

RX 36-120 STEAM BOILERS



Features

- Miniature boiler max. vessel volume 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
- Heavy duty carbon steel pressure vessel. Vessel jacket 304 stainless steel and electrical enclosure powder coated carbon 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

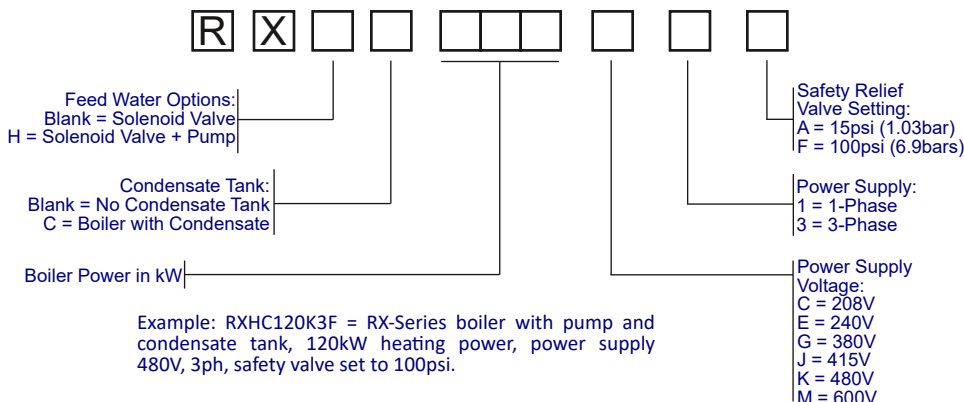
Applications

- Laboratories
- Process Heating
- Food Service
- Breweries
- Shrink Wrap Labels
- Dry Cleaning

(*) 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 POWER KW	OUTPUT CAPACITY LBS/hr (KG/HR) ⁽⁴⁾	BHP	NO. OF HEATING STAGES	VOLTAGE ⁽¹⁾	PHASE	SHIP WEIGHT ⁽²⁾ lbs (kg)	PRESSURE VESSEL CAPACITY GAL. (L)	OPERATING PRESSURE RANGE psi (bar)	STEAM OUTLET (NPT)	
									LP <15psig	HP >15psig
36 KW	122.83 (56)	3.6		208/240/480/600	3 ⁽²⁾	480 (218)	14.00 (53.00)	0 - 85 (0 - 5.86)	1	3/4
40 KW	136.48 (62)	4.0		208/240/380/415/480/600	3 ⁽²⁾	480 (218)	14.00 (53.00)	0 - 85 (0 - 5.86)	1	3/4
45 KW	153.54 (70)	4.5		208/240/380/415/480/600	3	530 (240)	14.00 (53.00)	0 - 85 (0 - 5.86)	1-1/4	3/4
54 KW	184.25 (84)	5.4		208/240/480/600	3	530 (240)	14.00 (53.00)	0 - 85 (0 - 5.86)	1-1/4	3/4
60 KW	204.72 (93)	6.0		208/240/380/415/480/600	3	530 (240)	14.00 (53.00)	0 - 85 (0 - 5.86)	1-1/4	1
72 KW	245.66 (111)	7.2		208/240/380/415/480/600	3	610 (277)	14.00 (53.00)	0 - 85 (0 - 5.86)	1-1/4	1
80 KW	272.96 (124)	8.0		208/240/380/415/480/600	3	610 (277)	14.00 (53.00)	0 - 85 (0 - 5.86)	1-1/4	1
90 KW	307.08 (139)	9.0		208	3	795 (361)	14.00 (53.00)	0 - 85 (0 - 5.86)	1-1/4	1
100 KW	341.20 (155)	10.0		208 ⁽⁵⁾ /240/380/415/480/600	3	795 (361)	14.00 (53.00)	0 - 85 (0 - 5.86)	1-1/4	1-1/4
120 KW	409.44 (186)	12.0		208/240/380/415/480/600	3	795 (361)	14.00 (53.00)	0 - 85 (0 - 5.86)	1-1/4	1-1/4

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

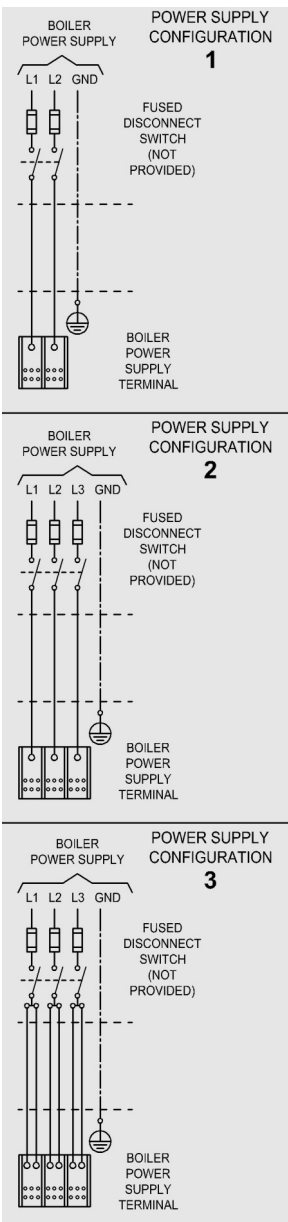
(4) The STEAM CAPACITY listed above is based on the evaporation rate from and at 212°F, at 0 psig. If the boiler feed water temperature is 50°F, then the STEAM CAPACITY for each model listed above is approximately 15% lower.

(5) RX100 model, rated 208V, 3ph is limited to 307lbs/hr, 90kW, 9BHP

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.

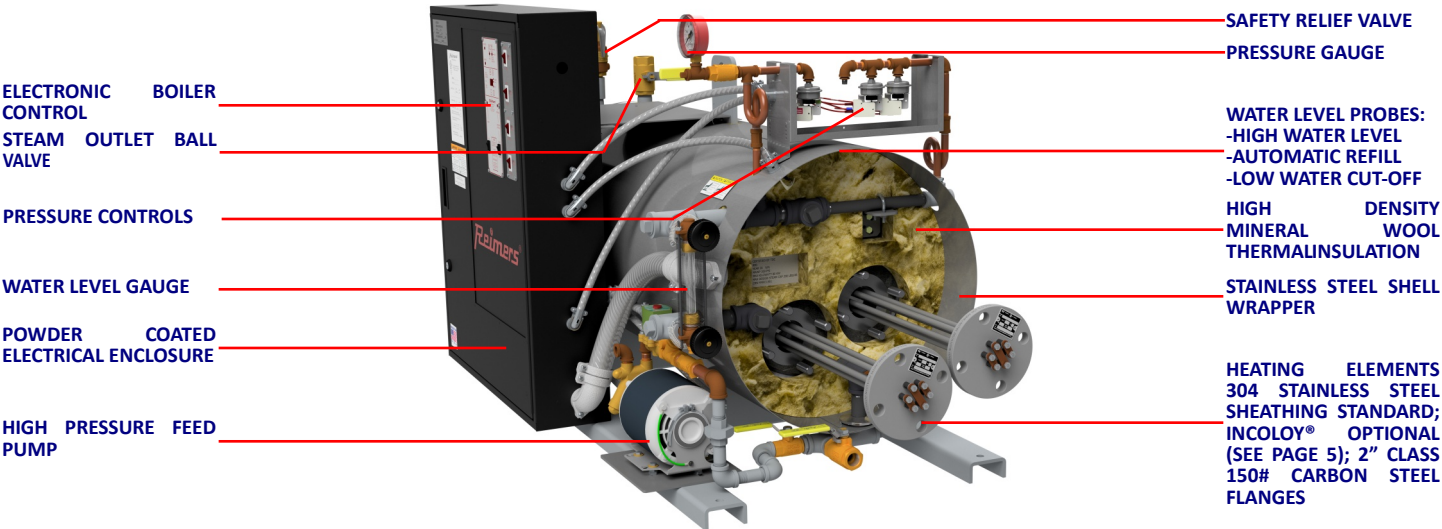
Electrical Specifications

BOILER HEATING POWER	PRIMARY VOLTAGE	PHASE	AMP DRAW	MIN REQ. N.E.C. SERVICE	POWER SUPPLY	
KW	V		A	A	MIN. REQUIRED CONDUCTOR SIZE IN BOILER ELECTRICAL ENCLOSURE (*)	CONFIGURATION
36	208	3	99.9	125	3 x AWG 1	2
	240	3	86.6	109	3 x AWG 2	2
	240	1	150.0	188	2 x AWG 3/0	1
	480	3	43.3	55	3 x AWG 6	2
	600	3	34.6	44	3 x AWG 8	2
40	208	3	111.0	139	3 x AWG 1/0	2
	240	3	96.2	121	3 x AWG 1	2
	240	1	166.7	209	2 x AWG 4/0	1
	380	3	60.8	76	3 x AWG 4	2
	415	3	55.6	70	3 x AWG 4	2
	480	3	48.1	61	3 x AWG 6	2
	600	3	38.5	49	3 x AWG 8	2
45	208	3	124.9	157	3 x AWG 2/0	2
	240	3	108.3	136	3 x AWG 1/0	2
	380	3	68.4	86	3 x AWG 3	2
	415	3	62.6	79	3 x AWG 4	2
	480	3	54.1	68	3 x AWG 4	2
	600	3	43.3	55	3 x AWG 6	2
54	208	3	149.9	188	3 x AWG 3/0	2
	240	3	129.9	163	3 x AWG 2/0	2
	480	3	65.0	82	3 x AWG 4	2
	600	3	52.0	65	3 x AWG 4	2
60	208	3	166.5	209	3 x AWG 4/0	2
	240	3	144.3	181	3 x AWG 3/0	2
	380	3	91.2	114	3 x AWG 1	2
	415	3	83.5	105	3 x AWG 2	2
	480	3	72.2	91	3 x AWG 3	2
	600	3	57.7	73	3 x AWG 4	2
72	208	3	199.9	250	3 x 250 MCM	2
	240	3	173.2	217	3 x AWG 4/0	2
	480	3	86.6	109	3 x AWG 2	2
	600	3	69.3	87	3 x AWG 3	2
80	208	3	222.1	278	3 x 350 MCM	2
	240	3	192.5	241	3 x 250 MCM	2
	380	3	121.6	152	3 x AWG 2/0	2
	415	3	111.3	140	3 x AWG 1/0	2
	480	3	96.2	121	3 x AWG 1	2
	600	3	77.0	97	3 x AWG 3	2
90	208	3	249.8	313	3 x 400 MCM	2
100	240	3	240.6	301	3 x 350 MCM	2
	380	3	151.9	190	3 x AWG 3/0	2
	415	3	139.1	174	3 x AWG 2/0	2
	480	3	120.3	151	3 x AWG 2/0	2
	600	3	96.2	121	3 x AWG 1	2
120	208	3	333.1	417	6 x AWG 4/0	3
	240	3	288.7	361	3 x 500 MCM	2
	380	3	182.3	228	3 x AWG 4/0	2
	415	3	166.9	209	3 x AWG 4/0	2
	480	3	144.3	181	3 x AWG 3/0	2
	600	3	115.5	145	3 x AWG 1/0	2

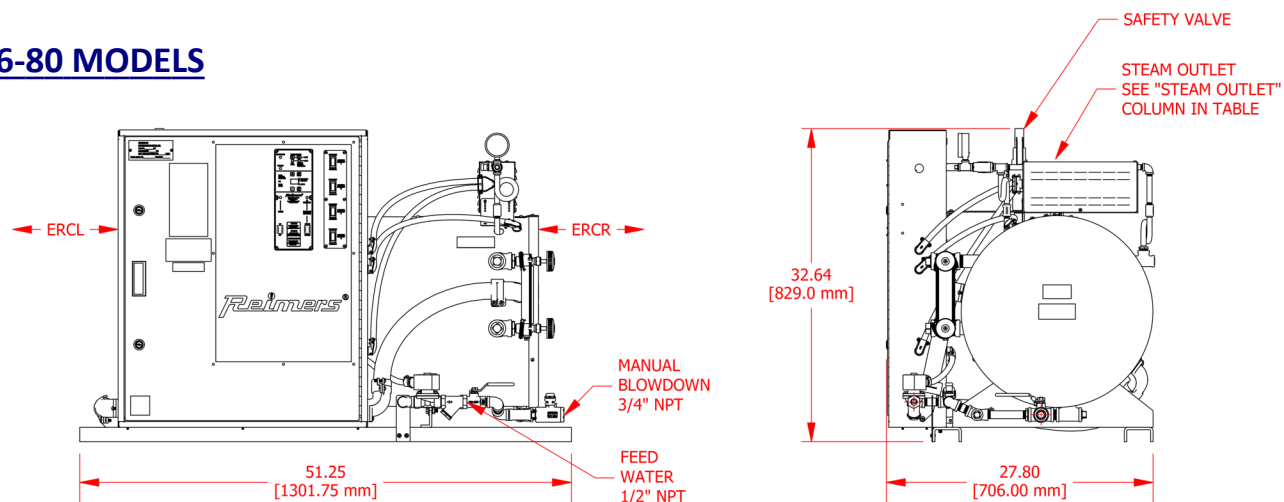


(*) The sizes shown in the above tabulation are the minimum required conductor sizes to be installed inside the boiler electrical enclosure as per the UL-File in which these boiler models are listed. The conductors must be rated at minimum 75°C. If the National Electrical Code (N.E.C.) or any other local code requires larger supply conductors at the boiler installation site then those conductor sizes shall be used.

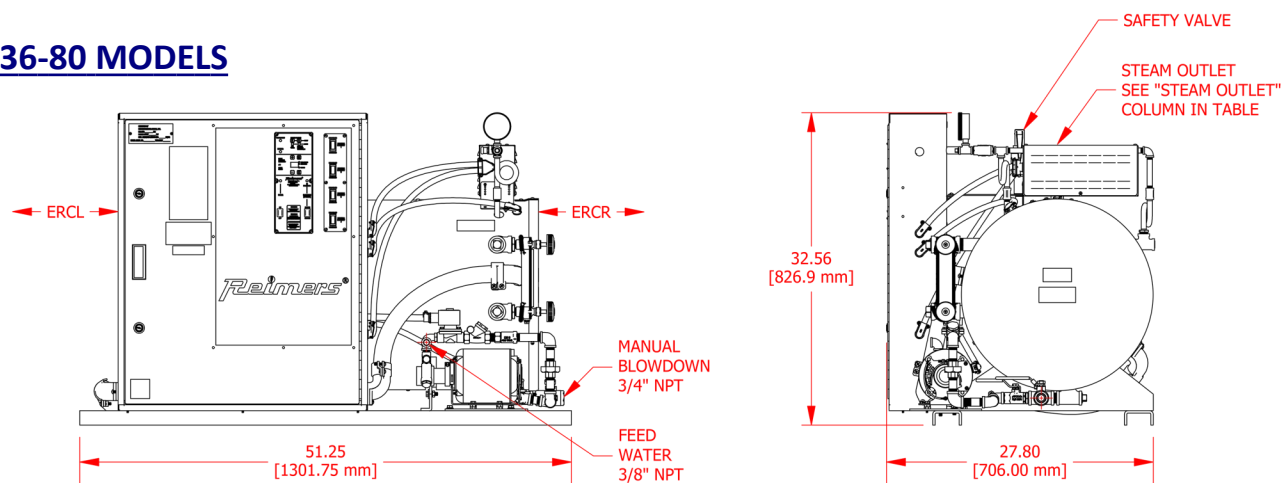
Construction



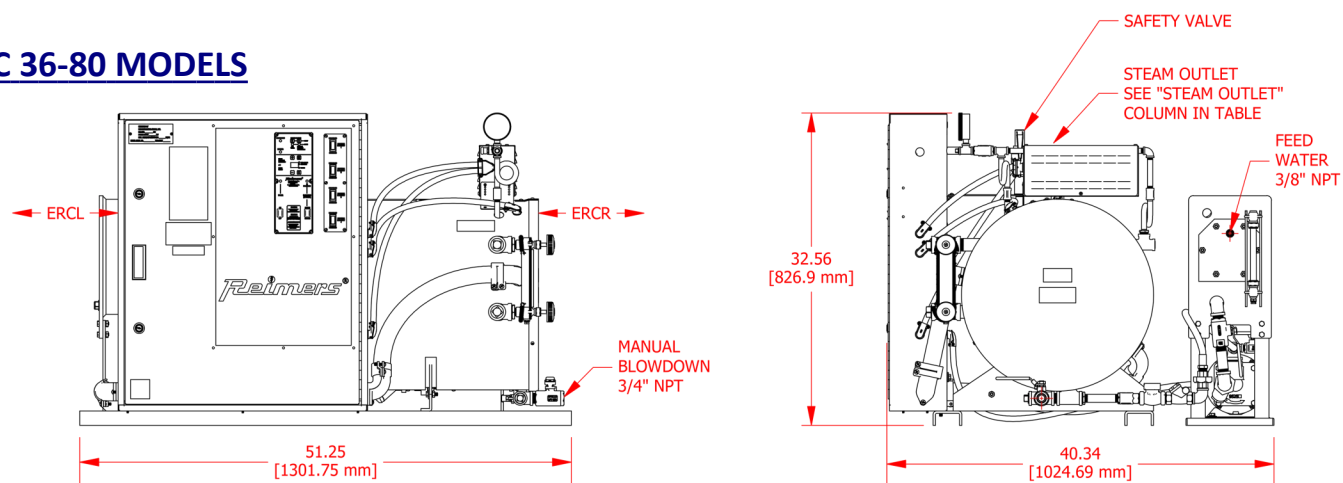
RX 36-80 MODELS



RXH 36-80 MODELS



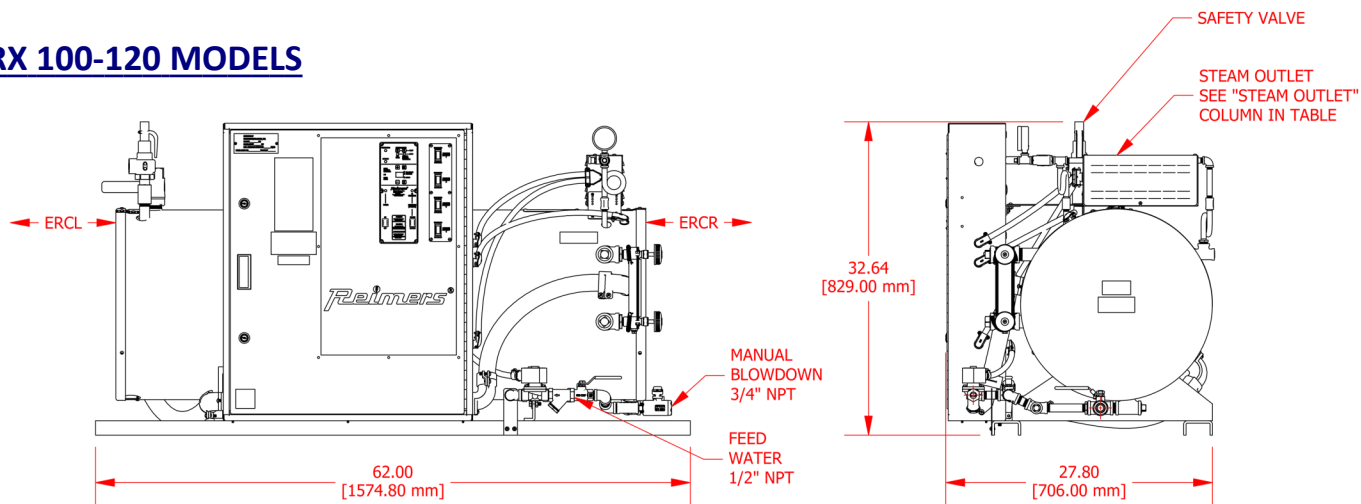
RXHC 36-80 MODELS



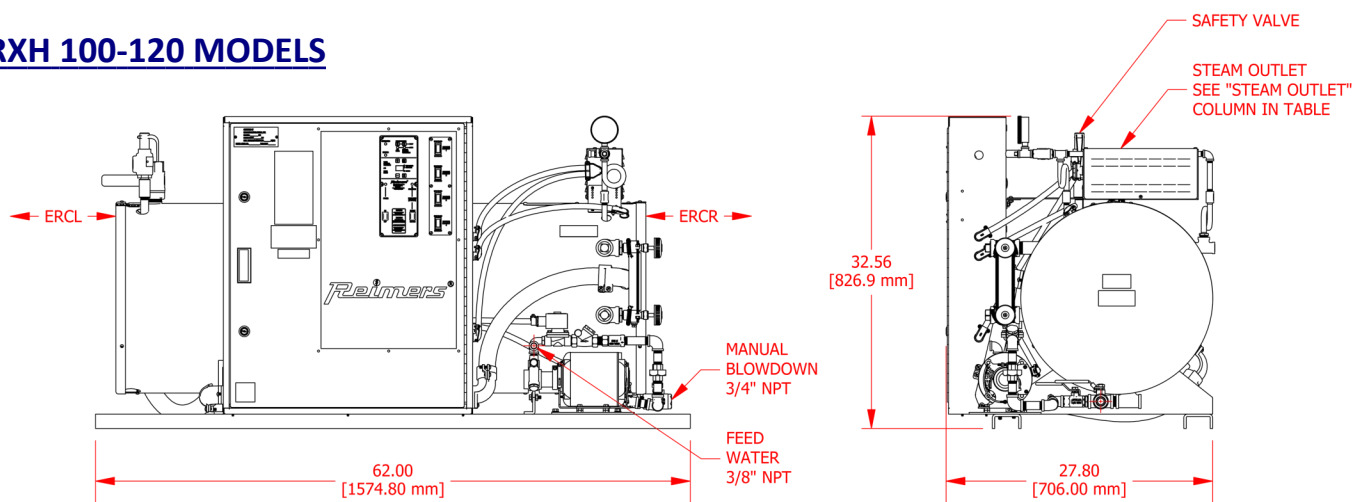
ELEMENT REMOVAL CLEARANCES LEFT & RIGHT (ERCL & ERCR)

MODEL	RX/RXH/RXHC-36	RX/RXH/RXHC-40	RX/RXH/RXHC-45	RX/RXH/RXHC-54	RX/RXH/RXHC-60	RX/RXH/RXHC-72	RX/RXH/RXHC-80
ERCL in (mm)	0	0	24 (610)	24 (610)	24 (610)	24 (610)	24 (610)
ERCR in (mm)	24 (610)	24 (610)	24 (610)	24 (610)	24 (610)	24 (610)	24 (610)

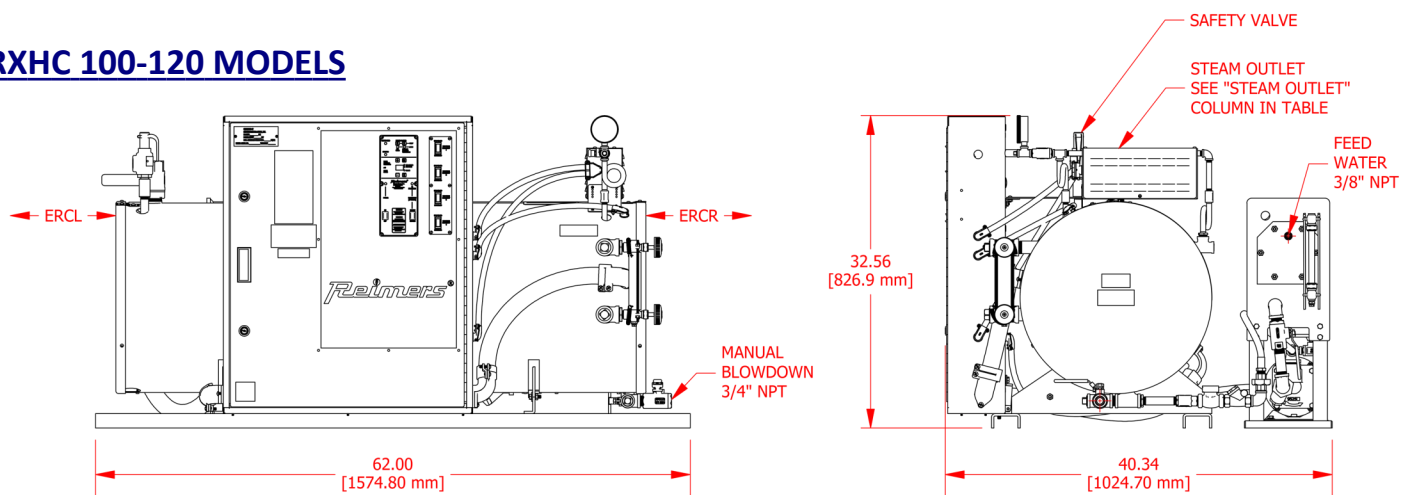
RX 100-120 MODELS



RXH 100-120 MODELS



RXHC 100-120 MODELS



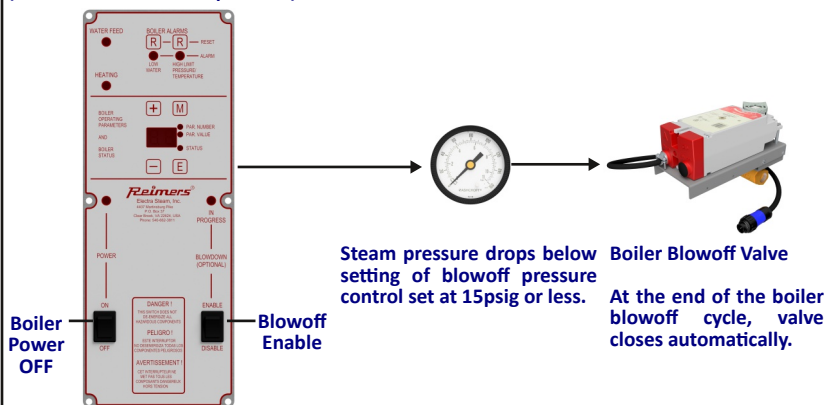
ELEMENT REMOVAL CLEARANCES LEFT & RIGHT (ERCL & ERCR)

MODEL	RX/RXH/RXHC-100	RX/RXH/RXHC-120
ERCL in (mm)	36 (915)	36 (915)
ERCR in (mm)	36 (915)	36 (915)

Optional Equipment and Accessories

Pressure Controlled Boiler Blowoff System Automatic Flush & Drain # OPT1016

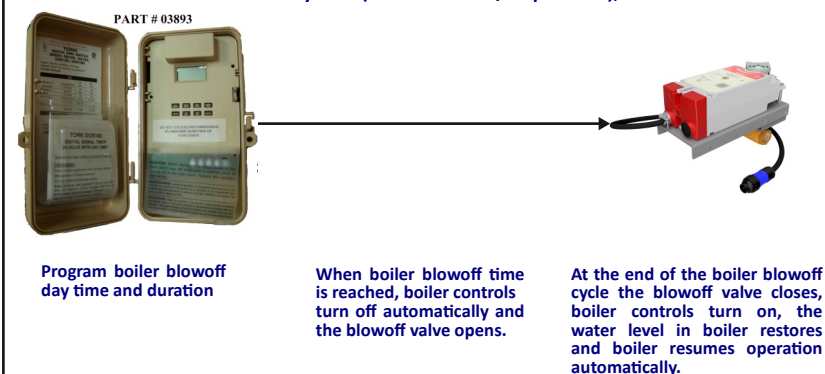
(Not suitable for 24/7 operation):



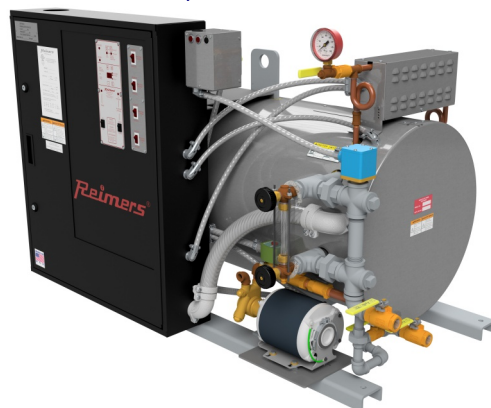
Auxiliary Low Water Cut-Off with McDonnell & Miller Model MM150, # OPTMM150:



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

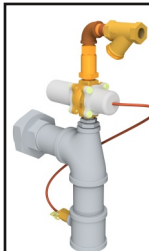
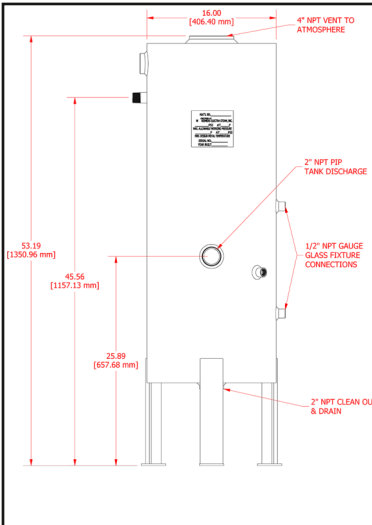


Auxiliary Low Water Cut-Off with Conductive Type Probe Fitting in External Water Column, # OPT1012:



Boiler Blowoff Tank, #BTANK-16:

- 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 100psig.



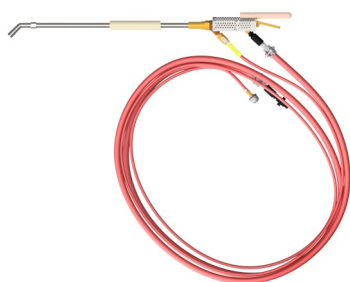
Boiler Blowoff Tank After-Cooler #OPT1027:

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 single point boiler power supply.

Main Boiler Supply Voltage	Transformer Option Part Number	
	Boiler Model	
	R-	RH- and RHC-
208V	OPT1010 - 208R	OPT1011 - 208RH
240V	OPT1010 - 240R	OPT1011 - 240RH
380V	OPT1010 - 380	OPT1011 - 380RH
415V	OPT1010 - 380	OPT1011 - 380RH
480V	OPT1010 - 480R	OPT1011 - 480RH
600V	OPT1010 - 600R	OPT1011 - 600RH

Boiler Steam Wand for Cleaning Applications



Proportional Step Control, #OPT1048-RX



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

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 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

