

## C230 ECO-A Series

**FULLY MODULATING CONDENSING BOILER** 

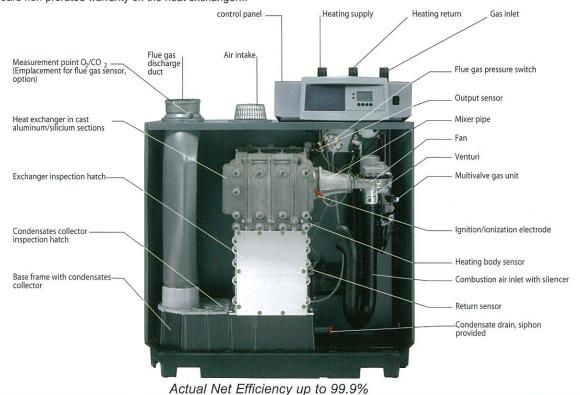
The De Dietrich C230 ECO-A Series of condensing boilers incorporates a cast aluminum/silicium sectional heat exchanger that achieves efficiencies of 99.9% and is able to operate at temperature differentials up to 81°F without thermal shock. Extremely resistant to any corrosion, with self-cleaning properties linked to the flow of condensates. The state of the art microprocessor based burner boiler control incorporates a P.I.D. control to manage and protect both the burner and the lightweight heat exchanger. With this type of burner management control you will get the exact output the system needs. De Dietrich has always set the standard for high efficiency boilers with unsurpassed quality and service for over three centuries around the world.

The De Dietrich obsession for perfection means that the C230 ECO-A Series of condensing boilers is "As the Boiler Should Be"!!!

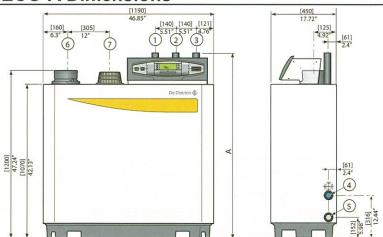
## **Features**

- 99% + net efficiency
- Stainless steel premix dual fuel gas burner (Natural Gas and LPG)
- Four models ranging from 325 to 821 MBH
- Fully modulating from 20 to 100%. Remote BMS control (0-10VDC / 4-20mA) w. optional IF-01 card
- Outdoor reset w. optional SCU-S01 card
- No minimum return water temperature, thermal shock is nonexistent.
  - no boiler pump, three-way valves or secondary heat exchanger needed
- Perfect adaptation of boiler output to the actual needs of the installation
- Optimum combustion quality on the full output range thanks to the constant air/gas ratio
- Extremely low emissions, NO<sub>X</sub> levels below 20ppm corrected to 3% O<sub>2</sub>
- Optional secondary return water inlet for maximum condensation
- Easy maintenance thanks to:
  - Self-cleaning condensing body,
  - o Rapid burner access via removable cover
  - Quick and easy heat exchanger access via the inspection hatch
  - Microprocessor gives the technician a step by step diagnostics
- Factory preset burner and controls for easy start ups
- Fits through standard 30" doorways
- Conventional or direct vented
- Less than 60dBA
- 10 years non-prorated warranty on the heat exchanger!!!





## C230 ECO-A Dimensions



- Heating supply
   Heating return
   Gas inlet 1 1/4"
   Filling and drain tap / Connection for second return 1 1/4"
- 1 1/4"

  ⑤ Condensate drain, siphon provided, for PVC pipe ext.
  Ø 1 1/4"

  ⑥ Flue gas vent Ø 6"
  ⑦ Combustion air inlet

Item	Description	Model				
		C230-80	C230-120	C230-160	C230-200	
Α	Height	51 1/2"	51 1/2"	51 1/2"	52"	
1	Heating Supply Pipe Connection	1 1/4"	1 1/4"	1 1/4"	1 1/2"	
2	Heating Return Pipe Connection	1 1/4"	1 1/4"	1 1/4"	1 1/2"	

			Model				
	Item	Unit	C230-80	C230-120	C230-160	C230-200	
CSA Output		MBH [kW]	317 [93]	390 [114]	663 [194]	800 [234]	
CSA Fuel Input		MBH [kW]	325 [95]	400 [117]	680 [199]	820 [240]	
Efficiency	100% at 158°F average temp.	%	97.4	97.5	97.5	97.6	
	100% at 86°F return temp.	%	99.0	99.0	99.0	99.0	
	30% at 86°F return temp.	%	99.9	99.9	99.9	99.9	
Combustion Efficiency (gross)		%	96.0				
Thermal Efficiency (heat to H2O)		%	97.4				
Stand by losses (average)		%	Less than 0.3				
Gas (fuel) type			Natural Gas/LPG				
Gas vent category			Cat. II or IV type BH (AL-29-4C) SS material				
NOx Emissions (corrected to 3% O2)		PPM	Less than 20ppm				
Operation			Single Stage, Full Modulation (0-10VDC, 4-20 mA)				
Maximum water temperature safety limit		°F [°C]	230 [110]				
Water temperature operating range		°F [°C]	68-194 [20-90]				
Water resistance @ 36°F ΔT [20°C ΔT, mbar]		Ft. H <sub>2</sub> O [mbar]	5.52 [165]	4.52 [135]	5.69 [170]	6.02 [180]	
Max. flue gas temperature at 104/86°F		°F [°C]	127 [53]				
Water content		USG [Liter]	3.2 [12]	4.2 [16]	5.2 [20]	6.2 [24]	
Min. water flow (operation >167°F)		USGPM	7.8	9.6	16.4	19.8	
ASME MAWP Rating (max)		PSI	100				
Sound emissions		dBA	Less than 60				
Net weight		Lbs	254	298	364	413	

Information contained in this brochure is subject to change without written notification

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Represented by:











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