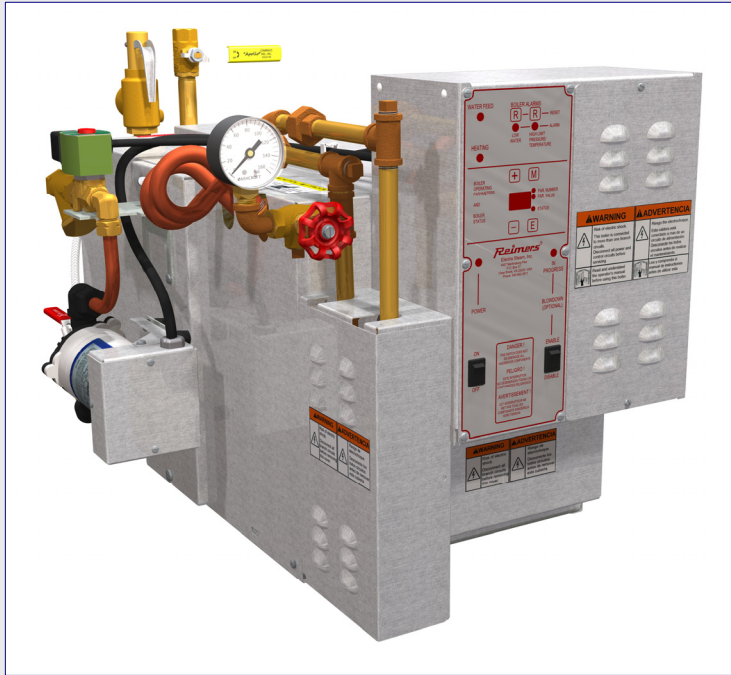




RB10 – RB30 Steam Boiler Series



Features

- Miniature boiler max. vessel volume 1.5ft³
- 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
- Very compact 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:

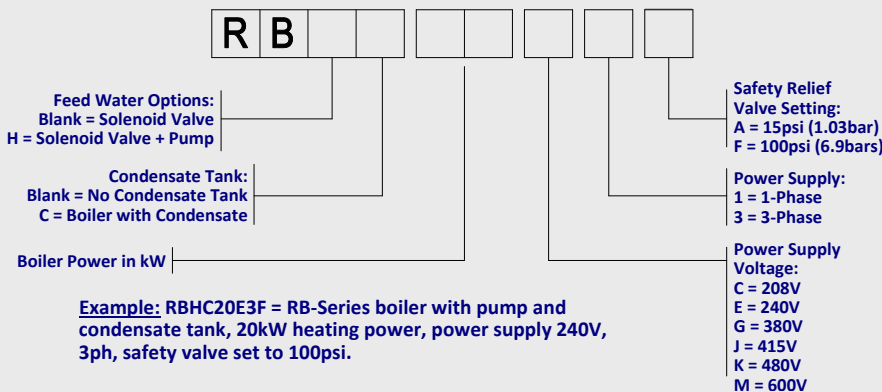
- A.S.M.E. pressure relief valve
- One (1) quick opening boiler bottom blowoff valve as per A.S.M.E. Code B31.1
- ½" NPT Bronze steam outlet ball valve
- High pressure feed pump in RBH- and RBHC-models
- Low water cutoff control with manual reset
- One (1) high pressure cutoff control with manual reset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

Applications

- Process Steam
- Air Humidification
- Food Service^(*)
- Autoclaves/Sterilizers
- Dry Cleaning
- Laboratories

HEATING POWER kW	STEAM CAPACITY lbs/hr (kg/hr) ⁽⁴⁾	BHP	VOLTAGE ⁽¹⁾	PHASE	SHIP WT. ⁽³⁾ lbs (kg)	PRESSURE VESSEL CAPACITY GAL. (L)	OP. PRESS. RANGE psi (bar)	Steam Outlet (NPT)	
								LP < 15psig	HP > 15psig
10 KW	34 (15.4)	1.0	208/240/380/415/480/600	3 ⁽²⁾	210 (95)	6.8 (25.7)	0 - 85 (0 - 5.86)	1/2	1/2
18 KW	61 (27.6)	1.8	208/240/380/415/480/600	3 ⁽²⁾	210 (95)	6.8 (25.7)	0 - 85 (0 - 5.86)	1/2	1/2
20 KW	68 (30.8)	2.0	208/240/380/415/480/600	3 ⁽²⁾	210 (95)	6.8 (25.7)	0 - 85 (0 - 5.86)	1/2	1/2
30 KW	102 (46.2)	3.0	208/240/380/415/480/600	3 ⁽²⁾	210 (95)	6.8 (25.7)	0 - 85 (0 - 5.86)	1/2	1/2

Model Number Key



⁽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

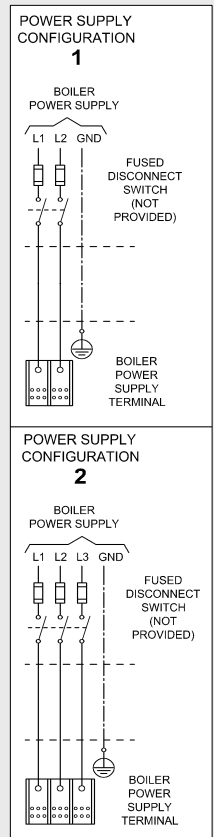
⁽³⁾ On boiler equipped with condensate tank, add 90lbs (41.0kg) to shipping weight

⁽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

BOILER HEATING POWER	PRIMARY VOLTAGE	PHASE	AMP DRAW	MIN REQ. N.E.C. SERVICE	INTERNAL POWER FUSING	NUMBER & SIZES OF CONTACTORS	NUMBER & SIZE OF ELEMENTS	POWER SUPPLY	
								FIELD TERMINAL MIN. REQUIRED CONDUCTOR SIZE	CONFIGURATION
kW	V		A	A					
10	208	3	27.8	35.0	NO	1 x 50A res.	1 x 10kW, 208V	8 AWG	2
18	208	3	50.0	62.0	NO	1 x 75A, res.	2 x 9kW, 208V	6 AWG	2
20	208	3	55.5	70.0	NO	1 x 75A, res.	2 x 10kW, 208V	4 AWG	2
30	208	3	83.3	104.0	NO	2 x 50A res.	2 x 15kW, 208V	2 AWG	2
10	240	1	41.7	52.0	NO	1 x 50A res.	1 x 10kW, 240V	6 AWG	1
18	240	1	75.0	94.0	NO	2 X 50A, res.	2 x 9kW, 240V	3 AWG	1
20	240	1	83.3	104.0	NO	2 X 50A, res.	2 x 10kW, 240V	2 AWG	1
30	240	1	125.0	156.0	6 X 50A, 300V	2 X 50A, res.	2 x 15kW, 240V	2/0 AWG	1
10	240	3	24.1	30.0	NO	1 x 50A res.	1 x 10kW, 240V	10 AWG	2
18	240	3	43.3	54.0	NO	1 x 50A res.	2 x 9kW, 240V	6 AWG	2
20	240	3	48.1	60.0	NO	1 x 75A, res.	2 x 10kW, 240V	6 AWG	2
30	240	3	72.2	90.0	NO	1 x 75A, res.	2 x 15kW, 240V	3 AWG	2
9.4	380	3	14.4	18.0	NO	1 x 50A res.	1 x 15kW, 480V	12 AWG	2
21	380	3	31.9	40.0	NO	1 x 50A res.	1 x 10kW, 240V + 1 x 15kW, 240V	8 AWG	2
30	380	3	45.6	57.0	NO	1 x 75A, res.	2 x 15kW, 380V	6 AWG	2
10	415	3	13.9	17.0	NO	1 x 50A res.	1 x 10kW, 415V	12 AWG	2
20	415	3	27.8	35.0	NO	1 x 50A res.	2 x 10kW, 415V	8 AWG	2
30	415	3	41.7	52.0	NO	1 x 50A res.	2 x 15kW, 415V	6 AWG	2
10	480	3	12.0	15.0	NO	1 x 50A res.	1 x 10kW, 480V	12 AWG	2
18	480	3	21.7	27.0	NO	1 x 50A res.	2 x 9kW, 480V	10 AWG	2
20	480	3	24.1	30.0	NO	1 x 50A res.	2 x 10kW, 480V	8 AWG	2
30	480	3	36.1	45.0	NO	1 x 50A res.	2 x 15kW, 480V	8 AWG	2
10.4	600	3	10.0	13.0	NO	1 x 50A res.	2 x 10kW, 240V	14 AWG	2
17.9	600	3	17.2	22.0	NO	1 x 50A res.	1 x 15kW, 208V + 1 x 15kW, 240V	10 AWG	2
20.8	600	3	20.0	25.0	NO	1 x 50A res.	2 x 15kW, 208V	10 AWG	2
30	600	3	28.9	36.1	NO	1 x 50A res.	2 x 15kW, 600V	8 AWG	2

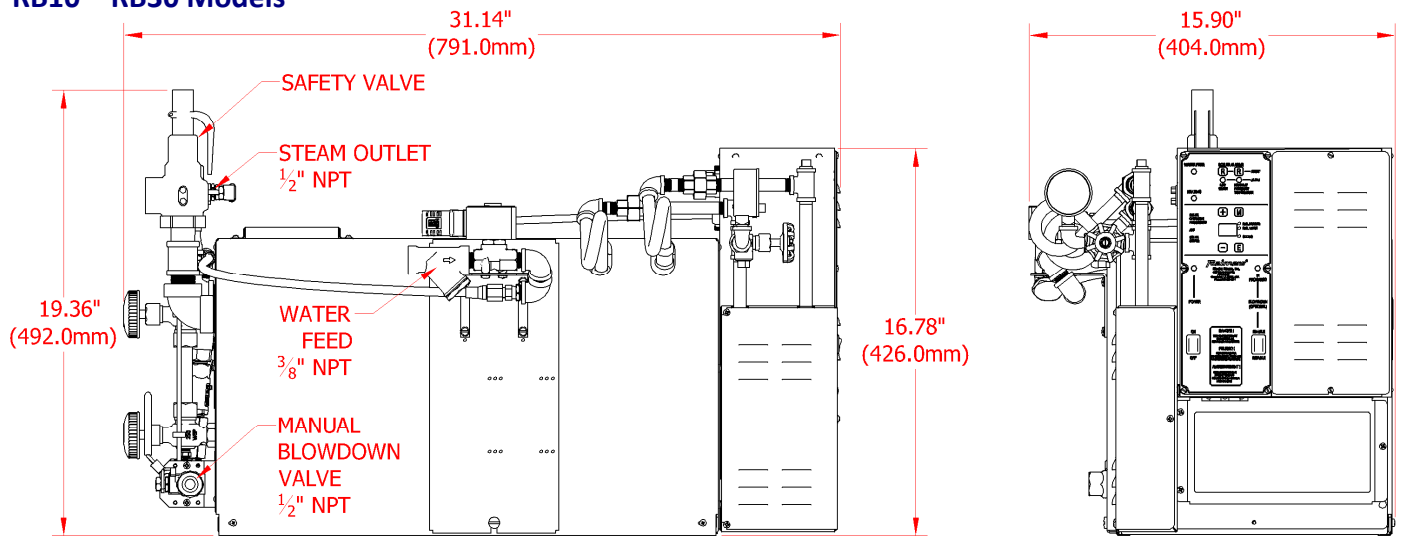


Construction

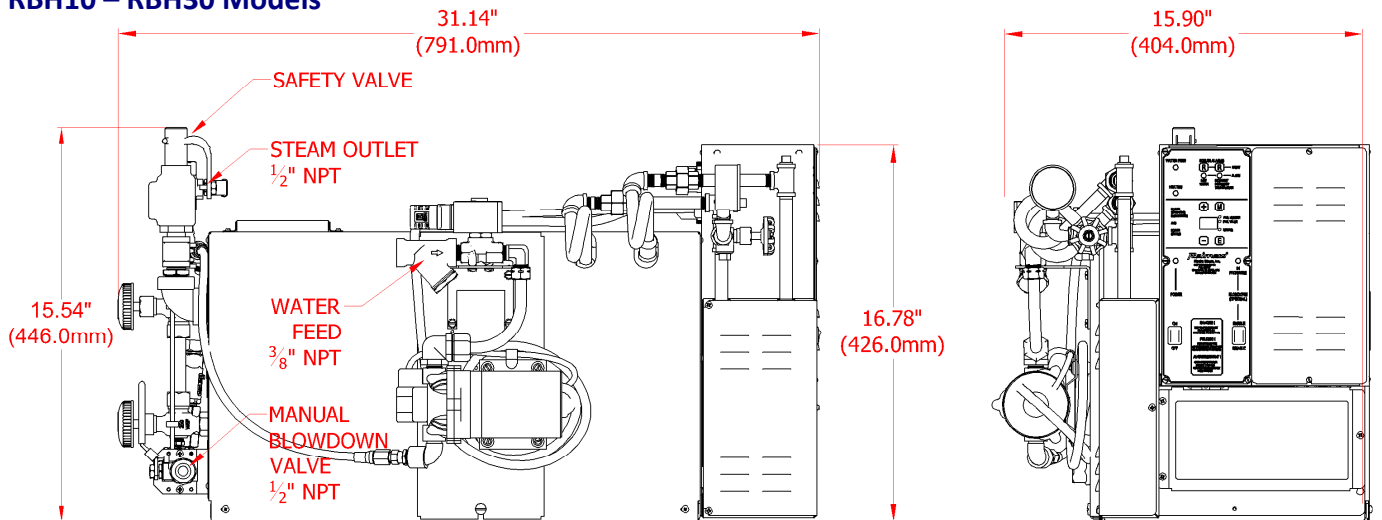


Dimensional Drawings (Approximate)

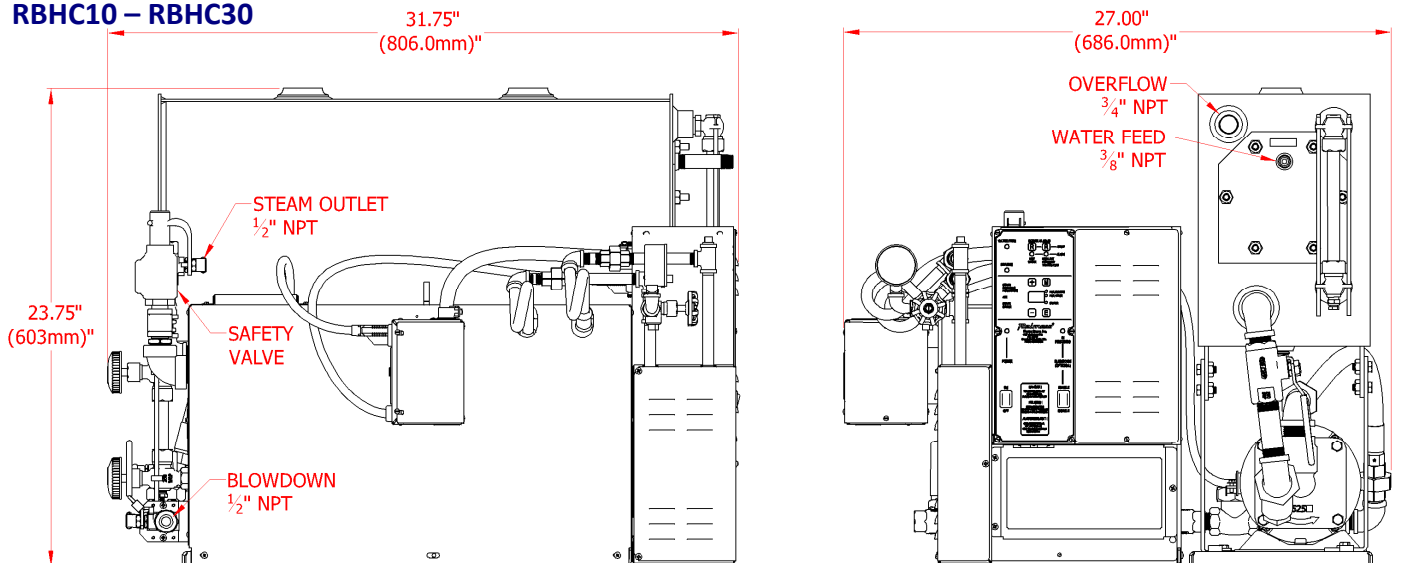
RB10 – RB30 Models



RBH10 – RBH30 Models

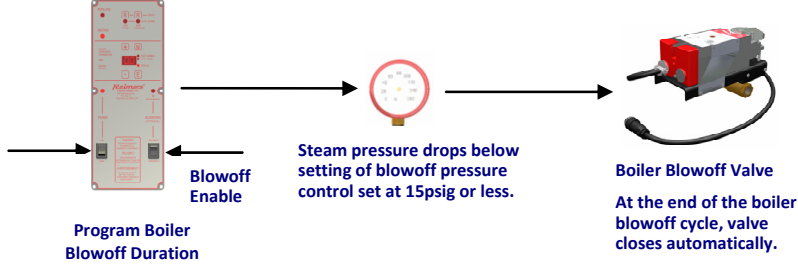


RBHC10 – RBHC30



Optional Equipment and Accessories

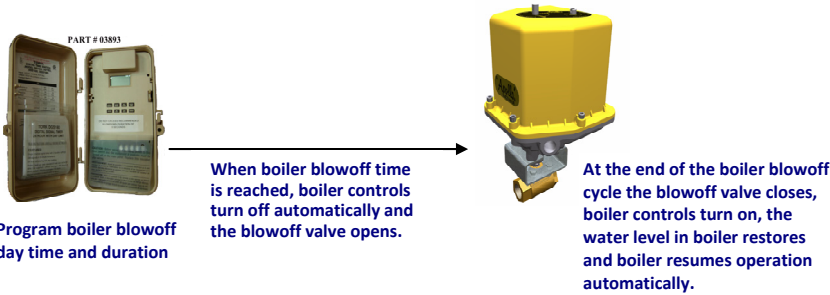
Pressure Controlled Boiler Blowoff System Automatic Flush & Drain # OPT1016 (Not suitable for 24/7 operation):



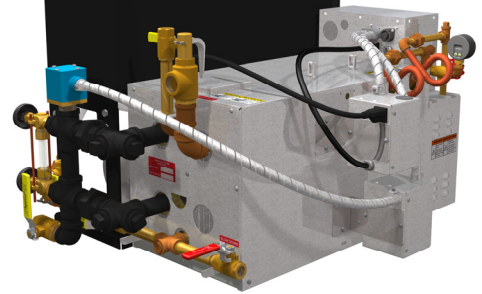
Auxiliary Low Water Cut-Off with McDonnell & Miller Model MM150, # OPTMM150:



Timer Controlled Boiler Blowoff System (Suitable for 24/7 operation), # OPT1001:

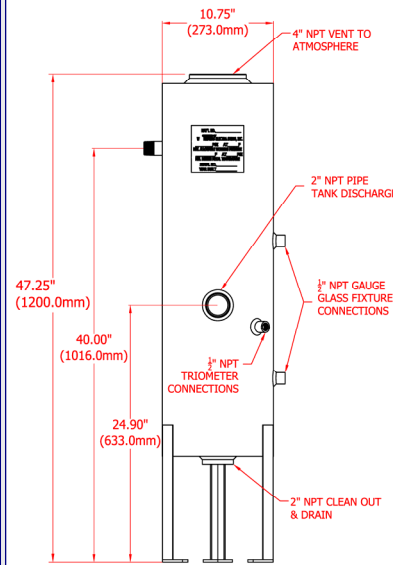


Auxiliary Low Water Cut-Off with Conductive Type Probe Fitting in External Water Column, # OPT1012:



Boiler Blowoff Tank, #BTANK-10:

- Designed in accordance with the National Board Guide for Blowoff Vessels NB-27
- Designed and manufactured in accordance with the requirements of the A.S.M.E. Boiler and Pressure Vessel Code Section VIII, Division 1. Each tank bears the National Board Stamp "U". The design pressure is 300psig.



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 tank discharge line when boiler operates with one of the above automatic blowoff options.

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

Boiler Voltage	Transformer Option Part Number	
	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

Boiler Wheel Set and Steam Wand for Cleaning Applications



Wheel Set:
OPT1019
Steam Wand:
PART # 20651

Steam Jet Station # 20845:



Attach Steam Jet Station to RB-Boiler or any other convenient location.

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

RX-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 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.

Timer Controlled Boiler On/Off, #OPT1017

