		CSM-15	CSM-15	CSM-30	CSM-30	CSM-45	CSM-45	CSM-60-LN	CSM-60-LN	CSM-75-LN	CSM-75-LN	CSM-100-LN	CSM-100-LN	CSM-125-LN	CSM-125-LN
		Standard	With Super Economiser	Standard	With Super Economiser	Standard	With Super Economiser	Standard	With Super Economiser	Standard	With Super Economiser	Standard	With Super Economiser	Standard	With Super Economiser
BOILER HORSEPOWER	BHP	15	15	30	30	45	45	60	60	75	75	100	100	125	125
NET HEAT OUTPUT	kcal/h	126.611	126.611	253.222	253.222	379.833	379.833	506.444	506.444	633.270	633.270	844.073	844.073	1.054.876	1.054.876
NET HEAT OUTPUT	kW	147	147	294	294	441	441	589	589	736	736	981	981	1.226	1.226
EQUIVALENT MAXIMUM OUTPUT SATURATED STEAM	kg/h	235	235	469	469	703	703	939	939	1.174	1.174	1.566	1.566	1.957	1.957
(from and at 100^{°} C feedwater and 0 barg steam)															
EQUIVALENT MAXIMUM OUTPUT SATURATED STEAM															
(at 7 barg and from 100°C feedwater)	kg/h	225	225	450	450	675	675	900	900	1.125	1.125	1.500	1.500	1.875	1.875
DESIGN PRESSURE	barg	10	10	10 / 13 / 16 / 20	10 / 13 / 16 / 20	10 / 13 / 16 / 20	10 / 13 / 16 / 20	10 / 13 / 16 / 20 / 30	10 / 13 / 16 / 20 / 30	10 / 13 / 16 / 20 / 30	10 / 13 / 16 / 20 / 30	10 / 13 / 16 / 20 / 30	10 / 13 / 16 / 20 / 30	10 / 13 / 16 / 20 / 3	10 / 13 / 16 / 20 / 31
STEAM MAX OPERATING PRESSURE	barg	7	7	7 / 10 / 13 / 16	7 / 10 / 13 / 16	7 / 10 / 13 / 16	7 / 10 / 13 / 16	7 / 10 / 13 / 16 / 25	7 / 10 / 13 / 16 / 25	7 / 10 / 13 / 16 / 25	7 / 10 / 13 / 16 / 25	7 / 10 / 13 / 16 / 25	7 / 10 / 13 / 16 / 25	7 / 10 / 13 / 16 / 25	7 / 10 / 13 / 16 / 25
(determined by design pressure)															
STEAM MIN. OPERATING PRESSURE	barg	4	4	4	4	4	4	4	4	4	4	4	4	4	4
OIL CONSUMPTION	kg/h	13,8	13,1	27,6	26,1	41,4	39,2	52,8	51,7	66,7	64,6	88,9	86,2	112,4	107,7
at maximum steam output (See note 1)															
GAS COMSUMPTION	Nm^{3} /h	15,9	15,1	31,8	30,1	47,7	45,2	61,6	59,7	77,8	75,4	103,7	99,4	131,1	125,6
at maximum steam output (See note 3)															
GAS SUPPLY PRESSURE REQUIRED	mbarg	25..300	25..300	25..300	25..300	25 or 27,5 - 300	25 or 27,5 - 300	100	100	100	100	100	100	100	100
(See notes 3 and 5)															
WATER CONTENT															
- Filled	l	35	37	76,7	80,3	85	89,5	80,2	104,2	80,2	104,2	134,8	177,5	134,8	177,5
- In operation	l	18,6	20,6	39,5	43,1	42,7	47,2	40,3	60,2	39,6	62,1	66,3	105,5	65,5	104,4
COMBUSTION EFFICIENCIES (See notes 2 and 4)															
Gas Fired -100% / 25% or 20% load	%	90 / 94	95 / 96	90 / 94	95 / 96	90 / 94	95 / 96	93 / 96	96 / 97	92 / 96	95 / 97	92 / 96	96 / 97	91 / 96	95 / 97
Diesel Oil Fired - 100% / 60% or 33% load	%	90 / 92	95 / 95	90 / 92	95 / 95	90 / 92	95 / 95	94 / 96	96 / 97	93 / 95	96 / 97	93 / 95	96 / 97	92 / 95	96 / 97
FIRING RATE															
- Step fired oil (See note 4)	%	0-60-100	0-60-100	0-60-100	0-60-100	0-60-100	0-60-100	-	-	-	-	-	-	-	-
- Modulating oil (See note 4)	%	-	-	-	-	-	-	33-100	33-100	33-100	33-100	33-100	33-100	33-100	33-100
- Modulating gas (See note 4)	%	25-100	25-100	25-100	25-100	25-100	25-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100	20-100
HEATING SURFACE	m^{2}	7,3	10,3	13,1	18,5	25,9	32,6	12,2	17,3	12,2	17,3	19,7	28,6	19,7	28,6
ELECTRIC MOTOR (Up to 10 barg)															
- Blower	kW	0,5	0,5	0,5	0,5	0,62	0,62	2,2	2,2	2,2	2,2	2,2	2,2	2,2	2,2
- Pump	kW	0,37	0,37	0,55	0,55	1,1	1,1	3	3	3	3	3	3	3	3
- Electrical Power		230VAC 50Hz 16A		230VAC 50Hz 16A		230VAC 50Hz 16A		400VAC 50Hz		400VAC 50Hz		400VAC 50Hz		400VAC 50Hz	
APPROXIMATE OVERALL DIMENSIONS															
- Length	mm	1.600	1.600	1.800	1.800	1.800	1.800	1.820	1.820	1.820	1.820	2.025	2.025	2.025	2.025
- Width	mm	1.172	1.172	1.350	1.350	1.350	1.350	1.338	1.338	1.338	1.338	1.405	1.405	1.405	1.405
- Height	mm	1.710	1.710	2.237	2.237	2.460	2.460	2.095	2.388	2.095	2.388	2.246	2.598	2.246	2.598
APPROXIMATE WEIGHT															
- Filled	kg	1.135	1.220	1.510	1.610	1.605	1.720	1.425	1.555	1.425	1.555	2.005	2.185	2.005	2.185
- Empty	kg	1.100	1.180	1.430	1.520	1.520	1.630	1.300	1.430	1.300	1.430	1.770	1.950	1.770	1.950
EXHAUST GAS															
- STACK CONNECTION (Outer Diameter)	mm	200	200	250	250	250	250	381	381	381	381	457	457	457	457
- Recommended diameter of Chimney (Inner diameter) - note 6	mm	200	200	250	250	300	300	400	400	400	400	450	450	500	500
NOISE LEVEL (sound pressure level Lp at 1m) - in free field	dBA	<80	<80	<80	<80	<80	<80	<85	<85	< 85	< 85	< 85	< 85	< 85	< 85

NOTES

1) Based on N° 2 fuel oil with a Low Heat Value (LHV) = 42700 kJ/kg - calculated using the announced combustion efficiencies

2) Efficiencies are based on 60°C feed water temperature. Please consult factory for guaranteed values

3) Based on natural gas with Low Heat Value (LHV) = 37000 kJ/Nm³ - calculated using the announced combustion efficiencies

4) No dual fuel burners available till further notice!

5) For all 15, 30 and 45 units with natural gas supply pressures between 150 (min.) and 300 (max.) mbar, a gas pressure regulating valve has to be provided / purchased. For CSM-45 with a natural gas supply pressure below 25 mbar or 27,5 mbar (LHV < 37000 kJ/Nm³) a "low pressure gas train"
may have to be provided / purchased - please consult factory in case of low gas pressures - to be engineered depending on the lower heating value of the natural gas.
The larger units as from the 60-model require a constant gas pressure as indicated (and the max. pressure allowed is 360 mbar)

6) The required draft at the stack outlet of the Steam generator should be between 0 and -6 mmWK. Depending on the length and height of the chimney, the diameter might change or a draft regulator should be added.