# Junkirk D248 Steam

## Innovative. Efficient. Dependable. Dunkirk.

## D248 Steam

### **Commercial Gas Fired Steam Boiler**

**Steam Trim Package:** 

## Electronic Ignition Base Standard Equipment:

- Base
- Fire Door
- Burner Orifice
- Manifold
- Main and Pilot Burner
- Electronic Pilot Gas Valve
- Intermittent Pilot Module
- High Gas Pressure Switch
- Low Water Cut-Off
  Glass Gauge Set
  Safety Valve
- Steam Gauge
- Pressure Limit
- Drain Valve
- Complete Jacket Assembly

D248 Series Boiler Bases are pre-assembled at the factory with burner manifold, burner orifices, gas valves and electronic ignition installed, ready for field installation of the pre-tested sections and appropriate packages.

#### Plug 'N Play Harness and Junction Box

Individual base and junction box controls are designed for easy installation with Plug 'n Play harnesses. The entire boiler links together in a "snap". A color-coded factory supplied harness eliminates wiring errors.

#### **Modular Efficiency**

Most commercial boilers are either "all-on" or "all-off". The D248 boiler when used in conjunction with the optional Argo AMB Control Kit will stage fire the individual bases. Depending on model, capacities as low as 11% of full load can be obtained for optimal performance. The optional AMB Control Kit adjusts the water temperature for increased fuel economy. The control balances section run time for increased reliability. The modular base design allows for built in back-up to reduce "no heat" situations.

#### **CSD1** Option

D248 boilers are available with a CSD1 option to comply with CSD1 standards where required by building code. The CSD1 option provides the increased number of controls and safety devices required to meet CSD1 standards.



## Dunkirk D248 Commercial Gas-Fired Steam Boiler

Model	Input (Mbh) <sup>(1)</sup>	Gross Output (Mbh)	Net AHRI Ratings			Base Size & Flue Outlet				Vent		
			Steam (PPF) <sup>(2)</sup>	Steam (Sq. Ft.) <sup>(3)</sup>	Steam (Mbh) <sup>(2)</sup>	300 (8")	300 (8") 400 (10") 500 (12") I.D. x Ht. to Chimney <sup>(4)</sup>	Therm. Eff.	Comb Eff			
D248-300S	300	233	1.333	729	175	1	0	0	8" x 20'	8	77.5	80.4
D248-400S	400	310	1.333	971	233	0	1	0	10" x 20'	10	77.5	80.5
D248-500S	500	388	1.333	1213	291	0	0	1	12" x 20'	12	77.5	80.5
D248-600S	600	465	1.333	1454	349	2	0	0	12" x 20'	12	77.5	80.4
D248-700S	700	543	1.333	1696	407	1	1	0	12" x 20'	12	77.5	80.5
D248-800S	800	620	1.333	1938	465	0	2	0	14" x 20'	14	77.5	80.5
D248-900S	900	698	1.333	2183	524	0	1	1	14" x 20'	14	77.5	80.5
D248-1000S	1000	775	1.333	2421	581	0	0	2	14" x 20'	14	77.5	80.5
D248-1100S	1100	853	1.333	2667	640	1	2	0	16" x 20'	16	77.5	80.5
D248-1200S	1200	930	1.333	2908	698	0	3	0	16" x 20'	16	77.5	80.5
D248-1300S	1300	1008	1.333	3150	756	1	0	2	16" x 20'	16	77.5	80.5
D248-1400S	1400	1085	1.333	3392	814	0	1	2	18" x 20'	18	77.5	80.5
D248-1500S	1500	1163	1.333	3633	872	0	0	3	18" x 20'	18	77.5	80.5
D248-1600S	1600	1240	1.333	3875	930	0	4	0	18" x 20'	18	77.5	80.5
D248-1700S	1700	1318	1.327	4138	993	1	1	2	18" x 20'	18	77.5	80.5
D248-1800S	1800	1395	1.319	4408	1058	0	2	2	20" x 20'	20	77.5	80.5
D248-1900S	1900	1473	1.313	4675	1122	0	1	3	20" x 20'	20	77.5	80.5
D248-2000S	2000	1550	1.307	4942	1186	0	0	4	20" x 20'	20	77.5	80.5
D248-2100S	2100	1628	1.301	5213	1251	2	0	3	20" x 20'	20	77.5	80.5
D248-2200S	2200	1705	1.296	5483	1316	0	3	2	22" x 20'	22	77.5	80.5
D248-2300S	2300	1783	1.292	5750	1380	0	2	3	22" x 20'	22	77.5	80.5
D248-2400S	2400	1860	1.290	6008	1442	0	1	4	22" x 20'	22	77.5	80.5
D248-2500S	2500	1938	1.288	6271	1505	0	0	5	22" x 20'	22	77.5	80.5
D248-2600S	2600	2015	1.288	6517	1564	2	0	4	22" x 20'	22	77.5	80.5
D248-2700S	2700	2093	1.288	6771	1625	1	1	4	24" x 20'	24	77.5	80.5
D248-2800S	2800	2170	1.288	7021	1685	0	2	4	24" x 20'	24	77.5	80.5
D248-2900S	2900	2248	1.288	7271	1745	0	1	5	24" x 20'	24	77.5	80.5
D248-3000S	3000	2325	1.288	7521	1805	0	0	6	24" x 20'	24	77.5	80.5

**Right & Left End Tappings Data** 



	-		12.		
Opening	Size	Steam			
А	4"	Supply and Return	e>		
В	1/2"	Primary LWCO and Gauge Glass set	3. 4. si		
С	3/4"	Drain, Left End	de de		
С	3/4"	Drain, Right End	Sy Ve		
D	1/2"	Plugged	0		
E	1"	Accessories			
*F	1"	Safety Valve			
G	3/4"	Plugged or Electronic (Probe Type) LWCO			

1. Ratings are at sea level to 2,000 feet. For altitudes above 2,000 feet, reduce all ratings 4% for each 1.000 feet above sea level. Net steam ratings based on piping and pickup allowance of 1.333 (300-1600), 1.327 (1700), 1.319 (1800), 1.313 (1900), 307 (2000), 1.301 (2100), 1.296 (2200), 1.292 (2300), 1.290 (2400), and 1.288 (2500-3000). Contact Technical Support fore selecting boiler for installations having unusual piping and pick-up factors, such as intermittent system operations, tensive piping systems, etc.

Ratings in square feet are computed at 240 Btuh/square foot for steam boilers. Chimney sizes shown are one option based on a typical venting system as shown in Figure 6 of the Installation Manual, and zed according to the National Fuel Gas Code, assuming Type B double wall vent and vent connectors, other venting system esigns are acceptable as shown on Flue Connection And Venting section of the installation manual. For further chimney esign and sizing information, consult the National Fuel Gas Code, ANSI Z223.1/NFPA 54-latest revision, or ASHRAE HVAC stems and Equipment Handbook, Chimney, Gas Vent, and Fireplace Systems, or the Standard for Chimneys, Fireplaces, ents, and Solid Fuel Burning Appliances. NFPA 211. Follow standard engineering practice.

ertifications





\*If opening F is to be used for something other than the Safety Valve or Pressure Relief Valve, or the Safety/Relief Valve is larger than 1", the Safety/Relief Valve must be installed in the Header Piping as near to the boiler as possible.

All ratings and specifications subject to change.

PN 240009440 Rev. 5/12



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