

Series TCII™

Large Commercial Boilers



Standard Equipment

- High Efficiency Power Burners*
- Burner Mounting Plate with Insulation Block
- Front and Rear Observation Port
- Graphite Port Connectors
- Steel Angle Floor Rails
- Insulated Enameled Steel Jacket
- Cast Iron Flue Collector with Integral Damper
- Manual Reset, Limit Control
- Tankless Coils—For Domestic Hot Water

*Choice of Beckett, Carlin or Power Flame

Series TCII™ Boiler Features

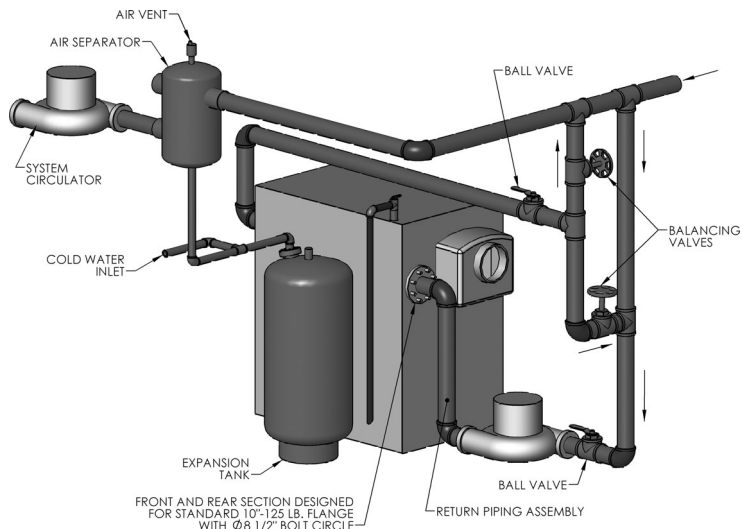
- Forced Draft Firing for the Highest Possible Efficiencies!
- Equipped with Balanced Return Temperature (Water Boilers)
- Constructed of Rugged, Cast Iron, Wet-Base Sections
- Oil, Gas or Combination Gas/Oil-fired for Hot Water or Steam Systems
- 15 Sizes, 4–18 Sections—Ideal for Large Commercial Applications
- Optional LoNOx, SCAQMD Certified (TCII-04 - TCII-07 models)

Balanced Return Temperature Technology (For Hot Water Boilers)

- Simplest, Most Effective Method to Reduce or Eliminate Stress Failures in Cast Iron Boilers
- Installation Requires No Additional Controls, Pumps or Piping!
- Easy to Install; Fits into Upper Flow Port
- Completely Self-adjusting and Sized for a Specific TCII™ Boiler Model

All commercial cast iron boilers include a full one-year warranty. A limited, ten-year warranty is provided on the cast iron sections for all commercial hot water and steam boilers. Visit PeerlessBoilers.com for complete details.

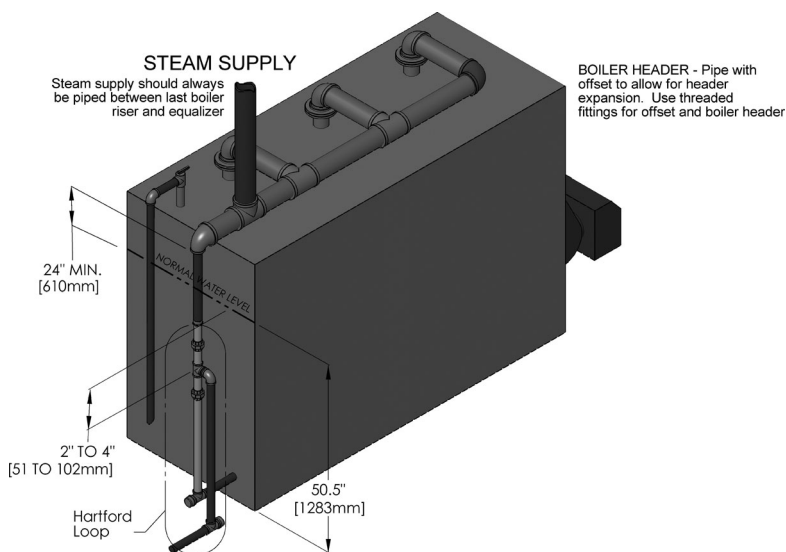
Water Piping



Boiler Piping (Water)

Boiler Model Number	Supply & Return Size
TCII-04 & TCII-05	3"
TCII-06 to TCII-09	4"
TCII-10 to TCII-18	5"

Steam Piping



Boiler Piping (Steam)

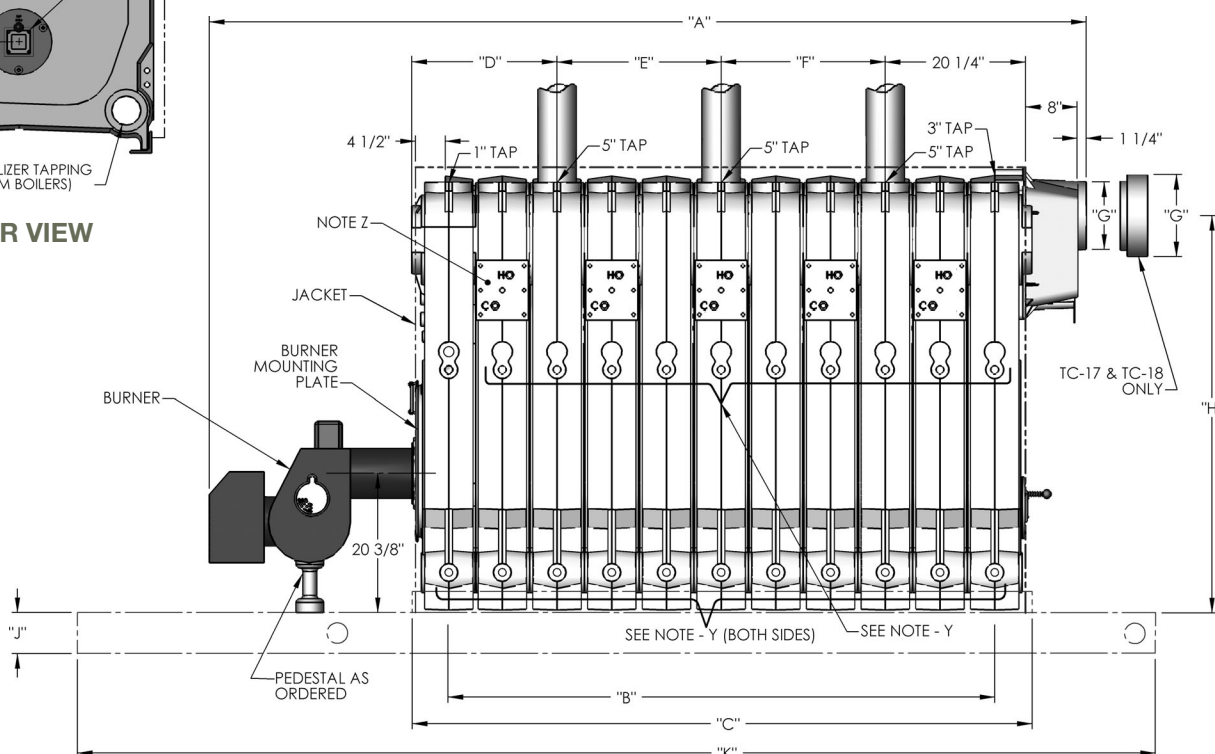
Boiler Model Number	Number of 5" NPT Risers	Header Size (NPT)	Equalizer Size (NPT)
TCII-04 & TCII-05	1	5"	2-1/2"
TCII-06 & TCII-07	2	5"	2-1/2"
TCII-08 to TCII-10	2	6"	4"
TCII-11 to TCII-18	3	8"	4"

Burner Specifications

Boiler Model Number	Burners – Light Oil								Burners – Gas						Burners – Gas/Oil			
	Beckett		Carlin		Power Flame		Riello		Beckett		Power Flame		Riello		Power Flame		Riello	
	Model No.	H.P.	Model No.	H.P.	Model No.	H.P.	Model No.	H.P.	Model No.	H.P.	Model No.	H.P.	Model No.	H.P.	Model No.	H.P.	Model No.	H.P.
TCII-04	CF1400	1/2	702CRD	1/2	C1	1/2	RL28/2	1/2	CG15	1/2	J50A	1/3	RS28	1/2	C1	1/2	RLS28	1/2
TCII-05	CF2300	3/4	702CRD	1/2	C1	1/2	RL38/2	1/2	CG25	3/4	J50A	1/2	RS38	1/2	C1	1/2	RLS38	1/2
TCII-06	CF2300	3/4	801CRD	3/4	C2	1	RL50/2	3/4	CG25	3/4	J50A	1/2	RS50	3/4	C2	1	RLS50	3/4
TCII-07	CF2300	3/4	801CRD	3/4	C2	1	RL50/2	3/4	CG25	3/4	J50A	1/2	RS50	3/4	C2	1	RLS50	3/4
TCII-08	CF2500	3/4	801CRD	3/4	C2	1	RL70/2	1-1/2	CG25	3/4	C2	3/4	RS70	1-1/2	C2	1	RLS70	1-1/2
TCII-09	CF2500	3/4	1050FFD	1	C2	1-1/2	RL70/2	1-1/2	CG50	2	C2	1	RS70	1-1/2	C2	1-1/2	RLS70	1-1/2
TCII-10	CF2500	2	1050FFD	1	C2	1-1/2	RL100/M	2-1/2	CG50	2	C2	1	RS100/M	2-1/2	C2	1-1/2	RLS100	2-1/2
TCII-11	CF3500	2	1150FFD	1-1/2	C3	2	RL100/M	2-1/2	CG50	2	C3	1-1/2	RS100/M	2-1/2	C3	2	RLS100	2-1/2
TCII-12	CF3500	2	1150FFD	1-1/2	C3	2	RL100/M	2-1/2	CG50	2	C3	1-1/2	RS100/M	2-1/2	C3	2	RLS100	2-1/2
TCII-13	CF3500	2	1150FFD	1-1/2	C3	2	RL100/M	2-1/2	CG50	2	C3	1-1/2	RS100/M	2-1/2	C3	2	RLS100	2-1/2
TCII-14	—	—	—	—	C3	2	RL100/M	2-1/2	—	—	C3	1-1/2	RS100/M	2-1/2	C3	2	RLS100	2-1/2
TCII-15	—	—	—	—	C3	3	RL130/M	3	—	—	C3	3	RS130/M	3	C3	3	RLS130	3
TCII-16	—	—	—	—	C3	3	RL130/M	3	—	—	C3	3	RS130/M	3	C3	3	RLS130	3
TCII-17	—	—	—	—	C4	3	RL130/M	3	—	—	C4	3	RS130/M	3	C4	3	RLS130	3
TCII-18	—	—	—	—	C4	5	RL190/M	5-1/2	—	—	C4	3	RS190/M	5	C4	5	—	—

Note: Low-High-Low or Modulation Firing consult the factory.

Your representative should be consulted before selecting boilers for installation having unusual piping and pick-up requirements, such as intermittent system operation, extensive piping systems, etc. For forced hot water heating systems where the boiler and all the piping are within the area to be heated, the boiler may be selected on the basis of its Gross Output.



SIDE VIEW

Note Y: 1-1/2" Inspection tappings when ordered.

Note Z: Tankless heater sections when ordered.

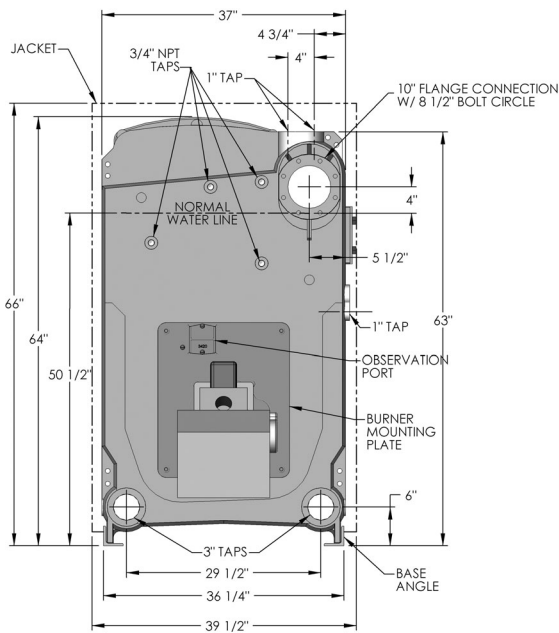
Boiler Dimensions

Boiler Model Number	Overall Length – “A” ¹ (inch)			Optional Packaged Base Dimension “K” (inch)	Firebox Length “B” (inch)	Boiler Length “C” (inch)	Riser Tapping Locations			Dia. Vent Conn. “G” (inch)	Height Vent Conn. “H” (inch)	Base Height “J” (inch)
	Beckett	Carlin	Power Flame				“D” (inch)	“E” (inch)	“F” (inch)			
TCII-04	64-1/4	62-1/4	71-3/4	91-1/4	23-5/16	33	12.5	—	—	10	57.625	6
TCII-05	72-1/4	70-1/4	83-1/4	104-1/4	31-5/16	41	20.5	—	—	10	57.625	6
TCII-06	80-1/4	80-1/4	91-1/4	112-1/4	39-5/16	49	12.5	16	—	10	57.625	6
TCII-07	88-3/4	88-1/4	99-1/4	120-1/2	47-5/16	57	12.5	24	—	12	56.625	6
TCII-08	96-3/4	96-1/4	107-1/4	128-1/2	55-5/16	65	12.5	32	—	12	56.625	6
TCII-09	104-3/4	108-3/4	115-1/4	136-1/2	63-5/16	73	12.5	40	—	14	55.625	6
TCII-10	116-1/2	116-3/4	128-1/4	144-3/4	71-5/16	81	20.5	40	—	14	55.625	6
TCII-11	124-1/2	125-1/4	137-1/4	157-3/4	79-5/16	89	20.5	24	24	14	55.625	6
TCII-12	132-1/2	133-1/4	145-1/4	166-1/4	87-5/16	97	20.5	24	32	14	55.625	6
TCII-13	N/A	141-1/4	153-1/4	173-3/4	95-5/16	105	20.5	32	32	14	55.625	6
TCII-14	N/A	149-1/4	161-1/4	181-3/4	103-5/16	113	20.5	32	40	16	54.625	6
TCII-15	N/A	N/A	169-1/4	189-7/8	111-5/16	121	20.5	40	40	16	54.625	8
TCII-16	N/A	N/A	177-1/4	198-1/4	119-5/16	129	20.5	48	40	16	54.625	8
TCII-17	N/A	N/A	191-1/4	211-1/4	127-5/16	137	20.5	48	48	18	54.625	8
TCII-18	N/A	N/A	199-1/4	219-1/4	135-5/16	145	20.5	56	48	18	54.625	8

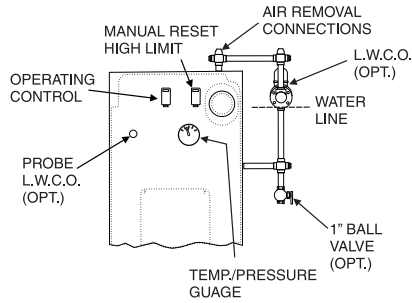
1 Add 2 3/4" (70 mm) to TCII-17 & TCII-18 for flue outlet adapter.



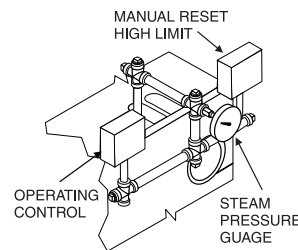
Technical Information



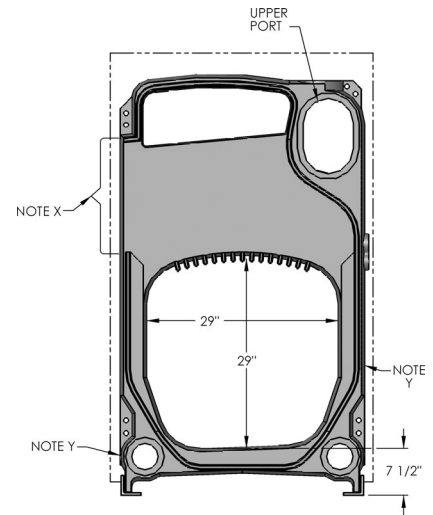
**FRONT VIEW
(Steam Boiler)**



**CONTROL LOCATIONS
(Water Boiler)**



**CONTROL LOCATIONS
(Steam Boiler)**



INTERMEDIATE SECTION

Note X: Flue cleanout opening. Allow 36" clear work space for using flue brush.

Note Y: 1-1/2" inspection tapings when ordered.

Boiler Ratings

Series TCII™																	
Boiler Model Number	Oil Input²		Gas Input³, MBH	Gross Output MBH	NET			Oil		Gas							
					Steam		Water, MBH¹	Combustion Efficiency, %	Thermal Efficiency, %	Combustion Efficiency, %	Thermal Efficiency, %						
GPH	MBH	sqft	MBH¹														
TCII-04	7.9	1,106	1,143	931	2,908	698	810	86.2	83.9	83.6	81.4	28	123.4	103.8	12.04	4,215	81.2
TCII-05	10.2	1,428	1,458	1,194	3,733	896	1,038	86.2	84.4	83.6	81.9	36	150.3	125.8	16.14	5,038	105.3
TCII-06	12.2	1,708	1,773	1,458	4,625	1,110	1,268	86.1	84.8	83.5	82.2	44	177.2	147.8	20.24	5,861	129.4
TCII-07	14.4	2,016	2,088	1,722	5,542	1,330	1,497	86.1	85.0	83.5	82.5	51	204.1	169.8	24.34	6,684	153.5
TCII-08	16.6	2,324	2,403	1,985	6,421	1,541	1,726	86.1	85.2	83.5	82.6	59	231.0	191.8	28.44	7,507	177.6
TCII-09	18.8	2,632	2,718	2,249	7,275	1,745	1,956	86.1	85.3	83.5	82.7	67	257.9	213.8	32.54	8,331	201.7
TCII-10	21.0	2,940	3,033	2,513	8,129	1,951	2,185	86.1	85.4	83.5	82.8	75	284.8	235.8	36.64	9,169	225.8
TCII-11	23.0	3,220	3,348	2,776	8,979	2,155	2,414	86.0	85.5	83.5	82.9	83	311.7	257.8	40.74	9,992	249.9
TCII-12	25.5	3,570	3,663	3,040	9,833	2,360	2,643	86.0	85.6	83.5	83.0	91	338.6	279.8	44.84	10,815	274.0
TCII-13	27.5	3,850	3,978	3,304	10,688	2,565	2,873	86.0	85.6	83.5	83.0	99	365.5	301.8	48.94	11,649	289.1
TCII-14	29.5	4,130	4,293	3,567	11,538	2,769	3,102	86.0	85.7	83.5	83.1	107	392.4	323.8	53.04	12,467	322.2
TCII-15	32.0	4,480	4,608	3,831	12,392	2,974	3,331	86.0	85.7	83.4	83.1	114	419.3	345.8	57.14	13,511	346.3
TCII-16	34.0	4,760	4,923	4,095	13,246	3,179	3,561	86.0	85.7	83.4	83.2	122	446.2	367.8	61.24	14,375	370.4
TCII-17	36.5	5,110	5,238	4,358	14,100	3,384	3,790	86.0	85.8	83.4	83.2	130	473.1	389.8	65.34	15,239	394.5
TCII-18	38.5	5,390	5,553	4,622	14,954	3,589	4,019	86.0	85.8	83.4	83.2	138	500.0	411.8	69.44	16,103	418.6

- Notes:
- Net Ratings are based on an allowance of 1.15 for Water Boilers. Net Ratings for steam boilers are based on a pick-up factors as follows: TCII-04 & TCII-05, 1.333; TCII-06 & TCII-07, 1.305; TCII-08 through TCII-18, 1.288.
 - Burner oil input based on Commercial Standard #2 fuel oil with a heating value of 140,000 BTU/Gal.
 - Burner natural gas input based on natural gas with a heating value of 1,000 BTU/Cu. Ft. and a specific gravity of 0.60.



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