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MAY 28 2009

Bureau of Air Monitoring  
& Mobile Sources

**ANIMAL CREMATORY  
AIR GENERAL PERMIT REGISTRATION FORM**

**Part II. Notification to Permitting Office**

(Detach and submit to appropriate permitting office; keep copy onsite)

**Instructions:** To give notice to the Department of an eligible facility's intent to use this air general permit, the owner or operator of the facility must detach and complete this part of the Air General Permit Registration Form and submit it to the appropriate Department of Environmental Protection or local air pollution control program office which has permitting authority. Please type or print clearly all information, and enclose the appropriate air general permit registration processing fee pursuant to Rule 62-4.050, F.A.C. (\$100 as of the effective date of this form)

**Registration Type**

0112048-005

Check one:

**INITIAL REGISTRATION** - Notification of intent to:

- Construct and operate a proposed new facility. **AGP**  
 Operate an existing facility not currently using an air general permit (e.g., a facility proposing to go from an air operation permit to an air general permit).

**RE-REGISTRATION** (for facilities currently using an air general permit) - Notification of intent to:

- Continue operating the facility after expiration of the current term of air general permit use.  
 Continue operating the facility after a change of ownership.  
 Make an equipment change requiring re-registration pursuant to Rule 62-210.310(2)(e), F.A.C., or any other change not considered an administrative correction under Rule 62-210.310(2)(d), F.A.C.

**Surrender of Existing Air Operation Permit(s) - For Initial Registrations Only**

If the facility currently holds one or more air operation permits, such permit(s) must be surrendered by the owner or operator upon the effective date of this air general permit. In such case, check the first box, and indicate the operation permits being surrendered. If no air operation permits are held by the facility, check the second box.

- All existing air operation permits for this facility are hereby surrendered upon the effective date of this air general permit; specifically permit number(s):  
All air permits are inactive.  
 No air operation permits currently exist for this facility.

**General Facility Information**

Facility Owner/Company Name (Name of corporation, agency, or individual owner who or which owns, leases, operates, controls, or supervises the facility.)

Broward County Animal Care and Regulation

Site Name (Name, if any, of the facility site; e.g., Plant A, Metropolis Plant, etc. If more than one facility is owned, a registration form must be completed for each.)

Pompano Beach facility

Facility Location (Provide the physical location of the facility, not necessarily the mailing address.)

Street Address: 3100 NW 19 Terr.

City: Pompano Beach

County: Broward

Zip Code: 33064

**Facility Start-Up Date (Estimated start-up date of proposed new facility.) (N/A for existing facilities)**  
6/30/2009

**Owner/Authorized Representative**

<b>Name and Position Title:</b> (Person who, by signing this form below, certifies that the facility is eligible to use this air general permit.) Print Name and Title: Cheryl Cayer, Interim Director		
<b>Owner/Authorized Representative Mailing Address</b> Organization/Firm: Broward County Animal Care and Regulation Street Address: 1870 SW 39 Street City: Fort Lauderdale                      County: Broward                      Zip Code: 33315		
<b>Owner/Authorized Representative Telephone Numbers</b> Telephone: 954-359-1317                      Fax: 954-359-1349 Cell phone (optional):		

**Facility Contact (If different from Owner/Authorized Representative)**

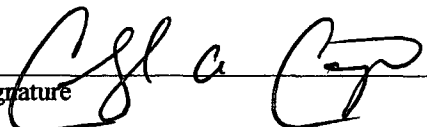
<b>Name and Position Title</b> (Plant manager or person to be contacted regarding day-to-day operations at the facility.) Print Name and Title: Calvin B. Frick		
<b>Facility Contact Mailing Address</b> Organization/Firm: Broward County Animal Care and Regulation, Pompano Facility Street Address: 3100 NW 19 Terr. Pompano Beach City:    County: Broward    Zip Code: 33064		
<b>Facility Contact Telephone Numbers</b> Telephone: 954-359-1348                      Fax: 954-359-8279 Cell phone (optional): 954-605-8322		

**Owner/Authorized Representative Statement**

This statement must be signed and dated by the person named above as owner or authorized representative

*I, the undersigned, am the owner or authorized representative of the owner or operator of the facility addressed in this Air General Permit Registration Form. I hereby certify, based on information and belief formed after reasonable inquiry, that the facility addressed in this registration form is eligible for use of this air general permit and that the statements made in this registration form are true, accurate and complete. Further, I agree to operate and maintain the facility described in this registration form so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof.*

*I will promptly notify the Department of any changes to the information contained in this registration form.*

Signature  \_\_\_\_\_ Date 05/21/09

**Design Calculations**

If this is an initial registration for a proposed new animal crematory unit, provide design calculations to confirm a sufficient volume in the secondary chamber combustion zone to provide for at least a 1.0 second gas residence time at 1800 degrees F.

- Manufacturer's' design calculations attached.
- Registration is not for proposed new animal crematory unit(s).

**Description of Facility**

Below, or as an attachment to this form, provide a description of all crematory operations at the facility in sufficient detail to demonstrate the facility's eligibility for use of this air general permit and to provide a basis for tracking any future equipment or process changes at the facility. Describe all air pollutant-emitting processes and equipment at the facility, and identify any air pollution control measures or equipment used.  
See Attached.



# **KELLER MECHANICAL & ENG**

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State Certified Mechanical Contractors • Building Contractors • ASME Certified

April,28 2009

To: Calvin Frick

Requested Information

Type of crematory

- M/N KM1600 Batch Load Incinerator
- S/N 101508632

All control devices

- M/N 5110001 Partlo Duel Pen Chart Recorder
- M/N SME312LPQD Banner sensor (opacity)
- M/N VF560232AA Eclipse Flame Safe Guard
- M/N P1160311000 Partlo Temperature Controller
- M/N 6E57-214-2BD23-OXBO Siemens PLC

Operating Temperatures

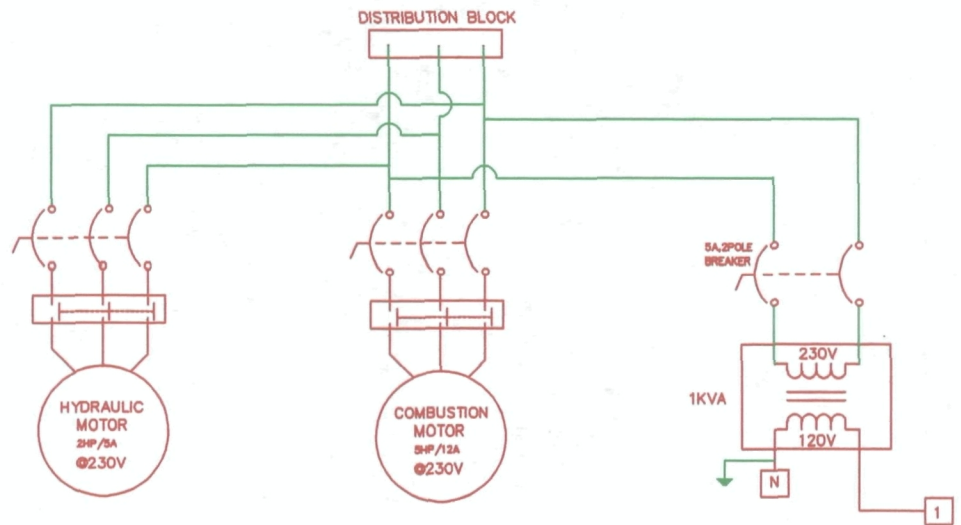
- Primary Chamber 1400 degrees F.
- Secondary Chamber 1600-1800 degrees F.

Schematics are attached

If you need any other information please contact.

Thanks

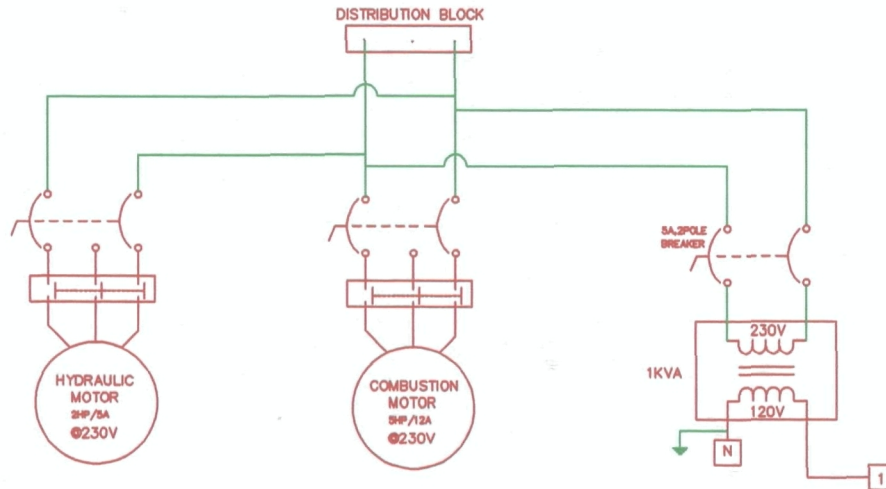
Bud Keller



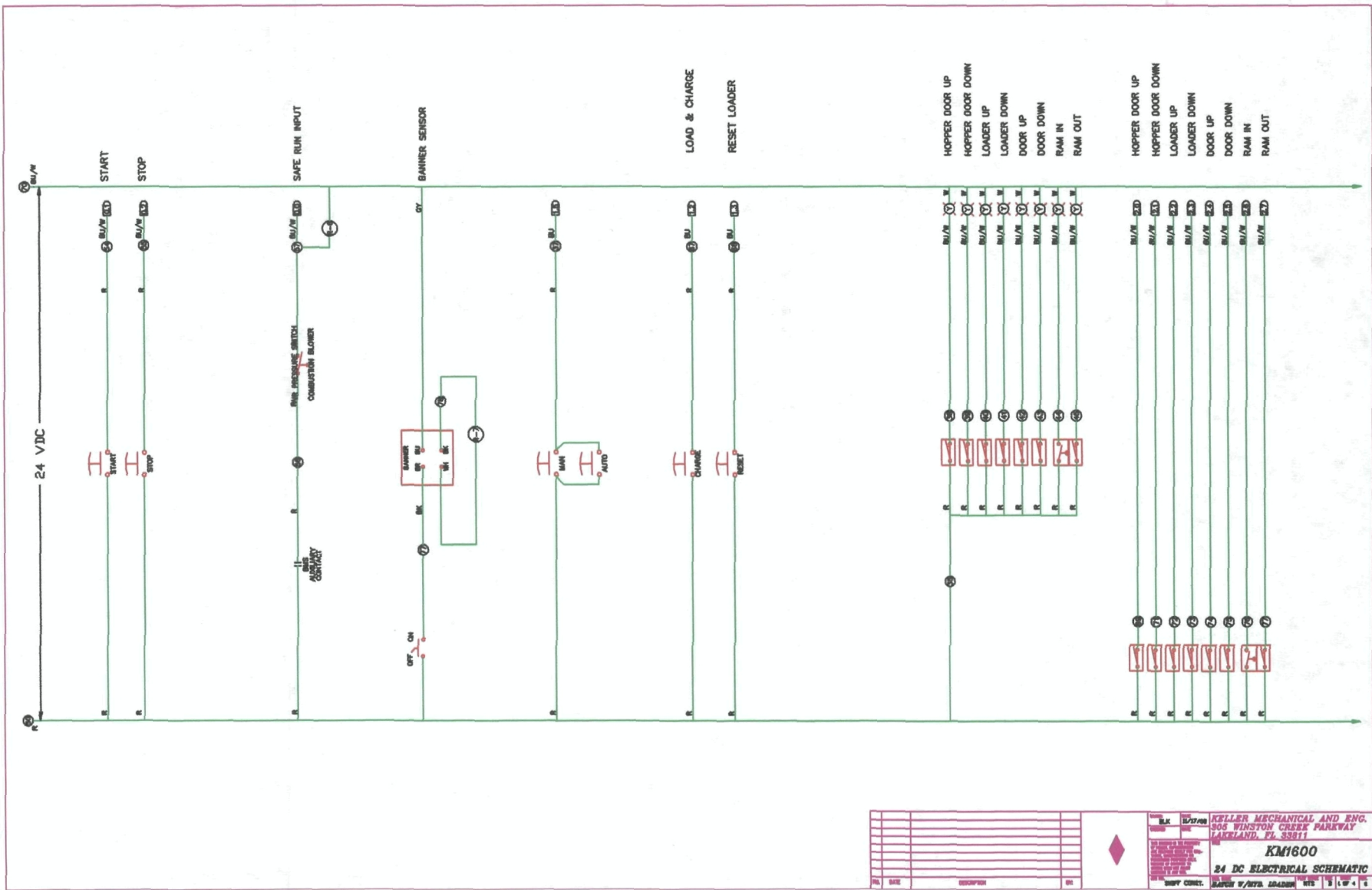
NO.	REV.	DESCRIPTION	BY



DATE: 01/21/98  
KELLER MECHANICAL AND ENG.  
504 HARTON CREEK PARKWAY  
LAKELAND, FL 33811  
**KM1600**  
POWER DISTRIBUTION  
REV. CONTROL: DATE: BY: HYP. DRAWN: HW 13 OF 13




ELS UNIT NO. **PELLER MECHANICAL AND ENG.**  
 305 VICTOR CREEK PARKWAY  
 LAKELAND, FL 33811  
**KN1600**  
**POWER DISTRIBUTION**  
 SHEET NO. 1 OF 1

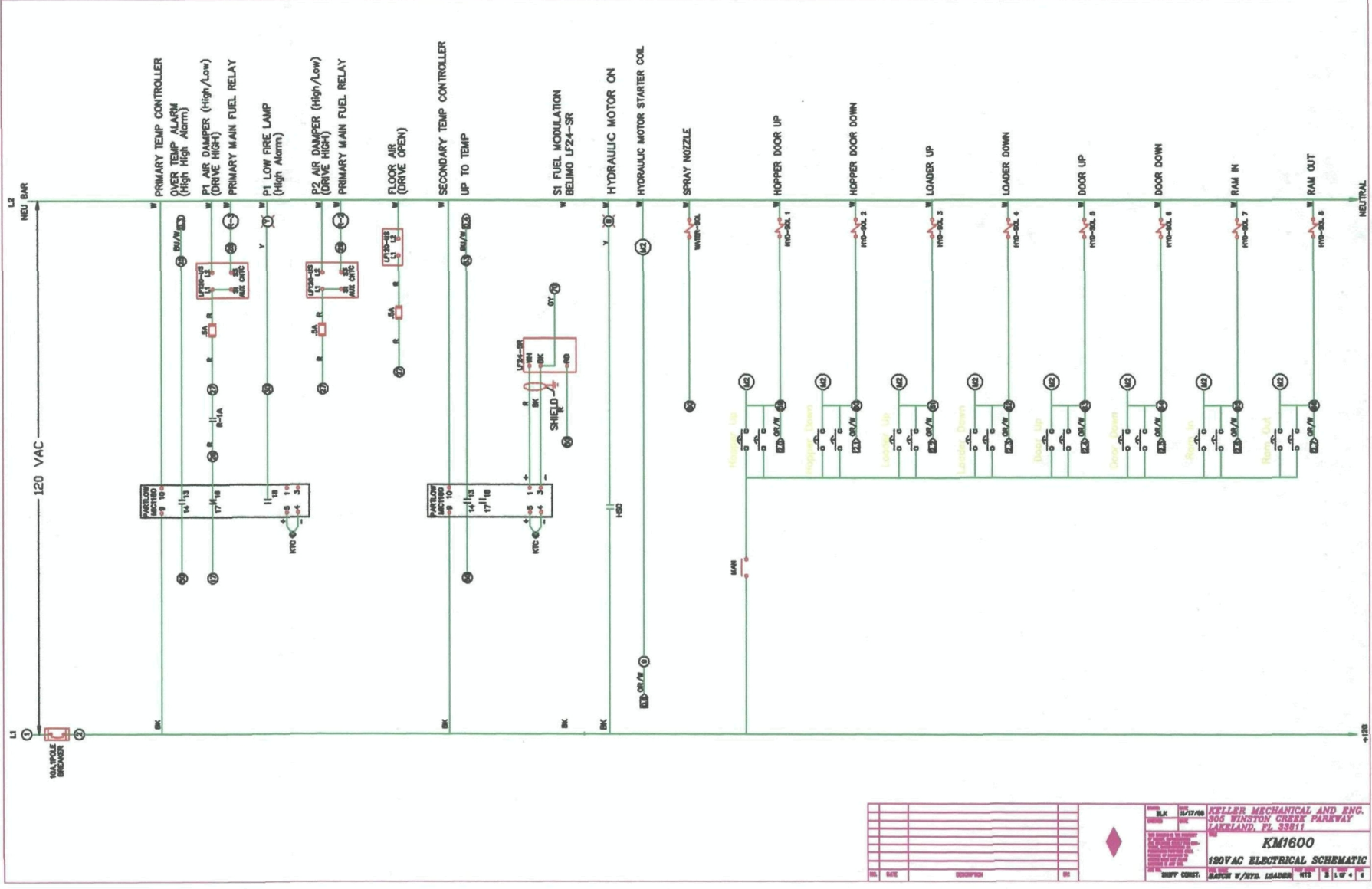


NO.	DATE	DESCRIPTION	BY



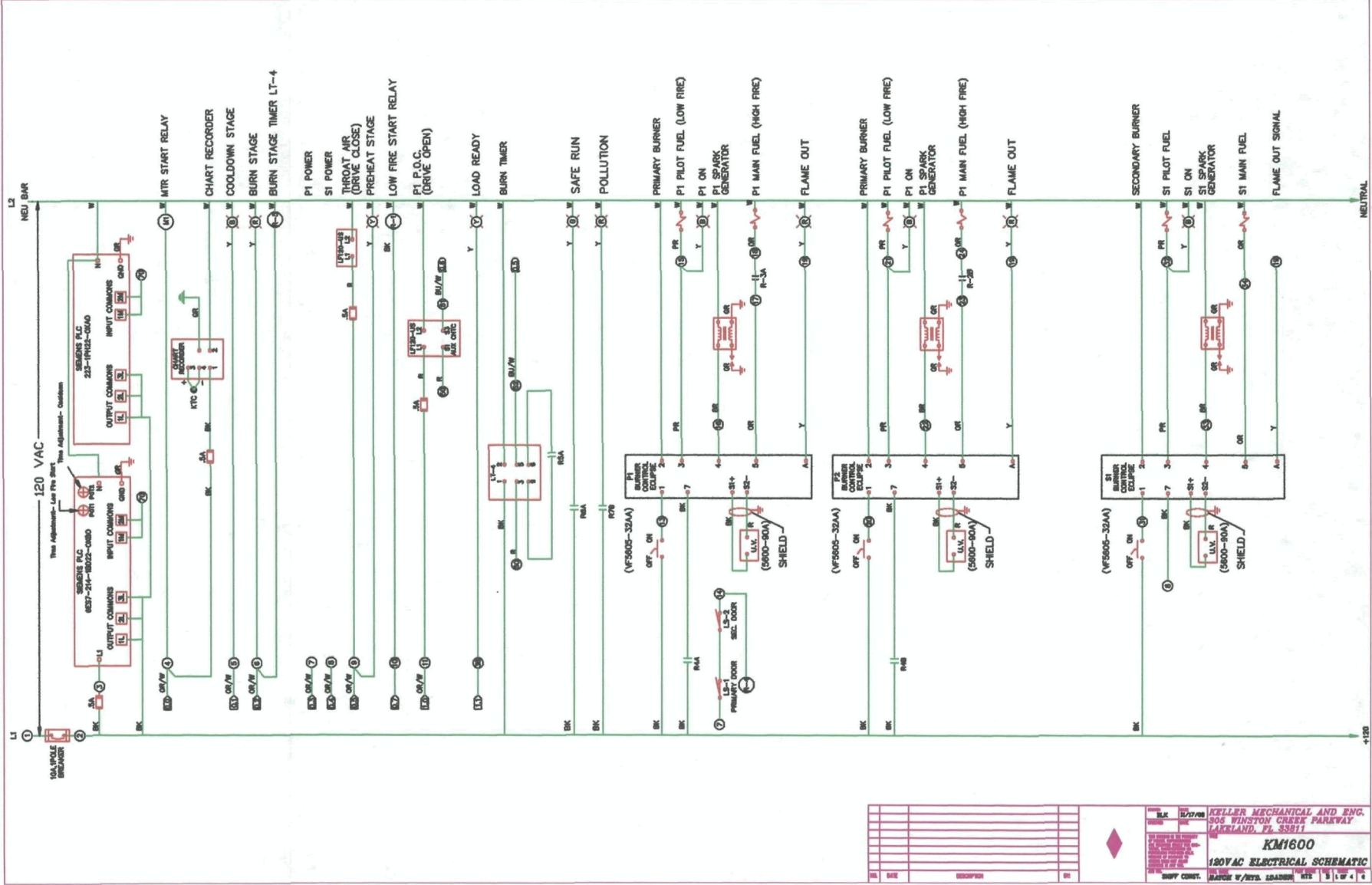
BK 12/27/99  
 KELLER MECHANICAL AND ENG.  
 305 WINSTON CREEK PARKWAY  
 LAKELAND, FL 33811  
**KM1600**  
**24 DC ELECTRICAL SCHEMATIC**  
 DWG. NO. 1600-001 RVS 1/1






◆

BLK	10/17/88	<b>KELLER MECHANICAL AND ENG.</b> 305 WINSTON CREEK PARKWAY LAKELAND, FL 33811 <b>KM1600</b> <b>120VAC ELECTRICAL SCHEMATIC</b> SHIPP CONST. MATCH W/INT'L LAYOUTS R10 2 OF 4



REV	DATE	BY	CHKD

**REV. 1**

**120VAC ELECTRICAL SCHEMATIC**

**120VAC ELECTRICAL SCHEMATIC**

**KM1800**

**KELLER MECHANICAL AND ENG.**  
305 WINSTON CREEK PARKWAY  
LAKELAND, FL 33817

**DRYV. CONST. RAJESH W/RTA. 12/28/2018**

KM1600 400 lb/hr, 1800F Heat and Mass Balance

Heat and Mass Balance		Basis one Hour		Waste Type and Description - Generalities				
Enter the following:		This Run	0-Trash	1-Rubbish	3-Garbage	4-Animal	MSW	
Percent Carbon Combustion		95	95	95	95	95	95	
Feed Compos. %	Carbon	33	47	33	12	7	25	
	Hydrogen	3	6	5	3	2	4	
	Oxygen	10	30	26	10	6	20	
	Water	70	10	25	70	82	30	
	Chlorine	0.4	2	1	0.4	0	1	
	Sulfur	0.1	0.1	0.1	0.1	0.1	0.1	
	Nitrogen	0.2	0.2	0.2	0.2	0.4	0.5	
	Ash	4.3	4.70	9.70	4.30	2.5	19.4	
Stated HHV of waste feed, Btu/lb		2500	8500	6500	2500	1000	5000	
Calculated LHV by Dulong's eq, Btu/lb		4437	7147	4909	1644	630	3679	
& subtracting heat to vaporize water								
Density of Waste, lb/cu ft		23	10	10	35	55	25	
Heat value of waste, Btu/cu ft		57500						
			Paper, cardboard, wood-10%plastics	paper, rags, cartons floor sweepings	Food wastes, paper resta/hotels/clubs	All animal & human tissue; labs; hosp.	Municipal Solid	
<-Typical Ranges->								
Percent carbon combustion		95	95-98%					
Percent Excess Air		100	40-150% Excess Air (=140-250% total air) for solid waste					
Percent of Total Air		200						
Feed rate Lbs per hour		400						
Target Comb gas temp. deg F		1800	1700-2200					
Target stack gas temp. deg F		350	300-600					
True heat loss, %		5	----- Losses (2-6%) due to rad./ cond./conv. Does not reflect HHV-LHV differences or delta H H2O vapz.					
O2 Req. for	12.20 lbmol/hr							
Dry air req	1675 lb/hr							
		CO2	HCl	SO2	H2O			
Moles from combustion		10.45	0.05	0.01	5.98			
Moles from evap					15.56			
Actual O2 in inlet air	lbmol/hr	24.40			Humidity Input			
Water vapor in Air		0.008	lbs water/ lbs dry air		0.74	lbmol/hr		
Tot. dry air, lbmol/hr	116.20				13 lb/hr			
	lb/hr	3351						
		CO2	HCl	SO2	N2	O2	H2O	
Total moles before aux fuel		10.45	0.05	0.01	91.78	12.20	22.28	
Total flue gas, wet		136.77	lbmol/hr		3824 lb/hr			
Total flue gas, dry		114.49	lbmol/hr		3423 lb/hr			
Mole Weight, wet/dry		27.96	29.89					
Temperature with no heat added, deg F			1,645					
Heat needed BTUs/Hour			1.73E+05					
If heat needed is positive, then add methane fuel:								
Heat balance calculations, based on LHVs and net available heat for methane								





BROWARD COUNTY  
ANIMAL CARE & REGULATION  
1870 SW 39 ST  
FT LAUDERDALE, FL 33315



USA FIRST CLASS FOREVER  
POSTNET 50845 33 443 90 9  
CAT 02 MAY 2000 PM

FDEP RECEIPTS  
P.O. BOX 3070  
TALLAHASSEE, FL 32315-3070