

Indirect-Fired Water Heaters



A New Lineup From The
Most Recognized Name In The Industry



AMTROL'S full line of indirects has a heater to fit every installation. Sizes are available from 26-gallon lowboy models to 119-gallon commercial units all utilizing a forged brass heat exchanger plate with hard piped connections. A Limited Lifetime or 5-year warranty can be selected on the same product, giving you price options. The lineup now includes two new series: The BoilerMate™ Top Down™, a gallon heater designed by contractors to decrease installation time and make maintenance easy; and the Dual Coil™ Series with the ability to provide radiant heat and domestic hot water from the same indirect heater.

AMTROL also knows that you want your installations to look as good as they function, so we provide matching colors for popular boilers at no charge - just ask your wholesaler or sales representative for information.

Finally, AMTROL provides a drain, temperature control and relief valve with every BoilerMate™ because you shouldn't have to pay for the parts you need anyway.

Maximized Heat-Transfer Technology

Our design begins with copper for maximum heat transfer. Copper conducts heat approximately:

- 8 times faster than cupronickel
- 25 times faster than stainless steel

Maximized height/diameter spacing to create a chimney effect of thermal currents which scrubs more heat into the water faster.

High-output capabilities to handle larger demands.

SmartControl

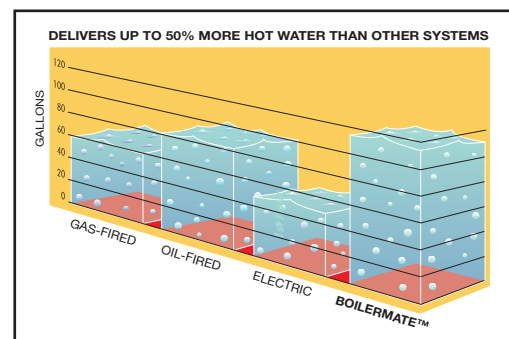
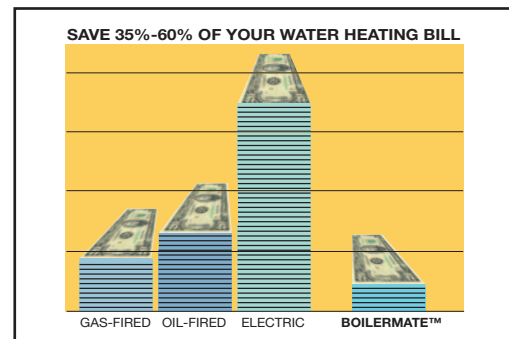
- Operates on 24V or 120V
- Simple up/down arrows to change settings
- Built-in diagnostics
- Pre-set from factory for install-and-go
- Built-in priority relay
- Post-purge failure takes advantage of boiler waste heat
- Adjustable temperature differential



*All models are still available with a standard dial aquastat.

SC-5000 Heat Exchanger

- High-performance in a durable package
- Brass plate and cold water inlet pipe provide a strong connection and meet stringent safety codes
- Threaded black iron pipe for the boiler supply and return withstand rough handling and require no back-up wrench
- Low pressure drop — multiple coil passes allow the use of a standard circulator. No large, expensive pump necessary.

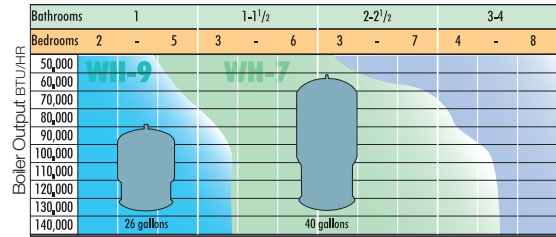


The AMTROL® BoilerMate™ Classic Series tanks are perfect for residential applications and are available in 26- and 41-gallon sizes. The Classic Series tanks use a seamless plastic liner that will not crack, chip or peel. This polyethylene reservoir is surrounded by high-density urethane insulation and enclosed in a steel outer shell with a durable, appliance-like finish.

Selecting the right model for your home is easy:
Just count the number of bathrooms and bedrooms you have and look on your boiler for its net output in BTU/HR.

Sizing is based on standard shower head flows (2.5 to 3 gpm). For whirlpool sizing applications, consult your AMTROL representative.

Quick Size Chart



Specifications

Model Number	Capacity (gallons)	Height (inches)	Diameter (inches)	Shipping Weight (lbs.)	Cold Water inlet-nptm	Hot Water outlet-nptf	Boiler Supply	Boiler Return
WH-9	26	36.5	22	90	3/4"	3/4"	3/4" NPTM	3/4" NPTM
WH-7	41	48	22	134	3/4"	3/4"	3/4" NPTM	3/4" NPTM
WH-41	41	48	22	134	3/4"	3/4"	3/4" NPTM	3/4" NPTM
WH-9DW	26	36.5	22	100	3/4"	3/4"	3/4" Union Sweat	3/4" Union Sweat
WH-7DW	41	48	22	144	3/4"	3/4"	3/4" Union Sweat	3/4" Union Sweat
WH-41DW	41	48	22	144	3/4"	3/4"	3/4" Union Sweat	3/4" Union Sweat

Performance

WH-9 Series BoilerMate™ Classic

- 26 Gallons
- Limited lifetime warranty
- Compact design to fit small spaces
- Available models (see option codes):
WH-9L, WH-9Z, WH-9P, WH-9LDW, WH-9ZDW

WH-7 Series BoilerMate™ Classic

- 41 Gallons
- Limited lifetime warranty
- Most popular model
- Recharge 41 gallons in as fast as 12 min.
- Available models (see option codes):
WH-7L, WH-7Z, WH-7P, WH-7LDW, WH-7ZDW

WH-41 Series BoilerMate™ Classic

- 41 Gallons
- Transferable 5-year warranty
- Same construction as WH-7
- Low-cost alternative for new construction, housing projects and retrofit
- Available models (see option codes):
WH-41L, WH-41Z, WH-41LDW, WH-41ZDW

WH-9 SERIES		
BOILER OUTPUT (5 gpm input-to BoilerMate)	1 FIRST-HOUR RATING (90°F rise)	2 CONTINUOUS FLOW (70°F rise steady state)
BTU/HR	GPH	GPH
40,000	75	69
60,000	102	104
80,000	129	139
100,000	156	173
120,000	184	208
140,000	211	242



Available with SmartControl or Standard Dial Aquastat

WH-7, WH-41 SERIES		
BOILER OUTPUT (5 gpm input-to BoilerMate)	1 FIRST-HOUR RATING (90°F rise)	2 CONTINUOUS FLOW (70°F rise steady state)
BTU/HR	GPH	GPH
40,000	89	69
60,000	116	104
80,000	143	139
100,000	170	173
120,000	197	208
140,000	224	242



Available with SmartControl or Standard Dial Aquastat

Option Codes:

- Z = electromechanical thermostat, packaged without circulator
- DW = heat exchanger with double-wall tubing, vented to atmosphere IAPMO listed
- P = SmartControl packaged with circulator & flanges
- L = SmartControl packaged without circulator

BoilerMate™ Top Down™ Series



NO ONE CAN TOP THIS. AMTROL® BoilerMate™ Top Down™ Series water heaters place all connections up high for fast installation and easy maintenance. The coil is piped horizontally to the exterior of the tank with slots for easy removal if cleaning is needed. Top Down Series BoilerMate heaters are based on the trusted WH-7 design with a seamless plastic liner and the proven SC-5000 heat exchanger.

Specifications

Model Number	Capacity (gallons)	Height (inches)	Diameter (inches)	Shipping Weight (lbs.)	Cold Water inlet-nptm	Hot Water outlet-nptf	Boiler Supply	Boiler Return
TD-7 Series	41	51	22	141	3/4"	3/4"	3/4" NPTM	3/4" NPTM
TD-7DW Series	41	51	22	151	3/4" Union Sweat	3/4" Union Sweat	3/4" Union Sweat	3/4" Union Sweat
TD-80 Series	80	58	26	190	3/4"	3/4"	3/4" NPTM	3/4" NPTM
TD-80DW Series	80	58	26	200	3/4" Union Sweat	3/4" Union Sweat	3/4" Union Sweat	3/4" Union Sweat

See why the BoilerMate™ Top Down™ tops the competition.



- The industry's only true top down with all connections at the top including electrical; available with SmartControl or dial aquastat
- Pre-piped connections to tank exterior
- Rugged, full length coil is pre-assembled and tested
- Temperature and pressure relief valve included and pre-piped
- Seamless, high density plastic reservoir will not crack, chip, flake or peel
- Solid brass threaded fittings provide long lasting strength
- The industry's most energy efficient heat exchanger coil with high flow rates and low pressure drops provides outstanding performance using a standard-size circulator
- No large, expensive pumps required
- Bottom drain piped to stand for complete and easy draining - no pump or siphon needed
- Available with a Limited Lifetime (TD-7, 80) or Transferable 5-year Warranty (TD-41, 80-5) as a low cost option



TD-7 BoilerMate™

- 41-Gallons for average households
- Heats 41 gallons in as little as 12 minutes
- Multiple colors available for boiler matching
- Available models: TD-7L, TD-7Z, TD-41L, TD-41Z, TD-7LDW, TD-7ZDW, TD-41LDW, TD-41ZDW

TD-80 BoilerMate™

- High volume for large households
- Perfect for hot tubs, multi-head showers and other high demands
- Available models: TD-80L, TD-80Z, TD-80L-5, TD-80Z-5

TD-7 SERIES		
BOILER OUTPUT (5 gpm input— to BoilerMate)	1 FIRST-HOUR RATING (90°F rise)	2 CONTINUOUS FLOW (70°F rise steady state)
BTU/HR	GPH	GPH
40,000	89	69
60,000	116	104
80,000	143	139
100,000	170	173
120,000	197	208
140,000	224	242

TD-80 SERIES		
BOILER OUTPUT (5 gpm input— to BoilerMate)	1 FIRST-HOUR RATING (90°F rise)	2 CONTINUOUS FLOW (70°F rise steady state)
BTU/HR	GPH	GPH
40,000	120	69
60,000	147	104
80,000	174	139
100,000	201	173
120,000	228	208
140,000	255	242

For your large or extended-draw heavy use applications, the AMTROL® BoilerMate™ Premier Series tanks are available in 60-, 80- and 119-gallon sizes. Premier Series tanks offer large dump capabilities and rapid recovery. 316-L stainless steel tanks are surrounded by thick foam insulation and protected by a dent-resistant plastic outer jacket. A large top-mounted access flange is included to make cleaning an easy procedure.

Specifications

Model Number	Capacity (gallons)	Height (inches)	Diameter (inches)	Shipping Weight (lbs.)	Cold Water inlet-nptm	Hot Water outlet-nptf	Boiler Supply	Boiler Return
WHS-60	60	54	26	160	3/4"	3/4"	3/4" NPTM	3/4" NPTM
WHS-80	80	66	26	170	3/4"	3/4"	3/4" NPTM	3/4" NPTM
WHS-120	119	71	29 3/4	210	3/4"	3/4"	3/4" NPTM	3/4" NPTM
WHS-60DW	60	54	26	178	3/4"	3/4"	3/4" Union Sweat	3/4" Union Sweat
WHS-80DW	80	66	26	188	3/4"	3/4"	3/4" Union Sweat	3/4" Union Sweat

Performance

WHS-60 BoilerMate™ Premier

- 60-Gallon storage
- Great for households with high water use
- Available models: WHS-60, WHS-60Z, WHS-60DW, WHS-60ZDW

WHS-80 BoilerMate™ Premier

- 80-Gallon storage
- High volume for large whirlpools
- Perfect for hot tubs, multi-head showers and other high demands
- Available models: WHS-80, WHS-80Z, WHS-80DW, WHS-80ZDW

WHS-60		
BOILER OUTPUT (5 gpm input-to BoilerMate)	1 FIRST-HOUR RATING (90°F rise)	2 CONTINUOUS FLOW (70°F rise steady state)
BTU/HR	GPH	GPH
40,000	105	69
60,000	133	104
80,000	160	139
100,000	187	173
120,000	214	208
140,000	241	242



Available with SmartControl or Standard Dial Aquastat

WHS-80		
BOILER OUTPUT (5 gpm input-to BoilerMate)	1 FIRST-HOUR RATING (90°F rise)	2 CONTINUOUS FLOW (70°F rise steady state)
BTU/HR	GPH	GPH
40,000	123	69
60,000	150	104
80,000	177	139
100,000	204	173
120,000	231	208
140,000	258	242



Available with SmartControl or Standard Dial Aquastat

WHS-120 BoilerMate™

- 119-Gallon storage
- Maximum volume for maximum delivery
- Available in multiple high-output coil configurations
- Available models: WHS-120, WHS-120Z

WHS-120		
BOILER OUTPUT (5 gpm input-to BoilerMate)	1 FIRST-HOUR RATING (90°F rise)	2 CONTINUOUS FLOW (70°F rise steady state)
BTU/HR	GPH	GPH
40,000	158	69
60,000	185	104
80,000	212	139
100,000	239	173
120,000	266	208
140,000	293	242



Available with SmartControl or Standard Dial Aquastat

Ratings terms:

Always read the fine print before selecting an indirect-fired water heater. AMTROL uses real-world numbers to bring you the performance you expect. All performance figures are calculated using 180°F boiler, standard domestic temperature rise and an off-the-shelf circulator pump.

1 FIRST-HOUR RATING – the ability of the water heater to supply hot water in a 60-minute period, assuming that the hour starts with both boiler water and domestic content up to set temperature. It is the sum of the usable storage capacity plus the amount of heated water generated during the 60-minute period. The rate is based on:

- 90°F temperature rise
- Boiler mass heat sink equivalent to 10 lbs. of water
- No low limit on boiler

It should not be considered a true measurement of performance or recovery during a normal intermittent (real world) draw period of 24 hours. During such real-world usage, the actual recovery ability of the water heater may be more or less than the "first-hour" rating, depending upon usage and installation parameters.

2 CONTINUOUS FLOW – the steady domestic water flow rate available at a given boiler heat output. The rate is based on:

- 70°F temperature rise
- Boiler high limit set 20°F (min.) above BoilerMate™ set point

AMTROL's BoilerMate Commercial indirect-fired water heaters are available in single or double-wall construction. Universal heat exchanger flanges and top cleanout plates make the Premier Series the most versatile indirect for multiple-heater installations and commercial applications. The 41-gallon WH-7C is well suited to light commercial applications such as restaurants, laundries and small rental properties.

Specifications

Model Number	Capacity (gallons)	Height (inches)	Diameter (inches)	Shipping Weight (lbs.)	Cold Water inlet-nptm	Hot Water outlet-nptf	Boiler Supply	Boiler Return
WH-7C	41	48	22	144	3/4"	3/4"	3/4" NPTM	3/4" NPTM
WH-7C-DW	41	48	22	151	3/4"	3/4"	1" Union Sweat	1" Union Sweat
WHS-60ZC	60	54	26	168	1"	1"	1" NPTM	1" NPTM
WHS-60-ZCDW	60	54	26	178	1"	1"	1" Union Sweat	1" Union Sweat
WHS-80ZC	80	66	26	178	1"	1"	1" NPTM	1" NPTM
WHS-80-ZCDW	80	66	26	188	1"	1"	1" Union Sweat	1" Union Sweat
WHS-120-ZC	119	71	29	218	1"	1"	3/4" NPTM	1" NPTM
WHS-120-ZCDW	119	71	29 3/4	228	1"	1"	1" Union Sweat	1" Union Sweat

Performance

WH-7C, WH-7CDW		
BOILER OUTPUT (7 gpm input-to BoilerMate)	1 FIRST-HOUR RATING (90°F rise)	2 CONTINUOUS FLOW (70°F rise steady state)
	GALLONS	GPH
100,000	170	172
120,000	197	207
140,000	223	241
160,000	250	275
180,000	277	310
200,000	304	344
220,000	331	379
240,000	357	413
260,000	384	448
280,000	411	482



WHS-60ZC, WH-60ZCDW		
BOILER OUTPUT (7 gpm input-to BoilerMate)	1 FIRST-HOUR RATING (90°F rise)	2 CONTINUOUS FLOW (70°F rise steady state)
	GALLONS	GPH
100,000	185	173
120,000	212	208
140,000	239	242
160,000	266	277
180,000	293	312
200,000	320	346
220,000	346	379
240,000	372	413
260,000	399	448
280,000	426	482



WHS-80ZC, WHS-80ZCDW		
BOILER OUTPUT (7 gpm input-to BoilerMate)	1 FIRST-HOUR RATING (90°F rise)	2 CONTINUOUS FLOW (70°F rise steady state)
	GALLONS	GPH
100,000	202	173
120,000	229	208
140,000	256	242
160,000	283	277
180,000	310	312
200,000	337	346
220,000	363	379
*240,000	389	413
260,000	416	448
280,000	443	482



WHS-120ZC, WHS-120ZCDW		
BOILER OUTPUT (7 gpm input-to BoilerMate)	1 FIRST-HOUR RATING (90°F rise)	2 CONTINUOUS FLOW (70°F rise steady state)
	GALLONS	GPH
100,000	236	173
120,000	263	208
140,000	289	242
160,000	316	275
180,000	343	310
200,000	370	344
220,000	397	379
240,000	423	413
260,000	450	448
280,000	477	482



Maximum BTU transfer with 180°F boiler water:
*ZCDW Models = 240,000

5-Year Limited Warranty

The ultimate in flexibility and design savings: Dual Coil™ Series indirects include a secondary top-mounted heat exchanger for use as a hydronic heat source or additional input. The temperature of the domestic water controls the top coil's heat output, eliminating the need for flat plate heat exchangers and mixing systems when properly applied. Available in single wall or IAPMO-approved double-wall construction, the top coil can also provide supplemental input for massive heat transfer capability.

Specifications

Model Number	Capacity (gallons)	Height (inches)	Diameter (inches)	Shipping Weight (lbs.)	Cold Water inlet-nptm	Hot Water outlet-nptf	Bottom Coil Connections	Top Coil Connections	Top Coil Type
DC-80	80	66	26	198	3/4"	3/4"	3/4" NPTF	3/4" NPTF	Single Wall
DC-80DW	80	69	26	208	3/4"	3/4"	3/4" Union Sweat	1" Union Sweat	Double Wall
DC-120	119	71	29 3/4"	238	3/4"	3/4"	3/4" NPTF	3/4" NPTF	Single Wall
DC-120DW	119	74	29 3/4"	248	3/4"	3/4"	3/4" Union Sweat	1" Union Sweat	Double Wall

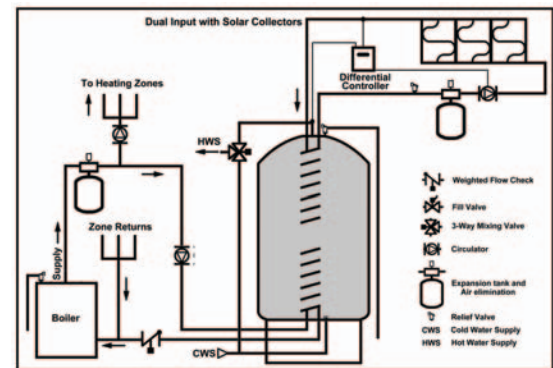
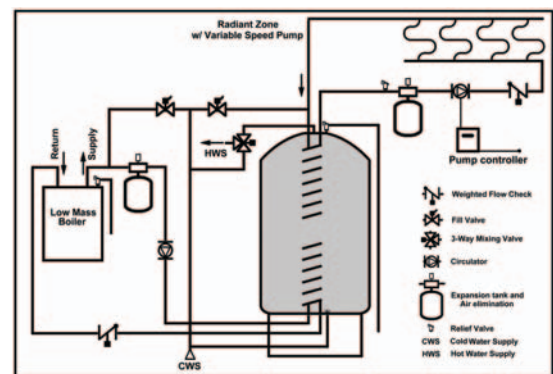
Heating (Output) Applications & Benefits

- Radiant heating
- Snow melt (including glycol systems)
- Bathroom remodels with whirlpool tub and floor warming
- Radiant panels, towel warmers, etc.
- Pool and spa heating
- Small isolated baseboard loops
- Reduces cycling with low-mass/wall-hung boilers
- Very low return temperature ability without shocking boilers
- Reliable dial aquastat adjustable to 180°F
- Eliminates expensive heat exchangers and mixing systems in many applications

Dual Input Applications & Benefits

- Solar collector systems
- Wood boilers and backup systems
- Large boiler feeding both coils
- Double-wall coil for antifreeze systems
- Domestic first hour over 900 gallons when tempered (180°F/120°F)
- Both coils are removable for inspection and cleaning

10-Year Limited Warranty



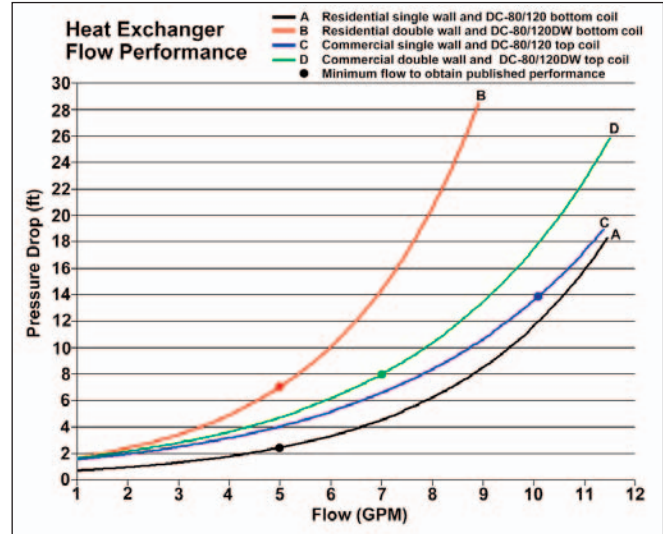
Domestic Water Performance

	DC-80 / DC-80DW			DC-120/DC-120DW		
	BOILER OUTPUT BTU/HR	FIRST-HOUR RATING (90°F rise) GALLONS	CONTINUOUS FLOW (70°F rise steady state) GPH	BOILER OUTPUT BTU/HR	FIRST-HOUR RATING (90°F rise) GALLONS	CONTINUOUS FLOW (70°F rise steady state) GPH
Bottom Coil Only	80,000	117	139	80,000	209	139
	100,000	202	173	100,000	236	173
	120,000	229	208	120,000	263	208
	140,000	256	242	140,000	289	242
	160,000	283	277	160,000	316	277
	180,000	310	312	180,000	343	312
	200,000	337	346	200,000	370	346
	240,000	389	413	240,000	423	413
	280,000	443	482	280,000	477	482
	320,000	469	551	320,000	530	551
	*360,000	550	620	*360,000	584	620
Both Coils as Input	400,000	603	688	400,000	637	688



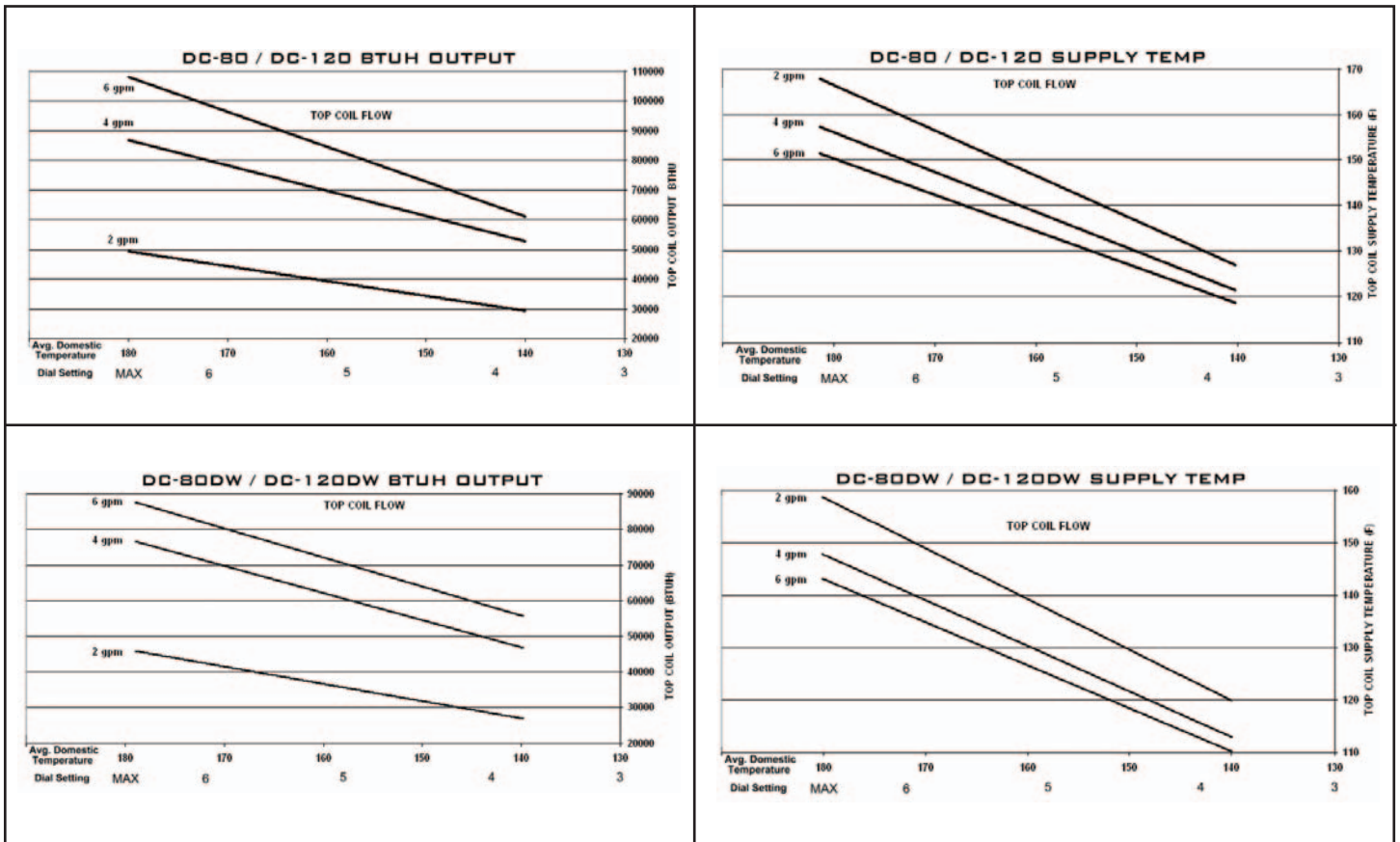
*Double wall models maximum 360,000 BTUH with both coils.

AMTROL® is dedicated to providing you with the technical data you require as a professional. We designed the BoilerMate™ product line to utilize accepted hydronic practices. All of our data assumes standard 180°F boiler temperature and is based on actual product testing.



Dual Coil™ Series: Top Coil Performance Charts

Use these charts to aid in model selection and system design.



*Refer to installation manual for warranty information or visit our website at www.amtrol.com



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