



4 YOUR COMFORT

- CABLE UNDERFLOOR HEATING SYSTEMS
 - MAT UNDERFLOOR HEATING SYSTEMS
- THERMOSTATS
- LEAKAGE PROTECTION



4 YOUR COMFORT

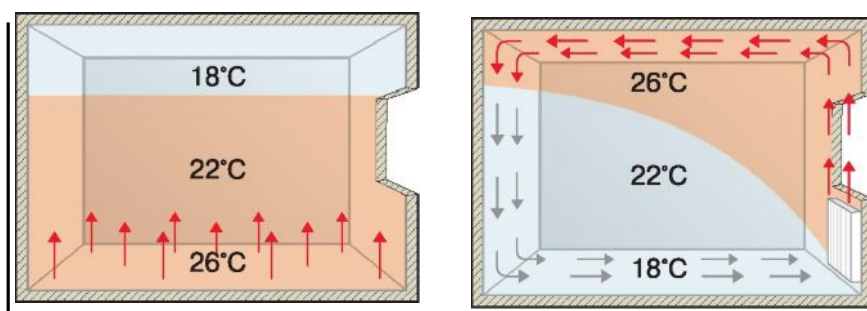
Underfloor heating is an economic and highly practical way of breathing a «warmth sense» into so beautiful but cold floor covering of your dwelling.

Underfloor heating systems provide thermal comfort and maintain an even heat distribution throughout the room. Besides these systems have a low installation cost and can be easily installed in a short period of time.

Underfloor Heating brings warm and cozy ambient to your apartments.

Premium comfort

Underfloor heating system is a perfect way to create thermal comfort in premises. This heating system is placed close to the floor surface and due to the even heat distribution upside you are getting the optimum heating climate in your room. Underfloor heating can be used both as a central heating unit and as a supplemental system.



Eco-friendly heating

Underfloor heating system of electric type is the most eco-friendly way of heating premises and the best way of thermal comfort creation. Just imagine... Your floor is always dry and warm. There are no intensive convective air and dust fows. On the one hand the air is not dry and on the other hand there is no humidity and cold air accumulation (which usually cause cold) near the floor surface. Underfloor heating takes care of your health and doesn't forget about your children: they will enjoy playing on the warm floor surface.

Low costs

Underfloor heating system enables to reduce your heating costs. Under floor installation of the heating system provides the enhanced surface of heat emission and close placement to the floor surface ensures quick and optimum warming-up. Meanwhile, an electronic smart thermostat maintains comfortable temperature in the room, automatically turning the heating system «on» and «of» in accordance with your wish. When you are out this smart device will be working in an energy-saving mode, but the premises will be warm enough by your turn-back. Underfloor heating system works only when you need it, it means your heating costs can be reduced markedly.

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Easy installation

Underfloor heating systems can be installed in quite an easy way, including installation on the existing ground. It is suitable for all types of premises: rooms, bathrooms, children's rooms and offices. This heating system is compatible with a full scope of floor coverings. It is an especially good solution for such «cold-type» coverings as ceramic tile, marble and granite.



Aesthetic qualities and flight of imagination in design

In comparison with traditional heating sources underfloor heating system is absolutely hidden. It is placed inside the floor construction, providing free room space and giving you freedom to be a designer. Make away with that bunching of heating devices around you! Be free to create your own scenery!

Long-life performance. Safety. Warranties.

Durability is a hallmark of the underfloor heating systems. It is ensured not only due to their protection from environmental influence, but also due to the highest production quality of components and innovative technologies. Warm floors are absolutely safe. They are produced in full conformity with European Quality Standards. Being the manufacturer — we secure the highest factory warranties for our products.

CABLE UNDERFLOOR HEATING SYSTEMS

SST offers a complete range of Underfloor Heating Systems to every taste and need:

Underfloor Heating System CABLE SECTIONS



Cable heating system is a «classical» type of underfloor heating, used for heat-retaining system creation. It is excellent for simple installation in screeded floors of 30–50 mm width and can be used in all types of premises. Heating sections are manufactured and tested in full conformity with IEC (International Electrotechnical Commission) Global Quality Standards.

Underfloor cable heating kit includes: heating section, thermostat with temperature probe, fixture elements, and corrugated tube for temperature probe placement.

Single-conductor heating cable section TLOE



Single-conductor heating cable section consists of the shielded heating cable with one core, two couplings and two cold leads, which are meant to connect the heating section to the thermostat and safety earth. Heating conductor and braided shield are securely connected with cold leads inside the coupling.

Double-conductor heating cable section TLBE



Double-conductor heating section consists of the shielded heating cable with two cores, coupling, cold lead (on the one end) and end bell (on the other end). Heating conductor and braided shield are securely connected to the cold leads (which are meant to connect the heating section to the thermostat and safety earth) inside the coupling. Double-conductor design of the heating cable enables to provide electric power supply from one end of the section, which makes the process of installation easier.

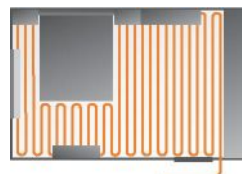
Technical specifications:

Voltage	230/240 V
Section Power	150–3600 W
Heating cable length	11–190 m
Diameter	6 mm



Technical specifications:

Voltage	230/240 V
Section Power	100–2200 W
Heating cable length	5–120 m
Diameter	8 mm



Double insulation undergoes special processing, which makes it flame-resistant and infusible. Shielded braid provides mechanical and electrical protection, and increases the heat resistivity of the cable. Only high-quality polymers of leading world manufacturers are used.



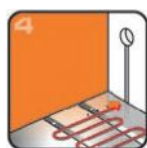
PREPARING



THERMAL INSULATION



PREFIXING



CABLE FIXATION



THERMOSTAT INSTALLATION



SCREED LAYING

Underfloor Heating System HEATING MAT

Ultra-thin mat heating system is an up-to-date kind of underfloor heating. It does not require the installation of a screed, because it can be easily laid into thin (8–10mm) under tile adhesive layer. It is applicable for all types of premises and can be easily installed both on a new surface or on the existing floor in case of repair works, especially when it is highly important to keep low thickness of the floor construction. Mats are manufactured and tested in full conformity with IEC (International Electrotechnical Commission) Global Quality Standards. Underfloor mat heating kit includes: heating mat, thermostat with temperature probe, fixture elements, and corrugated tube for temperature probe placement.

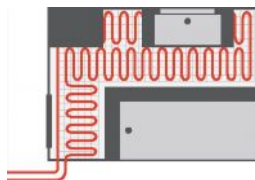
Single-conductor heating mat MH



Single-conductor heating mat is made of the shielded one-core cable, fixed on the fiber mesh. Heating mat is fitted up with cold leads and reliable coupling. High reliability of mats is ensured by ultra-thin shielded cables with diminished effect (linear power), which are fixed on the mesh with constant wire spacings. Thanks to the cable fixation on the mesh — there is no need to adjust the wire spacings and to fix the cable on the floor surface, which can by chance lead to the damage of the wire during the process of installation.

Technical specifications

Voltage	230/240 V
Mat Power	160–2500 W
Specific Power	150 W/m ²
Diameter	3 mm



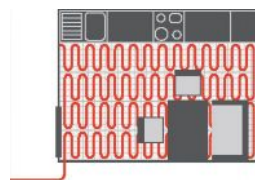
Double-conductor heating mat MHH



Double-conductor heating mat is made of the shielded twin-core cable, fixed on the fiber mesh. Heating mat is fitted up with cold lead, reliable coupling and end bell. High reliability of mats is ensured by ultra-thin shielded cables with diminished effect (linear power), which are fixed on the mesh with constant wire spacings. Thanks to the cable fixation on the mesh — there is no need to adjust the wire spacings and to fix the cable on the floor surface, which can by chance lead to the damage of the wire during the process of installation. Twin-core mat construction makes the process of installation easier.

Technical specifications

Voltage	230/240 V
Mat Power	140–2000 W
Specific Power	140 W/m ²
Diameter	4 mm



Double insulation undergoes special processing, which makes it flame-resistant and infusible. Foil-coated shielded jacket ensures mechanical and electrical protection of the cable. Only high-quality polymers of leading world manufacturers are used.



PREPARING



PREFIXING



TESTING



THERMOSTAT
INSTALLATION



SCREED
LAYING

Underfloor Heating CABLE SECTIONS



Spoiled Heating Kit consists of:



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- Assembly tape (this kit does not include a thermostat).

Additional Kit

consists of:

- Thermostat
- Splice box
- Corrugated tube

This kit is a perfect solution for premises. It is perfect for premises of irregular shape where you have to «bypass» furniture, sanitary equipment, etc in the process of underfloor heating system installation.

Spoiled Heating Kit is a universal decision: it is easily installed from convenient plastic reel, does not require screed arrangement (the heating cable is laid directly under tile into adhesive layer), and can be installed into a screed if heat-storage system is required.

This underfloor heating cable system can be defined as:

- **UNIVERSAL:** it can be installed both

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e, even above the old wood or tile covering.

- **ENERGY-SAVING:** due to the innovative construction of the heating cable and usage of modern programmable thermostat as a control unit, your energy expenses will be very low.

- **EASY AND HANDY:** installation of this spoiled heating kit is very easy and quick.

- **ECO-FRIENDLY:** it is produced out of environmentally friendly materials and in full conformity with sanitary standards.

Technical specifications:

Continuous foil-coated screening jacket — ensures 100% guarantee of electrical safety and absence of electromagnetic radiation.



Cable diameter — 4mm (only!) — allows to install the heating section in tile fixing adhesive layer without screed arrangement.

Several insulation layers — provide reliable heating cores protection.

Ultra-reliable fluoropolymer insulation — withstands temperature up to +180°C. Additional protection against overheating.

Double-core-section design — is convenient for installation and network connection

Voltage 230/240 V

Section Power 130–1000 W

Cable length 11–85 m





Kit Installation



FLOOR
LAYOUT



PREPARING



CABLE
FIXATION



CABLE
LAYING



THERMOSTAT
INSTALLATION

Having applied different combinations of Spooled Heating Kit you can install an underfloor heating system in premises of any floor space and shape.

In case of using Spooled Heating Kit together with Additional Kit you can minimize energy consumption of the Spooled Kit. With I-Warm 710 electronic thermostat the Spooled Kit consumes up to 50% of its installed power, and I-Warm 720 program-mable thermostat allows you to save up to 70% of the electric power.

THERMOSTATS

THERMOSTATS

From the very beginning SST LLC has already produced more than 600k pcs of thermostats. Our thermostatic equipment allows you to maintain the desired temperature of the system for creating comfortable ambient of your accommodation.



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ROOMSTAT IIO

This thermostat can be considered as a classical decision for your comfort. The thermostat is supplied with the light indication of the heating system «on» state, temperature fine adjustment knob and the dial of conventional values of assigned temperature. Up-to-date technologies are used in the thermostats manufacturing that excludes the possibility of defect appearance, that means **reliability**. The thermostat is an energy saving device, it automatically turns the heating system on and of reacting upon the thermosensor signals. That allows to consume the electric energy precisely as much as it is necessary to maintain the preset temperature in the premise.



Technical specifications:	
Supply voltage	230V- 50Hz
Maximum load current	16 A
Power self-consumption	500 mW
Weight	150 gr
Dimensions	80x80x52 mm
Ingress Protection level	IP 20
Remote floor temperature sensor	NTC 6.8 kOhm
Maintaining temperature	from +5 to +45 °C
Allowable ambient air temperature	from +5 to +40 °C
Sensitivity	1 °C
Various design	outlook

I-WARM 710

Room thermostat has **2 temperature sensors**: remote floor temperature sensor and built-in air temperature sensor. It is fush mounted. This thermostat is designed for constant maintenance of the preset temperature using floor temperature sensor. This model has the following features: **Large-screen backlit graphical display**, 3 control buttons. User-friendly «intuitive» «one-touch» interface. Indication of current floor temperature, set temperature, ON/OFF heater condition. **Self-diagnostics** of heating system with warning caption output. An additional mode allows to display **ambient air temperature** (at that temperature control is still based on floor temperature sensor, this option only makes it possible to use the device as room thermometer with digital indication). **Service mode** is realized for manual heating control not using sensors; at that the user sets the percentage (10-90%) of time when heating is ON during each hour.

Supply voltage	230 V~ 50Hz
Maximum load current	16 A
Power self-consumption	450 mW
Time of storage preset data at disconnected	
supply network	unlimited
Ingress Protection level	IP 20
Remote floor temperature sensor	NTC 6.8 kOhm
Length of sensor connection wire	2 m
Built-in air temperature sensor	NTC 6.8 kOhm
Maintaining temperature	from +5 °C to +45 °C, the factory preset value is +25 °C
Allowable ambient air temperature	de +5 à +40 °C
Frame color	white, black, gold, silver, champagne, beech



I-WARM 720

Room thermostat with remote floor temperature sensor. The device allows to decrease significantly energy consumption of warm floor by maintaining comfort temperature only in the preset time intervals when it is really required by the customer.

Large-screen backlit graphical display, 3 control buttons. User-friendly «intuitive» «one-touch» interface.

The built-in menu allows to control all functions of the device. Flush mounting.

Multimode thermostat with built-in real-time block and calendar. Built-in economizer. The device stores and keeps in memory all the information about the heating system that allows customer to control his expenditures not to the expense of comfort. «Intelligent» software allows to determine parameters of heat processes in the premise. The user can only settle time intervals when he needs heating and the device makes the rest by itself. The additional display features: **clock, calendar**.

The following **temperature maintenance modes** can be realized:

- **CONSTANT** comfort temperature maintenance;
- **DAILY** comfort temperature maintenance schedule.

At that daily cycle of comfort temperature distribution is realized. The user sets time intervals of the day when he requires warm floor. The device adjusts itself to the premise: determines the existing heat properties and defines by itself the time when the heating system should «turn ON» to obtain the comfort temperature exactly at the set time. All the rest time — the heating system is turned OFF saving the energy. This program repeats on a daily basis, till you modify the schedule or choose another mode.

- **WEEKLY** comfort temperature maintenance schedule.

The weekly temperature distribution cycle. It is similar to «daily» option; but you programme seven days independently and this cycle repeats each week.



Technical specifications:

Supply voltage	230V~ 50Hz
Maximum load current	16 A
Power self-consumption	450 mW
Weight	150 gr
Dimensions	80X80X52 mm
Time of storage preset data at disconnected supply network	12 months
Ingress Protection level	IP 20
Remote floor temperature sensor	NTC 6.8 kOhm
Length of sensor connection wire	2 m
Built-in air temperature sensor	NTC 6.8 kOhm
Maintaining temperature preset value is +25°C	from +5 to +45°C, the factory
Allowable ambient air temperature	from +5 to +40°C
Sensitivity	1 °C
Frame color	white, black, gold, silver, champagne, beech

I-WARM 730

Room thermostat with 2 remote floor temperature sensors and two zones control opportunity. It is flush mounted. This model maintains the set temperature in accordance with the floor temperature sensor.

This model has the following features:

Large-screen backlit graphical display, 3 control buttons. User-friendly «intuitive» «one-touch» interface. Indication of current floor temperature, set temperature, ON/OFF heater condition.

Self-diagnostics of heating system with warning caption output.

Service mode is realized for manual heating control not using sensors; at that the user sets the percentage (10 to 90%) of time when heating is ON during each hour.

Ensures up to 70% of energy saving.

Technical specifications:

Supply voltage	230V~ 50Hz
Maximum load current	2X8 A
Power self-consumption	1350 mW
Weight	200 gr
Dimensions	116X82X54 mm
Time of storage preset data at disconnected supply network	unlimited
Ingress Protection level	IP 20
Remote floor temperature sensor	NTC 6.8 kOhm
Length of sensor connection wire	2 m
Built-in air temperature sensor	NTC 6.8 kOhm
Maintaining temperature	from +5 to +45°C, the factory preset value is +25°C
Allowable ambient air temperature	from +5 to +40°C
Sensitivity	1 °C
Frame color	white, black, gold, silver, champagne, beech



WATER LEAKAGE PROTECTION

NEPTUN water leakage protection system for premises

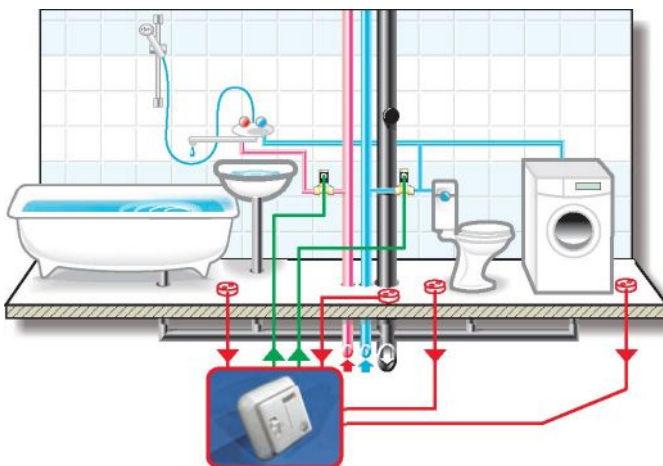


NEPTUN system ensures secure operation of domestic water and heating facilities, especially when you are not at home.

If any one of the NEPTUN flow sensors detects water leak, the system turns of the main water line in seconds. At the same time the system provides audio-visual alarms and informs you about the water damage by means of SMS or voicemail. After elimination of the breakage, water supply can be resumed by just pressing the button.

NEPTUN system is totally automated. In case of water leak the control unit gets the alert. After receiving it, the control unit dispatches the signal to the solenoid or ball valves with electric drive, which turn of the water line. Simultaneously the control unit switches on the audio-visual alarm. Optionally: wired and wireless models.

Scheme



Kit consists of:



FLOW SENSORS
(WITH SPECIAL
CONTACT PLATES)



CONTROL UNIT
(3 MODELS)



BALL VALVES
WITH ELECTRIC DRIVE
TO HOT AND COLD
WATER







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