Inspections Division
Date: 03/22/16

IBC

Better Boilers

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HC Series

HC 13-50 13,500 to 51,000 BTU/HR
HC 23-84 23,000 to 84,000 BTU/HR
HC 29-106 29,000 to 106,000 BTU/HR
HC 33-124 33,000 to 124,000 BTU/HR
HC 33-160 23,000 to 160,000 BTU/HR

Condensing Boiler

Introducing IBC's smallest ever boiler, the HC series begins with the HC 13-50 offering the solution for todays better insulated buildings. With onboard full outdoor reset and a slim boiler room footprint the HC Series offers great value for money without sacrificing reliability.

- Unique and innovative single pass Copper / Aluminum Heat Exchanger, ensuring greater efficiency and eliminating water side corrosion
- Up to 95% AFUE, with full ASME rated vessel
- Built in boiler pump
- 2" & 3" venting options available
- Contractor friendly, easy to install, maintain and service
- Fewer parts ensuring greater reliability
- Outdoor reset technology increases efficiency by lowering the water temp automatically
- Reset heating - Set point - DHW
- Includes Air Vent, Outdoor Sensor & Relief Valve
- Exceptional value
- Better reliability and durability
- 10 year limited Heat Exchanger warranty

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Energy Efficient Heating

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IBC Better Boilers

HC Series

13,500 to 51,000 BTU/HR
29,000 to 106,000 BTU/HR
33,000 to 160,000 BTU/HR
23,000 to 84,000 BTU/HR
33,000 to 124,000 BTU/HR

Condensing Boiler

	Description	DC Series
A	Exhaust Outlet	3" Schedule 40
B	Combustion Air	3" Schedule 40
E	Heating Water Inlet (Return)	1" Male NPT
F	Heating Water Outlet (Supply)	1" Male NPT
G	Gas Inlet	1/2" Male NPT
H	Condensate Outlet	3/4" Hose
I	Knock-Outs (3)	1/2"

Specification	HC 13-50	HC 23-84	HC 29-106	HC 33-124	HC 33-160
CSA Input (Natural Gas or Propane *) – MBH	13.5 – 51	23 – 84	28.5 – 106	33 – 124	33 – 160
CSA Input (Natural Gas or Propane *) – KW	3.95 – 14.94	6.7 – 24.9	8.4 – 31.0	9.7 – 36.3	9.7 – 46.9
CSA Output – MBH	12.4 – 45.4	21 – 79	26 – 99	31 – 115	30 – 149
CSA Output - KW	3.64 – 13.3	6.3 – 23.0	7.8 – 28.9	9.0 – 33.8	9.0 – 43.6
A.F.U.E	95%	94%	94%	94%	94%
Min Gas Pressure (Nat. Gas or Propane) – inch w.c.	5	5	5	5	5
Max Gas Pressure (Nat. Gas or Propane) – inch w.c.	14	14	14	14	14
Power (120Vac/60Hz) - Watts @ full fire with internal pump	126	126	128	130	164
Weight (empty) – lbs/Kg	85 / 39	85 / 39	85 / 39	85 / 39	85 / 39
Pressure Vessel water content – USG/Liters	0.37/1.4	0.37/1.4	0.37/1.4	0.5/1.9	0.5/1.9
Max boiler flow rate - USgpm	9	9	10	11	11
Min boiler flow rate - USgpm	2	2	3	3	3
Max Operating Pressure – Space Heating Coil - psig	43.5	43.5	43.5	43.5	43.5
Approved installation altitude - ASL	12,000 ft	12,000 ft	12,000 ft	12,000 ft	12,000 ft
Ambient Temperature – Low (°F/°C)	32/0	32/0	32/0	32/0	32/0
Ambient Temperature – High (°F/°C)	122/50	122/50	122/50	122/50	122/50
Max relative humidity (non-condensing)	90%	90%	90%	90%	90%
Min water Temperature - Space Heating (°F/°C)	50/20	50/20	50/20	50/20	50/20
Max water Temperature – Space Heating (°F/°C)	194/90	194/90	194/90	194/90	194/90
Max equivalent vent length 2" (each side)	35'	35'	35'	35'	35'
Max equivalent vent length 3" (each side)	120'	120'	120'	120'	120'

* *Natural Gas boilers require a Propane conversion kit to be ordered separately if converting a Natural Gas boiler to Propane. Propane (LP) boilers require a Natural Gas conversion kit to be ordered separately if converting a Propane boiler to Natural Gas.*
* *Boilers are shipped with 30 psig pressure relief valve*

Surface	Distance from combustible surfaces	Recommended distance for installation and service
Front	2"	24"
Rear	0"	0"
Left Side	1.5"	6" (labels may be difficult to read with educed clearance)
Right Side	4"	6" (labels may be difficult to read with educed clearance)
Top	2"	24"
Bottom	8"	24"

Exhaust pipe size	Maximum equivalent length
Sched.40; Rigid PPs	(each side)
2"	35'
3"	120'
2"/3" 90° Long Sweep Vent Elbow	Allow 5' equivalent feet
2"/3" 90° Short Sweep Vent Elbow	Allow 8' equivalent feet
2"/3" 45° Vent Elbow	Allow 3' equivalent feet
PPS	
PPs 87-90'Elbow	Allow 8' equivalent feet
Flexible PPs	
3" Flexible	35 actual feet

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