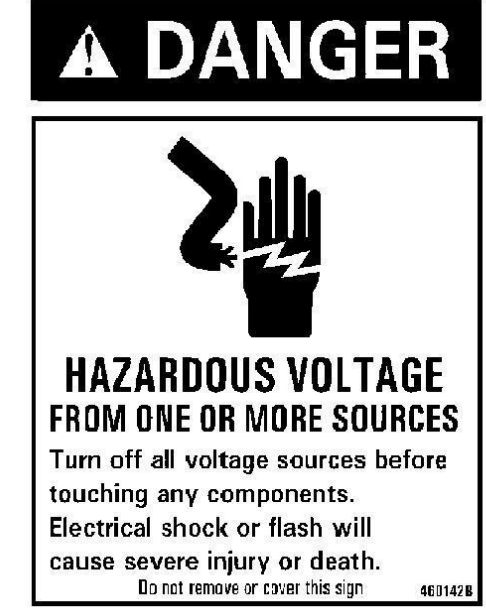


CAUTION - READ MANUAL & ALL NOTES BEFORE INSTALLING OR OPERATING CONTROL. SEE NOTE 1.



CAUTION Control Shipped Wired for 460 VAC Unless otherwise specified - See Note 2.

421212-004A

PARTS LIST - CONTROL SECTION			
QTY.	DESIG.	PART NO.	DESCRIPTION
1	PCB1	600528	Assem., Dial Plate, EN1000, Consisting of:
1	SW1	600541	Assem., Dial Plate, w/Key Switch, EN1000, Consisting of:
1	SW1	600531-001	Assem., Switch, Keylock, Momentary, SPST
1	SW1	540251	Panel, Display Window, Red Filter, EN1000
1	SW1	515104	Panel, Display Window, Red Filter, EN1000
1	SW1	565003	Hole Plug, 3/4" Diam., Black
1	PMW.LT.	305001	Lamp, Neon, Red, 230V
1	W.D.LT.	305002	Lamp, Neon, Clear, 230V
1	J2-J2	322303	Assem., Harness, Ctrl Bd. to Term. Strip Bd.
1	J3	322327	Assem., Harness, Power, EN1000
1	J4-RDE	322369	Assem., Harness, Control Bd. J4 to RDE JACK

PARTS LIST - CONTACTOR SECTION			
QTY.	DESIG.	PART NO.	DESCRIPTION
1	TS1	335067	Terminal Strip, 10 Pin, (Part of J3 Harness)
1	TS6	335017	Terminal Strip, 2 Pin, (Part of Contactor Assem.)
1	TS6	335038	Terminal Strip, 4 Pin, (For TLS/MFS), (Ship loose w/600A & 1200A)
2	R70, R71	225016	Resistor, Power, Surge, 500 Ohm, 100W
2	R74	600048	Assem., Resistor, Power, 2000 Ohm, 10W, (For 575V)
1	T1	311001	Transformer, Control, (Part of J3 Harness)
1	T2	311002	Transformer, Souse, (Part of J3 Harness)
1	T3	311002	Transformer, Valve, 150 VA
1	T3	311002	Transformer, Valve, 150 VA, 575V
1	F1	308010	Fuseholder, 1 Pole, Mini, 600V
1	F1	307024	Fuse, Control, 1/4A, FRCR-1/4 or KLDOR-1/4
1	F1	307022	Fuse, 1 Amp, Slow Blow, 2AG, (Part of 410319)
2	F1	325024	Assem., Wire, Surge Resistor, 18 Ga., Black
2	F1	325149	Assem., Wire, Valve Transformer, 22 Ga., Black
1	TS1	600520	Assem., Cont., Thyristor, Air, 300A, 460/575V, w/TLS
1	TS1	600609	Assem., Cont., Thyristor, Water, 600A, 460/575V
1	TS1	600597	Assem., Cont., Thyristor, Water, 1200A, 460/575V
1	TS1	600533-005	Assem., Contactor, SCR, Water, 1800A, 460/575V, w/TLS
1	TS1	600533-003	Assem., Contactor, SCR, Water, 2200A, 460/575V, w/TLS
1	PCB2	346004	Lug, 5/16 Bolt to 2/0 Wire, 600A Contactor, L1 & H1
1	PCB2	346002	Lug, Screw, 5/16" Bolt to 4/0 Wire, 1200A Contactor, L1 & H1
1	PCB2	410319	Assem., PCB, Terminal Strip Board, EN1000
1	PCB2	346004	Lug, Screw, Chassis GND, 2/0 Wire
1	PCB2	525136	Bracket, Mounting, 1800/2200A Contactors
1	PCB2	525055	Bracket, Mounting, 300/600/1200A Contactors
1	PCB2	510236	Plate, Mounting, Terminal Strip Board
1	PCB2	300020	Switch, Temp. Limit, (N.C.), (Part of 300/1800/2200A Cont.)
1	PCB2	530021	Plate, Mounting, 600/1200A Contactors
1	MFS	900045	Hose, 3/8" ID
1	MFS	566010	Hose Clamp, 3/8" Hose
1	MFS	600179	Assem., Water Flow Switch, 3/8" Hose
1	MFS	600297	Assem., Water Flow Switch, 3/8" Hose, (Ship loose w/600A & 1200A)
1	IDS	600044	Coil, Interlocking Door Solenoid
1	IDS	314001	Assem., Interlocking Door Solenoid Coil Assem. Only, IDS
1	IDS	510238	Cabinet, Control Style "E"
1	IDS	510241	Door, Cabinet, Style "E"
1	IDS	700202	Manual, RDH Options
1	IDS	700120	Manual, EN1000
1	IDS	421183	Logic Diagram, EN1000 Control
1	IDS	421212-004	Wiring Diagram, EN1000-Series/RDH, "E" Cabinet

△ Optional.
 X Optional when specified by customer. See Notes 4 & 9.
 * Substitution or addition of parts when 575V control is specified.
 + Optional Water Flow Switch Assembly, an additional inches (") of hose, P/N 900045 and two (2) hose clamps, P/N 566010, are to be supplied. See Note 9.
 See Drawing #440449 for Customer Mounting & Knockout Detail "E" Cabinet.
 See Wiring Diagram #421212 for interconnection wiring from EN1000-Series/RDH, "E" Cabinet to EN1000 Single Contactor Remote Data Entry Control.

MANUFACTURING INSTRUCTIONS:
 See Drawing #440445 for Packing Instructions "E" Cabinet.
 See Drawing #440449 for Label Locations "E" Cabinet.
 SEE DRAWING #600550, #600550-001, #600550-002, or #600550-003 FOR MECHANICAL ASSEMBLY INSTRUCTIONS.

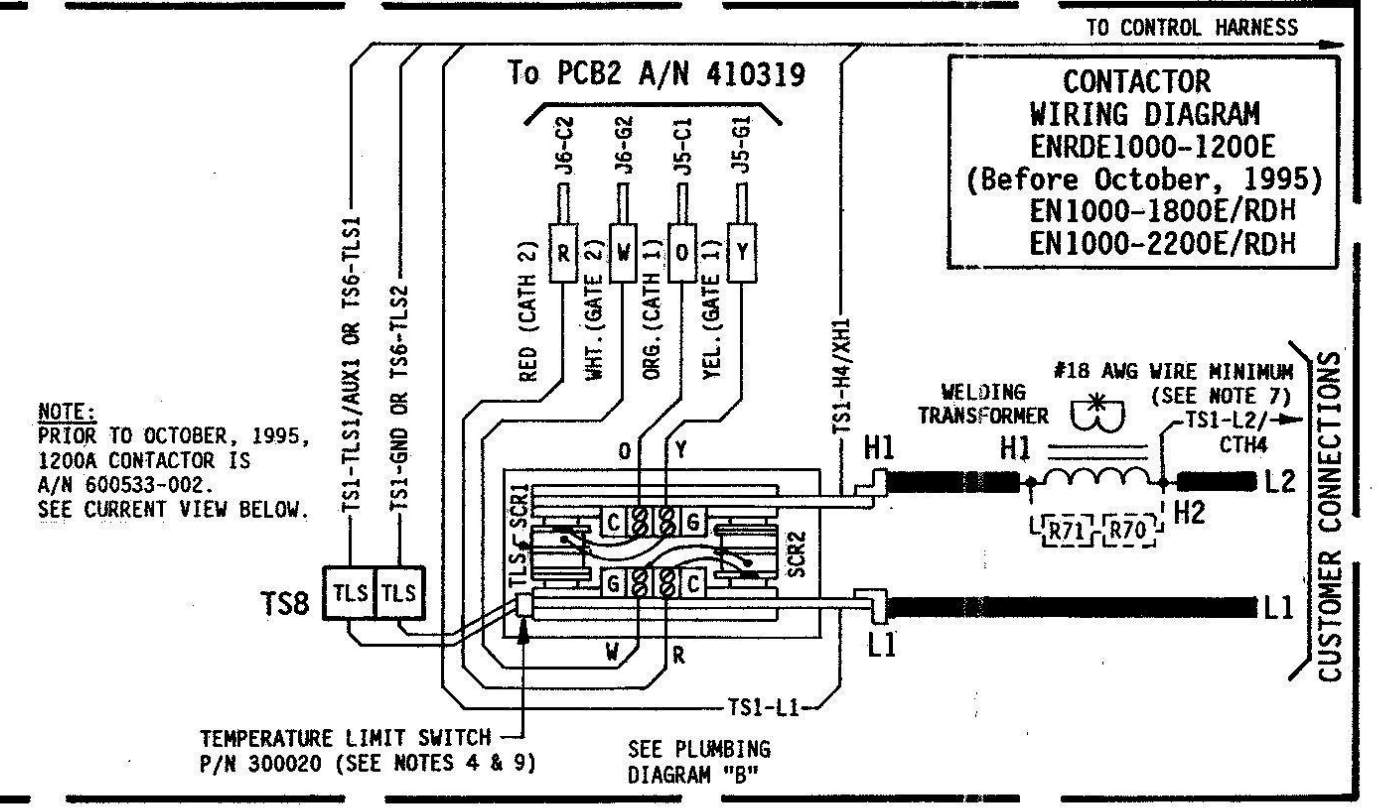
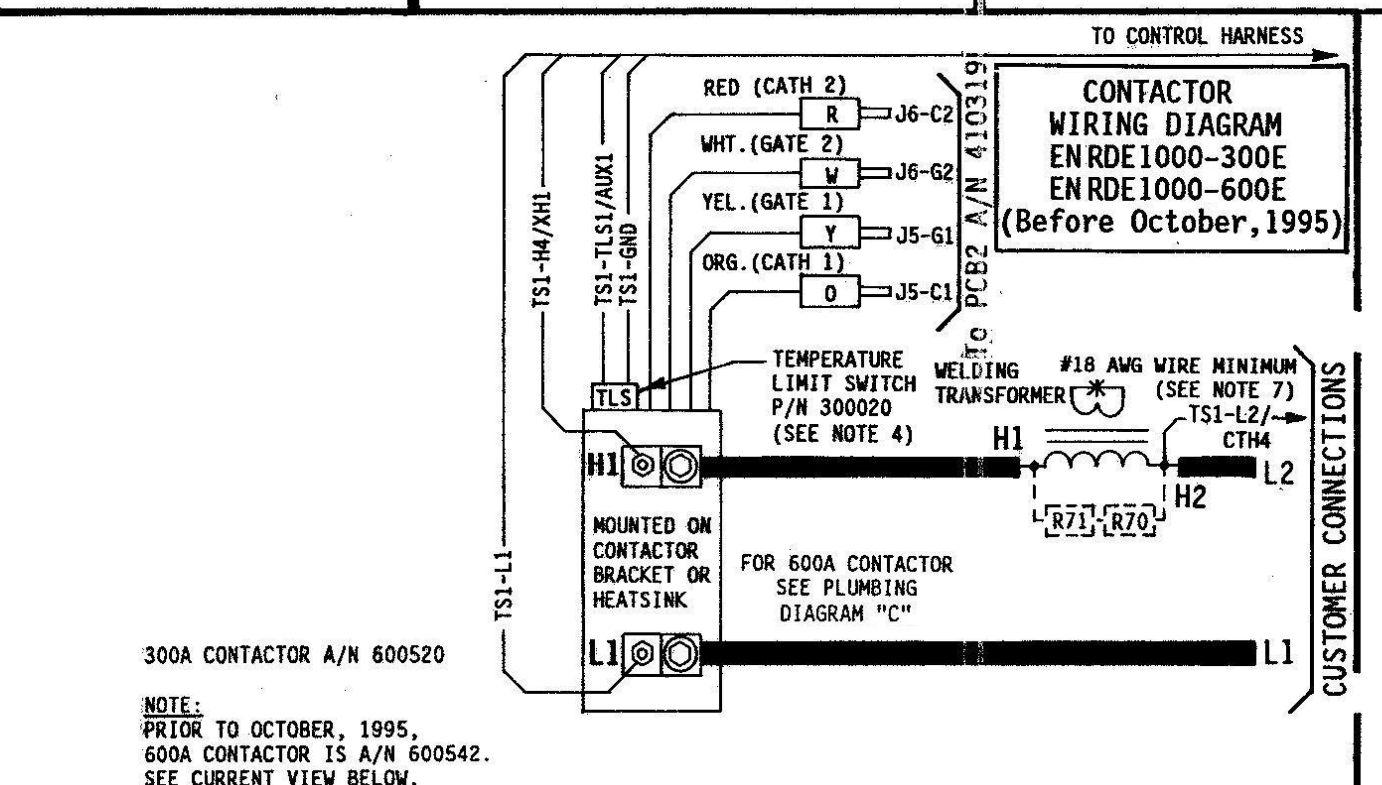
REV	DATE	DESCRIPTION	DRWN	CHK'D	DATE
1	12-10-96	ORIGINAL RELEASE	DCS	DCS	03/11
2	12-10-96	REVISED	DCS	DCS	03/11

SCALE: 1" = 1" (UNLESS SPECIFIED)
 ANGLES: ± 5°
 DECIMALS: ± .010
 FRACTIONS: ± 1/64

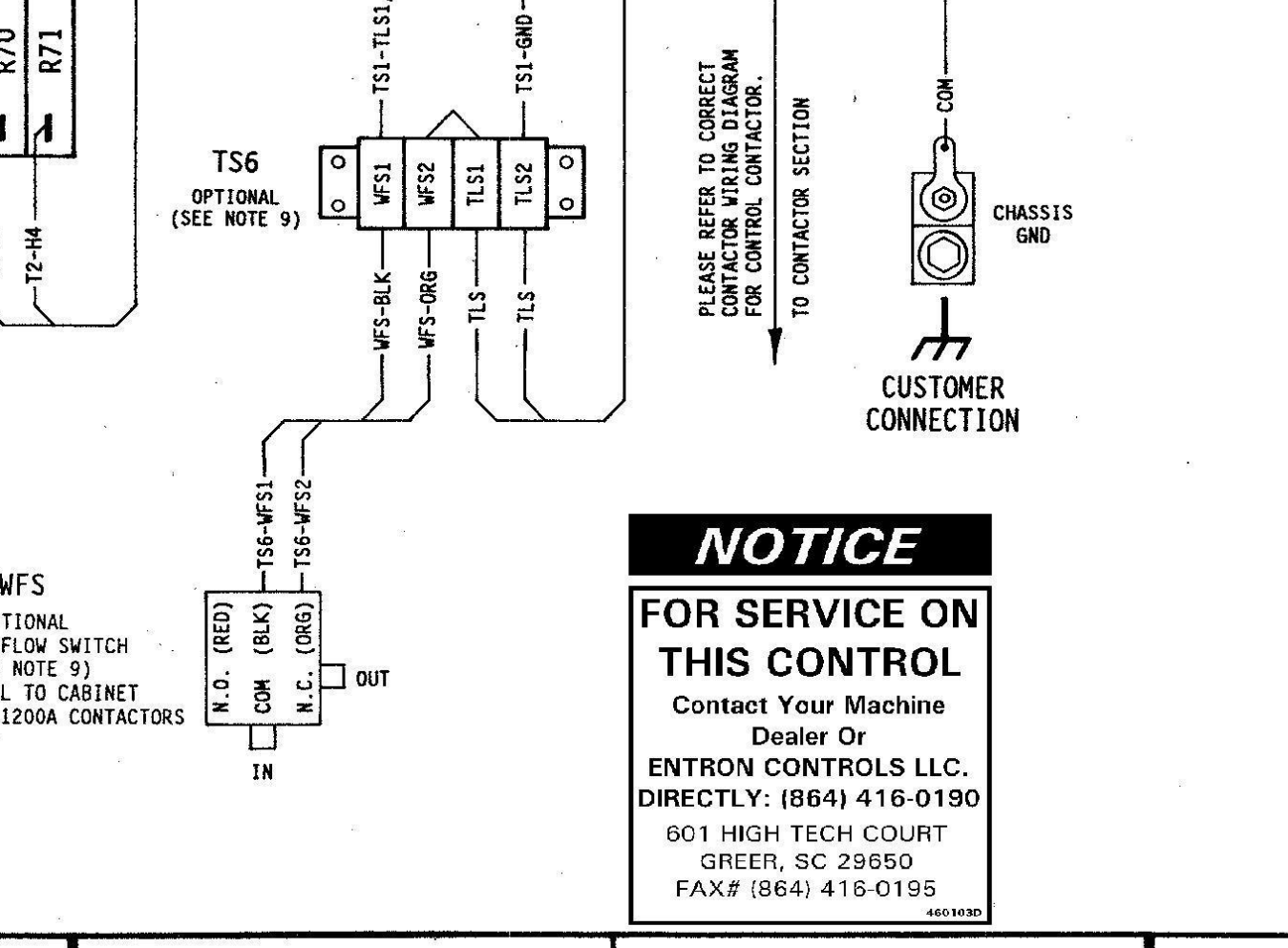
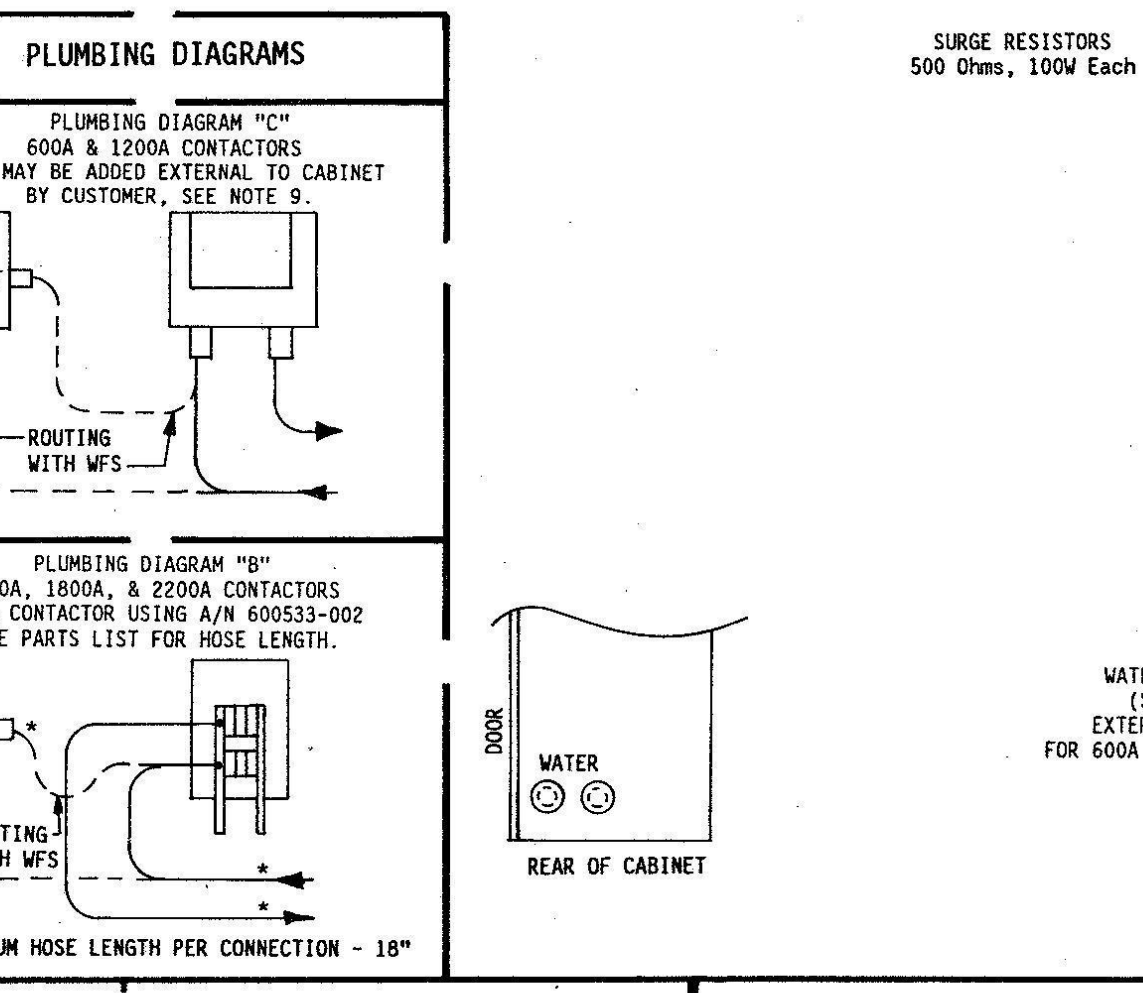
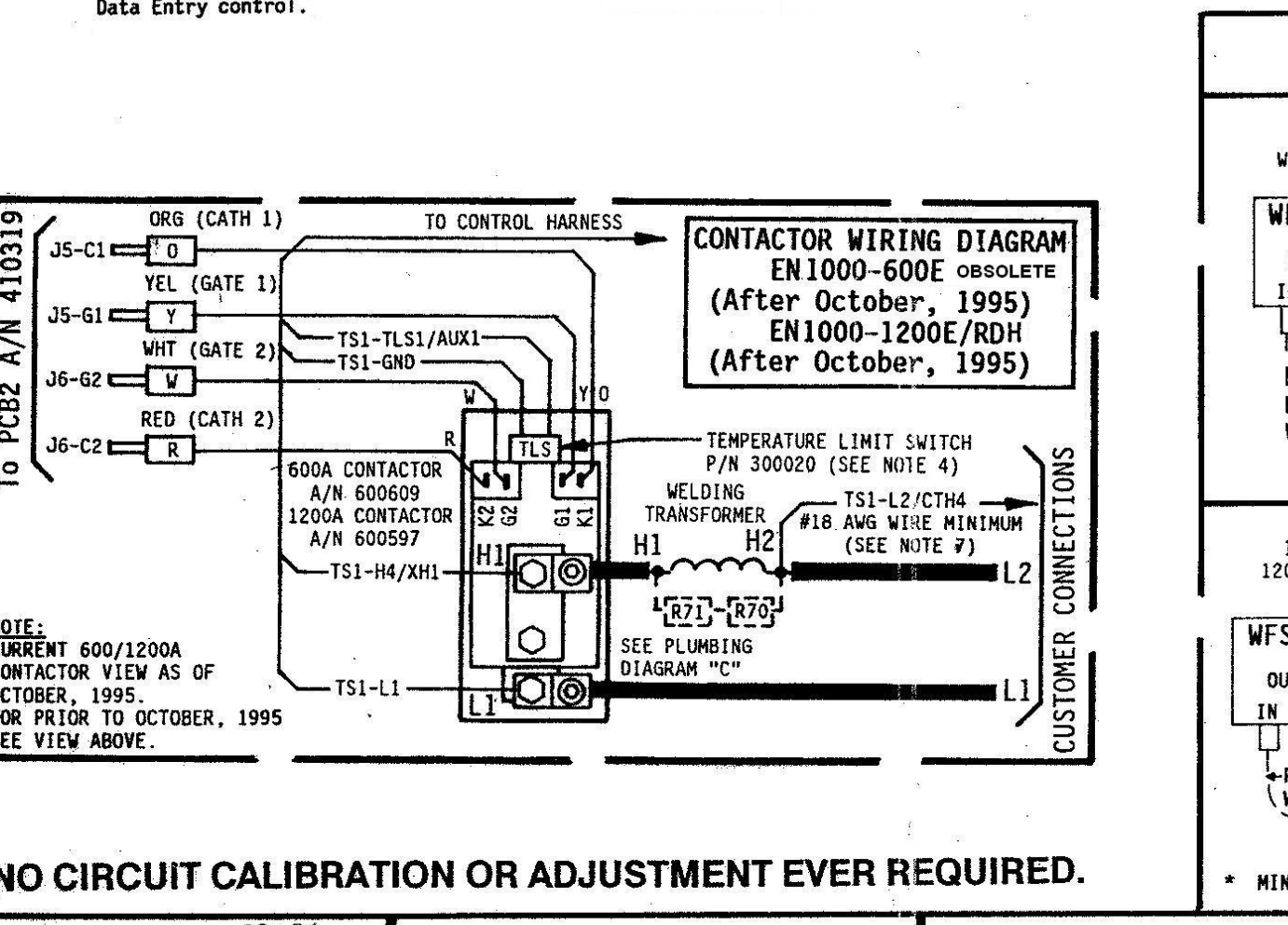
WIRING DIAGRAM, EN1000-SERIES/RDH, "E" CABINET

REV. AUTH. DATE DESCRIPTION DATE DATE

421212-004A



- 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 & TS1. As shipped unless otherwise specified.
 For 230 VAC Operation - Use Jumper #2 on T3 & TS1.
 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 TSI-FS3 & TSI-GND. No jumpers required across TSI-FS1 & TSI-GND.
 For Two Stage Pilot Operation - Connect 1st stage pilot switch to TSI-FS1 & TSI-GND. Connect 2nd stage pilot switch to TSI-FS3 & TSI-GND.
 - For DUAL COUNT/DUAL CURRENT (Dual Weld/Dual Heat) or TRIPLE COUNT/TRIPLE CURRENT (Triple Weld/Triple Heat) Selection, SEE MANUAL.
 - ENRDE1000-SERIES, "E" Cabinet:
 ENTRON supplies Temperature Limit Switch (TLS) P/N 300020 and provides connections to TSI-TLS1/AUX1 & TSI-GND. Jumper not required between TSI-TLS1/AUX1 & TSI-GND.
 NOTE: TLS SCR & Thyristor will open at temperatures greater than or equal to 150° F.
 - When external valve power is supplied to the control. Remove and insulate leads TS3-VL1 & TS3-VL2 on the Terminal Strip Board (PCB2), (from T3-X1 & T3-X2). Connect external AC power supply (24-240 VAC) to TSI-VL1 & TSI-VL2/3/4/VL2.
 CAUTION: Do not overtighten TS3.
 - VALVE 3 OUTPUT USAGE:
 TSI-SV5 & TSI-SV6 (Valve 3) can be used for either a Valve output or a Process output. When TSI-SV5 & TSI-SV6 is used as a Valve output use Jumper "A" on TS3.
 When TSI-SV5 & TSI-SV6 is used as a Process output use Jumper "B" on TS3.
 CAUTION: Do not overtighten TS3.
 WARNING: Use of Jumper "B" bypasses control relay contacts to allow a process output without an initiation. SEE MANUAL.
 - Connect TSI-L2/CTH4 to L2/H2 side of Welding Transformer Primary.
 - When Optional Program Lockout is specified by customer. Dial Plate A/N 600528-001 replaces A/N 600528. Add switch P/N 600531-001 & remove Hole Plug P/N 565003.
 - When TLS and MFS are used together, add terminal strip TS6 (P/N 335038) and wire as shown below. Jumper not required between TSI-TLS1/AUX1 & TSI-GND. MFS will open with flows less than .75 GPM. ENRDE1000-600E & ENRDE1000-1200E.
 When control is furnished with a 600A or 1200A Contactor the Water Flow Switch may be installed by the customer, external to the cabinet. The MFS must be wired in series with the TLS supplied by ENTRON, per the diagram below.



NOTICE
 FOR SERVICE ON THIS CONTROL
 Contact Your Machine Dealer Or
 ENTRON CONTROLS LLC.
 DIRECTLY: (864) 416-0190
 601 HIGH TECH COURT
 GREER, SC 29650
 FAX# (864) 416-0195