



# Technical data TRIGON® XXL ECO

TRIGON® XXL ECO		ECO 650	ECO 750	ECO 850	ECO 950	ECO 1050	ECO 1150	ECO 1300	ECO 1450	ECO 1600
Nominal heat output at 80/60°C	kW	615	719	814	909	1003	1097	1255	1411	1568
Minimum heat output at 80/60°C	kW	175	204	231	258	285	311	356	400	445
Nominal heat output at 50/30°C	kW	620	725	821	917	1011	1106	1265	1422	1581
Minimum heat output at 50/30°C	kW	192	224	254	284	314	343	392	440	490
Nominal heat input full load Net	kW	653	764	865	966	1066	1166	1333	1499	1666
Minimum heat input min. load Net	kW	187	218	247	276	305	333	381	428	476
Efficiency at 80/60°C full load Net/Gross	%	94.1/ 84.8	94.1/ 84.8	94.1/ 84.8	94.1/ 84.8	94.1/ 84.8	94.1/ 84.8	94.1/ 84.8	94.1/ 84.8	94.1/ 84.8
Efficiency at 50/30°C min. load Net/Gross	%	102.9/ 92.7	102.9/ 92.7	102.9/ 92.7	102.9/ 92.7	102.9/ 92.7	102.9/ 92.7	102.9/ 92.7	102.9/ 92.7	102.9/ 92.7
Efficiency at 30°C return 30% load Net/Gross	%	102.9/ 92.7	102.9/ 92.7	102.9/ 92.7	102.9/ 92.7	102.9/ 92.7	102.9/ 92.7	102.9/ 92.7	102.9/ 92.7	102.9/ 92.7
Gross seasonal efficiency*	%	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2	91.2
Gas consumption natural gas (G20) max./min.	m³/h	59.9/ 17.2	70.1/ 20.0	79.4/ 22.7	88.6/ 25.3	97.8/ 28.0	107.0/ 30.6	122.3/ 35.0	137.5/ 39.3	152.8/ 43.7
NOx level (EN 15502)	mg/kWh	22	22	22	22	22	22	22	22	22
Flue gas temperature at 80/60°C full load	°C	153	153	153	153	153	153	153	153	153
Max. permissible flue resistance	Pa	150	150	150	150	150	150	150	150	150
Water pressure max./min.	bar	8/1.5	8/1.5	8/1.5	8/1.5	8/1.5	8/1.5	8/1.5	8/1.5	8/1.5
Maximum temperature setpoint	°C	90	90	90	90	90	90	90	90	90
Water flow at ΔT=10K	m³/h	52	62	70	78	86	94	108	122	134
Hydraulic resistance at ΔT=10K	kPa	148	100	120	140	160	240	288	372	456
Water flow at ΔT=20K	m³/h	26.0	31.0	35.0	39.0	43.0	47.0	54.0	61.0	67.0
Hydraulic resistance at ΔT=20K	kPa	37	25	30	35	40	60	72	93	114
Water flow at ΔT=30K	m³/h	17.3	20.7	23.3	26.0	28.7	31.3	36.0	40.7	44.7
Hydraulic resistance at ΔT=30K	kPa	16	11	13	16	18	27	32	41	51
Electrical connection	V	400	400	400	400	400	400	400	400	400
Electrical power consumption boiler (excl. pump)	W	900	900	1270	1270	1270	2330	2330	2770	2770
Noise level	dB(A)	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7
Water content	l	53	70	75	80	85	97	109	116	123
Weight (empty)	kg	844	958	1084	1221	1369	1380	1740	1899	1991
<b>Dimensions</b>										
Water connections (W)	-	DN65 PN16	DN80 PN16	DN80 PN16	DN80 PN16	DN80 PN16	DN80 PN16	DN80 PN16	DN80 PN16	DN80 PN16
Gas connection (G)	-	R2"	R2"	R2"	DN65 PN16	DN65 PN16	DN65 PN16	DN65 PN16	DN80 PN16	DN80 PN16
Flue gas connection (C)	mm	350	350	400	400	400	450	450	500	500
Air intake connection (for room sealed use)	mm	355	355	355	355	355	450	450	450	450
Condensate connection	mm	40	40	40	40	40	40	40	40	40
Boiler length (incl. connections)	mm	2185	2565	2565	2565	2565	2795	3310	3310	3310
Boiler length (excl. connections) (L1)	mm	1710	2085	2085	2085	2085	2085	2600	2600	2600
Length water connections (Lw)	mm	475	480	480	480	480	480	480	480	480
Length chimney plate (L2)	mm	550	550	550	550	550	710	710	710	710
Width (B)	mm	1370	1170	1170	1370	1370	1570	1370	1570	1570
Height (H)	mm	1555	1555	1555	1555	1555	1555	1575	1575	1575

\* In accordance with equation 2 in the Non-Domestic Building Services Compliance Guide



# Technical data TRIGON<sup>®</sup> XXL EVO

TRIGON <sup>®</sup> XXL EVO		EVO 700	EVO 800	EVO 900	EVO 1000	EVO 1100	EVO 1200	EVO 1400	EVO 1550	EVO 1700	EVO 2000
Nominal heat output at 80/60°C	kW	639	747	846	945	1043	1141	1304	1467	1630	1953
Minimum heat output at 80/60°C	kW	182	212	241	269	297	324	371	417	464	487
Nominal heat output at 50/30°C	kW	676	791	896	1001	1104	1208	1381	1553	1726	2069
Minimum heat output at 50/30°C	kW	202	236	267	298	330	360	412	463	515	541
Nominal heat input full load Net	kW	653	764	865	966	1066	1166	1333	1499	1666	2000
Minimum heat input min. load Net	kW	187	218	247	276	305	333	381	428	476	500
Efficiency at 80/60°C full load Net/Gross	%	97.8/ 88.1	97.8/ 88.1	97.8/ 88.1	97.8/ 88.1	97.8/ 88.1	97.8/ 88.1	97.8/ 88.1	97.8/ 88.1	97.8/ 88.1	97.7/ 88.0
Efficiency at 50/30°C min. load Net/Gross	%	108.2/ 97.4	108.2/ 97.4	108.2/ 97.4	108.2/ 97.4	108.2/ 97.4	108.2/ 97.4	108.2/ 97.4	108.2/ 97.4	108.2/ 97.4	108.2/ 97.4
Efficiency at 30°C return 30% load Net/Gross	%	108.4/ 97.7	108.4/ 97.7	108.4/ 97.7	108.4/ 97.7	108.4/ 97.7	108.4/ 97.7	108.4/ 97.7	108.4/ 97.7	108.4/ 97.7	108.4/ 97.7
Gross seasonal efficiency*	%	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9	95.9
Gas consumption natural gas (G20) max./min.	m <sup>3</sup> /h	59.9/ 17.2	70.1/ 20.0	79.4/ 22.7	88.6/ 25.3	97.8/ 28.0	107.0/ 30.6	122.3/ 35.0	137.5/ 39.3	152.8/ 43.7	183.5/ 45.9
NOx level (EN 15502)	mg/kWh	22	22	22	22	22	22	22	22	22	23
Flue gas temperature at 80/60°C full load	°C	69	69	69	69	69	69	69	69	69	73
Max. permissible flue resistance	Pa	150	150	150	150	150	150	150	150	150	150
Water pressure max./min.	bar	8/1.5	8/1.5	8/1.5	8/1.5	8/1.5	8/1.5	8/1.5	8/1.5	8/1.5	8/1.5
Maximum temperature setpoint	°C	90	90	90	90	90	90	90	90	90	90
Water flow at ΔT=10K	m <sup>3</sup> /h	54.0	64.0	72.0	82.0	90.0	98.0	112.0	126.0	140.0	168.0
Hydraulic resistance at ΔT=10K	kPa	296	160	180	268	312	328	384	544	648	864
Water flow at ΔT=20K	m <sup>3</sup> /h	27.0	32.0	36.0	41.0	45.0	49.0	56.0	63.0	70.0	84.0
Hydraulic resistance at ΔT=20K	kPa	74	40	45	67	78	82	96	136	162	216
Water flow at ΔT=30K	m <sup>3</sup> /h	18.0	21.3	24.0	27.3	30.0	32.7	37.3	42	46.7	56.0
Hydraulic resistance at ΔT=30K	kPa	33	18	20	30	35	37	43	60	72	96
Electrical connection	V	400	400	400	400	400	400	400	400	400	400
Electrical power consumption boiler (excl. pump)	W	900	900	1270	1270	1270	2330	2330	2770	2770	2770
Noise level	dB(A)	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	68.7	72.7
Water content	l	73	97	104	110	117	131	147	157	166	209
Weight (empty)	kg	1136	1328	1468	1634	1800	1900	2000	2100	2201	2500
<b>Dimensions</b>											
Water connections (W)	-	DN65 PN16	DN80 PN16	DN80 PN16	DN80 PN16	DN80 PN16	DN80 PN16	DN80 PN16	DN80 PN16	DN80 PN16	DN80 PN16
Gas connection (G)	-	R2"	R2"	R2"	DN65 PN16	DN65 PN16	DN65 PN16	DN65 PN16	DN80 PN16	DN80 PN16	DN80 PN16
Flue gas connection (C)	mm	300	350	350	400	400	450	450	500	500	500
Air intake connection (for room sealed use)	mm	250	355	355	355	355	450	450	450	450	450
Condensate connection	mm	40	40	40	40	40	40	40	40	40	40
Boiler length (incl. connections)	mm	2185	2565	2565	2565	2565	2795	3310	3310	3310	3310
Boiler length (excl. connections) (L1)	mm	1710	2085	2085	2085	2085	2085	2600	2600	2600	2600
Length water connections (Lw)	mm	475	480	480	480	480	480	480	480	480	480
Length chimney plate (L2)	mm	550	550	550	550	550	710	710	710	710	710
Width (B)	mm	1370	1170	1170	1370	1370	1570	1370	1570	1570	1570
Height (H)	mm	1555	1555	1555	1555	1555	1555	1575	1575	1575	1665

\* In accordance with equation 2 in the Non-Domestic Building Services Compliance Guide