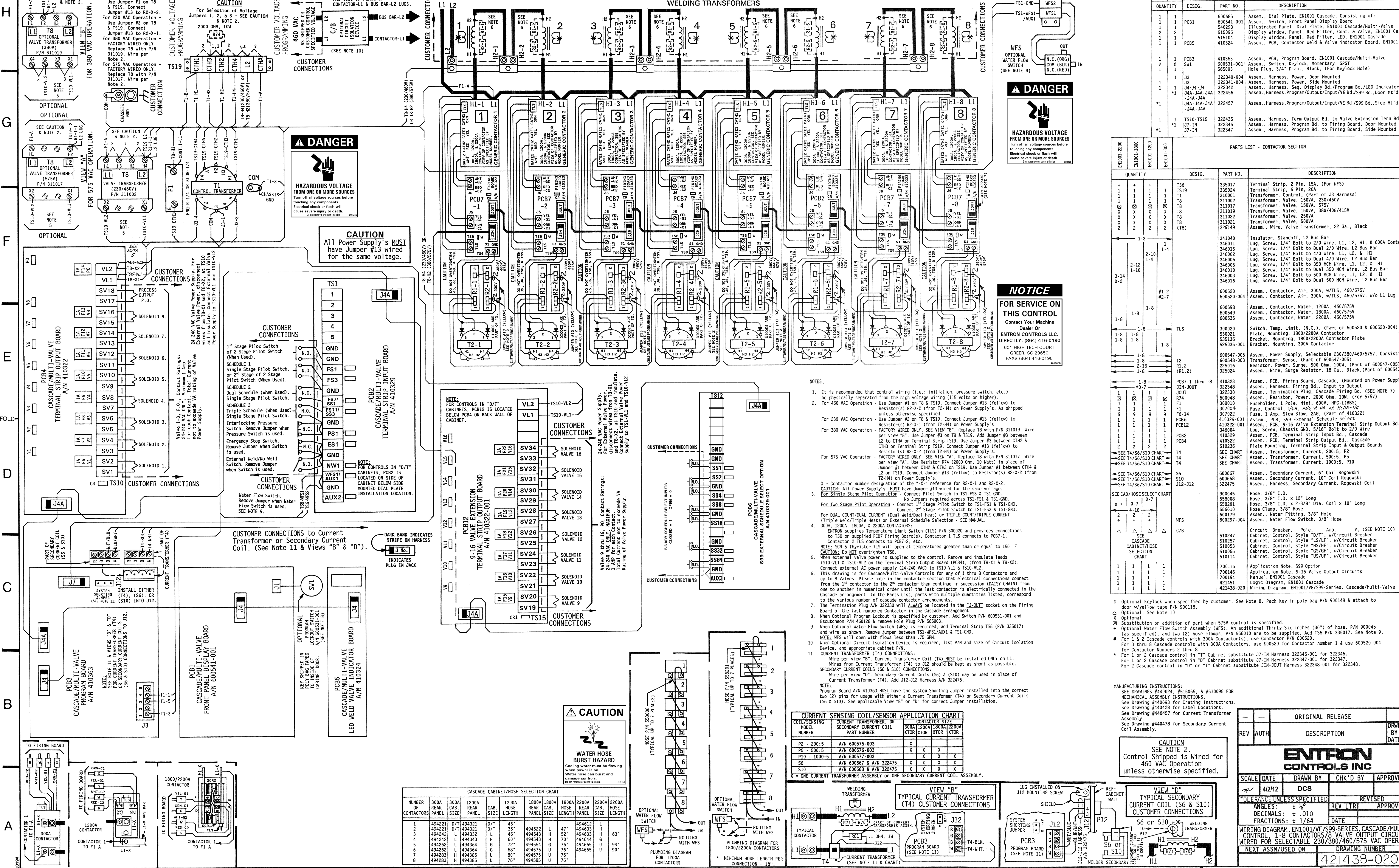


CAUTION - READ MANUAL & ALL NOTES BEFORE INSTALLING OR OPERATING CONTROL - SEE NOTE 1. NO CIRCUIT CALIBRATION OR ADJUSTMENT EVER REQUIRED.



PARTS LIST - CONTROL SECTION 421438-020

QUANTITY	DESIG.	PART NO.	DESCRIPTION
1	PCB1	600685	Assem., Dial Plate, EN1001 Cascade, Consisting of:
1		600541-001	Assem., Switch, Front Panel Display Board
1		540299	Illustrated Panel, Dial Plate, EN1001 Cascade/Multi-Valve
1		515096	Display Window, Panel, Red Filter, Cont. & Valve, EN1001 Cascade
1		513104	Assem., PCB, Contactor Weld & Valve Indicator Board, EN1001 Casc.
1		413324	
1	PCB5	413363	Assem., PCB, Program Board, EN1001 Cascade/Multi-Valve
1		600531-001	Assem., Switch, Keylock, Momentary, SPST
1		565003	Hole Plug, 3/4" Diam., Black, (For Keylock Hole)
1	J3	322340-004	Assem., Harness, Power, Door Mounted
1	J3	322341-004	Assem., Harness, Power, Side Mounted
1	J4-J4-J4-J4	322346	Assem., Harness, Seq. Display Bd./Program Bd./LED Indicator Bd.
1	J4-J4-J4-J4	322457	Assem., Harness, Program/Output/Input/VE Bd./599 Bd., Side Mt'd.
1	TS10-TS15	322435	Assem., Harness, Term Output Bd. to Valve Extension Term Bd.
1	J7-IN	322346	Assem., Harness, Program Bd. to Firing Board, Door Mounted
1	J7-IN	322347	Assem., Harness, Program Bd. to Firing Board, Side Mounted

PARTS LIST - CONTACTOR SECTION

QUANTITY	DESIG.	PART NO.	DESCRIPTION	
1	TS6	335017	Terminal Strip, 2 Pin, 15A, (For WFS)	
1	TS19	330011	Terminal Strip, 6 Pin, 20A	
1	T1	310001	Transformer, Control, (Part of J3 Harness)	
1	T1	310002	Transformer, Valve, 150VA, 230/460V	
1	T8	311017	Transformer, Valve, 150VA, 230/460V	
1	T8	311019	Transformer, Valve, 150VA, 380/408/415V	
1	T8	311022	Transformer, Valve, 250VA	
1	T8	311021	Transformer, Valve, 500VA	
1	(T8)	325149	Assem., Wire Valve Transformer, 22 Ga., Black	
1-3		341040	Insulator, Standoff, L2 Bus Bar	
1-4		346015	Lug, Screw, 1/4" Bolt to Dual 2/0 Wire, L1, L2, H1, & 600A Contactor	
1-4		346002	Lug, Screw, 1/4" Bolt to 4/0 Wire, L1, L2, & H1	
1-4		346003	Lug, Screw, 1/4" Bolt to Dual 4/0 Wire, L2 Bus Bar	
1-4		346005	Lug, Screw, 1/4" Bolt to 350 MCM Wire, L1, L2, & H1	
1-4		346010	Lug, Screw, 1/4" Bolt to Dual 350 MCM Wire, L2 Bus Bar	
1-4		346003	Lug, Screw, 1/4" Bolt to 500 MCM Wire, L1, L2, & H1	
1-4		346016	Lug, Screw, 1/4" Bolt to Dual 500 MCM Wire, L2 Bus Bar	
1-8		600520	Assem., Contactor, Air, 300A, w/TLS, 460/575V	
1-8		600520-004	Assem., Contactor, Air, 300A, w/TLS, 460/575V, w/o L1 Lug	
1-8		600598	Assem., Contactor, Water, 1200A, 460/575V	
1-8		600549	Assem., Contactor, Water, 1800A, 460/575V	
1-8		600535	Assem., Contactor, Water, 2200A, 460/575V	
1-8	TL5	300020	Switch, Temp. Limit, (N.C.), (Part of 600520 & 600520-004)	
1-8		530021	Plate, Mounting, 1800/2200A Contactor	
1-8		531336	Bracket, Mounting, 1800/2200A Contactor Plate	
1-8		525035-001	Bracket, Mounting, 300A Contactor	
1-8		600547-005	Assem., Power Supply, Selectable 230/380/460/575V, Consisting of:	
1-8		600548-003	Transformer, Sense, (Part of 600547-005)	
1-8		225016	Resistor, Power, Surge, 500 Ohm, 100W, (Part of 600547-005)	
1-8		325024	Assem., Wire, Surge Resistor, 18 Ga., Black, (Part of 600547-005)	
1-8		413023	Assem., PCB, Firing Board, Cascade, (Mounted on Power Supply)	
1-8	JIN-3OUT	322348	Assem., Harness, Firing Bd., Input to Output	
1-8	JOUT	322330	Assem., Termination Plug, Cascade Firing Bd. (SEE NOTE 7)	
1-8		307022	Assem., Resistor, Power, 500 Ohm, 10W, (For 575V)	
1-8	F1	308010	Fuseholder, 1 Pole, Mini, 600V, HFC-L(8BS)	
1-8	F1	307024	Fuse, Control, 1/4", 250V, 1/4" x 1/4" x 1/4" (K204-1)	
1-8	F1	307022	Fuse, 1 Amp, 500V, 248, (Part of 413023)	
1-8	PCB6	413022-001	Assem., PCB, 599 External Schedule Select	
1-8	PCB12	413022-001	Assem., PCB, 9-16 Valve Extension Terminal Strip Output Bd.	
1-8	PCB2	345004	Lug, Screw, Chassis Gnd, 5/16" Bolt to 2/0 Wire	
1-8	PCB4	413022-001	Assem., PCB, Terminal Strip Input Bd., Cascade	
1-8	PCB4	413022	Assem., PCB, Terminal Strip Output Bd., Cascade	
1-8	PCB4	510236	Plate Mounting, Terminal Strip Input & Output Boards	
1-8	SEE CHART		Assem., Transformer, Current, 200:5, P2	
1-8	SEE CHART		Assem., Transformer, Current, 500:5, P5	
1-8	SEE CHART		Assem., Transformer, Current, 1000:5, P10	
1-8	SEE CHART		Assem., Secondary Current, 6" Coil Rogowski	
1-8	SEE CHART		Assem., Secondary Current, 10" Coil Rogowski	
1-8	SEE CHART		Assem., Secondary Current, Rogowski Coil	
1-8	SEE CHART		322475	
1-8	SEE CHART		900045	Hose, 3/8" I.D.
1-8	SEE CHART		558008	Hose, 3/8" I.D. x 2-3/8" Dia. Coil x 18" Long
1-8	SEE CHART		558021	Hose, 3/8" I.D. x 2-3/8" Dia. Coil x 18" Long
1-8	SEE CHART		558010	Hose Clamp, 3/8" Hose
1-8	SEE CHART		600179	Assem., Water Fitting, 3/8" Hose
1-8	SEE CHART		600297-004	Assem., Water Flow Switch, 3/8" Hose
1-8	SEE CHART		510247	Circuit Breaker, Pole, Amp. V. (SEE NOTE 10)
1-8	SEE CHART		510257	Cabinet, Control, Style "D/T", w/Circuit Breaker
1-8	SEE CHART		510053	Cabinet, Control, Style "LS/LF", w/Circuit Breaker
1-8	SEE CHART		510055	Cabinet, Control, Style "HS/HF", w/Circuit Breaker
1-8	SEE CHART		510055	Cabinet, Control, Style "GS/GF", w/Circuit Breaker
1-8	SEE CHART		510114	Cabinet, Control, Style "US/UF", w/Circuit Breaker
1		700115	Application Note, 599 Option	
1		700146	Application Note, 9-16 Valve Output Circuits	
1		700194	Manual, EN1001 Cascade	
1		421451	Logic Diagram, EN1001 Cascade	
1		421438-020	Wiring Diagram, EN1001/VE/599-Series, Cascade/Multi-Valve	

MANUFACTURING INSTRUCTIONS: SEE DRAWINGS #40024, #515055, & #510095 FOR MECHANICAL ASSEMBLY INSTRUCTIONS. SEE DRAWING #440093 FOR CRATING INSTRUCTIONS. SEE DRAWING #440428 FOR LABEL LOCATIONS. SEE DRAWING #440457 FOR CURRENT TRANSFORMER ASSEMBLY. SEE DRAWING #440478 FOR SECONDARY CURRENT COIL ASSEMBLY.

CAUTION SEE NOTE 2. Control Shipped is Wired for 460 VAC Operation unless otherwise specified.

SCALE	DATE	DRAWN BY	CHK'D BY	APPROVED BY
	4/2/12	DCS		

ENTRON CONTROLS INC

REV	AUTH	DESCRIPTION	DRN	CHK	BY	DATE

WIRING DIAGRAM, EN1001/VE/599-SERIES, CASCADE/MULTI-VALVE CONTROL, 1-8 CONTACTOR/8 VALVE OUTPUT CIRCUITS, WIRED FOR SELECTABLE 230/380/460/575 VAC OPERATION
NET ASSM/USED ON DRAWING NUMBER REV

CASCADE CABINET/HOSE SELECTION CHART

NUMBER OF CONTACTORS	300A REAR PANEL	300A CAB. REAR PANEL	1200A REAR PANEL	1200A CAB. REAR PANEL	1800A REAR PANEL	1800A CAB. REAR PANEL	2200A REAR PANEL	2200A CAB. REAR PANEL	2200A REAR PANEL	2200A CAB. REAR PANEL	
1	494221	D/T	494321	D/T	45"	494522	L	47"	494633	H	63"
2	494242	L	494342	L	36"	494543	H	42"	494633	H	63"
4	494242	L	494343	H	60"	494543	H	70"	494644	H	70"
5	494262	L	494364	G	72"	494554	G	76"	494665	U	90"
6	494262	L	494364	G	72"	494554	G	76"	494665	U	90"
7	494283	H	494385	U	76"	494575	U	76"	494665	U	90"
8	494283	H	494385	U	76"	494575	U	76"	494665	U	90"

