

**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

**HAZARDOUS VOLTAGE**  
 Turn off all power sources before touching any components. Electrical shock or flash will cause severe injury or death.

**CAUTION**  
 Control Shipped Wired for 460 VAC Operation unless otherwise specified - See Note 2.

PARTS LIST - CONTROL SECTION				421180-010 A	
EXT. QTY.	INT. QTY.	150A, 300A, & 600/1200A QTY.	DESIG.	PART NO.	DESCRIPTION
1	1	1	600528-012	600528-012	Assem., Dial Plate, EN1000, Consisting of: Assem. Dial Plate, w/Keylock, EN1000, Consisting of:
1	1	1	PCB1 SW1	600541-009	Assem., Switch, Sequence Control & Display Bd.
1	1	1		600531-001	Assem., Switch, Keylock, Momentary, SPST
1	1	1		540251	Illustrated Panel, Dial Plate, EN1000
1	1	1		515104	Panel, Display Window, Red Filter, EN1000
1	1	1		565003	Hole Plug, 3/4" Diam., Black
1	1	1	PWR.LT.	305001	Lamp, Neon, Red, 230V
1	1	1	WLD.LT.	305002	Lamp, Neon, Clear, 230V
1	1	1	J4-J4	322539	Assem., Harness, Cerl. Bd./S49 Option
1	1	1	J2-J2	322303	Assem., Harness, Cerl. Bd./Term. Bd.
1	1	1	J3	322304	Assem., Harness, Power, 150A, 300/600/1200A Cont's
1	1	1	J3	322304-002	Assem., Harness, Power, External IGM Tube Cont's
1	1	1	J3	322304-003	Assem., Harness, Power, External SCR Contactors

PARTS LIST - CONTACTOR SECTION				421180-010 A	
EXT. QTY.	INT. QTY.	150A, 300A, & 600/1200A QTY.	DESIG.	PART NO.	DESCRIPTION
1	1	1	TS1	335067	Terminal Strip, 10 Pin, (Part of J3 Harness)
1	1	1	T1	310001	Transformer, Control, (Part of J3 Harness)
1	1	1	T2	310002	Transformer, Sense, (Part of J3 Harness)
1	1	1	T3	311001	Transformer, Valve, 50VA
1	1	1	T3	311016	Transformer, Valve, 50VA, 575V
1	1	1	J5-J5/J6-J6	322311	Assem., Harness, IGM Firing Module to Term. Bd.
1	1	1	T3	311002	Transformer, Valve, 150VA
2	2	2	R70, 71	225016	Resistor, Power, Surge, 500 Ohm, 100W
2	2	2	R72, 73(PCB3)	225055	Resistor, Ignitor, 5 Ohm, 50W, (Part of 410318)
2	2	2	R74	600048	Assem., Resistor, Power, 2000 Ohm, 10W, (For 575V)
1	1	1	F1	308010	Fuseholder, 1 Pole, Mini, 600V
1	1	1	F1	307024	Fuse, Control, 1/4A, FNQ-R-1/4 or KLD-R-1/4
3	3	3	F6, 7, 8(PCB2)	307022	Fuse, 1 Amp, Slow Blow, 2AG, (Part of 410319 & 410319-001)
1	1	1	F4, 5(PCB3)	307010	Fuse, Ignitor, 6 Amp, BAF 6, (Part of 410318)
1	1	1	F1	325191	Assem., Wire, Surge Resistor, 18 GA., Black
2	2	2	F2	325149	Assem., Wire, Valve Transformer, 22 GA., Blk.
2	2	2		346004	Lug, 5/16" Bolt to 2/0 Wire, 600A Cont., L1 & H1
1	1	1		600613	Assem., Contactor, Thyristor, Air, 150A, 460/575V, w/TLS
1	1	1		600520	Assem., Cont., Thyristor, Air, 300A, 460/575V, w/TLS
1	1	1		600669	Assem., Cont., Thyristor, Water, 600A, 460/575V
1	1	1		300020	Switch, Temp. Limit, (Part of 600520 & 600613)
1	1	1		346002	Lug, 5/16" Bolt to 4/0 Wire, 1200A Cont., L1 & H1
1	1	1		600670	Assem., Cont., Thyristor, Water, 1200A, 460/575V
1	1	1		410319	Assem., PCB, Terminal Strip Board, EN1000
1	1	1		410319-001	Assem., PCB, Term. Strip Bd., Ext. Firing, EN1000
1	1	1		410318	Assem., PCB, IGM Firing Module
1	1	1		510236	Plate, Mounting, Terminal Strip Board
1	1	1		410329-004	Assem., PCB, S49 Option
1	1	1		346004	Lug, Screw, Chassis GND, 2/0 Wire
1	1	1		600044	Assem., Interlocking Door Solenoid
1	1	1		314001	Coil Assem Only, IDS
1	1	1		510015	Cabinet, "S" Subcompact
1	1	1		510017	Door, Cabinet, "S"
1	1	1		700182	Application Note, S49 Option
1	1	1		700120	Manual, EN1000
1	1	1		421183	Logic Diagram, EN1000 Control
1	1	1		421180-010	Wiring Diagram, EN1000/S49-SERIES, 'S' CABINET

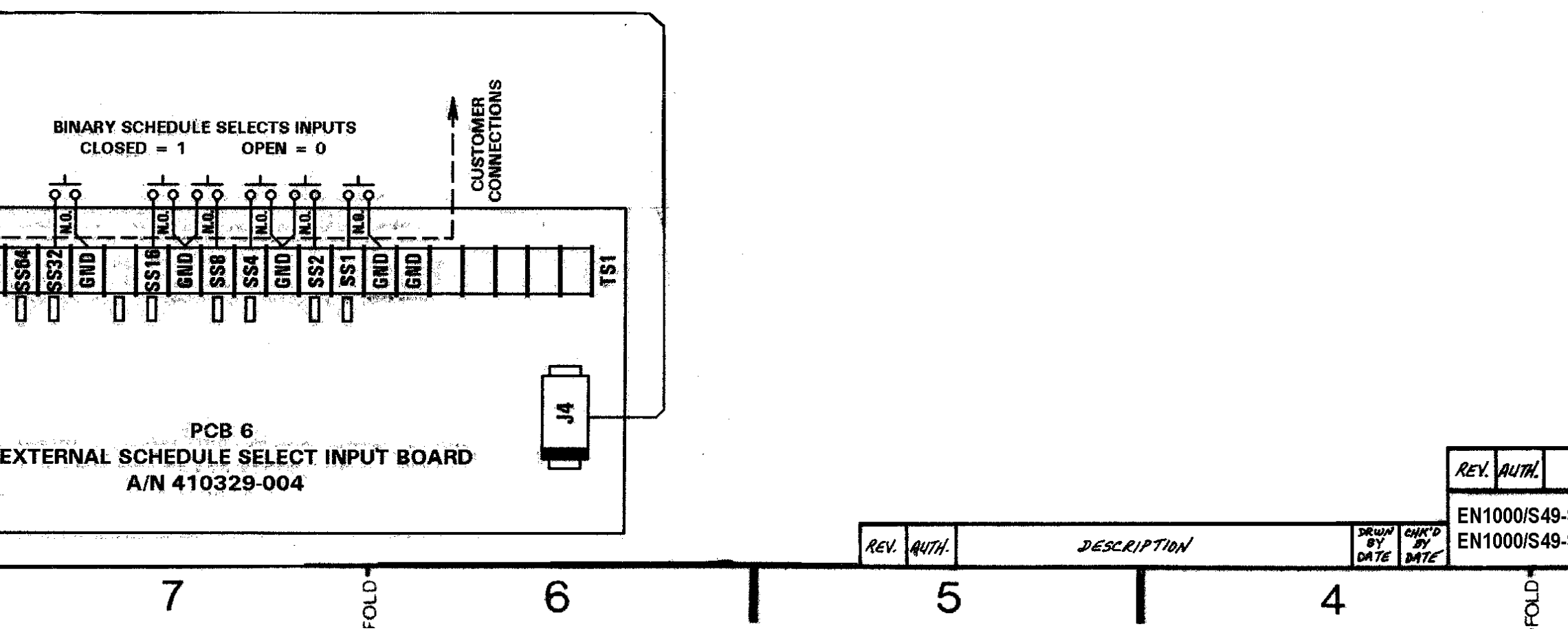
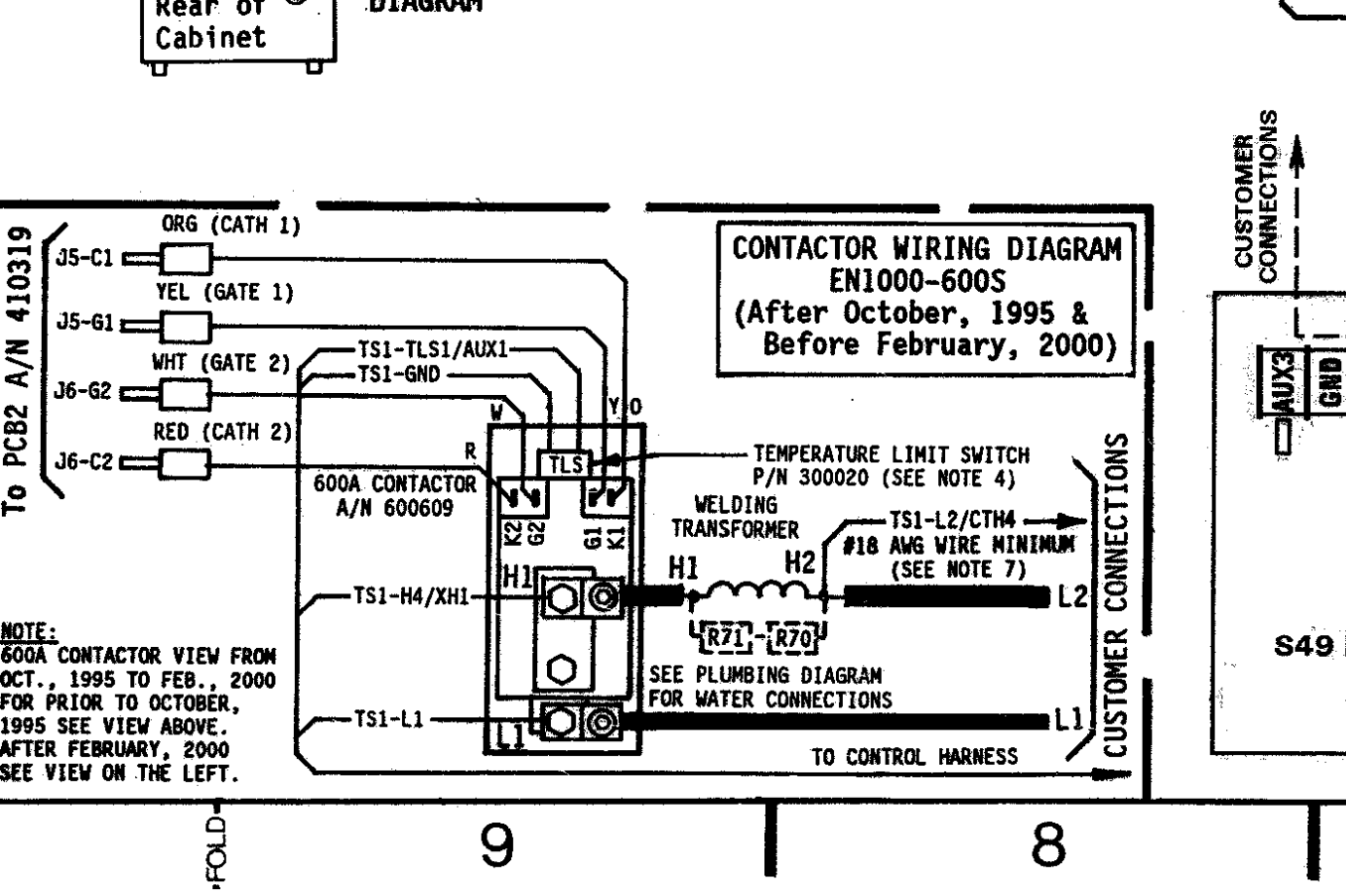
**MANUFACTURING INSTRUCTIONS**

X Optional.  
 \* Optional Keylock when specified by customer. See Note 8. Pack key in Poly bag 900148 & attach to Door w/Yellow Tape 900118.  
 \* Substitution or Addition of Parts when 575V Control is specified.

See Drawings #600530, #600530-001, #600530-002, & #600530-003 for Mechanical Assembly Instructions.  
 See Drawing #440269 for Packing Instructions, "S" Cabinet.  
 See Drawing #440352 for Label Locations, "S" Cabinet.  
 See Drawing #440055 for Customer Mounting & Knockout Detail of "S" Cabinet. For Layout/Assembly of Front Panel, See Drawing #600526.

**NO CIRCUIT CALIBRATION OR ADJUSTMENT EVER REQUIRED.**

**CAUTION - CONTROL WIRED FOR 460 VAC - UNLESS OTHERWISE SPECIFIED.**  
 CUSTOMER CONNECTIONS - CAUTION - READ MANUAL & ALL NOTES BEFORE INSTALLING OR OPERATING CONTROL. SEE NOTE 1.



REV	AUTH	DESCRIPTION	DATE	CHK'D BY	DATE
-	-	CHG'D TS1 TO PIN 335067; UPDATED LABELS.		DCS	2/28/12
-	-	ORIGINAL RELEASE			

SCALE	DATE	DRAWN BY	CHK'D BY	APPROVED BY
TOLERANCE UNLESS SPECIFIED		RHL		

REV	AUTH	DESCRIPTION	DATE	CHK'D BY	DATE
-	-	WIRING DIAGRAM, EN1000/S49-SERIES, 'S' CABINET			

NEXT ASSM/USED ON	DRAWING NUMBER	REV
EN1000/S49-S (IGN)	EN1000/S49-600S	
EN1000/S49-S (SCR)	EN1000/S49-300S	
EN1000/S49-600S	EN1000/S49-1200S	