

Clayton Steam Generators – Technical Specifications: E-10 up to E-185

Fuel efficiency. The Clayton design results in the lowest possible fuel consumption, also at partial loads. Fuels can be natural gas and/or light oil or heavy fuel oil. Economizer versions are available for additional fuel savings.

Rapid start-up. Full output from cold condition is reached in less than 10 minutes. Reaction to load changes is instant while maintaining operating steam pressure.

High quality steam. The Clayton separator assures steam with less than 0.5% moisture.

Compact and light weight design. Easy to install.

Unsurpassed safety record.

Packaged systems. The Clayton steam generator comes as a fully pre-assembled unit, tested in the factory. **Skidded and containerised solutions**, including installation accessories are available.

Fully automatic operation. Communication with control and monitoring systems are available.

Single source responsibility. For steam generator, parts, service and accessories.

Emission levels complying with the most stringent rules world-wide. Low NOx burners available for extremely low emission levels.

World-wide sales and service.



E-10 ... E-26

E-40 ... E-50

E-60 ... E-185

E-154 ... E-604

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TECHNICAL SPECIFICATIONS STEP FIRED STEAM GENERATORS

TS-001 / rev. C

GENERATOR MODEL		UNIT	E- 10	E- 15	E- 20	E- 26	E- 40	SE- 40	E- 50	SE- 50	E- 60	SE- 60	SE- 80	E- 100	SE- 100	E- 125	SE- 125	E- 185	SE- 185																		
NET OUTPUT	MAXIMUM LOAD	KW	98	147	186	255	392	392	490	490	589	589	785	981	981	1226	1226	1815	1815																		
	FIRING STEPS	%	ON/OFF burner				50 / 100	50 / 100	50 / 100	50 / 100	50 / 100	50 / 100	50 / 100	50 / 100	50 / 100	50 / 100	50 / 100	50 / 100	50 / 100	50 / 100																	
EQUIVALENT MAXIMUM OUTPUT SATURATED STEAM (*)		kg/h	157	235	313	407	626	626	783	783	939	939	1253	1566	1566	1957	1957	2897	2897																		
NOMINAL OPERATING STEAM PRESSURES AVAILABLE UP TO: (**)		bara	8	8	8	8	17	17	17	17	27	27	27	27	27	27	27	27	27																		
STANDARD INSTALLED ELECTRICAL MOTOR POWER (230/400/415/440 VAC - 50/60 Hz)	WATER PUMP	KW	0,37	0,37	0,55	0,55	2,4	2,4	2,4	2,4	4	4	7,5	7,5	7,5	7,5	7,5	11	11																		
	BLOWER	KW	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5																											
COMBUSTION EFFICIENCY (***)	FUEL TYPE: G = GAS / O = LIGHT OIL		G	O	G	O	G	O	GAS	G	O	G	O	GAS	GAS	G	O	G	O	G	O	G	O	G	O	G	O	G	O	G	O	G	O	G	O	G	O
	@ 100% STEP		%	94	93	91	92	92	92	90	91	92	94	95	88	93	91	91	94	94	92	93	92	93	95	96	91	92	94	95	90	91	94	94	94	94	
	@ 50% STEP		%	ON/OFF burner				94	95	98	96	93	95	94	93	95	95	95	95	95	95	97	97	94	95	96	97	94	95	96	97	94	94	98	96	96	96
CONSUMPTION @ FULL LOAD	GAS with LCV = 37000 kJ/Nm ³		Nm ³ /h	10,2	15,7	20,7	27,6	42,0	40,6	54,2	51,3	62,9	60,9	83,0	103,7	100,5	131,1	126,9	196,2	187,8																	
	LIGHT OIL with LCV = 42700 kJ/kg		kg/h	8,9	13,3	18,0		38,0	34,8		54,5	52,8	71,1	88,9	85,1	112,4	108,8	168,1	162,8																		
WATER CONTENT (generator water/steam system)	FILLED	L	24	24	50	50	65	76,5	65	76,5	104	130	192	192	235	192	235	290	367																		
	IN OPERATION	L	9,1	9,1	14	13	20	30,4	20	30,4	25	33	47	47	61	47	61	84	108																		
GAS PRESSURE REQUIRED @ INLET (****)		mbara	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25																		
OVERALL GENERATOR DIMENSIONS (approx.)	LENGTH	gas	mm	1325	1325	1325	1325	1520	1520	1520	1520	1520	2030	2030	2230	2230	2230	2230	2395	2395																	
		oil	mm					1325	1325						1710	1710	1880	1880	1880	1880	2030	2030															
	WIDTH	gas	mm	950	960	1045	1045	945	945	945	945	945	1280	1290	1400	1400	1400	1400	1400	1625	1625																
		oil	mm	835	835	925		835	835		1065	1065	1065	1065	1380	1380	1500	1500	1500	1500	1625	1625															
	HEIGHT	both	mm	1470	1470	1890	1890	2150	2465	2150	2450	2320	2320	2405	2405	2700	2405	2700	2515	2935																	
	WEIGHT (empty)	gas	kg	390	390	450	450	660	790	680	790	1250	1320	1695	1695	1950	1695	1950	2335	2550																	
oil		kg									1215	1285	1650	1650	1905	1650	1905	2245	2560																		
OVERALL PUMP SKID DIMENSIONS (approx.)	LENGTH	mm	500	500	515	515	930	930	930	930	Feed water pump installed on generator base frame as a standard.																										
	WIDTH	mm	375	375	465	465	830	630	630	630																											
	HEIGHT	mm	650	650	850	850	1065	1065	1085	1085																											
	WEIGHT	kg	40	40	40	40	180	180	180	180																											
GENERATOR STACK CONNECTION (outer diameter)		mm	202	202	202	202	305	305	305	305	381	381	457	457	457	457	457	559	559																		

NOTES

(*) @ 1 bara (absolute) with feed water temperature of 100 °C

(**) Available as standard. Higher pressure(s) available on request.

(***) based on feed water temperature of 60 °C

(****) to be regulated by customer, based on 100% capacity and GAS-LCV as shown above.