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## **RB10-30 STEAM BOILERS**



## **RB45 STEAM BOILERS**



### **Applications**

- Process Steam Autoclaves/Sterilizers
- Air Humidification
- Dry Cleaning
- Food Service<sup>(\*)</sup>
   Laboratories

### **Features**



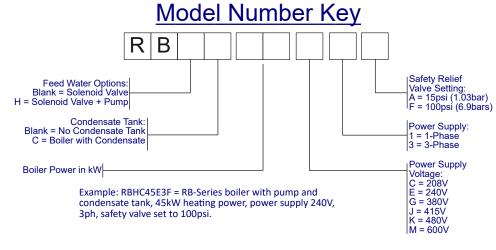
- Miniature boiler max. vessel volume 1.97ft3
  - Maximum safety valve setting 100psi
- All boilers are manufactured in accordance with the requirements of the A.S.M.E. Boiler and Pressure Vessel Code and A.S.M.E. CSD-1. Each boiler bears the National Board Stamp "M".
- High quality saturated steam, operating pressure range 0 85psig
- All enclosed sleek design, all controls accessible from boiler front, very suitable for installation in tight spaces such as autoclaves
- Heavy duty carbon steel pressure vessel. Vessel jacket and electrical enclosure 304 stainless steel
- Large selection of optional equipment

### **Standard Equipment of Each Boiler Includes:**

- A.S.M.E. pressure relief valve
- One (1) quick opening boiler bottom blowoff valve as per A.S.M.E. Code B31.1
- ½" NPT Bronze steam outlet ball valve
- High pressure feed pump in RBH- and RBHC-models
- Low water cutoff control with manual reset
- One (1) high pressure cutoff control with manual reset
- One (1) operating pressure control
- Magnetic contactors
- Main supply power distribution block
- Indicator lights for POWER, REFILLING, HEATING, ALARMS and Automatic Boiler Blowoff Status
- Pressure and water level gauge

(\*) DIRECT STEAM APPLICATIONS TO FOOD PRODUCTS: Reimers offers stainless steel boilers or #OPT1030 Brass/Bronze free boiler trim option (see Page 5). This alone does not guarantee the production of culinary grade steam. Applicable safety standards (i.e. 3-A T609) must be considered.

HEATING	STEAM	ВНР	VOLTAGE <sup>(1)</sup>	PHASE	SHIP	PRESSURE	OP. PRESS.	STEAM	OUTLET
POWER	CAPACITY				WT. <sup>(3)</sup>	VESSEL	RANGE	(N	PT)
						CAPACITY		LP	HP
кw	lbs/hr (kg/hr) <sup>(4)</sup>				lbs (kg)	GAL. (L)	psi (bar)	<15psig	>15psig
10	34 (15.4)	1.00	208/240/380/415/480/600	3 <sup>(2)</sup>	210 (95)	6.8 (25.7)	0 - 85 (0 - 5.86)	1/2	1/2
18	61 (27.6)	1.80	208/240/380/415/480/600	3 <sup>(2)</sup>	210 (95)	6.8 (25.7)	0 - 85 (0 - 5.86)	1/2	1/2
20	68 (30.8)	2.00	208/240/380/415/480/600	3 <sup>(2)</sup>	210 (95)	6.8 (25.7)	0 - 85 (0 - 5.86)	1/2	1/2
30	102 (46.2)	3.00	208/240/380/415/480/600	3 <sup>(2)</sup>	210 (95)	6.8 (25.7)	0 - 85 (0 - 5.86)	1/2	1/2
45	153 (69)	4.5	208/240/380/415/480/600	3 <sup>(2)</sup>	345 (156)	14.7 (55.7)	0 - 85 (0 - 5.86)	1/2	1/2

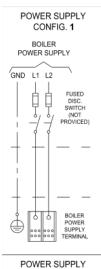


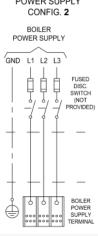
- (1) Each boiler model requires two (2) power supplies: Primary heating power and secondary control voltage. Nominal control voltage is 120V, 50/60Hz. Boiler models rated for 380V and 415V are equipped with control voltage transformers that require 220/240V applied to their primary side in order to provide the 120V AC control voltage to the boiler. As an option, all boiler models can be equipped with control voltage transformers so that only the heating power supply needs to be connected to the boiler.
- (2) Also available in 240V 1PH
- (3) On boiler equipped with condensate tank, add 90lbs (41.0kg) to shipping weight
- (4) The STEAM CAPACITY listed above is based on the evaporation rate from and at 212°F, at 0 psig. If the boiler feed water temperature is 50°F, then the STEAM CAPACITY for each model listed above is approximately 15% lower.

Please note that all information provided within this brochure is approximate and subject to change without notice. Please contact Reimers Electra Steam, Inc. with any questions regarding the specifications or dimensions detailed within.

# **Electrical Specifications**

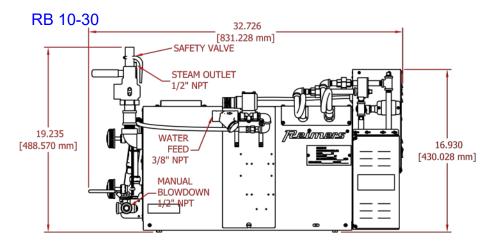
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BOILER HEATING POWER	PRIMARY	PHASE	AMP	MIN REQ. N.E.C. SERVICE	INTERNAL POWER FUSING	NUMBER & SIZES OF CONTACTORS	NUMBER & SIZE OF ELEMENTS	POWER SUPPL	Y
kW	v		A	A				FIELD TERMINAL MIN. REQUIRED CONDUCTOR SIZE	CONFIGU- RATION
9.4	380	3	14.4	18.0	NO	1 X 50A RES.	1 X 15kW, 480V	12 AWG	2
10	208	3	27.8	35.0	NO	1 X 50A RES.	1 X 10kW, 208V	8 AWG	2
	240	1	41.7	52.0	NO	2 X 50A RES.	1 X 10kW, 240V	6 AWG	1
7	240	3	24.1	30.0	NO	1 X 50A RES.	1 X 10kW, 240V	10 AWG	2
	415	3	13.9	17.0	NO	1 X 50A RES.	1 X 10kW, 240V	12 AWG	2
	480	3	12.0	15.0	NO	1 X 50A RES.	1 X 10kW, 480V	12 AWG	2
10.4	600	3	10.0	13.0	NO	1 X 50A RES.	2 X 10kW, 240V	14 AWG	2
17.9	300	3	17.2	22.0	NO	1 X 50A RES.	1 X 15kW, 208V + 1 X 15kW, 240V	10 AWG	2
18	208	3	50.0	62.0	NO	1 X 75A RES.	2 X 9kW, 208V	6 AWG	2
3.	240	1	75.0	94.0	NO	2 X 50A RES.	2 X 9kW, 240V	3 AWG	1
- 2	240	3	43.3	54.0	NO	1 X 50A RES.	2 X 9kW, 240V	6 AWG	2
7	480	3	21.7	27.0	NO	1 X 50A RES.	2 X 9kW, 480V	10 AWG	2
20	208	3	55.5	70.0	NO	1 X 75A RES.	2 X 10kW, 208V	4 AWG	2
	240	1	83.3	104.0	NO	2 X 50A RES.	2 X 10kW, 240V	2 AWG	1
	240	3	48.1	60.0	NO	1 X 75A RES.	2 X 10kW, 240V	6 AWG	2
	415	3	27.8	35.0	NO	1 X 50A RES.	2 X 10kW, 415V	8 AWG	2
	480	3	24.1	30.0	NO	1 X 50A RES.	2 X 10kW, 480V	8 AWG	2
20.8	600	3	20.0	25.0	NO	1 X 50A RES.	2 X 15kW, 208V	10 AWG	2
30	208	3	83.3	104.0	NO	2 X 50A RES.	2 X 15kW, 208V	2 AWG	2
	240	1	125.0	156.0	6 X 50A, 300V	2 X 50A RES.	2 X 15kW, 240V	2/0 AWG	1
	240	3	72.2	90.0	NO	1 X 75A RES.	2 X 15kW, 240V	3 AWG	2
	380	3	45.6	57.0	NO	1 X 75A, RES.	2 X 15kW, 380V	6 AWG	2
	415	3	41.7	52.0	NO	1 X 50A RES.	2 X 15kW, 240V	6 AWG	2
	480	3	36.1	45.0	NO	1 X 50A RES.	2 X 15kW, 480V	8 AWG	2
	600	3	28.9	36.1	NO	1 X 50A RES.	2 X 15kW, 600V	8 AWG	2
45	208	3	124.9	156.0	9 X 50A, 250V	3 X 50A	3 X 15kW, 208V 3ph	2/0 AWG	2
	240	3	108.3	136.0	9 X 50A, 250V	3 X 50A	3 X 15kW, 240V 3ph	1/0 AWG	2
	380	3	68.4	86.0	9 X 30A, 600V	3 X 50A	3 X 15kW, 380V 3ph	3 AWG	2
	415	3	62.6	79.0	9 X 30A, 600V	3 X 50A	3 X 15kW, 240V 3ph	4 AWG	2
8	480	3	54.1	68.0	9 X 30A, 600V	3 X 50A	3 X 15kW, 480V 3ph	4 AWG	2
	600	3	43.3	55.0	9 X 30A, 600V	3 X 50A	3 X 15kW, 600V 3ph	6 AWG	2

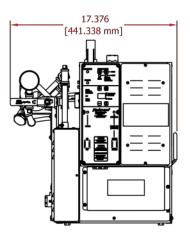


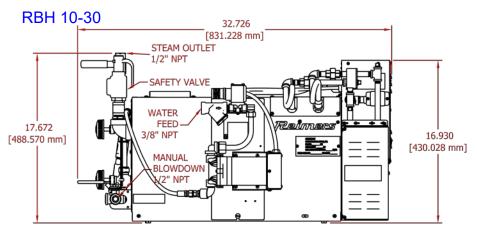


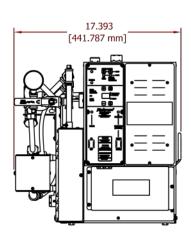
# **Construction**

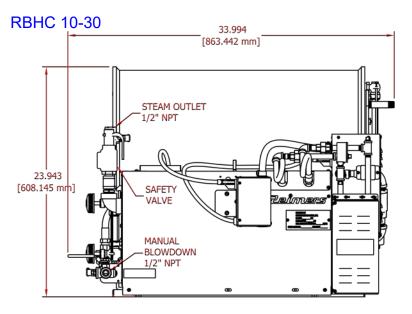


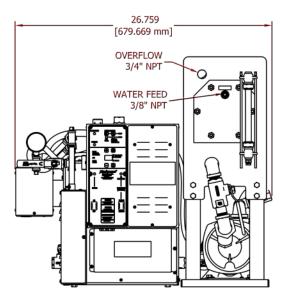


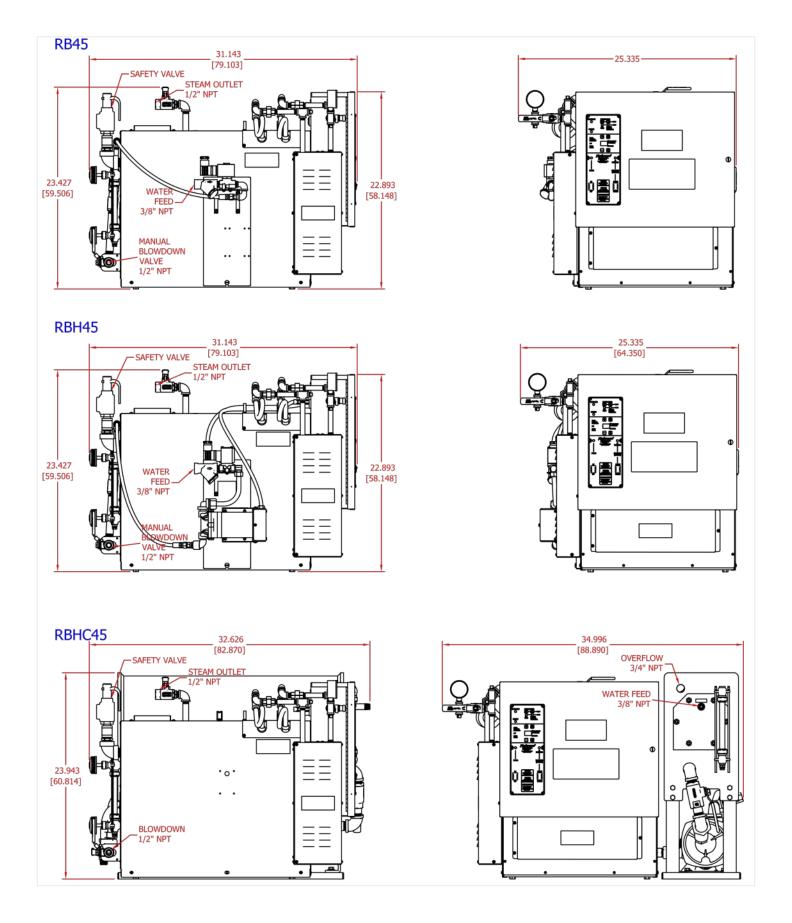




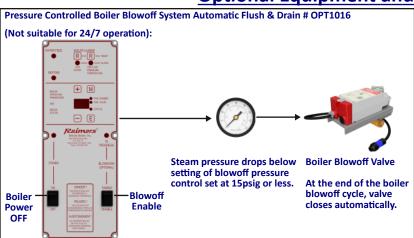








## **Optional Equipment and Accessories**





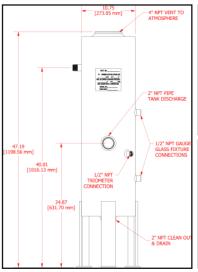


Program boiler blowoff When boiler blowoff time day time and duration is reached, boiler controls turn off automatically and the blowoff valve opens.

At the end of the boiler blowoff cycle the blowoff valve closes, boiler controls turn on, the water level in boiler restores and boiler resumes operation automatically.









#### **Boiler Blowoff Tank After-Cooler** #OPT1027:

Most States and Local Municipalities require that fluids drained to the sewer shall have a maximum temperature of not more than 140°F.

Install this after-cooler to the blowoff thank discharge line when boiler operates with one of the above automatic blowoff options.

#### Control Voltage Transformer Options: Use one of these options for single point boiler power supply.

Boiler Voltage	Transformer Option Part Number					
boller voltage	RB – and RBH Series	RBHC- Series				
208V	OPT1009 - 208RBH	OPT1011- 208RBHC				
240V	OPT1009 - 240RBH	OPT1011- 240RBHC				
380V	OPT1009 - 380RBH	OPT1011- 380RBHC				
415V	OPT1009 -380RBH	OPT1011- 380RBHC				
480V	OPT1009 – 480RBH	OPT1011- 480RBHC				
600V	OPT1009 - 600RBH	OPT1011- 600RBHC				





### Brass/Bronze-Free Boiler Trim, #OPT1030-RB:

RB-series boilers in which standard brass/bronze boiler trim is replaced with carbon steel and stainless steel trim. This option reduces the lead concentration in the boiler water and discharged steam to significantly lower levels. Use this option in applications in which steam comes in direct contact with food and all other applications where lead concentrations are a concern.

# Steam Filter for Culinary Steam Applications, #OPT1032:

Use this filter with FDA listed materials in food processing applications where the steam comes in direct contact with food. The 3 or 5 micron cartridges employed in The 3 or 5 micron cartridges employed in this steam filter meet or exceed the 3-A guidelines for the production of Culinary Steam under Accepted Practice T609. NOTE: The installation of this filter alone does not guarantee that the steam produced by your system meets all applicable culinary steam standards.



