



FLEXIHEAT UK LTD
www.flexiheatuk.com
01202 82221



LEO D XL TURBO / LEO D XL BMS TURBO / LEO DT XL TURBO

DESTRATIFICATOR
TECHNICAL DOCUMENTATION OPERATION MANUAL

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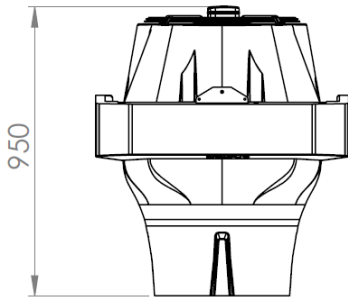
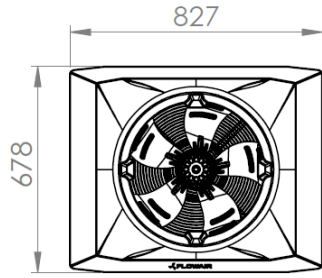
1. PURPOSE AND PRINCIPLE OF OPERATION

Destratificator (under ceiling air mixer) co-operates with various devices of the heating system and is used for improving the efficiency of heating in high objects such as: industrial shops, storehouses, supermarkets, exhibition halls.

The primary function of the under ceiling air mixer is counteracting the accumulation of warm air in upper zones of the room. An axial fan draws warm air in and forces its flow downwards, i.e. towards the zone occupied by people (the thermal comfort zone). This results in a reduction of heat losses through the ceiling and causes a faster heating of the building.

Destratificator is designed for installation indoors, in an environment protected against weather conditions and in rooms in which there is no risk of explosion.

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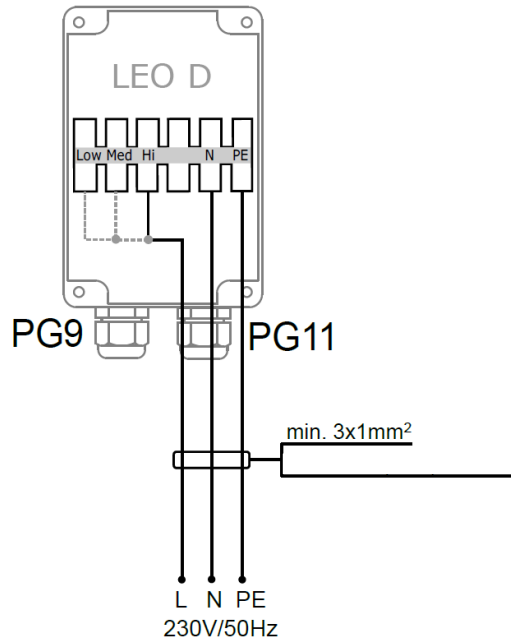
	LEO D XL TURBO
Speeds	III
Air flow [m ³ /h]	6300*
Max. current consumption [A]	2,0
Maximum power consumption [W]	450
Electric power supply	230V / 50Hz
Acoustic pressure level** [dB(A)]	67,5
Motor protection degree	IP 54
Motor insulation class	F
Weight [kg]	25

* CFD simulation air volume |

**Acoustic pressure level measured in the room of average sound absorption, capacity 1500m³, at distance of 5m from the unit

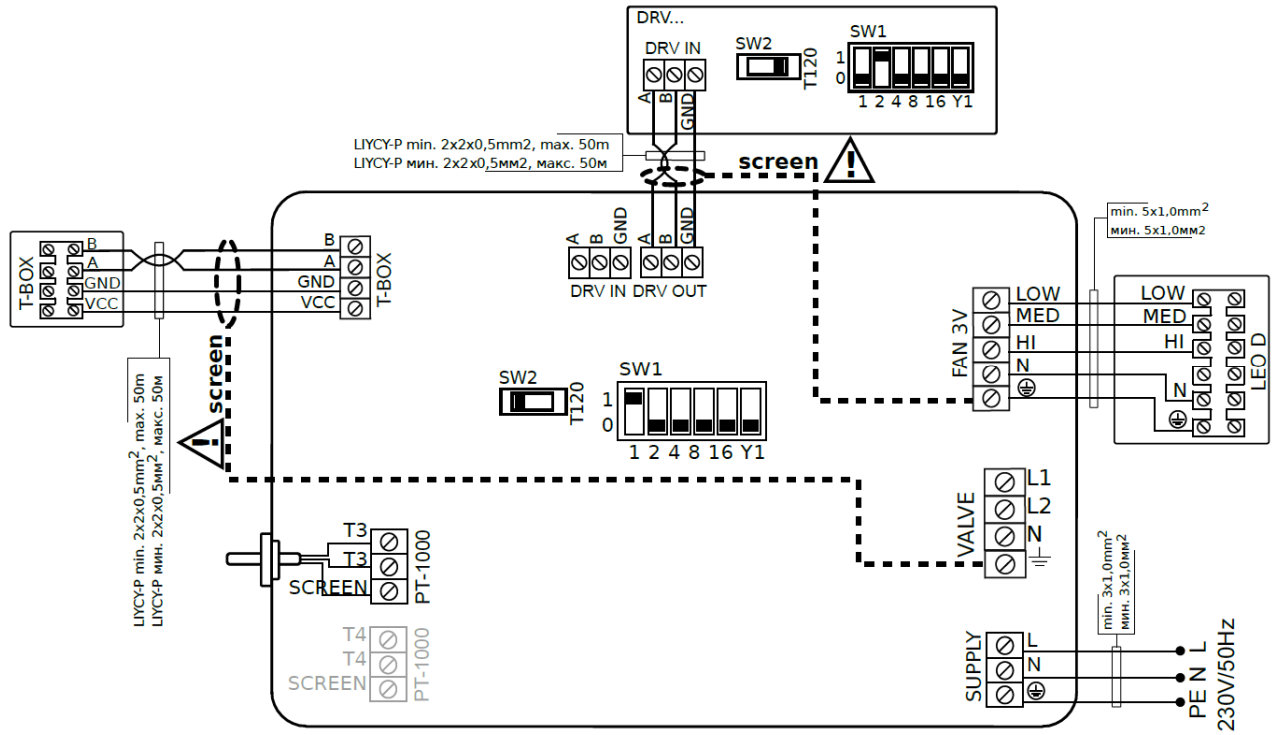
3. WIRING DIAGRAMS

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Hi / N / Pe - 3rd fan speed
Med. / N / Pe - 2nd fan speed
Low / N / Pe - 1st fan speed

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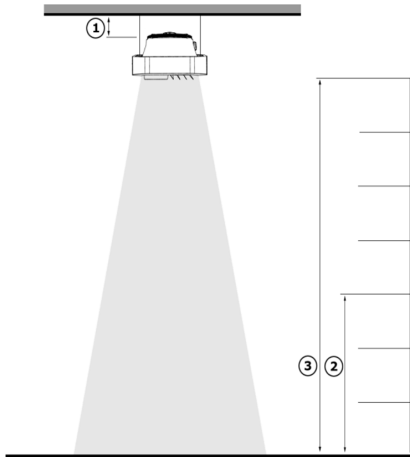
Glands	6 x PG9 + 2 x PG 11
Wires size and type should be chosen by the designer	

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- T-box – controller with touch screen connection
- FAN 3V - 3-step fan connection
- SUPPLY – supply connection

4. INSTALLATION

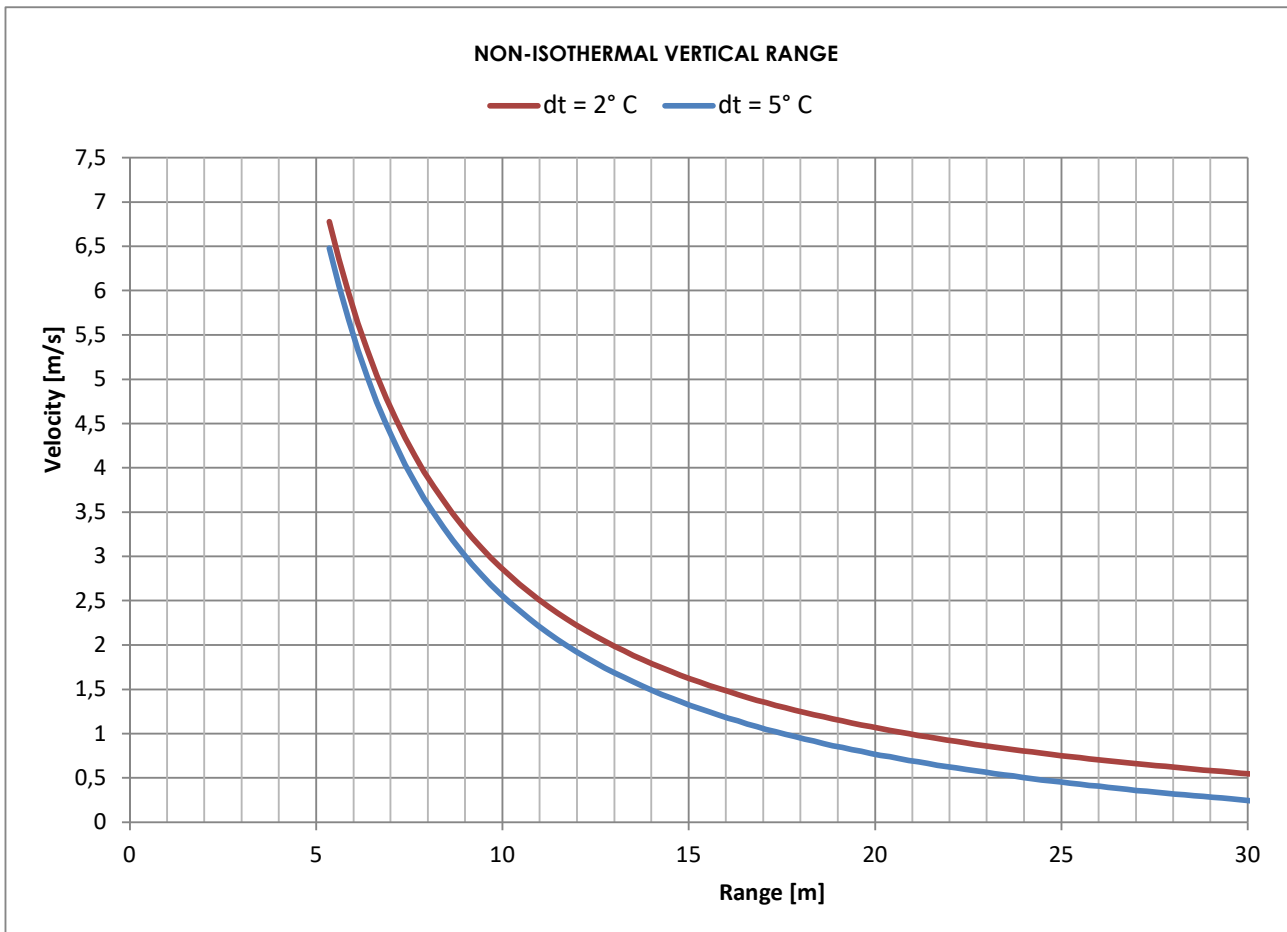
4.1. MOUNTING DISTANCE



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LEO D XL TURBO	
①	min. 0.5 m
②	min. 6m
③	max. 30 m

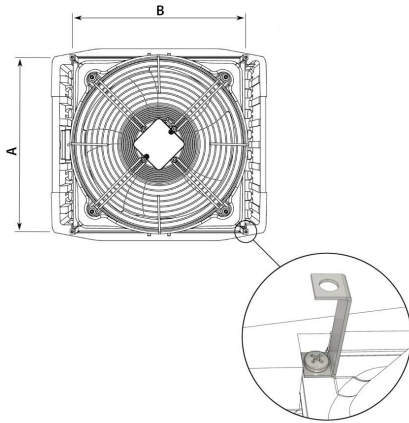
When installing on surfaces which transfer or suffer vibrations - it is recommended to use anti-vibration mounts



*range based on CFD program simulation

Solidworks Flow Simulation

4.2. METHODS OF INSTALLATION



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A	585
B	665

Under ceiling installation must be done using each (four) U-section profiles / mounting brackets
It is recommended that the mounting to the ceiling be executed keeping similar distance.

Units must be suspended by threaded rod/bar. Installation by chain or cable/wires is not permitted.
Please mind distances of installation listed in paragraph 4.1.

5. START-UP AND OPERATION

Start Up

- Before connecting the power supply check the correctness of connection of the fan motor and the controllers. These connections should be executed in accordance with their technical documentation.
- Before connecting the power supply check whether the mains voltage is in accordance with the voltage on the device data plate.
- The electrical system supplying the fan motor should be additionally protected with a circuit breaker against the effects of a possible short-circuit in the system.
- Starting the device without connecting the ground conductor is forbidden.

Operation

- The device is designed for operation inside buildings, at temperatures above 0°C.
 - The device must be inspected periodically every 12 months. In the case of incorrect operation of the device it should be switched off immediately.
It is forbidden to use a damaged device. The manufacturer bears no responsibility for damage resulting from the use of a damaged device.
 - For the time of performing inspection or cleaning the device, the electrical power supply should be disconnected.
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6. SERVICE AND WARRANTY TERMS

Please contact your dealer in order to get acquainted with the warranty terms and its limitation.

In the case of any irregularities in the device operation, please contact the manufacturer's service department.

The manufacturer bears no responsibility for operating the device in a manner inconsistent with its purpose, by persons not authorised for this, and for damage resulting from this!

7. CONFORMITY WITH WEEE DIRECTIVE 2012/19/UE

The symbol of the crossed out wheeled bin placed on the equipment, packaging or documents attached means that the product must not be disposed of with other wastes. It is the responsibility of the user to hand the used equipment to a designated collection point for proper processing. The symbol means at the same time that the equipment was placed on the market after August 13, 2005.

For information on the collection system of waste electrical and electronic equipment, please contact the distributor.

R E M E M B E R :

- Do not dispose of used equipment together with other waste! There are financial penalties for this. Proper handling of used equipment prevents potential negative consequences for the environment and human health. At the same time, we save the Earth's natural resources, reusing resources obtained from the processing of equipment.

Declaration Of Conformity

Flexiheat hereby confirms that heating unit

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were produced in accordance to the following Europeans Directives

1. **2014/30/UE** – Electromagnetic Compatibility (EMC)
2. **2006/42/WE** – Machine
3. **2014/35/UE** – Low Voltage Electrical Equipment (LVD)
4. **2009/125/WE** – Energy-related products (ErP 2015)

and harmonized norms ,with above directives

EN ISO 12100:2012 *Safety Of Machinery - General Principles For Design - Risk Assessment And Risk Reduction /*

EN 60204-1:2018-12 *Electrical equipment of machines – Part 1: General requirements*

EN 60034-1:2011 *Rotating electrical machines — Part 1: Rating and performance*

EN 61000-6-2:2008 *Electromagnetic compatibility (EMC). Generic standards. Immunity for industrial environments*