

DATASHEET

ORC ENO-20LT



“ Generate power from your waste heat thanks to our ORC “

Founded in 2009, ENOGIA is a turbine based ORC manufacturer specialised in waste heat recovery with systems producing from 10 kWe to 180 kWe.

THE PRODUCT

The ENO-20LT module is an ORC manufactured by ENOGIA, able to recover until 320 kWth and having a nominal power output of 20 kWe even after low grade heat source at 70°C.



High speed patented micro-turbines



Assembling and performance testing in ENOGIA workshop



Hydraulic connections with standard flanges



Plug-and-play system on a single skid



Remote control and access 24/7



A SYSTEM COMBINING PERFORMANCE AND RELIABILITY

Designed with the same state of mind as the 10kWe ORC manufactured by ENOGIA, ENO-20LT is a turnkey solution involving few hydraulic and electrical modifications to be integrated with this system thanks to its kinetic turbine.

This ORC can be integrated on a wide range of applications such as biomass boilers, gas engines, geo-

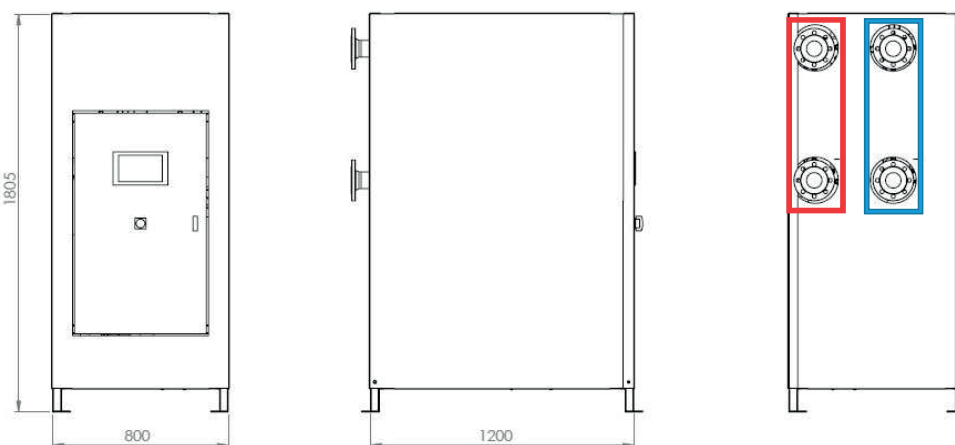
thermal sources, heating processes or concentrating solar panels. Any heat flow with temperatures between 70°C and 120°C can be recovered with this system.

In addition, it is possible to connect the cold loop of the ORC to a drying system, a floor heating system or greenhouses and reach global efficiency close to 95%!

ENO-20LT CHARACTERISTICS

Electrical ratings	Maximum gross electric power	20 kW _e
	Grid connection	400V, 3ph, 50-60 Hz
Heat source	Temperature range	70-120°C
	Thermal power input range	160-320 kW _{th}
	Hot source medium	Water, steam, oil
	Hydraulic connections	DN 65, PN 16
Cold source	Temperature range	0-60°C
	Working fluid	Water
	Cooling system	Dry cooler, cooling tower
	Hydraulic connections	DN 65, PN 16
Main components	Working fluid	R1233zd
	Generator	High speed, permanent magnet
	Expander	Kinetic turbine
	Heat exchangers	Brazed plate
	Pump	Multi-stage magnetic coupling
	Controls	Industrial PLC
	Monitoring	Remote web support
Main ratings	Weight	900 kg
	Dimensions L x w x h	1,2 m x 0,8 m x 1,8 m
	Environmental	IP 20
	Noise level @10m	60 dB
	Design lifetime	20 yrs
	Safety	Non flammable, non toxic, ODP=0
Norm compliance	Machine directive	2006/42/EG
	PED	2014/68/EU
	Electrical norms	2014/35/EG
	Grid codes	VDE-0126 (G59, VDE-ARN, UL,...)

DIMENSIONS



GOOD TO KNOW

This equipment should be installed as close as possible to the heat source to reduce heat losses through the pipes.