

## Tube Fans with sound insulated housing Z...E / Z...R



## Contents

3	Description - Z...E / Z...R
3	Application Areas
3	Casing
4	Impellers
4	Motor and Motor Protection
4	Electrical Connection
4	Installation
5	Air Volume Control
5	Scope of Delivery
5	Construction Scheme

## Z ... E / Z ... R – Zeroboxes

Tube fan with sound-insulated housing

- low noise
- can be installed in any position
- easy cleaning and maintenance
- easy electrical connection via IP44 terminal box
- motor protection by thermal contacts



### Description:

The Rosenberg-Zero boxes are used for ventilation of apartments, warehouses, factories, toilets, bathrooms, locker rooms and more. The extremely flat construction makes them ideal for installation in suspended ceilings. The very low noise fans can be installed in any position.

**Note:** Due to the open sound insulation, the use as a supply air fan (according to VDI 6022) is not possible.

### Application Areas:



### Casing:

Casing is made of sendzimir sheet steel as sound absorbing construction. The covering lid can easily be unscrewed to gain access for cleaning and maintenance. The motor is removable together with the impeller and spiral scroll.

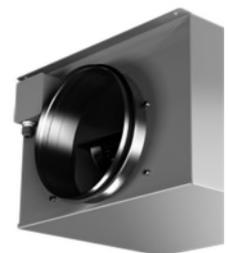


#### Z...E / Type Evolution

is equipped with 40mm thick rockwool plates

#### Z...R / Type Revolution

is equipped with 40mm thick rockwool plates



### Impellers:

Both types of impellers are balanced dynamically and statically together with the external rotor motors at two levels according to quality level G2.5/G6.3 DIN ISO 21940-11.



**Zerobox Revolution:** with backward curved impeller  
**BG 125/160/250/315/355/400:** made of plastic  
**Baugröße 200:** made of galvanized sheet steel



**Zerobox Evolution:** with forward curved impeller  
**BG 315/355/400:** made of galvanized sheet steel

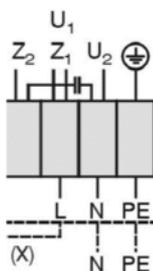
### Motor and Motor Protection:

All Rosenberg fans are equipped with direct driven external rotor motors. All our fans have motor protection through thermal contacts in the motor windings as standard. The motors apply to protection class IP44/IP54.



The drive has due to an external rotor motor a space saving, compact and attractive design. The motor is fitted within the impeller, which enables the best possible cooling. For this reason a 100% variable speed control can be guaranteed. V-belts, additional tension bars and motor mounting devices are not necessary. Only well-dimensions ball-bearings, fitted on both sides and life time greased are used. Both ball-bearing seats are ground to high precision in one work process to eliminate any vibrations. External rotor motors have extremely low starting currents. The windings comply to isolation class F. In addition the windings have a standard moisture impregnation.

### Electrical Connection:



#### Series Evolution / Revolution:

The electrical connection is mounted on the housing by a terminal box with IP44/IP54 protection.

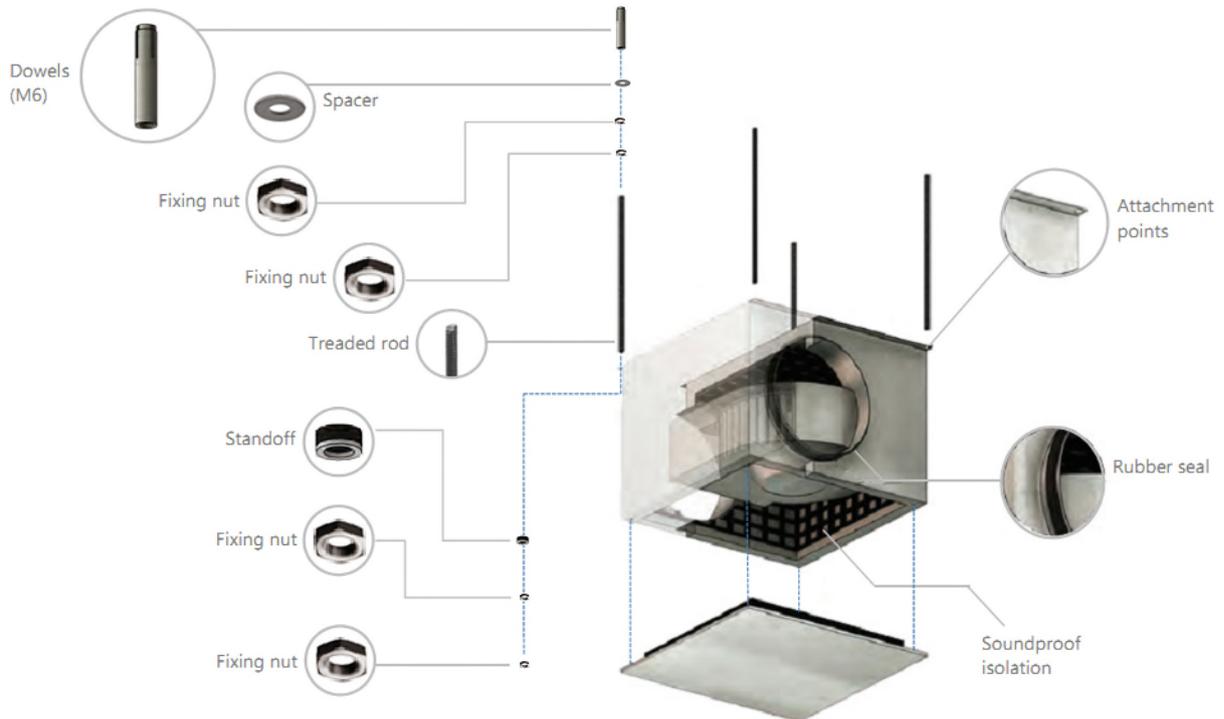
### Installation:



Rigid folded spiral-seam ducts (Spiro), flexible aluminium or plastic ducts with standardized diameter can be used. Zeroboxes can be installed in any position. If the Zerobox is used for several floor levels, the local laws on fire protection have to be observed.

### Ceiling Mount

of the tube fan type Z...E/R with treaded rod.  
 Mounting hardware is **not** included!



### Air volume Control:

For more information see accessories!



**5-speed control unit:**

230V → RE / RTE

**Infinitely variable control unit:**

230V → ED

### Scope of Delivery:

- Zerobox (Z...E / Z...R)
- Documentation

### Construction Scheme Zeroboxes:

