

Thank you for purchasing a BN Thermic product. Manufactured to a high standard, this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.



REGISTER: PLEASE REGISTER THIS PRODUCT ONLINE TO ACTIVATE YOUR GUARANTEE AT
www.bnthermic.co.uk



IMPORTANT: PLEASE READ THESE INSTRUCTIONS, NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS, AND CAUTIONS. USE THIS PRODUCT CORRECTLY, AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY.

1. SAFETY INSTRUCTIONS

1.1 ELECTRICAL SAFETY

WARNING! It is the responsibility of the owner and the operator to read, understand and comply with the following:

You must check all electrical products, before use, to ensure that they are safe. You must inspect power cables, plugs, sockets and any other connectors for wear or damage. You must ensure that the risk of electric shock is minimised by the installation of appropriate safety devices. A Residual Current Circuit Breaker (RCCB) should be incorporated in the main distribution board. If in any doubt consult a qualified electrician.

You must also read and understand the following instructions concerning electrical safety.

- The Health & Safety at Work Act 1974 makes owners of electrical appliances responsible for the safe condition of those appliances and the safety of the appliance operators. If in any doubt about electrical safety, contact a qualified electrician.
- Installation should always be carried out by a qualified electrician or a competent person in accordance with current electrical regulation.
- Ensure that the insulation of all the cables on the appliance is undamaged and safe, before connecting it to the power supply.
- Ensure that the cables are always protected against short circuit and overload.
- Regularly inspect the power supply cables and plugs etc. for wear or damage and check all connections to ensure that none are loose.
- Important: Ensure that the voltage marked on the appliance matches the power supply to be used and that a correctly rated fuse is fitted.
- DO NOT attach this unit to an extension cord it must be hard wired in position.
- The unit should be protected by a suitably rated isolator and fuse or MCB.
- This unit is IP20 rated and is suitable for indoor use only.

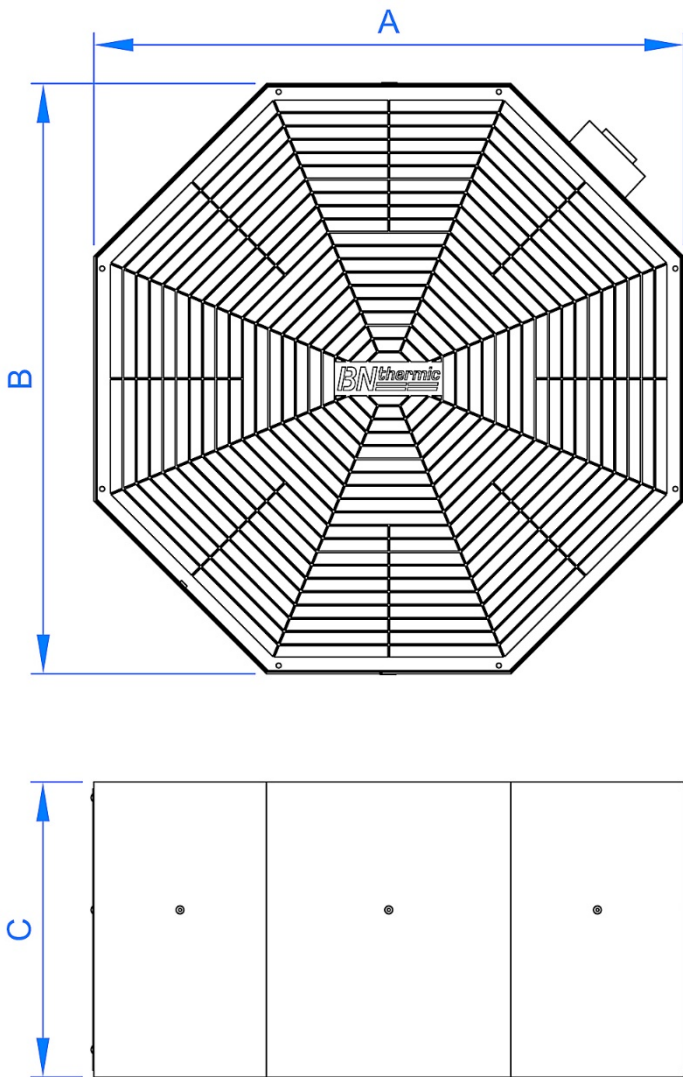
1.2 GENERAL SAFETY INSTRUCTIONS

- ✓ Remove all packaging and store it away from children, check the package and heater for visible damage or tampering.
- ✓ Familiarise yourself with the applications and limitations of the destratification unit.
- ✓ Ensure the unit is in good order and condition both physically and electrically before use. If in any doubt, do not use the unit and contact your supplier.
- ✓ Only use recommended attachments and parts. To use unauthorised parts may be dangerous and will invalidate your warranty.
- ✓ Keep tools and other items away from the destratification unit when it is in use.
- ✓ Keep children and unauthorised persons away from the unit.
- ✓ Disconnect from mains and allow the fan time to stop spinning before attempting any cleaning or maintenance.
- X **DO NOT** use in areas where hazardous gases or dusts may be present.
- X **DO NOT** use this destratification unit to perform a task for which it has not been designed.



2. INTRODUCTION & SPECIFICATION

Destratification units can reduce heating bills by up to 30% by recycling warm air that collects at high levels. The built-in thermostat allows the unit to work when warm air is present and turn off when the surrounding air is not warm.



	DSU3-40	DSU3-45	DSU3-50
Dimension A (mm)	600	600	600
Dimension B (mm)	600	600	600
Dimension C (mm)	300	300	300
Weight (Kg)	18	20	22
Airflow (m ³ /h)	3800	5600	7650
Motor Frequency (Hz)	50	50	50
Motor Voltage (V)	240	240	240
Motor Wattage (W)	180	240	380
Motor Current (A)	0.8	1.0	1.6
Motor Speed (RPM)	1400	1400	1400
IP Rating	20	20	20
Recommended Roof Heights (m)	4 – 7	7 – 10	10 – 15
Maximum Recommended Roof Height (m)	7	10	15

3. MOUNTING

The destratification unit is intended to be hung from a roof and comes complete with the following mounting kit:-

- 4 x M8 Eye Hooks
- 4 x M8 Nuts
- 4 x 500mm long chains
- 8 x Carabiner hooks

Note:- The chains may be extended if necessary BUT remember that heat rises and ideally the unit should be mounted as near to the roof as possible, leaving a minimum of 100mm between the top of the unit and the roof.

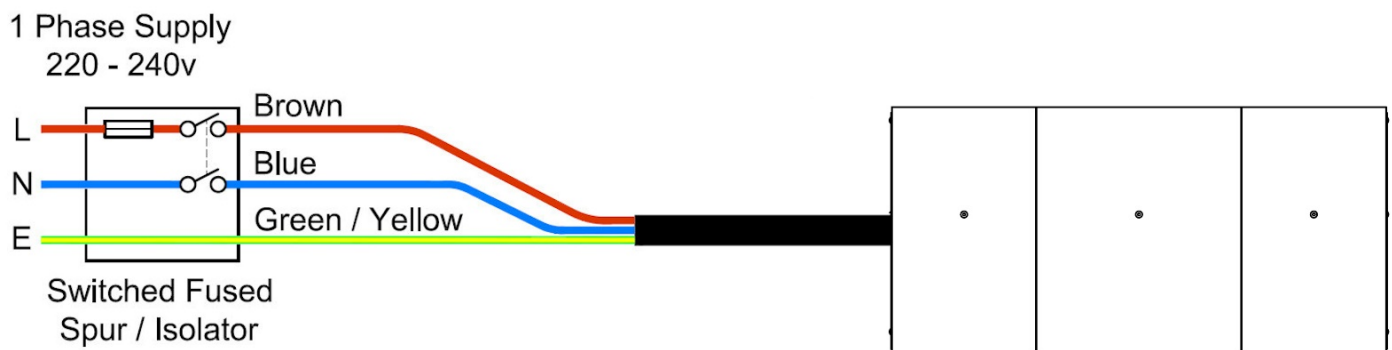
- ❑ **IMPORTANT!** A minimum of 100mm gap must be left between the top of the unit and the roof.
- ❑ **IMPORTANT!** Ensure that the mounting surface / ceiling is capable of taking the additional weight of the unit.
- ❑ **IMPORTANT!** Leave a minimum unobstructed gap of 3m below the unit to allow the unit to throw heat from the ceiling downwards.

Screw a M8 nut onto the end of each M8 eye hook. Now screw the eye hook into the insert on the top of the unit making sure you turn the hook a minimum of 3 complete turns. Now tighten the M8 nut so the hook cannot be undone. Use the chains and carabiners to secure the unit in position.

4. ELECTRICAL INSTALLATION

4.1 230V INSTALATION

- 4.1.1 Please make sure you have read the Safety instructions and you are a suitably qualified electrician before continuing.
- 4.1.2 The destratification unit is supplied with 2m of cable.
- 4.1.3 This unit must be earthed.
- 4.1.4 It is advised that Type C MCBs are used due to the inrush current present when initially turning on fan motors.
- 4.1.5 Connection to a Switched Fused Spur / Isolator.
- Connect the GREEN/YELLOW earth wire to the earth connection.
 - Connect the BROWN live wire to the live connection.
 - Connect the BLUE neutral wire to the neutral connection.
 - After wiring, check that there are no bare wires, that all wires have been correctly connected, that the cable outer insulation extends beyond the cable restraints and that the restraint is tight.



PLEASE CHECK ALL CONNECTIONS BEFORE TURNING ON AS INCORRECT WIRING IS NOT COVERED BY THE GUARANTEE

5. TEMPRATURE SETTING

Using the rotary knob on the side of the destratification unit set the temperature so that it is approximately 3°C above required room temperature setting. The fan will come on when warm air is present and turn off when the surrounding air is not warm.

6. MAINTENANCE

Note: Before examining or carrying out any maintenance ensure the fan has stopped rotating and is disconnected from the mains supply.

The destratification unit is intended to operate for many years, problem free. All moving parts are factory lubricated and therefore should require no service. Maintenance is limited to keeping the fan grill and outlet guard free from any accumulation of dust or any other foreign materials. This is especially important immediately before the heating season. Any dust build up can be loosened using a brush and a vacuum cleaner applied to the airways to ensure completed removal of any dust. When the destratification unit is first turned on after cleaning some dust may be thrown out of the unit.

If in any doubt always consult a qualified electrician for advice.

7. CHANGING MODE OF OPERATION

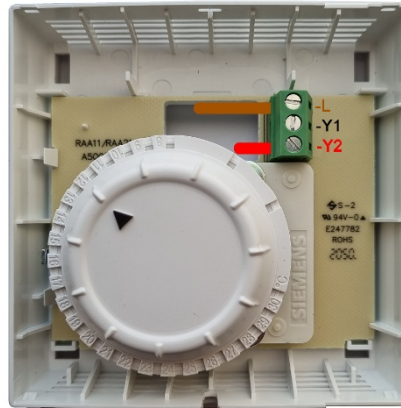
The destratification unit is factory supplied with the thermostat turning on the fan when the air present around the unit is at a certain temperature (usually 3°C above required room temperature setting). It then blows the warm air from the roof downwards saving heating costs. When the air around the destratification unit cools down the unit turns off so it does not blow cool air downwards.

The destratification unit can also be used to help frost protect or move air around when a room drops to a certain temperature. This is achieved by moving a wire in the thermostat so the fan now turns on when the air temperature around the unit drops to the set point. It then blows air downwards trying to stop cold spots occurring in the area in which it is mounted. It will now turn off then the air temperature around it increases above the set point of the thermostat.

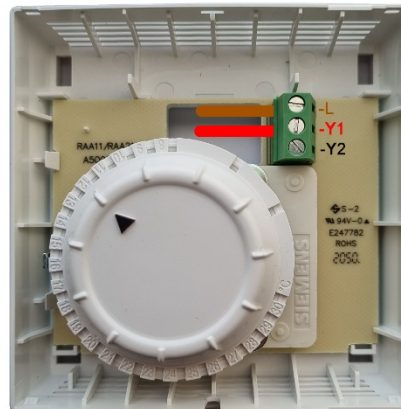
To adjust the mode of operation

Note: Before starting ensure the fan has stopped rotating and the destratification unit is isolated and disconnected from the mains supply.

- 1) Loosen the screw at the bottom of the thermostat holding the cover in position.
- 2) Remove the cover.
- 3) The internal wiring should look like the drawing labelled "Standard Wiring" to the right.
- 4) Loosen off screw number **Y2** and remove the red wire.
- 5) Insert the red wire into terminal **Y1** and make sure it is tightened up.
- 6) Retighten screw **Y2** so it does not come out when unit is turned on.
- 7) Replace the thermostat cover ensuring the bottom screw that holds the cover in position is tightened.



Standard Wiring –
Fan turns on when
air temp increases
to set point.



Modified Wiring –
Fan turns on when
air temp decreases
to set point.

8. SPEED CONTROL

A speed controller is available as an optional extra for the DSU3-40 and DSU3-50 destratification units, Part No: DSU-2R. One controller is required per destratification unit. These can also be added later should you require to control the rotational speed of the fan. **Note: This controller is not suitable for the DSU3-45.**



NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.



WEEE REGULATIONS:

This appliance bears the symbol of the crossed waste bin. This indicates that, at the end of its useful life, it must not be disposed of as domestic waste, but must be taken to a collection centre for waste electrical and electronic equipment. It is the user's responsibility to dispose of this appliance through the appropriate channels. Failure to do so may incur penalties established by laws governing waste disposal.

IMPORTANT: No liability is accepted for incorrect use of this product.

WARRANTY: Your BN Thermic product is guaranteed for one year from date of purchase. We will repair or replace at our discretion any part found to be defective. We cannot assume any consequential liability. This guarantee in no way prejudices your rights under common law and is offered as an addition to consumer liability rights.

REGISTER: Activate your warranty by registering online at www.bnthermic.co.uk and retain this installation data for future reference.

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