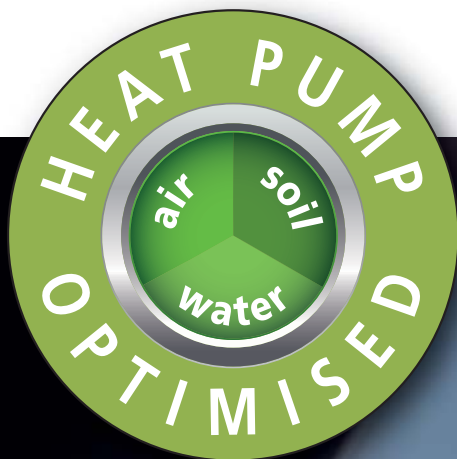


**Therm X2**  
▼ Save energy ▲ Gain comfort

**KERMI**



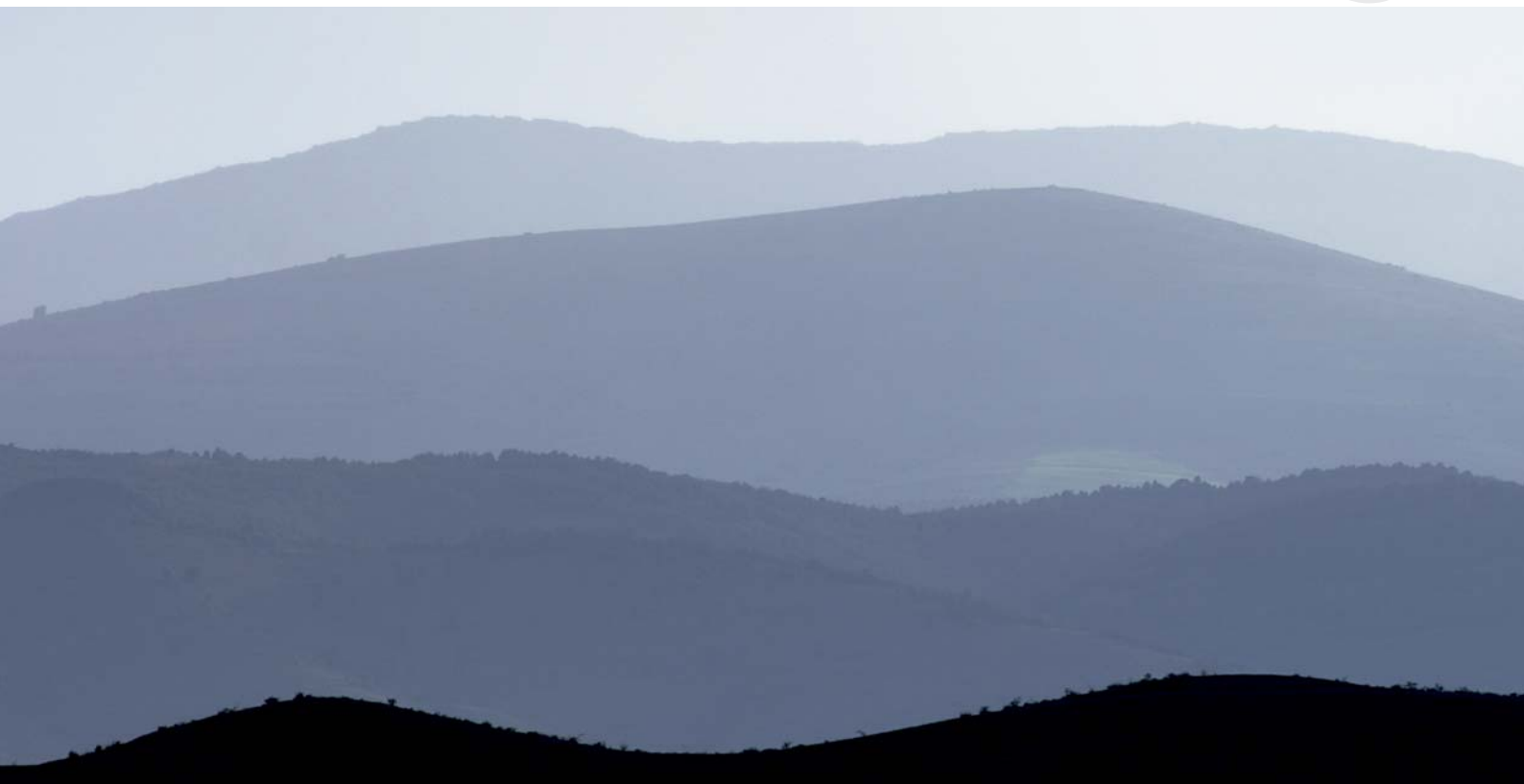
**The energy-saving radiator. One for all heating systems.**

**X2**  
INSIDE

**Therm X2. The original.**  
The energy-saving radiator innovation for all modern heating systems.

**Kermi is a pioneer in matters of economy and ecology.** Kermi has indeed given proof of its pioneering role in energy efficiency and ecology many times in the past. With pioneering achievements, ingenuity and vision. For example developments like the first low-temperature radiator, environmentally friendly double-layer paint finish and fully integrated,  $k_v$ -preset valve mountings, were trend-setting for the industry. We want to and will retain this pioneering role. Innovation from tradition forges a bridge from the past into a future full of new demands and challenges. New technologies, innovative ideas and unconventional solutions are needed more than ever, particularly in the area of energy efficiency. We are working on them and challenging ourselves. Once again, every day.

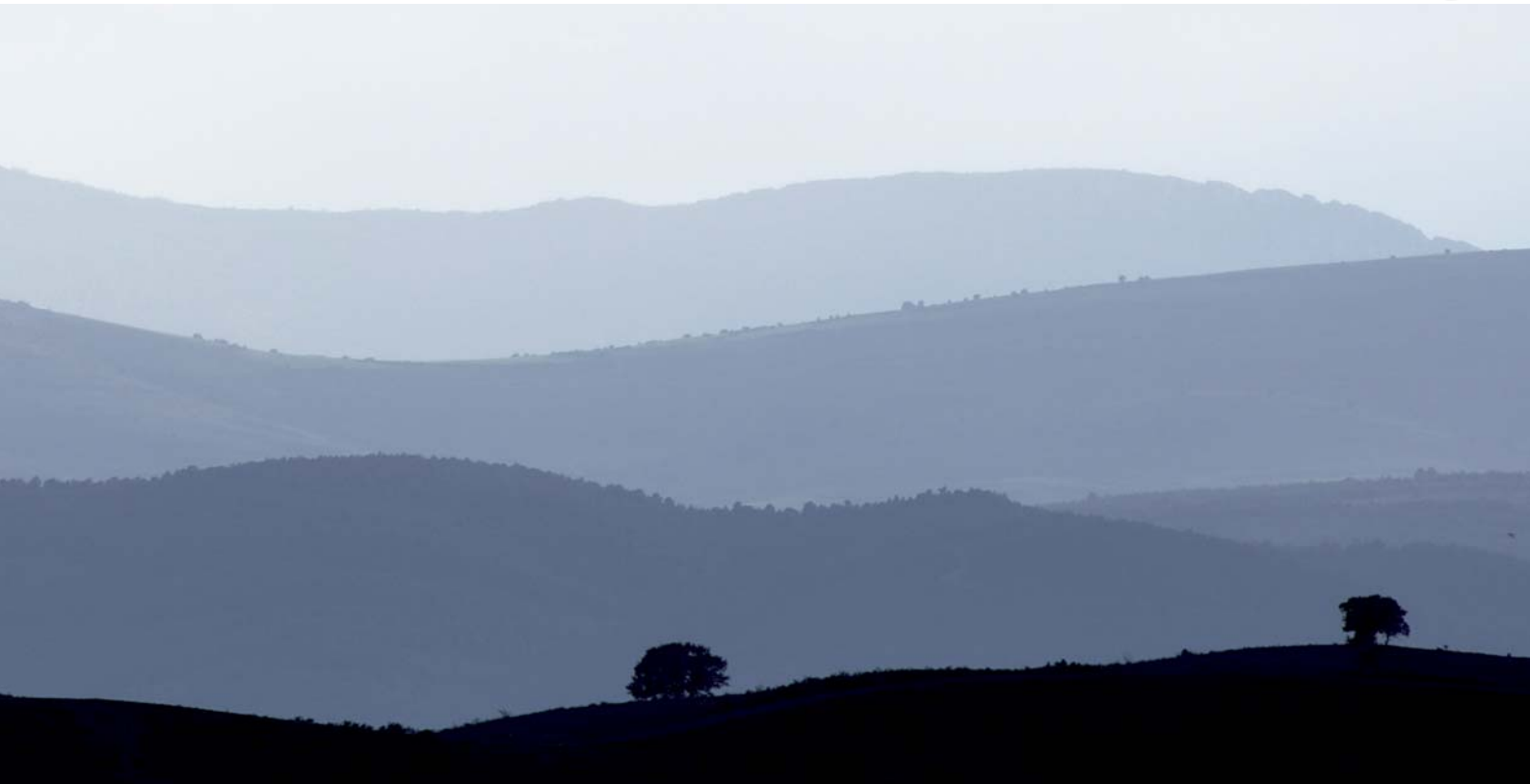
# Groundbreaking





Innovation as a constant process, with the demands of the market and the concerns of our customers emanating from installers, wholesalers, production engineers and product users as a powerful driving force. Groundbreaking forward thinking. For a maximum energy efficiency, environmental protection and sustainability. **With the Therm X2, Kermi provides a globally unique steel panel radiator innovation as the ideal response to the requirements of the future's heating technology. It is combinable with all heating systems and thanks to its patented X2 technology, it is ideally suitable even for modern, energy-efficient heat generators like heat pumps, higher caloric value technology and solar thermal systems . . . and makes also genuine energy savings during heat transfer possible for the first time. As a result, the steel panel radiator becomes the perfect, future-proof means of heat transfer within a period oriented toward maximum energy efficiency.**

# forward thinking



**Acquire know-how. Save energy.**

**Avoid hassle. Save time.**

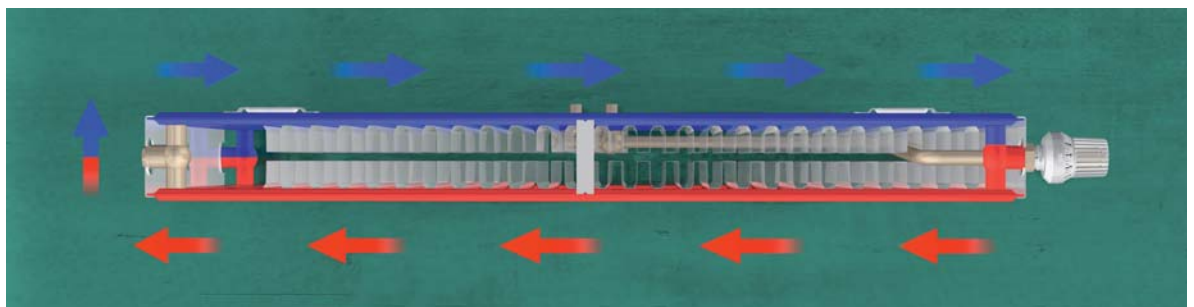
**Therm X2 improves your position 4-fold.**





Heat pumps, higher caloric value technology, solar collectors . . . are the future of energy-efficient heat generation. And the Therm X2 ties in with it seamlessly. Because it dovetails ideally with every heating system and is the globally unique steel panel radiator with patented X2 technology that saves energy efficiently even during heat transfer. Its multiply enhanced radiation power also protects you from aggravating, unnecessary complaints. And with the V-version you are at a clear advantage time-wise during installation thanks to the factory-k<sub>v</sub>-preset valves. Just like with the compact-version which, for instance, fits perfectly into the booming renovation market thanks to adapted DIN hub distances. Outstanding reasons to rely on Therm X2 in the future. For less pricing and competitive pressure and complete customer satisfaction. You can spare yourself everything else.

The unique, patented serial flow X2 technology makes it possible: the maximum energy efficiency, significantly more dynamics and optimal thermal comfort at every operating point.



**Therm X2**  
▼ Save energy ▲ Gain comfort





# Acquiring know-how.

With Therm X2 you are equipped for an energy-efficient heating technology future and have the optimal response for every system requirement.



The Therm X2 can be combined perfectly with all heating systems and is therefore the adequate response to the requirements of the heating technology future. Because of its patented X2 technology with up to 100 % increased radiated portion it ensures a best possible application of a heat generator's efficiency. With optimal heat output into the room and maximum comfort even at low system temperatures. As a result, it is best suited for the combination with heat pumps, higher caloric value technology, solar thermal applications . . . as an appropriate, future-proof means of heat transfer in our era oriented toward maximum energy efficiency. And a best possible alternative for heating renovation without panel heating.



#### One for all heating systems.

- Optimal application of the efficiency of an energy-efficient heat generator.
- Combinable with all heat generators: Oil, gas, pellets, heat pumps, solar . . .
- Optimal heat output into the room even at low system temperatures.
- Maximum comfort at every operating point.
- Rapid radiator heating-up time.
- Best possible alternative for heating renovation without panel heating.

#### Heat pump optimised.

- High radiated portion even at low system temperatures. For consistently optimised heat output and major comfort.
- High  $\Delta T$  between flow and return, as a result, optimally suited for heat generators that require low return temperatures.
- Secured design temperature even at low system temperatures without increasing the mass flow ratio. Resulting in the prevention of flow noises.
- Energy-saving X2 technology.
- Quicker radiator reactivity.

# Saving energy.

The Therm X2 harmonises optimally with all modern heat generators. Your customers save even more expensive heating energy and you save yourself tough pricing and competitive pressure.



An investment that pays off quickly, as the example below shows.

Basis: Comparison of old building, new building and low energy house. In each case with an area to be heated of 190 m<sup>2</sup> distributed over cellar, ground floor and top floor.

	Old building	New building (acc. to the German Energy Saving Ordinance (EnEV))	Low energy house
Total annual heating requirements by building standard	57.000 kWh/a	18.050 kWh/a	9.500 kWh/a
Potential annual savings in kWh with Therm X2 (11 %)	6.270 kWh/a	1.986 kWh/a	1.045 kWh/a
Potential annual savings of heating oil in litres (10 kWh/ltrs) with Therm X2	629 l/a	199 l/a	105 l/a
Potential annual cost savings with Therm X2*	607 €	192 €	101 €
Potential cost savings**			
after 10 years	6.884,35 €	2.180,04 €	1.147,39 €
after 15 years	10.048,63 €	3.182,07 €	1.674,77 €
after 20 years	13.233,60 €	4.190,64 €	2.205,60 €
after 25 years	16.442,55 €	5.206,81 €	2.740,43 €

\*) Heating oil EL (extra light), price for 3000 l (95,50 €/100 l) incl. VAT

\*\*) An annual increase in the price of heating oil of 3 % is assumed

Performance of the comparison on a house with an area to be heated of 190 m<sup>2</sup> distributed over cellar, ground floor and top floor.

The total heating requirements are as follows:

Old building standard: 57.000 kWh/a

New building (acc. to German Energy Saving Ordinance): 18.050 kWh/a

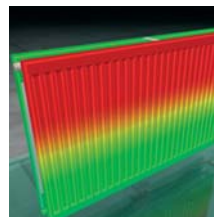
Low energy standard: 9.500 kWh/a



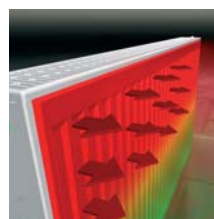


Pioneering heat generation has not reached the end of the line when it comes to the optimal use of energy-saving capabilities. As an efficient extension and optimisation of heat pumps, solar collectors, higher caloric value technology and the like, the Therm X2 ensures even more efficiency. Because the unique X2 technology makes also genuine energy savings during heat transfer possible for the first time ever. An excellent chance for you to perfectly complete the energy-saving chain. With convincing arguments that every homeowner is receptive to. And that unlock for you brilliant opportunities to attract customers, to retain customers and to stand out from the competition.

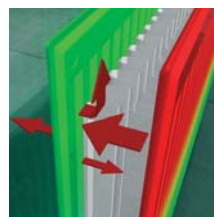
**X2 technology functions according to the completely new, patented serial flow-through principle. In the process, the front plate is first flowed through. In normal operation, the front plate's output is completely sufficient and the downstream plate takes on the radiation shield function. Only with the increasing need for output, it also contributes with high convection output to the rapid heating of the room. The result: a level of energy efficiency that is unrivalled in the steel panel radiator sector. In addition, all valve radiators are equipped with factory  $k_v$ -preset valves and ensure practically ideal hydraulic conditions in the heating system ex factory. And moreover there is a saving of about 20 % pump drive current.**



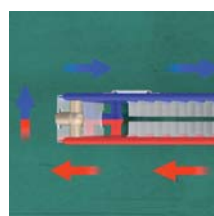
**Radiator heating-up time reduced by up to 25%. Forced flow-through produces a shorter heating cycle, shorter operating times and the valve closes more quickly.**



**Up to 100 % higher radiated portion into the room. Induced by the front plate's higher mean surface temperature.**



**Lower radiation loss on the exterior walls. Induced by the rear plate's lower mean surface temperature.**



**Increasing energy efficiency and decreasing losses during distribution and generation due to greater  $\Delta T$  between flow and return. Particularly in partial load operation during low mass flows.**



# Avoid hassle.

**You can supply the optimal radiator  
for all heat generators and spare yourself  
unnecessary customer complaints.**

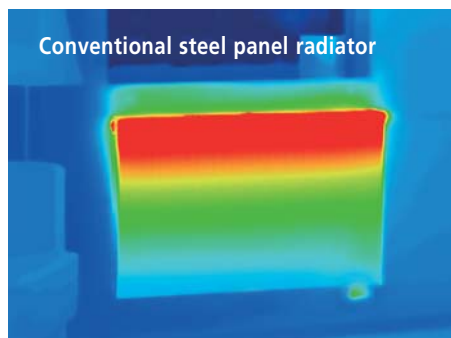
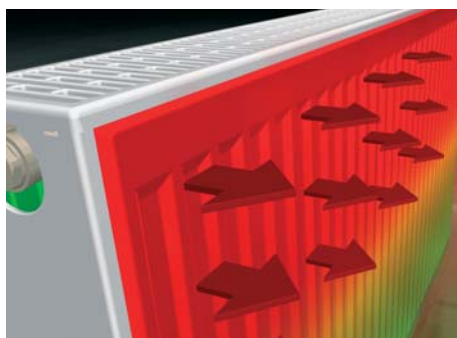


# Save time.

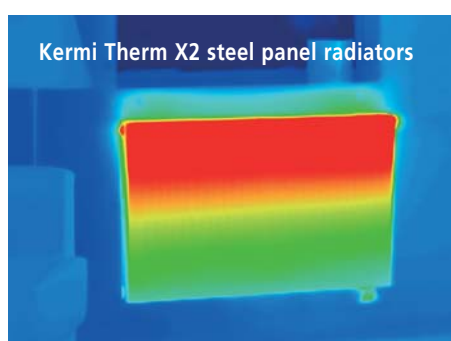
Your customers save on expensive heating energy  
and you save valuable working hours.



During most of the heating period, the radiator works at partial load with low mass flows. In the course of this, the mean radiator surface temperature drops considerably – and with it the mood of your customers. As a surface temperature of appreciably under 40° C is indeed enough to reach the designated room temperature but it gives not the feeling of real comfort. The result: unnecessary time-consuming complaint processing. Therm X2 finally puts an end to this. Because the serial flow-through necessarily produces a considerably higher surface temperature on the front plate and as a result a higher radiated portion of up to 100 %. As a consequence, you have an efficient radiator for every heating system and peace rather than annoying complaints. Thanks to maximum thermal comfort at all times – even in partial load operation.



**The thermography comparison shows it: The serial flow-through causes a significantly higher mean surface temperature of the front plate and with it a radiated portion up to 100 % higher. And that means optimal comfortable warmth for your customer at every operating point.**





**X2**  
INSIDE

In addition to dynamic reactivity and up to 25 % shorter warm-up time of the radiator, the appeal of the Therm X2 lies in the considerable advantages in time during its installation. The V-version, for example, is factory-equipped with an integrated,  $k_v$ -preset valve set. And for the compact version Kermi provides x-part, the  $k_v$ -preset connection sets. Thanks to this, in both cases, time-consuming hydraulic balance at the installation site is for the most part not required any longer. Because it is considered as already implemented as per the method of approximation according to VdZ and VDI 2073-2. And the compact version brings you rapid business in the growing renovation market into the bargain. As the economical replacement solution with hub distances adjusted precisely to the old DIN connections.



You can spare yourself the time-consuming hydraulic balance at the installation site very easily, not only with the V-version, but with the compact version as well. With x-part, the  $k_v$ -preset connection sets for all Kermi compact radiators.



By using the version with centre connection, radiator type and dimensions can still be freely determined even after pipe installation.

**Therm X2**  
▼ Save energy ▲ Gain comfort





Therm X2 Plan valve radiators  
with side or centre connection

## Therm X2 Plan-V / VM

Unique energy saving technology with an appealing visual effect. With its brilliantly smooth design, Therm X2 Plan-V/VM brings not just feel-good warmth and more comfort to every room, it can be harmoniously integrated into almost every room situation, too. The valve is integrated and factory preset to the respective heat output.

- Smooth, brilliantly coated front cover
  - Side connection right / left or with centre connection
  - Universally ready-for-connection for one- and two-pipe systems
  - Type 12, 20, 22, 30, 33
  - Heights 300 – 900 mm
  - Lengths 400 – 3000 mm\*
- \*not for all types and lengths







Therm X2 Profile valve radiators  
with side or centre connection

## Therm X2 Profile-V / VM

Innovative future technology with a distinctive look. In addition to the uniquely innovative X2 technology for reduced energy consumption and greater comfort, the Therm X2 Profile valve radiator has all the attributes of trend-setting heat distribution in terms of quality and design. From the high-quality brilliantly coated casing to the fully integrated valve set with factory preset  $k_v$  values.

- Distinctive, profiled look
  - Side connection right / left or with centre connection
  - Universally ready-for-connection for one- and two-pipe systems
  - Type 12, 22, 33
  - Heights 300 – 900 mm
  - Lengths 400 – 3000 mm\*
- \*not for all types and lengths





**Therm X2 Profile compact radiator  
with side connection**

## Therm X2 Profile-K

The basic version with Kermi's high quality standard.

Universal X2 energy saving technology for every room and every heating requirement. Finished, complete, installation-friendly, specially packed. Brilliantly coated, with top and side cover.

- Distinctive, profiled look
- Side connection right / left
- Universally ready-for-connection for one- and two-pipe systems
- Type 12, 22, 33
- Heights 300 – 900 mm
- Lengths 400 – 3000 mm



Therm X2 Plan compact radiator /  
Therm X2 Plan compact hygiene radiator  
with side connection

## Therm X2 Plan-K / Plan-K hygiene

Universal energy saving technology with an appealing visual effect. Brilliant and flat all the way to the edges. Suitable for all heat sources and variable for one- and two-pipe systems. The hygienic version is specially adjusted to the hygienic requirements in the hospital sector. Open on both sides and on the top for easy cleaning. For nearly dust-free room air conditions. And as a result, best suited for allergy sufferers.

- Smooth, brilliantly coated front cover
- Side connection right / left
- Universally ready-for-connection for one- and two-pipe systems
- Type 12, 20, 22, 30, 33
- Heights 300 – 900 mm
- Lengths 400 – 3000 mm







**Therm X2 Profile compact /  
Plan compact replacement radiator  
with side connection**

## **Therm X2 Profile -/ Plan-K replacement radiator**

Innovative energy-saving technology as a special, quick, uncomplicated renovation solution. Precisely adjusted to the obsolescent DIN radiators with the standard hub distances 500 and 900 mm, which represent over 90 % of the demand. For a completely trouble-free radiator replacement in just a few installation steps, without any special accessories.

- **Quick radiator replacement thanks to hub distances that exactly fit those of the old DIN radiators**
- **Just a few installation steps without any special accessories**
- **Available on stock**
- **Hub distances 500, 900 mm**
- **Lengths 400 - 3000 mm**





Verteo Profile radiator  
 Verteo Plan radiator –  
 energy-saving heating in  
 slimline upright format

## Verteo Profile / Verteo Plan

Slimline heating technology that saves space and energy.

The space-saving solution for harmonious room integration.

With supersmooth front panel or in distinctive profiled look.

With unique, innovative X2 technology. Flexible and universal

for customised heating requirements. Heat outputs between

650 and 3100 watts. 4 different heights and lengths.

- Supersmooth front panel or distinctive, profiled look
- Side panel standard
- Universal connection possibility via 6 connecting sleeves on all multi-layer versions
- Optional with Kermit valve shut-off block
- Lengths 400, 500, 600, 700 mm
- Heights 1600, 1800, 2000, 2200 mm



Kermi offers a full range  
of steel panel radiators  
for all applications.  
Please look at our website  
for more information.



Therm X2. The complete  
energy-saving programme.



[www.kermi.com](http://www.kermi.com)

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