

Clayton Steam Generators – Technical Specifications: E-154 up to E-604

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 MODULATING STEAM GENERATORS

TS-002 / rev. C

GENERATOR MODEL		UNIT	E- 154		SE- 154		E- 204		SE- 204		E- 254		SE- 254		E- 304		SE- 304		E- 354		SE- 354		E- 404		SE- 404		E- 504		SE- 504		E- 604		SE- 604	
NET OUTPUT	MAXIMUM LOAD	kW	1471		1471		1962		1952		2452		2452		2943		2943		3433		3433		3924		3924		4905		4905		5886		5886	
	MODULATION RANGE	%	33 / 100		33 / 100		25 / 100		25 / 100		20 / 100		20 / 100		20 / 100		20 / 100		20 / 100		20 / 100		20 / 100		20 / 100		20 / 100		20 / 100		20 / 100		20 / 100	
EQUIVALENT MAXIMUM OUTPUT SATURATED STEAM (*)		kg/h	2349		2349		3131		3131		3914		3914		4997		4997		5480		5480		6263		6263		7829		7829		9394		9394	
NOMINAL OPERATING STEAM PRESSURES AVAILABLE UP TO (**)		barg	27		27		27		27		27		27		27		27		27		27		27		27		27		27		27		28	
STANDARD INSTALLED ELECTRICAL MOTOR POWER (230/400/415/440 VAC - 50/60 Hz)	WATER PUMP (****)	kW	4		4		5,5		5,5		7,5		7,5		7,5		7,5		7,5		11,0		5,5+5,5		5,5+5,5		7,5+7,5		7,5+7,5		11+11		11+11	
	BLOWER	kW	5,5		5,5		7,5		7,5		11		11		11		11		15		15		22		22		30		30		30		30	
COMBUSTION EFFICIENCY (***)	FUEL TYPE		G O		G O		G O		G O		G O		G O		G LO		G LO		G LO		G O		G O		G O		G O		G O		G O		G O	
	MAXIMUM LOAD	%	93	93	95	95	92	93	94	95	92	93	94	95	92	93	94	95	91	92	93	94	91	92	95	95	90	91	94	95	91	91	94	95
	MINIMUM LOAD	%	96	97	96	97	95	95	96	97	95	95	96	97	95	95	96	97	94	95	96	97	96	97	96	97	96	97	97	97	96	97	97	97
CONSUMPTION @ FULL LOAD	GAS with LCV = 37000 kJ/Nm ³	Nm ³ /h	154		151		297		203		259		254		311		305		367		359		420		402		530		508		629		609	
	LIGHT OIL with LCV = 42700 kJ/kg	kg/h	133		131		178		174		222		218		287		261		315		308		390		348		454		435		545		522	
WATER CONTENT (generator water/steam system)	FILLED	L	558		695		556		695		556		695		777		818		777		916		1485		1721		1485		1761		1817		2183	
	IN OPERATION	L	315		469		390		450		288		431		400		530		380		520		665		930		650		920		1120		1388	
MINIMUM GAS PRESSURE REQUIRED @ INLET (****)		mbar	120		120		170		170		230		230		300		300		390		390		170		170		230		230		300		300	
ATOMIZING AIR (oil fired only)	REQUIRED FLOW	Nm ³ /h	36		36		27		27		27		27		32		32		32		32		40		40		40		40		40		40	
	REQUIRED PRESSURE	barg	5 -> 7		5 -> 7		5 -> 7		5 -> 7		5 -> 7		5 -> 7		5 -> 7		5 -> 7		5 -> 7		5 -> 7		5 -> 7		5 -> 7		5 -> 7		5 -> 7		5 -> 7		5 -> 7	
OVERALL GENERATOR DIMENSIONS (approx.)	LENGTH	gas	2755		2755		2755		2755		2745		2745		2745		2745		2745		2745		3060		3060		3060		3060		3060		3060	
		oil	2550		2550		2550		2550		2550		2550		2550		2550		2550		2550		2550		2840		2840		2840		2840		2840	
		gas-oil	2882		2882		2882		2882		2872		2872		2872		2872		2872		2872		2872		3190		3190		3190		3190		3190	
	WIDTH	all fuels	1950		1950		1950		1950		1950		1950		1950		1950		1950		1950		2130		2130		2130		2130		2130		2130	
	HEIGHT	all fuels	2785		3165		2785		3165		2785		3165		2915		3490		2915		3490		3410		3975		3410		3975		4590		5235	
WEIGHT (empty)	all fuels	2950		3450		3050		3550		3150		3650		3900		4100		3700		4200		5800		6600		5800		6600		6900		7700		
OVERALL PUMP SKID DIMENSIONS (approx.)	LENGTH	mm	1345		1345		1350		1350		1350		1350		1350		1350		1350		1350		1350		1350		1350		1350		1350		1350	
	WIDTH	mm	690		690		820		820		820		820		820		820		820		820		820		820		820		820		820		820	
	HEIGHT	mm	1025		1025		1155		1155		1155		1155		1155		1155		1155		1155		1155		1155		1155		1155		1155		1155	
	WEIGHT	kg	325		325		400		400		400		400		400		400		400		400		400		400		400		400		400		400	
GENERATOR STACK CONNECTION (outer diameter)		mm	559		559		559		559		713		713		713		713		713		713		806		806		806		806		806		806	

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 80 °C

(****) to be provided by customer, based on 100% capacity and GAS-LCV = 31600 kJ/Nm³ Maximum pressure at inlet : 415 mbar

(*****) motor power may vary due to feed water pressures. E404 and up have two pumps