



# Convector Panel Heaters

Modern design and cost effective heating Improving your indoor environment

## **BEHA Convector Heaters**

**BEHA Convector Heaters** are approved and certified according to international CCA specifications EN 60335 and carry the CE mark, thus complying with European safety standards and standards for electromagnetic compatibility.

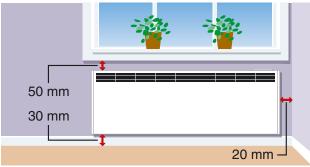
All BEHA Convector Heaters, are tested and approved for IP X4 rating (splash proof) and can be installed in bathrooms and other damp areas.

#### Installation

BEHA Convector Heaters are designed to fit in at the coldest part of the home - underneath the windows.



For safe installation and operation the panel heaters are double insulated and can be connected to any 220-240V wall power outlet, earthed or not earthed.



Picture is showing minimum distances to building parts.

The heaters can be installed in 2 ways and are supplied with a 1.5 m electrical lead and plug with a junction box for fixed installations fitted on the cross rail of the wall bracket.



#### Heating element designs

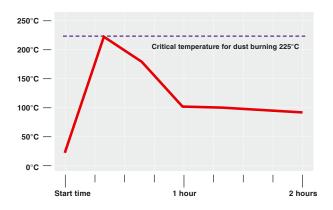
The heating elements are made of extruded aluminium with cooling fins and perforations. This special design gives an expanded surface area and a unique heat distribution, reducing the surface temperature.

The heating elements are mounted in special glass fibre reinforced brackets eliminating unwanted noise from the heater.

#### Low heating element operating temperatures

Convector panel heaters are often burning dust and deposit soot above the heaters. Not any more. The problems are eliminated with BEHA Environmentally Friendly Heaters.

Dust burning is caused by a high surface temperature on the heating elements inside the heaters and a high surface temperature on the front panel. Burning of dust becomes a problem at 225°C. The heating elements inside BEHA Heaters are designed to increase the surface area and thus lower the normal operating surface temperature. During the start-up period the element temperature may reach 225°C for a few minutes, then decrease and stabilise at 100°C.



Extremely low heating element temperatures have virtually eliminated the problems of burning dust, which can create unpleasant and irritating odours, much appreciated by people suffering from allergies and asthma.

#### **Heat outlet**

The heat outlet on the front panel, guiding the warm airflow away from the wall, is another means of reducing the possibilities of dust collection and soot deposits above the heater. The combination of low surface temperature and the guided heat outlet on the front will create a cleaner indoor environment. The maximum surface temperature on the front panel is 80°C at 20°C room temperature.





## Norwegian Quality at low installation and maintenance cost

#### **Safety Features**

All BEHA Convector Heaters have a built-in "frost guard" symbolised by a snow crystal on the thermostat temperature setting wheel. This function ensures that the room temperature will not drop below 5°C even if the thermostat temperature wheel is turned towards the off position.

All heaters come with a lockable dust cover on the control panel. For installation in schools and public buildings the cover can be fixed, removable only by an authorised person. Another important safety feature is the thermal cut out switch that disconnects the power to the heater if an object, such as clothing, accidentally falls onto the heater body. When the covering object is removed the cut out will reset automatically once the heater reaches a safe operating temeprature.

NB! Hanging clothes for drying on any heater is dangerous and may cause fire!

The maximum front panel surface temperature is  $80^{\circ}\text{C}$  at  $20^{\circ}\text{C}$  room temperature.

#### **Electronic Thermostat**

All BEHA Convector Heaters are fitted with an on/off switch and electronic thermostat maintaining a very stable room temperature. The thermostat's typical deviation is 0.2°C at 20°C room temperature.

#### Available products

The convector heaters from BEHA consist of two basic lines. The Convector Panel Heaters, height 400 mm, range from 400W to 2000W.

The Skirting Board Convector Heaters, height 200 mm, range from 500W to 1500W.

#### P and L Series Convector Heaters

These heaters are fitted with an on/off switch, electronic thermostat, 1.5m power cable with plug and junction box for a permanent electrical connection.



The P and L series convector heaters give two options for installation without any additional equipment; a plug for a standard wall socket and a junction box for a permanent connection.

#### Additional functions with P and L Series Heaters

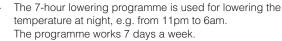
Additional functions are available by using plug-in modules with the P and L series heaters. The plug-in module slides into the slot next to the thermostat. The slot is covered by a blank cover when not in use.

Plug-in modules for additional functions can be installed at any time after purchase and fitting of a BEHA Heater.

### Programmable temperature reduction module:

Selectable economy options are available with the Energy Saving Module.

The module has 3 pre-programmed sleeping modes lowering the temperature by 5°C from the set thermostat temperature.



- The 5-hour programme is used when a room is vacant during the daytime and is normally used in combination with the 7-hour programme. The programme works 5 days a week.
- The 15-hour programme is used for lowering the room temperature during night time and day time when at work or school. The programme is active 5 days a week.

Any of the programmes can be overridden by pressing the "PAUSE" button. During the pause period the thermostat setting controls the heater. When pressing the "PAUSE" button again the programmes go back to the original setting.

All programme settings are indicated by illuminated light diodes when activated.

#### **PS and LS Series Convector Heaters**

These heaters are fitted with an on/off switch and electronic thermostat that operates with most centralised temperature control units and 24-hour time clock control units available in the market. A 3-core cable including pilot wire and junction box for permanent electrical connection is included. The PS and LS convector heaters are fitted with an economy setting to reduce the room temperature by 5°C when the room is not occupied.



The PS and LS Series heaters cannot be fitted with additional function plug-in modules.

## **Technical Specifications**

#### All BEHA Convector Heaters are fitted with on/off switches and electronic thermostats.

Thermostat deviation: 0.2°C at 20°C room temperature.

Maximum surface temperature: 80°C at 20°C room temperature.

Double insulated Splash proof, rating IP X4.

#### Convector Panel Heaters Series PS

With pilot wire for centralised time clock control and junction box for permanent electrical connection.

Height 400 mm, depth 50 mm. Wall bracket adds 33 mm.

Operating voltag: 220-240 V

Colour: RAL 9010

#### **Convector Panel Heaters Series P**

With 1.5 m cable with plug and junction box for permanent electrical connection.

Height 400 mm, depth 50 mm. Wall bracket adds 33 mm.

Туре	Watts W	Length mm	Dist. between wall fixings	Туре	Watts W	Length mm	Dist. between wall fixings
P 4	400W	431 mm	210 mm	PS 4	400W	431 mm	210 mm
P 6	600W	555 mm	210 mm	PS 6	600W	555 mm	210 mm
P 8	800W	679 mm	310 mm	PS 8	800W	679 mm	310 mm
P 10	1000W	803 mm	310 mm	PS 10	1000W	803 mm	310 mm
P 12	1250W	927 mm	610 mm	PS 12	1250W	927 mm	610 mm
P 15	1500W	11 <i>75</i> mm	610 mm	PS 15	1500W	11 <i>7</i> 5 mm	610 mm
P 20	2000W	1423 mm	610 mm	PS 20	2000W	1423 mm	610 mm

#### Convector Skirting Board Heaters Series L

With 1.5 m cable with plug and junction box for permanent electrical connection.

Height 200 mm, depth 50 mm. Wall bracket adds 33 mm.

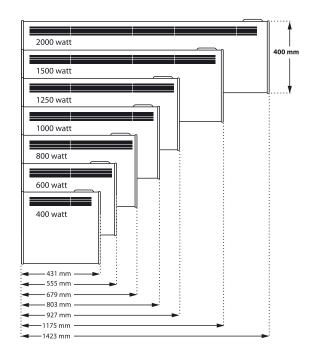
#### Convector Skirting Board Heaters Series LS

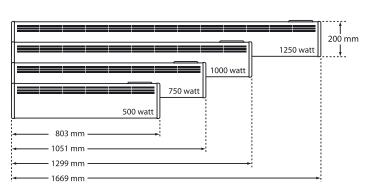
With pilot wire for centralised time clock control and junction box for permanent electrical connection. Height 200 mm, depth 50 mm. Wall bracket adds 33 mm.

Туре	Watts W	Length mm	Dist. between wall fixings	Туре	Watts W	Length mm	Dist. between wall fixings
L 5	500W	803 mm	310 mm	LS 5	500W	803 mm	310 mm
L 7	750W	1051 mm	610 mm	LS 7	750W	1051 mm	610 mm
L 10	1000W	1299 mm	610 mm	LS 10	1000W	1299 mm	610 mm
L 12	1250W	1669 mm	910 mm	LS 12	1250W	1669 mm	910 mm

#### Additional Functions to be used with P and L Series Convector Heaters: TP 100

Plug-in Energy Saving Module - 230V/400V - 50 Hz





Simple Heat Calculations				
Room Square Meterage	Recommended Heater Size			
2 - 4 m2	300 watt			
3 - 7 m2	400 watt			
3 - 10 m2	600 watt			
9 - 12 m2	800 watt			
12 - 16 m2	1000 watt			
14 - 20 m2	1250 watt			
18 - 25 m2	1500 watt			
22 - 32 m2	2000 watt			

