

Ansty Single Boiler Technical Data

Performance and General Data Information

	Boiler Model	AS75	AS90	AS120	AS160	AS220	AS270	AS320	
Energy	Heat output to water - Gross Non condensing 80/60°C	kW Btu/hr x 1000	67.7 231	81.2 277	108.2 369.2	144.3 492.3	198.5 677.3	243.6 831.2	280.1 989.8
	Heat output to water - Gross Condensing 50/30°C	kW Btu/hr x 1000	75 255.9	90 307.1	120 409.4	160 545.9	220 750.6	270 921.2	320 1091.8
	Heat input (net) - Gross	kW Btu/hr x 1000	78.5 267.8	94.3 321.7	126.3 430.9	168.3 574.2	230.4 786.1	282.7 964.6	336.7 1148.8
	Heat input (net) - Net	kW Btu/hr x 1000	69.8 238.2	83.7 285.6	112.2 382.8	149.5 510.1	204.7 698.4	251.2 856.8	299.1 1020.5
Water	Water content	l UK gal	97 21	97 21	97 21	112 25	147 33	230 51	230 51
	Design flow rate @ 11°C Δt	l/min UK gal/min	98 22.5	117 25.7	156 34.3	208 45.8	287 63.1	352 77.4	417 91.7
	Waterside pressure drop @ 11°C Δt	mbar in wg	0.8 0.3	1 0.4	1.2 0.5	1.3 0.5	1.5 0.6	1.6 0.6	1.8 0.7
	Design flow rate @ 20°C Δt	l/min UK gal/min	54 11.9	64 14.1	86 18.9	115 25.3	158 34.8	194 42.7	229 50.4
	Waterside pressure drop @ 20°C Δt	mbar in wg	0.25 0.1	0.3 0.1	0.36 0.1	0.39 0.2	0.45 0.2	0.48 0.2	0.54 0.2
	Flow rate @ 40°C Δt	l/min UK gal/min	27 5.9	32 7.0	43 9.5	57 12.5	79 17.4	97 21.3	115 25.3
	Maximum water pressure	bar psig	5 72.5						
Maximum water flow temperature	°C	100							
Gas	Combustion resistance	mbar in wg	0.7 1.75	0.9 2.25	1.5 3.75	2.5 6.25	2.8 7	3 7.5	3.8 9.5
	Input rate Natural Gas (G20)	m ³ /h ft ³ /h	7.38 260.61	8.86 312.9	11.87 419.2	15.82 558.7	21.66 764.9	26.58 938.7	31.65 1117.7
	Nominal inlet pressure required Natural gas - inlet to gas train	mbar in wg	20 8						
	Approx. flue gas volume at NTP natural gas	m ³ /h ft ³ /h	98 3461	118 4167	158 5580	210 7416	288 10170	352 12431	420 14832
	Approx. flue gas temp - nat. gas @ 30° return temp	°C °F	45 113						
Flue	Flue connection O/D	mm in	151 5.95	151 5.95	151 5.95	181 7.13	181 7.13	201 7.91	201 7.91
	Flue draught requirements		Balanced Condition at Boiler Outlet						
Electrical	Electrical supply - boiler / burner		230V 1PH 50hz						
	Start current	Amps	2.6	2.6	4.5	4.5	4.8	4.8	4.8
	Run current	Amps	0.7	0.7	1.4	1.4	1.3	1.3	1.3

Ansty Dual Boiler Technical Data

Performance and General Data Information

	Boiler Model	AD150	AD180	AD240	AD320	AD440	AD540	AD640	
Energy	Heat output to water - Gross Non condensing 80/60°C	kW 136.00 Btu/hr x 1000 464	163.20 556.8	218.5 745.5	294.1 1003.5	398.9 1361	489.5 1670.2	580.2 1979.6	
	Heat output to water - Gross Condensing 50/30°C	kW 150 Btu/hr x 1000 511.8	180 614.2	240 818.9	320 1091.8	440 1501.3	540 1842.5	640 2183.7	
	Heat input (net) - Gross	kW 157.8 Btu/hr x 1000 538.4	189.4 646.2	254.9 869.7	343.1 1170.7	462.9 1579.4	568.1 1938.1	673.3 2297.3	
	Heat input (net) - Net	kW 140.2 Btu/hr x 1000 478.4	168.2 573.9	226.4 772.5	304.8 1040	411.2 1403	504.7 1722	598.1 2040.7	
Water	Water content	l UK gal 194 43	194 43	194 43	224 49	298 66	460 101	460 101	
	Design flow rate @ 11°C Δt	l/min UK gal/min 196 43.1	234 51.5	312 68.6	416 91.5	574 126.3	704 154.9	834 183.5	
	Waterside pressure drop @ 11°C Δt	mbar in wg 1.6 0.64	2 0.8	2.4 0.96	2.6 1.04	3.0 01.20	3.2 2.66	3.6 1.44	
	Design flow rate @ 20°C Δt	l/min UK gal/min 108 23.8	128 28.2	172 37.8	230 50.6	316 69.5	388 85.4	458 100.7	
	Waterside pressure drop @ 20°C Δt	mbar in wg 0.5 0.2	0.6 0.24	0.72 0.29	0.78 0.31	0.90 0.36	0.98 0.39	1.08 0.43	
	Flow rate @ 40°C Δt	l/min UK gal/min 54 11.9	64 14.1	86 18.9	114 25.1	158 34.8	194 42.7	230 50.6	
	Maximum water pressure	bar psig	5 72.5						
	Maximum water flow temperature	°C	100	100	100	100	100	100	100
Gas	Combustion resistance	mbar in wg 0.7 1.75	0.9 2.25	1.5 3.75	2.5 6.25	2.8 7	3 7.5	3.8 9.5	
	Input rate Natural Gas (G20)	m ³ /h ft ³ /h 14.83 253.7	17.80 628.6	23.96 846.1	32.25 1138.9	43.51 1536.6	53.40 1885.8	63.29 2235.1	
	Nominal inlet pressure required Natural gas - inlet to gas train	mbar in wg	20 8						
	Approx. flue gas volume at NTP natural gas	m ³ /h ft ³ /h 196 6922	236 8334	316 11160	420 14832	576 20340	704 24862	840 29664	
	Approx. flue gas temp - nat. gas @ 30° return temp	°C °F	45 113						
Flue	Flue connection O/D 2 Connections	mm in 151 11.9	151 11.9	151 11.9	181 14.26	181 14.26	201 15.82	201 15.82	
	Flue draught requirements	Balanced Condition at Boiler Outlet							
Electrical	Electrical supply - boiler / burner	230V 1PH 50hz							
	Start current	Amps	2.6	2.6	4.5	4.5	4.8	4.8	4.8
	Run current	Amps	0.7	0.7	1.4	1.4	1.3	1.3	1.3