

Region: 5

Location: DE007

CSS # 32914

Maximo Work Order No.: 17312

Asset #: 1732

Date Issued: 04/21/22

Original Description: **DE007-01 (2) Boilers replacement Proposal**

Repairs Needed:

S&S Mechanical is proposing the following removal and replacement of two 1000K BTU Fulton Boilers at 100 Ogletown Road, Newark Delaware Army Reserve Center building #1. S&S shall isolate system and remove the existing Fulton Pulse boilers each with a 1000k BTU rating. S&S shall reconfigure all gas and water piping, intake and exhaust duct to fit new Fulton Endura 1000K boilers. S&S shall reclaim all glycol and replenish the system once all boilers are installed and ready for operation. S&S will verify the system of fit and leaks. S&S shall remove and clean all job related materials and debris from the site. S&S shall connect all power and controls to new boilers and perform all operational checks and the commissioning of each new boiler with the assistance of the factory representatives.

*Labor will be tracked daily, total cost could be adjusted at completion of project.

(2) HVAC Technicians >\$100 per hour x 12=\$2,400 per day/\$24,000 for the 10-day estimate job

(2) Plumbers >\$100 per hour x 12= \$2,400 per day/\$24,000 for the 10-day estimate job

RS Means Line Buildup and Labor Summary (Data Version 2017, Q4):

Quantity	Line Item Number	Description	Labor Hours	Labor Rate/Hr	Materials	Equipment	Total
--	NA	Part/Hotel/Per Diem in Quote 891 attached	--	--	\$97,328.55	--	\$97,328.55
--	NA	S&S Labor 4 People	480	\$100.00	--	--	\$48,000.00
--	NA	TW Administrative Oversight	40	\$80.00	--	--	\$3,200.00

Estimate Summary:

Labor Hours	Labor Cost	Material Cost	Equipment	Total Cost	CE Factor	Total Estimate
520	\$51,200.00	\$97,328.55	NA	\$148,528.55	106%	\$157,440.26



CUSTOMER QUOTATION NO. 891

Tidewater, Inc.
Tidewater, Inc
6625 Selnick Dr.
Suite A
Elkridge MD 21075

Quote Name: 15130
Quote No: 891
Site: DE007 Olgetown Road
Site Contact:
Salesperson: Lindsay Ruby
Created Date: 02/11/2022
Valid For: 30 Day(s)

WO#: 17312

CSS Ticket Number: 32914

Problem: Asset 1732 #2 Boiler Replacement.

POC Jason Gavin 302-670-1589

S&S Mechanical is proposing the following removal and replacement of two 1000K BTU Fulton boilers at 1000 Ogletown road, Newark Del. Army Reserve Center building #1. S&S shall isolate system and remove the existing Fulton Pulse boilers each with a 1000K BTU rating. S&S shall reconfigure all gas and water piping, intake and exhaust duct to fit new Fulton Endura 1000k BTU boilers. S&S shall reclaim all glycol and replenish the system once all boilers are installed and ready for operation. S&S will verify the system of fit and leaks. S&S shall remove and clean all job related materials and debris from the site. S&S shall connect all power and controls to new boilers and perform all operational checks and the commissioning of each new boiler with the assistance of the factory representatives.

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- (2) Plumbers > \$100 per hour x 12 = \$ 2,400 per day / \$24,000 for the 10-day estimated job

Service

Item	Quantity	Unit Price	Total
2 Fulton Heating Fire Tube Condensing Boiler	1.00	\$70,932.00	\$70,932.00
Heat Fab T Vent	1.00	\$4,200.00	\$4,200.00
Hotel Expenses	1.00	\$3,669.60	\$3,669.60
Per Diem	1.00	\$2,360.00	\$2,360.00
Disposal	1.00	\$1,000.00	\$1,000.00
Startup	1.00	\$2,500.00	\$2,500.00
Boiler Storage/Delivery	1.00	\$1,650.00	\$1,650.00
Freight/Shipping	1.00	\$4,000.00	\$4,000.00
Cat 5/98013099753	1.00	\$194.81	\$194.81
EMT 034E 3/4" EMT Conduit	1.00	\$153.72	\$153.72
THHN 10 Black	1.00	\$628.10	\$628.10
THHN 10 White	1.00	\$628.10	\$628.10
THHN 10 Red	1.00	\$628.10	\$628.10
THHN 10 Blue	1.00	\$628.09	\$628.09
THHN 10 Green	1.00	\$628.09	\$628.09



CUSTOMER QUOTATION NO. 891

Service

Item	Quantity	Unit Price	Total
3/4 EMT Couplings	1.00	\$31.44	\$31.44
3/4" EMT Connector	1.00	\$25.88	\$25.88
7 ADJ THERM 30-240 3-1/2 L/ WELL	1.00	\$413.33	\$413.33
1X8 BRZ FLEX CONN W/ SWT	1.00	\$201.20	\$201.20
LF 1 BRS 600# WOG 2PC SWT FP BV	1.00	\$54.70	\$54.70
6X10 FT PVC DWV S40 PE PIPE	1.00	\$508.20	\$508.20
6 PVC DWV 90 ELL	1.00	\$449.26	\$449.26
6 PVC DWV 45 ELL	1.00	\$393.72	\$393.72
1 X 10 L HARD COP TUBE	1.00	\$224.16	\$224.16
1 WROT CXC 90 ELL 1-1/8 OD	1.00	\$40.63	\$40.63
1 WROT CXC 45 ELL 1-1/8 OD	1.00	\$19.24	\$19.24
LF 1 WROT CXC UNION	1.00	\$56.02	\$56.02
LF 3/4 WROT CXC UNION	1.00	\$32.70	\$32.70
3/4X2 BLK STL NIP	1.00	\$8.16	\$8.16
3/8 OD X 50 SOFT REF TUBE	1.00	\$172.38	\$172.38
LF 3/8 X 3/8 COMP UNION	1.00	\$9.54	\$9.54
1 Z/PLT SPLT RNG HGR 3/8 BT	1.00	\$23.36	\$23.36
3/8 Z/PLT BT CEIL FLG	1.00	\$24.71	\$24.71
3/8X6 Z/PLT ATR	1.00	\$9.88	\$9.88
3/8 16 HEX NUT ZN A563 GR 2 50PK	1.00	\$7.75	\$7.75
3/8 X 1 FLT WSHR ZN 50PK	1.00	\$6.79	\$6.79
32 OZ PVC HD CLR CMNT	1.00	\$22.55	\$22.55
2" Fiberglass Insulation	1.00	\$447.70	\$447.70
2" 90 Elbow Fiberglass Insulation	1.00	\$344.64	\$344.64
HVAC Labor Rate	240	\$100.00	\$24,000.00
Plumbing Labor Rate	240	\$100.00	\$24,000.00
		Sub-Total ex Tax	\$145,328.55
		Tax	\$0.00
		Total inc Tax	\$145,328.55

Labor	\$48,000.00
Materials	\$97,328.55
Sub-Total ex Tax	\$145,328.55
Tax	\$0.00
Total inc Tax	\$145,328.55



Candlewood Suites Newark South - University Area, an IHG Hotel

1101 S College Ave, Newark, DE, 19713, United States

Check-in

Monday, May 9, 2022 (3:00 PM)

Check-out

Friday, May 20, 2022 (11 AM)

11 nights, 2 rooms

Room, 2 Queen Beds, Accessible, Non Smoking

Average nightly rate **\$139.00**

Room 1

[11 nights](#) **\$1,529.00**

Room 2

[11 nights](#) **\$1,529.00**

Taxes and fees **\$336.38**

Total price \$3,394.38

for 2 rooms, 4 guests, 11 nights
including taxes

Payment schedule

Due now **\$0.00**

Due at property **\$3,394.38**

This price may increase if you book later.

Sorry, but you cannot redeem coupons or
Hotels.com® Rewards nights for this booking

Type of Gas: Natural Propane

Boiler Model No. PHW-1000

Boiler National Board No. 109874

Year 2010

Min. BTU Input/Hr. 200K

Min. BTU Output/Hr. 180K

Max. BTU Input/Hr. 1000K

Max. BTU Output/Hr. 900K

Design Pressure 160 PSI

Minimum Relief Valve Capacity: 900 Pounds/Hr.

Manifold Gas Pressure: 5.0 Inches W.C.

Maximum Gas Supply Pressure: 14 Inches W.C.

Minimum Permissible Gas Supply Pressure for Purpose of

Input Adjustment: 7 Inches W.C. 11 Inches W.C.

Electrical Ratings: 120 V/60 Hz/Less than 15 Amps

Low Pressure Steam and Hot Water Boiler

ANSI Z21.13

• CSA 4.9

High Pressure Steam Boiler

AGA Requirements 3-89

Wall Thickness Through Which Vent System May

Be Installed: 3 1/4 Inches Min. / 20 Inches Max.





Quotation

Reference #: 21-01535
Quote #: Q-01636
Date: 2/04/2022
Expires On: 3/04/2022

Baltimore/D.C. Mechanical
1610 Professional Blvd.
Crofton Maryland 21114
(410) 793-0202
<http://www.uepsales.com>

Job Name: Army Reserve

Job Engineer: None

Drawing Date:

Addendum:

PROJECT SPECIFIC EXCEPTIONS/CLARIFICATIONS:

BOILER

TAG	QTY	MANUFACTURER	PRODUCT	DESCRIPTION
	2.00	Fulton Heating	EDR-1000 (PURE)	Fire-tube Condensing Boiler Natural Gas with Pure ControlTM Input: 1,000 MBH Output: 953 MBH Turndown: 11:1 Water Content: 50 Gal Pressure Drop at 20oF DT: 0.7 PSI Operating Weight: 1,848 lbs Electrical: 10 FLA @ 120V/1PH
	1.00	Fulton Heating	N54 Protonode BACnet (MS/TP, IP) Gateway (Shipped Loose)	
	1.00	Fulton Heating	Supply Header Temperature PT100 Sensor	
	1.00	Fulton Heating	Outdoor Air Temperature PT100 Sensor	
	1.00	Fulton Heating	Multiple Boiler Condensate Trap (12MMBH Max)	
	2.00	Fulton Heating	pH Neutralizer Kit (12MMBH Max)	
	2.00	Fulton Heating	PVC/CPVC Exhaust Kit for EDR-750/1000/1500	

TAG	QTY	MANUFACTURER	PRODUCT	DESCRIPTION
	2.00	UEP	SU - Manufacturer's authorized start-up and demonstration	Manufacturer's authorized start-up and demonstration
BOILER Total (DOES NOT INCLUDE SALES TAX):				\$59,110.00

VENTING

TAG	QTY	MANUFACTURER	PRODUCT	DESCRIPTION
	1.00	HeatFab	HeatFab Saf - T Vent CI Plus	<ul style="list-style-type: none"> - AL29-4C stainless steel liner - 430 stainless steel outer jacket - One-inch insulating air space between inner & outer walls - U.L. Listed (UL 1738) with factory warranty. <p>1. 6" I.D. (2) FULTON EDR-1000 boilers 2. All Support bracing to bulding structures provided by installing contractor. 3. Parts to connect from new EDR boilers to existing flue,</p>
VENTING Total (DOES NOT INCLUDE SALES TAX):				\$3,500.00

EXCEPTIONS, COMMENTS, AND CLARIFICATIONS:

1. All meters, valves, and gauges by others.
2. Electrical voltages must be confirmed by customer prior to order.
3. Spool pieces by others.
4. Owner training Included.
5. Commissioning by others.
6. Order is subject to acceptance by UEP and is subject to UEP General Terms and Conditions of Sale.
7. Spare parts by others.
8. Standard manufacturer warranties apply. Other warranties accepted on case by case basis.
9. Site services (off loading, installation, alignment, field testing) by others.
10. Professional Engineering services including PE signed/sealed drawings and foundation design by others.
11. Bill of material listed above represents our best understanding of customer requirements. Should the scope of supply be other than quoted, our price will be revised accordingly.
12. UEP will provide a 90 day labor warranty from start-up of equipment.

The above quotation price DOES NOT INCLUDE SALES TAX, wiring, starters, power factor capacitors, temperature sensing bulbs, proportional signal temperature controls, structural steel, inertia bases, vibration solation, pump grout, startup, rigging, installation, or other material or labor unless specifically noted as included.

The above equipment includes a manufacturer's standard one year parts only warranty unless otherwise noted above. Extended parts and labor warranties are available for an additional charge. Any manufacturer start-up or warranty labor included in the proposal excludes warranty removal and is during normal business hours unless specifically outlined above.

Please contact me with any questions or comments.

Thank you for the opportunity to offer this proposal.

F.O.B.: Factory, Full Freight Allowed
Quotation valid: 30 Days

Delivery: TBD
Terms: Net 30 days based on credit approval

Estimated By: UEP

THANK YOU FOR YOUR BUSINESS!

ENDURA (EDR) SERIES:

EDR-750, EDR-1000, EDR-1500, EDR-2000

750,000 to 2,000,000 BTU/HR:

Duplex Stainless Steel Firetube Condensing Boilers



Fulton's Endura (EDR) line of condensing boilers are a durable three-pass firetube derived from a rugged pressure vessel architecture with over thirty years of proven performance. The packaged boiler features an ultra-compact footprint that fits through a standard doorway, reliable quiet operation, access panels which detach in seconds, and simplified service & maintenance. The highly-engineered robust construction is built to last with thicker, higher-strength materials, and a premium fit and finish reflecting Fulton's paramount quality. The high-turndown combustion technology utilizes the surgical precision of independent air and gas servo motors and continuously tunes the air/fuel ratio for ideal excess O₂ levels to automatically adjust for seasonality. This maximizes condensing potential, and outperforms all conventional platforms in durability, reliability and repeatability.

STANDARD FEATURES:

- Factory Packaged and Test Fired Boiler Assembly
- Duplex Stainless Steel Firetube Heat Exchanger
- Fully Condensing Ultra-High Efficiency Operation
- Designed for Variable Primary Flow Arrangements
- Fully Modulating Burner; Up to 15:1 Turndown
- Low NOx Emissions <20 ppm
- Flame-by-Wire™ Combustion Control; ± 0.2° Precision
- Real-Time O₂ Compensation™; Feed Forward
- Variable Speed Combustion Blower
- Direct Spark Ignition System
- 160 PSIG Maximum Allowable Working Pressure
- 210°F Maximum Allowable Working Temperature
- Factory Recommended Maximum Setpoint 190°F
- Operating and High Limit Aquastats; 200°F Setting
- Low Water Cut Off Probe with Manual Reset
- 50 Micron Combustion Air Intake Filter
- Air and Blocked Flue Switches
- Ventless Gas Train
- Low and High Gas Pressure Switches
- Emergency Stop (E-Stop) Contact

PURE CONTROL™ CAPABILITIES: v1.0.0.0+

- 7-inch Color Touchscreen Display
- Integrated Lead-Lag of 2 to 10 Boilers
- Universal Data over Ethernet/IP; No Master Boiler Req.
- Modbus Communication Protocol
- Flue Gas Exhaust Temperature Monitoring
- Inlet and Outlet Water Temperature Sensors
- Combustion Air Temperature Sensor
- Outdoor Air Temperature Reset with Plant Cutoff
- Trending Data Logging
- Setback Modes via Internal Clock
- Accept 4-20mA or 0-10VDC Remote Setpoint Signal
- Two Safety Interlock Contacts for External Device(s)
- Monitoring Contacts (Status, Demand, Alarm)
- Remote Boiler Enable Contact
- Motorized Isolation Valve Control
- Variable Speed Secondary Pump Control (2 Pumps)
- Automatic Rotation of Secondary Pumps
- Variable Speed Primary Pump Control
- Domestic Hot Water Priority with DHW Pump Start/Stop
- Two-Stage Freeze Protection

PROJECT DETAILS:

Project Name	
Date Submitted	
Fulton Representative	

City, State (Province)	
Engineer of Record	
Contractor	

LISTINGS & COMPLIANCE:

- ASME Section IV, "H" Stamp
- ETL Listed to UL-795
- CSD-1 and CSA Controls and Fuel Train
- AXA XL Compliant; Supersedes IRI
- AHRI Certified to BTS-2000
- FM Compliant Fuel Train Components
- SCAQMD Certified; TCEQ Compliant

OPTIONAL ACCESSORIES: PARTS SHIP LOOSE FOR FIELD INSTALLATION

BACnet Protonode with Remote Cloud Access 2-45-001058-30
 Lead/Lag IP Switch (8 Port, 120VAC) 2-45-315010
 Lead/Lag IP Switch (5 Port, DIN Mount, 24VDC) 2-45-315044-31
 Second (Auxiliary) Low Water Cut Off Kit 4-30-000330
 Multiple Boiler Condensate Drain Trap (12MM Max) 4-57-000440
 Individual Boiler Condensate Drain Trap (4MM Max) 4-57-005500
 pH Neutralization Kit (12MM Max) 4-50-000008
 PVC/CPVC Flue Gas Exhaust Kit for EDR-750/1000/1500 4-50-071005
 PVC/CPVC Flue Gas Exhaust Kit for EDR-2000 4-50-072005
 2-Inch Ball Valve with 120VAC 2-Position Actuator 2-30-001382
 4-Inch Butterfly Valve with 120VAC 2-Position Actuator 2-30-001385

NOTE:

Information provided in this document is based on standard boiler configurations only. Alternate or custom configurations may result in deviations.

TRIM KIT ITEMS:

- ASME Safety Relief Valve 60, 100, 125, or 160 PSIG
- Pressure & Temperature Gauge
- Installation, Operation and Maintenance Manual

Supply Header Temperature Sensor 4-30-000510
 Outdoor Air Temperature Sensor Kit 4-30-000500
 Domestic Hot Water Temperature Sensor 4-30-315300
 Spare Combustion Air Filter for 750/1000 2-30-071039
 Spare Combustion Air Filter for 1500/2000 2-30-000739
 Outdoor Installation Kit for EDR-750/1000 4-50-001910-37
 Outdoor Installation Kit for EDR-1500/2000 4-50-001909-37

FIELD CONNECTIONS			
ITEM	DESCRIPTION	SIZE	TYPE
A	SUPPLY WATER OUTLET	2"	N.P.T.
B	FLUE GAS EXHAUST OUTLET (I.D.)	6"	----
C	COMBUSTION AIR INLET (SEE NOTE 6)	6"	----
D	BOILER DRAIN	1"	N.P.T.
E	FLUE GAS CONDENSATE DRAIN	1"	N.P.T.
F	RETURN WATER INLET	2"	N.P.T.
G	SAFETY RELIEF VALVE CONNECTION (SEE NOTE 3)	1"	N.P.T.
H	NATURAL GAS INLET	1"	N.P.T.
J	ELECTRICAL CONNECTION	----	----

NOTES:

1. FRONT ACCESS DOOR REQUIRES A 28" [711mm] RADIUS SWING HINGED AT LEFT SIDE OF THE BOILER, FRONT CLEARANCE MINIMUM IS 36" [914mm], REAR CLEARANCE MINIMUM IS 24" [610mm], TOP CLEARANCE MINIMUM IS 18" [457mm] & SIDE CLEARANCE MINIMUM IS 1" [25mm].

2. THE PRESSURE VESSEL IS BUILT TO COMPLY WITH ASME SECTION IV.

3. APPROPRIATE SAFETY RELIEF VALVE IS DETERMINED BY TRIM PRESSURE & IS SUPPLIED IN THE TRIM KIT FOR FIELD INSTALLATION. INLET & OUTLET ARE NPT AND SIZES ARE AS FOLLOWS:

60# - 3/4" INLET x 1" OUTLET
100# - 3/4" INLET x 1" OUTLET
125# - 3/4" INLET x 1" OUTLET
160# - 3/4" INLET x 1" OUTLET

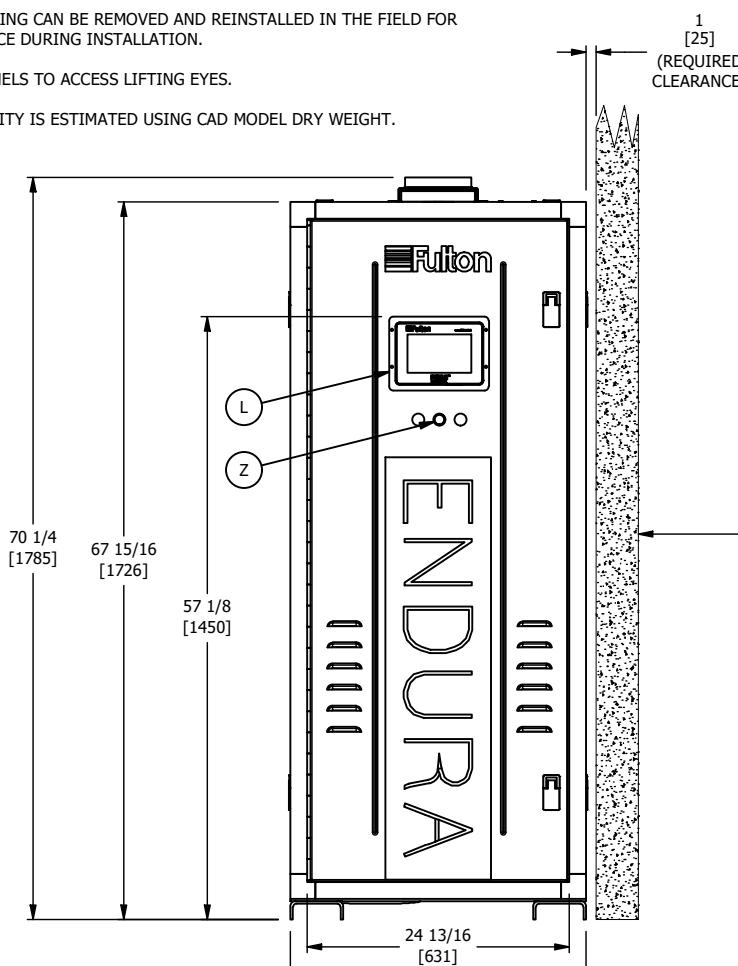
4. FOR ACCESS TO REAR INSPECTION OPENING & ASME STAMPING AREA, BACK COVER PANEL MUST BE REMOVED.

5. ALL DIMENSIONS ARE IN INCHES [MILLIMETERS] & ARE FOR REFERENCE ONLY. THIS DRAWING IS NOT FOR CONSTRUCTION PURPOSES.

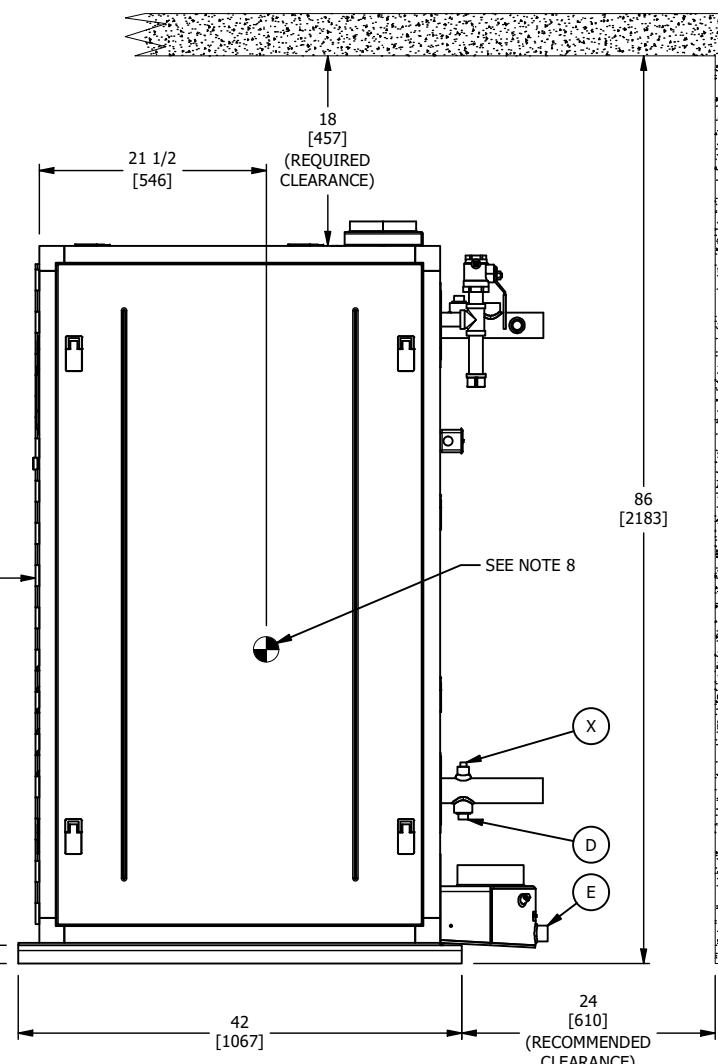
6. AIR FILTER HOUSING CAN BE REMOVED AND REINSTALLED IN THE FIELD FOR LOWER CLEARANCE DURING INSTALLATION.

7. REMOVE TOP PANELS TO ACCESS LIFTING EYES.

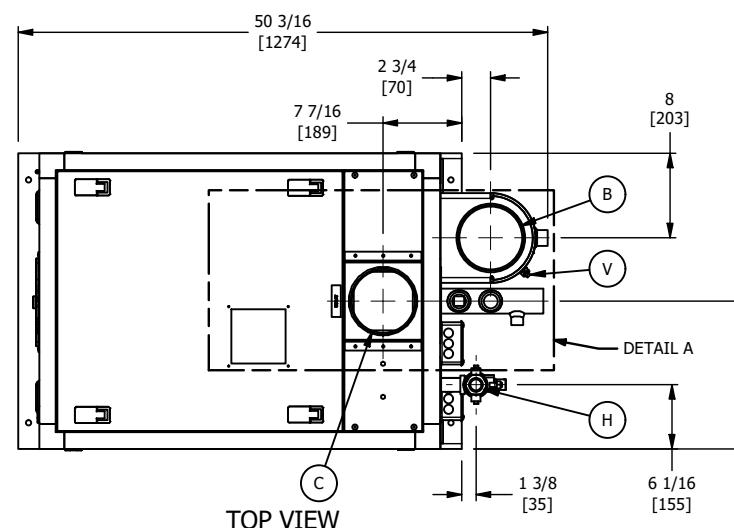
8. CENTER OF GRAVITY IS ESTIMATED USING CAD MODEL DRY WEIGHT.



FRONT VIEW

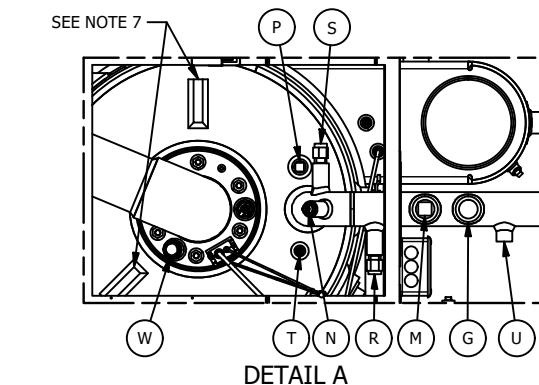


RIGHT SIDE VIEW

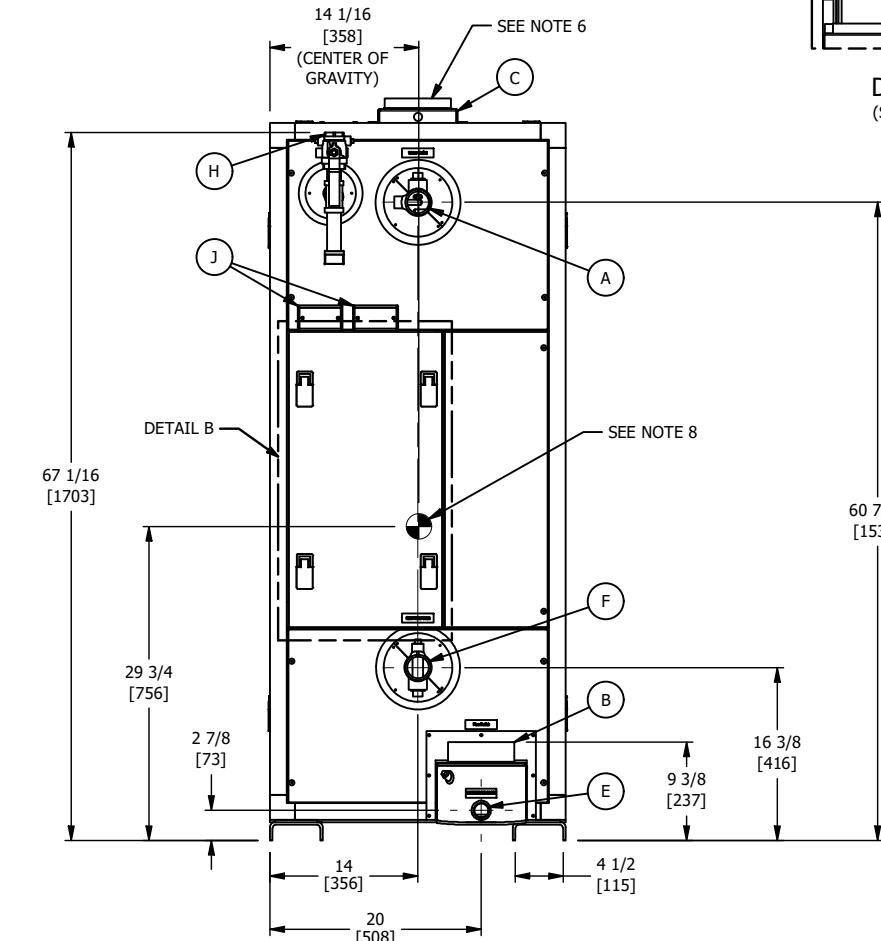


TOP VIEW

CALLOUTS			
ITEM	DESCRIPTION	SIZE	TYPE
K	ASME STAMPING AREA (SEE NOTE 4)	----	----
L	CONTROL DISPLAY	----	----
M	AUXILIARY CONNECTION	1"	N.P.T.
N	LOW WATER PROBE	1/2"	N.P.T.
P	AUXILIARY SAFETY DEVICE CONNECTION	1/2"	N.P.T.
R	HIGH LIMIT AQUASTAT	----	N.P.T.
S	OPERATING AQUASTAT	1/2"	N.P.T.
T	OPERATING TEMPERATURE SENSOR	1/4"	N.P.T.
U	PRESSURE AND TEMPERATURE GAUGE CONNECTION (FIELD INSTALLED)	1/2"	N.P.T.
V	COMBUSTION ANALYSIS PORT	1/4"	N.P.T.
W	FLAME VIEW PORT	----	----
X	AUXILIARY RETURN WATER INSTRUMENTATION CONNECTION	1/2"	N.P.T.
Y	INSPECTION ACCESS (SEE NOTE 4)	2"	N.P.T.
Z	ON/OFF BUTTON	----	----



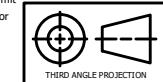
DETAIL A



DETAIL B
(SEE NOTE 4)

INITIAL RELEASE	-	-	-	-	-	-
REV	REVISION DESCRIPTION	CHECKED	BOM/PLANT	MECH/ELEC	ASME	APPROVED
REVISION HISTORY						

This design and drawings are proprietary and are the exclusive property of The Fulton Companies. The corporation does not permit their use except with prior written consent.



THIRD ANGLE PROJECTION

DRAWN BY: T. BETTS 7/7/2021 MECHANICAL/ELECTRICAL REVIEW: A. PEDROSA 7/29/2021 JOB NUMBER:

CHECKED BY: N/A ASME REVIEW: N/A PROJECT NAME:

B.O.M. / PLANT REVIEW: N/A APPROVED BY: K. BOTTORFF 7/23/2021 PROJECT MANAGER:

DESCRIPTION: ENDURA EDR-750, EDR-1000 PURE CONTROL CONDENSING HYDRONIC BOILER END ASSEMBLY

Fulton

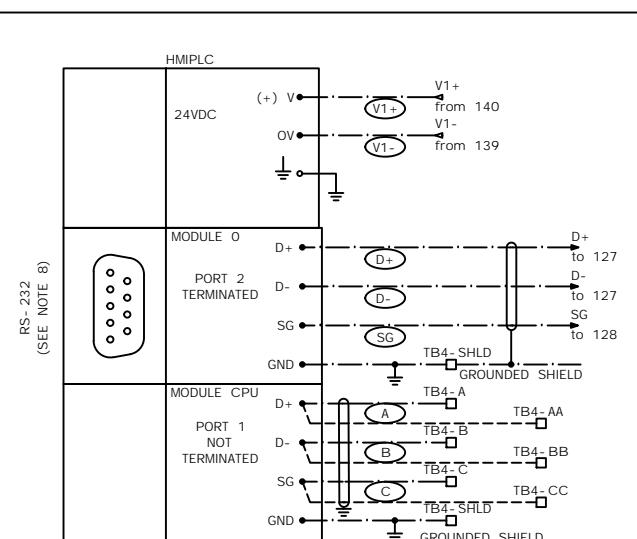
DRAWING NUMBER
7-91-081000-PDS

SHEET 1 OF 1

REVISION
-

BOM FOR REFERENCE ONLY

ITEM	PART #	DESCRIPTION	TAGS	QTY
1	- - -	PROOF OF CLOSURE	POC	1
2	2- 20- 000023	LOW WATER CUTOFF PROBE	LWCP1 LWCP2	2
3	2- 20- 082010- 37	FLAME ROD	FR	1
4	2- 30- 000003	MAIN GAS VALVE	MV1	1
5	2- 30- 005098	COMBUSTION AIR SWITCH	AS	1
6	2- 30- 071646- 37- PURE	BURNER MOTOR	BM	1
7	2- 40- 000251	OPERATING TEMPERATURE CONTROL	OTC	1
8	2- 40- 000294	HIGH LIMIT TEMP CONTROL	HLTC	1
9	2- 40- 000387	LOW GAS PRESSURE SWITCH	LGP	1
10	2- 40- 000390	HIGH GAS PRESSURE SWITCH	HGP	1
11	2- 40- 000421	WATER LEVEL SAFETY RELAY 120VAC	LWSRB1	1
12	2- 40- 000423	11 PIN RELAY BASE	LWSRB1 LWSRB2	2
13	2- 40- 000474	SIEMENS PLUG CONNECTOR SET	FPPS	1
14	2- 40- 000476	FLAME PROGRAMMER LM36 120VAC	FP	1
15	2- 40- 000976	15.6KVA TRANSFORMERS	IT1	1
16	2- 40- 002104	FUEL SERVO MOTOR	SM2	1
17	2- 45- 000371	1 POLE 30 AMP FUSE HOLDER CLASS CC	1- 30- CC	1
18	2- 45- 000519	30 AMP CUBEFUSE HOLDER TCFH30N	H30A	1
19	2- 45- 000802	SINGLE CIRCUIT GROUND TERMINAL BLOCK	SHLD	1
20	2- 45- 000912	RS232- RS485 MODULE CVM(OC1)	CVM(OC1)	1
21	2- 45- 001235	1 POLE SIGNAL RELAY 120VAC	CR01 CR02 CR03 CR04	4
22	2- 45- 315001	COLOR SCREEN	HMIPLC	1
23	2- 45- 315004	MODULE 2	MODULE 2	1
24	2- 45- 315004	MODULE 3	MODULE 3	1
25	2- 45- 315005	MODULE 4	MODULE 4	1
26	2- 45- 315007	PLC CPU MODULE	MODULE CPU	1
27	2- 45- 315009	N.O. LIGHTED PUSH BUTTON	PB1	1
28	2- 45- 315110	CONTACT BLOCK	CB	1
29	2- 45- 315011	24VDC SLIM LINE 1 POLE CONTROL RELAY	CR06 CR08 CR09 CR10 CR11 CR12 CR13 CR14 CR16 CR18 CR19	11
30	2- 45- 315114	LED LIGHT 120VAC	LED	1
31	2- 45- 315121	MODULE 1	MODULE 1	1
32	2- 45- 315124	ETHERNET HUB	EH	1
33	2- 45- 880400	CONTROL RELAY 24VDC	CR07 CR15	2
34	2- 45- 315901	POWER SUPPLY 120VAC - 24VDC	PS	1
35	2- 50- 315301	STAINLESS STEEL PT100 SENSOR	RTD1 RTD3	2
36	2- 50- 31502	BRASS PT100 SENSOR	RTD2 RTD4	2
37	SEE FUSE TABLE	CUBE FUSE	F1	1



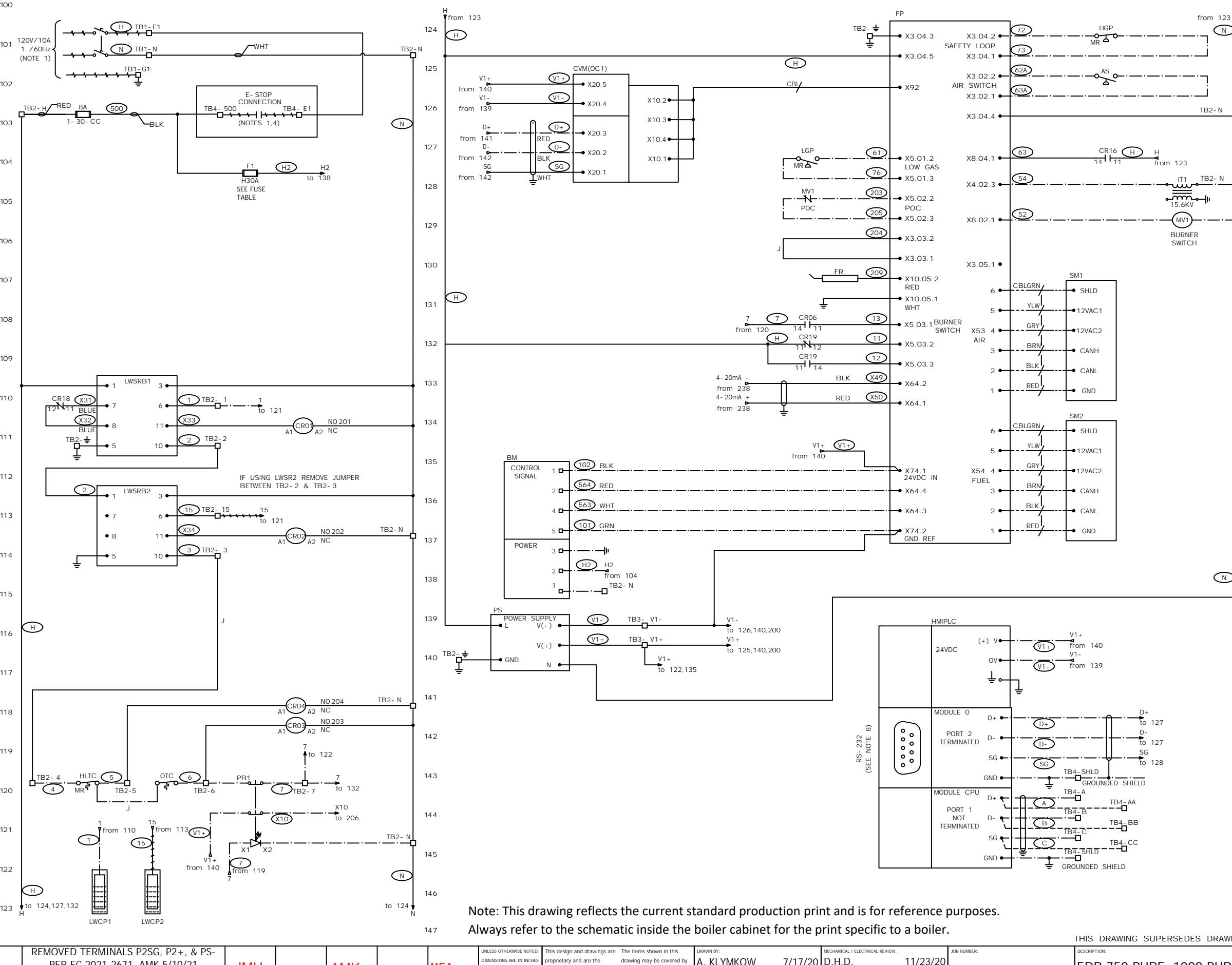
THIS DRAWING SUPERSEDES DRAWING NUMBER 7- 53- 082500									
EDR 750 PURE, 1000 PURE, 1500 PURE, 2000 PURE ELECTRICAL PANELS								Fulton	
Fulton Thermal Corporation								REV A	

NOTES:

- (---) INDICATES FIELD WIRING AND/OR FUSED SWITCH BY OTHERS.
- (---) INDICATES WIRE AND CONDUIT SUPPLIED BY FULTON, INSTALLED BY INSTALLER.
- LOW WATER TEST: PRESS SCREEN BUTTON TO RESET.
- REMOVE JUMPER BETWEEN TERMINAL BLOCKS SHOWN TO UTILIZE CONNECTION.
- ISOLATION VALVES SUPPLIED AND WIRED BY OTHERS.
- (---) INDICATES WIRING TERMINATED BY FINAL ASSEMBLY AND PANEL ASSEMBLY.
- MODULES THAT REQUIRE POWER NEED INDIVIDUAL DIRECT POWER SUPPLY FROM TB3.
- (---) RS232 PORT NOT TERMINATED.
- (---) INDICATES FACTORY FINAL WIRING.

Note: This drawing reflects the current standard production print and is for reference purposes.

Always refer to the schematic inside the boiler cabinet for the print specific to a boiler.



A	REMOVED TERMINALS P2SG, P2+, & PS- PER EC 2021-2671. AMK 5/10/21 COMBINED 7-53-081500 & 7-53-082500 INTO 7-53-081500 PER EC 2021-2671. T.B. 5/19/21	JMH 6/1/21	MEA 6/1/21	AMK 5/26/21	N/A	MEA 6/1/21			
REV	REVISION DESCRIPTION	CHECKED	BOM/PLANT	MECH/ELEC	ASME	APPROVED			

REVISION HISTORY

UNLESS OTHERWISE NOTED:
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS & 1/8
WHOLE NUMBERS
(1) PLACE DEC. .03
(2) PLACE DEC. .015
(3) PLACE DEC. .005
ANGLE .5 DEG.
SURFACE FINISH .250 MICRO-INCHES

This design and drawings are
proprietary and are the
exclusive property of Fulton
Heating Solutions, Inc. The
corporation does not permit
their use except with prior
written consent.

The items shown in this
drawing may be covered by
one or more patents of Fulton
Heating Solutions, Inc.

DRAWN BY:
A. KLYMKOW
7/17/20
D.H.D.
11/23/20
JOB NUMBER:

MECHANICAL / ELECTRICAL REVIEW:
M.E.A.
11/20/20
N/A
PROJECT NAME:

CHECKED BY:
M.E.A.
11/20/20
N/A
PROJECT NUMBER:

B.O.M. / PLANT REVIEW:
S.M.
12/4/20
T.T.
11/25/20
PROJECT MANAGER:

APPROVED BY:
S.M.
12/4/20
T.T.
11/25/20
PROJECT MANAGER:

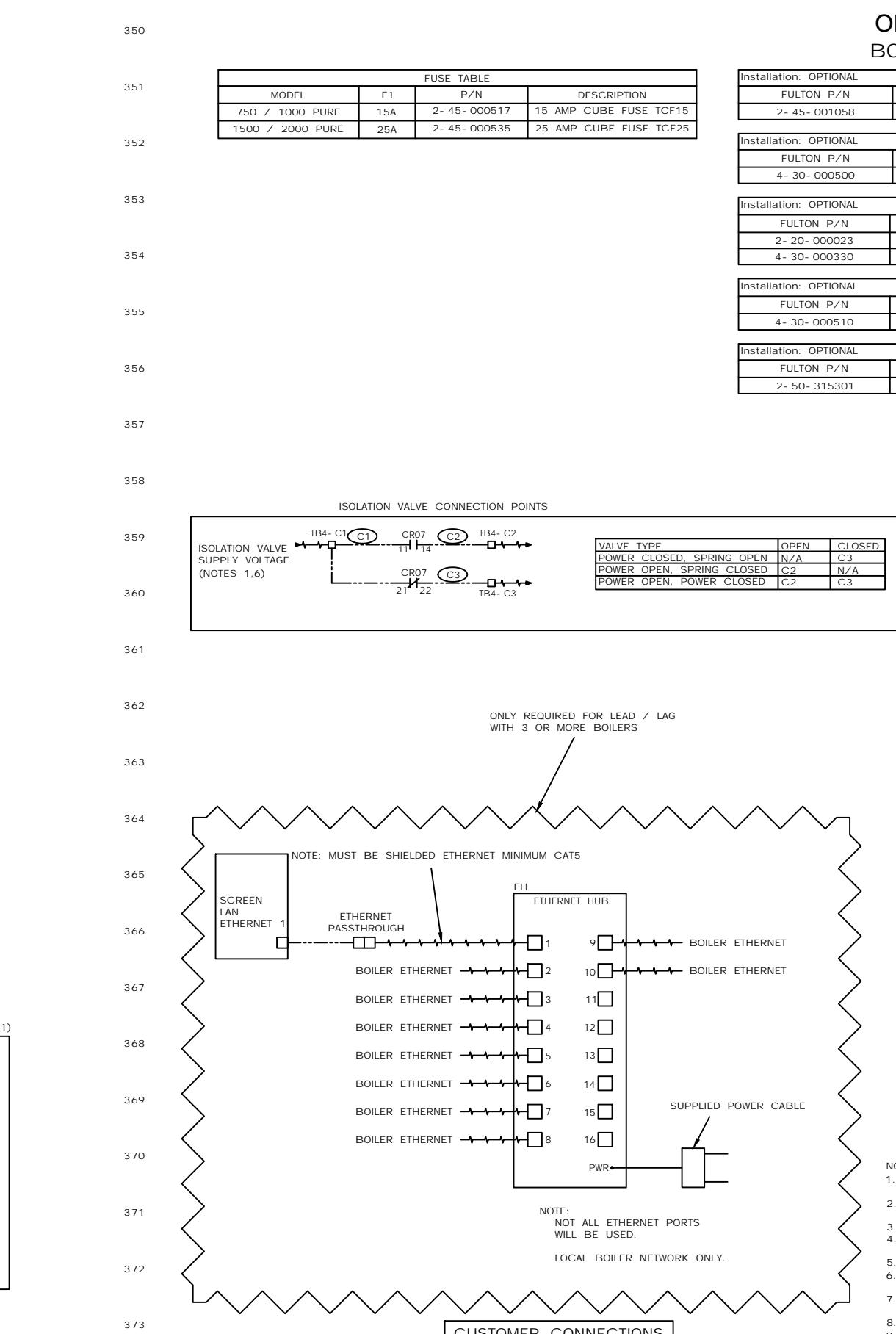
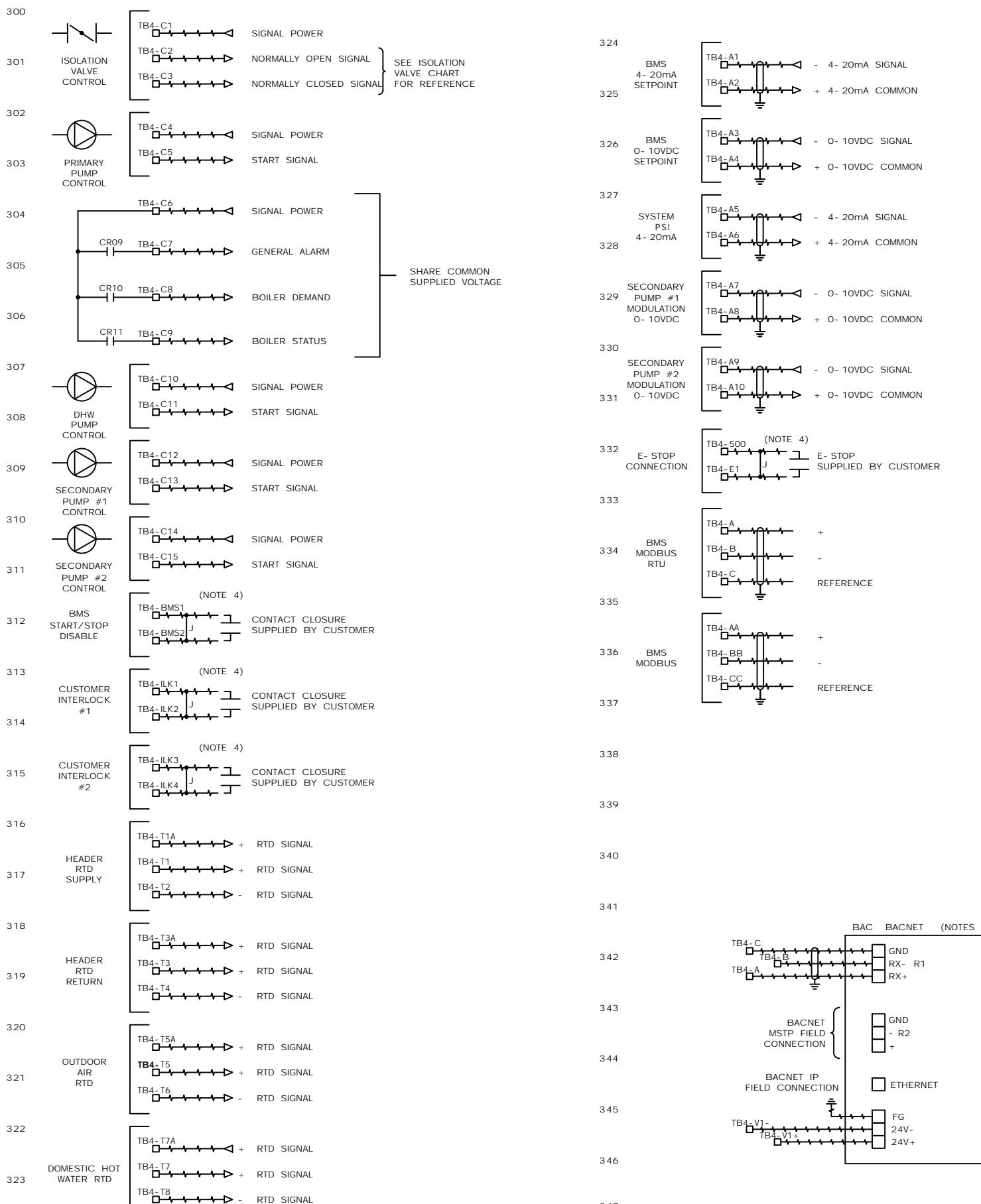
THIRD ANGLE PROJECTION

REV A

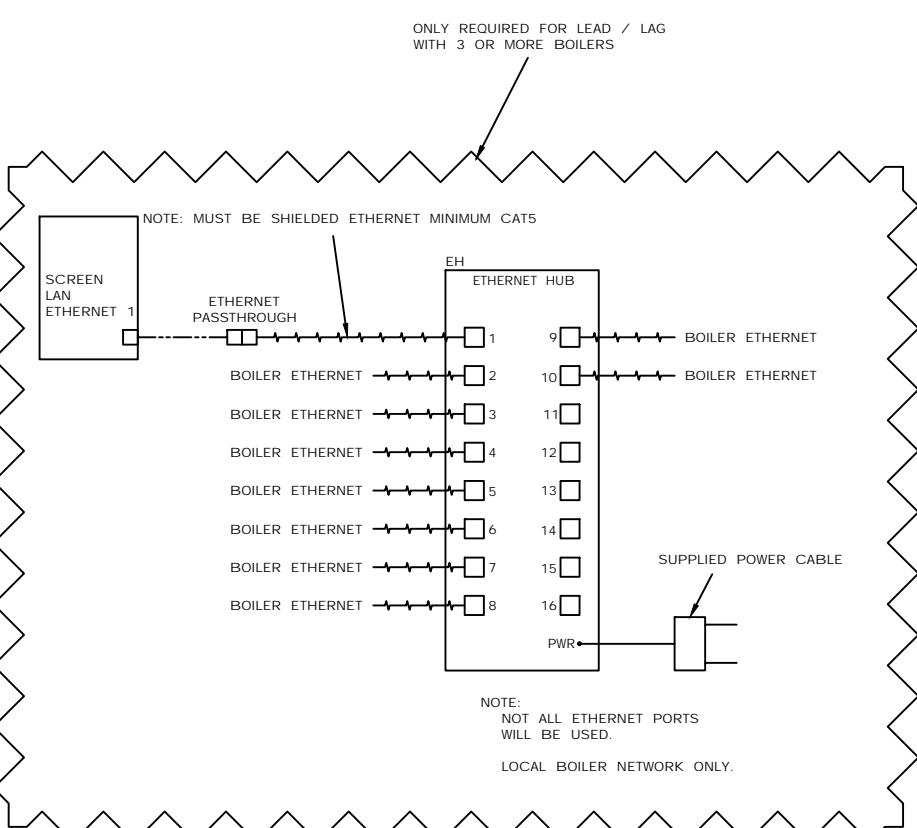
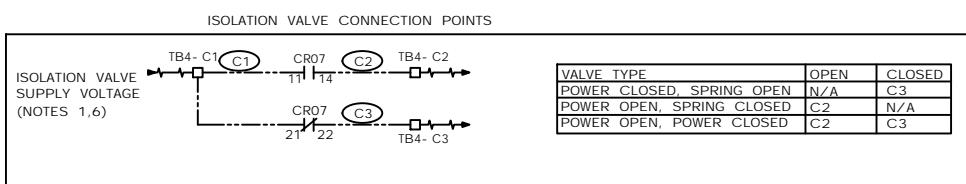
SHEET 1 OF 9

OPTIONAL COMPONENTS BOM FOR REFERENCE ONLY

Installation: OPTIONAL	Location: BACNET
FULTON P/N	DESCRIPTION
2- 45- 001058	PROGRAMMED BACNET MODULE
	TAG QTY
Installation: OPTIONAL	Location: OUTDOOR SENSOR
FULTON P/N	DESCRIPTION
4- 30- 000500	OUTDOOR TEMPERATURE SENSOR KIT
	TAG QTY
Installation: OPTIONAL	Location: 2ND LOW WATER
FULTON P/N	DESCRIPTION
2- 20- 000023	3" LOW WATER PROBE
4- 30- 000330	WATER LEVEL SAFETY RELAY KIT
	LWP 1
	LWSR2 1
Installation: OPTIONAL	Location: SUPPLY HEADER TEMP SENSOR
FULTON P/N	DESCRIPTION
4- 30- 000510	HEADER SENSOR KIT
	HS 1
Installation: OPTIONAL	Location: DHW TEMP SENSOR
FULTON P/N	DESCRIPTION
2- 50- 315301	DOMESTIC TEMPERATURE SENSOR KIT
	DTS 1



FUSE TABLE			
MODEL	F1	P/N	DESCRIPTION
750 / 1000 PURE	15A	2- 45- 000517	15 AMP CUBE FUSE TCF15
1500 / 2000 PURE	25A	2- 45- 000535	25 AMP CUBE FUSE TCF25



CUSTOMER CONNECTIONS
THIS DRAWING SUPERSEDES DRAWING NUMBER 7- 53- 082500

NOTES:

- (---) INDICATES FIELD WIRING AND/OR FUSED SWITCH BY OTHERS.
- (- - - -) INDICATES WIRE AND CONDUIT SUPPLIED BY FULTON, INSTALLED BY INSTALLER.
- LOW WATER TEST: PRESS SCREEN BUTTON TO RESET.
- REMOVE JUMPER BETWEEN TERMINAL BLOCKS SHOWN TO UTILIZE CONNECTION.
- ISOLATION VALVES SUPPLIED AND WIRED BY OTHERS.
- (- - - - -) INDICATES WIRING TERMINATED BY FINAL ASSEMBLY AND PANEL ASSEMBLY.
- MODULES THAT REQUIRE POWER NEED INDIVIDUAL DIRECT POWER SUPPLY FROM TB3.
- RS232 PORT NOT TERMINATED.
- (- - - - -) INDICATES FACTORY FINAL WIRING.

REMOVED TERMINALS P2SG, P2+, & PS-
PER EC 2021-2671. AMK 5/10/21
COMBINED 7-53-081500 & 7-53-082500
INTO 7-53-081500 PER EC 2021-2671.
T.B. 5/19/21

REV REVISION DESCRIPTION CHECKED BOM/PLANT MECH/ELEC ASME APPROVED

REVISION HISTORY

JMH 6/1/21 MEA 6/1/21 AMK 5/26/21 N/A MEA 6/1/21

UNLESS OTHERWISE NOTED:
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS & 1/8
WHOLE VALUES
(1) PLACE DEC. : 0.03
(2) PLACE DEC. : 0.015
(3) PLACE DEC. : 0.005
ANGLE : 0.5 DEG.
SURFACE FINISH : 250 MICRO-INCHES

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proprietary and are the
exclusive property of Fulton
Heating Solutions, Inc. The
corporation does not permit
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written consent.

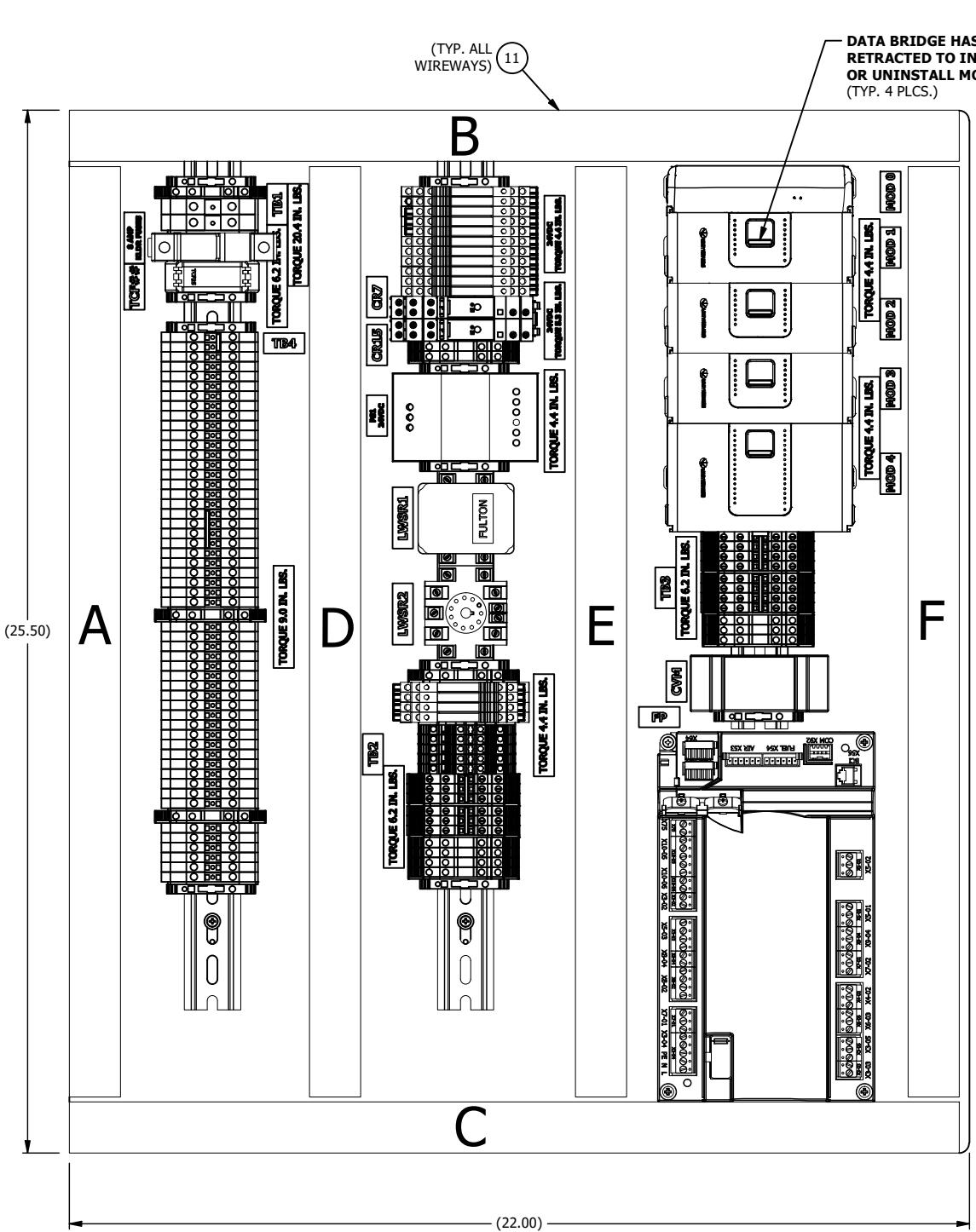
DRAWN BY: A. KLYMKOW 7/17/20 MECHANICAL / ELECTRICAL REVIEW: D.H.D. 11/23/20 JOB NUMBER:
CHECKED BY: M.E.A. 11/20/20 ASME REVIEW: N/A PROJECT NAME:
B.O.M. / PLANT REVIEW: S.M. 12/4/20 APPROVED BY: T.T. 11/25/20 PROJECT MANAGER:
THIRD ANGLE PROJECTION

EDR 750 PURE, 1000 PURE, 1500 PURE, 2000
PURE ELECTRICAL PANELS

Fulton
Fulton Thermal Corporation

DRAWING NUMBER 7-53-081500 REV A
SHEET 3 OF 9

WIRING DETAIL						
WIRE #	WIRE COLOR	WIRE LENGTH	WIRE GA.	FROM	ROUTE	TO
T2	WHITE	56.25	16	MOD3 3 R0-	GCD	TB4-T2
T4	WHITE	55.50	16	MOD3 6 R1-	GCD	TB4-T4
T6	WHITE	47.25	16	MOD3 5 R2-	ECD	TB4-T6
T8	WHITE	45.50	16	MOD3 2 R3-	ECD	TB4-T8
N	WHITE	13.25	16	TB2-N	D	LWSR1.3
N	WHITE	9.5	16	LWSR1-3	D	LWSR2.3
N	WHITE	7.5	16	LWSR2-3	D	TB2-CR3-A2
N	WHITE	16.5	16	TB2-N	D	PS-14
N	WHITE	14.5	16	TB2-N	E	FP X3.04.4
V1+	BLUE	11.75	16	TB3-V1+	E	CUM X20.5
V1+	BLUE	14.5	16	TB3-V1+	E	MOD0 V+
V1+	BLUE	11.75	16	TB3-V1+	E	CR1.11
V1+	BLUE	12.5	16	TB3-V1+	E	MOD1 1
V1+	BLUE	7	16	TB3-V1+	E	MOD4 V+
V1+	BLUE	6.5	16	MOD4 V+	E	MOD4 CM2
V1+	BLUE	5.5	16	MOD4 CM2	E	MOD4 CM3
V1+	BLUE	26	16	LWSR1-8	ECD	CR18.12
V1+	BLUE	25.25	16	LWSR1-7	ECD	CR18.11
V1+	BLUE	41	16	TB3-V1+	GBD	TB4-V1+
V1-	YELLOW	11	16	TB3-V1-	E	CUM X20.4
V1-	YELLOW	8	16	TB3-V1-	E	MOD4 0V
V1-	YELLOW	16	16	TB3-V1-	E	MOD0 0V
V1-	YELLOW	14	16	TB3-V1-	E	MOD1 2 0V
V1-	YELLOW	10.75	16	TB3-V1-	G	MOD4 1 CMO
V1-	YELLOW	6.5	16	MOD4 1 CMO	G	MOD4 12 CM1
V1-	YELLOW	41	16	TB3-V1-	GBD	TB4-V1-
V1-	YELLOW	11	16	TB3-V1-	E	CR19.A2
V1-	YELLOW	4	16	J		RELAY J
V1-	YELLOW	4	16	J		RELAY J
V1-	YELLOW	4	16	J		RELAY J
V1-	YELLOW	4	16	J		RELAY J
V1-	YELLOW	91	16	TB3-V1-	GBA	WHIP 3 HMIPLC
V1-	YELLOW	91	16	MOD4 5 I3	GB	WHIP 5 BLOCKED FLUE
N	WHITE	143	16	TB2-N	EBG	WHIP 7 IT
N	WHITE	92	16	TB2-N	EBG	WHIP 6 MV2
T10	WHITE	85	16	MOD2 3 R0-	G	WHIP 7 INLET SENSOR
T12	WHITE	83	16	MOD2 6 R1-	G	WHIP 7 STACK SENSOR
N	WHITE	87	16	TB2-N	DCA	WHIP 3 PB1
T14	WHITE	130	16	MOD2 5	EBG	WHIP 7 BOILER OUTLET
1	WHITE	158	16	TB2-1	DBG	WHIP 6 LW PROBE
T16	WHITE	63	16	MOD2 2 R3-	EB	WHIP 6 COMBUSTION AIR
V1+	BLUE	91	16	TB3-V1+	GBA	WHIP 3 HMIPLC
V1+	BLUE	83.5	16	TB3-V1+	EB	WHIP 3 BLOCKED FLUE
X10	BLUE	87	16	MOD4 14	GBA	WHIP 3 PB1
V1+	BLUE	75	16	TB3 V1+	EBA	WHIP 3 PB1
GND	GREEN	91	16	TB3 GND	GBA	WHIP 3 HMIPLC
GND	GREEN	92	16	TB2 GND	EBG	WHIP 6 HGP
GND	GREEN	83	16	TB2 GND	ECA	WHIP 4 AS
GND	GREEN	146	16	CVM GND	G	WHIP 7 IT
GND	GREEN	96	16	TB2 GND	EBG	WHIP 6 MV1
GND	GREEN	96	16	TB2 GND	EBG	WHIP LGP
GND	GREEN	86	16	TB3 GND	EB	WHIP 5 BLOCKED FLUE
GND	GREEN	89	16	CVM GND	G	WHIP 8
GND	GREEN	8	16	TB2 GND	E	FP X10.05.1
GND	GREEN	120	18	CVM	EBA	WHIP 3 HMIPLC



FRONT VIEW

BILL OF MATERIAL				
ITEM	PART NUMBER	DESCRIPTION	QTY	U.O.M.
1	2-22-000026	6-32 X 1/2" PAN HEAD T/S F PHILLIPS HEAD SELF TAPPING SCREW	32	EA.
2	2-22-000214	#6 SAE FLAT WASHER	35	EA.
3	2-22-000322	#6 STAR WASHER	1	EA.
4	2-22-315065	6- 32 X 1" PAN HEAD T/S F PHILLIPS HEAD SELF TAPPING SCREW	3	EA.
5	2-40-000421	FULTON HI/LO WATER RELAY	1	EA.
6	2-40-000423	11 PIN RELAY BASE	2	EA.
7	2-40-000474	SIEMENS LMV3 PLUG CONNECTION SET (AGG3.131)	1	EA.
8	2-40-000476	LMV36.520A1 120V SINGLE FUEL BURNER CONTROL *PROGRAMMING BY FULTON*	1	EA.
43	2-45-000020	DIN RAIL WEIDMULLER MOUNTING RAIL	4.61	FT.
10	2-45-000153	1" x 3" WHITE WIREWAY	11.24	FT.
11	2-45-000283	1" WIREWAY COVER	11.24	FT.
12	2-45-000371	1 POLE 30 AMP FUSE HOLDER	1	EA.
13	2-45-000384	KLDR 8AMP 600 VAC TIME DELAY FUSE	1	EA.
14	2-45-000519	30 AMP CUBEFUSE HOLDER TCFH30N	1	EA.
15	2-45-000618	8 WAY NEUTRAL JUMPER	.25	EA.
16	2-45-000803	SINGLE CIRCUIT TERMINAL BLOCK END CAP	4	EA.
17	2-45-000804	SINGLE CIRCUIT, 2 CONNECTION, 30A TERMINAL BLOCK (30GA. - 10GA.)	14	EA.
18	2-45-000805	SINGLE CIRCUIT, 2 CONNECTION GROUND TERMINAL BLOCK (30GA. - 10GA.)	13	EA.
19	2-45-000806	SINGLE CIRCUIT, 2 CONNECTION TERMINAL BLOCK END CAP	11	EA.
20	2-45-000807	DUAL CIRCUIT, 35A TERMINAL BLOCK (26GA. - 10GA.)	5	EA.
21	2-45-000808	DUAL CIRCUIT TERMINAL BLOCK END CAP	1	EA.
22	2-45-000809	SINGLE CIRCUIT, 65A TERMINAL BLOCK (18GA. - 6GA.)	2	EA.
23	2-45-000810	DIN RAIL END ANCHOR (35MM)	10	EA.
24	2-45-000816	PUSH-IN TERMINAL BLOCK JUMPER - 2 (6MM)	1	EA.
25	2-45-000817	PUSH-IN TERMINAL BLOCK JUMPER - 3 (6MM)	2	EA.
26	2-45-000818	PUSH-IN TERMINAL BLOCK JUMPER - 4 (6MM)	3	EA.
27	2-45-000830	SINGLE CIRCUIT, 35A TERMINAL BLOCK (22GA. - 10GA.)	53	EA.
28	2-45-000912	RS232-RS485 MODULE CVM(OCI)	1	EA.
29	2-45-001095	AB 700 - TBJ20R JUMPER 20 POLE FOR 700 - HL BLOCKS	1.1	EA.
30	2-45-001235	1 POLE SIGNAL RELAY 120VAC	4	EA.
31	2-45-315004	UNISTREAM-IO (SLIM #UIS-04PTN)	2	EA.
32	2-45-315005	UNISTREAM-IO (WIDE #UID-W161R)	1	EA.
33	2-45-315011	1 POLE SIGNAL RELAY 24VDC	11	EA.
34	2-45-315121	UNISTREAM-IO (SLIM #UIA-0402N)	1	EA.
35	2-45-315124	UNISTREAM EXP END UNIT (#UAG-XKPL-600)	1	EA.
36	2-45-315901	POWER SUPPLY 120VAC - 24VDC (MEAN WELL #MDR-100-24)	1	EA.
37	2-45-880400	CONTROL RELAY 24VDC	2	EA.
38	5-10-081590-37	ENDURA 750K / 1000K PURE ELECTRICAL BACK PANEL	1	EA.
39	SELECT VARIANT	750/1000 PURE 15 AMP CUBE FUSE TCF15 2-45-000517 1500/2000 PURE 25 AMP CUBE FUSE TCF25 2-45-000535	1	EA.

NOTES:

1. ALIGN WIRE WAYS AND DIN RAILS WITH PREPUNCHED HOLES IN BACK PANEL. THERE ARE EXTRA HOLES TO ENSURE WIRE WAYS AND DIN RAILS WILL LINE UP.
2. USE SELF TAPPING SCREWS AND WASHERS TO FASTEN WIRE WAYS AND DIN RAILS TO BACK PANEL.
3. ALL WIRE CONNECTIONS ARE REQUIRED TO BE TORQUED TO THE APPROPRIATE TORQUE, REFERENCE BOM FOR SPECIFIC TORQUE VALUES.
4. WIRE WAYS ARE LABELED BY LETTERS TO ENSURE WIRE ROUTING IS CONSISTENT.

A	REMOVED TERMINALS P2SG, PS, PS+, M2, & M1 FROM TERMINAL BLOCK 4, COMBINED 7-53-081500 & 7-53-082500 INTO 7-53-081500, ADDED SHEET 9, ADDED LABELING, & REPLACED TERMINAL BLOCKS W/ ALLEN-BRADLEY EQUIV. PER EC 2021-2671. T.B. 5/21/21	JMH 6/1/21	MEA 6/1/21	AMK 5/26/21	N/A	MEA 6/1/21
	REVISION DESCRIPTION	CHECKED	BOM/PLANT	MECH/ELEC	ASME	APPROVED
	REVISION HISTORY					

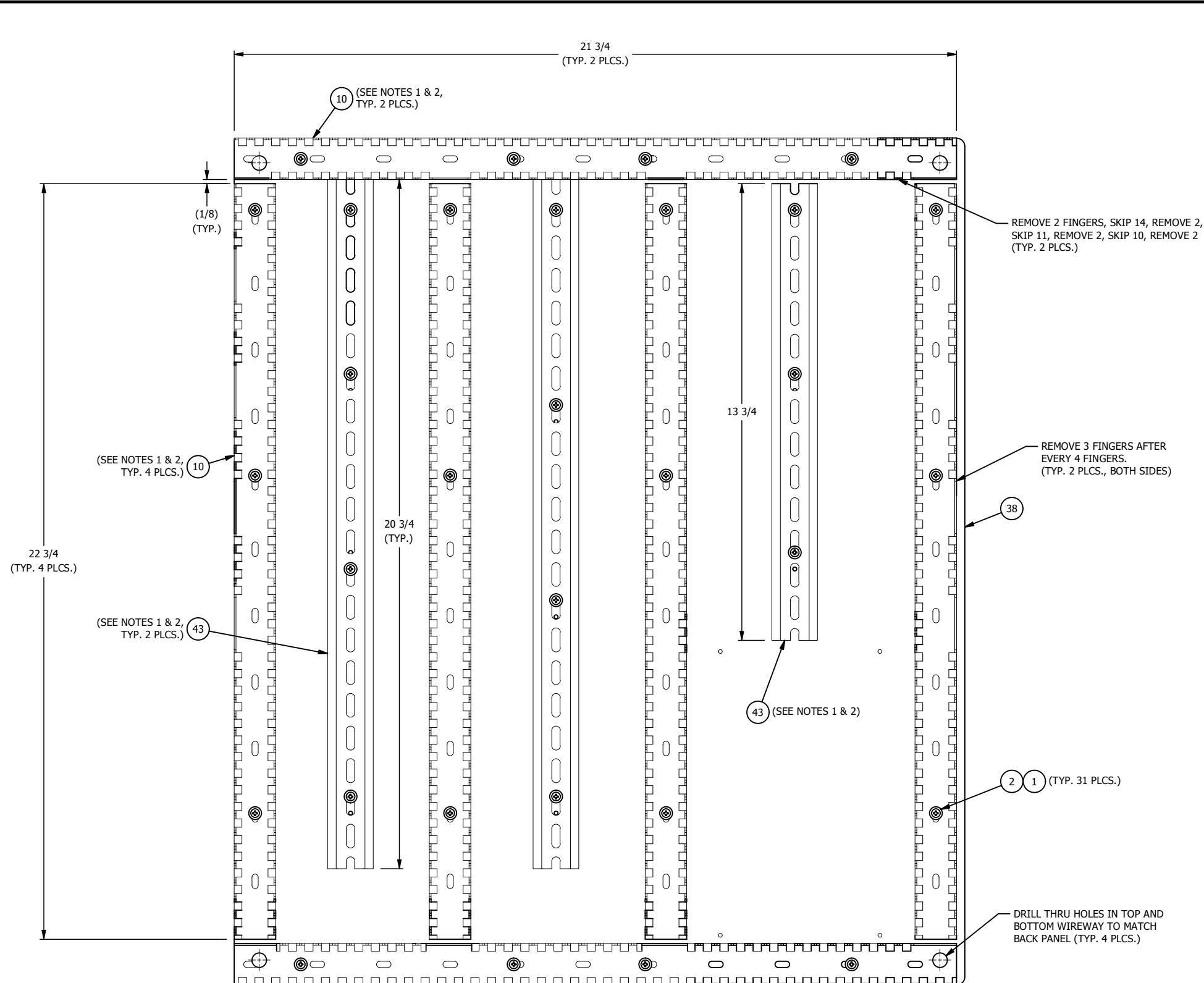
UNLESS OTHERWISE NOTED, DIMENSIONS ARE DUAL DIMENSIONED
TOLERANCES INCH METRIC
FRACTION & WHOLE VALUE ± 0.005 $\pm 0.7mm$
(1) PLACE DEC. ± 0.015 $\pm 1.2mm$
(2) PLACE DEC. ± 0.005 $\pm 0.5mm$
(3) PLACE DEC. ± 0.005 $\pm 0.5mm$
ANGLE $\pm 0.5^{\circ}$ $\pm 0.5^{\circ}$

THIRD ANGLE PROJECTION

SURFACE FINISH 250 MICRO-INCHES 6.35 MICRO-METERS

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DRAWN BY: B. PALMER 6/16/2020 MECHANICAL



BILL OF MATERIAL				
ITEM	PART NUMBER	DESCRIPTION	TORQUE SPEC	
1	2-22-000026	6-32 X 1/2" PAN HEAD T/S F PHILLIPS HEAD SELF TAPPING SCREW	14 IN. LBS.	
2	2-22-000214	#6 SAE FLAT WASHER	---	
10	2-45-000153	1" x 3" WHITE WIREWAY	---	
38	5-10-081590-37	ENDURA 750K / 1000K PURE ELECTRICAL BACK PANEL	---	
43	2-45-000020	DIN RAIL WEIDMULLER MOUNTING RAIL	---	

DIN RAIL & WIREWAY DETAIL
(ALL ELECTRICAL COMPONENTS HIDDEN)

A	REMOVED TERMINALS P2SG, PS, PS+, M2, & M1 FROM TERMINAL BLOCK 4, COMBINED 7-53-081500 & 7-53-082500 INTO 7-53-081500, ADDED SHEET 9, ADDED LABELING, & REPLACED TERMINAL BLOCKS W/ ALLEN-BRADLEY EQUIV. PER EC 2021-2671. T.B. 5/21/21	JMH 6/1/21	MEA 6/1/21	AMK 5/26/21	N/A	MEA 6/1/21
REV	REVISION DESCRIPTION	CHECKED	BOM/PLANT	MECH/ELEC	ASME	APPROVED
REVISION HISTORY						

UNLESS OTHERWISE NOTED,
DIMENSIONS ARE DUAL DIMENSIONED
TOLERANCES INCH METRIC
FRACTION & WHOLE VALUE ± 1/16 ± 3mm
(1) PLACE DEC. ± 0.008 ± 0.7mm
(2) PLACE DEC. ± 0.015 ± 2.0mm
(3) PLACE DEC. ± 0.005 ± 0.5mm
ANGLE ± 0.5DEG ± 0.5 DEG

Surface Finish: 250 Micro-inches
Surface Finish: 6.35 Micro-meters



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THIS DRAWING SUPERSEDES DRAWING NUMBER 7-53-082500

DESCRIPTION: EDR 750 PURE, EDR 1000 PURE, 1500 PURE, 2000 PURE ELECTRICAL PANELS

Fulton
Fulton Thermal Corporation

DRAWING NUMBER
7-53-081500

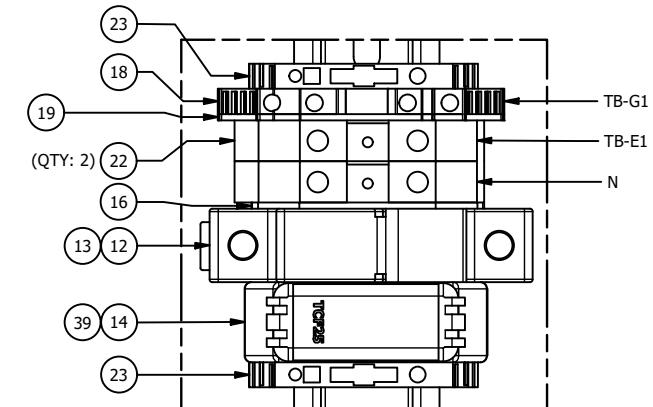
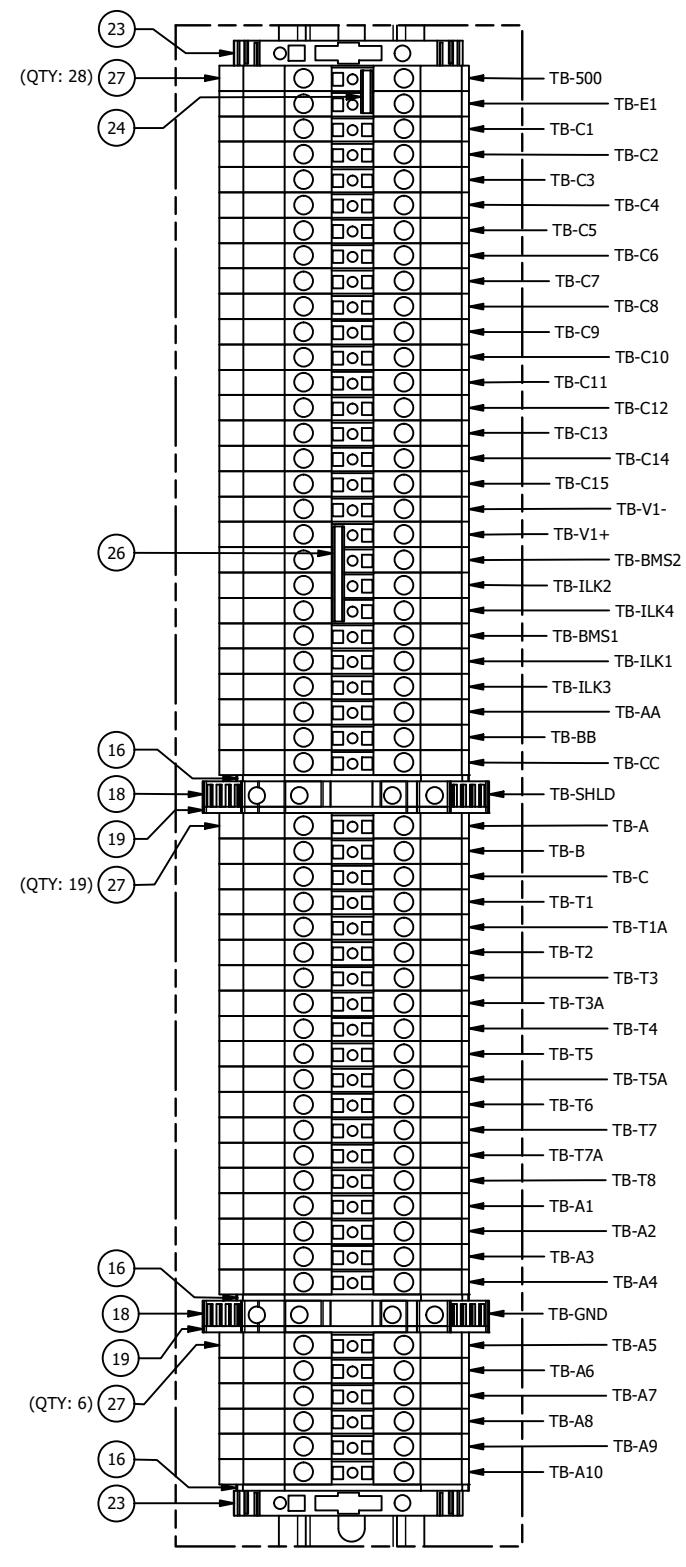
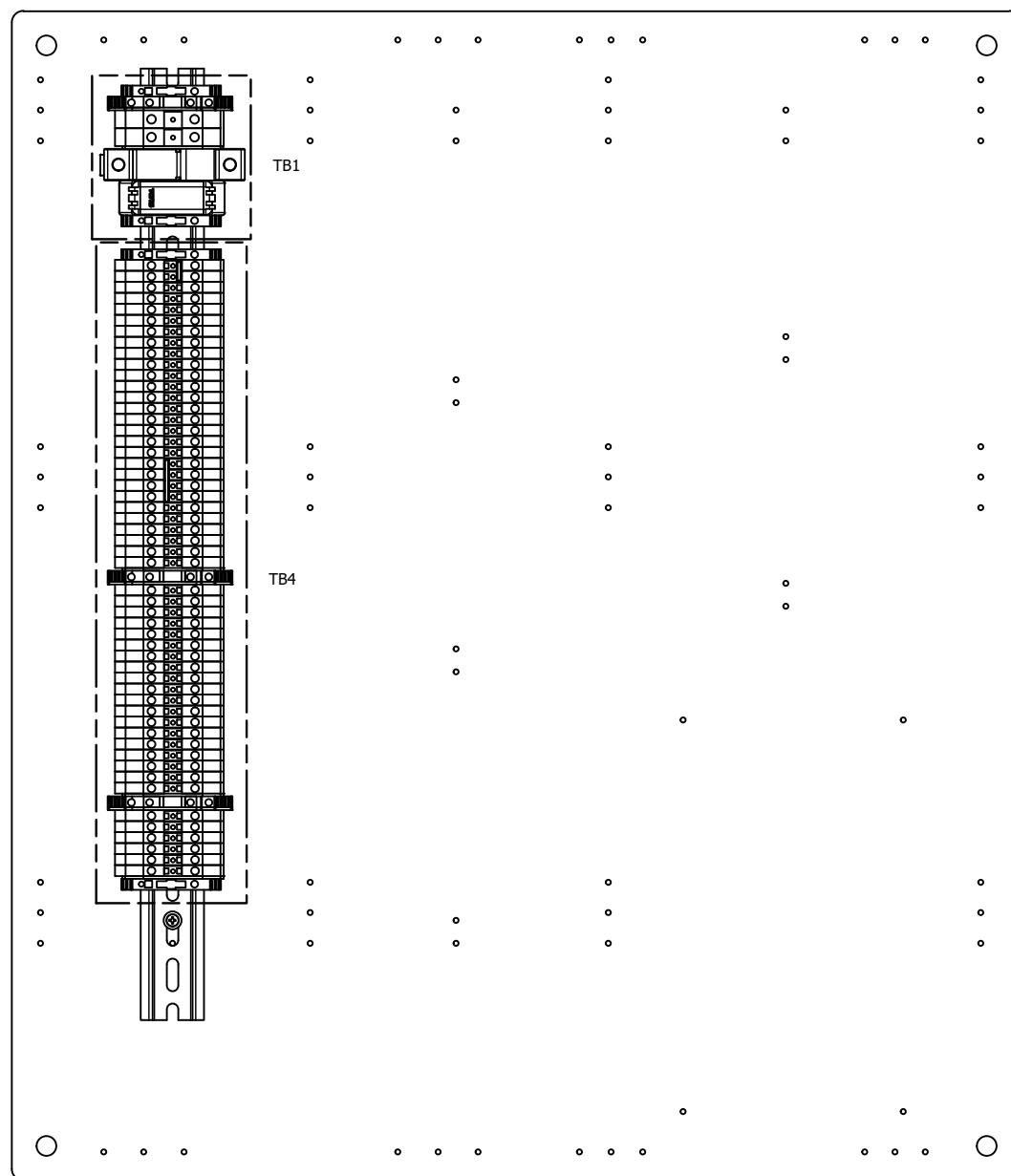
REVISION
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SHEET 5 OF 9

NOTES:

1. ALIGN WIRE WAYS AND DIN RAILS WITH PREPUNCHED HOLES IN BACK PANEL. THERE ARE EXTRA HOLES TO ENSURE WIRE WAYS AND DIN RAILS WILL LINE UP.
2. USE SELF TAPPING SCREWS AND WASHERS TO FASTEN WIRE WAYS AND DIN RAILS TO BACK PANEL.
3. ALL WIRE CONNECTIONS ARE REQUIRED TO BE TORQUED TO THE APPROPRIATE TORQUE, REFERENCE BOM FOR SPECIFIC TORQUE VALUES.
4. WIRE WAYS ARE LABELED BY LETTERS TO ENSURE WIRE ROUTING IS CONSISTENT.

BILL OF MATERIAL			
ITEM	PART NUMBER	DESCRIPTION	TORQUE SPEC
12	2-45-000371	1 POLE 30 AMP FUSE HOLDER	17.7 IN. LBS.
13	2-45-000384	KLDR 8AMP 600 VAC TIME DELAY FUSE	---
14	2-45-000519	30 AMP CUBEFUSE HOLDER TCFH30N	5.3 IN. LBS.
16	2-45-000803	SINGLE CIRCUIT TERMINAL BLOCK END CAP	----
18	2-45-000805	SINGLE CIRCUIT, 2 CONNECTION GROUND TERMINAL BLOCK (30GA. - 10GA.)	6.2 IN. LBS.
19	2-45-000806	SINGLE CIRCUIT, 2 CONNECTION TERMINAL BLOCK END CAP	----
22	2-45-000809	SINGLE CIRCUIT, 65A TERMINAL BLOCK (18GA. - 6GA.)	20.4 IN. LBS.
23	2-45-000810	DIN RAIL END ANCHOR (35MM)	----
24	2-45-000816	PUSH-IN TERMINAL BLOCK JUMPER - 2 (6MM)	----
26	2-45-000818	PUSH-IN TERMINAL BLOCK JUMPER - 4 (6MM)	----
27	2-45-000830	SINGLE CIRCUIT, 35A TERMINAL BLOCK (22GA. - 10GA.)	9.0 IN. LBS.
39	SELECT VARIANT	750/1000 PURE 15 AMP CUBE FUSE TCF15 2-45-000517 1500/2000 PURE 25 AMP CUBE FUSE TCF25 2-45-000535	----
43	2-45-000020	DIN RAIL WEIDMULLER MOUNTING RAIL	



NOTES:

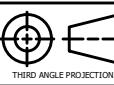
1. ALIGN WIRE WAYS AND DIN RAILS WITH PREPUNCHED HOLES IN BACK PANEL. THERE ARE EXTRA HOLES TO ENSURE WIRE WAYS AND DIN RAILS WILL LINE UP.
2. USE SELF TAPPING SCREWS AND WASHERS TO FASTEN WIRE WAYS AND DIN RAILS TO BACK PANEL.
3. ALL WIRE CONNECTIONS ARE REQUIRED TO BE TORQUED TO THE APPROPRIATE TORQUE, REFERENCE BOM FOR SPECIFIC TORQUE VALUES.
4. WIRE WAYS ARE LABELED BY LETTERS TO ENSURE WIRE ROUTING IS CONSISTENT.

A	REMOVED TERMINALS P2SG, PS, PS+, M2, & M1 FROM TERMINAL BLOCK 4, COMBINED 7-53-081500 & 7-53-082500 INTO 7-53-081500, ADDED SHEET 9, ADDED LABELING, & REPLACED TERMINAL BLOCKS W/ ALLEN-BRADLEY EQUIV. PER EC 2021-2671. T.B. 5/21/21	JMH 6/1/21	MEA 6/1/21	AMK 5/26/21	N/A	MEA 6/1/21
	REV	REVISION DESCRIPTION	CHECKED	BOM/PLANT	MECH/ELEC	ASME
		REVISION HISTORY				

UNLESS OTHERWISE NOTED,
DIMENSIONS ARE DUAL DIMENSIONED
TOLERANCES INCH METRIC
FRACTION & WHOLE VALUE ± 0.005 $\pm 0.7mm$
(1) PLACE DEC. ± 0.015 $\pm 2.0mm$
(2) PLACE DEC. ± 0.005 $\pm 0.5mm$
(3) PLACE DEC. ± 0.005 $\pm 0.5deg$

Surface Finish: 250 Micro-Inches
Surface Finish: 6.35 Micro-Meters

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THIS DRAWING SUPERSEDES DRAWING NUMBER 7-53-082500

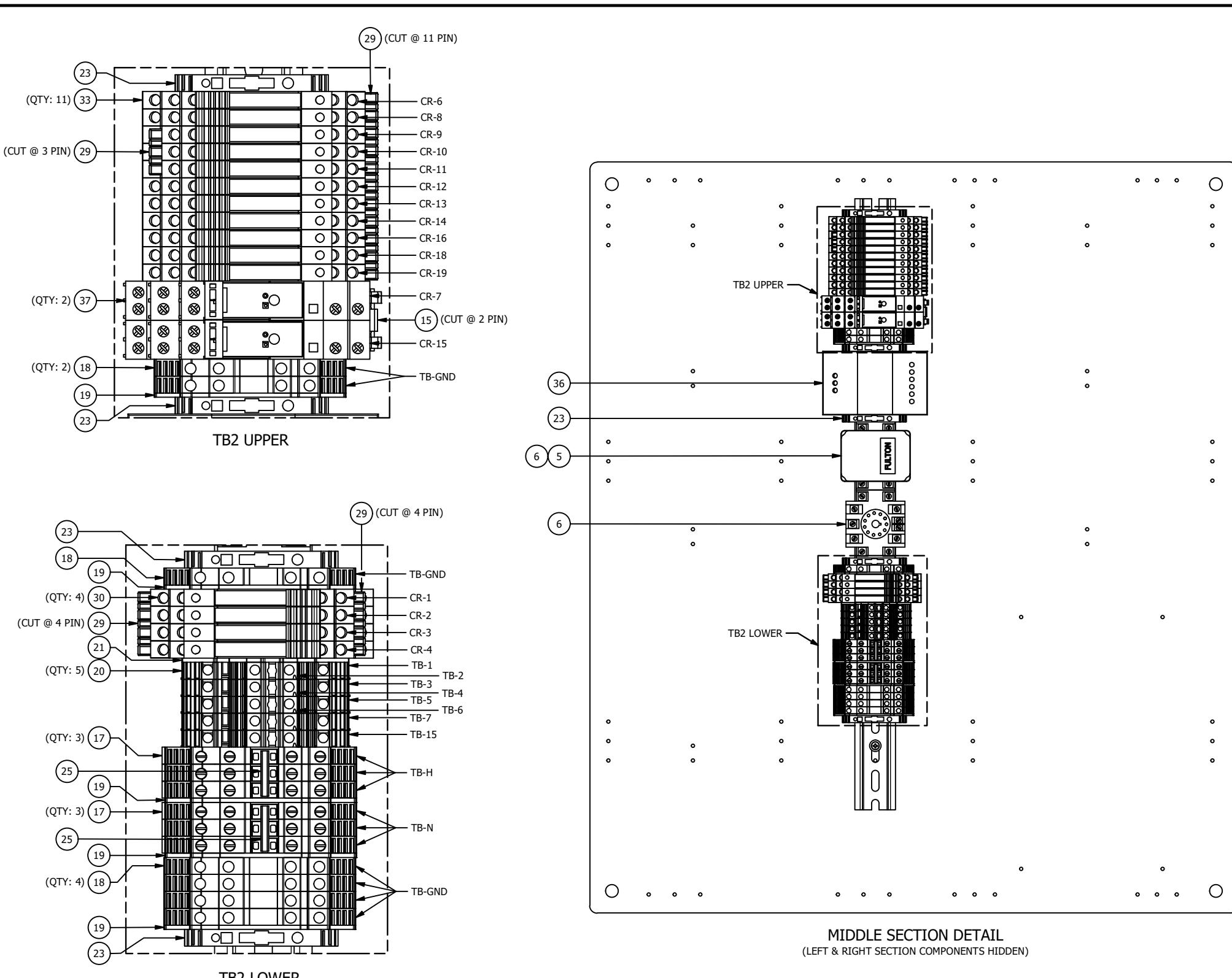
DESCRIPTION: EDR 750 PURE, EDR 1000 PURE, 1500 PURE, 2000
PURE ELECTRICAL PANELS

Fulton
Fulton Thermal Corporation

DRAWING NUMBER
7-53-081500

REVISION
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SHEET 6 OF 9

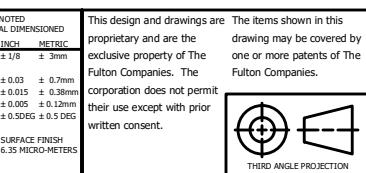


BILL OF MATERIAL			
ITEM	PART NUMBER	DESCRIPTION	TORQUE SPEC
5	2-40-000421	FULTON HI/LO WATER RELAY	----
6	2-40-000423	11 PIN RELAY BASE	5.3 IN. LBS.
15	2-45-000618	8 WAY NEUTRAL JUMPER	----
17	2-45-000804	SINGLE CIRCUIT, 2 CONNECTION, 30A TERMINAL BLOCK (30GA. - 10GA.)	6.2 IN. LBS.
18	2-45-000805	SINGLE CIRCUIT, 2 CONNECTION GROUND TERMINAL BLOCK (30GA. - 10GA.)	6.2 IN. LBS.
19	2-45-000806	SINGLE CIRCUIT, 2 CONNECTION TERMINAL BLOCK END CAP	----
20	2-45-000807	DUAL CIRCUIT, 35A TERMINAL BLOCK (26GA. - 10GA.)	4.4 IN. LBS.
21	2-45-000808	DUAL CIRCUIT TERMINAL BLOCK END CAP	----
23	2-45-000810	DIN RAIL END ANCHOR (35MM)	----
25	2-45-000817	PUSH-IN TERMINAL BLOCK JUMPER - 3 (6MM)	----
29	2-45-001095	AB 700 - TBJ20R JUMPER 20 POLE FOR 700 - HL BLOCKS	----
30	2-45-001235	1 POLE SIGNAL RELAY 120VAC	4.4 IN. LBS.
33	2-45-315011	1 POLE SIGNAL RELAY 24VDC	6.2 IN. LBS.
36	2-45-315901	POWER SUPPLY 120VAC - 24VDC (MEAN WELL #MDR-100-24)	3.8 IN. LBS.
37	2-45-880400	CONTROL RELAY 24VDC	4.4 IN. LBS.
43	2-45-000020	DIN RAIL WEIDMULLER MOUNTING RAIL	

NOTES:

1. ALIGN WIRE WAYS AND DIN RAILS WITH PREPUNCHED HOLES IN BACK PANEL. THERE ARE EXTRA HOLES TO ENSURE WIRE WAYS AND DIN RAILS WILL LINE UP.
2. USE SELF TAPPING SCREWS AND WASHERS TO FASTEN WIRE WAYS AND DIN RAILS TO BACK PANEL.
3. ALL WIRE CONNECTIONS ARE REQUIRED TO BE TORQUED TO THE APPROPRIATE TORQUE, REFERENCE BOM FOR SPECIFIC TORQUE VALUES.
4. WIRE WAYS ARE LABELED BY LETTERS TO ENSURE WIRE ROUTING IS CONSISTENT.

A	REMOVED TERMINALS P2SG, PS, PS+, M2, & M1 FROM TERMINAL BLOCK 4, COMBINED 7-53-081500 & 7-53-082500 INTO 7-53-081500, ADDED SHEET 9, ADDED LABELING, & REPLACED TERMINAL BLOCKS W/ ALLEN-BRADLEY EQUIV. PER EC 2021-2671. T.B. 5/21/21	JMH 6/1/21	MEA 6/1/21	AMK 5/26/21	N/A	MEA 6/1/21
REV	REVISION DESCRIPTION	CHECKED	BOM/PLANT	MECH/ELEC	ASME	APPROVED
REVISION HISTORY						



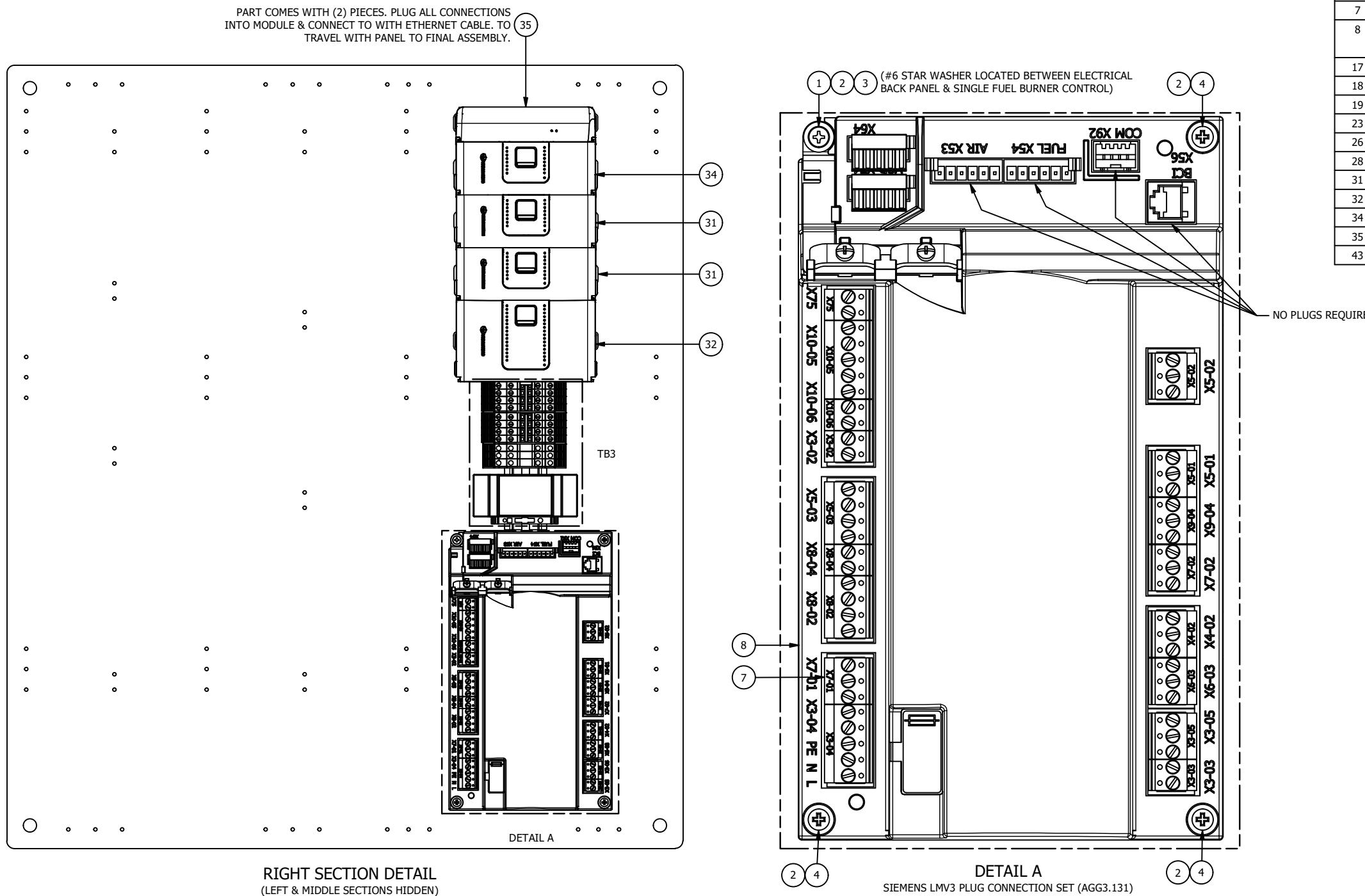
DRAWN BY: B. PALMER 6/16/2020	MECHANICAL / ELECTRICAL REVIEW: N/A	JOB NUMBER:
CHECKED BY: MEA 11/20/2020	ASME REVIEW: N/A	PROJECT NAME:
B.O.M. / PLANT REVIEW: SM 12/4/2020	APPROVED BY: TT 11/25/2020	PROJECT MANAGER:

THIS DRAWING SUPERSEDES DRAWING NUMBER 7-53-082500
DESCRIPTION: EDR 750 PURE, EDR 1000 PURE, 1500 PURE, 2000
PURE ELECTRICAL PANELS

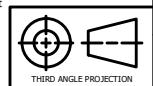
DRAWING NUMBER
7-53-081500

REVISION
A

Fulton
Fulton Thermal Corporation



ED DIMENSIONED		This design and drawings are Proprietary and are the exclusive property of The Fulton Companies. The corporation does not permit their use except with prior written consent.	
	METRIC		
4	\pm 3mm		
03	\pm 0.7mm		
015	\pm 0.38mm		
005	\pm 0.12mm		
SDEG \pm 0.5 DEG			



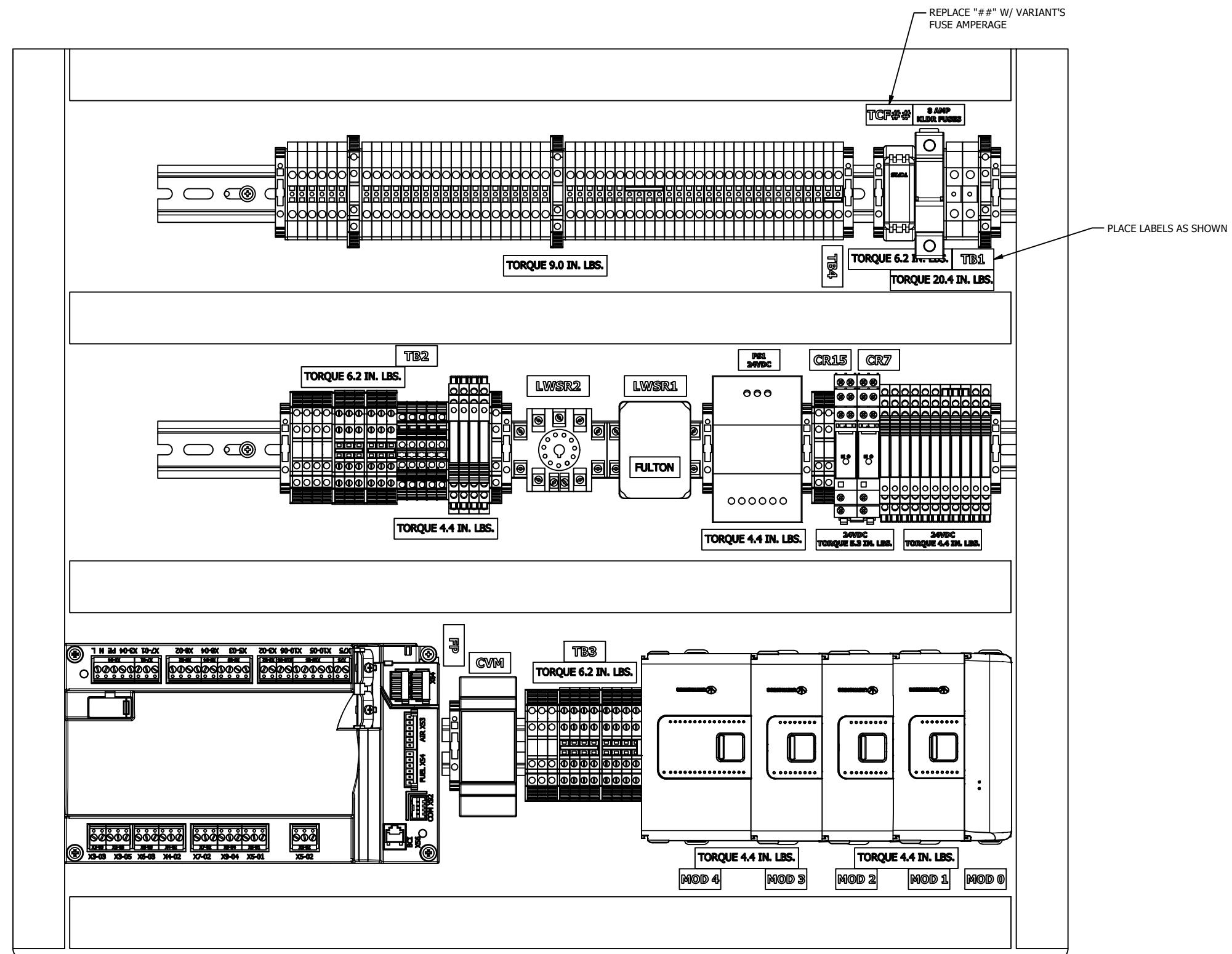
DRAWN BY: B. PALMER	6/16/2020	MECHANICAL / ELECTRICAL REVIEW: N/A	JOB NUMBER
CHECKED BY: MEA	11/20/2020	ASME REVIEW: N/A	PROJECT NUMBER
B.O.M. / PLANT REVIEW: SM	12/4/2020	APPROVED BY: TT	PROJECT NUMBER 11/25/2020

THIS DRAWING SUPERSEDES DRAWING NUMBER 7-53-082500

ITEM DRAWING SUPERSEDED DRAWING NUMBER: 00-0000000
DESCRIPTION: EDR 750 PURE, EDR 1000 PURE, 1500 PURE, 2000
PURE ELECTRICAL PANELS

- ES:
ALIGN WIRE WAYS AND DIN RAILS WITH PREPUNCHED HOLES
IN BACK PANEL. THERE ARE EXTRA HOLES TO ENSURE WIRE
WAYS AND DIN RAILS WILL LINE UP.
- USE SELF TAPPING SCREWS AND WASHERS TO FASTEN WIRE
WAYS AND DIN RAILS TO BACK PANEL.
- ALL WIRE CONNECTIONS ARE REQUIRED TO BE TORQUED TO
THE APPROPRIATE TORQUE, REFERENCE BOM FOR SPECIFIC
TORQUE VALUES.
- WIRE WAYS ARE LABELED BY LETTERS TO ENSURE WIRE
ROUTING IS CONSISTENT.

WING NUMBER -53-081500	REVISION A
----------------------------------	----------------------



NOTES:

1. ALIGN WIRE WAYS AND DIN RAILS WITH PREPUNCHED HOLES IN BACK PANEL. THERE ARE EXTRA HOLES TO ENSURE WIRE WAYS AND DIN RAILS WILL LINE UP.
2. USE SELF TAPPING SCREWS AND WASHERS TO FASTEN WIRE WAYS AND DIN RAILS TO BACK PANEL.
3. ALL WIRE CONNECTIONS ARE REQUIRED TO BE TORQUED TO THE APPROPRIATE TORQUE, REFERENCE BOM FOR SPECIFIC TORQUE VALUES.
4. WIRE WAYS ARE LABELED BY LETTERS TO ENSURE WIRE ROUTING IS CONSISTENT.

PANEL LABELING

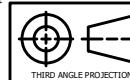
REMOVED TERMINALS P2SG, PS, PS+, M2, & M1 FROM TERMINAL BLOCK 4, COMBINED 7-53-081500 & 7-53-082500 INTO 7-53-081500, ADDED SHEET 9, ADDED LABELING, & REPLACED TERMINAL BLOCKS W/ ALLEN-BRADLEY EQUIV. PER EC 2021-2671. T.B. 5/21/21						JMH 6/1/21	MEA 6/1/21	AMK 5/26/21	N/A	MEA 6/1/21
REV	REVISION DESCRIPTION	CHECKED	BOM/PLANT	MECH/ELEC	ASME	APPROVED				
REVISION HISTORY										

UNLESS OTHERWISE NOTED,
DIMENSIONS ARE DUAL DIMINISHED
TOLERANCES
FRACTION & WHOLE VALUE INCH METRIC
(1) PLACE DEC. ± 0.00 $\pm 0.7mm$
(2) PLACE DEC. ± 0.015 $\pm 0.2mm$
(3) PLACE DEC. ± 0.005 $\pm 0.1mm$
ANGLE $\pm 0.5^{\circ}$ $\pm 0.5^{\circ}$

SURFACE FINISH
250 MICRO-INCHES

SURFACE FINISH
6.35 MICRO-METERS

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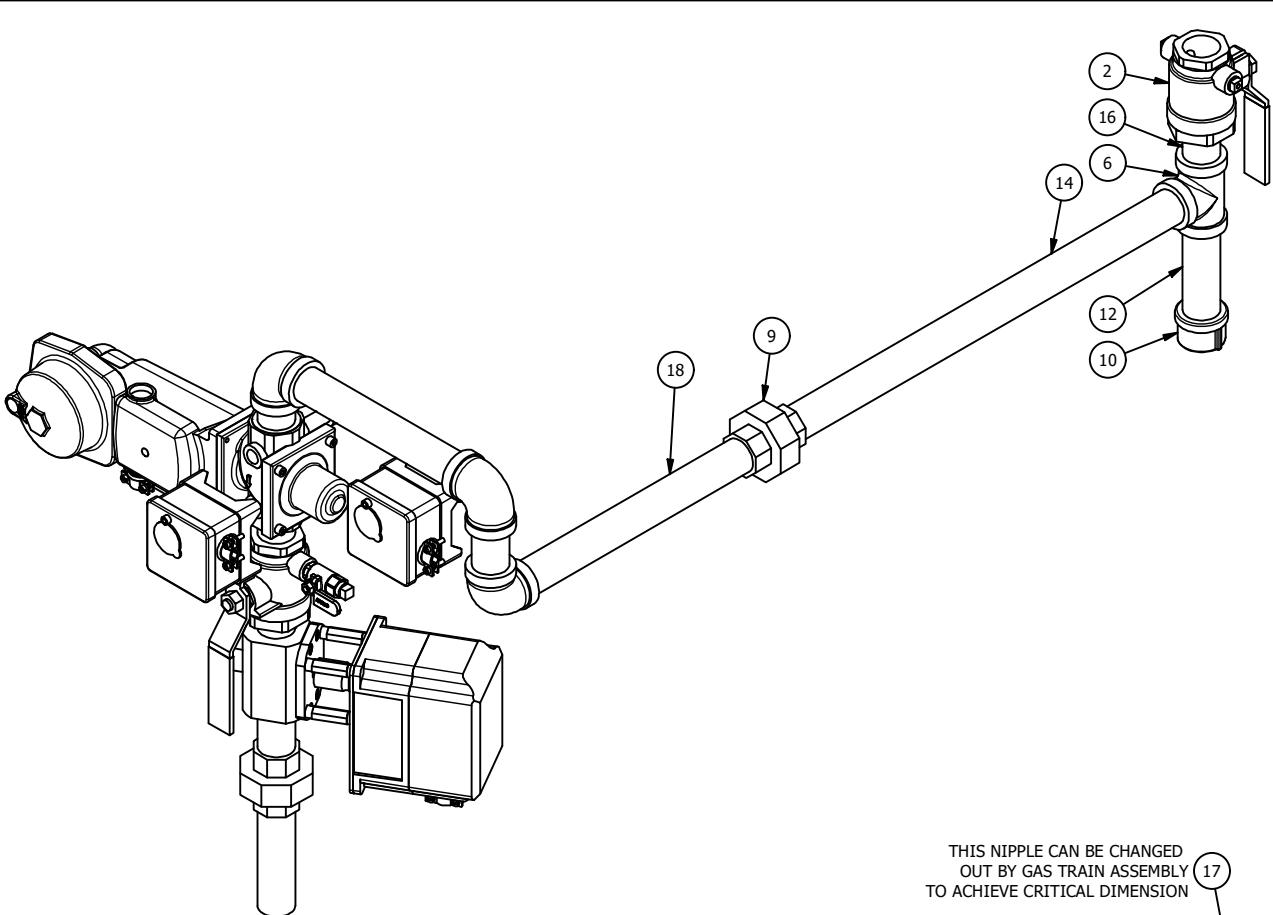
THIS DRAWING SUPERSEDES DRAWING NUMBER 7-53-082500

DESCRIPTION: EDR 750 PURE, EDR 1000 PURE, 1500 PURE, 2000 PURE ELECTRICAL PANELS

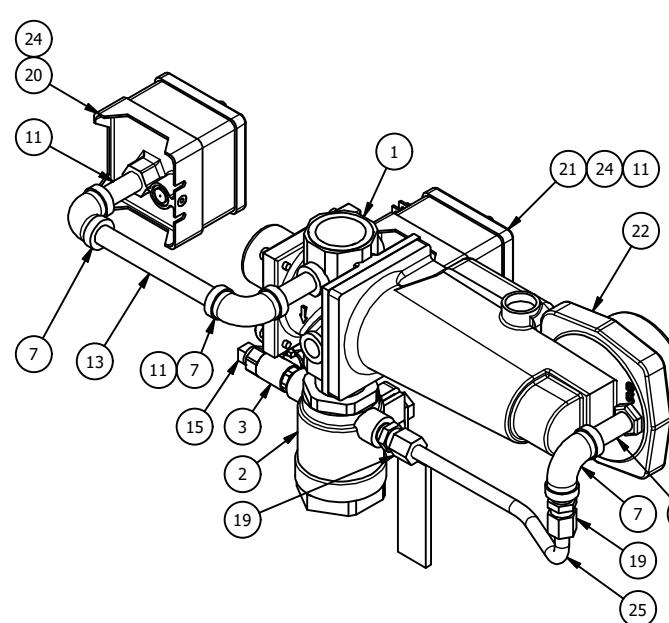
Fulton
Fulton Thermal Corporation

DRAWING NUMBER
7-53-081500

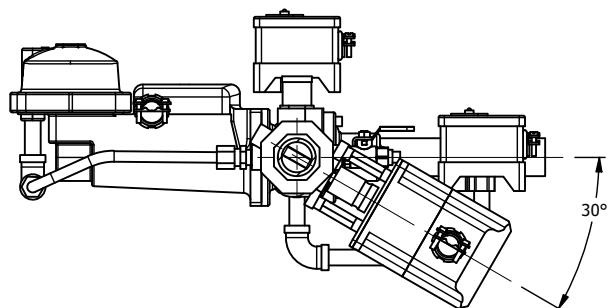
REVISION
A



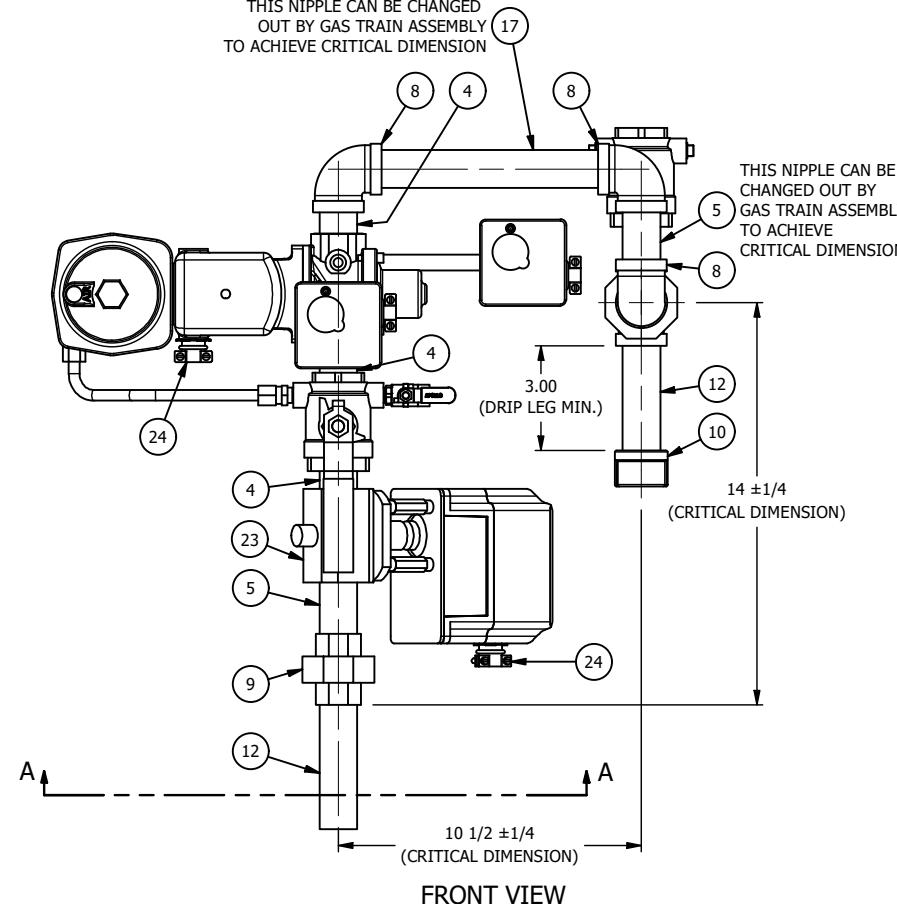
ISOMETRIC VIEW



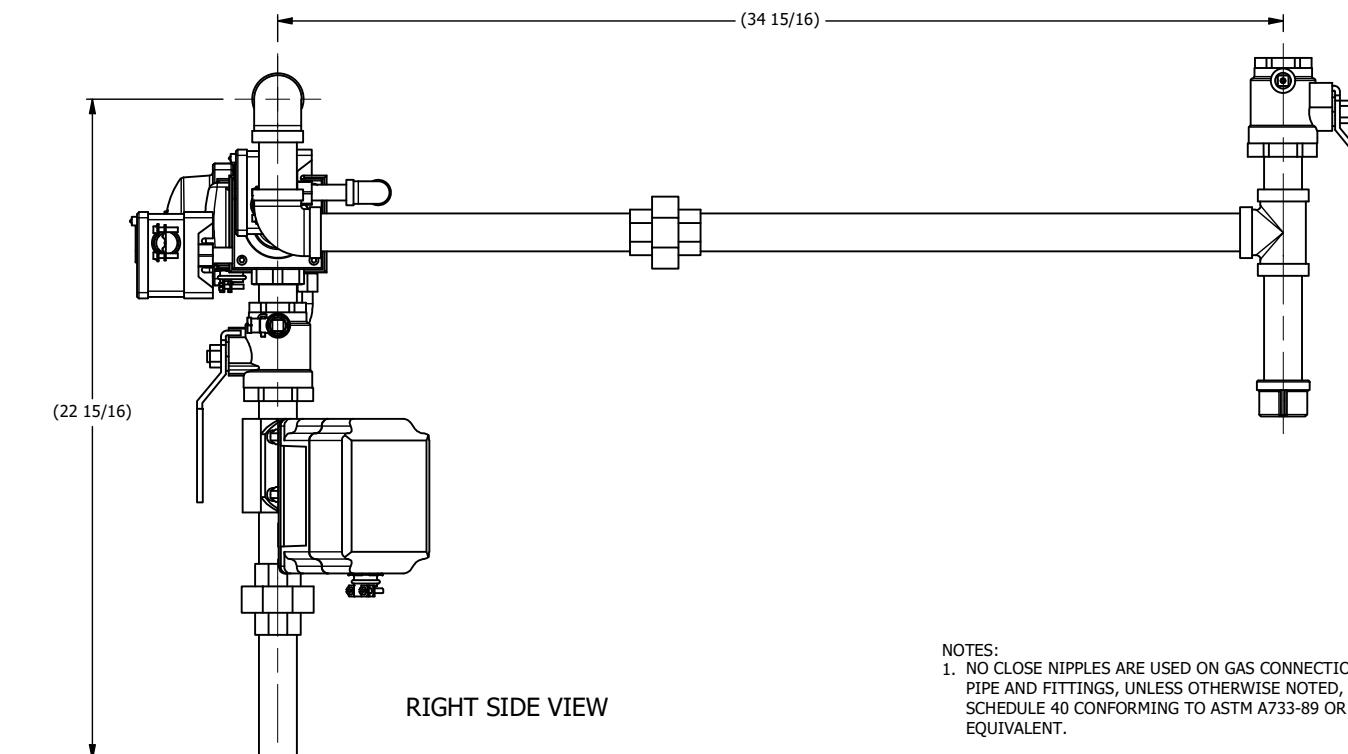
DETAIL VIEW A
(AIR/GAS RATIO VALVE)



PARTIAL SECTION VIEW A-A
(SIEMENS GAS VALVE ROTATION ANGLE)



FRONT VIEW



RIGHT SIDE VIEW

NOTES:
 1. NO CLOSE NIPPLES ARE USED ON GAS CONNECTIONS. ALL PIPE AND FITTINGS, UNLESS OTHERWISE NOTED, ARE NPT SCHEDULE 40 CONFORMING TO ASTM A733-89 OR EQUIVALENT.

2. APPLY THREAD SEALANT TO ALL PIPE THREADS, REFER TO WI-2123 & SW-2119 FOR SELECTION AND APPLICATION DETAILS.

3. USE SMOOTH JAW PIPE WRENCH WHERE EVER POSSIBLE.

BILL OF MATERIAL				
ITEM	PART NUMBER	DESCRIPTION	QTY	U.O.M.
1	2-30-000002	1" N.P.T. GAS VALVE VGG10.254U	1	EA.
2	2-30-000113	1" UL GAS BALL VALVE W/ DUAL SIDE TAPS	2	EA.
3	2-30-000282	1/4" FNPT X 1/4" MNPT BALL VALVE CSA	1	EA.
4	2-35-000129	1" X 2" - NPT SCH 40 NIPPLE	3	EA.
5	2-35-000130	1" X 3" - NPT SCH 40 NIPPLE	2	EA.
6	2-35-000223	1" THREADED TEE	1	EA.
7	2-35-000269	1/4" THREADED ELBOW	3	EA.
8	2-35-000271	1" THREADED ELBOW	3	EA.
9	2-35-000284	1" SCH. 40 UNION	2	EA.
10	2-35-000286	1" 150# THREADED CAP	1	EA.
11	2-35-000371	1/4" X 2" - NPT SCH 80 NIPPLE	4	EA.
12	2-35-000728	1" X 5" - NPT SCH 40 NIPPLE	2	EA.
13	2-35-000944	1/4" X 5" - NPT SCH 80 NIPPLE (SA-53 - ERW)	1	EA.
14	2-35-001021	1" X 20" - NPT SCH 40 NIPPLE	1	EA.
15	2-35-001230	1/4" BRASS SQUARE HEAD PLUG	1	EA.
16	2-35-001425	1" X 2 1/2" - NPT SCH 40 NIPPLE	1	EA.
17	2-35-001430	1" X 9" - NPT SCH 40 NIPPLE	1	EA.
18	2-35-001555	1" X 12" - NPT SCH 40 NIPPLE	1	EA.
19	2-35-001634	1/4" N.P.T. X 3/8" COMPRESSION STAINLESS STEEL FITTING	2	EA.
20	2-40-000387	SIEMENS QPL31.050M00 LOW GAS PRESSURE SWITCH W/ MANUAL RESET 1"-20" WC	1	EA.
21	2-40-000390	SIEMENS QPH31.050M00 HIGH GAS PRESSURE SWITCH W/ MANUAL RESET 2"-20" WC	1	EA.
22	2-40-000884	SKP25.011U1 SIEMENS AIR/GAS RATIO VALVE 120V	1	EA.
23	2-40-001089	1" MEDIUM PORT SQM33 ALUMINUM BUTTERFLY VALVE - VA33-NM-100	1	EA.
24	2-45-000048	TWO SCREW STRAIN RELIEF T&B	4	EA.
25	5-10-081532-37	ENDURA 750K / 1000K PURE GAS TRAIN SENSE LINE	1	EA.

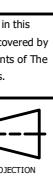
A	REPLACED AUTO-RESET PRESSURE SWITCHES						
	MER 5/26/21	MEA 5/27/21	N/A	N/A	MEA 5/27/21		
REV	REVISION DESCRIPTION		CHECKED	BOM/PLANT	MECH/ELEC	ASME	APPROVED
REVISION HISTORY							

UNLESS OTHERWISE NOTED
DIMENSIONS ARE DUAL DIMENSIONED
TOLERANCES
INCH METRIC
FRACTION & WHOLE VALUE ± 1/16 ± 3mm
(1) PLACE DEC. ± 0.015 ± 0.7mm
(2) PLACE DEC. ± 0.015 ± 0.3mm
(3) PLACE DEC. ± 0.005 ± 0.12mm
ANGLE ± 0.005 ± 0.5 DEG

SURFACE FINISH: 250 MICRO-INCHES
SURFACE FINISH: 6.35 MICRO-METERS

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proprietary and are the
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Fulton Companies. The
corporation does not permit
their use except with prior
written consent.

THIRD ANGLE PROJECTION



THE ITEMS SHOWN IN THIS
DRAWING MAY BE COVERED BY
ONE OR MORE PATENTS OF THE
FULTON COMPANIES.

THE CORPORATION DOES NOT
PERMIT THEIR USE EXCEPT WITH
PRIOR WRITTEN CONSENT.

DRAWN BY: B. PALMER 6/18/2020

MECHANICAL / ELECTRICAL REVIEW: T. TIGHE 10/27/2020

JOB NUMBER:

CHECKED BY: M. ALLEN 10/27/2020

ASME REVIEW: N / A

PROJECT NAME:

B.O.M. / PLANT REVIEW: S. MONTIETH 12/4/2020

APPROVED BY: M. ALLEN

10/27/2020

PROJECT MANAGER:

DESCRIPTION: ENDURA 750K / 1000K PURE NATURAL GAS TRAIN, CSD-1 / NEMA-1 120V (INCOMING NATURAL GAS PRESSURE 4-28" WC, 4-14" WC CANADA)

Fulton
Fulton Thermal Corporation

DRAWING NUMBER: 7-54-080750

REVISION: A

SHEET 1 OF 1



Fulton Heating Solutions, Inc.

Technical Data

Multiple Boiler Condensate Trap For Use With: Endura, Endura+, Vantage

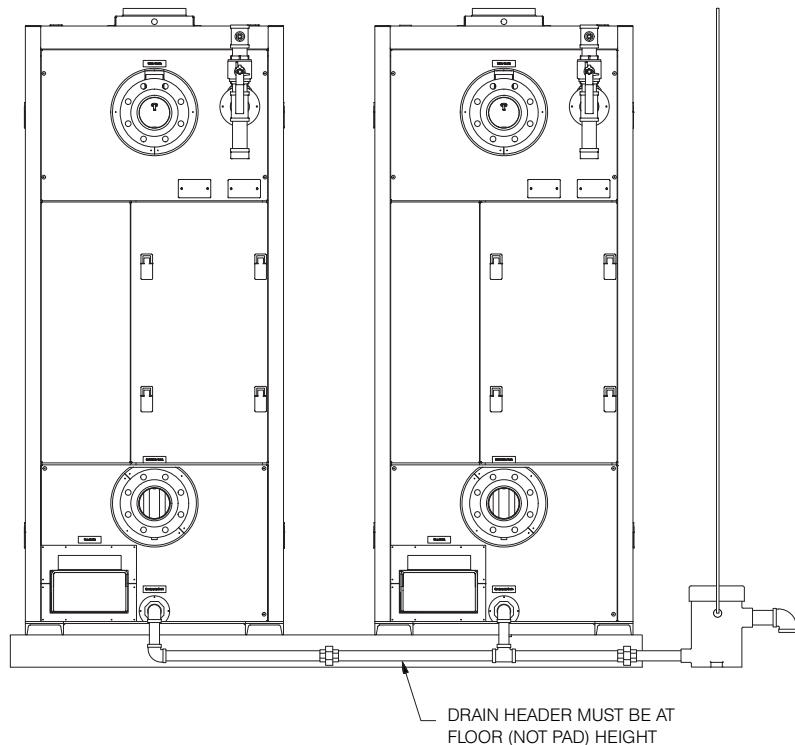
OVERVIEW

The multiple boiler condensate drain trap (PN 4-57-000440) will allow for the safe drainage and disposal of flue gas condensate from multiple boilers, while preventing flue gases from escaping into the boiler room. Condensate drain traps are required for every Fulton condensing boiler installation.

The outlet of the condensate drain trap is piped to either the inlet of the pH Neutralization Kit, or to an open floor drain.

SPECIFICATIONS

- Material: Cast Aluminum
- Inlet: 1" NPT
- Outlet: 1-1/2" NPT
- Fresh Water: 1/4" (Maximum 100 PSI)
- Capacity: Maximum 12,000,000 BTU/hr



INLET

OUTLET

1/4" FRESH WATER
(REQUIRED)



WARNING: The 1/4" fresh water make-up supply line prevents flue gases from escaping into the boiler room, and must be connected prior to commissioning of the boilers.

INSTALLATION REQUIREMENTS

- Minimum 4-inch housekeeping pad height required.
- The drain header must be at floor (not pad height) level and remain flooded during operation.
- One trap can serve multiple boilers with total combined capacity not to exceed 12,000,000 BTU/hr.
- The piping must be pitched downward towards the condensate drain trap and the floor drain.
- Installation and piping material requirements vary by boiler type and model, refer to the respective boiler Installation and Operation Manual for product specific requirements.
- The outlet of the condensate trap must be below the height of the boiler condensate drain connection.



Fulton Heating Solutions, Inc.

Technical Data

pH Neutralization Kit

For Use With: Endura, Endura+, Vantage

OVERVIEW

The pH Neutralization Kit (PN 4-50-000008) is used to reduce the acidity of the boiler flue gas condensate prior to disposal into the floor drain.

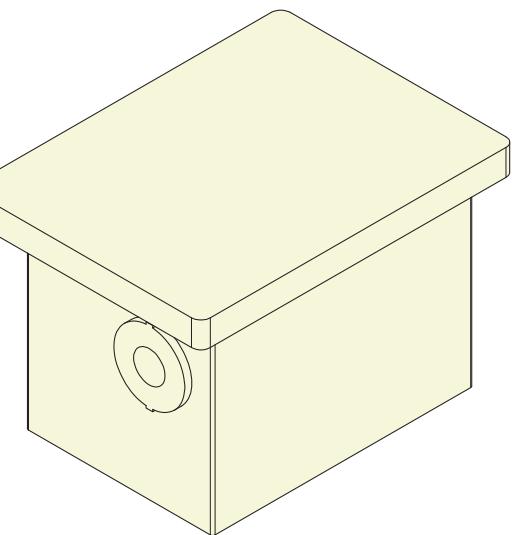
The kit is designed to handle a maximum combined boiler capacity of 12,000,000 BTU/hr, and contains enough neutralizing medium for approximately 6 months of typical operation.

SPECIFICATIONS

- Container: Polyethylene
- Neutralizing Medium: MgO (PN 2-30-001580)
- Connection Sizes: 1-1/2" NPT
- Maximum Capacity: 12,000,000 BTU/hr

INSTALLATION REQUIREMENTS

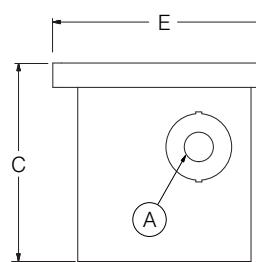
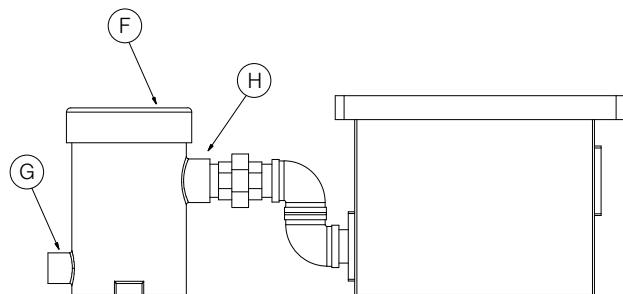
- The pH Neutralization Kit is not a replacement or alternate for the Condensate Drain Trap.
- A separate Fulton Condensate Drain Trap is required for all installations, and must be installed upstream of the pH Neutralization Kit.
- Installation and piping material requirements vary by boiler type and model, refer to the respective boiler Installation and Operation Manual for product specific requirements.
- The pH Neutralization Kit outlet must be below the height of the boiler condensate drain.



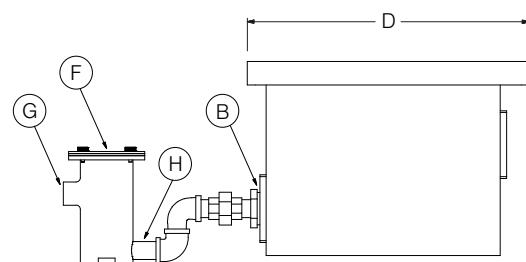
SELECTION DATA TABLE

pH Kit Outlet (A)	1-1/2"	
pH Kit Inlet (B)	1-1/2"	
pH Kit Height (C)	11-3/8"	
pH Kit Length (D)	16-3/4"	
pH Kit Depth (E)	12-1/2"	
Condensate Trap (F)	Multiple Boilers 4-57-004400	Individual Boiler 4-57-005500
Trap Inlet (G)	1"	3/4"
Trap Outlet (H)	1-1/2"	3/4"

MULTIPLE BOILERS



SINGLE BOILER





Fulton Heating Solutions, Inc.

Technical Data

Supply Header Temperature Sensor Kit For Use With: ModSync, Endura+

OVERVIEW

The supply header temperature sensor kit (PN 4-30-000510) is used in multiple boiler applications where the Fulton ModSync or Endura+ PURE Control™ are controlling boiler lead/lag.

The kit includes a 2-1/2" long 1/2" NPT insertion well, heat conducting compound, a 1/2" x 1/4" reducing bushing, and a PT100 RTD.

SPECIFICATIONS

- Tolerance: Class B
- Temp. Range: -58 to 392°F (-50 to 200°C)
- Connection: 3-wire
- Lead Length: 180 inch (457 cm)

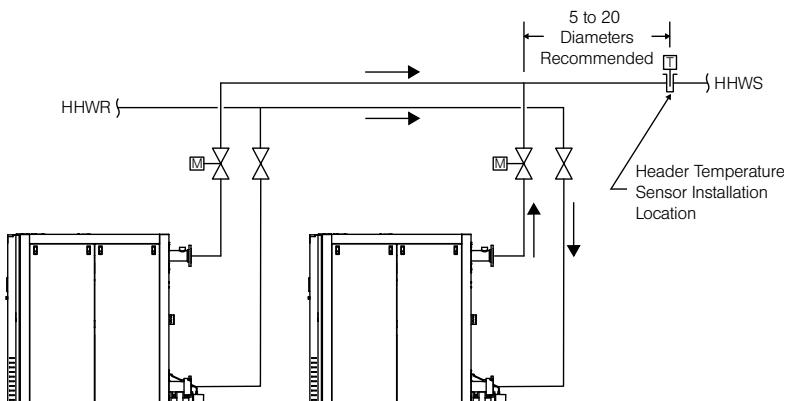


Fig 1 - Variable Primary Piping

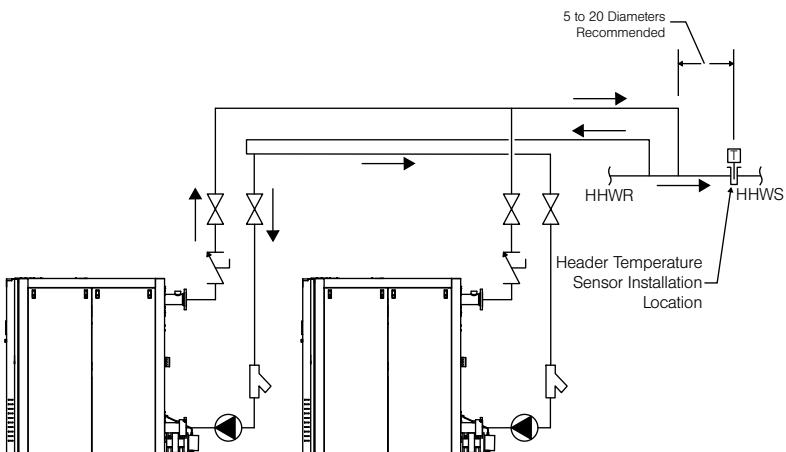


Fig 2 - Primary-Secondary Piping

INSTALLATION REQUIREMENTS

- Install the insertion well downstream of the last boiler in the common supply piping. Ensure the location and depth will read a blended temperature.
- For variable primary piping applications (Fig 1) install the sensor in the common supply header 5 to 20 pipe diameters downstream of the last boiler tie in point.
- For primary-secondary piping applications (Fig 2), install the sensor in the secondary (system) supply piping, 5 to 20 piping diameters downstream of the primary manifold tie in point.
- When extending the wire lead, use 18 to 22awg twisted 3 conductor stranded copper with insulated jacket. Ensure connections are tight with no shorts. Soldered and heat shrink tubing connections are recommended. Do not use wire nuts to join lead to extension.
- Some applications may allow for a 2-wire connection to the control device where the red leads from the RTD are joined. A 2-wire connection is acceptable but may result in less accurate measurement. Use of 3-wire connections is recommended.
- When used in conjunction with the ModSync, this sensor may also be installed in the common return piping for the purpose of monitoring of return header temperature. Return water temperature must not be used as a lead/lag process variable.



Fulton Heating Solutions, Inc.

OVERVIEW

The Outdoor Air Temperature Sensor (PN 4-30-000500) is used in applications where the Fulton ModSync or Endura+ PURE Control™ are calculating hot water supply temperature via outdoor reset.

The sensor is housed in a 4-inch (102 mm) round enclosure.

SPECIFICATIONS

- Tolerance: Class B
- Temp. Range: -58 to 392°F (-50 to 200°C)
- Connection: 3-wire
- Lead Length: 144 inch (366 cm)

INSTALLATION REQUIREMENTS

- Mount in the vertical position, sensor sheath pointing downward, in a shaded area on a north facing wall only.
- Do not install the sensor near mechanical equipment or other possible sources of heat such as exhaust vents, operable windows, or louvers.
- When extending the wire lead, use 18 to 22awg twisted 3 conductor stranded copper with insulated jacket. Ensure connections are tight with no shorts. Soldered and heat shrink tubing connections are recommended. Do not use wire nuts to join lead to extension.
- Some applications may allow for a 2-wire connection to the control device where the red leads from the RTD are joined. A 2-wire connection is acceptable but may result in less accurate measurement. Use of 3-wire connections is recommended.

Technical Data

Outdoor Air Temperature Sensor
For Use With: ModSync, Endura+



CAPITAL ELECTRIC
600 W HAMBURG ST
BALTIMORE, MD 21230-2682
410-752-4080

nichon.skinner@capitalelectricsupply.com

QUOTE TO:
S&S FABRICATORS INC
4845 SOUTH CRAIN HWY
UPPER MARLBORO, MD 20772-3109
240-882-1660

Quotation

QUOTE DATE	QUOTE NUMBER
02/18/22	S047240288
	PAGE NO.
1 of 1	

SHIP TO:
S&S FABRICATORS INC
4845 SOUTH CRAIN HWY
UPPER MARLBORO, MD 20772-3109
240-882-1660

CUSTOMER NUMBER	CUSTOMER ORDER NUMBER		JOB NAME	QUOTED TO	
SALESPERSON	SHIP VIA	FREIGHT ALLOWED		EXPIRATION DATE	
NICHON SKINNER	OT OUR-TRUCK	No		11:59pm ET 03/05/22	
ORDER QTY	UPC	DESCRIPTION	UNIT PRICE	U	EXT PRICE
1000ft	98013099753	CAT5E. 24/4PR-E 24GA 4PR CAT5-E WIRE BLUE ENHANCED 1000RIB	162.340	m	162.34
100ft	98001002002	EMT 034E 3/4IN EMT CONDUIT 10FT	128.100	c	128.10
1500ft	98010023000	WIC THHN 10 STR BLK 500R	348.940	m	523.41
1500ft	98010023010	WIC. THHN 10 STR WHT 500R	348.940	m	523.41
1500ft	98010023020	WIC. THHN 10 STR RED 500R	348.940	m	523.41
1500ft	98010023030	WIC. THHN 10 STR BLU 500R	348.940	m	523.41
1500ft	98010023040	WIC. THHN 10 STR GRN 500R	348.940	m	523.41
25ea	78456420661	CRS 661S 3/4 STL COMP EMT CPLG	104.810	c	26.20
25ea	78456420651	CRS 651S 3/4 STL COMP EMT CONN	86.290	c	21.57

TERMS & CONDITIONS

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TAXES NOT INCLUDED

Subtotal	2955.26
S&H CHGS	0.00
Amount Due	2955.26

14:46:27 FEB 17 2022

Page 1 of 2

FERGUSON ENTERPRISES #1300

Price Quotation

Phone: 443-543-1300

Fax: 410-242-4893

Bid No: B990768
Bid Date: 02/17/22
Quoted By: AJB

Cust Phone: 301-574-1555
Terms: NET 10TH PROX

Customer: S & S FABRICATORS INC
4845 SOUTH CRAIN HIGHWAY
UPPER MARLBORO, MD 20772

Ship To: S & S FABRICATORS INC
4845 SOUTH CRAIN HIGHWAY
UPPER MARLBORO, MD 20772

Cust PO#:**Job Name:** PVF

Item	Description	Quantity	Net Price	UM	Total
W7VU3530240	7 ADJ THERM 30-240 3-1/2 L/ WELL AVAIL-APPROX 5-7 BUS DAY LEAD	4	86.110	EA	344.44
FNW35SG	1X8 BRZ FLEX CONN W/ SWT	2	83.835	EA	167.67
FNWX416G	LF 1 BRS 600# WOG 2PC SWT FP BV	2	22.792	EA	45.58
P40PU10	6X10 FT PVC DWV S40 PE PIPE	30	1411.665	C	423.50
PDWV9U	6 PVC DWV 90 ELL	4	93.596	EA	374.38
PDWV4U	6 PVC DWV 45 ELL	4	82.026	EA	328.10
LHARDG10	1 X 10 L HARD COP TUBE	30	622.662	C	186.80
C9G	1 WROT CXC 90 ELL 1-1/8 OD	6	5.643	EA	33.86
C4G	1 WROT CXC 45 ELL 1-1/8 OD	2	8.017	EA	16.03
CUG	LF 1 WROT CXC UNION	2	23.340	EA	46.68
CUF	LF 3/4 WROT CXC UNION	2	13.624	EA	27.25
IBNFK	3/4X2 BLK STL NIP	2	3.400	EA	6.80
RTC	3/8 OD X 50 SOFT REF TUBE	2	71.823	EA	143.65
PFXCUCN	LF 3/8 X 3/8 COMP UNION	2	3.973	EA	7.95
FNW7001ZG	1 Z/PLT SPLT RNG HGR 3/8 BT	6	3.245	EA	19.47
FNW7502ZC	3/8 Z/PLT BT CEIL FLG	6	3.432	EA	20.59
GATRCU	3/8X6 Z/PLT ATR	12	0.686	FT	8.23
FNWHNG2Z38	3/8 16 HEX NUT ZN A563 GR 2 50PK	1	6.460	PK	6.46
FNWFLWZ38	3/8 X 1 FLT WSHR ZN 50PK	1	5.662	PK	5.66
O31008	32 OZ PVC HD CLR CMNT	1	18.792	EA	18.79

Net Total: \$2231.89
Tax: \$133.93
Freight: \$0.00
Total: \$2365.82

HOW ARE WE DOING? WE WANT YOUR FEEDBACK!



Scan the QR code or use the link below to
complete a survey about your bids:

<https://survey.medallia.com/?bidsorder&fc=2&on=280399>

FERGUSON ENTERPRISES #1300
Price Quotation

Fax: 410-242-4893

14:46:27 FEB 17 2022

Reference No: B990768

Quoted prices are based upon receipt of the total quantity for immediate shipment (48 hours). SHIPMENTS BEYOND 48 HOURS SHALL BE AT THE PRICE IN EFFECT AT TIME OF SHIPMENT UNLESS NOTED OTHERWISE. QUOTES FOR PRODUCTS SHIPPED FOR RESALE ARE NOT FIRM UNLESS NOTED OTHERWISE.

CONTACT YOUR SALES REPRESENTATIVE IMMEDIATELY FOR ASSISTANCE WITH DBE/MBE/WBE/SMALL BUSINESS REQUIREMENTS.

Seller not responsible for delays, lack of product or increase of pricing due to causes beyond our control, and/or based upon Local, State and Federal laws governing type of products that can be sold or put into commerce. This Quote is offered contingent upon the Buyer's acceptance of Seller's terms and conditions, which are incorporated by reference and found either following this document, or on the web at <https://www.ferguson.com/content/website-info/terms-of-sale>
Govt Buyers: All items are open market unless noted otherwise.

LEAD LAW WARNING: It is illegal to install products that are not "lead free" in accordance with US Federal or other applicable law in potable water systems anticipated for human consumption. Products with *NP in the description are NOT lead free and can only be installed in non-potable applications. Buyer is solely responsible for product selection.

COVID-19 ORDER: ANY REFERENCE TO OR INCORPORATION OF EXECUTIVE ORDER 14042 AND/OR THE EO-IMPLEMENTING FEDERAL CLAUSES (FAR 52.223-99 AND/OR DFARS 252.223-7999) IS EXPRESSLY REJECTED BY SELLER AND SHALL NOT APPLY AS SELLER IS A MATERIALS SUPPLIER AND THEREFORE EXEMPT UNDER THE EXECUTIVE ORDER.

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Scan the QR code or use the link below to
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<https://survey.medallia.com/?bidsorder&fc=2&on=280399>

10:17



grainger.com

Est. Total (Products)

\$660.28

CONTINUE

2 Products in Your Cart



OWENS CORNING 2 in Thick, Hinged with Self Sealing Lap Fiberglass Pipe Insulation, 3 ft...

Item # 4LFF7

Qty

12

Web Price

\$31.09 / each

Item Subtotal:

\$373.08

Pickup (Current location)

LanhamBranch #896

Available for pickup **Tue. Feb 22** estimated after 1:00 PM.

REMOVE



GRAINGER APPROVED 2.000" Thick Fiberglass 90° Elbow Pipe Fitting Insulation, 10.0 Approx. ...

Item # 6MPY0

Qty

8

Web Price

\$35.90 / each

Item Subtotal:

\$287.20