

Condensing Gas Combination Boiler (NCB)

Product	 NCB-150E	 NCB-180E	 NCB-210E	 NCB-240E
Summary	<ul style="list-style-type: none">• Super condensing efficiency• Dual stainless steel heat exchangers• SCH40, 2" PVC venting up to 60'• ½" Gas pipe up to 24'• Automatic water filling system• integrated controls	<ul style="list-style-type: none">• Super condensing efficiency• Dual stainless steel heat exchangers• SCH40, 2" PVC venting up to 60'• ½" Gas pipe up to 24'• Automatic water filling system• integrated controls	<ul style="list-style-type: none">• Super condensing efficiency• Dual stainless steel heat exchangers• SCH40, 2" PVC venting up to 60'• ½" Gas pipe up to 24'• Automatic water filling system• integrated controls	<ul style="list-style-type: none">• Super condensing efficiency• Dual stainless steel heat exchangers• SCH40, 2" PVC venting up to 60'• ½" Gas pipe up to 24'• Automatic water filling system• integrated controls

Gas Input	Space Heating	12,000–60,000 BTU/H	14,000–80,000 BTU/H	18,000–100,000 BTU/H	18,000–120,000 BTU/H
	Domestic Hot Water	12,000–120,000 BTU/H	14,000–150,000 BTU/H	18,000–180,000 BTU/H	18,000–199,900 BTU/H
AFUE		95.0%	95.0%	95.0%	95.0%
Flow Rate (DHW)	77°F (43°C) Temp Rise	2.6 GPM (9.8 L/m)	3.4 GPM (12.9 L/m)	4.0 GPM (15.1 L/m)	4.5 GPM (17.0 L/m)
Dimensions		17"(W) x 28"(H) x 12"(D)	17"(W) x 28"(H) x 12"(D)	17"(W) x 28"(H) x 12"(D)	17"(W) x 28"(H) x 12"(D)
Weight		66 lbs (30kg)	74 lbs (34kg)	84 lbs (38kg)	84 lbs (38kg)
Installation Type		Indoor wall-hung	Indoor wall-hung	Indoor wall-hung	Indoor wall-hung
Venting Type		Forced draft direct vent	Forced draft direct vent	Forced draft direct vent	Forced draft direct vent
Ignition		Electronic ignition	Electronic ignition	Electronic ignition	Electronic ignition
Water Pressure (Hydronic/DHW)		12–30 PSI /15–150 PSI	12–30 PSI /15–150 PSI	12–30 PSI /15–150 PSI	12–30 PSI /15–150 PSI
Natural Gas Supply Pressure (from source)		3.5" –10.5" WC	3.5" –10.5" WC	3.5" –10.5" WC	3.5" –10.5" WC
Propane Gas Supply Pressure (from source)		8.0" –13.5" WC	8.0" –13.5" WC	8.0" –13.5" WC	8.0" –13.5" WC

Natural Gas Manifold Pressure (min to max)		-0.08" WC / -0.34" WC	-0.07" WC / -0.66" WC	-0.05" WC / -0.36" WC	-0.06" WC / -1.20" WC
Propane Gas Manifold Pressure (min to max)		-0.08" WC / -0.30" WC	-0.07" WC / -0.62" WC	-0.10" WC / -0.66" WC	-0.03" WC / -0.98" WC
Minimum Flow Rate (DHW)		0.5 GPM (1.9 L/m)	0.5 GPM (1.9 L/m)	0.5 GPM (1.9 L/m)	0.5 GPM (1.9 L/m)
Connection Sizes	Heating Supply/Return	1" NPT	1" NPT	1" NPT	1" NPT
	DHW Inlet/Outlet	3/4" NPT	3/4" NPT	3/4" NPT	3/4" NPT
	Gas Inlet	3/4" NPT	3/4" NPT	3/4" NPT	3/4" NPT
	Auto Feeder	1/2" NPT	1/2" NPT	1/2" NPT	1/2" NPT
	Condensate Outlet	1/2" NPT	1/2" NPT	1/2" NPT	1/2" NPT
Power Supply	Main Supply	120V AC, 60Hz	120V AC, 60Hz	120V AC, 60Hz	120V AC, 60Hz
	Maximum Power Consumption	200W (up to 2 amperes)	200W (up to 2 amperes)	200W (up to 2 amperes)	200W (up to 2 amperes)

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Materials	Casing	Cold rolled carbon steel	Cold rolled carbon steel	Cold rolled carbon steel	Cold rolled carbon steel
	Heat Exchangers	Primary/secondary heat exchanger: stainless steel DHW heat exchanger: stainless steel	Primary/secondary heat exchanger: stainless steel DHW heat exchanger: stainless steel	Primary/secondary heat exchanger: stainless steel DHW heat exchanger: stainless steel	Primary/secondary heat exchanger: stainless steel DHW heat exchanger: stainless steel
Venting	Exhaust	2" or 3" PVC, CPVC, approved polypropylene 2" or 3" special gas vent type BH (Class II, A/B/C)	2" or 3" PVC, CPVC, approved polypropylene 2" or 3" special gas vent type BH (Class II, A/B/C)	2" or 3" PVC, CPVC, approved polypropylene 2" or 3" special gas vent type BH (Class II, A/B/C)	2" or 3" PVC, CPVC, approved polypropylene 2" or 3" special gas vent type BH (Class II, A/B/C)
	Intake	2" or 3" PVC, CPVC, polypropylene 2" or 3" special gas vent type BH (Class II, A/B/C)	2" or 3" PVC, CPVC, polypropylene 2" or 3" special gas vent type BH (Class II, A/B/C)	2" or 3" PVC, CPVC, polypropylene 2" or 3" special gas vent type BH (Class II, A/B/C)	2" or 3" PVC, CPVC, polypropylene 2" or 3" special gas vent type BH (Class II, A/B/C)
	Vent Clearances	0" to combustibles	0" to combustibles	0" to combustibles	0" to combustibles
Safety Devices		Flame rod, APS, gas valve operation detector, ignition operation detector, water temperature high limit switch, exhaust temperature high limit sensor	Flame rod, APS, gas valve operation detector, ignition operation detector, water temperature high limit switch, exhaust temperature high limit sensor	Flame rod, APS, gas valve operation detector, ignition operation detector, water temperature high limit switch, exhaust temperature high limit sensor	Flame rod, APS, gas valve operation detector, ignition operation detector, water temperature high limit switch, exhaust temperature high limit sensor