



NORRIS THERMAL TECHNOLOGIES

global equipment solutions

GAME CHANGER
ELECTRICAL SCHEMATIC



REVISIONS:

REV	BY	DATE	DESCRIP
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2015-11-24	CC JOHN
DRAWN BY:	REVIEWER:
K OWENS	K OWI

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CUSTOMER PROJECT/PO NUM
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GAME CHANGER

COVER PAGE

DRAWING NUMBER:
2128-000

SMOKER CONTROL SYSTEM

ELECTRICAL DRAWING INDEX

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SHEET #	DRAWING #	DESCRIPTION



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DRAWING INDEX

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ELECTRICAL REQUIREMENTS

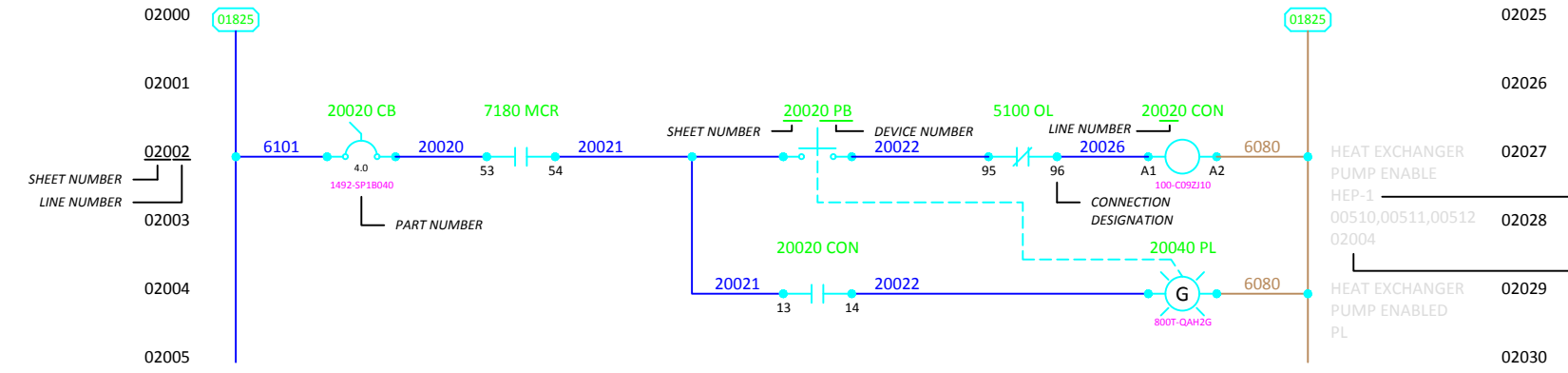
SUPPLY VOLTAGE	240V AC, 1Ø, 60Hz
TOTAL CONNECTED Hp	0.063 Hp
TOTAL CONNECTED kVA	6.84 kVA
ESTIMATED FULL LOAD AMPS	28.5 A
MAIN FUSE/BREAKER	30 A
PLANT FUSE/BREAKER	XX A
INTERRUPT CAPACITY	40 kAIC

WIRE CONVERSION CHART

METRIC	AWG
0.5	20
1.0	18
1.5	16
2.5	14
4.0	12
6.0	10
10.0	8
16.0	6
25.0	4
35.0	2
50.0	1
50.0	0

NOTES FOR INTERNAL CONTROL PANEL WIRING:

- POWER WIRING SHALL BE A MINIMUM OF #14 AWG.
- ALL 240V AC WIRING TO BE BLK.
- ALL UNGROUNDED 120V AC WIRING TO BE RED AND UTILIZE A WHT OR GRN AS THE GROUNDED NEUTRAL.
- ALL UNGROUNDED 24V DC WIRING TO BE BLU AND UTILIZE A GRN AS THE GROUNDED COMMON.
- ALL GROUND WIRES TO BE GRN.
- ALL CIRCUITS THAT MAY BE STILL ENERGIZED AFTER THE PANEL MAIN DISCONNECT IS IN THE "OFF" POSITION SHALL BE YEL.
- WIRES & MULTI-CONDUCTOR CABLES ARE TO BE SUPPORTED EVERY 3 FEET.
- NO MORE THAN TWO WIRES AT EACH CONNECTION POSITION ON GROUND BARS.
- MAIN GROUND LUG TO BE LABELED AS "PE".
- ALL ENCLOSURE DOORS ARE TO HAVE A GROUND BONDING WIRE.
- THERE IS TO BE NO MORE THAN 2 WIRES ON ANY TERMINATION POINT. IF 2 WIRES ARE WIRED TO THE SAME CONNECTION POINT, THE TERMINAL RATING MUST MATCH OR EXCEED THE COMBINED GAUGE OF THE 2 WIRES.
- ALL DEVICES SHALL BE TOUCH SAFE, HAVE MOLDED COVERS OR LEXAN COVERS. IF LEXAN COVERS ARE USED, TEST HOLES MUST BE DRILLED TO ALLOW FOR TESTING OF VOLTAGES WITH MULTI-METER.
- HIGH VOLTAGE POWER DISTRIBUTION BLOCKS SHALL ALSO BE LABELED AS SUCH.
- ALL WIRES SHALL HAVE WIRE LABELS AT ALL TERMINATION POINTS.
- ALL DEVICES SHALL MATCH THE MANUFACTURERS TORQUE RECOMMENDATIONS AND BE PERMANENTLY MARKED ON THE BACK PANEL.
- ALL DEVICES SHALL BE MARKED ACCORDING TO THE DESIGNATION PROVIDED ON THE ELECTRICAL SCHEMATICS.



HEAT EXCHANGER PUMP ENABLE HEP-1 00510,00511,00512 02004
HEAT EXCHANGER PUMP ENABLED PL 02029

P&ID REFERENCE
SHEET AND LINE CROSS REFERENCE, AN UNDERLINED REFERENCE DESIGNATES A NC REFERENCE

<p>XXXXX CB CIRCUIT BREAKER</p> <p>XXXXX DISC DISCONNECT SWITCH NORMALLY OPEN (NO) HELD CLOSED</p> <p>XXXXX CR COIL (CONTROL RELAYS, CONTACTORS, TIMER, ETC.)</p> <p>XXXXX CR DRY CONTACT NORMALLY OPEN (NO)</p> <p>XXXXX CR DRY CONTACT NORMALLY CLOSED (NC)</p> <p>XXXXX LS LIMIT SWITCH NORMALLY OPEN (NO)</p> <p>XXXXX LS LIMIT SWITCH NORMALLY OPEN (NO) HELD CLOSED</p> <p>XXXXX LS LIMIT SWITCH NORMALLY CLOSED (NC)</p> <p>XXXXX LS LIMIT SWITCH NORMALLY CLOSED (NC) HELD OPEN</p>	<p>XXXXX PB MUSHROOM HEAD PUSHBUTTON NORMALLY OPEN (NO)</p> <p>XXXXX PB MUSHROOM HEAD PUSHBUTTON NORMALLY CLOSED (NC)</p> <p>XXXXX PB PUSHBUTTON NORMALLY OPEN (NO)</p> <p>XXXXX PB PUSHBUTTON NORMALLY CLOSED (NC)</p> <p>XXXXX SS SELECTOR SWITCH NORMALLY OPEN (NO)</p> <p>XXXXX SS SELECTOR SWITCH NORMALLY CLOSED (NC)</p> <p>XXXXX PL INDICATOR LIGHT (PILOT LIGHT, STACK LIGHT, ETC.)</p> <p>XXXXX SOL SOLENOID</p> <p>XXXXX LT LIGHT (LED LIGHT BAR, FLORESCENT LIGHT, ETC.)</p>	<p>XXXXX FLT FLOAT SWITCH NORMALLY OPEN (NO)</p> <p>XXXXX FLT FLOAT SWITCH NORMALLY CLOSED (NC)</p> <p>XXXXX FLW FLOW SWITCH NORMALLY OPEN (NO)</p> <p>XXXXX FLW FLOW SWITCH NORMALLY CLOSED (NC)</p> <p>XXXXX TS TEMPERATURE SWITCH NORMALLY OPEN (NO)</p> <p>XXXXX TS TEMPERATURE SWITCH NORMALLY CLOSED (NC)</p> <p>XXXXX PS PRESSURE SWITCH NORMALLY OPEN (NO)</p> <p>XXXXX PS PRESSURE SWITCH NORMALLY CLOSED (NC)</p> <p>XXXXX RECP POWER RECEPTACLE</p>	<p>XXXXX PE PHOTO EYE OR REED SWITCH 2 WIRE NORMALLY OPEN (NO)</p> <p>XXXXX PE PHOTO EYE OR REED SWITCH 3 WIRE NORMALLY OPEN (NO)</p> <p>XXXXX PE PHOTO EYE OR REED SWITCH 2 WIRE NORMALLY CLOSED (NC)</p> <p>XXXXX PE PHOTO EYE OR REED SWITCH 3 WIRE NORMALLY CLOSED (NC)</p> <p>XXXXX PRX PROXIMITY SWITCH 2 WIRE NORMALLY OPEN (NO)</p> <p>XXXXX PRX PROXIMITY SWITCH 3 WIRE NORMALLY OPEN (NO)</p> <p>XXXXX PRX PROXIMITY SWITCH 2 WIRE NORMALLY CLOSED (NC)</p> <p>XXXXX PRX PROXIMITY SWITCH 3 WIRE NORMALLY CLOSED (NC)</p> <p>XXXXX FU FUSE</p>	<p>XXXXX OL MOTOR OVERLOAD</p> <p>XXXXX LINE REFERENCE</p> <p> JUMPER</p> <p> WIRE CROSS WITH CONNECTION</p> <p> WIRE CROSS WITHOUT CONNECTION</p> <p> TERMINAL WITH FIELD WIRING DESIGNATION</p> <p> GROUND CONNECTION</p> <p> PROTECTED EARTH GROUND</p> <p> CUSTOMER SUPPLIED OR CONTINUATION REFERENCE</p>
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GENERAL ELECTRICAL SYMBOL AND TECHNICAL NOTES

This material is the property of
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other purpose than the furnishing
of services and supplies.



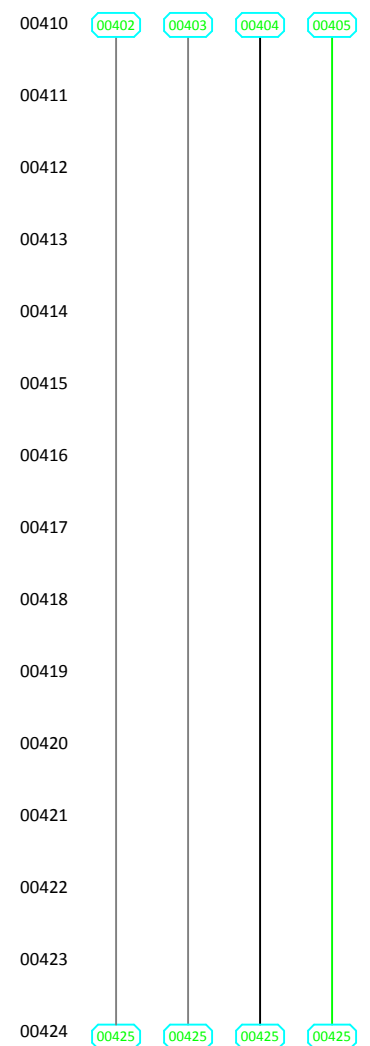
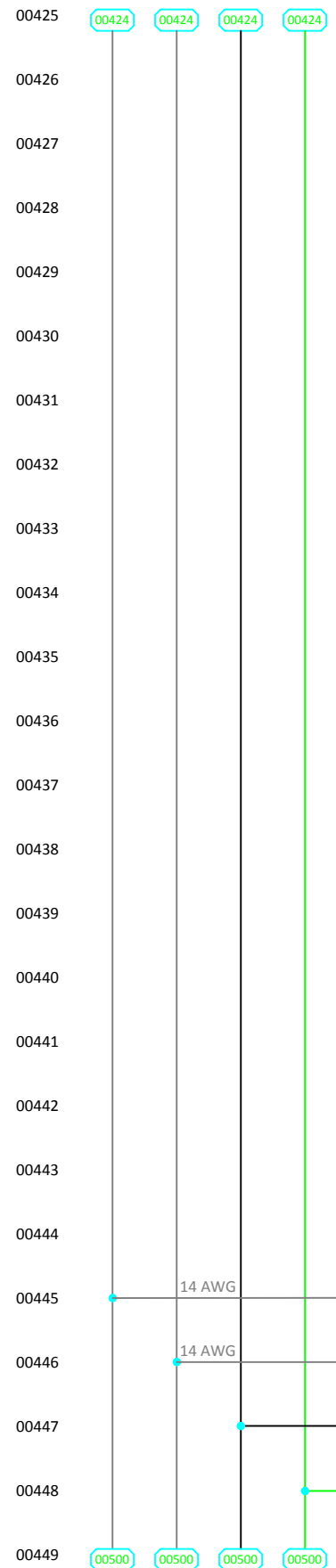
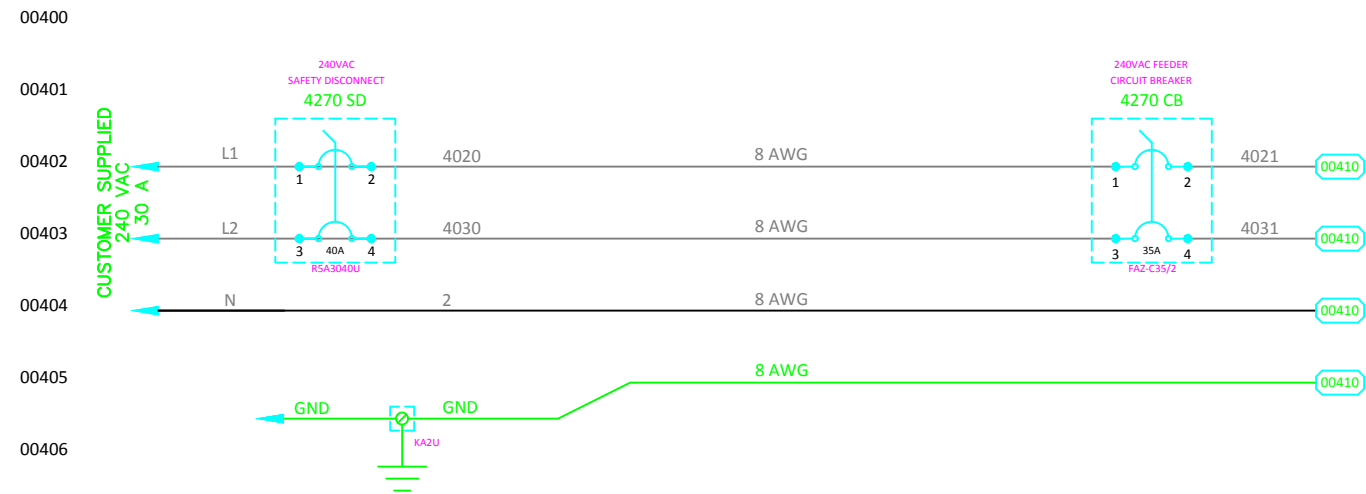
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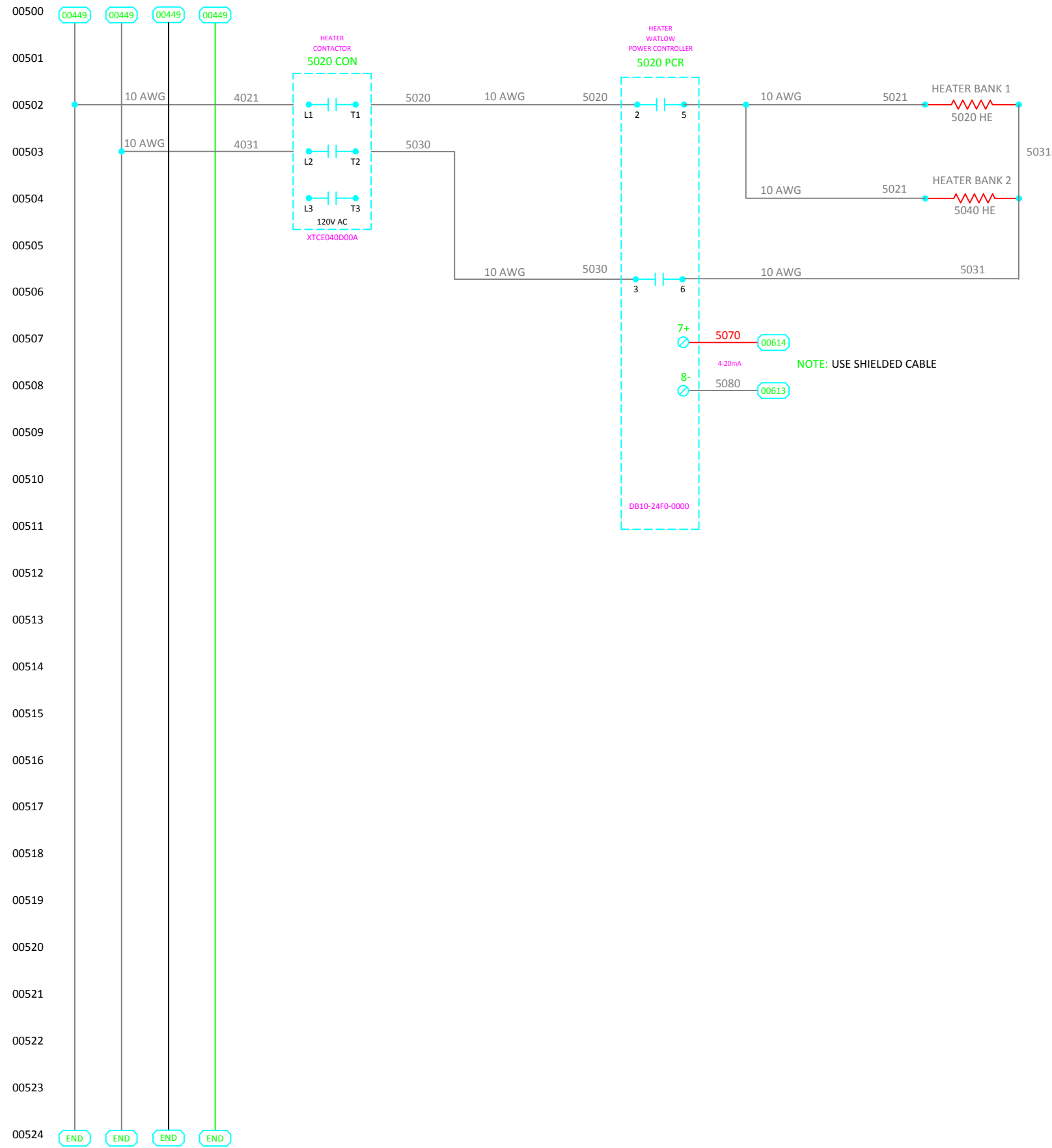
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240V AC
POWER DISTRIBUTION



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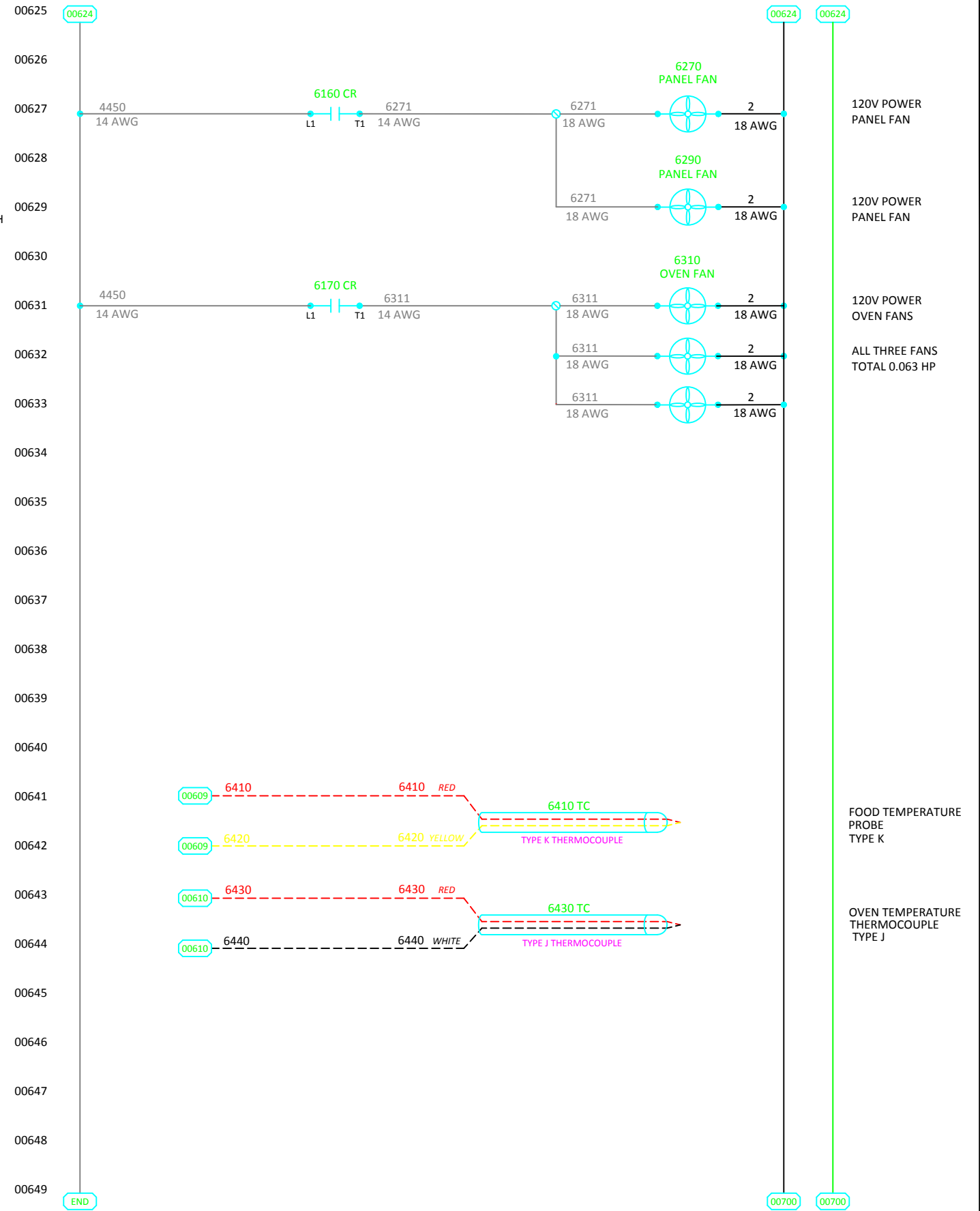
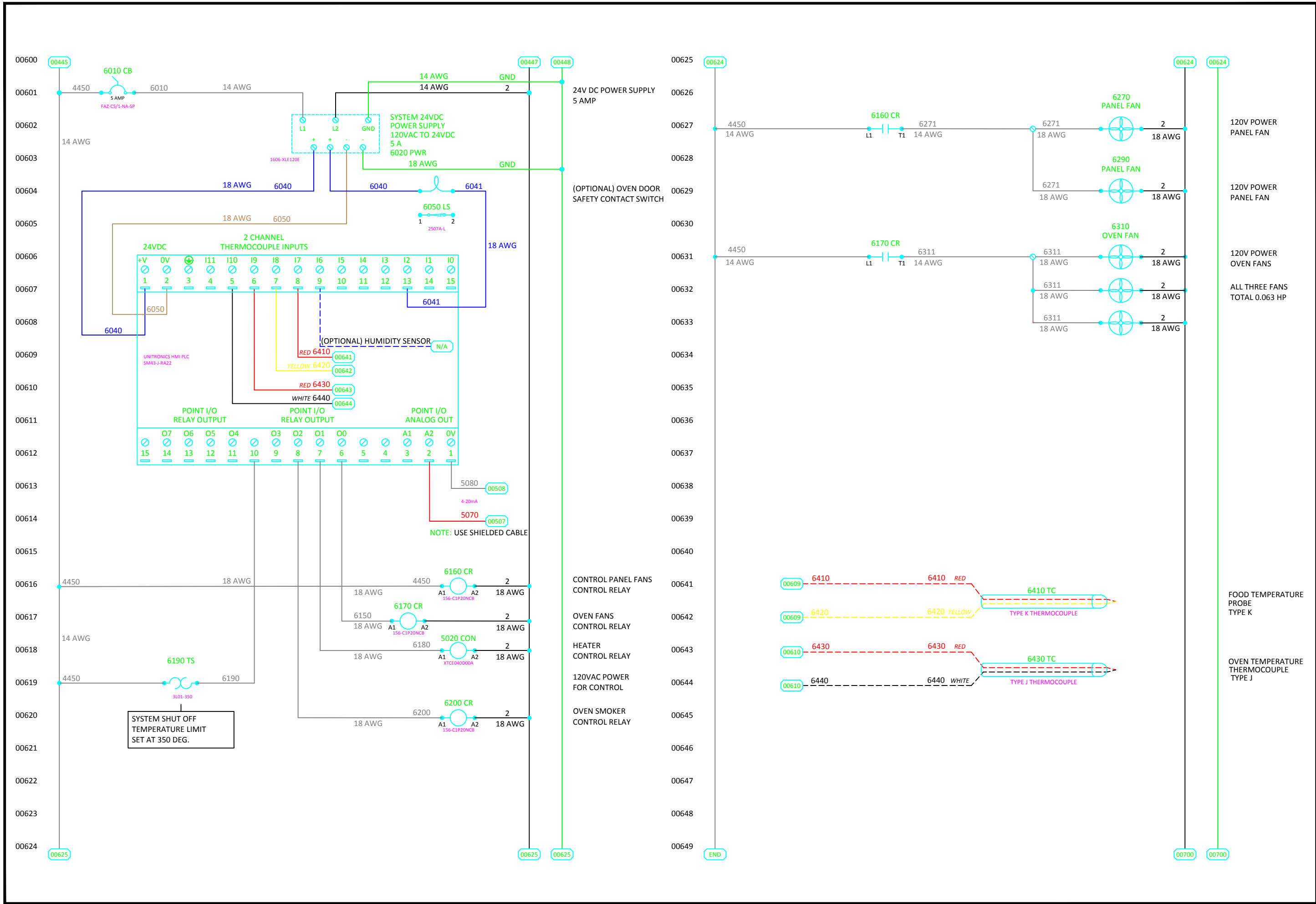
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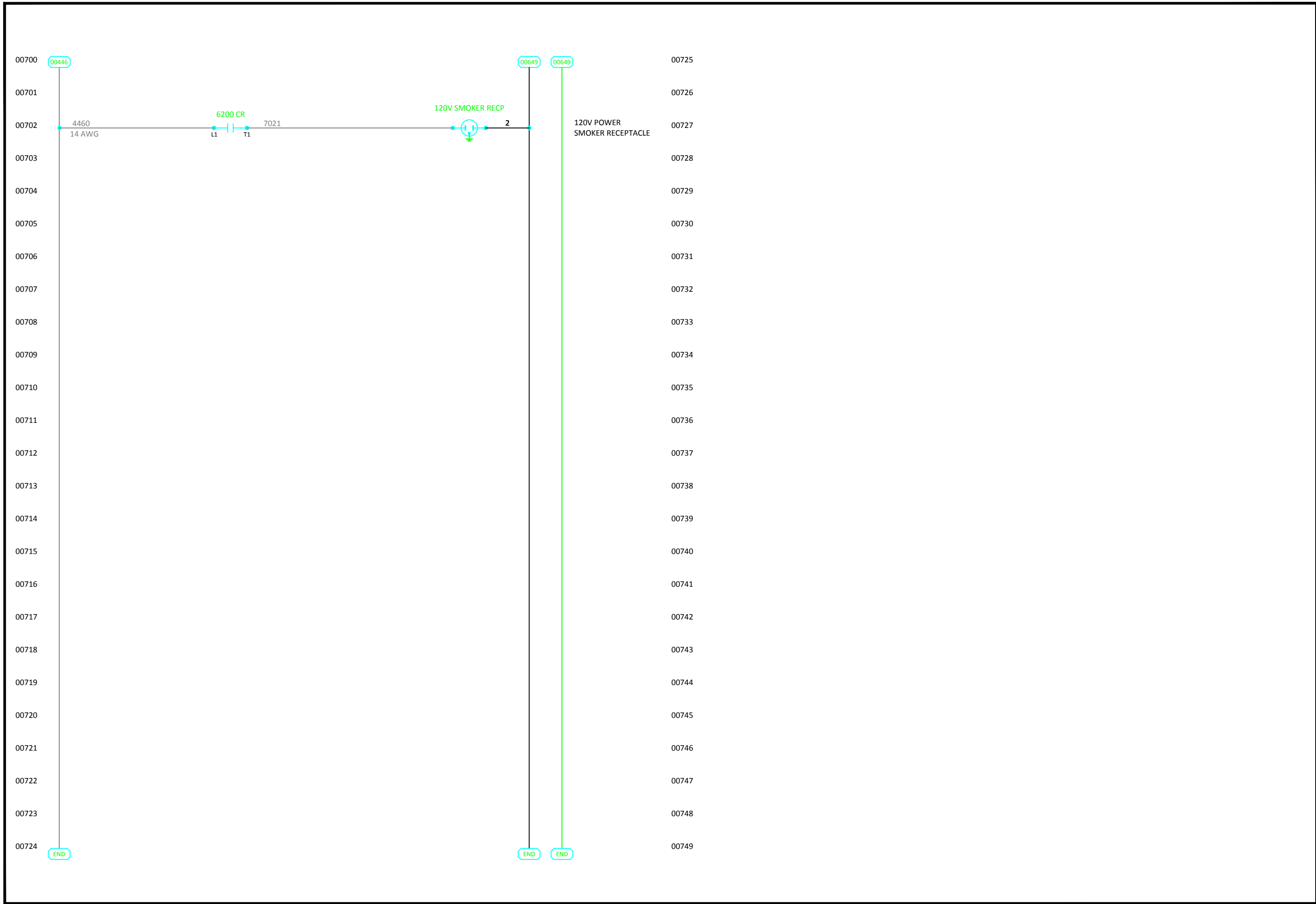
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120V AC
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120V AC
POWER DISTRIBUTION