# ORC ENO-40LT



### "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-40LT module is an ORC manufactured by ENOGIA, able to recover up to 640 kWth and having a nominal power output of 40 kWe from low temperature heat sources.



2 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



## SYSTEM COMBINING PERFORMANCE AND RELIABILITY AT LOW TEMPERATURE

Designed with the same state of mind as the other ORC of the LT range, the ENO- 40LT is a turnkey product raising from architectural innovations.

This system suits a wide range of heat recovery applications such as biomass boilers, gas engines, geothermal sources, heating processes or concentrating solar panels. Any heat flow with temperatures between

70°C and 120°C can be recovered with this system thanks to its two kinetic turbines.

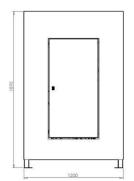
The produced power is monitored by decoupling protection relays, ensuring its compliance with the grid. Remaining heat can be recovered for floor heating or drying system to reach a global efficiency close to 95%!

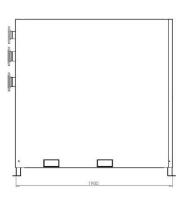


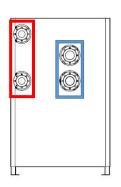
### **ENO-40LT CHARACTERISTICS**

Electrical ratings  Maximum gross electric power Grid connection  Temperature range Thermal power input range Hot source  Temperature range Thermal power input range Hot source medium Hydraulic connections  Temperature range Working fluid Cooling system Hydraulic connections  DN 100, PN 16  Working fluid Generator Expander Heat exchangers Pump Controls Monitoring  Weight Dimensions L x w x h Environmental Noise level @10m Design lifetime Safety  Machine directive  Machine directive  Temperature range 450-640 kWth Water To-120°C To-120° To-12		
Heat source  Thermal power input range Hot source medium Hydraulic connections  Temperature range Working fluid Cooling system Hydraulic connections  DN 100, PN 16  Working fluid Generator Expander Heat exchangers Pump Controls Monitoring  Weight Dimensions L x w x h Environmental Noise level @10m Design lifetime Safety  Mater Co-60°C Working fluid Water Dry cooler, cooling tor Water Dry cooler, cooling tor Water Cooling tor Water Water, steam, oil Day of the steam, oil	mammam greec creams por cr	60 Hz
Cold source  Working fluid Cooling system Hydraulic connections  Working fluid R1233zd Generator Expander High speed, permanet Expander Heat exchangers Pump Controls Monitoring  Weight Dimensions L x w x h Environmental Noise level @10m Design lifetime Safety  Water Water Dry cooler, cooling tox High speed, permanet Kinetic turbine Brazed plate Nulti-stage magnetic Industrial PLC Remote web support  Weight Dimensions L x w x h 1,9 m x 1,2 m x 1,9 m Environmental IP 20 Noise level @10m Design lifetime 20 yrs Non flammable, non t	Thermal power input range 450-640 kWth Hot source medium Water, steam,	oil
Generator Expander Kinetic turbine  Heat exchangers Brazed plate Pump Multi-stage magnetic Controls Industrial PLC Monitoring Remote web support  Weight Dimensions L x w x h 1,9 m x 1,2 m x 1,9 m Environmental IP 20 Noise level @10m 60 dB Design lifetime 20 yrs Safety Non flammable, non te	Working fluid Water Cooling system Dry cooler, coo	•
Main ratings  Dimensions L x w x h Environmental Noise level @10m Design lifetime Safety  Dimensions L x w x h 1,9 m x 1,2 m x 1,9 m IP 20 60 dB 20 yrs Non flammable, non t	Generator High speed, per Expander Kinetic turbine Heat exchangers Brazed plate Pump Multi-stage matching Controls Industrial PLC	agnetic coupling
Machine directive 2006/42/EC	Dimensions L x w x h Environmental Noise level @10m Design lifetime  1,9 m x 1,2 m x IP 20 60 dB 20 yrs	
Norm compliance PED 2014/68/EU 2014/35/EG Grid codes VDE-0126 (G59, VDE-0126 (G59	Electrical norms 2014/35/EG	9, 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.



