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 production of 20 kWe even after low grade heat source at 70°C.

A system combining performance and reliability

Designed with the same state of mind than the 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, geothermal sources, process heat 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.

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%!
### Characteristics of ENO-20LT

#### Electrical ratings
- **Maximum gross electric power [kWe]**: 20
- **Grid connection**: 400V, 3ph neutral + earth, 50-60 Hz

#### Heat source
- **Temperature range [°C]**: 70-120
- **Thermal power input range [kWth]**: 160-320
- **Hot source medium**: Water, Steam, Oil
- **Hydraulic connections**: DN 65, PN16

#### Cold source
- **Temperature range [°C]**: 0-60
- **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 [kg]**: 900
- **Dimensions L x w x h (mm)**: 1280 x 800 x 1805
- **Environmental**: IP 20
- **Noise level [dB] @10m**: 60
- **Design lifetime [yrs]**: 20
- **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 system, plug and play, should be installed as close as possible of the heat source to reduce heat losses through the pipes.