

# DA 60-920

## Technical Info





## 1 Product description

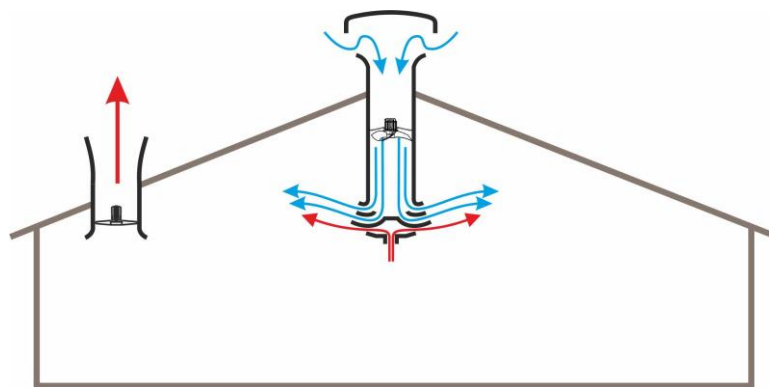
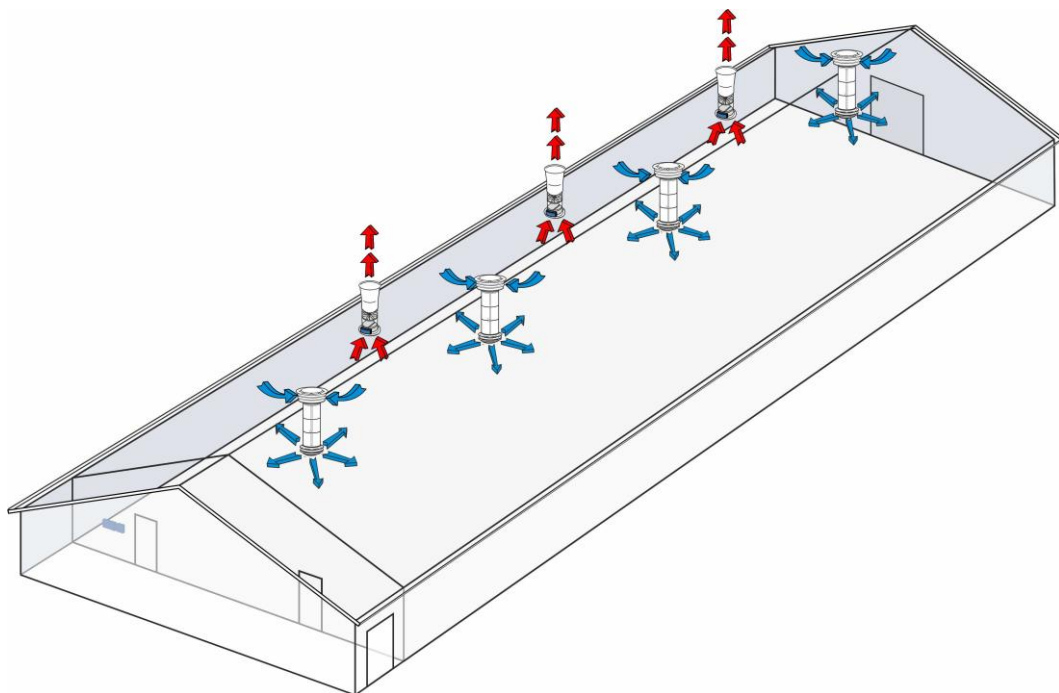
The DA 60-920 equal pressure unit is an air inlet for equal pressure that combines high output with low air velocity in the animal zone.

The 60-920 supplies up to 20,000 m<sup>3</sup>/hour and the output is regulated steplessly via the fan and parallel motion system. This ensures that the equal pressure unit opens uniformly all the way round, which ensures uniform distribution of air throughout the house.

The DA 60-920 is equipped with a recirculation fan that ensures the necessary air jet range, even though the amount of incoming air is adjusted downwards.

The unit can be adjusted to the air jet range desired for the current time of year. It is in this way possible to always create a combination of negative pressure and opening which gives the desired relation between output and air velocity.

The DA 60-920 equal pressure unit is moulded in PUR with high insulation capacity and the metal parts are made from stainless steel A2.

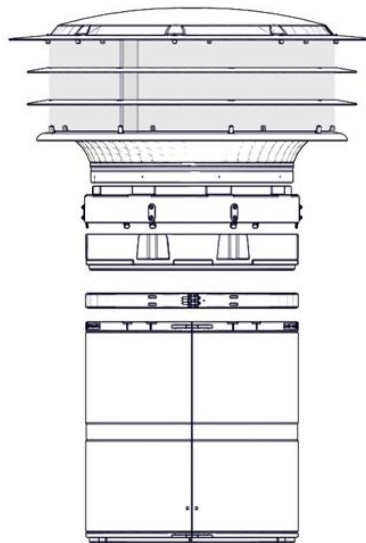


## 2 Product survey

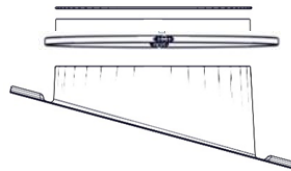
With roof cap

Attic space

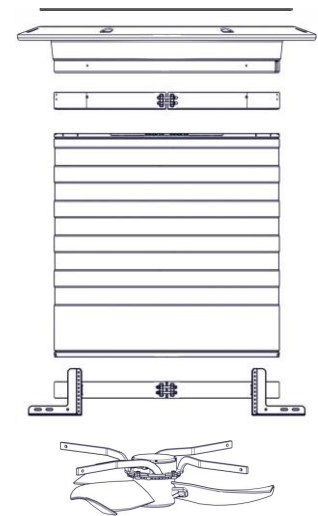
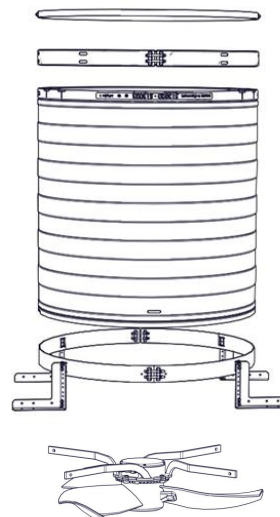
### 1-9 Above Roof



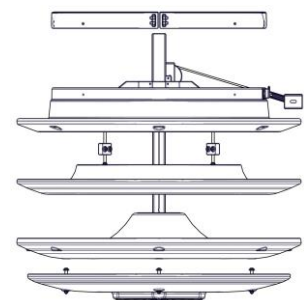
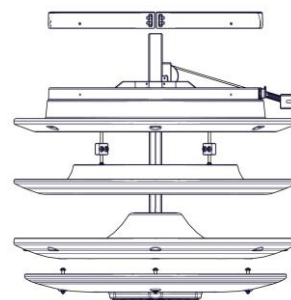
### 10-19 Lead-Through



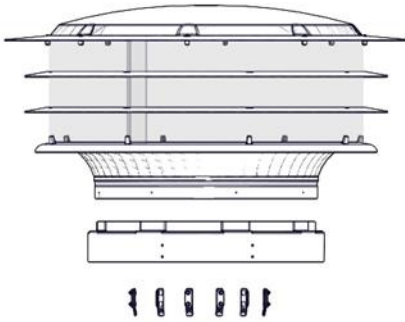
### 20-29 Attic/Section



### 30-39 Air Supply



1


**433479 DA 60-920 Roof cap, complete, grey**
**433579 DA 60-920 Roof cap, complete, black**

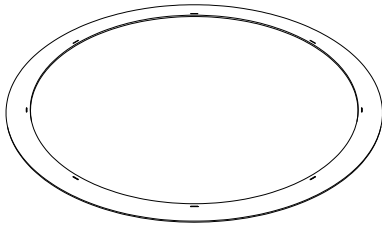
Used for air intakes above roof.

A rain screen is mounted on the mesh for protection from weather. The top of the bell mouth is designed so that water running down along the mesh is always led out to the roof.

The bell mouth and roof cap are made from weather resistant fibre glass. The mesh is hot-dip galvanised with a mesh of 10 x 25 mm and a height of 250 mm.

The DA 60-920 is delivered unassembled.

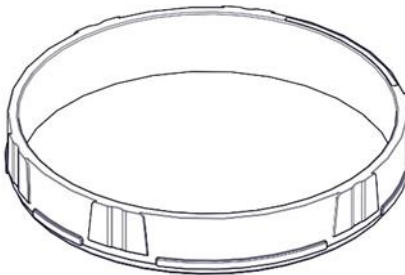
2


**433489 DA 60-920 Rain screen for roof cap, grey**
**433589 DA 60-920 Rain screen for roof cap, black**

The DA 60 is as a standard delivered with 2 rain screens for the roof cap.

Additional rain screens can be bought if necessary, if further reduction of rain and snow entering.

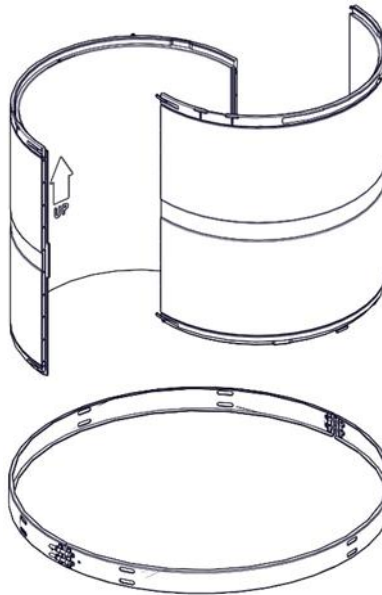
3


**434155 DA 920 duct end, black**

Used at transition to roof cap, bell mouth or duct end.

1 unit per DA 60-920 roof inlet.

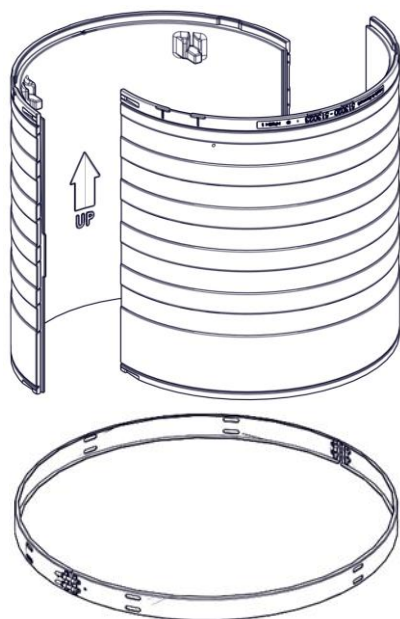
4


**434157 DA 920 duct 1000 mm, grey**
**434160 DA 920 duct 1000 mm, black**
**434158 DA 920 duct 1500 mm, grey**
**434161 DA 920 duct 1500 mm, black**

The DA 920 ducts are available in two different lengths, 1000 and 1500 mm.

The duct is delivered with DA 920 duct connector and a mounting set for connecting the ducts.

5

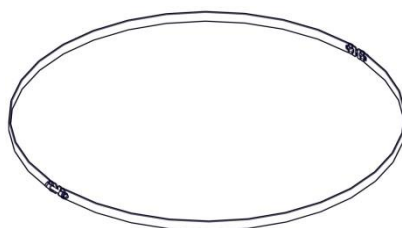
**433527 DA 920 duct f.fan/roof 1000 mm grey****433528 DA 920 duct f.fan/roof 1000 mm black**

DA 920 duct with fan suspension.

The duct comes with DA 920 duct connector as well as a mounting set for joining of ducts.

Use when mounting above the roof.

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**434162 DA 920 support band, A2**

One support band should be used per DA 920 duct.

On ducts with anchoring (434142) the support bands can be omitted

## DA 60-920 lead-through

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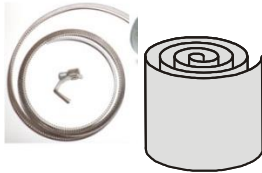
**530155 Joint sealer, Sikaflex 221, grey 300 ml**

**530156 Joint sealer, Sikaflex 221, black 300 ml**

Used for sealing ducts.

1 for 20 DA 60-920 roof inlets.

11



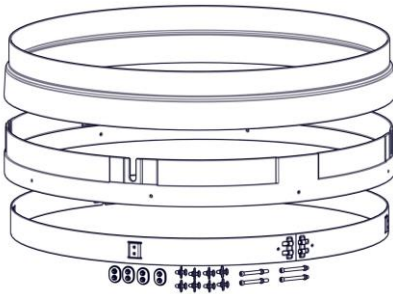
**434118 DA 920 flashing band, grey**

**434119 DA 920 flashing band, black**

The DA 920 flashing bands (3150 mm x 140 mm) with 3.5 m clips are always used as a transition between the DA 920 ducts and the DA 920 roofing sheets.

1 per each DA 920 roofing sheet.

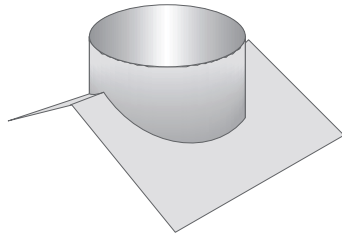
12



**433534 DA 920 suspension system roofing sheet**

DA 920 suspension system roofing sheet used in connection with DA 60-920 equal pressure, so the equal pressure unit can be mounted on the roofing sheet.

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**434107 DA 920 roofing sheet, ridge, grey**

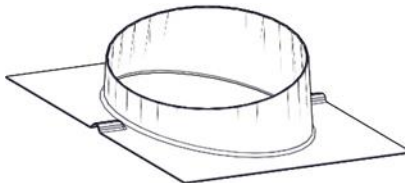
**434127 DA 920 roofing sheet, ridge, black**

The roof sheet is designed for mounting on the ridge and is available in different versions in terms of roof sheet types and pitches.

It is always to be used if the DA 920 is to be mounted on the ridge.

Remember to always order flashing bands (434118, 434119).

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**434106 DA 920 roofing sheet, side, grey**

**434116 DA 920 roofing sheet, side, black**

The roof sheet is designed for slope mounting and is available in different versions in terms of roof sheet types and pitches.

This solution is recommended when slope mounting on roofs that do not use steel sheet, for example on asbestos roofs.

Remember to always order flashing bands (434118, 434119).

If using DA 920 roofing sheet with smooth sides there is also a need for using flex flashing for smooth side roofing sheets (433099, 433093).

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**433099 Flex flashing for smooth side roofing sheet, black**

**433093 Flex flashing for smooth side roofing sheet, grey**

The flex flashing (1925 mm x 560 mm) is always used for transition between the roofing sheet of the building and DA 920 smooth side roofing sheets.

Contains WakaFlex flashing, supports and construction adhesive.

1 per each DA 920 smooth side roofing sheet.

## DA 60-920 lead-through

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**433094 Flex flashing for steel roofing sheets, grey**

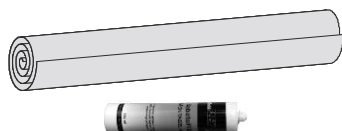
**433096 Flex flashing for steel roofing sheets, black**

The flex flashing is always used for steel roofing sheets at the transition between the building's steel roof and slope mounted DA 60-920 roof inlets.

Contains WakaFlex flashing, supports and construction adhesive.

1 per each DA 60-920 roof inlet.

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**433493 Neoprene cloth 1.85m x 1.75m**

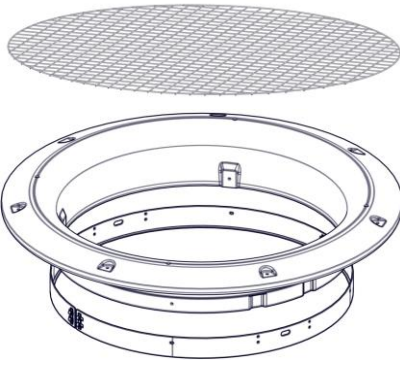
An inexpensive alternative to the DA 920 roofing sheet side or flex flashing. Neoprene cloths can be used at the transition between the building's roofing sheets and slope mounted DA 60-920 roof inlets.

1 per each DA 60-920 roof inlet.



## DA 60-920 attic/section

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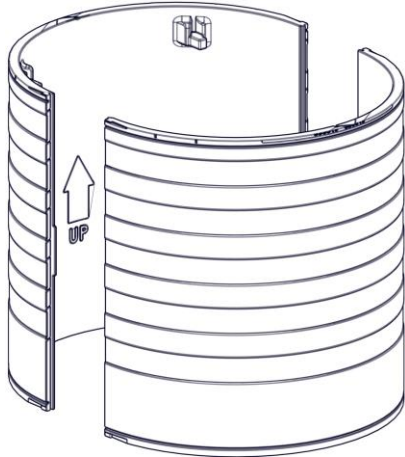


### 433532 DA 920 bell mouth w/clamp black

DA 60-920 bell mouth.

The bell mouth comes with a mesh and collar band including flange.

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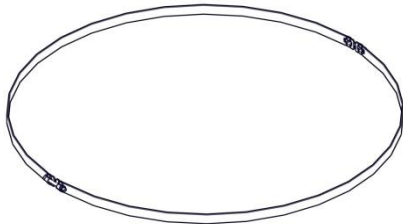
### 433529 DA 920 duct f. fan/ceiling 1000 mm grey

### 433530 DA 920 duct f. fan/ceiling 1000 mm black

DA 920 ducts with shoe for suspension of fan unit.

Use when mounting in an attic space.

22

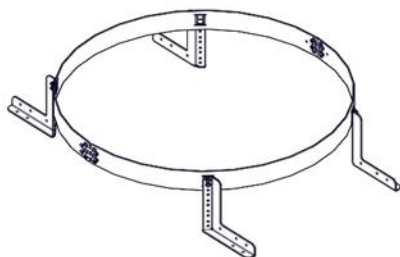


### 434162 DA 920 support band, A2

One support band should be used per DA 920 duct.

On ducts with anchoring (434142) the support bands can be omitted.

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### 434142 DA 920 anchorage for duct, A2

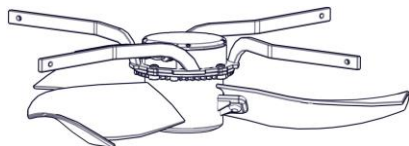
Used for lead-through in ceilings, that is, where the ceiling does not go all the way up to the ridge and where the duct height over the roofing sheet is from 0 to 2.5 m.

24



### 434165 DA 920 fittings for wire suspension

In livestock houses with no attic, i.e. where the ceiling ends in the ridge (ceiling = roof), this kit should be used for suspension of duct/fan in the roof construction.

**DA 60-920 attic/section****24****409161 DCT 920-1E equal pressure fan FF 230V50/60Hz**

3 fan blades, 230 V fan with aluminium fan blades which fit a duct with an inside duct dimension of 920 mm. It is equipped with an EC motor (internal fan speed controller). It is used as stepless or ON/OFF fan.

High output and good pressure stability.

## DA 60-920 air supply

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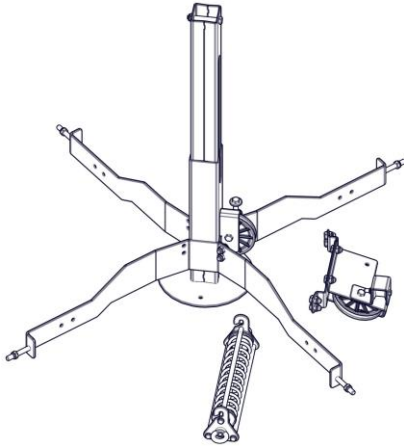
### 433520 DA 60-920 Free Flow outlet, black

The outlet funnel and the bottom plate are made from PUR with a material thickness of 30 mm to counter condensation.

Remember to order the DA 60-920 Outlet, accessories (433533).

Mounting sets must be ordered separately.

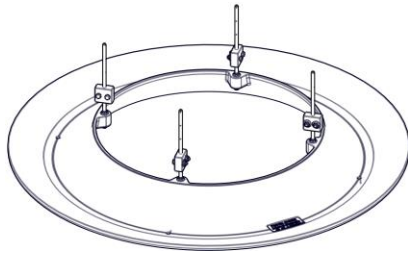
31



### 433533 DA 60-920 outlet, accessories

Pulling system and steel wire is delivered unassembled.

32



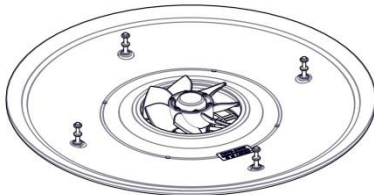
### 433521 DA 60-920 Intermediate plate, black

Intermediate plate complete with guide rods for 150 mm opening.

Approximately 50 % of the air is directed onto the intermediate plate, which reduces the air velocity coming out of the air supply unit and therefore also the velocity at the floor.

The intermediate plate is delivered unassembled.

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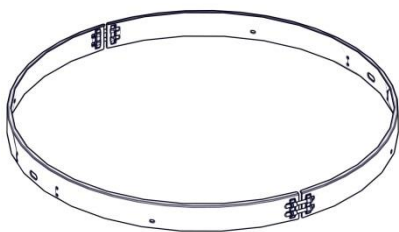
### 433522 DA 60-920 Recirculation fan, black

If the temperature difference is vary large, the attic Coanda-effect is poor, or if free air jet is used, a recirculation fan might help preventing inappropriate down draughts.

Complete with recirculation fan, capacitor and connection box.

The recirculation fan is delivered unassembled.

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### 433523 DA 60-920 Clamp with collar

Used for transitions to DA 920 ducts.

### 3 Technical data

#### 3.1 Recirculation Fan

	Recirculation Fan
<b>Electric</b>	
Operating voltage [V]	230
Frequency [Hz]	50
Power consumption [A]	0.62
Power consumption [kW]	0.12
RPM	1440
Air output [m³/h]	2200

#### 3.2 DA 60-920

	DA 60-920
<b>Negative pressure [Pa]</b>	<b>DA 60-920 without intermediate plate Output [m³/h]</b>
Air output [m³/h] (at 0 Pa)	21,600
Air output [m³/h] (at -10 Pa)	22,600
Air output [m³/h] (at -20 Pa)	23,600
Air output [m³/h] (at -30 Pa)	24,300
Air output [m³/h] (at -40 Pa)	25,200
<b>Mekanisk</b>	
Material	PUR / fibre glass
Band	Stainless steel A2
Colour	RAL 7035 / RAL 9005 / black
Hole diameter [mm]	920
Tensile length [mm]	420
<b>Tensile force [kg]</b>	
DA 60-920 Outlet	10.5
DA 60-920 outlet DA 60-920 intermediate plate	14.5
DA 60-920 outlet DA 60-920 recirculation fan	20.5
DA 60-920 outlet DA 60-920 intermediate plate DA 60-920 recirculation fan	24.5
<b>Environment</b>	
Ambient temperature, operation	-40 to +40°C (-40 to +104°F)
Ambient temperature, storage	-40 to +65°C (-40 to +149°F) – and protected against direct sunlight.
Ambient relative humidity, operation	0-95 % RH
Protection class	IP 54

**Table 1: Technical Data**

### 3.3 DCT 60-920-1E

Fan type	409161 DCT 920-1E
<b>Electric</b>	
Rated voltage [V AC]	1x230 ± 10 %
Operational voltage [V AC]	200-277
Frequency [Hz]	50
Max. power consumption [A]	5.0
Power consumption at [A] - 40Pa	3.6
Power [W]	960
Adjustment ability	0-10 V
Motor protection	Integrated
Motor relay	-
<b>Mechanic</b>	
Cable length [m]	2.0
Min. duct diameter [mm]	920
Blade diameter [mm]	905
Number of blades [pcs.]	3
<b>Fan output</b>	
Revolutions [per minute] (mark)	950
Power consumption [W] (at -10 Pa)	860
Specific output [m³/kWh] (at -10 Pa)	26,800
Specific energy [Watt/1000 m³/h] (at -10 Pa)	37
Pressure stability, change from 0 to -20 Pa [%]	8
<b>Environment</b>	
Operating temperature	55° C
Start temperature	÷ 35° C til + 55° C
Storage temperature	÷ 40° C til + 80° C
Ambient humidity, operation	85 %
Protection class	IP55
Fan noise, outside [dB (A)] (2m, 45 degrees)	68
<b>Shipping</b>	
Dimensions H x W x D [mm]	910 x 910 x 192
Dimensions crated H x W x D [mm]	940 x 940 x 325
Weight [g]	16,000
Shipping weight [g]	22,300

### 3.3.1 ErP/Ecodesign

Fan type	409161 DCT 920-1E
Ecodesign	EU 327/2011 Lot 11
Efficiency classification [N]	57.8
Efficiency ( $\eta$ ) [%]	_*
Measurement category	A
Efficiency category	40
Optimum efficiency [%]	51.3
VSD required	No
Year of manufacture	2014
Manufacturer's name	ZIEHL-ABEGG
Product's model number	179389 FF091-ZIT.DG.A3P1
Motor power input [kW]	0.94
Flow rate [m <sup>3</sup> /s]	4.27
Optimum pressure [Pa]	126
Total pressure [Pa]	_*
Rotations per minute [RPM]	950
Specific ratio	1.00
Recycling/disposal	The product is designed for recycling and it will be possible for customers to deliver worn-out product to SKOV A/S or to local collection sites/recycling stations according to local instructions.
Impact on environment	_*
Additional items used when determining the fan energy efficiency	_*

\* Not relevant

### 3.4 Dimensioned sketch

In mm

