

“Generate power from your waste heat”

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-100LT module is an ORC manufactured by ENOGIA, able to recover up to 1400 kWth and having a nominal power output of 100 kWe from low temperature heat sources.



High speed **patented micro-turbines**



Hydraulic connections with **standard flanges**



Remote control and access **24/7**



Assembling and performance testing in ENOGIA workshop



Plug-and-play system on a single skid



A SYSTEM COMBINING PERFORMANCE AND RELIABILITY

Designed with the same state of mind as the other ORC of the LT range, the ENO-100LT is a turnkey product featuring ENOGIA's best technology.

This system suits a wide range of heat recovery applications such as biomass boilers, gas engines, geo-thermal sources or industrial processes. Any heat flow with temperatures between 70°C and

120°C can be recovered with this system thanks to its kinetic turbines.

The produced electricity is monitored by decoupling protection relays, ensuring its compliance with the grid.

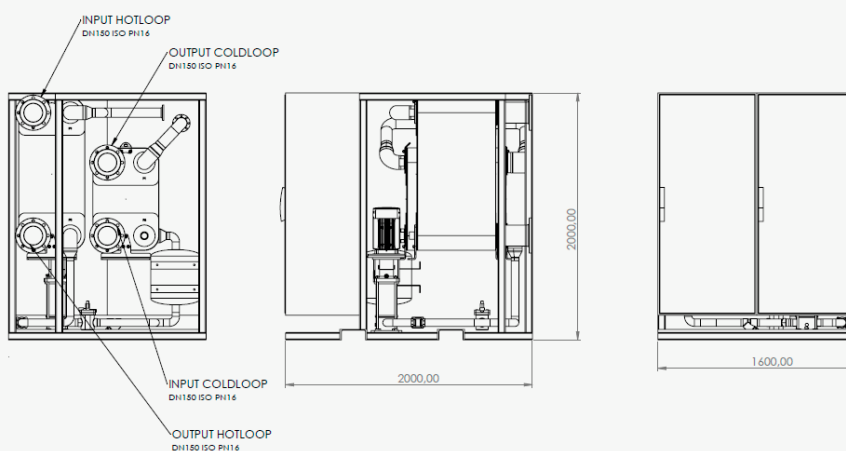
Remaining heat can be recovered for floor heating or drying system to reach a global efficiency close to 95%.

ENO-100LT CHARACTERISTICS

| | | |
|---------------------------|------------------------------|-----------------------------------|
| Electrical ratings | Maximum gross electric power | 100 kW _e |
| | Grid connection | 400V, 3ph, 50-60 Hz |
| Heat source | Temperature range | 70-120°C* |
| | Thermal power input range | 800-1400 kW _{th} |
| | Hot source medium | Water |
| | Hydraulic connections | DN 150, PN 16 |
| Cold source | Temperature range | 0-55°C |
| | Working fluid | Water |
| | Cooling system | Dry cooler, cooling tower |
| | Hydraulic connections | DN 150, PN 16 |
| Main components | Working fluid | R1233zd |
| | Generator | Medium 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 | 3000 kg |
| | Dimensions L x w x h | 2,0m x 1,6m x 2,0m |
| | 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 |
| | Norm compliance | VDE-0126 (G59, VDE-ARN, UL, etc.) |

* possibility to have >120°C with ORC MT

DIMENSIONS



GOOD TO KNOW

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