

421283 H

PARTS LIST - CONTROL SECTION	
QTY	DESIG. PART NO. DESCRIPTION
1	PCB1 600580 Assem., Dial Plate, w/Sw. Assem., EN2000, Consisting of:
1	600580 Assem., Switch, Sequence Control & Display Board
1	540244 11 Illustrated Panel, Dial Plate, EN2000
1	515104 Panel, Display Window, Red Filter, EN2000
1	J2-J2 322326 Assem., Harness, Control Board to Terminal Strip Board
1	J3 322325-004 Assem., Harness, Power, EN2000

PARTS LIST - CONTACTOR SECTION	
QTY	DESIG. PART NO. DESCRIPTION
1	TS1 335034 Terminal Strip, 10 Pin, (Part of J3 Harness)
1	T3 33507 Terminal Strip, 2 Pin, (Part of 1800/2200A Cont. Assem.)
1	T8 31001 Transformer, Control, (Part of J3 Harness)
1	T9 31002 Transformer, Sump, (Part of J3 Harness)
1	T3 31102 Transformer, Valve, 150VA
1	T3 31107 Transformer, Valve, 150VA, 575V
1	T3 31102 Transformer, Valve, 250VA
1	T250 31102 Resistor, Power, Surge, 500 Ohm, 100W
1	R74 600048 Assm., Resistor, Power, 2000 Ohm, 10W, (For 575V)
1	F1 308010 Fuseholder, 1 Pole, Mini, 600V
1	F1 307018 Fuse, Control, 6/10A, BBS 6/10
1	F1 307022 Fuse, 1 Amp, Slow Blow, 2AG, (Part of 410319-006)
1	F1 325024 Assm., Wire, Surge Resistor, 18 Ga., Black
1	325149 Assm., Wire, Valve Transformer, 22 Ga., Black
1	600520 Assm., Contactor, Thyristor, Air, 300A, 460/575V, w/LS
1	600510 Assm., Contactor, Thyristor, Water, 600A, 460/575V
1	600598 Assm., Contactor, Thyristor, Water, 1200A, 460/575V
1	600533-005 Assm., Contactor, SCR, Water, 1800A, 460/575V, w/LS
1	600533-003 Assm., Contactor, SCR, Water, 2200A, 460/575V, w/LS
1	341040 Standoff, Insulator, 600/1200A Thyristor Contactor, L1
1	325174 Assm., Wire, Contactor-L1 to Lug L1, 600/1200A Thyristor Cont.
1	346004 Lug, Screw, 5/16 Bolt to 2/0 Wire, 600A Thyristor Contactor, H1
1	346011 Lug, Screw, 1/4 Bolt to 2/0 Wire, 600A Thyristor Contactor, L1
1	346002 Lug, Screw, 5/16 Bolt to 250 MCM (4/0) Wire, 1200A Cont., L1 & H1
1	346004 Lug, Screw, Chassis GND, 2/0 Wire
1	410319-006 PCB, Terminal Strip Board, EN2000
1	510236 Plate, Mounting, Terminal Strip Board
1	525135 Bracket, Mounting, 300A Thyristor Contactor
1	525136 Bracket, Mounting, 1800/2200A Contactors
1	530021 Plate, Mounting, 600/1200A Contactors
1	300020 Switch, Temperature Limit, (N.C.), (Part of 300A Contactor & 1800/2200A Contactor Assem.'s)
1	900045 Hose, 3/8" I.D.
1	566010 Hose, 3/8" Hose
1	600179 Assm., Water Fitting, 3/8" Hose
1	600297 Assm., Water Flow Switch, 3/8" Hose
1	550014 Vault Closing Door Mechanism, "D"/"L"/"LF" Cabinet
1	510407 Cabinet, Control, Style "D/T", w/CB
1	510248 Door, Cabinet, Control, Style "D/T"
1	510247-005 Cabinet, Control, Style "D/T", w/CB, Modified for 300A Cont.
1	510257 Cabinet, Control, Style "L5/LF", w/CB
1	510258 Door, Cabinet, Control, Style "L5/LF"
1	700121 Manual, EN2000
1	421279 Logic Diagram, EN2000 Control
1	421283 Wiring Diagram, EN2000-Series, "D"/"L"/"LF" Cabinet

MANUFACTURING INSTRUCTIONS:

- See Drawing #515112, #515114, #60552, & #60591 for Mechanical Assembly Instructions of EN2000 "L5/LF" Cabinet.
- See Drawing #440190-001 for Mechanical Layout of "L5/LF" Cabinet Rear Panel.
- See Drawing #440093 for Crating Instructions of "L5/LF" Cabinet.
- See Drawing #60056 for Mechanical Layout/Assembly of EN2000 "D/T" Cabinet.
- See Drawing #440366 for Inner Pack & Use Carton #650016 for "D/T" Cabinet Packing Instructions.
- See Drawing #440437 for Circuit Breaker to L1 Contactor Cable Connections.
- See Drawing #600526 for Layout/Assem. of Front Panel.

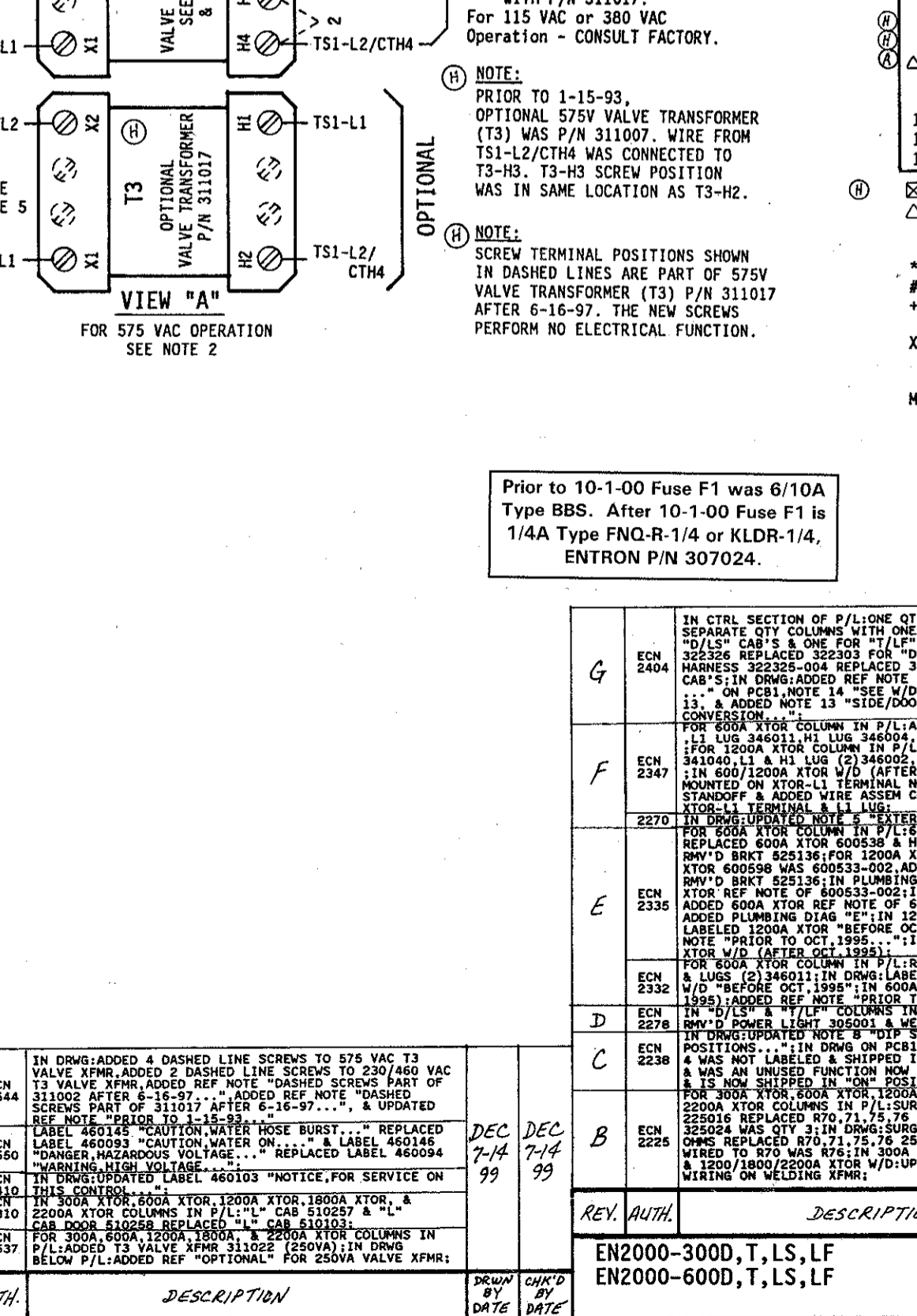
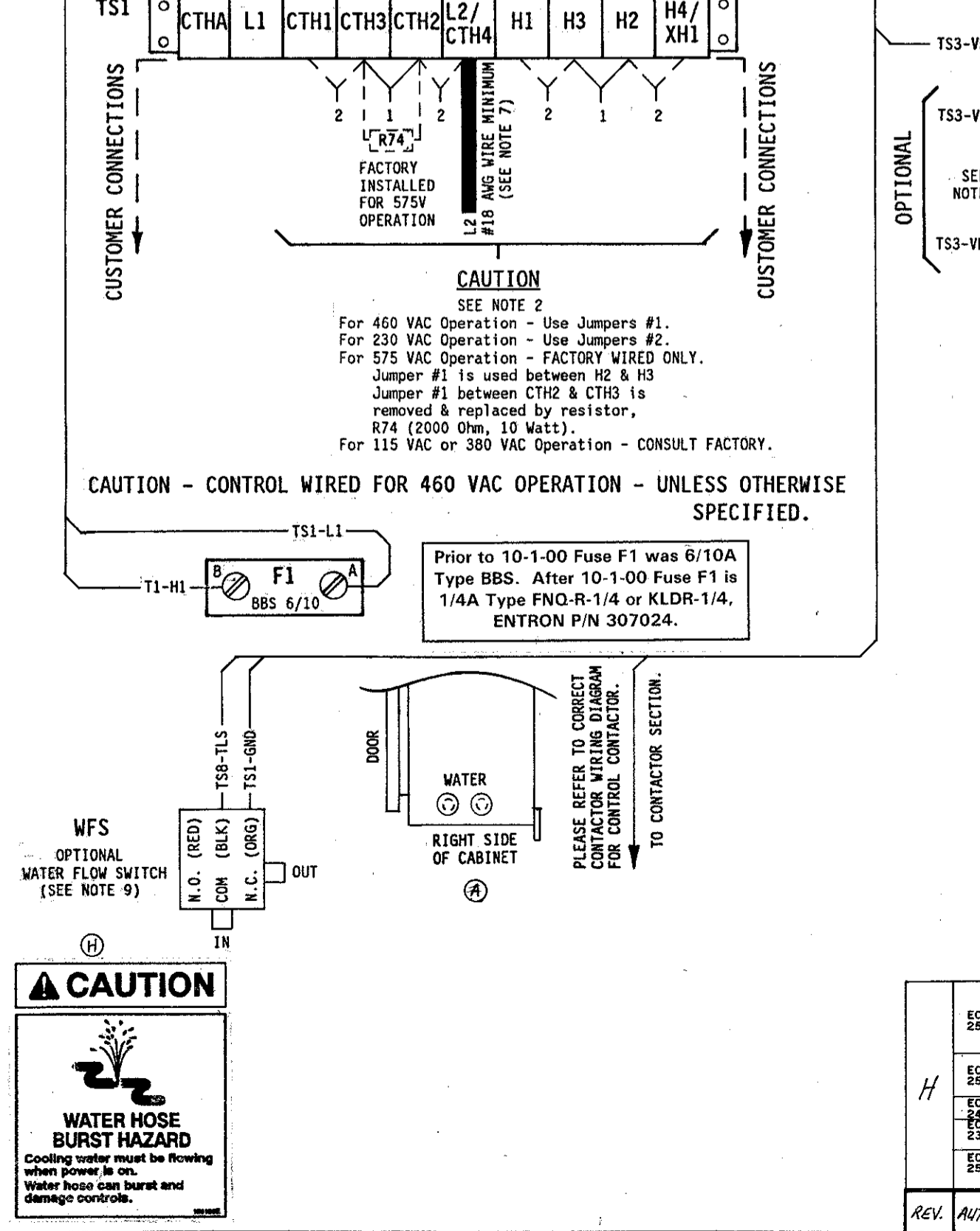
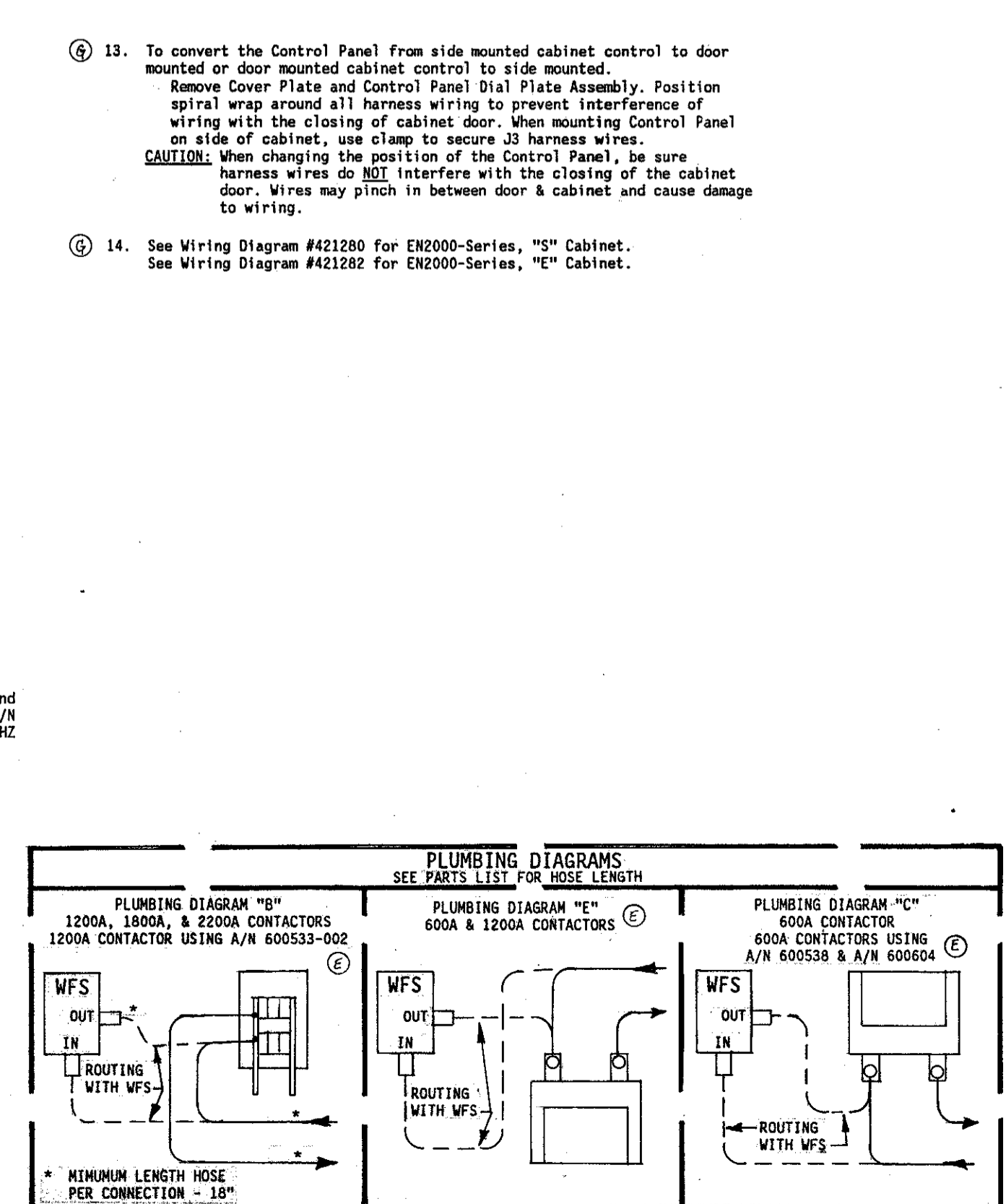
SCALE	DATE	DRAWN BY	CHK'D BY	APPROVED BY
1/16"	94	DEC	DEC	DEC
1/8"	94	DEC	DEC	DEC
3/16"	94	DEC	DEC	DEC

ENTRON CONTROLS INC.

WIRING DIAGRAM, EN2000-SERIES, "D", "T", "L5", "LF" CABINET

421283-

- NOTES:
- It is recommended that control wiring (i.e.: initiation, pressure switch, etc.) be physically separated from the high voltage wiring (115 volts or higher).
 - For 460 VAC Operation - Use Jumper #1 on T3 & T51. As shipped unless otherwise specified. For 230 VAC Operation - Use Jumper #2 on T3 & T51. For 575 VAC Operation - FACTORY WIRED ONLY. SEE VIEW "A". Replace T3 with P/N 311017. Wire per View "A". Use Jumper #1 between H2 & H3 on TS1. Use Resistor R74 (2000 Ohm, 10 Watt) in place of Jumper #1 between CTH2 & CTH3 on TS1. For 115 VAC or 380 VAC Operation - CONSULT FACTORY.
 - For Single Stage Pilot Operation - Connect pilot switch to T51-F53 & T51-GND. No jumpers required across T51-F51 & T51-GND.
 - For Two Stage Pilot Operation - Connect 1st stage pilot switch to T51-F51 & T51-GND. Connect 2nd stage pilot switch to T51-F53 & T51-GND.
 - For DUAL COUNT/DUAL CURRENT (Dual Weld/Dual Heat) or TRIPLE COUNT/TRIPLE CURRENT (Triple Weld/Triple Heat) or External Schedule Selection, SEE MANUAL.
 - EN2000-SERIES, "D"/"L"/"LF" CABINET: ENTRON supplies Temperature Limit Switch (TLS) P/N 300020 and provides connections to T51-TLS1/AUX1 & T51-GND. Jumper not required between T51-TLS1/AUX1 & T51-GND. NOTE: TLS SCR will open at temperatures greater than or equal to 150° F.
 - When external valve power is supplied to the control. Remove and insulate leads T3-VL1 & T3-VL2 on the Terminal Strip Board (TSB), from T3-X1 & T3-X2. Connect external AC power supply (24-240 VAC) to T51-VL1 & T51-SV2/SV4/VL2. CAUTION: Do not overtighten TS3.
 - Connect T51-L2/CTH4 to L2/H2 side of Welding Transformer Primary. (Factory wired on controls supplied with Circuit Isolation Device).
 - The Automatic Voltage Compensation (AVC), Automatic Power Factor (APF), 87° Delayed Firing, and 50Hz/60Hz functions are determined by the settings of the four position DIP switch on PCB1 (A/N 600580). As shipped from the factory, AVC is off, APF is on, 87° Delayed Firing is on, and 60Hz operation is selected. To change any of these functions, see instructions in the manual.
 - When TLS and WFS are used together, add WFS P/N 600297 & Terminal Strip T58 P/N 335017. Wire as shown below. Jumper not required between T51-TLS1/AUX1 & T51-GND. WFS will open with flows less than .75 GPM.



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