

Technical Data – Heliex GenSet

Steam Expander Generator Set HP204



Description

The HP204 steam expander generator set is a fully integrated system which converts energy in the form of wet steam into clean electrical power.

Features

- Rugged screw expander technology
- Standalone packaged unit
- Industry standard key components
- Fully automated

Package design may vary.

Performance	HP204 – 200	HP204 – 250	HP204 – 315	HP204 – 400
Gross power output	Up to 200 kWe	Up to 250 kWe	Up to 315 kWe	Up to 400 kWe
Auxiliary power input	Up to 2.5 kWe	Up to 2.5 kWe	Up to 2.5 kWe	Up to 2.5 kWe

Operating parameters	
Electrical	400V, 50Hz, 3ph+N 480v, 60Hz, 3ph+N Option
Ambient temperature	-10°C to +45°C
Ambient humidity	<95% (non-condensing)
Installation	Indoor or Outdoor
Sound pressure level	<87dBA at 1 metre
Steam mass flow rate range	Up to 15,000kg/h
Max. steam inlet temperature	221°C (saturated steam)
Max. steam inlet pressure	25 Bar A
Max. operating steam outlet pressure	6 Bar A*
Rated steam outlet pressure	17 Bar A
Max. inlet-outlet ΔP	20 Bar
Steam inlet dryness fraction	<97%
IP Rating	IP25 (to standard BS EN 60529:1992:2013)

Dimensions and foundations	
Dimensions	3000 X 1850 X 2000 mm (LWH)
Mass	Up to 9,000 kg
Lifting and handling	Standard forklift pockets 180 x 80 mm, 1300 mm between centres
Site foundation	Level load bearing surface 3500 X 2500 mm

Plant services and interconnections	
Steam inlet connection	DN100, PN40 flange. (All flange sizes up to and including DN150 are dimensionally the same whether designated PN25 or PN40). (See above for max. steam inlet pressure)
Steam outlet connection	DN150, DN200, DN250 or DN300, PN25 (Size dependent on customer operating conditions). (See above for max. steam outlet pressure)
Compressed air supply (Control System).	7 bar(g) (Instrument air to ISO 8573.1 Class 2:3:1)
Compressed air supply (Seal Pressure)**	Equal to P1 pressure (Instrument air to ISO 8573.1 Class 2:3:1)
Electrical output	400V, 3 ph+N, continuous rating to suit generator protection device
Electrical input	400V, 3 ph+N
Remote monitoring	Internet bridge (via internet cable or optional wireless GPRS / UMTS Modem). BMS or SCADA systems - MODbus over RS232, RS485, USB, Ethernet.

* Higher operating pressures considered upon request.

** Compressed air for seal supply is required at equal to P1 pressure (dependent on the actual P1 pressure)

Heliex Power Ltd reserve the right to change technical specification without notice

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