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INPUT TABLE	Entry OK?	VALID
Enter Line Voltage: (208,220,380,400,415,440,480)	380	Vac TRUE
Limit Lamps to Max Rating? (Y/N)	Y	TRUE
Line Frequency (50/60)	50	Hz TRUE
Number of Phases:	3	Φ TRUE
Lamp Length (6, 9, 15, 24, 36)	9	inches TRUE
Typical Operating %	50	% TRUE

SUMMARY OF RESULTS	
Max Power:	26.5 kW
Max Current:	40.3 A
Typical Power:	13.5 kW
Typical Current:	20.5 A

HARDWARE	
Lamps: 32	SCRs: 10
EMs: 5	TCs: 4
Nbr strings: 16	AOV-25: 5
Nbr Lamps in 10" zone: 6	AITM: 2


CONFIGURATION	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Zone 11	Zone 12	Totals
Length (6,6,7,5,10,14,3,15,20,30) in.	7.5	7.5	7.5	7.5									30 in.
Length Entry OK?	TRUE	TRUE	TRUE	TRUE									
(F)urn., (D)ryer, (1) SCR-Zn, (D)ryer	F	F	F	F									4
Zone Type OK?	TRUE	TRUE	TRUE	TRUE									
No. Lamps in Series/String (1-5)	2	2	2	2									
Lamps/String OK?	TRUE	TRUE	TRUE	TRUE									
No. Lamps in Top/Bottom Power	4/4	4/4	4/4	4/4									Plenum: 120

SCR PHASE	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Zone 11	Zone 12	Totals
Top Lamp Phase (1/2/3):	1	2	3	2									Lamp Balance (kW)
Bottom Lamp Phase (1/2/3):	1	2	3	2									Phase 1: 5.9
													Phase 2: 11.8
													Phase 3: 5.9

SCR POWER					Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	Zone 11	Zone 12	Totals	
Rated Lamp Voltage		216	216	216	216													
Max. Lamp Wired Voltage		190	190	190	190													
50% Power SCR Cal Span Setting		268	268	268	268													
Max. Lamp Wired Power (W)		739	739	739	739													
No. Strings per SCR		2	2	2	2													
Max. Current per String (A)		3.9	3.9	3.9	3.9													
No. Lamps in Zone		8	8	8	8													32
No. SCRs in Zone		2	2	2	2													8
No. Strings in Furnace Zones		4	4	4	4													16
																		4
																		Nbr. Furnace Element Monitors:
Top Lamp Power (kW)		3.0	3.0	3.0	3.0													
Bottom Lamp Power (kW)		3.0	3.0	3.0	3.0													
Total Power/Zone (kW)		5.9	5.9	5.9	5.9													23.6
Current Required Top SCR (A)		7.8	7.8	7.8	7.8													
Current Required Bottom SCR (A)		7.8	7.8	7.8	7.8													
Color Temp (K) (nominal: 2500K)		2384	2384	2384	2384													
Peak Wavelength (µm)		1.22	1.22	1.22	1.22													
Estimated Lamp Life (hrs)		Long	Long	Long	Long													
Lumen Output vs. Rated (%)		66	66	66	66													

Furnace Total	Number of Item?	Voltage (Vac)	Current (Amps)	Power (kW) Max	Power (kW) Typical	Phase Assigned	Other Items
Lamps	32	380	as above	23.6	11.8	as above	10" Cabinet or CACT Fans, 117 Vac, 0.30/029 A for 50/60 Hz 4" Box (Muffin) Fans, product cooling, 117 Vac, 0.16 A Cross-flow Fans, product cooling, 230 Vac, 1.27 A max Lower Cabinet Blowers (Impellers), 230 Vac, 0.72 A max H2 Igniters, 120 Vac, 5 A 24 Vdc PS, 120 Vac, 2 A No more than 8 SCRs/phase per TRx xfmr 24 Vac secondary TR1: 2 TR2: 4 TR3: 4 Max Curr/EH1 SCR: 3.1 A 124 ohms Max Curr/EH2 SCR: Max Curr/EH3 SCR: Cabinet/CACT/Control Box Fans: 1.2 A
PC, Monitor	1	117	1.3	0.2	0.2	1	
Belt, Opto22, EM	1	117	2.1	0.2	0.2	1	
UC (Pump & Gen)		117	10.0				
UC (Tank Heater)		117	8.4				
UCD (Blower)		117	2.0				
UCD (Heater)		380	12.7				
Edg Htr 1 Length	30	380	6.1	2.3	1.2	3	
Edg Htr 2 Length							
Edg Htr 3 Length							
Cabinet Vent Fan 10"	2	117	0.3	0.1	0.1	1	
CACT Fans 10"	2	117	0.3	0.1	0.1	1	
CACT Fans 4"		117	0.16				
Control Box Fans 4"		117	0.16				
Prod Cooling fans		117	0.16				
Furnace Totals:				26.5	13.5		

PHASE	PHASE BALANCING			TOTAL
	1	2	3	ALL
LAMP PWR, kW	5.9	11.8	5.9	23.6
EH/OTHER	0.5	0.0	1.2	1.7
TOTAL	6.4	11.8	7.1	25.3

 LCI Furnaces DIVISION OF LOCHABER CORNWALL INC	DATA SHEET		DOC NBR:	13-006	802-101521	R4
	IR FURNACE SYSTEM BASE FUSE LIST		MODEL:	LA-309XN	APVL	SLB 6/28/13
			SERIAL NBR:	1303091301	PRNT	07Sep13
Customer: ALL IMPEX 2001 LLC			DATE:	05/09/12	SHT	1 of 1

Safety Enclosure (TR0, basic control)

Fuse Label	Size (A)	Comments
FA	5	24 Vac control, AGC
FB	4	Switched/Unswitched 117 Vac, AGC
F1	3	To TR0, L1 leg, KTK
F2	3	To TR0, L2 leg, KTK
F3	20	To K3 Contactor, KTK
F4	20	To K3 Contactor, KTK
F5	20	To K3 Contactor, KTK

Power Distribution Panel (TR1-TR3 power supplies to TB2 & TB3)

Fuse Label	Size (A)	Comments
FC	4	Phase 1, 117 Vac switched, AGC
FD	4	Phase 2, 117 Vac switched, AGC
FE	4	Phase 3, 117 Vac switched, AGC
FF	1	Phase 1, 24 Vac switched, AGC
FG	1	Phase 2, 24 Vac switched, AGC
FH	1	Phase 3, 24 Vac switched, AGC
F6	3	TR1, L1 leg, KTK
F7	3	TR1, L2 leg, KTK
F8	3	TR2, L2 leg, KTK
F9	3	TR2, L3 leg, KTK
F10	3	TR3, L3 leg, KTK
F11	3	TR3, L1 leg, KTK

Belt Motor Controller

Fuse Label	Size (A)	Comments
MB & MC	0.062	Isolation board, special size
Line Fuse	15	On control board, ABC
Motor Fuse	1.5 or 2	On control board, varies w/ motor HP, ABC

Heating Lamp/Edge Heat SCR Fuses (all KTK)

Fuse Label	Size (A)	Comments	Fuse Label	Size (A)	Comments
F30	10.0	Zone 1 Top			
F31	10.0				
F32	10.0	Zone 1 Btm			
F33	10.0				
F34	10.0	Zone 2 Top			
F35	10.0				
F36	10.0	Zone 2 Btm			
F37	10.0				
F38	10.0	Zone 3 Top			
F39	10.0				
F40	10.0	Zone 3 Btm			
F41	10.0				
F42	10.0	Zone 4 Top			
F43	10.0				
F44	10.0	Zone 4 Btm			
F45	10.0				
F46	6.0	EH1L			
F47	6.0				
F48	6.0	EH1R			
F49	6.0				



DATA SHEET


DOC NBR: 13-006 802-101522 R4

**IR FURNACE SYSTEM
TB1 OVERVIEW**


MODEL:	LA-309XN	APVL	SLB	4/10/13
SERIAL NBR:	1303091301	PRNT	07Sep13	
DATE:	05/09/12	SHT	1	of 1

Customer: ALL IMPEX 2001 LLC

From	Wire	TB1 Conn	Wire	To	Expected resistance (ohms)		
					Total	Each String	1 out
Zone 1 Top Load	101	1	101	-> out to Top lamps E2R	4.5		9.0
E1R->	102	2	102	F31		9	
E4R->	103	3	103	F31		9	
Zone 1 Btm Load	126	4	126	-> out to Btm lamps E2R	4.5		9.0
E1R->	127	5	127	F33		9	
E4R->	128	6	128	F33		9	
Zone 2 Top Load	151	7	151	-> out to Top lamps E2R	4.5		9.0
E1R->	152	8	152	F35		9	
E4R->	153	9	153	F35		9	
Zone 2 Btm Load	176	10	176	-> out to Btm lamps E2R	4.5		9.0
E1R->	177	11	177	F37		9	
E4R->	178	12	178	F37		9	
Zone 3 Top Load	201	13	201	-> out to Top lamps E2R	4.5		9.0
E1R->	202	14	202	F39		9	
E4R->	203	15	203	F39		9	
Zone 3 Btm Load	226	16	226	-> out to Btm lamps E2R	4.5		9.0
E1R->	227	17	227	F41		9	
E4R->	228	18	228	F41		9	
Zone 4 Top Load	251	19	251	-> out to Top lamps E2R	4.5		9.0
E1R->	252	20	252	F43		9	
E4R->	253	21	253	F43		9	
Zone 4 Btm Load	276	22	276	-> out to Btm lamps E2R	4.5		9.0
E1R->	277	23	277	F45		9	
E4R->	278	24	278	F45		9	
EH1L Load	301	25	301	-> to EH1L	124.0		
EH1L->	302	26	302	F47		124	
EH1R Load	326	27	326	-> to EH1R	124.0		
EH1R->	327	28	327	F49		124	

 LCI Furnaces DIVISION OF LOCHABER CORNWALL INC Customer: ALL IMPEX 2001 LLC	DATA SHEET		DOC NBR: 13-006 802-101523 R1	
	IR FURNACE SYSTEM TB2 OVERVIEW		MODEL: LA-309	APVL: SLB 3/15/10
			SERIAL NBR: 1303091301	PRNT: 03Oct13
		DATE: 05/09/12	SHT 1	of 1

Leg	TB2 Conn	Wire	Fuse	Leg	TB2 Conn	Wire	Fuse	Leg	TB2 Conn	Wire	Fuse
L1	TB2-01A	100	F30								
L1	TB2-01B	125	F32								
L1	TB2-01C	204	F39								
L1	TB2-01D	229	F41								
L1	TB2-02A	303	F47								
L1	TB2-02B	328	F49								
	TB2-02C										
	TB2-02D										
L2	TB2-03A	104	F31								
L2	TB2-03B	129	F33								
L2	TB2-03C	150	F34								
L2	TB2-03D	175	F36								
L2	TB2-04A	250	F42								
L2	TB2-04B	275	F44								
	TB2-04C										
	TB2-04D										
L3	TB2-05A	154	F35								
L3	TB2-05B	179	F37								
L3	TB2-05C	200	F38								
L3	TB2-05D	225	F40								
L3	TB2-06A	254	F43								
L3	TB2-06B	279	F45								
L3	TB2-06C	300	F46								
L3	TB2-06D	325	F48								

 LCI Furnaces DIVISION OF LOCHABER CORNWALL INC	DATA SHEET	DOC NBR: 13-006 802-101524 R2	
	IR FURNACE SYSTEM TB3 OVERVIEW	MODEL: LA-309XN	APVL SLB 4/11/13
Customer: ALL IMPEX 2001 LLC		SERIAL NBR: 1303091301	PRNT 07Sep13
		DATE: 05/09/12	SHT 1 of 1

Phase	Signal		SCR	Neutral		SCR
	TB3 Conn	Color	PWR 24V	TB3 Conn	Color	PWR 0V
1	TB3-L1	RED/BLK	Z1 Top Z1 Btm	TB3-N1	BLU	Z1 Top Z1 Btm
2	TB3-L2	RED/WHT	Z2 Top Z2 Btm Z4 Top Z4 Btm	TB3-N2	BLU/WHT	Z2 Top Z2 Btm Z4 Top Z4 Btm
3	TB3-L3	RED/GRY	Z3 Top Z3 Btm EH1L EH1R	TB3-N3	BLU/GRY	Z3 Top Z3 Btm EH1L EH1R

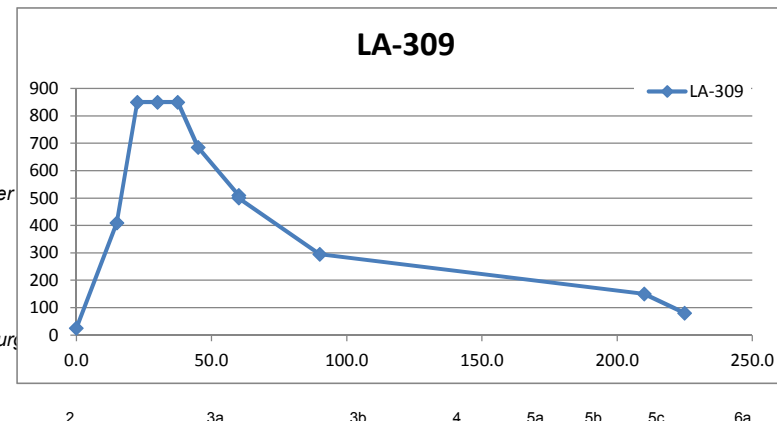
DATA SHEET

**IR FURNACE SYSTEM
GAS FLOW**

DOC NBR: 13-006	802-101560-01	R0	SHT 1 of 1
MODEL: LA-309	DWN: JCLARK	08/07/13	
SERIAL NBR: 1303091301	APVL: SLB	08/07/13	
PRINT: 26Sep13	PM: JCLARK	09/26/13	

IR FURNACE FLOWMETER SCALE CORRECTION, PURGE AIR AND EXHAUST

Gage 70 F 0.0 psig	STANDARD CONDITIONS Standard Temperature, F Standard Pressure, psig	Absolute Ts 530 R Ps 14.7 psia	Dwyer flowmeter std Dwyer flowmeter std
100 F 70 psig	COMPRESSED GAS SUPPLY Actual Temperature, F Pressure after Furnace Regulator, psig	T1 560 R P1 84.7 psia	max normal temperature at flowmeter furnace pressure regulator setting
2.0 rep/min	REPLENISH RATE Number of Replenishes/minute Time it takes to evacuate Furnace	RepRate 120 rep/H 30.00 sec	furnace replenishes per hour time to refresh gas in furnace
2 in Standard 15 Standard	Product Height Eductor multiplier	Excess flow 148.0 scfh 69.8 sL/m grad	=> Positive pressure in furnace to purg



Standard Flowmeters	Available Flowmeters
cfh	L/m
5	20
100	50
200	90
400	190
600	280
1000	NA
1200	NA
1800	NA

INTERNAL VOLUME OF THE FURNACE AND FURNACE GAS INFLOWS

Include?	Select Gas	Enter 1or2	Label	Location	Furnace Size			Process Gas Cond			Pref RepRate	Initial Std Flow Avg RepRate=2.5		Convert Sizing Flow to			Select Flowmeters			Initial Flowmeter Settings		Max Std Flow				
					Length inch	Width inch	Height inch	Proc Gas	Temp °C	Press in H2O		Typ flow @70F scfh	Adj Units for Flowmetr to sL/m	Sizing Flow 1.5-2x scfh	Flowmeter Discharge Temp deg F	Press in H2O	Press psig	Calc FMtr Sizing Flow scfh grad	GROUP Flowmeters sL/m grad	Get Lookup Flowmeter sL/m grad	Manually select meter sL/m grad	Installed Flowmeters	scfh grad	sL/m grad	Max Flow scfh	Max Flow sL/m
Y	N2		CEX15 Load Table Extension	Entrance unload ext	15.0	10.5																				
Y	none		LOAD Load Station	Entrance load area	15.0	10.5			21																	
Y			EEBE ENTRANCE STACK	On entrance baffle				none	25																	
Y	Gas 1		BESE ENTRANCE BAFFLE	Entrance barrier	15.0	10.5	6	N2	410	1	2.0	28.3	13.4	42.5	100	15	0.54	42.2	19.9	20.0	95	ENTRANCE BAFFLE	28.1	13.3	202.9	95.7
Y	Gas 1		Z1 ZONE 1	Heating chamber 1	7.5	10.5	9	N2	850	1	4.0	25.9	12.2	38.8	100	8	0.29	38.8	18.3	20.0	95	ZONE 1	25.9	12.2	201.2	94.9
Y	Gas 1		Z2 ZONE 2	Heating chamber 1	7.5	10.5	9	N2	850	1	4.0	25.9	12.2	38.8	100	8	0.29	38.8	58.1	90.0	95	ZONES 2 - 4	82.1	38.7	201.2	94.9
Y	Gas 1		Z2-4 ZONE 2-4	Heating chamber 1	7.5	10.5	9	N2	850	1	4.0	25.9	12.2	38.8	100	8	0.29	38.8	58.1	90.0	95	ZONES 2 - 4	82.1	38.7	201.2	94.9
Y	Gas 1		Z4 ZONE 4	Heating chamber 1	7.5	10.5	9	N2	685	1	4.0	30.3	14.3	45.5	100	8	0.29	45.5								
Y	Gas 1		TTSE TRANSITION TUNNEL	Transition tunnel Ed	15.0	10.5	6	N2	510	1	2.0	24.7	11.7	37.1	100	15	0.54	36.8	17.4	20.0	95	TRANSITION TUNNEL	24.5	11.6	202.9	95.7
Y			EET Trans Tunnel Stack	Transition tunnel				none	500								65.0									
Y	Gas 1		CACT COOLING TUNNEL	Cooling section	30.0	10.5	6	N2	295	1	2.0	68.2	32.2	102.3	100	250	9.03	81.3	38.4	50.0	95	COOLING TUNNEL	54.2	25.6	253.1	119.5
Y	Gas 1		HC LAMP PLENUMS	Heat chamber sides	120.0	1.0	2	N2	150	1385	2.0	51.1	24.1	76.6	100	12.5	0.45	76.2	36.0	50.0	95	LAMP SEALS	50.8	24.0	202.3	95.5
Y			Unload Station	Exit station	15.0	10.5			80																	
Y			CXX15 Unload Table Extension	Exit unload extension	15.0	10.5																				
Y			Frame Adjustment	Internal	1.0																					
Total Furnace Length with optional items					151.0 in	3.84	3.8 ft3	0.1 m3				280.2 scfh	132.2 sL/m	420.4 scfh					250.0	570			266	125	1263	596
Optional Items					.0 in	0	. ft3	- m3																		
Total Furnace Length without optional items					151.0 in	3.84	3.8 ft3	0.1 m3																		
					LENGTH		VOLUME																			


Size Exhaust Flowmeters to balance for 1-Max Flow or 2-Preferred Flow

Eductors sized to balance Preferred Inflow	Average Zone Temp	800	Reqd Max Std Flow	Initial Std Flow		Sizing Flow	Convert Sizing Flow to			Select Flowmeters			Initial Flowmeter Settings		Max Std Flow							
				scfh	sL/m grad		Temp deg F	Press in H2O	Press psig	Calc FMtr Sizing Flow scfh grad	GROUP Flowmeters sL/m grad	Get Lookup Flowmeter sL/m grad	Manually select meter sL/m grad	scfh grad	sL/m grad	scfh	sL/m					
Y	Gas 1	EEBE ENTRANCE STACK	Entrance stack	N2	100	6	42.1	6.2	2.9	6.2	100	30	1.1	6.0	2.8	10.0	10.0	ENTRANCE STACK	6.0	2.9	21.7	10.3
Y	Gas 1	EETT TRANSITION TUNNEL STA	Transition tunnel	N2	100	6	42.1	2.6	1.2	2.6	100	30	1.1	2.6	1.2	10.0	10.0	TRANSITION TUNNEL	2.6	1.2	21.7	10.3
Total Eductor Inflows							84.2 scfh	8.8 scfh	4.2 sL/m	8.8 scfh				20.0	20				8.6	4.2	43.5	20.5

GAS INFLOW		Temp °C	Press psi	Flow RepRate=2 scfh	Initial Flow RepRate=2.5 scfh	sL/m		
Gas 1	N2	35	70	241	289.0	136.4		
Gas 0	none	35	70	0	0.0	0.0		
				241	289.0	136.4		
GAS EXHAUST		in H2O		Temp °C	Press psi	Flow RepRate=2 scfh	Initial Flow RepRate=2.5 scfh	sL/m
Gas 1	via eductor powered by: N2	200	6	241	141.0	66.6		
Gas 0	via eductor powered by: none	100	6	0	0.0	0.0		
		200	6	241	141.0	66.6		
NET GAS FLOW IN (OUT)		Temp °C	Press psi	Flow RepRate=2 scfh	Initial Flow RepRate=2.5 scfh	sL/m		
Gas 1	N2	200	6	0	148	70		
Gas 0	none	200	6	0	0	0		
				148.0	69.8			
N2 Supply		Temp °C	Press psi	Typical scfh	Typical sL/m			
1.0	Compressor Safety Factor	21	70	289	136			
N/A		Temp °C	Press psi	Typical scfh	Typical sL/m			
1.0	Compressor Safety Factor	21	70	0	0			

Total Nbr Flowmeters 8

Max Flow scfh	Max Flow sL/m
1,307	617
0	0
1,307	617
695	328
0	0
695	328
612	289
0	0
612	289
Max Compressor scfh	Max Compressor sL/m
1,307	617
Max Compressor scfh	Max Compressor sL/m
0	0

 LCI Furnaces DIVISION OF LOCHABER CORNWALL INC	CHANNEL ASSIGNMENTS	DOC NBR: 13-006	802-101570	R1				
		MODEL: LA-309	DWN JCLARK	7/10/13				
CUSTOMER ALL IMPEX 2001 LLC		S/N: 1303091301	APVL JMC	7/10/13				
		SIZE: A	PRNT 09/26/13	SHT 1 OF 1				
Electrical		Power: 380 Vac	Orig FO					
		Phase: 3						
		Freq: 50 Hz						
Controller Module POWER SUPPLY 5Vdc 5A TDK PS-5V 25W TDK Capacitor, Tantalum 10uF 10 V USED ON TCAP OPTO22 Controller Snap LCM4 LCM4 OPTO22 SNAP M4SENET-100 Ethern SNAP-M4SENET-100 POWER SUPPLY 5Vdc 5A TDK PS-5V 25W TDK Power Supply, 24Vdc 1.3A, 30W PS-24V TDK				Part Number 322-094408-03 310-100637-03 322-092246-03 322-092246-04 322-094408-03 322-094508-03				
DIGITAL01 Address: 0 OPTO22 SNAP-B16M RACK SNAP-B16M 16 Module Rack Rack Controller B3000-B				322-094409-16 322-094410-02				
Channel	Signal	Module	Type	RANGE	Location	Description	Ref	Part Number
00	MAIN_POWER_LATCH	SNAP-OAC5MA	DO	4 ch DO 12-140 Vac sw	K4	Delay Power OFF	802-101770	322-094401-01
01	LAMP_POWER_CTRL		DO		K7	Process Power On	802-101770	
02	ALARM_HORN		DO		K14	Alarm Horn	802-101772	
03	Spare ch					Spare channel		
04	SPEED_FEEDBACK	SNAP-IDC5-FAST	DI	4ch DI 2-16Vdc .025ms	K11	Transport Motor Tach Feedba	802-101771	322-094406-01
05	TRANSPORT_MOTION_FAULT		DI		K8	Transport Motion Sensor	802-101771	
06	PRES_SW_N2_MANIFOLD		DI		K52	N2 Pressure Sensor SW1	802-101776	
07	Spare ch					Spare channel		
08	not used		nt usd		nt usd	no IO	not used	
09	not used		nt usd		nt usd	no IO	not used	
10	not used		nt usd		nt usd	no IO	not used	
11	not used		nt usd		nt usd	no IO	not used	
12	not used		nt usd		nt usd	no IO	not used	
13	not used		nt usd		nt usd	no IO	not used	
14	not used		nt usd		nt usd	no IO	not used	
15	not used		nt usd		nt usd	no IO	not used	
6 Data Points		2 Modules						
DIGITAL02 Address: 1								
Channel	Signal		Type	RANGE	Location	Description	Ref	Part Number
00	EM01	SNAP-IDC5	DI	4 ch DI 10-32 Vdc/12-32 Vac		Element Monitor 01	EM Sch	322-094407-02
01	EM02		DI			Element Monitor 02	EM Sch	
02	EM03		DI			Element Monitor 03	EM Sch	
03	EM04		DI			Element Monitor 04	EM Sch	
04	EM05	SNAP-IDC5	DI	4 ch DI 10-32 Vdc/12-32 Vac		Element Monitor 05	EM Sch	322-094407-02
05	EM06		DI			Element Monitor 06	EM Sch	
06	EM07		DI			Element Monitor 07	EM Sch	
07	EM08		DI			Element Monitor 08	EM Sch	
08	EM09	SNAP-IDC5	DI	4 ch DI 10-32 Vdc/12-32 Vac		Element Monitor 09	EM Sch	322-094407-02
09	EM10		DI			Element Monitor 10	EM Sch	
10	EM11		DI			Element Monitor 11	EM Sch	
11	EM12		DI			Element Monitor 12	EM Sch	
12	EM13	SNAP-IDC5	DI	4 ch DI 10-32 Vdc/12-32 Vac		Element Monitor 13	EM Sch	322-094407-02
13	EM14		DI			Element Monitor 14	EM Sch	
14	EM15		DI			Element Monitor 15	EM Sch	
15	EM16		DI			Element Monitor 16	EM Sch	
16 Data Points		4 Modules						
ANALOG01 Address: 3								
Channel	Signal		Type	RANGE	Location	Description	Ref	Part Number
00	TEMPERATURE_ZONE_1_K	SNAP-AITM	AI	2 ch AI Type K -150 to 1372 (KA103	Thermocouple Inputs TC1	802-101701	322-094405-01
01	TEMPERATURE_ZONE_2_K		AI		KA203	Thermocouple Inputs TC2	802-101701	
02	TEMPERATURE_ZONE_3_K	SNAP-AITM	AI	2 ch AI Type K -150 to 1372 (KA303	Thermocouple Inputs TC3	802-101701	322-094405-01
03	TEMPERATURE_ZONE_4_K		AI		KA403	Thermocouple Inputs TC4	802-101701	
04	ZONE_1_TOP	SNAP-AOV-25	AO	2 ch AO 0-10 Vdc	KA100	Top SCR Signal Control	Element Wiring Sch	322-094402-01
05	ZONE_1_BOTTOM		AO		KA101	Bot SCR Signal Control	Element Wiring Sch	
06	ZONE_2_TOP	SNAP-AOV-25	AO	2 ch AO 0-10 Vdc	KA200	Top SCR Signal Control	Element Wiring Sch	322-094402-01
07	ZONE_2_BOTTOM		AO		KA201	Bot SCR Signal Control	Element Wiring Sch	
08	ZONE_3_TOP	SNAP-AOV-25	AO	2 ch AO 0-10 Vdc	KA300	Top SCR Signal Control	Element Wiring Sch	322-094402-01
09	ZONE_3_BOTTOM		AO		KA301	Bot SCR Signal Control	Element Wiring Sch	
10	ZONE_4_TOP	SNAP-AOV-25	AO	2 ch AO 0-10 Vdc	KA400	Top SCR Signal Control	Element Wiring Sch	322-094402-01
11	ZONE_4_BOTTOM		AO		KA401	Bot SCR Signal Control	Element Wiring Sch	
12	LEFT_EDGE_HEAT1	SNAP-AOV-25	AO	2 ch AO 0-10 Vdc	KA112	Edge Heat 1 Right SCR Sign	Element Wiring Sch	322-094402-01
13	RIGHT_EDGE_HEAT1		AO		KA111	Edge Heat 1 Left SCR Signal	Element Wiring Sch	
14	BELT_SPEED_OUTPUT	SNAP-AOV-25	AO	2 ch AO 0-10 Vdc	K2	Motor Speed Control Signal	802-101771	322-094402-01
15	Spare ch					Spare channel		
15 Data Points		8 Modules						
Total		37 Data Points		14 Modules				
4								
3								
2								
1	ADDED LEFT & RIGHT EDGE_HEAT1 MODULES.						9/27/2012	JCLARK
REV	DESCRIPTION						DATE	APPROVED

