

WÄRTSILÄ WFC20



WÄRTSILÄ WFC20 COMES AS A FULLY EQUIPPED POWER PACKAGE THAT IS EASY TO INSTALL AND USE.

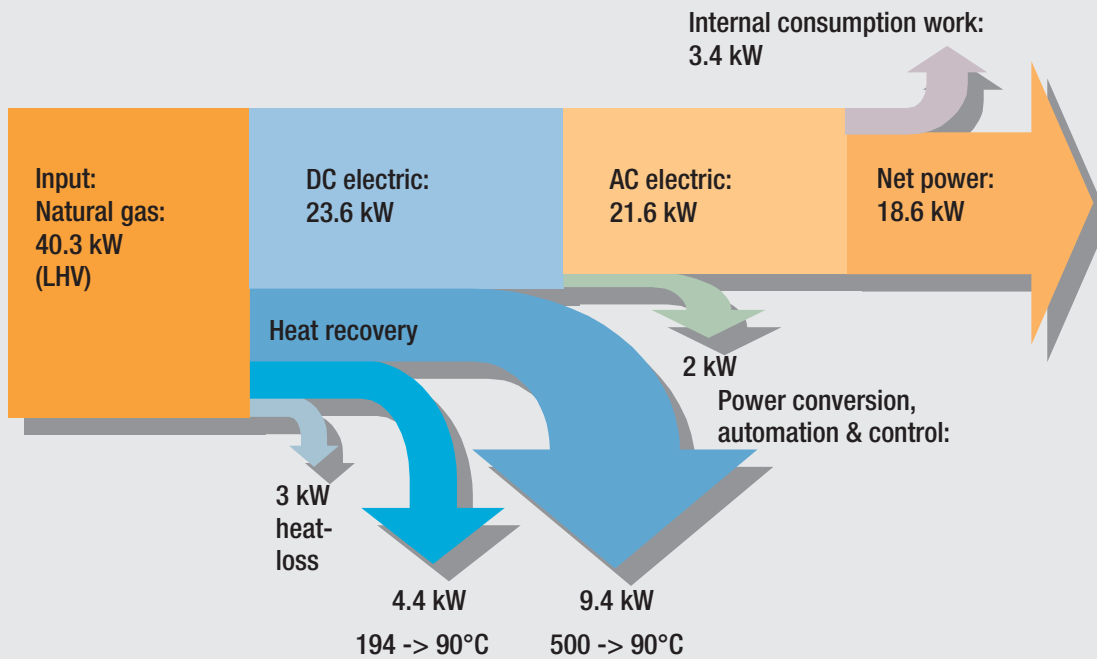
The WFC20 is the first Wärtsilä fuel cell power unit. It is based on Solid Oxide Fuel Cell (SOFC) technology, having a nominal power of 20 kWe. The high efficiency and high temperature of the exhaust gases makes the unit ideal for CHP operation, providing ultra clean power for both stationary and marine applications. The former includes commercial buildings like supermarkets, service stations, data centres, etc, and the latter marine auxiliary power generation uses.

The benefits of the fuel cell technology include:

- High fuel efficiency
- Low running noise
- Ultralow NO_x and no SO_x emissions
- CHP capability
- Grid parallel or island mode operation
- Reliable operation
- Vibration free



WÄRTSILÄ



Sankey diagram of the Wärtsilä WFC20 system.

PRODUCT SPECIFICATIONS:

Operating on NG.

UNIT SPECIFICATIONS

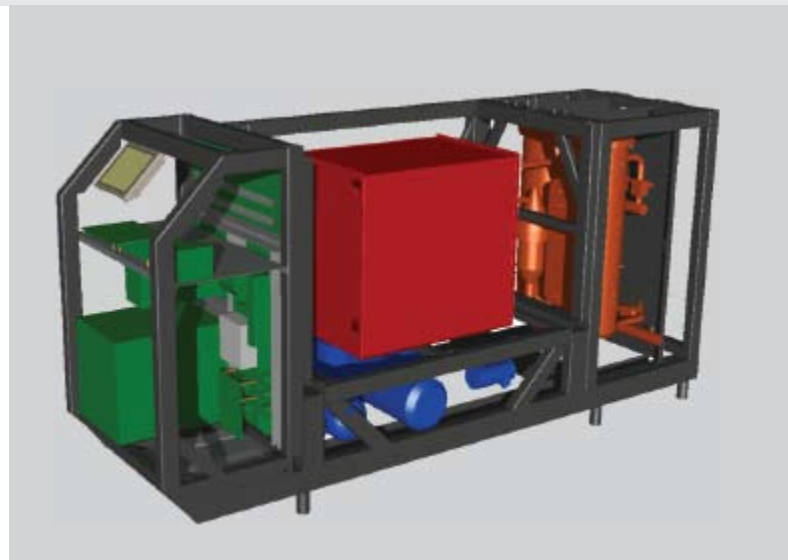
	Output	Efficiency
Nominal power	20 kW	
Net power	18.2 kW	
Cos Φ	0.8-1.0, adjustable leading or lagging	46 % (LHV)
Net heat	13.8 kW	
– Cooling 500 to 90 °C	9.4 kW	34 % (LHV)
– Cooling 195 to 90 °C	4.4 kW	
Overall efficiency		80 % (LHV)

EMISSION (TARGETS)

CO ₂	< 415 g / kWh
NO _x	< 0.04 g / kWh
SO _x	–
Noise	< 60 dB at 1 m

FEATURES

Grid connection	400 Vac 50 / 60 Hz Parallel
Primary fuels	NG, Methanol, H ₂
Stack lifetime target	40 000 h
Service interval	8 000 h



DIMENSIONS

Height	1650 mm
Width	1050 mm
Length	3290 mm
Weight	~ 3 tons