



Operating Instructions CXLSN

IMPORTANT

These instructions should be read carefully and retained for future reference. Note also the information given on the appliance.

Ultra-Slim Automatic Storage and Convector Heaters

(85318 lss. 8)

- **IMPORTANT SAFETY INFORMATION** -
- The Installation must be carried out by trained personnel.
- A means for disconnection must be incorporated in the fixed wiring by a double pole switch with a contact separation of a minimum of 3mm and in accordance with the current IEE Wiring Regulations.
- The heater must not be installed immediately below a fixed socket outlet.
- The heater is not suitable for connection to a 30A ring circuit.
- Do not position the heater under windows where curtains can contact the heater casing.
- To maintain stability, it is essential that the heater is placed on a level surface and care should be taken to avoid irregular surfaces, such as may result from carpets or tiled surrounds partially protruding under the heater.
- Only heat resisting cable (minimum rating T85) should be used.
- If used in a bathroom the heater must be installed such that switches and other controls cannot be touched by a person in the bath or shower.
- During any reassembly of the heater if a part of the thermal insulation shows damage or deterioration which may impair safety, it should be replaced with an identical part.
- WARNING In order to avoid overheating, do not cover the surfaces of the heater.
- Do not put clothes, fabrics or any other materials on the heaters.
- Do not place objects in contact with the heater.
- Do not position the heater where objects can come within 250mm (10") of the top and 75mm (3") of the sides of the heater.
- CAUTION Some parts of this product can become very hot and cause burns.
- Particular attention has to be given where children and vulnerable people are present.
- This appliance can be used by children from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge, if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance.
- Children less than 8 years of age should be kept away unless continuously supervised.
- IMPORTANT Due to the newness of materials the heater will produce a smell for the first few days of operation. Rooms must be well ventilated and young children, caged birds or people with respiratory complaints must not remain in proximity to the heater for the first 48 hours of the commissioning period.

Models CXLS12N, CXLS18N and CXLS24N

Your Dimplex CXLSN combined storage and convector heater enables you to take advantage of cheap off peak electricity to provide the bulk of your heating requirements, with the added flexibility of a built-in, thermostatically controlled convector heater. This allows you to provide top-up heat, for example, in very cold weather when the storage heater may not have sufficient stored heat in reserve later in the day for providing full comfort conditions. These operating instructions assume that the correct size of storage heaters have been selected to cater for the heating requirements of the room.

STORAGE HEATER OPERATION

Setting the Controls

The control knobs have been positioned so that they are clearly visible to an adult, but out of sight of young children. In this way it is hoped that they will not provide temptation to a child to alter the settings.

Domestic Use

The right hand (INPUT) knob should be set at the midway position. If after the first charge period the room temperature is too high or too low, the position of this knob should be moved to a lower or higher position as appropriate. The most suitable position should be found by experience, and the control may be left at this position without further alteration.

Normally the left hand (OUTPUT) knob may be left on minimum (fully anticlockwise). This control may be moved to maximum in the evening if additional heat is required at that time. Return to minimum before retiring.

Commercial Use

For normal commercial applications a setting of maximum on the output control will ensure maximum output during working hours. The input control should be set as described above for Domestic Use.



Should these settings not provide the comfort levels required, the more detailed instructions overleaf should be consulted.

CXLSN Storage heater section - Principle of operation

The storage heater section of the CXLSN heater consists of a core of high density heat storage bricks surrounded by a carefully designed insulating case. During the night time off-peak period elements within the brick core heat up the bricks to a temperature level determined by the setting you select using the input control knob.



In the morning, when the core is at its hottest, the amount of heat being transmitted through the insulation and emitted as radiant heat is at its greatest and the heater feels hot over most of its upper outer surfaces. *Diagram 2.*

As the day progresses, heat is transmitted from the heater to the room and the outer surface of the heater becomes less hot and the amount of heat released in this way becomes less.

If the amount of emitted heat becomes insufficient the output of the heater and thus the room temperature may be increased by means of the Output Control. This control operates a damper flap within the heater which, when the output control knob is at minimum, covers vertical airways which pass directly through the centre of the core of the heater. Even when the outer surfaces of the heater are noticeably less hot, the core of bricks can still be at a relatively high temperature. Opening the damper flap by moving the output control away from minimum allows the room air to circulate through this hot core and release more heat to the room by convection. *Diagram 3*.



Convected Heat



Input Control

The setting of this control determines the temperature of the room at the end of the charge period, as measured by the heater's built-in room temperature sensor.

With the Output Control Knob set to minimum (fully anticlockwise) for domestic use, or maximum (fully clockwise) for commercial applications, the Input Control Knob should initially be set at the mid point position. During the day following the first charge period the comfort level provided by the heater should be noted. If it is felt that the level of heating is either too high or too low, then the input control knob should be adjusted up or down as appropriate before the next charge period. This process should be repeated each day until the most acceptable conditions are attained. The Input Control knob should then be left at this setting, and the heater will automatically vary the charge taken in during subsequent charge periods to make the most effective use of off-peak electricity to provide the selected level of comfort at the end of each charge period.

In the Autumn and Spring a lower setting of the input control knob should be sufficient, the actual setting required being influenced by the prevailing weather conditions, the room size and insulation levels. The most suitable settings will be found by experience.

NOTE - The input charge may be affected by other sources of heat, such as the convector. Please refer to the section '24 Hour Convector Operation' overleaf.

Output Control

Depending upon the amount of charge accepted by the heater, the OUTPUT control allows the release of additional heat by means of a damper which can be opened to allow a greater air flow through the heater core, and therefore additional circulation of heat. By altering the setting of the Output control knob the damper may be opened and closed manually, or it may be made to open automatically.

Manual Operation

With the OUTPUT control on minimum the damper remains closed, and heat is released from the heater only by normal radiation and convection around the outer surfaces of the heater. This alone may provide sufficient heat on many occasions and therefore no alteration of the OUTPUT control is necessary. However, if a boost of heat is required in the evening period, then moving the OUTPUT control to maximum in the evening will immediately open the damper to allow more rapid release of any available stored heat. When the next charging period commences the damper will automatically close to prevent this release of extra heat during the charge period, but the OUTPUT control must be returned to minimum manually to obtain a similar operation the following day.

Automatic Operation

The damper may be pre-set to open automatically each day if required. Setting the OUTPUT control at settings other than minimum results in an automatic boost of heat. A high setting on the output control knob causes the damper to open early afternoon/evening, conversely a lower setting causes it to open later.

Because the automatic opening of the damper is primarily dependent on core temperature then the amount of charge the heater has taken has a bearing on the time at which the damper opens. For a given setting of the OUTPUT control, the colder the weather (and consequentially, the greater the charge taken automatically by the heater) the later the damper will open.

Conversely, for a lower charge input (in milder weather) the earlier the damper will open for a given room temperature boost setting.

The most suitable settings of the Output control for different conditions will be found by experience.

Remember - a high setting of the OUTPUT control early in the day may leave too little heat stored in the heater for the evening, especially during the less cold weather conditions.

CONVECTOR HEATER OPERATION Convector Heater - Principle of operation

In addition to the storage heater section the CXLSN incorporates a convector heater element in the front of the heater which may be used independently of the storage heater, for example to "top up" on very cold days, or for use in late spring and early autumn when only infrequent cold spells do not justify continuous use of storage heater. Cool air is drawn in at the base of the heater, heated by the convector element, and subsequently emitted from the grille at the top front of the heater.

The convector heater section is intended for use when the output of the storage heater is not sufficient to maintain the desired comfort level. For the most economical operation of the CXLSN, the heating system should normally be designed so that the storage heater section provides the bulk of the heating requirements, and the convector heater section provides only top up heat, for example, later in the day in cold weather.



Switching on

To put the convector switch F in the ON position, depress the right-hand side of the switch. The switch neon will glow when the switch is in the ON position. If the room temperature is below the thermostat setting neon C will glow, showing the convector is providing heat.

Setting the Thermostat

The thermostat knob A should be set to the comfort level required. Turning the knob clockwise will increase the room temperature selected, but the actual setting to provide the required conditions will be found by experience. If, when the convector heater is switched ON and available for use, the room temperature is below that set on the control knob, neon C will be illuminated, showing the heater elements are energised.



24-hour Convector Operation

In certain circumstances it may be desirable for the convector to be available during the off-peak period. If this is so the installer can select this option during installation. However, the user should be aware of the following:

1. If the convector heater is not required during the off-peak period the user must remember to switch it off.

2. If the convector heater is used at a high level for a significant period during the off-peak period it will have the effect of reducing the level of charge taken by the storage heater for a given input setting. A higher setting of the input control may be required to compensate for this.

IMPORTANT - Due to the newness of the materials the heater will produce a slight smell for the first few days of operation. ROOMS MUST BE WELL VENTILATED AND YOUNG CHILDREN, CAGED BIRDS, OR PERSONS WITH RESPIRATORY COMPLAINTS MUST NOT REMAIN IN CLOSE PROXIMITY TO THE HEATER DURING THE FIRST 48 HOURS OF THE COMMISSIONING PERIOD. To commission the heater set both the input and output controls to maximum and leave for 48 hours, after this period the controls should be adjusted for everyday use - see 'SETTING THE CONTROLS' on the front cover of these instructions.

Cleaning

To maintain the external appearance of the radiator it need only be wiped over occasionally with a dry duster. During the summer months, or at other times when the appliance is not in use and is completely cold, the opportunity should be taken to wipe over with a damp cloth. Do not use abrasive cleaning powders or furniture polish.

Discoloration of wall finishes can sometimes occur immediately above a storage heater due to the properties of some paints and decorating materials or the presence of environmental impurities in the air (such as soot or incense generated from the burning of candles, etc.) A suitable shelf (available from Dimplex) may be fitted to limit the extent of any wall discoloration.

After Sales Service

Your product is guaranteed for two years from the date of purchase. Within this period, we undertake to repair or exchange this product free of charge (subject to availability) provided it has been installed and operated in accordance with these instructions.

Your rights under this guarantee are additional to your statutory rights, which in turn are not affected by this guarantee.

Should you require after sales information or assistance with this product please go to **www.dimplex.co.uk** where you will find our self help guide by clicking on 'After Sales' or ring our help desk on 0844 879 3588 (UK) or 01 842 4833 (ROI). It would assist us if you can quote the model number, series, date of purchase, and nature of the fault at the time of your call. Spare parts are also available on the website **www.dimplex.co.uk**.

Please do not return a faulty product to us in the first instance as this may result in loss or damage and delay in providing you with a satisfactory service. Please retain your receipt as proof of purchase.

Recycling

For electrical products sold within the European Community. At the end of the electrical products useful life it should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling
advice in your country.

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Dimplex,Tel:0844 879 3588Millbrook House,Fax:0844 879 3583Grange Drive,Fax:0844 879 3583Grange Drive,Web-sitewww.dimplex.co.ukHedge End,Southampton, SO30 2DF.Southampton, SO30 2DF.

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This product complies with the European Safety Standards EN60335-2-30 and the European Standard Electromagnetic Compatibility (EMC) EN55014, EN60555-2 and EN60555-3. These cover the essential requirements of EEC Directives 2006/95/EC and 2004/108/EC