



## LOCAL AIR CONDITIONER PAC 2010 SH

4-in-1 air conditioner: ensures an agreeable room climate in every weather by cooling, heating, ventilating and dehumidifying the air

26 m<sup>2</sup>  
 65 m<sup>3</sup>  
 2 kW  
 7.000 Btu/h

Dehumidifier

2 Speed Levels

Timer

IR

2 kW 1,8 kW

ENERGY LABEL: TROTEC PAC 2010 SH

| Mode             | Power (kW)                 | Efficiency                |
|------------------|----------------------------|---------------------------|
| Cooling          | 2,0 kW                     | 2,6 EER                   |
| Heating          | 1,8 kW                     | 2,3 COP                   |
| Dehumidification | 0,8 kW/100 mm <sup>3</sup> | 0,8 l/100 mm <sup>3</sup> |

65dB

### Welcome cooling in the summer, agreeable feel-good warmth in the winter

Too hot, too cold, too humid, too dry – honestly, when are we ever happy with the weather as it is? More often than not summer brings not just pleasant warmth, but parching heat – followed by phases that are "somewhat too cold for the season". Especially in the time between seasons it often happens that the air is still crisp in the morning, but by afternoon a lot of heat has built up in the room. Consequently, it comes in handy if you don't have to get the fan out of the cabinet or dig up the electric heater from the basement each time. The air conditioner PAC 2010 SH can be used 365 days a year for cooling, heating, ventilation and dehumidification – all combined in just one device.

#### The 4-in-1 solution for an ideal room climate: PAC 2010 SH

Positioned at home, at the office, on business premises, in your holiday home, in a hotel or restaurant – with a cooling capacity of 2 kW (energy efficiency category A) the **comfort air conditioner** in stylish white cools rooms sized up to 26 m<sup>2</sup> / 65 m<sup>3</sup> down to the individually adjustable target temperature. With 1.8 kW of heating capacity the all-rounder can additionally provide cosy warmth on the colder days. For particularly efficient energy saving, the compressor automatically switches off during both heating and cooling provided the desired target temperature has been reached. Only if the room temperature has again increased or decreased, will the device start up once more to ensure agreeable feel-good temperatures ranging between 16 and 31 °C.

#### Ventilation and dehumidification included

The 2-stage ventilation function and the vertically adjustable air louvres make sure that the cold or warm air is reliably distributed within the room. Of course, you can always enjoy the fresh breeze produced by the integrated fan – without having to activate the cooling or heating function.

Since especially summers often become oppressive and sweltering, the integrated dehumidification function contributes to a more agreeable feel-good climate. Set to dehumidification mode, the device withdraws up to 0.8 litres of excess moisture per hour from the room air. Positive side effect: A permanent dehumidification can prevent the formation of harmful mould within a room. The integrated and easy-to-clean air filter retains dust, fluff and animal hair – ensuring you can breathe freely.



### Propane (R290) as environmentally friendly refrigerant in air conditioning systems

Every year, several million tons of harmful CO<sub>2</sub> emissions (greenhouse gas) are emitted to the atmosphere due to synthetic refrigerants. For this reason, the utilization of alternative refrigerants has become one of our key objectives. By using propane (R290) as refrigerant this air conditioner makes a valuable contribution to protecting our climate.

The natural refrigerant propane (R290) is an organic compound belonging to the group of hydrocarbons. Unlike synthetic refrigerants the environmentally friendly propane (R290) comes with neither ozone depletion potential (ODP = 0) nor a noteworthy greenhouse effect (GWP = 3).

**Additional bonus for the environment:** Owing to its excellent thermodynamic properties, propane (R290) is a particularly energy-efficient refrigerant thereby additionally reducing your energy costs.

### Pre-programming the desired temperature by use of the timer function

Using the 24-hour timer you can easily schedule the switch-on and switch-off times of your device. For instance, you can cool or heat the living room in the evenings so you will be welcomed home after work by agreeable room temperatures. Or you can use the timer function to improve the conditions for a good night's sleep on the hot summer days – resting assured that the device will be switched off automatically at the specified time after you have fallen asleep in the cooled bedroom. With merely 53 dB(A) the cooling / heating operation of the compact air conditioner is also agreeably silent so it doesn't disturb the peace in the bedroom.

All settings can be made quickly and easily – via the neatly arranged, intuitive control panel with membrane keys or conveniently from your present position using the remote control. If you would like to use the compact air conditioner in another room, it can easily be wheeled over on the low-friction rollers holding it by the recessed handles at the side. With the 4-in-1 air conditioner PAC 2010 SH you are optimally prepared for every weather on 365 days a year.

### Did you know? Heating with air conditioners saves more energy than using electric heaters!

Cooling and heating combined in one device – how does that work? The refrigerant circuit of the combined air conditioner and heater PAC 2010 SH is simply reversed as needed. Instead of generating cool room air and in turn discharging hot process air outside through the exhaust air hose, the reversed process means that now hot air is produced for the room whilst the colder process air is discharged to the outside.

**Tip to save energy:** The heating operation of air conditioners with heating function operating in accordance with the heat pump principle is more energy-efficient than that of conventional electric heater fans! Unlike electric heater fans which convert the energy virtually 1:1 into heat output, the air conditioner PAC 2010 SH converts the energy input into more than twice the heat output.

As a result your **energy consumption can be reduced by more than 50 %** (as compared to an electric heater). Used for heating or cooling, owing to energy efficiency category A the electricity costs for your efficient and economical air conditioner PAC 2010 SH will be kept within reasonable bounds at all times. Moreover, the **environmentally sound refrigerant R290** complies with the latest climate protection requirements.



## Calculation of the required cooling capacity



Find out how to easily calculate the cooling capacity required for your living and office spaces.

How much power is required to cool a room? The rule of thumb: Every cubic metre of room volume requires a cooling capacity of 30 watts ( $1 \text{ m}^3 = 30 \text{ W}$ ).

Using this blanket value the required cooling capacity can be determined quickly and easily for every room size. Example: Assuming a room with **26 m<sup>2</sup> of floor space** and a **room height of 2.5 m** ... The resulting calculation reads as follows:

Room volume calculation:

**26 m<sup>2</sup> of floor space x 2.5 m ceiling height = a room volume of 65 m<sup>3</sup>**

Calculation of the cooling capacity required for the room volume:

**65 m<sup>3</sup> cubature x 30 watts of cooling capacity = required cooling capacity of 1,950 watts**

Conversion from watt to kilowatt:

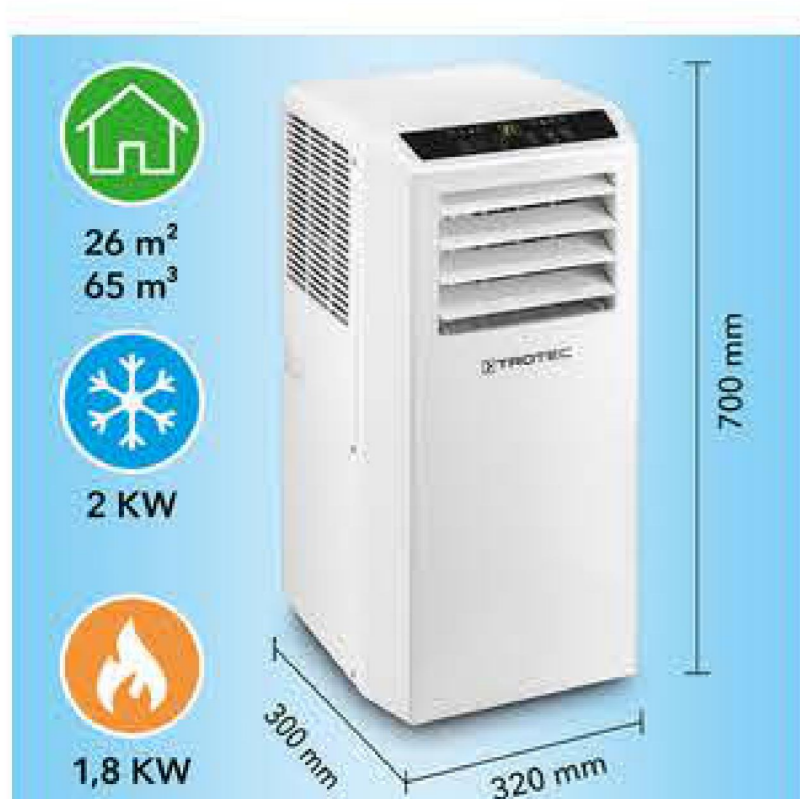
**1,950 W = 1.95 kW**

**Result: In a room with 26 m<sup>2</sup> of floor space and a height of 2.5 m you need an air conditioner with a cooling capacity of approx. 2 kW – such as the PAC 2010 SH.**

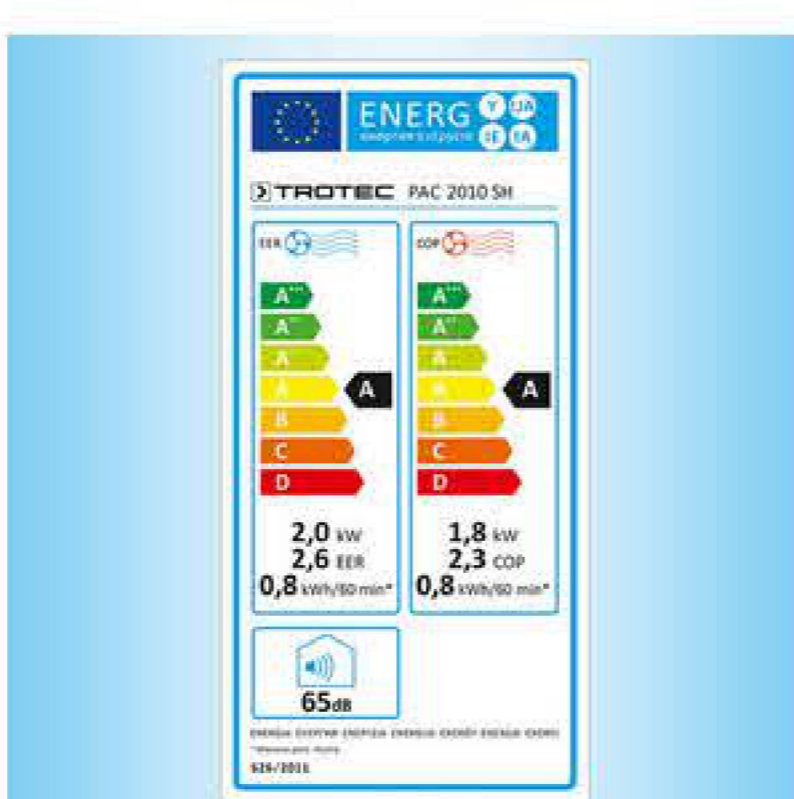
This is only a rough calculation formula for living and office spaces with modern insulation (passive house standard), though. The required cooling capacity further depends on the room's "thermal load": For selecting an appropriate air conditioner, the factors of insulation, insulation, window dimensions, the number of persons as well as the heat sources play an equally important role.

You would like to find out more? Our info page "Practical knowledge concerning air conditioning" contains all the important information. By reading it you will quickly become an air conditioning expert.

## PAC 2010 SH – special equipment features



With its stylish white housing the compact air conditioner blends in perfectly with any living or working environment. With a cooling capacity of 2 kW and a heating capacity of 1.8 kW it ensures year-round agreeable feel-good temperatures for rooms sized up to 26 m<sup>2</sup> or 65 m<sup>3</sup>.



The cooling and heating capacity of air conditioner PAC 2010 SH was rated with energy efficiency category A. Therefore, you can be on the safe side that your electricity costs will keep within reasonable bounds. Inside the device, the environmentally friendly refrigerant R290 is used.

## AirLock window and door seals

**ACCESSORY TIP: AirLock window seals prevent warm air from streaming back into the room you are trying to cool.**

The warm air is discharged through an air conditioner's exhaust air hose and thus through a window into the open air. In order to keep the warm air from streaming right back into the room through the window gap we recommend using **AirLock window or door seals**.

The window seal **AirLock 100** is suitable for windows with a maximum perimeter of up to 4 metres. The hose can be attached to any type of window (casement, bottom-hung or skylight windows). With the Velcro® tape mounting between window and frame only takes a few steps. This ensures an optimal cooling efficiency in the room and substantially reduces the consumption costs of your air conditioner.



**Also perfect for floor-to-ceiling windows or balcony and patio doors.**

The convenient door and window seal **AirLock 1000** was specifically designed for sealing floor-to-ceiling windows or balcony and patio doors – it is the only window seal on the market that has a perimeter of up to 5.6 metres. The AirLock 1000 can be used for both one- or two-hose devices. [Further information on all available AirLock versions is provided here.](#)



The neatly arranged control panel with membrane keys reveals all important setting options at one glance and so offers a very intuitive operation. Depending on the setting, the LED display indicates the desired target temperature or the number of hours until the pre-programmed automatic switch-on or -off.



In addition to the control panel on the device, the air conditioner PAC 2010 SH can also be operated using the infrared remote control included in the scope of delivery. There is no need to get up – all functions can also be set via remote control.



To avoid a draught, the air discharge direction can be controlled by changing the position of the vertically adjustable air louvers. The air current can be regulated in 2 speed levels. In a way that suits your individual needs.



The integrated air filter cleans the room air from dust, fluff and animal hair. It can be removed without difficulty and cleaned without great effort. All in all the combined air conditioner and heater PAC 2010 SH unites an uncomplicated, quick and easy installation, maintenance and servicing.

## Cooling down in every room



With the combined air conditioner and heater PAC 2010 SH you can benefit from an individually adjustable feel-good climate all through the year. During heat waves the device cools the room air quickly and effectively. And on the somewhat chillier days it can generate an agreeable, cosy warmth. Consequently, you can always enjoy an agreeable room temperature.



For an ideal room climate: Enjoy the fresh breeze emitted at 2 different speed levels – the integrated fan can also be used without heating or cooling function. The dehumidification function of the PAC 2010 SH fights the oppressive, muggy room air. Moreover, the integrated air filter retains dust, lint and animal hair.



## All Comfort air conditioners of the PAC series in direct comparison:

To find the Comfort air conditioners of the PAC series which exactly meets your requirements, please consult the concise overview of all Comfort air conditioners of the PAC series from Trotec, which we're providing to you here so that you can compare them directly to each other.

Models which you do not wish to include in your comparison can be easily dismissed with only one click.

### Technical data by comparison

## A few practical benefits:

- ✓ **4-in-1 air conditioner: cooling, heating, ventilation, dehumidification**
- ✓ **Suitable for rooms sized up to 26 m<sup>2</sup> / 65 m<sup>3</sup>**
- ✓ **Cooling capacity of up to 2 kW (energy efficiency category A)**
- ✓ **Heating capacity of up to 1.8 kW (energy efficiency category A)**
- ✓ **2 fan settings**
- ✓ **24-hour timer function**
- ✓ **Practical LED display**

- ✓ **Easy-to-clean membrane keypad**
- ✓ **Adjustable air discharge direction**
- ✓ **IR remote control**
- ✓ **Removable air filter**
- ✓ **Air cleaning function (animal hair, fluff, dust)**
- ✓ **Quiet operation ≤ 53 dB(A)**
- ✓ **Environmentally friendly refrigerant R290**

## All important features at a glance

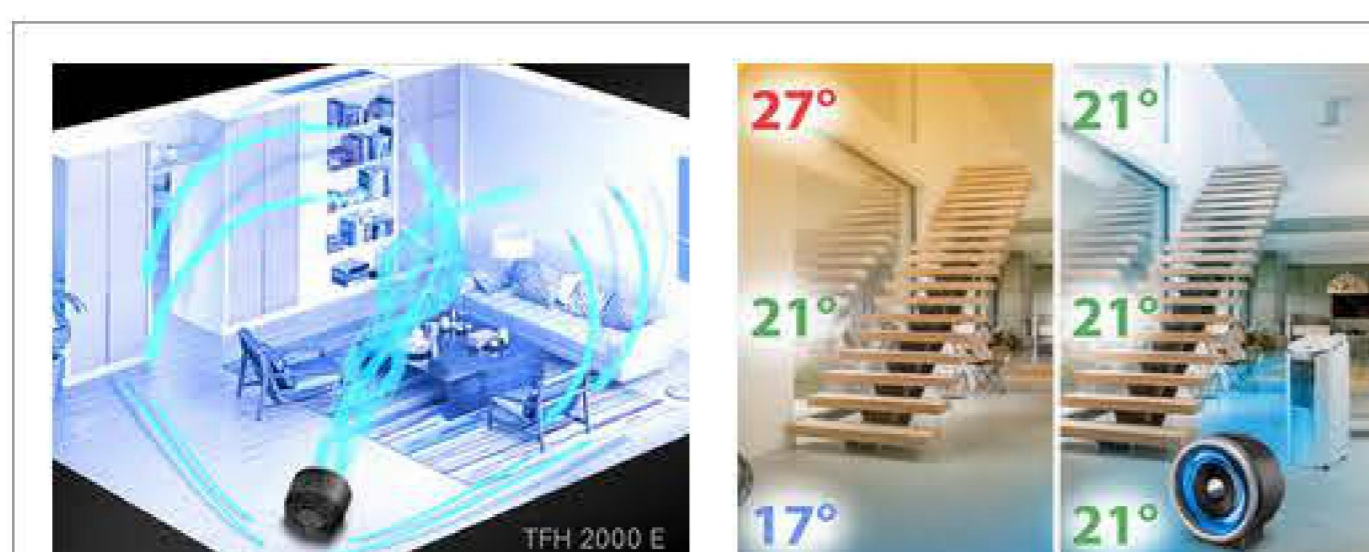
|   |  |  |   |  |   |
|---|--|--|---|--|---|
| <p><b>Cooling capacity</b><br/>With its 2 kW the air conditioner provides a pleasantly chilled feel-good climate.</p> | <p><b>Heating function</b><br/>At the push of a button the heating capacity of 1.8 kW ensures cosy warmth for cold days.</p> | <p><b>Dehumidification function</b><br/>The humidity level in the room can be reduced even without the cooling function.</p> | <p><b>2 fan settings</b><br/>The room air is circulated even when the cooling function is switched off.</p> | <p><b>Automatic mode</b><br/>Controls the cooling level depending on the ambient and target temperature.</p> | <p><b>Remote control</b><br/>Control your air conditioner conveniently using the infrared remote control.</p> |
| <p><b>LED display</b><br/>The backlit LED display provides information on all important parameters.</p>               | <p><b>Self-diagnosis</b><br/>Detection of faults and precise indication of the source of error.</p>                          | <p><b>Timer function</b><br/>The air conditioner automatically switches on or off after the desired period.</p>              | <p><b>Room thermostat</b><br/>The current room temperature is determined by the integrated thermostat.</p>  | <p><b>Air filter</b><br/>Anti-bacterial, washable filter for air quality improvement.</p>                    | <p><b>Condensation water recycling</b><br/>Reduces energy demand and constant emptying of the container.</p>  |
| <p><b>Castors</b><br/>Thanks to the low-friction castors the air conditioner can be positioned as needed.</p>         |  |  |   |  |   |

### Monobloc or split? One-hose or two-hose technology?

Don't get hosed by competitive statements, we provide the big picture. Before purchase make sure to get an overview of device differences, functional principles and possible applications.

Trotec, your climate expert, has compiled the most important facts in a reader-friendly overview! Direct link to the "[Practical knowledge concerning air conditioning](#)"...

Benefit from the Trotec brand quality guaranteeing high value, safety and functionality. Via the registered GS mark the inspection authority SGS certifies that, if used foreseeably and as intended, the device does not pose a risk to the health and safety of the user.



## A boost of freshness: Enjoy maximum refreshment anywhere in the room!

Do you want to additionally support the effect your air conditioner has? In order to really distribute the cool air into every last corner of the room we recommend using the **powerful fan TFH 2000 E with turbo spin technology**. The extremely compressed turbulent air flow gushes out of the TFH 2000 E as tornado-like air column that revolves around itself and advances deep into the room. The air current breaks through warm and cold room air zones mixing it all up. The exiting air current encounters the opposite wall and from there is deflected to all sides.

In a constant circulation the air returns to the rear of the fan flowing along the side walls and the ceiling. It is sucked in once more to start a new cycle. This effective turbo spin method ensures maximum circulation and mixing of the room air. The temperature difference between cold air near the ground and warm air just beneath the ceiling is substantially reduced, instead the air temperature in the entire room is noticeably evened out.