

LEO
Destratification Fans

KLINGENBURG

Natural convection causes warm air to rise to roof level, which will result in high temperature gradients along with increased energy use. The LEO range of destratification fans prevents the accumulation of warm air within the roof space, taking the stratified warm air and recirculating it back to low level providing a permanent reduction in roof space temperature and uniform temperature distribution.

Model Range

LEO destratification fans are available in three sizes, with mounting heights ranging from 4 to 15m and air volumes from 2,500m³/h up to 7,200m³/h. LEO units are supplied with a high efficiency axial fan with mesh finger guard, EPP casing with four point suspension and four way discharge adjustable louvres. Each unit is fitted with a three speed fan, speed is selectable at installation by adjusting a link within the motor. Default setting is high speed.

Installation

LEO units are supplied ready for automatic operation with installation only requiring mounting and connection to a single phase electrical supply. Standard units are supplied with an integral thermostat to operate the fan as soon as the roof space

temperature rises above the set point. The four-way adjustable outlet blades allow the air direction and terminal velocity to be set to suit the application and mounting height.

Design

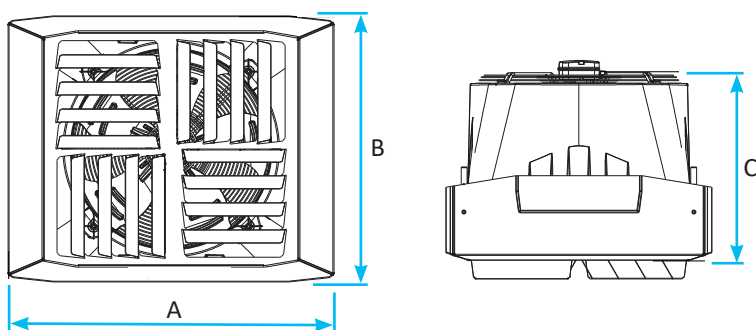
Select the LEO unit to suit the mounting height required, ideally the units should be installed approximately 1 metre below the apex of the roof. To select the number of LEO fans needed, calculate the volume of the building and multiply by two (this determines the amount of air that needs to be re-circulated for effective de-stratification). Finally divide by the primary air volume of the unit to determine the number of units.

Technical Data

Description		LEO DT S			LEO DT L			LEO DT XL		
Fan speed	Unit	Low	Med	High	Low	Med	High	Low	Med	High
Air volume	m ³ /h	1,900	2,200	2,500	2,800	4,200	5,200	3,900	6,100	7,200
Electrical supply	230v/50Hz/1 Phase									
Min mounting height	m	6.0			6.0			6.0		
Max mounting height ²	m	8.0			13.0			15.0		
Min clearance from rear	m	1.0			1.0			1.0		
Max current consumption	A	0.3	0.4	0.5	0.6	1.0	1.3	1.3	1.5	2.0
Max power consumption	W	70	80	110	120	200	280	260	350	450
IP/Insulation class	54/F									
Max sound pressure level ¹	dB(A)	49	55	57	45	58	66	54	67	73
Max sound power level	dB(A)	65	70	72	60	74	81	69	82	88
Max ambient temperature	°C	60			60			60		
Weight	kg	9			14			20		

1. Sound pressure level at 5m from the unit Q=2, A = 1500 2. Based on all louvres blowing vertically downwards zero deflection

Dimensional Detail



Model	A	B	C	D	E
LEO DT S	580	480	345	415	415
LEO DT L	650	580	355	515	515
LEO DT XL	830	680	475	665	585

Suspension Detail

Each unit is equipped with corner brackets, which make the installation and leveling of the unit under the roof much easier.

