

Technical data & dimensions

Models UF100-1, UF200-2, UF300-3, UF150-1, UF300-2, UF450-3
100 and 150kW modules

	Boiler model	Units	UF100-1	UF200-2	UF300-3	UF150-1	UF-300-2	UF450-3
	No. of modules		1	2	3	1	2	3
Energy	Building Regulations Part L seasonal efficiency	% gross	97.4	97.4	97.4	95.6	95.6	95.6
	Building Regulations Part L seasonal efficiency	% nett	108.2	108.2	108.2	106.2	106.2	106.2
	Boiler output 80/60°C	kW	89.1	178.2	267.3	134.5	269	403.5
	Boiler output 50/30°C	kW	98.6	197.2	295.8	147.3	294.6	441.9
	Boiler input gross (maximum)	kW	103	206	309.0	154.6	309.2	463.8
	Boiler input nett (maximum)	kW	92.8	185.5	278.3	139.2	278.4	417.6
	Boiler output 80/60°C (minimum)	kW	17.8	17.8	17.8	26.9	26.9	26.9
	Boiler output 50/30°C (minimum)	kW	19.7	19.7	19.7	29.5	29.5	29.5
Water	Water content	litres	9	18	27	12.6	25.2	37.8
	System design flow rate @ 11°C ΔT rise	l/s	2.2	4.3	6.5	3.3	6.5	9.8
	Water side pressure loss @ 11°C ΔT rise	mbar	736	736	736	820	820	820
	System design flow rate @ 20°C ΔT rise	l/s	1.2	2.4	3.6	1.8	3.6	5.4
	Water side pressure loss @ 20°C ΔT rise	mbar	225	225	225	250	250	250
	Minimum operating water pressure	barg	0.5	0.5	0.5	0.5	0.5	0.5
	Maximum operating water pressure	barg	5.3	5.3	5.3	5.3	5.3	5.3
	Maximum water pressure	barg	6	6	6	6	6	6
	Maximum flow temperature setting	°C	85	85	85	85	85	85
	Minimum flow temperature setting	°C	30	30	30	30	30	30
Gas	Gas flow rate (maximum) (Nat gas)	m³/hr	9.8	19.6	29.5	14.7	29.5	44.2
	Gas flow rate (maximum) (LPG)	m³/hr	3.8	7.6	11.4	5.7	11.4	17.1
	Nominal inlet pressure (Nat gas)	mbar	20	20	20	20	20	20
	Nominal inlet pressure (LPG)	mbar	37	37	37	37	37	37
	Maximum inlet pressure (Nat gas)	mbar	25	25	25	25	25	25
	Maximum inlet pressure (LPG)	mbar	45	45	45	45	45	45
Flue	Approx flue gas volume @ 72°C , 9.0% CO2	m³/hr	155	310	465	233	466	699
	Maximum flue gas temperature @ 80/60°C	°C	72	72	72	72	72	72
	Maximum flue gas temperature @ 50/30°C	°C	42	42	42	42	42	42
	Pressure available at flue connection	Pa mbar	150 1.5	150 1.5	150 1.5	150 1.5	150 1.5	150 1.5
	NO _{x,pond,Hs} (gross) emission (0% excess oxygen, dry air) (Nat gas)	mg/kWh	33	33	33	32	32	32
	NO _{x,pond,Hs} (gross) emission (0% excess oxygen, dry air) (LPG)	mg/kWh	42.8	42.8	42.8	44.8	44.8	44.8
	NO _{x,pond} (nett) emission (0% excess oxygen, dry air) (Nat gas)	mg/kWh	37	37	37	36	36	36
	NO _{x,pond} (nett) emission (0% excess oxygen, dry air) (LPG)	mg/kWh	48.3	48.3	48.3	48.7	48.7	48.7
	NO _x Class		6	6	6	6	6	6
Connection	Water flow/return connections	inches	R2-11	R2-11	R2-11	R2-11	R2-11	R2-11
	Gas inlet connection pipe thread size	inches	G1¼	G1¼	G1¼	G1¼	G1¼	G1¼
	Flue connection diameter (I/D)	mm	130	200	200	130	200	200
	Condensate trap connections (O/D)	mm	34	34	34	34	34	34
Electrics	Electrical supply		230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz
	Power consumption - maximum boiler modulation	W	139	278	417	304	608	912
	Run current (per module)	Amp	0.6	0.6	0.6	1.3	1.3	1.3
	Approx shipping weight	kg	152	286	420	177	336	495
	Noise emission @1m @max modulation (per module)	Max dB (A)	55.8	55.8	55.8	59.4	59.4	59.4

Technical data & dimensions

Models UF200-1, UF400-2, UF600-3, UF250-1, UF500-2, UF750-3
200 and 250kW modules

	Boiler model	Units	UF200-1	UF400-2	UF600-3	UF250-1	UF500-2	UF750-3
	No. of modules		1	2	3	1	2	3
Energy	Building Regulations Part L seasonal efficiency	% gross	96.5	96.5	96.5	94.3	94.3	94.3
	Building Regulations Part L seasonal efficiency	% nett	107.2	107.2	107.2	104.8	104.8	104.8
	Boiler output 80/60°C	kW	181.7	363.4	545.1	229.4	458.8	688.2
	Boiler output 50/30°C	kW	197.9	395.8	593.7	246.9	493.8	740.7
	Boiler input gross (maximum)	kW	208.9	417.7	626.6	261.9	523.9	785.8
	Boiler input nett (maximum)	kW	188.1	376.1	564.2	235.9	471.7	707.6
	Boiler output 80/60°C (minimum)	kW	36.3	36.3	36.3	45.9	45.9	45.9
	Boiler output 50/30°C (minimum)	kW	39.6	39.6	39.6	49.4	49.4	49.4
Water	Water content	litres	16.2	32.4	48.6	19.8	39.6	59.4
	System design flow rate @ 11°C ΔT rise	l/s	4.3	8.7	13	5.4	10.9	16.3
	Water side pressure loss @ 11°C ΔT rise	mbar	710	710	710	767	767	767
	System design flow rate @ 20°C ΔT rise	l/s	2.4	4.8	7.2	3	6	9
	Water side pressure loss @ 20°C ΔT rise	mbar	217	217	217	234	234	234
	Minimum operating water pressure	barg	0.5	0.5	0.5	0.5	0.5	0.5
	Maximum operating water pressure	barg	5.3	5.3	5.3	5.3	5.3	5.3
	Maximum water pressure	barg	6	6	6	6	6	6
	Maximum flow temperature setting	°C	85	85	85	85	85	85
	Minimum flow temperature setting	°C	30	30	30	30	30	30
Gas	Gas flow rate (maximum) (Nat gas)	m³/hr	19.1	38.2	57.3	25	49.9	74.9
	Gas flow rate (maximum) (LPG)	m³/hr	7.7	15.4	23.1	9.7	19.4	29.1
	Nominal inlet pressure (Nat gas)	mbar	20	20	20	20	20	20
	Nominal inlet pressure (LPG)	mbar	37	37	37	37	37	37
	Maximum inlet pressure (Nat gas)	mbar	25	25	25	25	25	25
	Maximum inlet pressure (LPG)	mbar	45	45	45	45	45	45
Flue	Approx flue gas volume @ 72°C , 9.0% CO2	m³/hr	314	628	942	394	788	1182
	Maximum flue gas temperature @ 80/60°C	°C	72	72	72	72	72	72
	Maximum flue gas temperature @ 50/30°C	°C	42	42	42	42	42	42
	Pressure available at flue connection	Pa mbar	150 1.5	150 1.5	150 1.5	150 1.5	130 1.3	130 1.3
	NO _{x,pond,Hs} (gross) emission (0% excess oxygen, dry air) (Nat gas)	mg/kWh	33	33	33	35	35	35
	NO _{x,pond,Hs} (gross) emission (0% excess oxygen, dry air) (LPG)	mg/kWh	49	49	49	40.1	40.1	40.1
	NO _{x,pond} (nett) emission (0% excess oxygen, dry air) (Nat gas)	mg/kWh	36	36	36	39	39	39
	NO _{x,pond} (nett) emission (0% excess oxygen, dry air) (LPG)	mg/kWh	53.3	53.3	53.3	43.6	43.6	43.6
	NO _x Class		6	6	6	6	6	6
	Connection	Water flow/return connections	inches	R2-11	R2-11	R2-11	R2-11	R2-11
Gas inlet connection pipe thread size		inches	G1¼	G1¼	G1¼	G1¼	G1¼	G1¼
Flue connection diameter (I/D)		mm	130	250	250	130	250	250
Condensate trap connections (O/D)		mm	34	34	34	34	34	34
Electrics	Electrical supply		230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz
	Power consumption - maximum boiler modulation	W	220	440	660	285	570	855
	Run current (per module)	Amp	1	1	1	1.2	1.2	1.2
	Approx shipping weight	kg	220	422	624	247	476	705
	Noise emission @1m @max modulation (per module)	Max dB (A)	59.7	59.7	59.7	58.5	58.5	58.5

Technical data & dimensions

Models UF300-1, UF600-2, UF900-3, UF350-1, UF700-2, UF1050-3
300 and 350kW modules

	Boiler model	Units	UF300-1	UF600-2	UF900-3	UF350-1	UF700-2	UF1050-3
	No. of modules		1	2	3	1	2	3
Energy	Building Regulations Part L seasonal efficiency	% gross	95.6	95.6	95.6	96.9	96.9	96.9
	Building Regulations Part L seasonal efficiency	% nett	106.2	106.2	106.2	107.7	107.7	107.7
	Boiler output 80/60°C	kW	273	546	819	316.4	632.8	949.2
	Boiler output 50/30°C	kW	295.9	591.8	887.7	348.9	697.8	1046.7
	Boiler input gross (maximum)	kW	314.6	629.1	943.7	360.8	721.6	1082.5
	Boiler input nett (maximum)	kW	283.3	566.5	849.8	324.9	649.8	974.8
	Boiler output 80/60°C (minimum)	kW	54.6	54.6	54.6	63.3	63.3	63.3
	Boiler output 50/30°C (minimum)	kW	59.2	59.2	59.2	69.8	69.8	69.8
Water	Water content	litres	23.4	46.8	70.2	27	54	81
	System design flow rate @ 11°C ΔT rise	l/s	6.5	13	19.6	7.6	15.2	22.8
	Water side pressure loss @ 11°C ΔT rise	mbar	807	807	807	835	835	835
	System design flow rate @ 20°C ΔT rise	l/s	3.6	7.2	10.8	4.2	8.4	12.6
	Water side pressure loss @ 20°C ΔT rise	mbar	246	246	246	255	255	255
	Minimum operating water pressure	barg	0.5	0.5	0.5	0.5	0.5	0.5
	Maximum operating water pressure	barg	5.3	5.3	5.3	5.3	5.3	5.3
	Maximum water pressure	barg	6	6	6	6	6	6
	Maximum flow temperature setting	°C	85	85	85	85	85	85
	Minimum flow temperature setting	°C	30	30	30	30	30	30
Gas	Gas flow rate (maximum) (Nat gas)	m³/hr	30	60	89.9	34.4	68.8	103.1
	Gas flow rate (maximum) (LPG)	m³/hr	11.6	23.2	34.8	13.3	26.6	39.9
	Nominal inlet pressure (Nat gas)	mbar	20	20	20	20	20	20
	Nominal inlet pressure (LPG)	mbar	37	37	37	37	37	37
	Maximum inlet pressure (Nat gas)	mbar	25	25	25	25	25	25
	Maximum inlet pressure (LPG)	mbar	45	45	45	45	45	45
Flue	Approx flue gas volume @ 72°C, 9.0% CO ₂	m³/hr	474	948	1422	543	1086	1629
	Maximum flue gas temperature @ 80/60°C	°C	72	72	72	72	72	72
	Maximum flue gas temperature @ 50/30°C	°C	42	42	42	42	42	42
	Pressure available at flue connection	Pa mbar	100 1	100 1	80 0.8	110 1.1	70 0.7	60 0.6
	NO _{x,pond,Hs} (gross) emission (0% excess oxygen, dry air) (Nat gas)	mg/kWh	34	34	34	36	36	36
	NO _{x,pond,Hs} (gross) emission (0% excess oxygen, dry air) (LPG)	mg/kWh	47.3	47.3	47.3	47.1	47.1	47.1
	NO _{x,pond} (nett) emission (0% excess oxygen, dry air) (Nat gas)	mg/kWh	37	37	37	40	40	40
	NO _{x,pond} (nett) emission (0% excess oxygen, dry air) (LPG)	mg/kWh	51.5	51.5	51.5	51.2	51.2	51.2
NO _x Class		6	6	6	6	6	6	
Connection	Water flow/return connections	inches	R2-11	R2-11	R2-11	R2-11	R2-11	R2-11
	Gas inlet connection pipe thread size	inches	G1¼	G1¼	G1¼	G1¼	G1¼	G1¼
	Flue connection diameter (I/D)	mm	130	300	300	130	300	300
	Condensate trap connections (O/D)	mm	34	34	34	34	34	34
Electrics	Electrical supply		230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz
	Power consumption - maximum boiler modulation	W	442	884	1326	508	1016	1524
	Run current (per module)	Amp	1.9	1.9	1.9	2.2	2.2	2.2
	Approx shipping weight	kg	287	551	815	310	597	884
	Noise emission @1m @max modulation (per module)	Max dB (A)	60.9	60.9	60.9	60.9	60.9	60.9