

Baxi Luna Duo-Tec

11 Brown Street

Portland, ME 04101

4.0 Technical Data

4.1 Duo-tec Combi 24, 28, 33 & 40 HE A

Appliance Type	C ₁₃	C ₃₃	C ₅₃
Appliance Category CAT I 2H			
Heat Input CH (Net)			
24 model	kW	20.5	7
28 model	kW	24.7	9
33 model	kW	28.9	9.7
40 model	kW	32.8	9.9
Heat Input CH (Gross)			
24 model	kW	22.7	7.8
28 model	kW	27.4	10
33 model	kW	32.1	10.8
40 model	kW	36.4	11
Heat Output CH (Non-Condensing)			
		Max	Min
24 model	kW	20	6.8
28 model	kW	24	8.7
33 model	kW	28	9.4
40 model	kW	32	9.6
Heat Output CH (Condensing)			
		Max	Min
24 model	kW	21	7.4
28 model	kW	25.9	9.5
33 model	kW	30.3	10.2
40 model	kW	34.4	12.1
Heat Input DHW (Net)			
24 model	kW	24.7	
28 model	kW	28.9	
33 model	kW	34	
40 model	kW	41.2	
Heat Input DHW (Gross)			
24 model	kW	27.4	
28 model	kW	32.1	
33 model	kW	37.7	
40 model	kW	45.7	
Heat Output DHW			
		Max	
24 model	kW	24	
28 model	kW	28	
33 model	kW	33	
40 model	kW	40	
Max Gas Rate (Natural Gas - G20) (After 10 mins)			
24 model	m ³ /h	2.61	
28 model	m ³ /h	3.1	
33 model	m ³ /h	3.6	
40 model	m ³ /h	4.36	

SEDBUK Declaration

The efficiency for all models is 91.1%

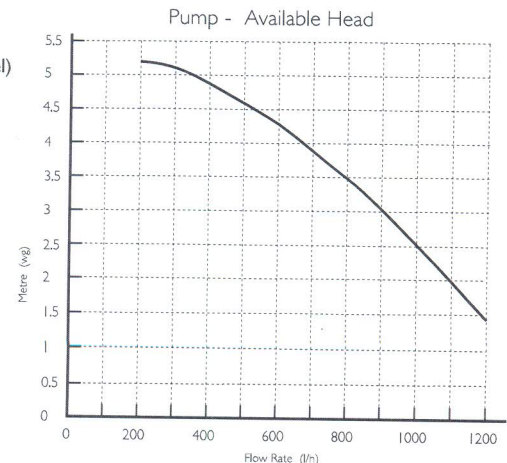
This value is used in the UK Government's Standard Assessment Procedure (SAP) for energy rating of dwellings. The test data from which it has been calculated has been certified by 0087.

NOTE: All data in this section are nominal values and subject to normal production tolerances.

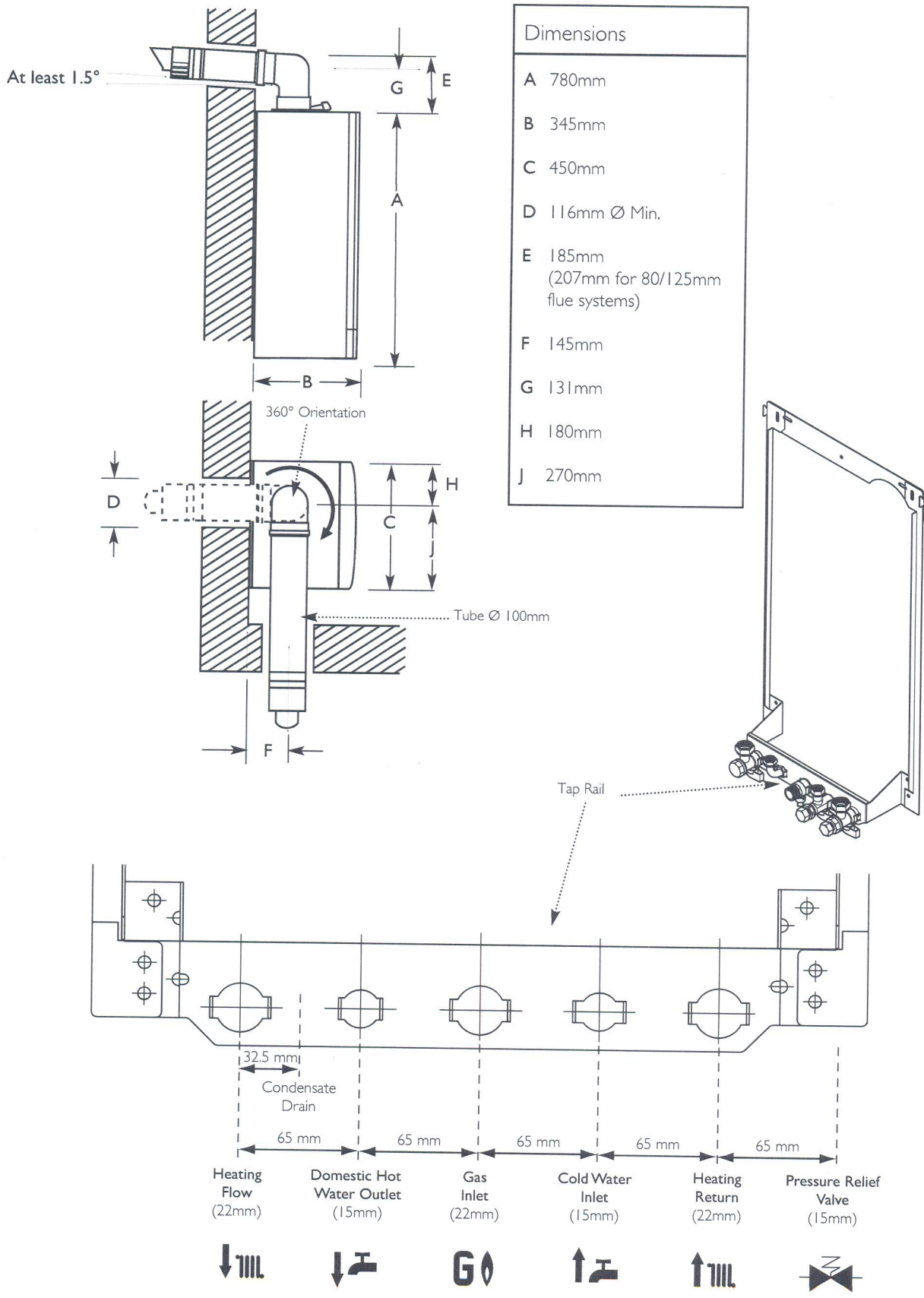
Inlet Pressure (Natural Gas - G20)		
mbar	20	
Injector (Natural Gas - G20)		
7.5mm (24 & 28) 12mm (33 & 40)		
Electrical Supply 230V~ 50Hz		
(Appliance must be connected to an earthed supply)		
Power Consumption		
155W (24, 28) 160W (33 & 40)		
Electrical Protection		
IPX0D (with timer)		
IPX5D (without timer)		
External Fuse Rating 3A		
Internal Fuse Rating F2L		
Condensate Drain		
To accept 21.5mm (¾ in) plastic waste pipe		
Flue Terminal	Diameter	100mm
Dimensions	Projection	125mm
Connections		
copper tails		
Gas Supply	-	22mm
Central Heating Flow	-	22mm
Central Heating Return	-	22mm
Cold Water Mains Inlet	-	15mm
DHW Flow	-	15mm
Pressure Relief Discharge	-	15mm
Outer Case Dimensions		
Casing Height	-	780mm
Overall Height Inc Flue Elbow	-	965mm
Casing Width	-	450mm
Casing Depth	-	345mm
Clearances		
Above Casing	200 mm Min	
Below Casing	150 mm Min*	
Front	450 mm Min (For Servicing)	
Front	5 mm Min (In Operation)	
L.H. Side	5 mm Min	
R.H. Side	5 mm Min (In Operation)	
*This is MINIMUM recommended dimension. Greater clearance will aid installation and maintenance.		
Weights		
Packaged Boiler Carton	(24 model)	48.6 kg
Installation Lift Weight		43.6 kg
Packaged Boiler Carton	(28 model)	49.2 kg
Installation Lift Weight		44.2 kg
Packaged Boiler Carton	(33 & 40 model)	51 kg
Installation Lift Weight		46 kg

NO_x Class	5			
Central Heating Primary Circuit Pressures				
Safety Discharge	bar			
Max Operating	3			
Min Operating	2.5			
Recommended Operating Range	0.5			
DHW Circuit Pressures	bar			
Max Operating	8			
Min Operating	0.15			
Flow Rates	(24)	(28)	(33)	(40)
	l/min	l/min	l/min	l/min
DHW Flow Rate @ 30°C Rise	11.43	13.3	15.7	19.1
DHW Flow Rate @ 35°C Rise	9.8	11.5	13.5	16.4
Min Working DHW Flow Rate	2	2	2	2
IMPORTANT: Where Low Flow Taps or Fittings are intended to be used in the DHW system connected it is strongly recommended that the DHW flow rate DOES NOT fall below 2.5l/min. This will ensure reliable operation of the DHW function.				
Pump				
Available Head	See graph below			
Expansion Vessel - (For Central Heating only. Integral with appliance)				
Min Pre-charge Pressure	bar			
	0.5			
Max Capacity of CH System	(24 & 28)	(33 & 40)	litre	
	125	155		
Primary Water Content of Boiler (unpressurised)	2.5	2.8		

Temperatures	
C.H. Flow Temp (adjustable)	25°C to 80°C max (± 5°C)
D.H.W. Flow Temp (adjustable)	35°C to 60°C max (± 5°C) dependent upon flow rate



5.0 Dimensions and Fixings



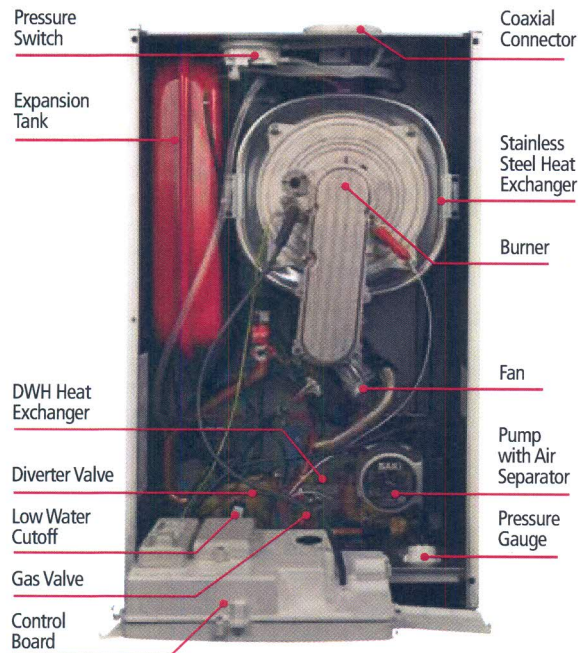
Introducing The New Standard of
High Efficiency Wallhung Boilers



Baxi Luna Duo-Tec

- ◆ 7:1 modulation ratio promotes savings in fuel use and utility bills
- ◆ Gas-adaptive control enables precise setup and commissioning
- ◆ Self-calibration function ensures continuous optimum combustion

Built-In Value Added



Baxi Luna Duo-Tec is a high efficiency modulating, condensing wallhung boiler with multiple built-in safety and performance enhancing components.

- ◆ 7:1 turndown ratio enhances versatility and optimal efficiency.
- ◆ Automatic gas-adaptive and self-calibrating functions enhance combustion efficiency and lower fuel bills.
- ◆ Two-speed modulating pump with built-in air vent generates up to 40% reduction in electrical use annually.
- ◆ Stainless steel ANSI 316L pre-mixed burner and heat exchanger (which comes with a 10-year warranty) assures longevity.
- ◆ Enhanced stainless steel secondary heat exchanger delivers domestic hot water.
- ◆ Controller with large backlit digital display on front of boiler makes it easy to set up and service.
- ◆ Pre-heat function helps eliminate cold water sandwich.
- ◆ Ability to accept preheated solar water.
- ◆ Frost protection, as well as pump and diverter valve seize prevention.
- ◆ Approved for closet installation, saving valuable living space.
- ◆ Ask a Baxi certified contractor about other built-in performance and safety features including high limit sensors, low water cut-off, shut off valves, pressure relief valve, system pressure gauge, expansion tank and auto bypass.

Baxi Luna Duo-Tec Residential Models

Baxi Luna Commercial Models

Baxi Luna High Efficiency Technical Notes			40 GA	1.33 GA	HT 1.45	HT 1.65	HT 1.100
Rated heat input	BTU/hr		125,908	125,908	167,262	241,600	379,127
Reduced heat input	BTU/hr		21,838	21,838	55,681	73,361	112,980
Rated heat output	BTU/hr		112,601	112,601	153,456	221,789	348,039
Reduced heat output	BTU/hr		19,108	19,108	52,058	69,326	106,766
Rated Domestic input	BTU/hr		153,864	n/a	n/a	n/a	n/a
Reduced Domestic input	BTU/hr		21,838	n/a	n/a	n/a	n/a
Rated Domestic output	BTU/hr		136,486	n/a	n/a	n/a	n/a
Reduced Domestic output	BTU/hr		19,108	n/a	n/a	n/a	n/a
Sealed combustion chamber			Yes	Yes	Yes	Yes	Yes
Ignition			Electronic	Electronic	Electronic	Electronic	Electronic
Freeze Protection Safety Device			Yes	Yes	Yes	Yes	Yes
Maximum pressure on heating circuit	psi		30	30	30	30	30
Regulation of heating circuit water temperature	– high temp °F/°C		176/80	176/80	176/80	176/80	176/80
	– low temp °F/°C		77/25	77/25	77/25	77/25	77/25
Dimensions:	Height	in	30	30	37 ¹³ / ₃₂	37 ¹³ / ₃₂	37 ¹³ / ₃₂
	Width	in	17 ²³ / ₃₂	17 ²³ / ₃₂	23 ⁵ / ₈	23 ⁵ / ₈	23 ⁵ / ₈
	Depth	in	13 ¹⁹ / ₃₂	13 ¹⁹ / ₃₂	18 ²³ / ₆₄	18 ²³ / ₆₄	25 ⁵ / ₈
Coaxial Vent Diameter	in		2 ³ / ₈ - 3 ¹⁵ / ₁₆	2 ³ / ₈ - 3 ¹⁵ / ₁₆	3 ⁵ / ₃₂ - 4 ¹⁵ / ₁₆	3 ⁵ / ₃₂ - 4 ¹⁵ / ₁₆	4 ¹¹ / ₃₂ - 6 ⁵ / ₈
	mm		60-100	60-100	80-125	80-125	110-160
Dual Flue Vent Diameter	in mm		3 ⁵ / ₃₂ 80	3 ⁵ / ₃₂ 80	3 ⁵ / ₃₂ 80	3 ⁵ / ₃₂ 80	4 ¹¹ / ₃₂ 110
Net weight	lbs		102	102	141	158	215
Gas type			NG/LPG	NG/LPG	NG/LPG	NG/LPG	NG/LPG



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