Peerless[®] Boilers

Peerless® FLEX-HEAT® PeerlessBoilers.com Hydronic Comfort System

The Peerless® FLEX-HEAT® Hydronic Comfort System combines Series GM™ boilers in single, multiple or modular arrangements with the Peerless® Partner® indirect-fired water heater, modern system controls, circulators and a design application guide to provide efficient, economical space and domestic hot water heating.





FLEX-HEAT® System

Modular systems have higher overall efficiency than typical single, large boiler installations.

- ✓ Higher part load efficiency Atmospheric gas boilers operate most efficiently at full gas input rate. The FLEX-HEAT® system activates each boiler at its full gas input and efficiency and controls the system by modulating the number of activated boilers.
- ✓ **Lower standby losses –** Since the FLEX-HEAT® system activates only the number of boilers needed to meet the heat demand, less heat escapes from the system. FLEX-HEAT® boiler circulators further reduce standby losses by preventing heated water from flowing through idle boilers.
- ✓ **Modular systems are redundant -** If one boiler shuts down, the remaining boilers will provide heat until the problem can be corrected. If a single, large boiler installation shuts down, it's a no heat situation.
- ✓ Modular systems can be easier to maintain and service



System Configurations



MODULAR VS. MULTIPLE

Modular Boiler Systems

- ✓ Require fewer limit controls and low water cut-offs than multiple boiler systems
- ✓ Only one limit control on each boiler and one system limit control and low water cut-off are required

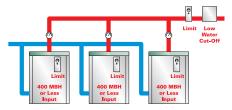
Multiple Boiler Systems

- ✓ Two limit controls are required on each individual boiler
- ✓ Low water cut-off is also required on each boiler if the boilers are larger than 400 MBH input

To qualify as a modular boiler system, ASME¹ adds the following requirements versus a multiple boiler system:

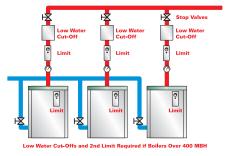
- Modules can be no larger than 400 MBH gas input (all Series GM™ boilers meet this requirement).
- 2. No isolation or stop valves can be placed between modules and the main headers.

If ASME CSD-1 applies in your area, the low water cut-off(s) and additional limit control(s) must be manual reset.



MODULAR BOILER SYSTEM

Treated as if a Single Boiler



MULTIPLE BOILER SYSTEM
Each Unit Treated as a Separate Boiler

¹ ANSI/ASME Boiler and Pressure Code, Section IV: Rules for Construction of Heating Boilers.

Typical FLEX-HEAT® Modular Boiler Systems

System Number	Module Quantity & Size	Input (MBH)	Gross Output (MBH)	Gross Output (H.P.)	Net Output (MBH)	Combustion Efficiency	Thermal Efficiency
FH-429	2-5	429	364	10.9	316	82.5%	80.3%
FH-482	1-5, 1-6	482	408	12.2	355	82.5%	80.3%
FH-536	2-6	536	452	13.5	394	82.5%	80.3%
FH-610	1-6, 1-7	610	501	15.0	436	82.5%	80.3%
FH-684	2-7	684	550	16.4	478	82.5%	80.3%
FH-741	1-7, 1-8	741	595	17.8	517	82.5%	80.3%
FH-798	2-8	798	640	19.1	556	82.5%	80.3%
FH-804	3-6	804	678	20.3	591	82.5%	80.3%
FH-878	2-6, 1-7	878	727	21.7	633	82.5%	80.3%
FH-952	1-6, 2-7	952	776	23.2	675	82.5%	80.3%
FH-1026	3-7	1026	825	24.6	717	82.5%	80.3%
FH-1140	1-7, 2-8	1140	915	27.3	795	82.5%	80.3%
FH-1197	3-8	1197	960	28.7	834	82.5%	80.3%
FH-1220	2-6, 2-7	1220	1002	29.9	872	82.5%	80.3%
FH-1368	4-7	1368	1100	32.9	956	82.5%	80.3%
FH-1482	2-7, 2-8	1482	1190	35.6	1034	82.5%	80.3%
FH-1539	1-7, 3-8	1539	1235	36.9	1073	82.5%	80.3%
FH-1596 FH-1710	4-8	1596 1710	1280 1375	38.2 41.1	1112	82.5%	80.3% 80.3%
FH-1710	5-7 3-7, 2-8	1824	1465	43.8	1195 1273	82.5% 82.5%	80.3%
FH-1881	2-7, 3-8	1881	1510	45.1	1312	82.5%	80.3%
FH-1938	1-7, 4-8	1938	1555	46.5	1351	82.5%	80.3%
FH-1995	5-8	1995	1600	47.8	1390	82.5%	80.3%
FH-2052	6-7	2052	1650	49.3	1434	82.5%	80.3%
FH-2166	4-7, 2-8	2166	1740	52.0	1512	82.5%	80.3%
FH-2280	2-7, 4-8	2280	1830	54.7	1590	82.5%	80.3%
FH-2394	6-8	2394	1920	57.4	1668	82.5%	80.3%
FH-2508	5-7, 2-8	2508	2015	60.2	1751	82.5%	80.3%
FH-2622	3-7, 4-8	2622	2105	62.9	1829	82.5%	80.3%
FH-2736	1-7, 6-8	2736	2197	65.6	1907	82.5%	80.3%
FH-2793	7-8	2793	2240	66.9	1946	82.5%	80.3%
FH-2850	6-7, 2-8	2850	2290	68.4	1990	82.5%	80.3%
FH-2964	4-7, 4-8	2964	2380	71.1	2068	82.5%	80.3%
FH-3021	3-7, 5-8	3021	2425	72.4	2107	82.5%	80.3%
FH-3078	2-7, 6-8	3078	2470	73.8	2146	82.5%	80.3%
FH-3192	8-8	3192	2560	76.5	2224	82.5%	80.3%
FH-3306	5-7, 4-8	3306	2655	79.3	2307	82.5%	80.3%
FH-3363	4-7, 5-8	3363	2700	80.7	2346	82.5%	80.3%
FH-3420	3-7, 6-8	3420	2745	82.0	2385	82.5%	80.3%
FH-3534	1-7, 8-8	3534	2835	84.7	2463	82.5%	80.3%
FH-3591	9-8	3591	2880	86.0	2502	82.5%	80.3%
FH-3648 FH-3762	6-7, 4-8 4-7, 6-8	3648	2930	87.5 90.2	2546 2624	82.5% 82.5%	80.3% 80.3%
FH-3876		3762 3876	3020				
FH-3990	2-7, 8-8 10-8	3876 3990	3110	92.9 95.6	2702	82.5% 82.5%	80.3% 80.3%
FII-377U	10-0	3770	3200	73.0	2780	02.3%	00.370



