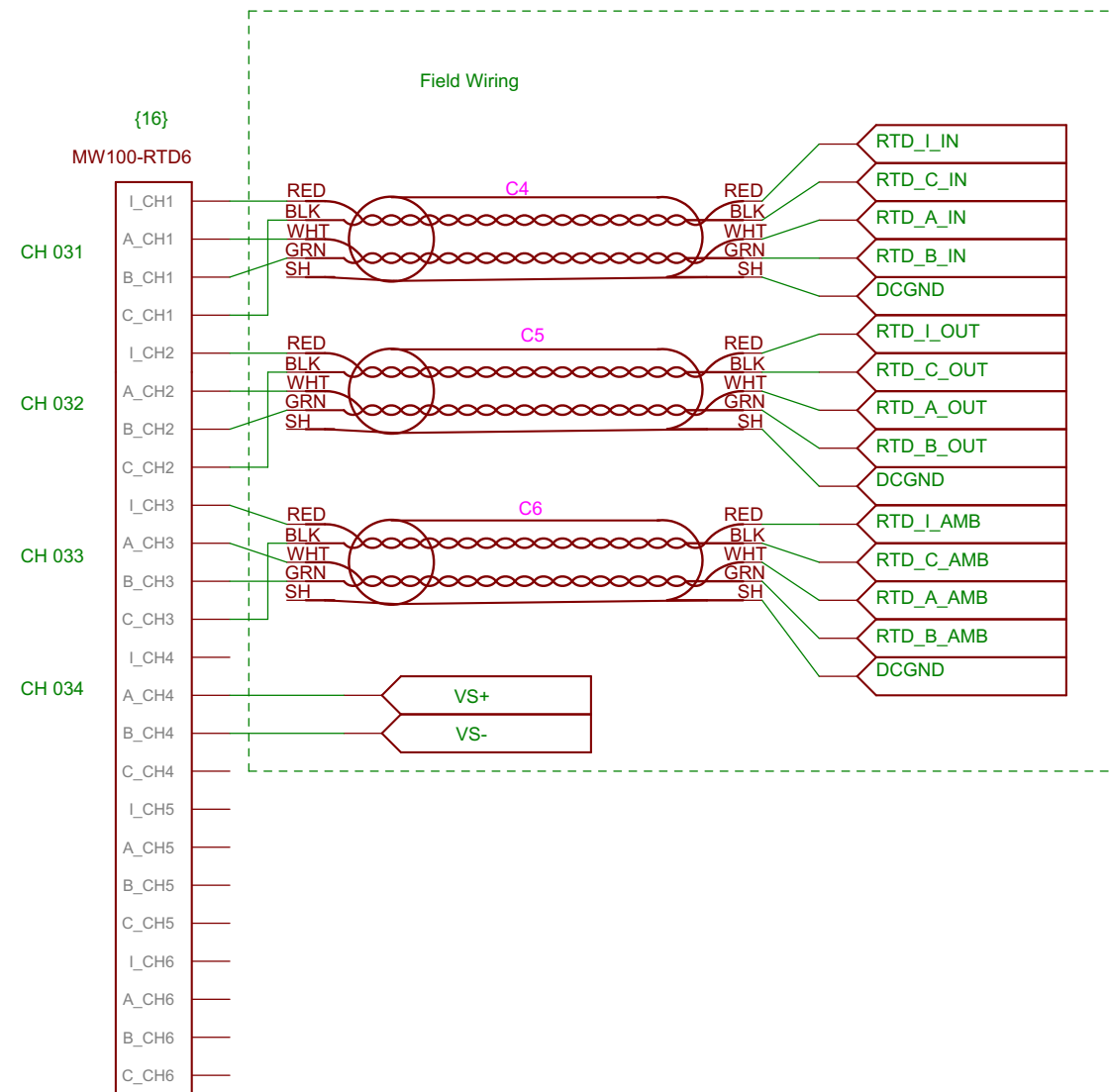
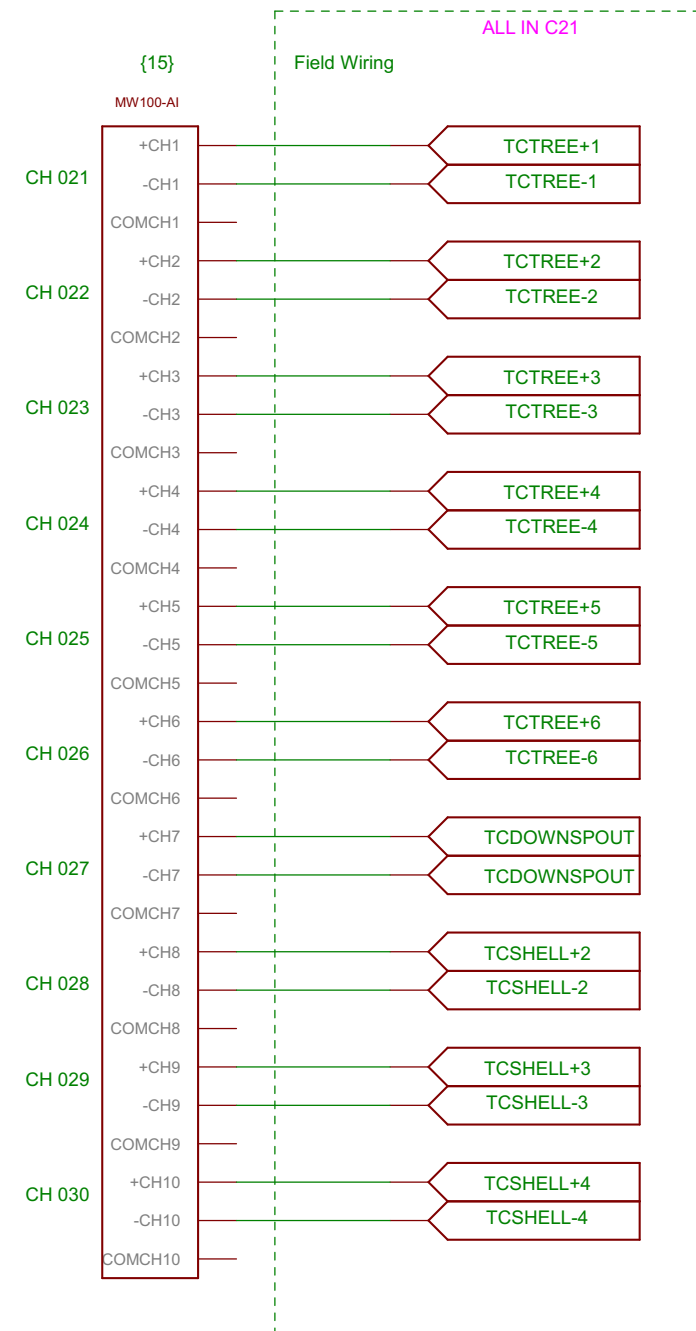


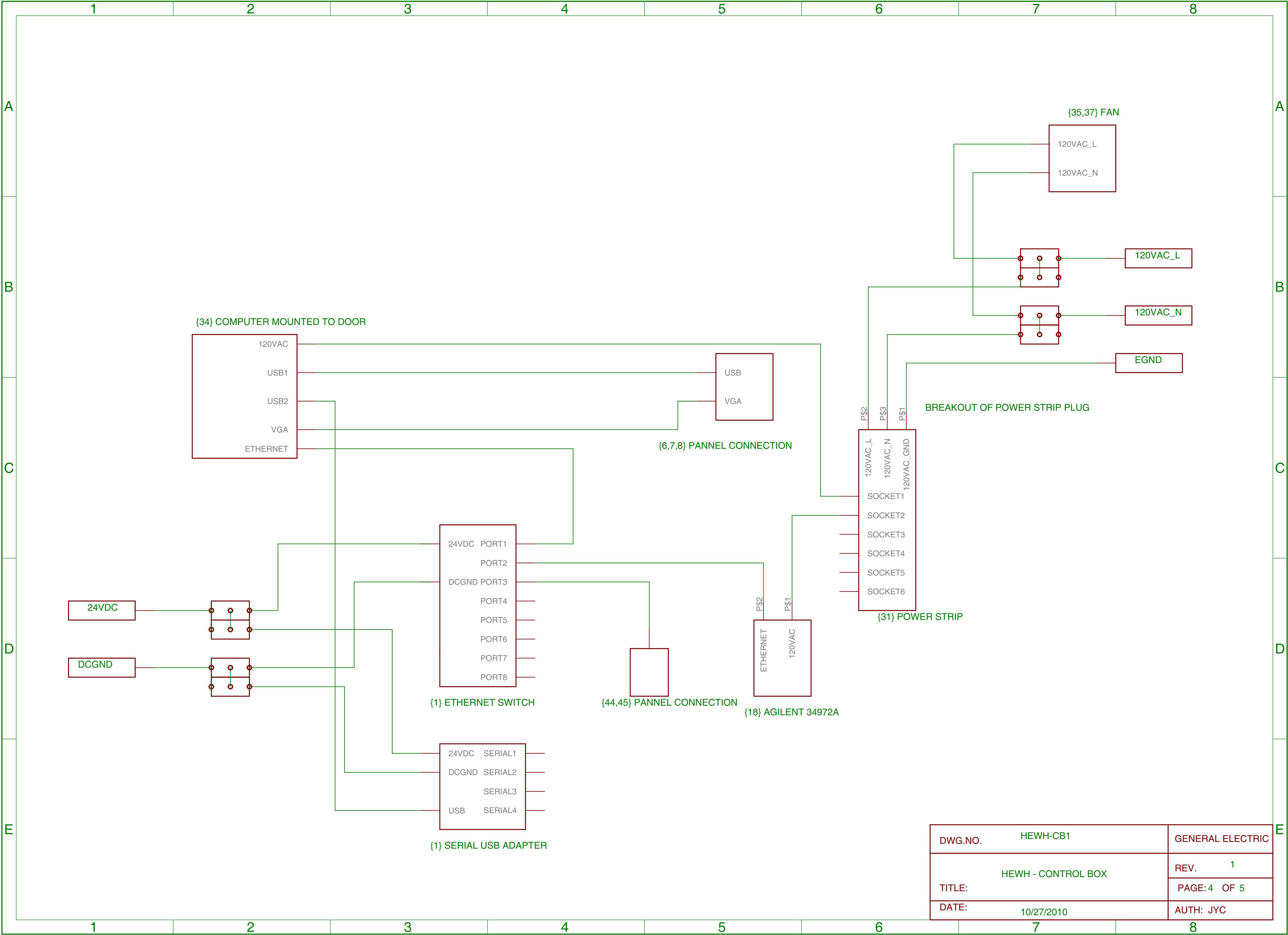
DWG.NO.	HEWH-CB1	GENERAL ELECTRIC
TITLE:	HEWH - CONTROL BOX	REV. 5
DATE:	05/19/2011	PAGE: 2 OF 5
		AUTH: JYC



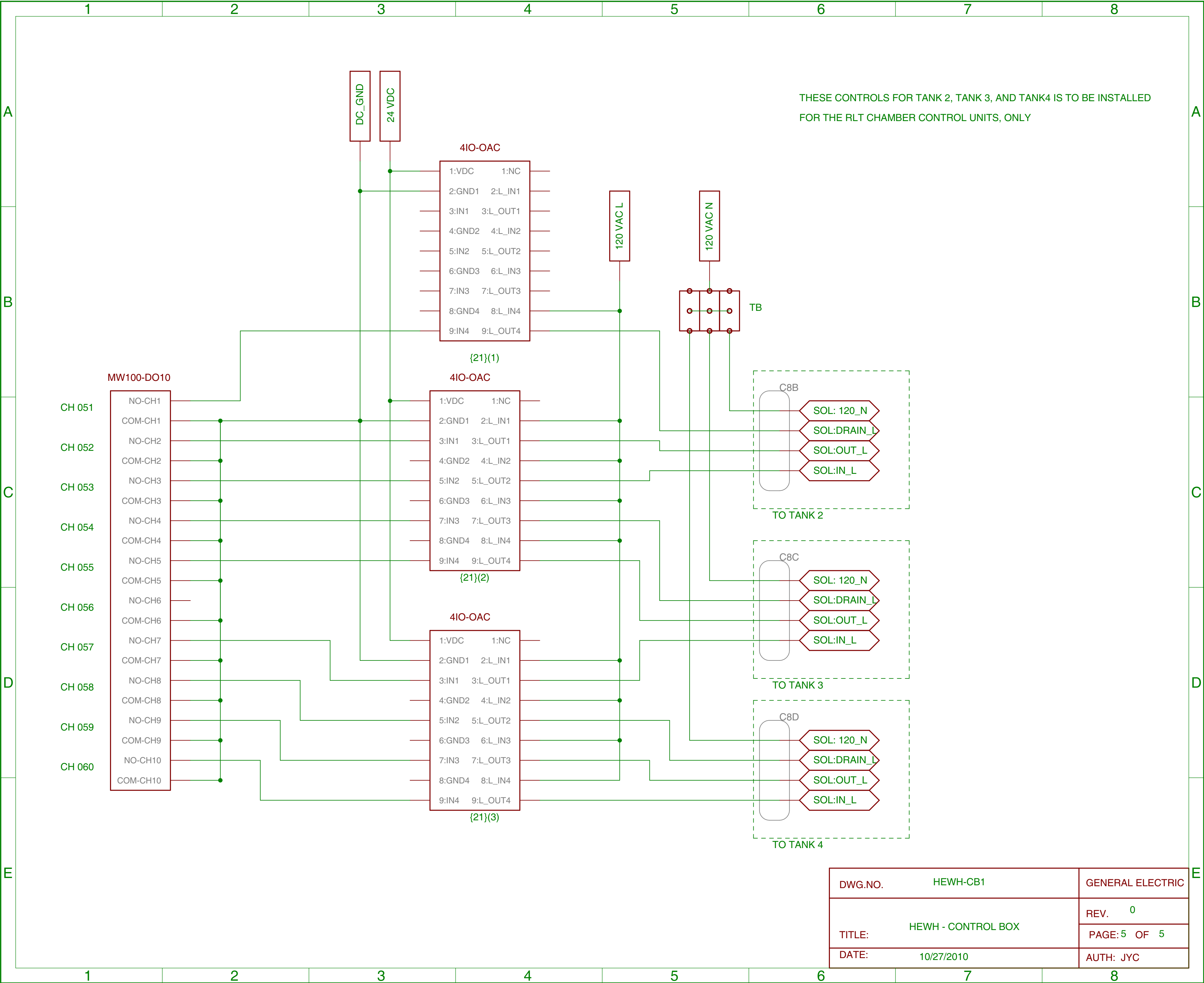
REFER TO HEWH-WIRING DIAGRAM FOR CABLE LAYOUT



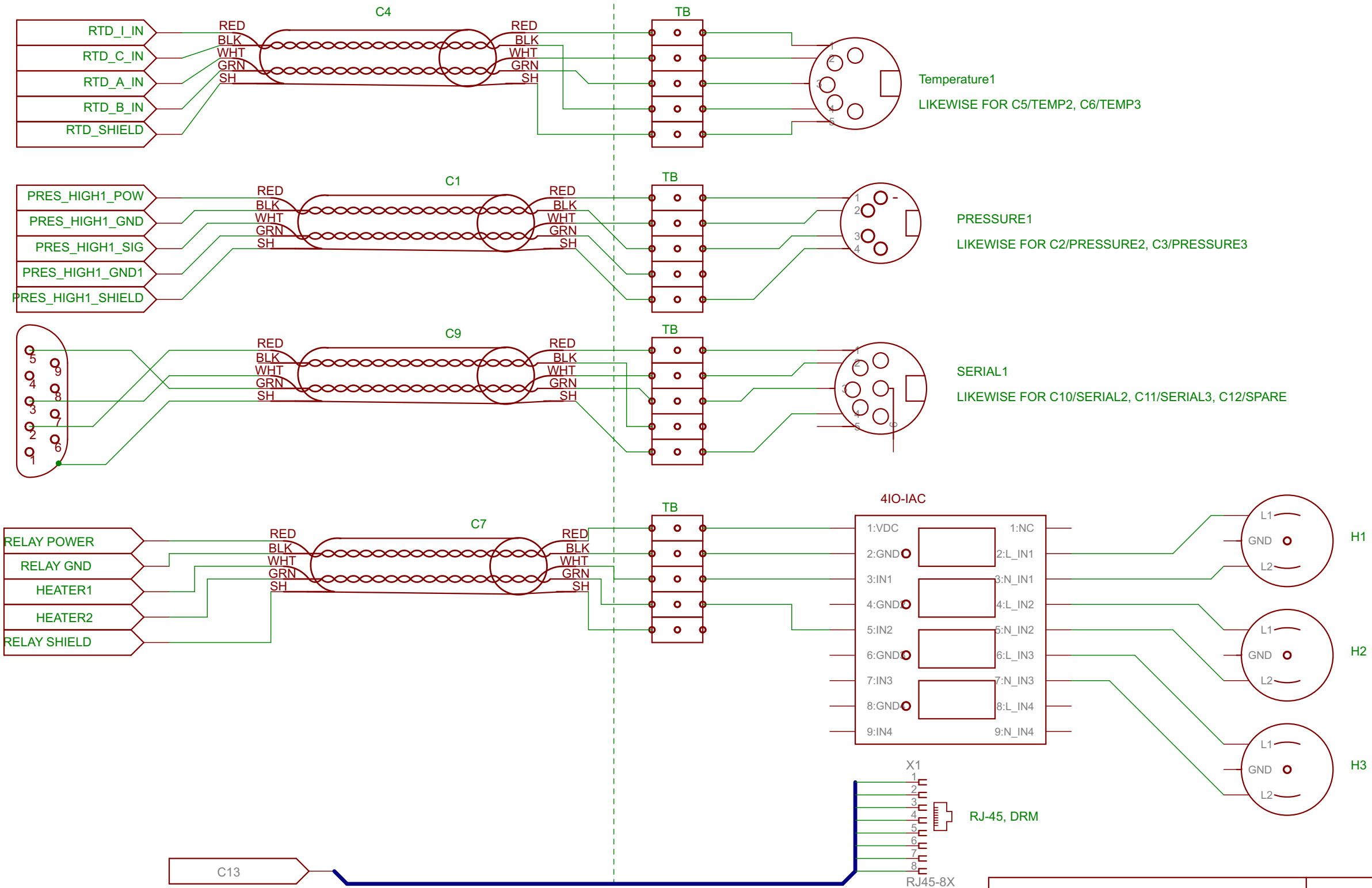
DWG.NO.	HEWH-CB1	GENERAL ELECTRIC
TITLE:	HEWH - CONTROL BOX	REV. 2
		PAGE: 3 OF 5
DATE:	05/19/2011	AUTH: JYC



DWG.NO.	HEWH-CB1	GENERAL ELECTRIC
TITLE:	HEWH - CONTROL BOX	REV. 1
		PAGE: 4 OF 5
DATE:	10/27/2010	AUTH: JYC



DWG.NO.	HEWH-CB1	GENERAL ELECTRIC
TITLE:	HEWH - CONTROL BOX	REV. 0
		PAGE: 5 OF 5
DATE:	10/27/2010	AUTH: JYC



DWG.NO.	HEWH-PP1	GENERAL ELECTRIC
TITLE:	PATCH PANEL BOX WIRING	REV. 2
DATE:	12/15/2010	PAGE: 1 OF 1
		AUTH: JYC

DRM Wiring Reference

HEWH Board Pin	Function	HEWH Wire Color	MW100 Channel	RJ45 Pin
1	+5VDC	Red		3
2	DRM1 - LOW	Orange	045	4
3	DRM0 - HIGH	Yellow	046	5
4	TXD			
5	RXD			
6	GND	Blue		8

DRM -H (046)	DRM L (045)	Name	Temperatu	Mode
1	1	Normal	UNC	UNC
1	0	Meduim	UNC	EHEAT
0	1	High	110	EHEAT
0	0	Critical	100	EHEAT

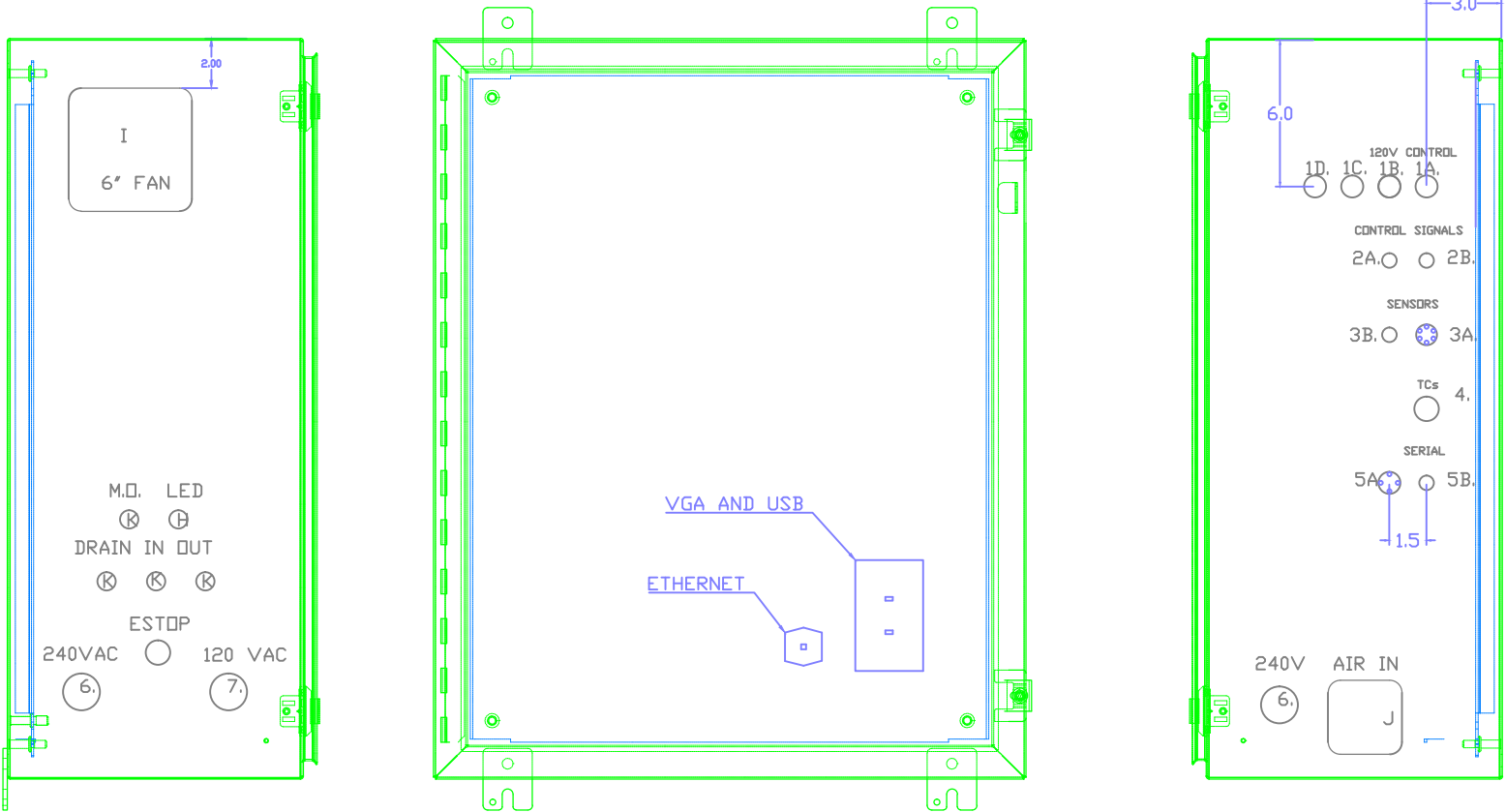
Select Mode, see HEWH_Controls_SRS_rev_2c.doc page 23.

Contact view of RJ45 Connector						Function
Cable Wire Color					HEWH Wire Color	
O/W				1		
O				2		
Green/White				3	RED	+5V
Blue				4	ORANGE	DRM1-LOW
Blue/White				5	YELLOW	DRM0-HIGH
Grn				6		
Brn/W				7		
Brown				8	BLUE	GND


Control Elements and External Sensors						
13	RTD w/ Connector	OMEGA	P-M-1/10-1/8-6-1/8-P-3-TA4M			
1A3	Connector for RTD	OMEGA	TA4F			
22	Pressure Txd (High Side)	Measurement Specialties Inc	2000261	Digikey	MSP3501P4A1-ND (High Side)	Supply 8-30 VDC, 500 psi
31	Pressure Txd (Low Side)	Measurement Specialties Inc	2000203	Digikey	MSP3251P4A1-ND (Low Side)	250 psi
41	Flow Meter			Flow Technology	68604-BAA-ABA	1 % of reading
52	Solenoid Valve,2 Way,NC,Brass,3/4 In 2Watts NC	ASCO	8210P095	Grainger	1ALB3	
	Solenoid Valve,2 Way,NC,Brass,3/4 In 10.1 Watts NC	ASCO	8210G095	Gexpro		alt for 5
61	Solenoid Valve,2 Way,NO,Brass,3/4 In 10 Watts NO	ASCO	8210G035	Grainger	3UK89	
71	Receptacle, 240 VAC marine	Hubble	HBL2620SW	Grainger	4CV27	117.45
81	Plug 240 VAC, maring	Hubble	HBL2621SW	Grainger	4CV29	127.85
91	Lockout Switch	Hubble	HBLMITL	Grainger	4CV76	498
101	TMP Valve 150 PSI 3/4" Brass			Lowes		
111	Brass, 1/8" tube ok, 1/8" NPT	OMEGA	BRLK-18-14	OMEGA	BRLK-18-14	
121	T_Tc, 6" long 1/8" sheath, ungrounded	OMEGA	TMQSS-125U-6	OMEGA	TMQSS-125U-6	
Test Control Box						
11	Ethernet Isolated Din Switch			B&B	EIR308	
21	USB TO ISOLATED Serial 4 prt RS232 W/DB9M			B&B	USO9ML2-4P	
31	Main Test Enclosure	Hoffman	CSD302410	CED	CSD302412	
41	Mounting Plate	Hoffman	CP30P24	CED	CP3024	
51	Mounting Kits	Hoffman	CMFK	CED	CMFK	
61	USB A Bulkhead	DataPro	1598-02C	DataPro	1598-02C	
71	HD15 Bulkhead VGA Panel-Mount Ext CL2 PVC 2 ft	Data Pro	1152-02C	DataPro	1152-02C	
81	VGA & USB Wall Plate	DataPro	70302A	DataPro	70302A	
91	Relay/Contactor	McMaster Carr	70255K342	McMaster Carr	70255K342	or equivalent
4040	Liquid-Tight 1" Conduit Adapter			McMaster Carr	75145K56	or equivalent
111	DAQ: Main Module (with MW100 Viewer Software), Math Function.	Yokogawa	MW100-E-1D	Measurement Instruments	MW100-E-1D	Supplied by GE
121	DAQ: Base plate for one main and six I/O modules \$	Yokogawa	MX150-6	Measurement Instruments	MX150-6	Supplied by GE
131	DAQ: 10 ch 100 msec Form A contact relay	Yokogawa	MX125-MKC-M10	Measurement Instruments	MX125-MKC-M10	Supplied by GE
141	DAQ:10 ch/100msec, DCV/TC/RTD/DI analog input module	Yokogawa	MX110-UNV-M10	Measurement Instruments	MX110-UNV-M10	Supplied by GE
151	DAQ:10 ch/100msec, DCV/TC/RTD/DI analog input module	Yokogawa	MX110-UNV-M10	Measurement Instruments	MX110-UNV-M10	Supplied by GE
161	DAQ:6 channels/100msec, 4-wire RTD, resistance, DCV and DI	Yokogawa	MX110-V4R-M06	Measurement Instruments	MX110-V4R-M06	Supplied by GE
171	DAQ:8 ch 100msec 1 to 5V & 4 to 20mA output	Yokogawa	MX120-VAO-M08	Measurement Instruments	MX120-VAO-M08	Supplied by GE
181	Thermal Data Acquisition	Agilent	34972A	Newark	55R0480	Supplied by GE
193	Thermocouple Input Cards	Agilent	34902A	Newark	83F4191	Supplied by GE
202	Resistor 250 ohm,1% Tc = 50 ppm	Vishay	R60C2500BB14	Newark	83F1584	
211	4 Position Modular Relay Board	Tyco/PB	2IO4A	Newark	81F4505	or equivalent
224	24 input 120 output relay	Tyco/PB	OAC24A	Newark	18M9254	or equivalent
234	Toggle switches	Honeywell	11TS15-1	Newark	23F2113	or equivalent
241	Cap for RJ45 pass through			Newark	15M3585	or equivalent
251	RJ45 pass through connector	Daniel Woodhead	ENSP1F5	Newark	15M0234	or equivalent
261	Cap for RJ45 pass through	Daniel Woodhead	67-0300	Newark	15M3585	or equivalent
271	2 Pole 32 A, 480 V circuit breaker			Newark	86K9999	or equivalent
281	1 Pole 10 A, 277 V circuit breaker			Newark	32M7843	or equivalent
291	4PDT Relay for Manual Override	TYCO / POTTER & BRUM	KHAU-17A11N-120	Newark	87F1106	or equivalent
301	Din rail mount relay socket	TYCO / POTTER & BRUM	27E894	Newark	46F3589	or equivalent
311	Power Strip	TRIPP LITE	6SP	Newark	87F2854	or equivalent
321	LED 120 VAC override indicator			Newark	79M6920	or equivalent
331	E-Stop Button	IDEC	AVW401-R	Newark	74K3690	or equivalent
341	Industrial Computer	Rave Computer	R-SFF-C2D-1			Not available
34A1		Superlogics	See PCs Spreadsheet			Substitute
351	Ventilation Fan	NMB-MAT	4715MS-12T-B50-A00	Newark	70K9511	or equivalent
361	Finger Guard	NMB-MAT	055015	Newark	93K7618	or equivalent
371	Fan Power Chord	NMB-MAT	432000	Newark	93K7643	or equivalent
381	SPDT 120VAC 10 A relay	TYCO/PB	KUP-5A15-120	Newark	18M9148	or equivalent
391	Relay Base	TYCO/PB	27E893	Newark	46F3616	or equivalent
401	24 VDC 100W din power supply			Newark	73K6073	
411	120 VAC Plug			McMaster Carr	7196K31	or equivalent
421	240 VAC Plug 3 terminal			McMaster Carr	7120K54	or equivalent
431	Watt-Hour Sensor			Ohio Semitronics	W-119CX5	Supplied by GE
441	RJ45 Breakout Box	EMERSON	32-2038	32-2038	Master Distributors	
451	USB-150: Full Speed USB Isolator	Keterex	USB-150	Keterex	USB-150	
461	ACER V173 DJB 17" Monitor	ACER	V173 DJB 17"	CDW		2091793
471	USB Keyboard	Keytronic	Mfg#: KEY-KT400U2	CDW		1378635
481	IOGEAR 4PT USB 2.0 HUB	IOGEAR	Mfg#: IOR-GUH285	CDW		1571452
491	Optical Mouse	Kensington	Mfg#: KEN-K72356US	CDW		1909960
501	FAN FILTER STARTECH FANFILTER12 RT			NewEgg	11-993-011	
531	Voltage Transducer			Ohio Semitronics		salvaged from old equipment
Patch Panel Box						
11	Enclosure for sensor interface			CED	CSD241668	
21	Mouning Plate			CED	CP2416	
31	Mounting Kits			CED	CMFK	Mounting Hardware
43	Female Mini Turnlock for heater 240 VAC	McMaster Carr	6755K21	McMaster Carr	6755K21	
53	Male Mini Turnlock Recept. 240 VAC	McMaster Carr	6755K22	McMaster Carr	6755K22	
63	Thermocouple Jack Panel	Omega	SJP3-18-T	Omega	SJP3-18-T	
73	5 PIN FEMALE PANEL MOUNT, SLIVER CONTACT, ZINC BODY			Newark	87F6603	Not available
7A		Multicomp/SPC	SPC21423	Newark	11M0618	Substitut
7B		Neutrik	NC5FP-B-1	Newark	27B4347	Not available
83	4 PIN FEMALE PANEL MOUNT, SLIVER CONTACT, ZINC BODY			Newark	46F8566	
93	4 PIN MALE CONNECTOR, SLIVER CONTACT, ZINC BODY			Newark	89F6044	
103	5 PIN MALE CONNECTOR, SLIVER CONTACT, ZINC BODY			Newark	89F6045	
10A3		Multicomp/SPC	SPC21436	Newark	11M0631	Substitut
114	6 PIN FEMALE PANEL MOUNT, SLIVER CONTACT, ZINC BODY			Newark	87F6605	
124	6 PIN MALE CONNECTOR, SLIVER CONTACT, ZINC BODY			Newark	89F6046	
131	RJ45 pass through connector	Daniel Woodhead	ENSP1F5	Newark	15M0234	or equivalent
141	Cap for RJ45 pass through	Daniel Woodhead	67-0300	Newark	15M3585	or equivalent
152	240 VAC in, conf 367065, 24 VDC out relay	OPTO22	IAC-24A	Newark	18M9104	
15A2		NTE	RIM-IAC24A	Newark	02H6945	Substitute
161	4 Position Modular Relay Board	Tyco/PB	2IO4A	Newark	81F4505	
1754	Thermocouple connectors	Omega	OSTW-CC-T-M	Omega		
Wire Harnessing Parts						
3	4 PIN MALE CONNECTOR, SLIVER CONTACT, ZINC BODY			Newark	89F6044	
3	5 PIN MALE CONNECTOR, SLIVER CONTACT, ZINC BODY			Newark	19P1958	Order 10
4	6 PIN MALE CONNECTOR, SLIVER CONTACT, ZINC BODY			Newark	89F6046	
3	Female 3 Blade Turnlock for heater			McMaster Carr	7162k51	Order 6
6	#10 Ring Terminal					
6	Thermalcouple MiniFlat Connector Female	Omega	SMPW-CC-T-F	Omega	SMPW-CC-T-F	Order 25
6	Thermocouple connectors	Omega	OSTW-CC-T-M	Omega	OSTW-CC-T-M	Order 25
	T thermocoupl wire 60 ft					? Frank Supplied
	30 ft of 14/16 2 conductor cable				62M3365	250 ft spool
	60 ft of 2 shielded twisted pairs 22 awg			Newark	02F5311	500' Spool
2	Multicord Nylon Liquid-Tight Cord Grip 1/2" NPT, for 6 Cords, 0.13"-0.16" Cord Dia Range			McMaster Carr	7807K43	
2	Heat Shrink-Sealed Liquid-Tight Cord Grip 3 Cords, .11" Cord Seal ID After Shrinking			McMaster Carr	5595K5	
4	PG and Metric Thread Liquid-Tight Cord Grip Polyamide, PG-16 Size, 0.35"-0.55" Cord Dia Range			McMaster Carr	7310K14	
6	PG and Metric Thread Liquid-Tight Cord Grip Polyamide, PG-9 Size, 0.14"-0.32" Cord Dia Range			McMaster Carr	7310K12	
2	Multicord Nylon Liquid-Tight Cord Grip 3/4" NPT, for 4 Cords, .16" - .20" Cord Dia Range			McMaster Carr	7807K14	
	Flexible Nylon Conductor Cable Unshielded, 18/5 Awg, .31" OD, 600 VAC, Gray 100' 1.04			McMaster Carr	9936K19	
1	Corrosion-Resistant PVC Enclosure(NEMA 4X/13) 4" Height X 4" Width X 2.4" Depth 4			McMaster Carr	8261K21	
?	Super Flex Liquid-Tight PVC Conduit 1/2" Trade Size, 0.63" ID, 0.83" OD 50'			McMaster Carr	7609K3	
?	Liquid-Tight Nonmetallic Conduit Fitting Twist-in Straight, PVC, 1/2" Trade Size 1.31 32x			McMaster Carr	9106K42-black	
?	Liquid-Tight Nonmetallic Conduit Fitting Twist-in 90 Degree Elbow, PVC, 1/2" Trade Size 2.48 8x			McMaster Carr	9106K52	
?	Belden 8304 22AWG, 4prs, Externally Shielded	Belden	8304 060100	Newark	87K1680	
4	RS232 DB9 F solder cup adapter			Peerless		
				Newark	79k5049	
4	Shrouwd for DB9 F			Peerless		
				Newark	79k5005	
1	Breakout box for RJ45			Master Supply		
100ft	Harsh Environment Multiconductor Cable Unarmored, 10/3 Awg, .51" OD, 600 VAC			Mcmaster Carr	8248K19	
1	0.031 to 0.56 chord grip; 3/4"	Thomas and bettes	2931nm			for hubble switch
1	3/4" sealing gasket	appleton	stg-75			for hubble switch
3	RJ45 plug	Molex	44915-0001	Newark	01J8343	

NOTES:

1A: 7310K14, PG16 (0.89" OD) CHORD GRIP 1X WIRE 5. HEWH WIRING REF. C8
1B,1C,1D: ONLY ON RLT UNITS, 7310K14, PG16 (0.89" OD) CHORD GRIP 1X WIRE 5. HEWH WIRING REF. C8
2A: 7310K12, PG9 (0.6 OD) CHORD GRIP 1X WIRE 3. HEWH WIRING REF. C16
2B: 7310K12, PG9 (0.6 OD) CHORD GRIP 1X WIRE 1. HEWH WIRING REF. C17.
3A: 7807K43, CHORD GRIP 1/2"NPT 0.84 OD, 6X WIRE 1. HEWH WIRING REF. C1-C6.
3B: 7310K12, CHORD GRIP 1X WIRE 1. HEWH WIRING REF. C7.
4: 5595K5, 1" MOUNTING HOLE. HEWH WIRING REF. C21.
5A: 7807K14, 3/14 NPT (1.05" OD) CHORD GRIP 4X WIRE 1. HEWH WIRING REF. C9-C12.
5B: 7310K12, PG9 (0.6 OD) CHORD GRIP 1X WIRE 5. HEWH WIRING REF. C13.
6: 7310K14, PG16 (0.89" OD) CHORD GRIP 1X WIRE 4. HEWH WIRING REF. C14, C15
7: 7310K14, PG16 (0.89" OD) CHORD GRIP 1X WIRE 2. HEWH WIRING REF. C20
H: LED INDICATION OF MANUAL OVERRIDE
I: 120 VAC 6" VENTILATION FAN
J: AIR VENTILATION INLET
K: MANUAL OVERRIDE SWITCHES



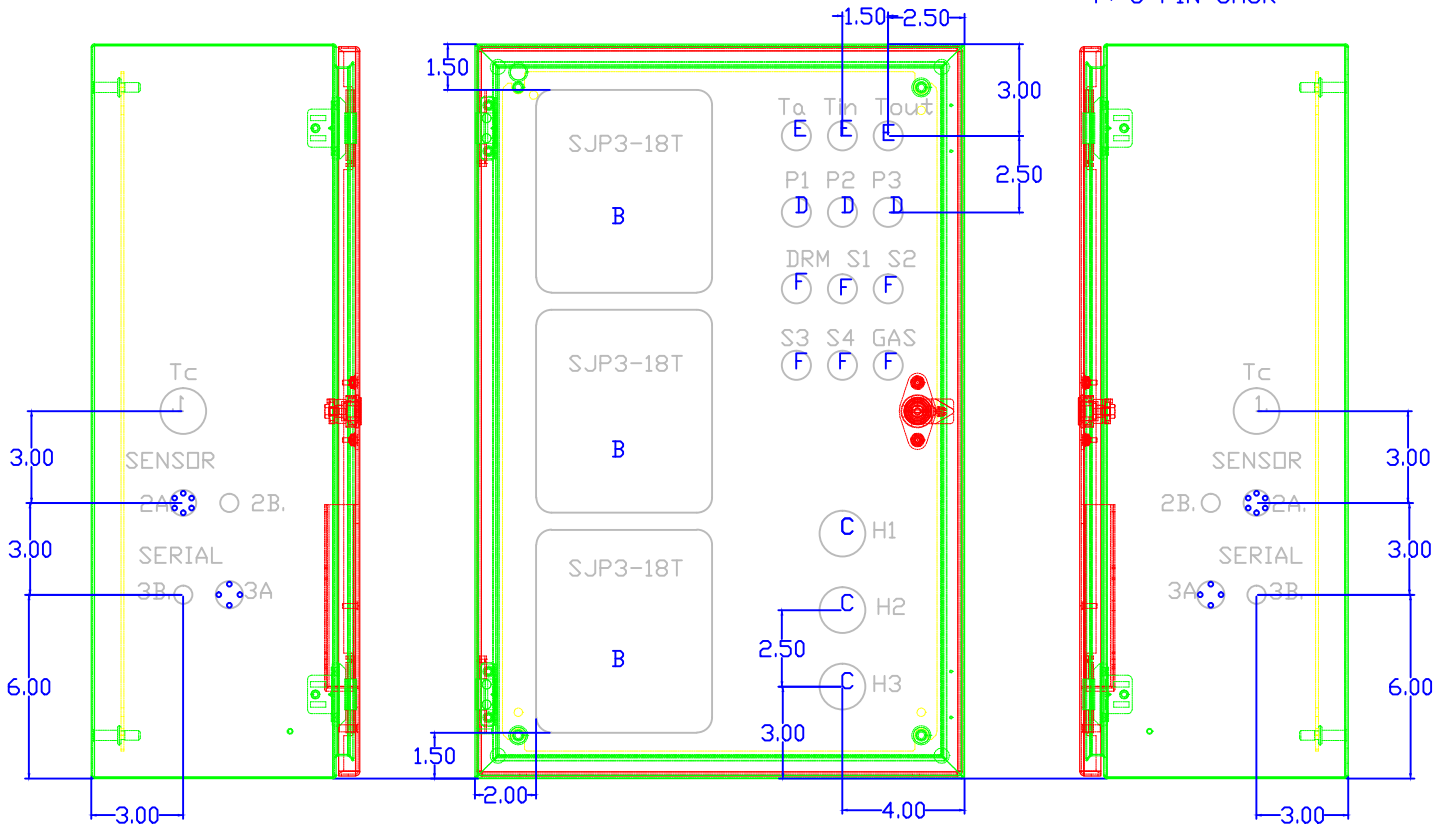
UNCONTROLLED IF PRINTED

ARTICLE OR MATERIAL MUST CONFORM TO ROHS PROCEDURE SI 900000 SECT 13 AND REACH PROCEDURE SI 900000 SECT 14	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE IN MM. TOLERANCES ON: 2 PL DECIMALS ± tolerance_2pl 3 PL DECIMALS ± tolerance_3pl ANGLES ± tolerance_angle ° FRACTIONS ± tolerance_fraction	APPROVED BY:		DATE		GENERAL  ELECTRIC DEPT LOC LOUISVILLE, KY.			
		DRAWN Jyc		10/28/2010		TITLE HEWH DAQ BOX			
		CHECKED							
ENGRG.									
DO NOT SCALE THIS DRAWING	PART MUST CONFORM TO SI 900000 SECT.4 GEA TOXICITY PROCEDURE	ISSUED				SIZE B			
THIRD ANGLE PROJECTION						DWG. NO. & FILENAME		B	
						HEWH-CP-Holes1			
						STATUS		SHEET: 1 OF 1	

DWG NO		B	SHT 1
REVISION			
REV		-	
	DATE: 8/13/2010	0	

NOTES: CHORD GRIP pn'S FROM McMASTER CARR:
1: 1" OD, pn.55595K5 Chord Grip - FOR TcS.
2A: pn.7807K43, CHORD GRIP 1/2"NPT (0.84" OD), 6X WIRE 1. HEWH WIRING REF. C1-C6.
2B: pn.7310K12, PG9 (0.6" OD) CHORD GRIP 1X WIRE 1. HEWH WIRING REF. C7.
3A: pn.7807K14, 3/4 NPT (1.05" OD) CHORD GRIP 4X WIRE 1. HEWH WIRING REF. C9-C12.
3B: pn.7310K12, PG9 (0.6" OD) CHORD GRIP 1X WIRE 5. HEWH WIRING REF. C13.
B: TEMPERATURE JACK PANNELS
C: HEATER PICKUPS (TURNLOCK, 240VAC)
D: 4 PIN JACK
E: 5 PIN JACK
F: 6 PIN JACK

HOLES TO BE PUNCHED
IN EITHER THE RIGHT SIDE
OR THE LEFT SIDE, NOT
BOTH.



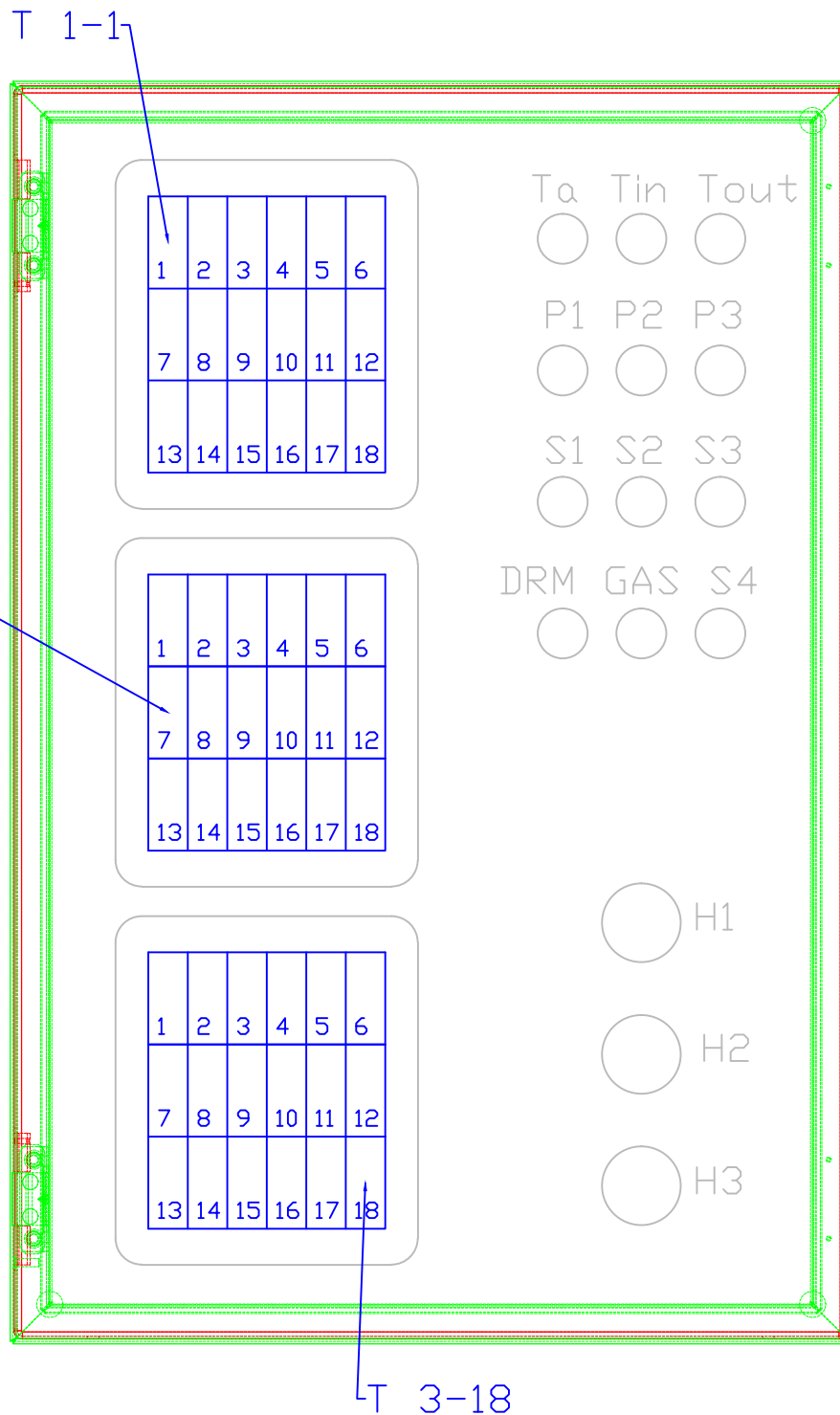
LEFT SIDE HOLE DRAWING

RIGHT SIDE HOLE DRAWING

UNCONTROLLED IF PRINTED

ARTICLE OR MATERIAL MUST CONFORM TO ROHS PROCEDURE SI 900000 SECT 13 AND REACH PROCEDURE SI 900000 SECT 14	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE IN MM. TOLERANCES ON: 2 PL DECIMALS ± tolerance_2pl 3 PL DECIMALS ± tolerance_3pl ANGLES ± tolerance_angle ° FRACTIONS ± tolerance_fraction	APPROVED BY:		DATE	GENERAL  ELECTRIC DEPT LOC LOUISVILLE, KY.		
		DRAWN Jyc		10/28/2010			
DO NOT SCALE THIS DRAWING	PART MUST CONFORM TO SI 900000 SECT.4 GEA TOXICITY PROCEDURE	CHECKED			TITLE HEWH PATCH PANNEL		
		ENGRG.					
THIRD ANGLE PROJECTION		ISSUED			SIZE B		
							
		DWG. NO. & FILENAME HEWH-PP-Holes1			B		
		DRW VER	GEOM VER	---	STATUS	SHEET: 1 OF 1	

Channel	Description	Signal	Notes	Power Requirement
001	Flow Control Intellifacet	4-20 MA	RED,BLACK TWISTED PAIR	24 VDC
011	Pressure - High Side 1	1-5V	CABLE C1	8-30VDC
012	Pressure - High Side 2	1-5V	CABLE C2	8-30VDC
013	Pressure - Low Side	1-5V	CABLE C3	8-30VDC
014	Pressure - Pinput	1-5V	NC	12-24 vdc
015	Voltage - 20A Top Heater	DI 240 VAC Relay	CABLE C7:WHITE, PORT H1	
016	Voltage - 20A Bot Heater	DI 240 VAC Relay	CABLE C7:GREEN, PORT H2	
017	Temp Shell 1	Thermocouple - T	PP 1-7	
018	Flow	Across Resistor 1-5V	CABLE C17: GREEN/WHITE TWISTED PAIR	
019	Watt Sense	0-5V		
020	Watt Tick	Contact		
021	Temp Tank Tree 1	Thermocouple - T	PP 1-1	
022	Temp Tank Tree 2	Thermocouple - T	PP 1-2	
023	Temp Tank Tree 3	Thermocouple - T	PP 1-3	
024	Temp Tank Tree 4	Thermocouple - T	PP 1-4	
025	Temp Tank Tree 5	Thermocouple - T	PP 1-5	
026	Temp Tank Tree 6	Thermocouple - T	PP 1-6	
027	Temp Downspout	Thermocouple - T	Downspout	
028	Temp Shell 2	Thermocouple - T	PP 1-8	
029	Temp Shell 3	Thermocouple - T	PP 1-9	
030	Temp Shell 4	Thermocouple - T	PP 1-10	
031	Temp RTD Tin	4 wire RTD	CABLE C4	
032	Temp RTD Tout	4 wire RTD	CABLE C5	
033	Temp RTD Tamb	4 wire RTD	CABLE C6	
034	Voltage Reading	2 Wire 0-10 VDC	From Voltage Transducer in Control Panel	
041	Temp/Flow DO to intellifaucet	Contact	BLUE(twisted w/ black, black unused). On Connector Short pin G to E	SPST
042	Ready DO to intellifaucet	Contact	BLK (twisted w/grn, grn to dig gnd). On Connector Short pin F to E.	SPST
043	Start to intellifaucet	Contact	WHITE(twisted with blk, used on STOP). On Connector Short pin C to E	SPST
044	Stop to Intellifaucet	Contact	BLK (twisted with white, used on START). Short pin D to E	SPST
045	DRM 1 (input Low Bit)	Contact	RJ45, PIN 4. COM(standard color = BLUE) = PIN8 (standard color = BRN)	SPST
046	DRM 0 (input High Bit)	Contact	RJ45, PIN 5. COM(standard color = BLUE/WH) =PIN8(std.color = BRN)	SPST
047	Water Heater Power	240 VAC Contactor	To contactor	
048	Solenoid Purge Tank 1	120 VAC Relay		
049	Solenoid Output Tank 1	120 VAC Relay		
050	Solenoid Input Tank 1	120 VAC Relay		
051	Solenoid Purge Tank 2	120 VAC Relay	Only on RLT	
052	Solenoid Output Tank 2	120 VAC Relay	Only on RLT	
053	Solenoid Input Tank 2	120 VAC Relay	Only on RLT	
054	Solenoid Purge Tank 3	120 VAC Relay	Only on RLT	
055	Solenoid Output Tank 3	120 VAC Relay	Only on RLT	
056	Solenoid Input Tank 3	120 VAC Relay	Only on RLT	
057	Solenoid Purge Tank 4	120 VAC Relay	Only on RLT	
058	Solenoid Output Tank 4	120 VAC Relay	Only on RLT	
059	Solenoid Input Tank 4	120 VAC Relay	Only on RLT	
Building 2 TC Wiring				
Agilent 101	TC Evap1 - IN	Thermocouple - T	NC	NC
Agilent 102	TC Evap2	Thermocouple - T	NC	NC
Agilent 103	TC Evap3	Thermocouple - T	NC	NC
Agilent 104	TC Evap4	Thermocouple - T	NC	NC
Agilent 105	TC Evap5 - OUT	Thermocouple - T	PP 3-17	TC Xtra 8
Agilent 106	TC Xtra 1	Thermocouple - T	PP 3-18	TC Xtra 9
Agilent 107	TC Xtra 2	Thermocouple - T	PP 2-17	TC Shadow T5
Agilent 108	TC Xtra 3	Thermocouple - T	PP 2-18	TC Shadow T6
Agilent 109	TC Xtra 4	Thermocouple - T	PP 1-17	TC Xtra 2
Agilent 110	TC Dry/wet bulb 1	Thermocouple - T	PP 1-18	TC Xtra 3
Agilent 111	TC Dry/wet bulb 2	Thermocouple - T	PP-1-11	TC Evap1 - IN
Agilent 112	TC Dry/wet bulb 3	Thermocouple - T	PP-1-12	TC Evap2
Agilent 113	TC Dry/wet bulb 4	Thermocouple - T	PP-1-13	TC Evap3
Agilent 114	TC Tsuct	Thermocouple - T	PP-1-14	TC Evap4
Agilent 115	TC Tdis	Thermocouple - T	PP-1-15	TC Evap5 - OUT
Agilent 116	TC Tret	Thermocouple - T	PP-1-16	TC Xtra 1
Agilent 201	TC Controls 1	Thermocouple - T	PP-2-1	TC Dry/wet bulb 1
Agilent 202	TC Controls 2	Thermocouple - T	PP-2-2	TC Dry/wet bulb 2
Agilent 203	TC Controls 3	Thermocouple - T	PP-2-3	TC Dry/wet bulb 3
Agilent 204	TC Controls 4	Thermocouple - T	PP-2-4	TC Dry/wet bulb 4
Agilent 205	TC Controls 5	Thermocouple - T	PP-2-5	TC Tsuct
Agilent 206	TC Shadow T1	Thermocouple - T	PP-2-6	TC Tdis
Agilent 207	TC Shadow T2	Thermocouple - T	PP-2-7	TC Tret
Agilent 208	TC Shadow T3	Thermocouple - T	PP-2-8	TC Controls 1
Agilent 209	TC Shadow T4	Thermocouple - T	PP-2-9	TC Controls 2
Agilent 210	TC Shadow T5	Thermocouple - T	PP-2-10	TC Controls 3
Agilent 211	TC Shadow T6	Thermocouple - T	PP-2-11	TC Controls 4
Agilent 212	Temp Xtra 5	Thermocouple - T	PP-2-12	TC Controls 5
Agilent 213	Temp Xtra 6	Thermocouple - T	PP-2-13	TC Shadow T1
Agilent 214	Temp Xtra 7	Thermocouple - T	PP-2-14	TC Shadow T2
Agilent 215	Temp Xtra 8	Thermocouple - T	PP-2-15	TC Shadow T3
Agilent 216	Temp Xtra 9	Thermocouple - T	PP-2-16	TC Shadow T4
Agilent 301	TC Cond1 - IN	Thermocouple - T	PP-3-1	TC Cond1 - IN
Agilent 302	TC Cond2	Thermocouple - T	PP-3-2	TC Cond2
Agilent 303	TC Cond3	Thermocouple - T	PP-3-3	TC Cond3
Agilent 304	TC Cond4	Thermocouple - T	PP-3-4	TC Cond4
Agilent 305	TC Cond5	Thermocouple - T	PP-3-5	TC Cond5
Agilent 306	TC Cond6	Thermocouple - T	PP-3-6	TC Cond6
Agilent 307	TC Cond7	Thermocouple - T	PP-3-7	TC Cond7
Agilent 308	TC Cond8	Thermocouple - T	PP-3-8	TC Cond8
Agilent 309	TC Cond9	Thermocouple - T	PP-3-9	TC Cond9
Agilent 310	TC Cond10	Thermocouple - T	PP-3-10	TC Cond10
Agilent 311	TC Cond11	Thermocouple - T	PP-3-11	TC Cond11
Agilent 312	TC Cond12 - OUT	Thermocouple - T	PP-3-12	TC Cond12 - OUT
Agilent 313	NC	Thermocouple - T	PP-3-13	TC Xtra 4



Patch Panel Channel Description

T 1-1	T 1-2	T 1-3	T 1-4	T 1-5	T 1-6
MW100 Chan:021	MW100 Chan:022	MW100 Chan:023	MW100 Chan:024	MW100 Chan:025	MW100 Chan:026
Temp Tank Tree 1	Temp Tank Tree 2	Temp Tank Tree 3	Temp Tank Tree 4	Temp Tank Tree 5	Temp Tank Tree 6
Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T

T 1-7	T 1-8	T 1-9	T 1-10	T 1-11	T 1-12
MW100 Chan:17	MW100 Chan:028	MW100 Chan:029	MW100 Chan:030	Agilent 101	Agilent 102
Temp Shell 1	Temp Shell 2	Temp Shell 3	Temp Shell 4	Temp Evap1	Temp Evap2
Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T

T 1-13	T 1-14	T 1-15	T 1-16	T 1-17	T 1-18
Agilent 103	Agilent 104	Agilent 105	Agilent 106	Agilent 107	Agilent 108
Temp Evap3	Temp Evap4	Temp Evap5	Temp Xtra 1	Temp Xtra 2	Temp Xtra 3
Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T

T 2-1	T 2-2	T 2-3	T 2-4	T 2-5	T 2-6
Agilent 110	Agilent 111	Agilent 112	Agilent 113	Agilent 114	Agilent 115
Temp Dry/wet bulb 1	Temp Dry/wet bulb 2	Temp Dry/wet bulb 3	Temp Dry/wet bulb 4	Temp Tsuction	Temp Tdis
Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T

T 2-7	T 2-8	T 2-9	T 2-10	T 2-11	T 2-12
Agilent 116	Agilent 201	Agilent 202	Agilent 203	Agilent 204	Agilent 205
Temp Tret	Temp Controls Trise 1	Temp Controls Trise 2	Temp Controls Trise 3	Temp Controls Trise 4	Temp Controls Trise 5
Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T

T 2-13	T 2-14	T 2-15	T 2-16	T 2-17	T 2-18
Agilent 206	Agilent 207	Agilent 208	Agilent 209	Agilent 210	Agilent 211
Temp Shadow T1	Temp Shadow T2	Temp Shadow T3	Temp Shadow T4	Temp Shadow T5	Temp Shadow T6
Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T

T 3-1	T 3-2	T 3-3	T 3-4	T 3-5	T 3-6
Agilent 301	Agilent 302	Agilent 303	Agilent 304	Agilent 305	Agilent 306
Temp Condensor 1	Temp Condensor 2	Temp Condensor 3	Temp Condensor 4	Temp Condensor 5	Temp Condensor 6
Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T

T 3-7	T 3-8	T 3-9	T 3-10	T 3-11	T 3-12
Agilent 307	Agilent 308	Agilent 309	Agilent 310	Agilent 311	Agilent 312
Temp Condensor 7	Temp Condensor 8	Temp Condensor 9	Temp Condensor 10	Temp Condensor 11	Temp Condensor 12
Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T

T 3-13	T 3-14	T 3-15	T 3-16	T 3-17	T 3-18
Agilent 109	Agilent 212	Agilent 213	Agilent 214	Agilent 215	Agilent 216
Temp Xtra 4	Temp Xtra 5	Temp Xtra 6	Temp Xtra 7	Temp Xtra 8	Temp Xtra 9
Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T	Thermocouple - T

Ta
MW100 Chan:033
Temp RTD Tamb
4 wire RTD
Pin 1: I
Pin 2:+/A
Pin 3: -/B
Pin 4: C
Pin 5: Shield

P1
MW100 Chan:011
Pressure - High Side 1
Pin 1: +V 24 VDC
Pin 2: Sense 1-5 VDC
Pin 3: DC_GND
Pin 4: Shield

DRM
MW100 Chan:045
Pin 4 - DRM 1 (input Low Bit)
MW100 Chan:046
Pin 5- DRM 0 (input High Bit)
Contact Out Pin 8 Ref
Pins 1,2,3,6,7: NC

Serial 3
Pin 1: RXD
Pin 2: TXD
Pin 3: GND
Pin 4: Shield
Pin 5: No Con
Pin 6: No Con

Tin
MW100 Chan:031
Temp RTD Tin
4 wire RTD
Pin 1: I
Pin 2:+/A
Pin 3: -/B
Pin 4: C
Pin 5: Shield

P2
MW100 Chan:012
Pressure - High Side 2
Pin 1: +V 24 VDC
Pin 2: Sense 1-5 VDC
Pin 3: DC_GND
Pin 4: Shield

Serial 1
Pin 1: RXD
Pin 2: TXD
Pin 3: GND
Pin 4: Shield
Pin 5: No Con
Pin 6: No Con

GAS
Unused
Pin 1: +V
Pin 2: +Sense
Pin 3:-Sense
Pin 4: DC_GND
Pin 5: Shield
Pin 6: No Con

Tout
MW100 Chan:032
Temp RTD Tout
4 wire RTD
Pin 1: I
Pin 2:+/A
Pin 3: -/B
Pin 4: C
Pin 5: Shield

P3
MW100 Chan:013
Pressure - Low Side
Pin 1: +V 24 VDC
Pin 2: Sense 1-5 VDC
Pin 3: DC_GND
Pin 4: Shield

Serial 2
Pin 1: RXD
Pin 2: TXD
Pin 3: GND
Pin 4: Shield
Pin 5: No Con
Pin 6: No Con

Serial 4
Pin 1: RXD
Pin 2: TXD
Pin 3: GND
Pin 4: Shield
Pin 5: No Con
Pin 6: No Con

H1
MW100 Chan:015
Top Heater Voltage
DI 240 VAC Relay

H2
MW100 Chan:016
Bot Heater Voltage
DI 240 VAC Relay

H3
Unused