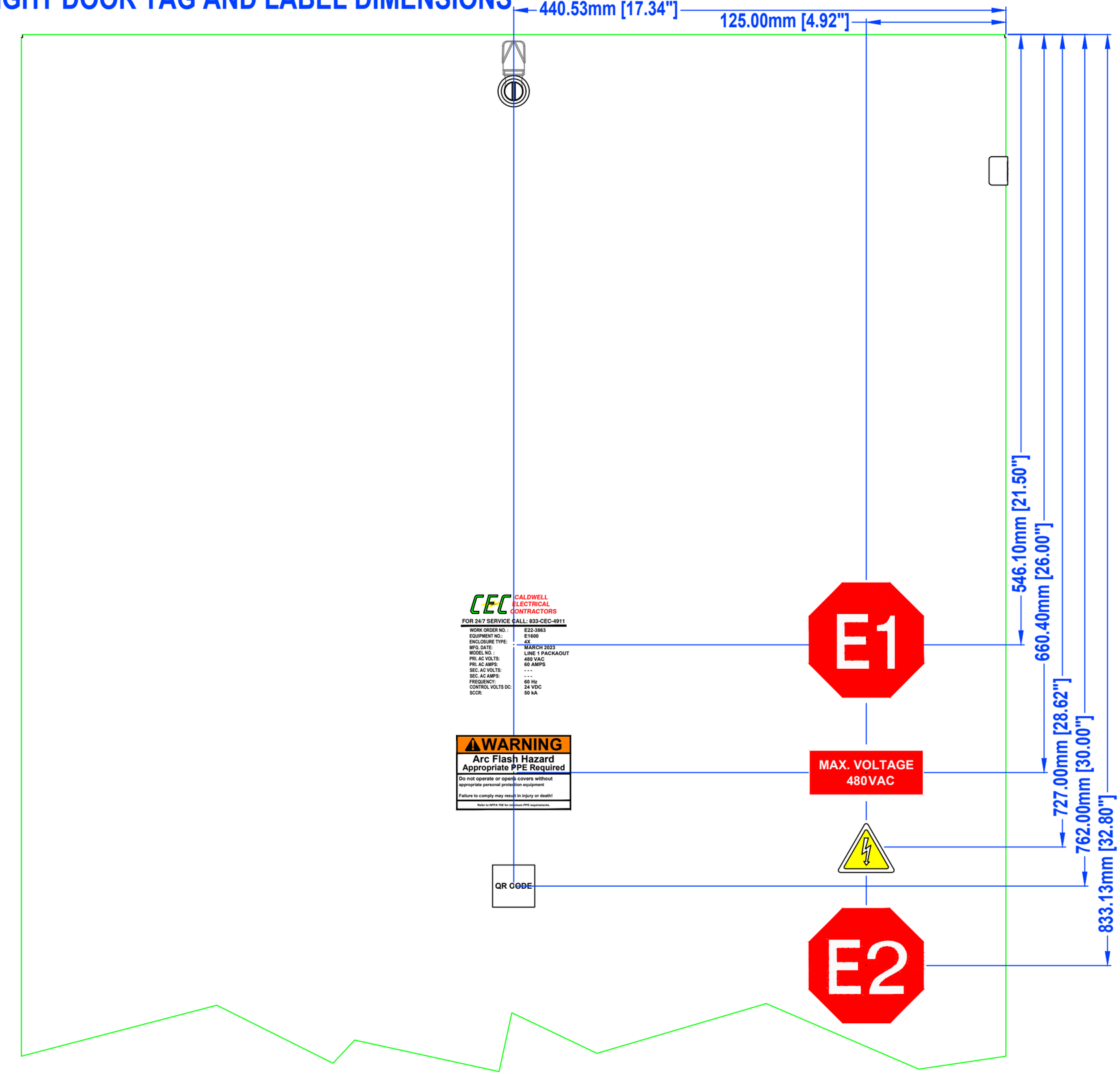
site address
435 HORIZON DRIVE
SUWANEE, GEORGIA

drawing title
HMI CUT-OUT
AND STOP PB
DETAILS

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC075
2023-02-20

RIGHT DOOR TAG AND LABEL DIMENSIONS



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engineer's seal

project name
CECIL PROJECT SUZANNA'S KITCHEN

designed for
SUZANNA'S KITCHEN

site address
435 HORIZON DRIVE SUWANEE, GEORGIA

drawing title
MAIN TAG, ARC FLASH, AND QR DETAILS

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC076
2023-02-21

E22-3863 SUZANNA'S KITCHEN 3 - SUMMARY BILL OF MATERIAL, 1 OF 1

Line 1 Qty	Manufacturer Name	Manufacturer's Part No.	Description	Supplier Name	Supplier Part No.	UL List No.	UL Product IQ Link
1	SAGINAW	SEC-72EL7224SSST	ENCLOSURE, 72"H X 72"W X 24"D, STAINLESS STEEL, 2-DOOR, SLOPED TOP	BOSWELL	SEC-72EL7224SSST	E69392	https://iq.ulprospector.com/en/profile?e=1853912
1	SAGINAW	SEC-7272P	SUB-PANEL, 72"H X 72"W, STEEL	BOSWELL	SEC-7272P	E69392	
1	SAGINAW	SCE-FK1224SS	FLOOR STAND 12H x 24D	BOSWELL	SCE-FK1224SS	E69392	
1	EATON OR EQUAL	38616005	DISCONNECT, 60A, 4 POLE	AUTOMATIONDIRECT	38616005	E201138	
1	EATON OR EQUAL	14001020	DISCONNECT HANDLE ROD	AUTOMATIONDIRECT	14001020	E201138	https://iq.ulprospector.com/en/profile?e=1327402
1	EATON OR EQUAL	141E2115	DISCONNECT HANDLE	AUTOMATIONDIRECT	141E2115	E201138	
3	EDISON OR EQUAL	EPDB306	POWER DISTRIBUTION BLOCK, 1X6	AUTOMATIONDIRECT	EPDB306	E256146	https://iq.ulprospector.com/en/profile?e=135244
5	EDISON OR EQUAL	EHCC1DU	FUSE HOLDER, CLASS CC, 1 POLE	AUTOMATIONDIRECT	EHCC1DU	E300536	https://iq.ulprospector.com/en/profile?e=2369789
2	EDISON OR EQUAL	EDCC4	FUSE, CLASS CC, 4A	AUTOMATIONDIRECT	EDCC4	E162363	
3	EDISON OR EQUAL	EDCC2	FUSE, CLASS CC, 2A	AUTOMATIONDIRECT	EDCC2	E162363	https://iq.ulprospector.com/en/profile?e=59940
1	PULS	CS10.241	POWER SUPPLY, 24VDC, 10A	DIGI-KEY	CS10.241	E137006	https://iq.ulprospector.com/en/profile?e=2546411
5	FUGI OR EQUAL	BZ0BR05A	BUSBAR, 3PH, 15 POLE, 64A, NOT CUTTABLE	AUTOMATIONDIRECT	BZ0BR05A	E163944	
5	FUGI OR EQUAL	BZ0BFRA	FEEDER, 3PH, 3 POLE, 64A, FOR BUSBAR	AUTOMATIONDIRECT	BZ0BFRA	E163944	https://iq.ulprospector.com/en/profile?e=81775
4	FUGI OR EQUAL	BZ0BCRA	COVER, BUSBAR OPEN SPACE	AUTOMATIONDIRECT	BZ0BCRA	E163944	
21	WEG	MPW40-3-U004	MANUAL MOTOR PROTECTOR 2.5-4.0A FOR 2HP, 480VAC, 3PH, 65kA	BOSWELL	MPW40-3-U004	E172121	
21	WEG	ACBF-11	MANUAL STARTER AUX CONTACT, N.O./N.C., FRONT MOUNT	BOSWELL	ACBF-11	E172121	
4	WEG	ECCMP-C0	LINK MODULE, MPW40 TO CWC07-CWC016	BOSWELL	ECCMP-C0	E172121	https://iq.ulprospector.com/en/profile?e=81782
4	WEG	CWC07-10-30L03	STARTER, UP TO 2HP, 3.4 FLA, 3.7A INRUSH, 24VDC COIL	BOSWELL	CWC07-10-30L03	E172121	
4	WEG	DIC0-1C33	STARTER SURGE SUPPRESSOR, DIODE	BOSWELL	DIC0-1C33	E172121	
10	WEG	CFW500A02P6T4NB20G2	VFD, 1HP, 480VAC, 3 PHASE, 3.2A	BOSWELL	15573714	E184430	
7	WEG	CFW500A04P3T4NB20G2	VFD, 2HP, 480VAC, 3 PHASE, 5.2A	BOSWELL	15573819	E184430	https://iq.ulprospector.com/en/profile?e=82530
17	WEG	CFW500-CETH-IP	ETHERNET I/O CARD	BOSWELL	12892814	E184430	
20	SAGINAW	SCE-1PBSSI	PUSHBUTTON ENCLOSURE, ONE OF 22mm HOLE, SCREW COVER, FOR RUN-STOP	AUTOMATIONDIRECT	SCE-1PBSSI	E69392	https://iq.ulprospector.com/en/profile?e=1853912
1	SCHMERSAL	NDRZ50RT-2905-1	E-STOP OPERATOR	AUTOMATIONDIRECT	NDRZ50RT-2905-1	E57648	https://iq.ulprospector.com/en/profile?e=79568
1	SCHMERSAL	EF103.1	(1) N.O. / (1) N.C. CONTACT BLOCK	AUTOMATIONDIRECT	EF103.1	E57648	
1	EATON OR EQUAL	E22VA8	E-STOP LEGEND	AUTOMATIONDIRECT	E22VA8	NONE	
20			RUN-STOP OPERATOR				
20			(1) N.O. / (1) N.C. CONTACT BLOCK				
20			PUSH-TO-STOP, PULL-TO-RUN LEGEND				

0	AUTOMATIONDIRECT	P2-11B	RACK 11 SLOT	AUTOMATIONDIRECT	P2-11B	E139594	
1	AUTOMATIONDIRECT	P2-04B	RACK 4 SLOT	AUTOMATIONDIRECT	P2-04B	E139594	
1	AUTOMATIONDIRECT	P2-01AC	POWER SUPPLY, PLC	AUTOMATIONDIRECT	P2-01AC	E139594	
1	AUTOMATIONDIRECT	P2-550	PLC	AUTOMATIONDIRECT	P2-550	E139594	
0	AUTOMATIONDIRECT	P2-RS	REMOTE COMMUNICATIONS	AUTOMATIONDIRECT	P2-RS	E139594	https://iq.ulprospector.com/en/profile?e=86375
0	AUTOMATIONDIRECT	P2-16ND3-1	24VDC INPUT CARD	AUTOMATIONDIRECT	P2-16ND3-1	E139594	
0	AUTOMATIONDIRECT	P2-16TD2P	24VDC OUTPUT CARD	AUTOMATIONDIRECT	P2-16TD2P	E139594	
0	AUTOMATIONDIRECT	P2-16DA-1	4-20mA ANALOG CURRENT OUTPUT CARD	AUTOMATIONDIRECT	P2-16DA-1	E139594	
2	AUTOMATIONDIRECT	P2-16NA	120VAC INPUT CARD	AUTOMATIONDIRECT	P2-16NA	E139594	
1	AUTOMATIONDIRECT	P2-16TR	120VAC OUTPUT CARD, RELAY	AUTOMATIONDIRECT	P2-16TR	E139594	
3	AUTOMATIONDIRECT	P2-RTB	I/O CARD TERMINAL	AUTOMATIONDIRECT	P2-RTB	NONE	
1	AUTOMATIONDIRECT	P2-FILL	I/O MODULE SLOT FILLER	AUTOMATIONDIRECT	P2-FILL	NONE	
0	AUTOMATIONDIRECT	ZL-RTB20-1	I/O TERMINAL FOR ANALOG	AUTOMATIONDIRECT	ZL-RTB20-1	E139594	
0	AUTOMATIONDIRECT	ZL-P2-CBL24	0.5M I/O CABLE, DOUBLE ENDED FOR ANALOG	AUTOMATIONDIRECT	ZL-P2-CBL24	E139594	https://iq.ulprospector.com/en/profile?e=86375
3	AUTOMATIONDIRECT	ZL-P2-CBL18-1P	I/O MODULE TO PIGTAIL CABLE FOR FIELD WIRING TO TERMINALS	AUTOMATIONDIRECT	ZL-P2-CBL18-1P	E139594	

2	HARTING OR EQUAL	24020160000	ETHERNET SWITCH, 16 PORT	MOUSER	24020160000	E253944	https://iq.ulprospector.com/en/profile?e=86542
1	AUTOMATIONDIRECT	EA9-T15CL-R	HMI, 15" WITH ETHERNET	AUTOMATIONDIRECT	EA9-T15CL-R	E157382	https://iq.ulprospector.com/en/profile?e=86386

20	AUTOMATIONDIRECT	GMC-2-R	FUSE, 5x20mm, GMC SERIES (TIME DELAY), 2A	AUTOMATIONDIRECT	GMC-2-R	E19180	https://iq.ulprospector.com/en/profile?e=59987
1	AUTOMATIONDIRECT	DN-DEC10MN	DINNECTOR TERMINAL BLOCK END COVER	AUTOMATIONDIRECT	DN-DEC10MN	NONE	
57	AUTOMATIONDIRECT	DN-D10-A	DINNECTOR DOUBLE LEVEL TERMINAL BLOCKS	AUTOMATIONDIRECT	DN-D10-A	E179129	https://iq.ulprospector.com/en/profile?e=167226
3	AUTOMATIONDIRECT	DN-24J4Y	DINNECTOR 24-POLE TERMINAL BLOCK JUMPER	AUTOMATIONDIRECT	DN-24J4Y	NONE	
25	AUTOMATIONDIRECT	KN-G12SP-10	GROUND TERMINAL	AUTOMATIONDIRECT	KN-G12SP-10	E179129	https://iq.ulprospector.com/en/profile?e=167226
7	AUTOMATIONDIRECT	KN-EB4-10	END BARRIER	AUTOMATIONDIRECT	KN-EB4-10	NONE	
20	AUTOMATIONDIRECT	DN-T10BR-A	DINNECTOR TERMINAL, BROWN, 24-10AWG, FOR MOTOR FIELD TERMINATION	AUTOMATIONDIRECT	DN-T10BR-A	E179129	
20	AUTOMATIONDIRECT	DN-T10ORG-A	DINNECTOR TERMINAL, ORANGE, 24-10AWG, FOR MOTOR FIELD TERMINATION	AUTOMATIONDIRECT	DN-T10ORG-A	E179129	https://iq.ulprospector.com/en/profile?e=167226
20	AUTOMATIONDIRECT	DN-T10YEL-A	DINNECTOR TERMINAL, YELLOW, 24-10AWG, FOR MOTOR FIELD TERMINATION	AUTOMATIONDIRECT	DN-T10YEL-A	E179129	
20	AUTOMATIONDIRECT	DN-T10GRN-A	DINNECTOR TERMINAL, GREEN, 24-10AWG, FOR MOTOR FIELD TERMINATION	AUTOMATIONDIRECT	DN-T10GRN-A	E179129	
20	AUTOMATIONDIRECT	DN-10-10	DINNECTOR GROUND TERMINAL, GREEN, 24-10AWG, FOR MOTOR FIELD TERMINATION	AUTOMATIONDIRECT	DN-10-10	E179129	
3	MCMASTER-CARR	8961K16	DIN RAIL, 35mm x 2M ZINC-PLATED STEEL NO ! ALUMINUM !	MCMASTER-CARR	8961K16	NONE	
30	AUTOMATIONDIRECT	DN-SSB50-10	DIN RAIL STAND-OFF, 50mm	AUTOMATIONDIRECT	DN-SSB50-10	NONE	
3	AUTOMATIONDIRECT	T1-3040G-1	WIRE DUCT, 3 X 4 X 2M WITH COVER	AUTOMATIONDIRECT	T1-3040G-1	E123572	https://iq.ulprospector.com/en/profile?e=195766
1	AUTOMATIONDIRECT	T1-4040G-1	WIRE DUCT, 4 X 4 X 2M WITH COVER	AUTOMATIONDIRECT	T1-4040G-1	E123572	
1	EQUIPMENT TAG	COMMERCIAL	4"W x 1.5"H STAINLESS STEEL			NONE	

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engineer's seal

project name
CECIL PROJECT SUZANNA'S KITCHEN

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SUZANNA'S KITCHEN

site address
435 HORIZON DRIVE SUWANEE, GEORGIA

drawing title
ENCLOSURE BOM LINE 1

drawn by	chkd by	project no.
DAF	DAF	E22-3863

drawing no.
EC080

2023-02-24