

RHP330 - RHP510 STEAM BOILERS



Applications

- Process Steam
- Industrial Autoclaves

- Air Humidification
- Dry Cleaning

- Food Service
- Laboratories
- Automotive Industry

Features

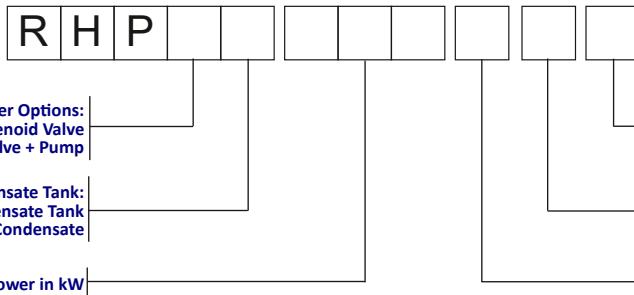
- Maximum safety valve setting 150psi
- All boilers are manufactured in accordance with the requirements of the A.S.M.E. Boiler and Pressure Vessel Code and A.S.M.E. CSD-1. Each boiler bears the National Board Stamp "S".
- High quality saturated steam, operating pressure range 0 – 135psig
- Heavy duty carbon steel pressure vessel. Vessel jacket and electrical enclosure made from painted carbon steel
- Large selection of optional equipment

Standard Equipment of Each Boiler Includes:

- A.S.M.E. pressure relief valve
- One (1) slow opening boiler bottom blowoff valve as per A.S.M.E. Code B31.1
- Steam outlet globe valve
- High pressure feed pump in RPH- and RPHC-models
- One (1) primary high pressure cutoff control with automatic reset and one (1) secondary high pressure cutoff control with manual reset
- One (1) primary low water cutoff control with automatic reset and one (1) secondary low water cutoff with manual reset
- PID-step controller with number of heating stages depending on boiler model
- Digital readout of the operating pressure
- Magnetic contactors
- Internal branch circuit fusing
- Main supply power distribution block
- Indicator lights for POWER, REFILLING, HEATING, ALARMS and Automatic Boiler Blowoff Status
- Pressure and water level gauge

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
330 KW	1125.96 (511)	33.0	6	380/415/480/600	3	2440 (1107)	124.00 (469.39)	0 - 135 (0 - 9.3)	3	2
360 KW	1228.32 (557)	36.0	6	380/415/480/600	3	2460 (1116)	124.00 (469.39)	0 - 135 (0 - 9.3)	3	2
390 KW	1330.68 (603)	39.0	6	380/415/480/600	3	2480 (1125)	124.00 (469.39)	0 - 135 (0 - 9.3)	3	2
420 KW	1433.04 (650)	42.0	7	380/415/480/600	3	2500 (1134)	124.00 (469.39)	0 - 135 (0 - 9.3)	3	2
450 KW	1535.40 (696)	45.0	7	380/415/480/600	3	2520 (1143)	124.00 (469.39)	0 - 135 (0 - 9.3)	3	2
480 KW	1637.76 (743)	48.0	7	380/415/480/600	3	2540 (1152)	124.00 (469.39)	0 - 135 (0 - 9.3)	3	2
510 KW	1740.12 (789)	51.0	8	380/415/480/600	3	2540 (1152)	124.00 (469.39)	0 - 135 (0 - 9.3)	3	2

Model Number Key



Example: RPHC360K3H = RHP-Series boiler with pump and condensate tank, 360kW heating power, power supply 480V, 3ph, safety valve set to 150psi.

⁽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⁾ On boiler equipped with condensate tank, add 250lbs (113kg) to shipping weight

⁽³⁾ 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.

Safety Relief Valve Setting:
A = 15psi (1.03bar)
H = 150psi (10.3bars)

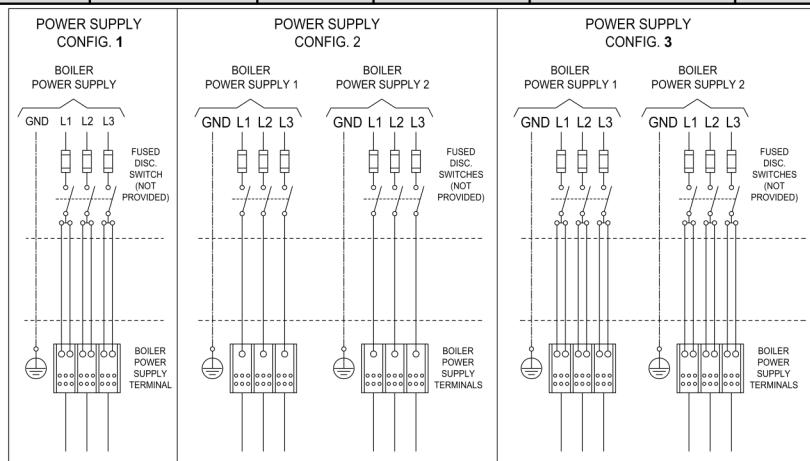
Power Supply:
3 = 3-Phase

Power Supply Voltage:
E = 240V
G = 380V
J = 415V
K = 480V
M = 600V

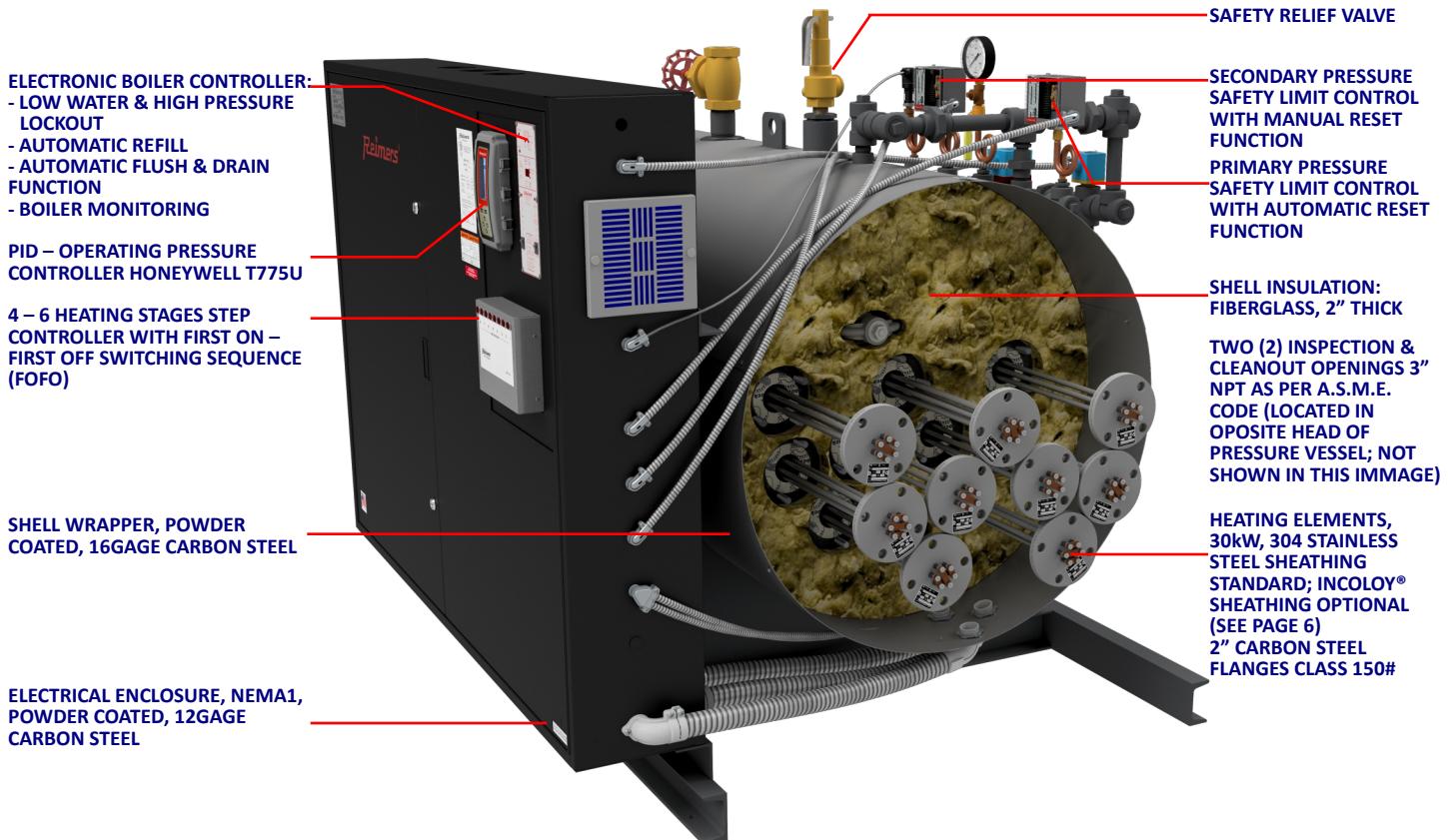
Please note that all information provided within this brochure is approximate and subject to change without notice.
 Please contact Reimers Electra Steam, Inc. with any questions regarding the specifications or dimensions detailed within.

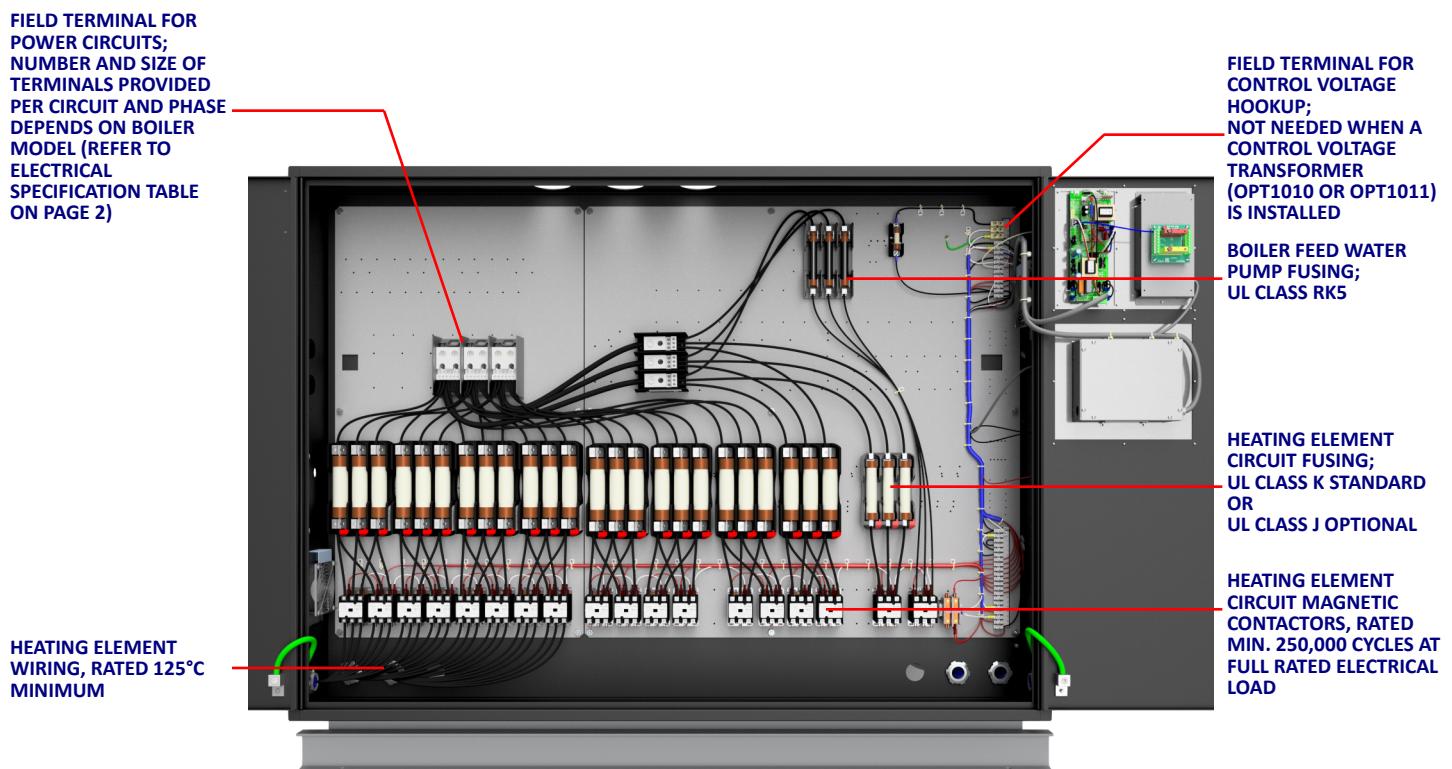
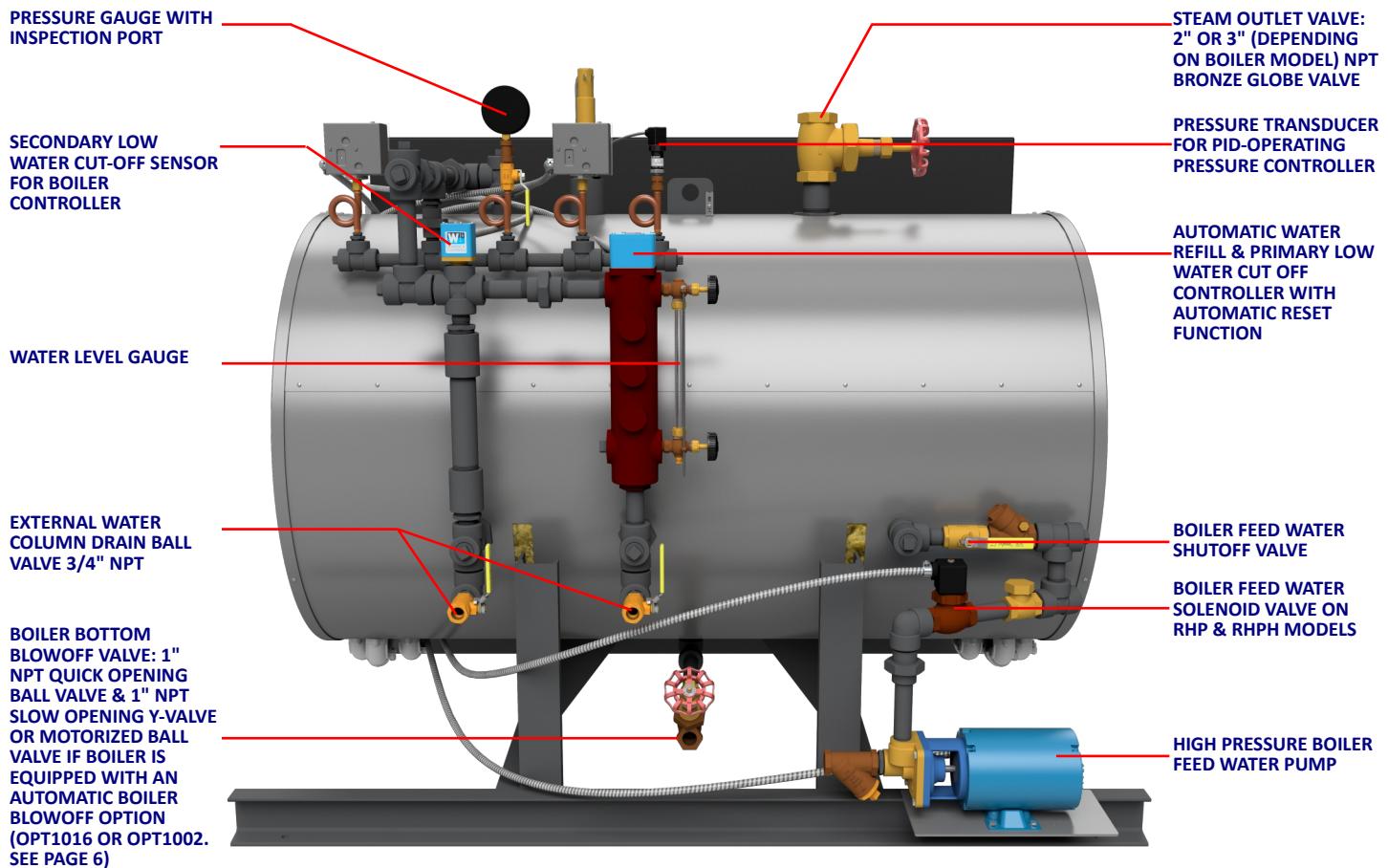
Electrical Specifications

HEATING POWER	VOLTAGE	PH	AMP DRAW	MIN REQ. N.E.C. SERVICE	INTERNAL POWER FUSING	INTERNAL ELEMENT WIRING	NUMBER & SIZES OF CONTACTORS	NUMBER & SIZE OF ELEMENTS	POWER SUPPLY	
									A	A
									AWG (mm ²)	TERMINAL MAX. CONDUCTOR SIZE
360	380	3	547.0	648.0	36 x 60A, 600V	8 (8.35)	12 x 75A	12 x 30kW, 380V, 3ph	6 x 500MCM	2
415	3	500.8	626.0	626.0	18 x 100A, 600V	8 (8.35)	12 x 50A	12 x 30kW, 415V, 3ph	6 x 500MCM	2
480	3	433.0	542.0	542.0	18 x 90A, 600V	8 (8.35)	12 x 50A	12 x 30kW, 480V, 3ph	6 x 500MCM	1
600	3	346.4	433.0	433.0	18 x 70A, 600V	8 (8.35)	12 x 50A	12 x 30kW, 600V, 3ph	6 x 500MCM	1
420	380	3	638.1	798.0	42 x 60A, 600V	8 (8.35)	14 x 75A	14 x 30kW, 380V, 3ph	12 x 500MCM	3
415	3	584.3	731.0	731.0	21 x 100A, 600V	8 (8.35)	14 x 50A	14 x 30kW, 415V, 3ph	6 x 500MCM	2
480	3	505.2	632.0	632.0	21 x 90A, 600V	8 (8.35)	14 x 50A	14 x 30kW, 480V, 3ph	6 x 500MCM	2
600	3	404.1	506.0	506.0	21 x 70A, 600V	8 (8.35)	14 x 50A	14 x 30kW, 600V, 3ph	6 x 500MCM	1
510	380	3	774.9	969.0	17 x 60A, 600V	8 (8.35)	17 x 75A	17 x 30kW, 380V, 3ph	12 x 500MCM	3
	415	3	709.5	887.0	24 x 100A, 600V 3 x 50A, 600V	8 (8.35)	17 x 50A	17 x 30kW, 415V, 3ph	12 x 500MCM	3
	480	3	613.4	767.0	24 x 90A, 600V 3 x 50A, 600V	8 (8.35)	17 x 50A	17 x 30kW, 480V, 3ph	12 x 500MCM	3
	600	3	490.7	614.0	24 x 70A, 600V 3 x 40A, 600V	8 (8.35)	17 x 50A	17 x 30kW, 600V, 3ph	6 x 500MCM	2

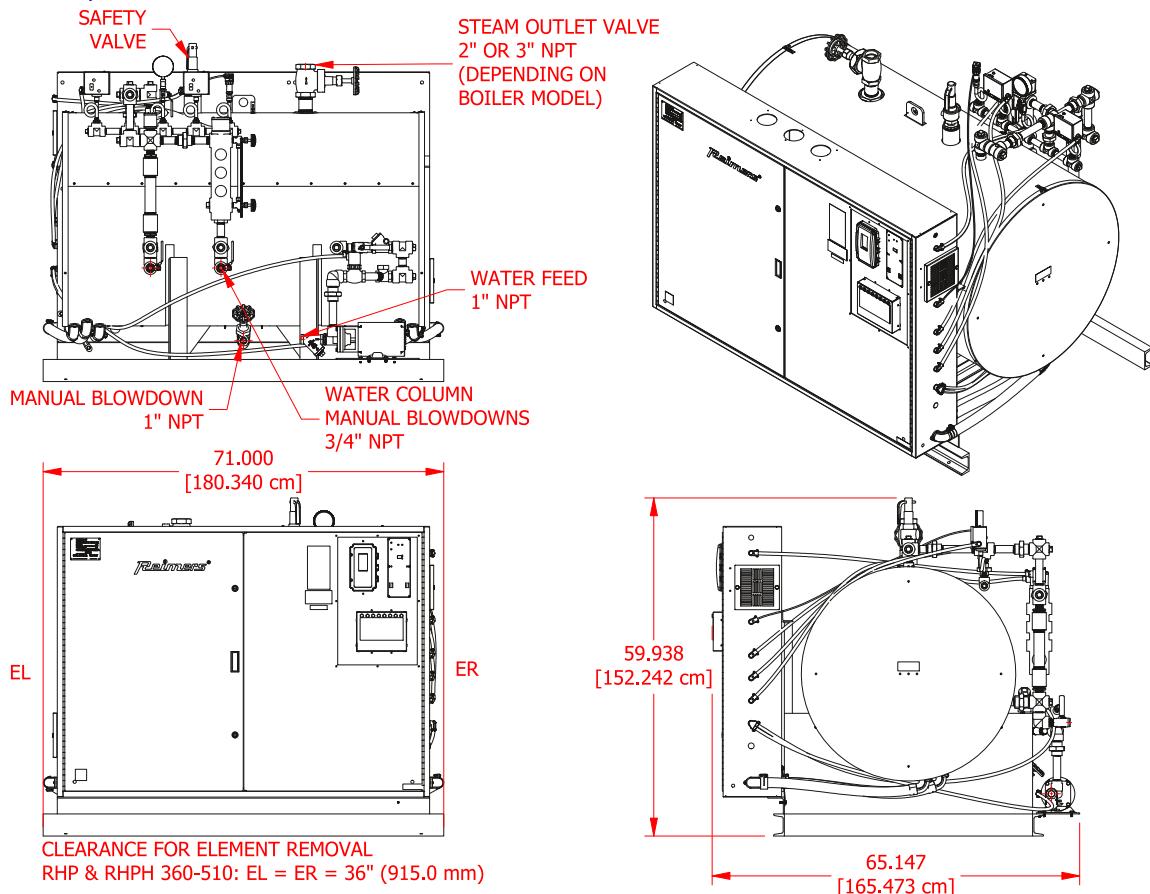


Construction

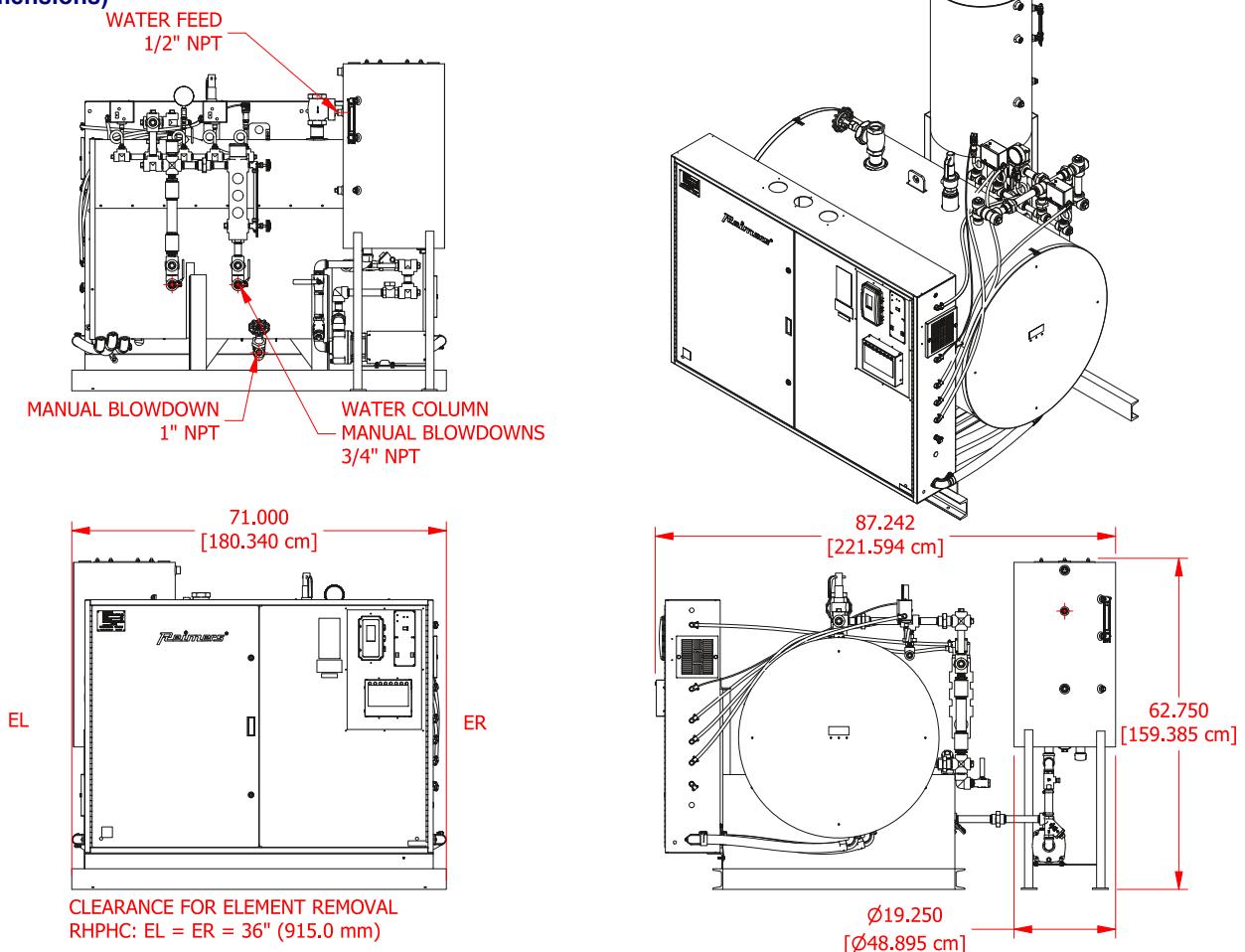




RHP & RPH 360-510 MODELS (Approximate Dimensions)



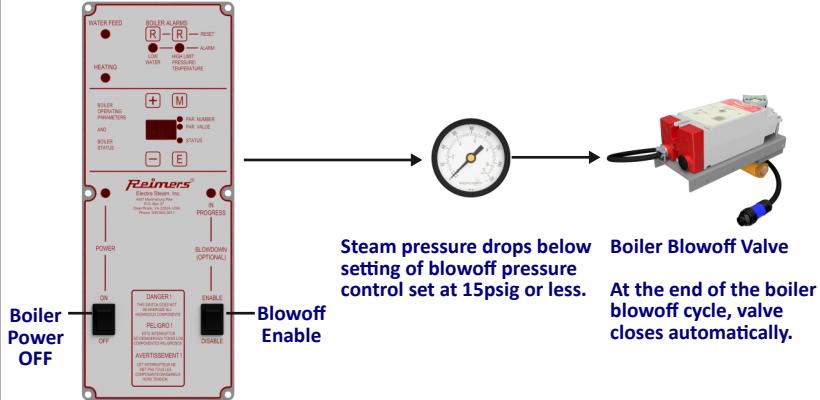
RPHC 360-510 MODELS (Approximate Dimensions)



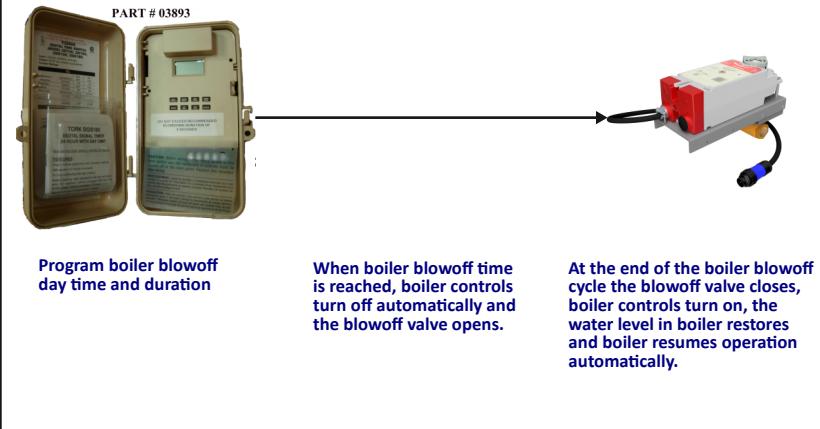
Optional Equipment and Accessories

Pressure Controlled Boiler Blowoff System Automatic Flush & Drain # OPT1016

(Not suitable for 24/7 operation):

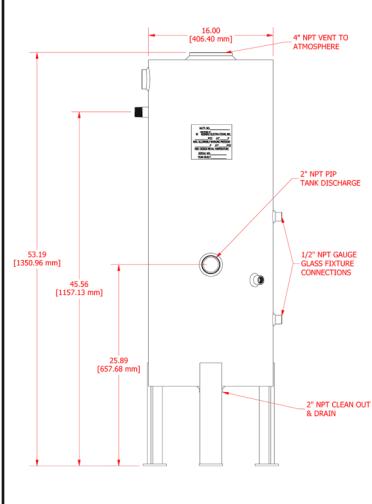
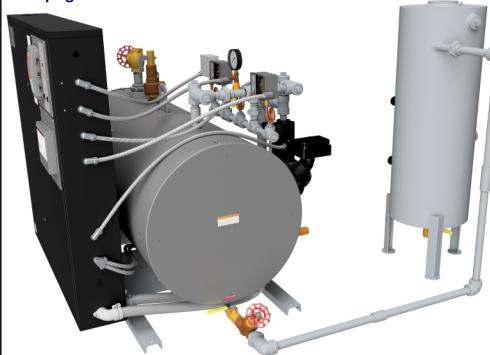


Timer Controlled Boiler Blowoff System (Suitable for 24/7 operation), # OPT1001:



Boiler Blowoff Tank, #BTANK300USA/CRN:

- 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 point boiler power supply.

Boiler Voltage	Transformer Option Part Number
380V	OPT1011 - 380RHP
415V	OPT1011 - 380RHP
480V	OPT1011 - 480RHP
600V	OPT1011 - 600RHP

Timer Controlled Boiler On/Off, #OPT1017



INCOLOY® HEATING ELEMENT SHEATHING, #OPT-INCOLOY®