



ECOTERM
ELECTRIC UNDERFLOOR HEATING

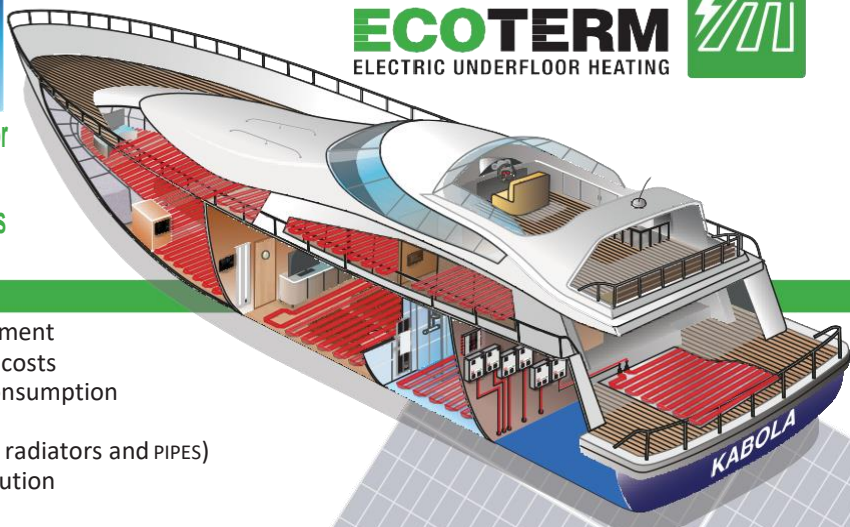


Low-voltage underfloor heating for ships, yachts, campers and campers

SYSTEM SPECS

- Low initial investment
- No maintenance costs
- Extremely low consumption
- Long lifespan
- Space-saving (no radiators and PIPES)
- Even heat distribution
- Easy installation

This electric underfloor heating is ideal for combining with existing electric solar panels and yet to be INSTALLED.



Main Switch

Low voltage transformer

Room thermostat

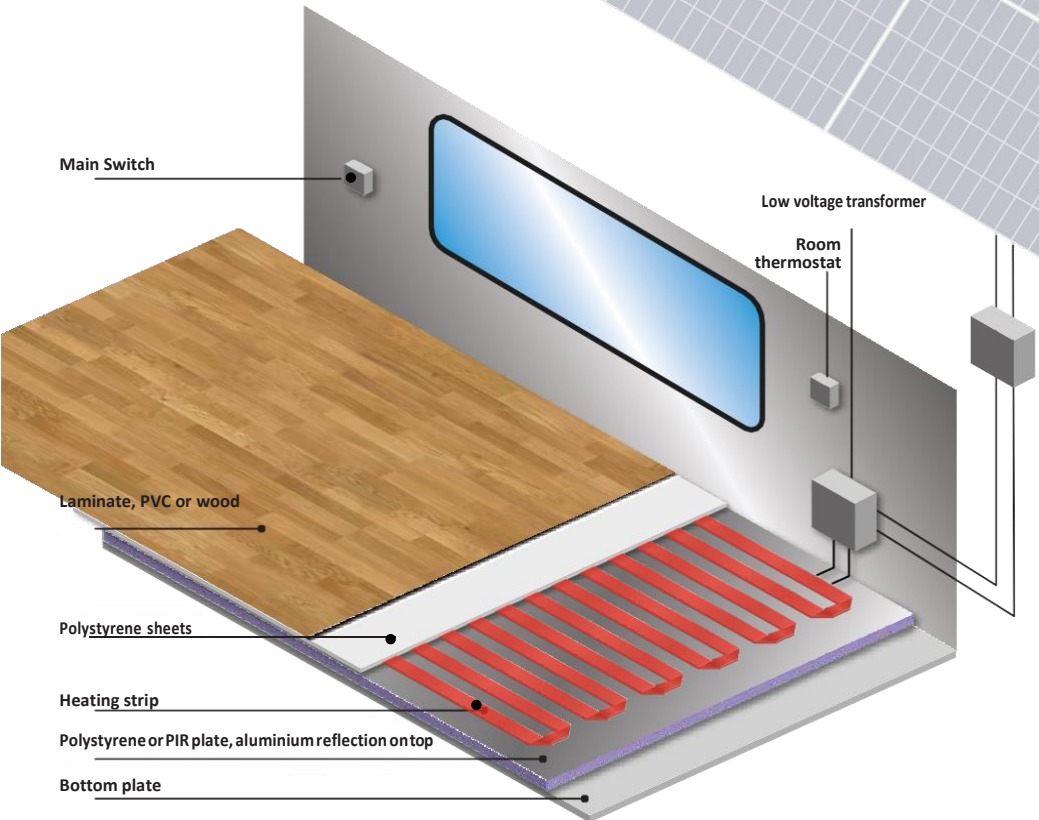
Laminate, PVC or wood

Polystyrene sheets

Heating strip

Polystyrene or PIR plate, aluminium reflection on top

Bottom plate



FLAT STRIP LOW VOLTAGE UNDERFLOOR HEATING

ECOTERM
ELECTRIC UNDERFLOOR HEATING



BASIC FEATURES

Save space

There are no physical obstacles in rooms such as radiators, pipes, etc.

No maintenance costs

There are no maintenance costs due to the extremely durable properties of heating strips long-term resistance to mechanical loads. Very reliable electronics guarantee a long lifespan.

Safe and certified

Safety is guaranteed by high-quality, reliable construction of heating strips and installation according to construction standards. The complete system is safety certified.

Optimal temperature distribution

Lower body at higher temperatures than the head. Evenly distributed temperature over the floor and the surface of the room, as well as heat transfer. Large heating surface (entire floor area).

Ecology

Less dust, fewer mites, fewer bacterial. Increased hygiene in the room, less allergens. No noise, unpleasant odors and dust circulation.

TECHNICAL PROPERTIES

System power supply

Power supply: 230 V / 50 Hz Heating supply: 5V-40V / 50 Hz

Temperature

Heating strips up to 40 °C; Floor up to 28 °C ideal temperature profile.

Method of installation and application:

Underfloor or wall heating. Application: homes, catering establishments, business premises, halls, etc.

Guarantee

For electronics 5 years. For heating strips 20 years.

Safety

According to regulations and CE certificate

Heating element

Aluminum foil, insulated on both sides with polypropylene, mechanically and chemically resistant

- Low consumption and extremely low energy transmission losses.
- Efficient use of energy in the lower part of the room.
- No transmission losses as with other systems.
- It has an optimal temperature profile and operating mode.
- Savings in consumption compared to other systems of at least 25%.

MONTHLY CONSUMPTION WITH WELL APPLIED THERMAL INSULATION; INDICATIVE 75 W/m²

Monthly heating consumption for 60 m² is 460 kWh Even more savings are possible with a nightly rate.

Monthly maintenance: € 000



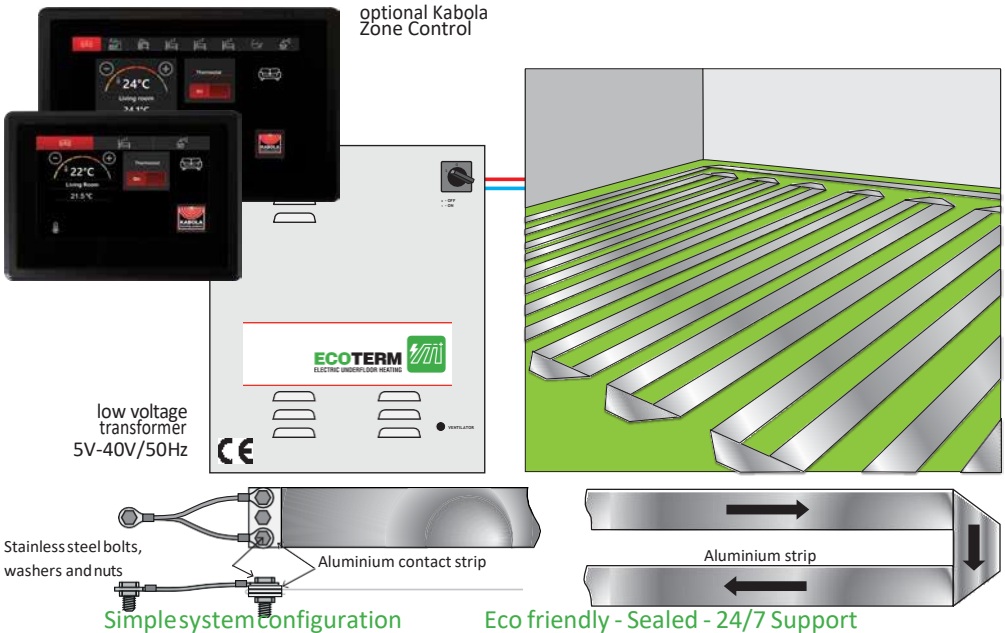
Low-voltage underfloor heating: Ideal for commercial shipping, yachts, campers and trailers

INSTALLATION METHOD

Installation can be done under all types of floor coverings.

The heating strip is installed in the floor: Styrofoam or PIR panels (at least 5 cm) are mounted on the basic floor. Reflective aluminum foil is applied to the Styrofoam or use PIR panels with cached aluminium layers. The heating strips are placed / taped on the panels. We advise to place facade mesh on which a cast floor can be applied. When applying ceramic tiles, laminate, PVC or wood use a thin layer of Styrofoam between the underfloor heating and your choice top finish.

ECOTERM, cheap for 4-12 square meters!!!



COMPONENTS

Control unit: Wi-Fi Thermostat

Wi-Fi thermostat (the most modern way of control, the control is controlled via the internet, i.e. with your phone Option: can also be linked to our Kabola Zone Scheme. Please inquire for this option.

Custom part: Distribution box

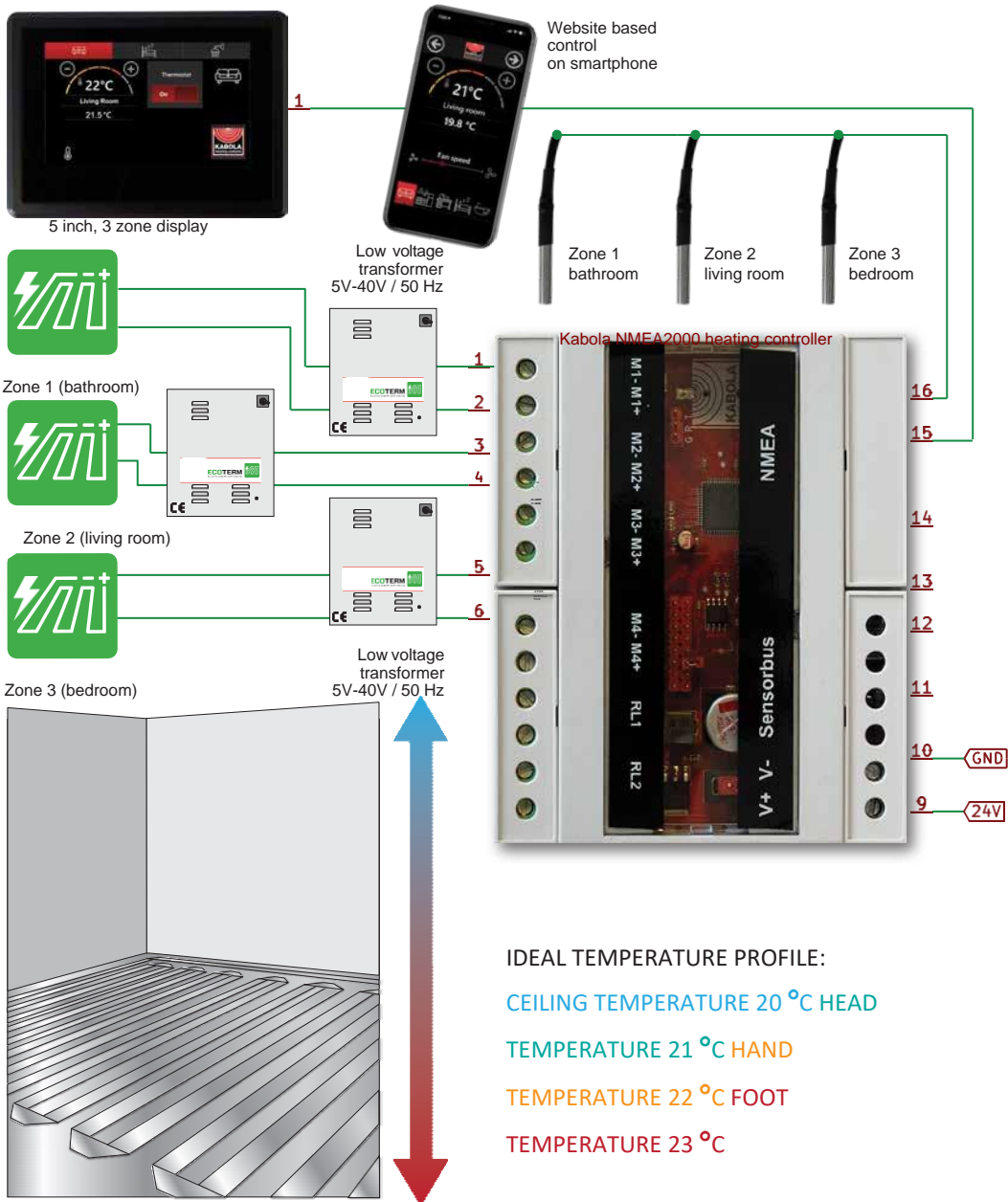
The distribution box built into the wall contains a soft start and a transformer (one or more). We use a toroidal transformer, which has small energy transmission losses compared to a classical transformer.

Heating element: Aluminium strips

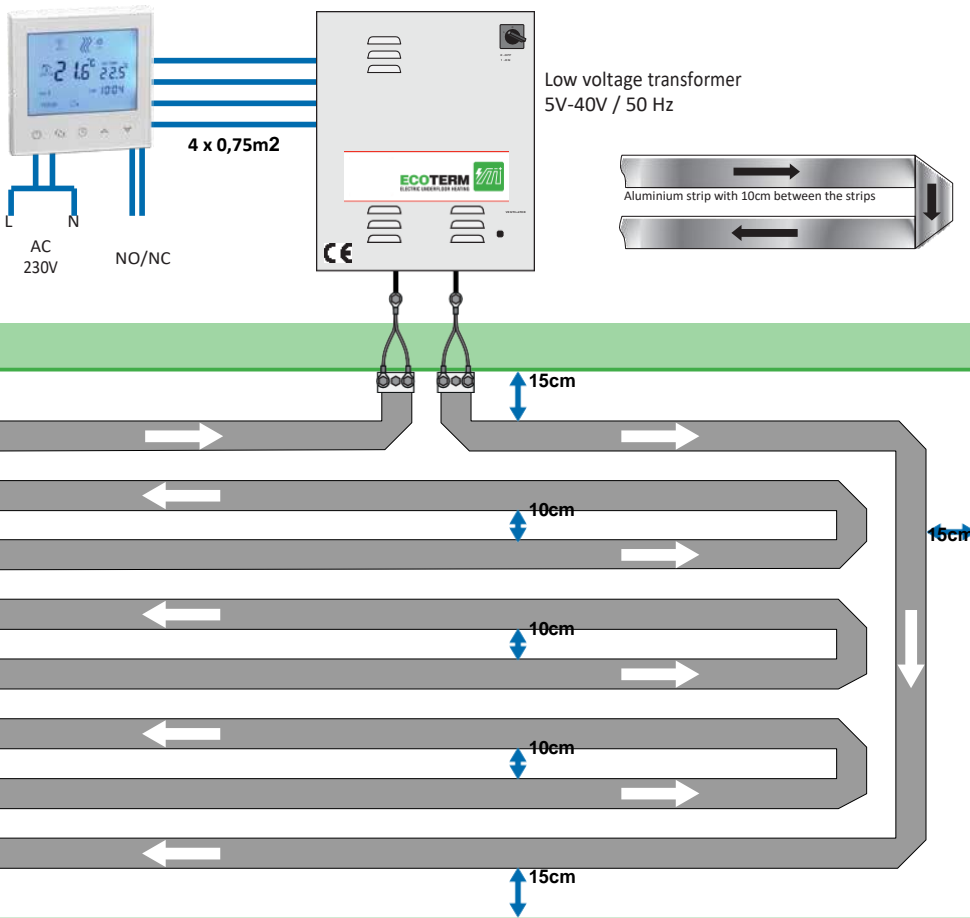
Aluminium strip that is heated by the current. This is generated by a secondary transformer, which has a safe low voltage.



Kabola Zone control system in combination with ECOTERM underfloor heating



Technical manual installation underfloor heating



Installation and dimensions for the underfloor heating strip:

From the wall-mounted transformer cabinet, mount 1 connection cable at the beginning of the conductor strip with the necessary stainless steel screws, washers, bolts and aluminum contact strips.

Always place the conductor strip at 15 cm from the walls, so that after 2 or 3 lengths along the wall the tape can be folded back to lay parallel to the first laid track. Make sure that these 2 strips are 10 cm apart. Always keep a distance of 15 cm from the wall at the folding points.

In this way, fill the entire floor space until the end point of the conductor strip ends up under the transformer cabinet again. Here you cut the strip sufficiently, fold it also between the aluminum contact strips of the connection strip and use it to mount the second connection cable.

PLEASE NOTE! There may be differences per project.



Sample package technical information

Technical description (class C insulation)

Space (floor per m2)	Needed power (W/m2)	Total power (W)	Fused ampere (C-characteristics)	Amount of transformers and sizes	Maximum consumption per heating season (kWh)	Consumption per month (kWh)	Standard Wi-Fi thermostat (pieces)
25 -30	70 -80	2.300	16A	300x450x120mm (1 trafo)	2.000	350	1
50 -60	70 -80	4.300	2x16A	500x600x120mm (2 trafos)	3.250	540	1
70 -90	70 -80	6.000	2x20A	500x600x120mm (2 trafos)	4.300	720	1
90 -100	70 -80	9.000	3x20A	800x650x120mm (3 trafos)	6.000	1.000	1

The target price per m2 is € 55,- excl. vat

Prices are valid from october 1 2023 till december 31 2023, excl. vat

* **One heating season exists of 6 months**

* **Consumption data are indicative for cold months (Dec, Jan, Feb)**

Technical properties

- **System power supply:**
power supply: 230 V / 50 Hz
heating supply: 5V -40V / 50 Hz (low voltage)
- **Temperature:** heating strips up to 40°C. Floor up to 28°C ideal temperature profile.
- **Method of installation and application:** underfloor or wall heating.
Application: homes, catering establishments, business premises, halls, etc.
- **Warranty:** 5 years for electronics. For heating strips 20 years.
- **Safety:** according to regulations and CE certificate.

OPEATION

The desired temperature is set on the thermostat (or on the WiFi THERMOSTAT).
If the set temperature is higher than the room temperature, the transformer is switched on via soft start and current flows via the transformer through the aluminum strip in the SUBFLOOR.
This is the heating element and therefore the HEATER.
The aluminum strip, and thus the layer above the strip, is heated (heat rises) until the set temperature is REACH. Then the system shuts DOWN.
The essence of the saving is that the bottom plate accumulates (stores) thermal energy, so that the accumulation of energy can occur mainly at night, i.e. during a period when electricity is CHEAPER. Ideal when you want to limit additional floor height, when underfloor heating is APPLIED.

This electric underfloor heating is ideal for combining with existing and future electric solar PANELS. No obstacles (radiators) in the space and equal heating DISTRIBUTION.

**ECOTERM ELECTRIC
UNDERFLOOR HEATING
COMBINED WITH
CINI ELECTRIC DESIGN RADIATORS**

ECOTERM
ELECTRIC UNDERFLOOR HEATING



Modern design and multifunctionality


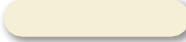





CINI Electric Design Radiators

Finesse D is a decorative element with a simple and elegant design and multifunctional with the optional towel holders. For extra energy saving in the pre winter and post winter period choose for extra CINI Electric Design Radiators. Heating up quickly the used room. In those periods you don't need to switch on the Ecoterm underfloor heating, since underfloor heating increases the room temperature at a lower speed.



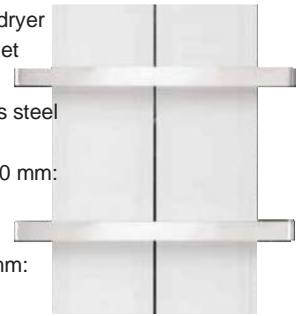
Powder coated colors

- RAL 9016  white
- RAL 1013  ivory
- RAL 9006  metallic grey
- RAL 9005  black
- RAL 1036  metallic gold

Optional towel holders

Decorative towel holder and dryer for bathroom, kitchen and toilet

- in color or polished stainless steel
- radiator height 600/800/1000 mm: 2 holders
- radiator height 1200/1500 mm: 3 holders



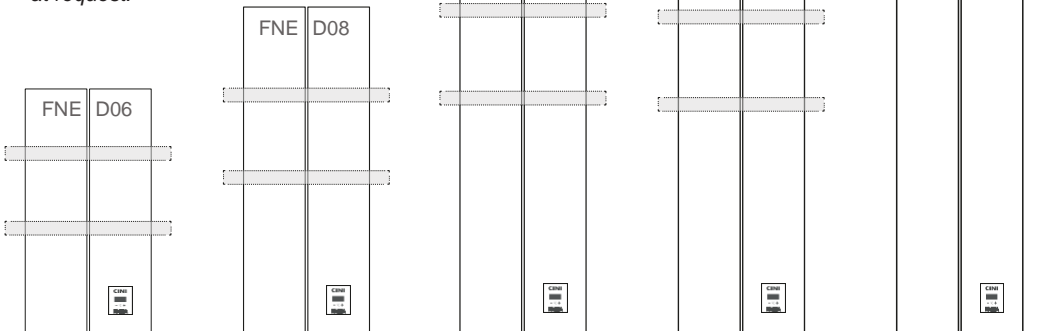
Sizes and properties

type	sizes HxB (mm)	thermal power (W)
FNE D06	600x408	400
FNE D08	800x408	500
FNE D10	1000x408	700
FNE D12	1200x408	900
FNE D15	1500x408	1200

Further technical information at request.



electrical heater



ECOTERM ELECTRIC UNDERFLOOR HEATING COMBINED WITH CINI ELECTRIC DESIGN RADIATORS

ECOTERM
ELECTRIC UNDERFLOOR HEATING



SIMPLE AND COMFORTABLE USE



Smart regulation - precise regulation of room temperature with the help of a digital thermostat

Temperature range 5-30 °C

Maintenance of the set temperature ± 0.5 °C



Digital thermostat

HIGH QUALITY

The construction of extruded aluminum profiles and stainless steel enables long-term stability of the product over time.



5 year warranty

QUICK HEATING AND SAFETY

Finesa D is a dry radiator, with an integrated electric heater, without the presence of a heating fluid. The heat is transferred very quickly and evenly from the heaters to the front panels. The dry heating system enables safe operation of the device, without the possibility of freezing or increasing the pressure inside the heating body.

Additional modes:
frost protection mode, overheating protection mode



High security



Overheating protection



Freezing protection

IP PROTECTION

Protection from spraying water from all directions



IPX4 protection



VENIVLADIMO DOO

www.venivladimo.com

Janka Veselinovica 23/2  venivladimodoo@gmail.com

Novi Sad, Serbia



+381603366931