File ES2065

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Example Draft REPORT

on

COMMERCIAL STEAM COOKER

Hobart/Vulcan
Troy, OH

PRODUCT COVERED:

Hobart Models HC24EO3, HC24EO5, Vulcan Models C24EO3, C24EO5, Pressureless, Boilerless Countertop Steamers.

PARTNER INFORMATION:

Hobart Corporation (A division of ITW Food Equipment Group) (1017903)
Vulcan (A division of ITW Food Equipment Group) (1017245)

FACTORY LOCATION:

Troy, Ohio.

GENERAL:

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE USE):

The appliances in this section comply with the ENERGY STAR Specification 1.2, effective August 1, 2003. Any changes to this section must comply with this specification. Link: http://www.energystar.gov/products/specs/system/files/Commercial_Steam_Cookers_Program_Requirements%20v1_2.pdf

Models in this report are countertop steamers intended to be installed individually or stacked on top of one another via an accessory stacking kit. These units are permanently connected. The units come in 3 or 5 pan capacities.

ENERGY STAR RATINGS:

	Vulcan - C24EO3	Vulcan - C24EO5	Hobart - HC24EO3	Hobart - HC24EO5
ENERGY STAR Partner	Vulcan (A division of ITW Food Equipment Group)	Vulcan (A division of ITW Food Equipment Group)	Vulcan (A division of ITW Food Equipment Group)	Vulcan (A division of ITW Food Equipment Group)
Product Type	Pressureless Boilerless	Pressureless Boilerless	Pressureless Boilerless	Pressureless Boilerless
Method of Steam Generation				
Pan Capacity	3	5	3	5
Primary Fuel Source	Electric	Electric	Electric	Electric
Cooking Energy Efficiency (%)	74	77	74	77
Water Consumption (gallons/hr)	0.6	0.7	0.6	0.7
Idle Energy Rate Electric (Watts)	259	382	259	382

ELECTRICAL RATINGS:

Models ($)	V, 50/60 Hz	Phase	A	W	Min. supply wire size (75°C)	Stacked Units with Single Power Connection, Min. wire size (60 °C) (+)
C24EO3	208	1	38.5	8000	8	N/a
	240	1	33.3	8000	8	N/a
	208	3	22.2	8000	10	6
	240	3	19.2	8000	12	8
	480	3	9.6	8000	14	14
C24EO5 (12KW)#	208	1	57.7	12000	4	N/a
	240	1	50	12000	6	N/a
	208	3	33.3	12000	8	4
	240	3	28.9	12000	10	4
	480	3	14.4	12000	14	10
C24EO5 (13KW)@	208	1	62.5	13000	4	N/a
	240	1	54.2	13000	6	N/a
	208	3	36.1	13000	8	3
	240	3	31.3	13000	8	4
	480	3	15.6	13000	14	8

- Models employ 12KW elements. See Figure 3, item 10.

@ - Models employ 13KW elements. See Figure 3, item 10.

$ - Includes HC in lieu of just C.

+ - Only 3 phase units are allowed to have a single connection point in a stacked configuration.

MARKING:

Nameplate - Manufacturer's name, model number, date code, and electrical rating.

MODEL C24EO5 - FIG. 1

General – Fig. 1 shows the front view of the appliance.

1. Steam Vent – Stainless steel, 1 in. OD tube, located at rear of cavity and is connected to the top of unit where another 1 in. OD stainless steel tube exits the unit. Connection between stainless fittings is through steam tube, Figure 2, item 3. Used to exhaust steam from cavity.

2. Door Gasket – (Specifications on material and length required, along with visual image) Gasket is not visible in Figure 1, above.

MODEL C24EO3

General – Model C24EO3 is similar to Model C24EO5 except for the electrical ratings, heating element ratings, and it represents the 3 pan version of this series. See ILL. 1 for overall unit dimensions and Ill. 3 for cooking compartment dimensions. See page 2 for electrical ratings. Element is as noted in table under Figure 3, item 3.

Models HC24E03 and HC24E05

General – Models HC24E03 and HC24E05 are identical to models C24E03 and C24E05, respectively, except for model designation.

MODEL C24EO5 – FIG. 2

General – Fig. 2 shows the front view with the door opened.

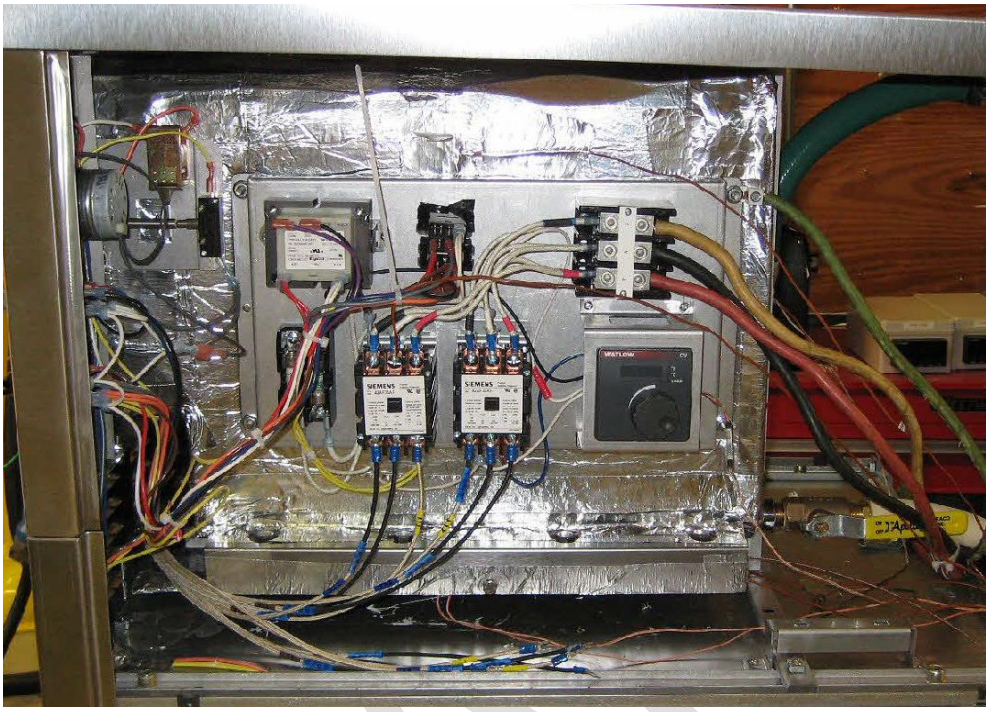
1. Cooking Compartment – Stainless steel, approximately 0.036" thick. See Ill. 2 for overall dimensions of the pan model. Provided with water reservoir at bottom of cavity, nominal 3-7/8" deep. Used to hold water to create steam.

2. Thermal Insulation – 0.125" thick fiberglass with foil outer layer. Covers cooking cavity.

3. Steam Exhaust Tubing (not shown) – Flexible hose. Secured to fittings with hose clamps.

MODEL C24EO5 – FIG. 3

General – Fig. 3 shows a close up of the main control area. Disregard thermocouples shown in photo.



1. Temperature Control – R/C (XAPX2), Watlow, cat. no. CVC1HH Series, input rated 120 V AC. Sensor is located in steam exhaust vent, Figure 1, item 1. Maximum 215°F temperature setting, adjustable but not programmable.

2. Hold Thermostat - Rated 120 V minimum. Mounted to right side of heated cavity, near center. Used to regulate pre-heat temperature of steam generator to 180 to 200°F (nominal).

3. Heating Elements – Not visible, cast into heater casing located at bottom of heated cavity. Watlow, cat. no. U3-5-40-XXX Series, ratings of elements, and number of elements as noted below. Cast into aluminum casting that interfaces with the floor of the water reservoir.

Model	Unit Voltage	Element Model	Element Voltage	Element Wattage	No. of Elements
C24EO3	208	U3-5-40-349	240(208)	2667(2003)	3
		U3-5-40-350	240(208)	883(664)	3
C24EO3	240	U3-5-40-349	240(208)	2667(2003)	3
		U3-5-40-350	240(208)	883(664)+	3
C24EO3	480	U3-5-40-xxx	277	2667	3
(ALT)	480	U3-5-40-xxx	480	2667	3
C24EO5	208	U3-5-40-354	208	4000	3
(OPT)	208	U3-5-40-xxx	208	4326	3

C24EO5	240	U3-5-40-355	240	4000	3
(ALT)	240	U3-5-40-xxx	240	4326	3
C24EO5	480	U3-5-40-356	277	4000	3
(ALT)	480	U3-5-40-xxx	480	4000	3
(OPT)	480	U3-5-40-xxx	277	4333	3

+ - Elements are employed but not electrically connected.

Alternate – Same as above except Durex Industries, DA Series, with corresponding identical ratings as above.

Illustration 1

DETAILS AND DIMENSIONS

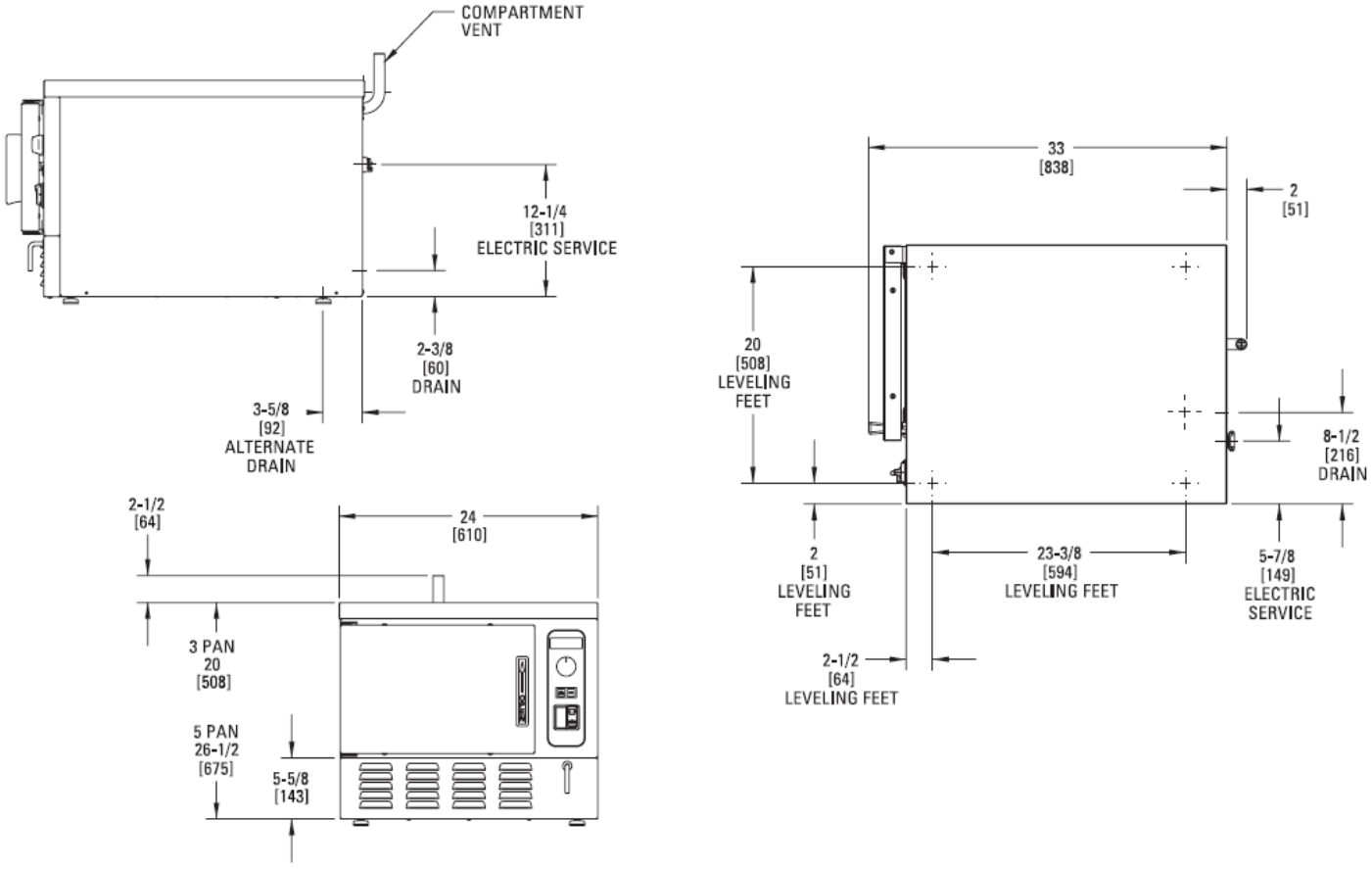


Illustration 2

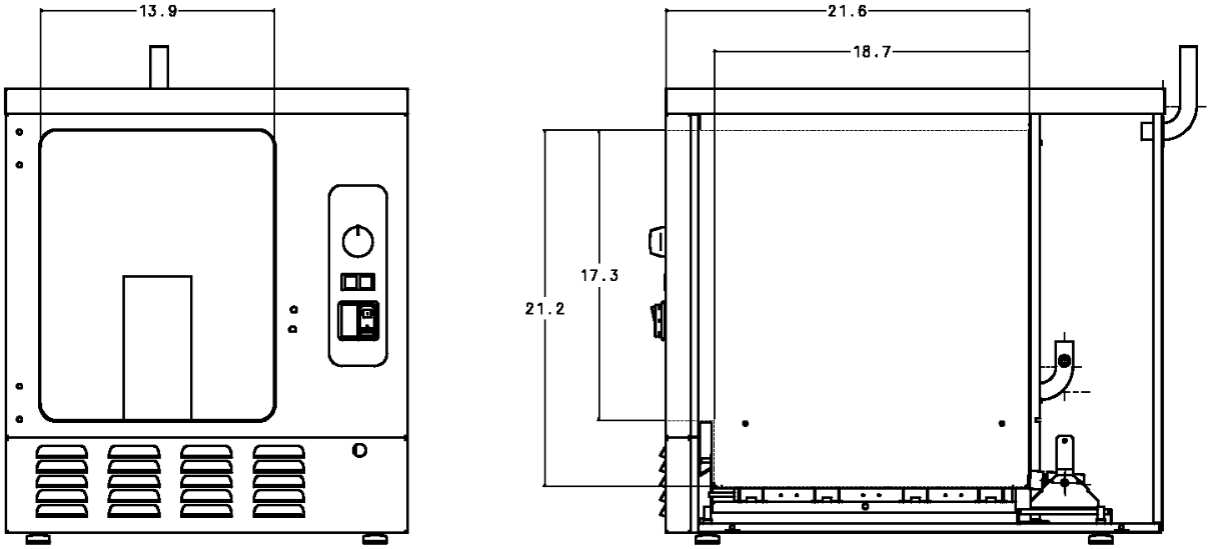


Illustration 3