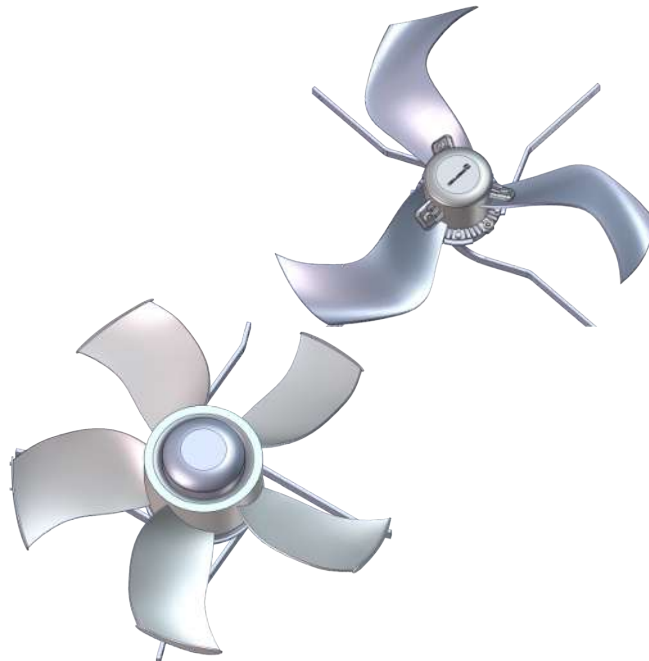


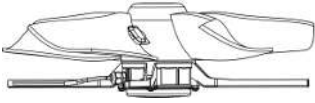
ECT 920 • DCT 920

Fans

Technical Info



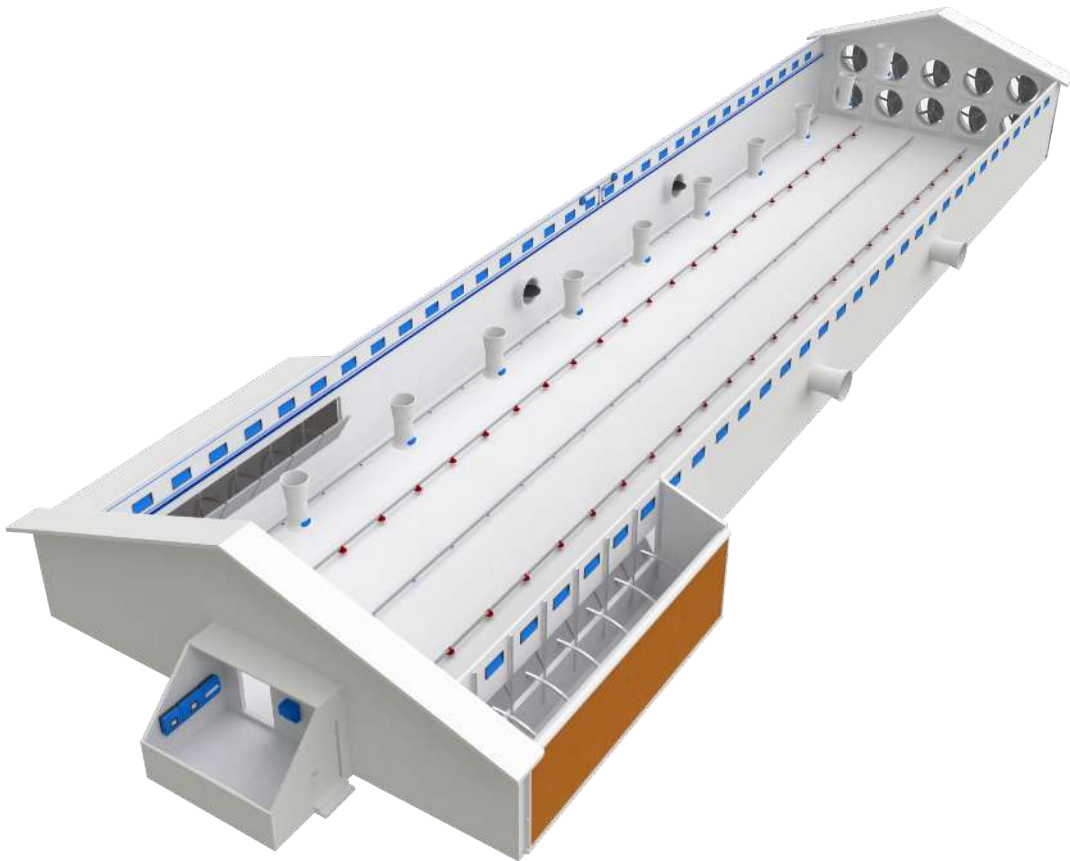
1 Product description



ECT/DCT fans are supplied with an integrated motor and fan blades cast in aluminum. ECT/DCT fans are used as ON/OFF fans. ECT fans can also be used as a Triac regulated fan.

The fan is designed for mounting in exhaust units and wall exhaustion in livestock houses where the ventilation system operates in the low-pressure range, i.e. in LPV, diffuse livestock houses and Combi-Tunnel livestock houses.

The fans bear a CE marking and have a sturdy four-point suspension.



2 Product survey



409150 DCT 920-1 ON/OFF fan 400V3 50Hz

Three fan blades, 3x400 V fan with aluminium fan blades which fits a duct with an inside duct dimension of 920mm.

It is used as ON/OFF fan.

High output and good pressure stability.



409152 ECT 920-1E EC stepl. fan 230V1 50/60Hz

Three fan blades, 1x230 V fan with aluminium fan blades which fits a duct with an inside duct dimension of 920mm. 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.



409153 DCT 920-2 ON/OFF fan 400V3 50Hz

Five fan blades, 3x400 V fan with aluminium fan blades which fits a duct with an inside duct dimension of 920mm. Special fan blade coating for maximum protection.

It is used as ON/OFF fan.

High output and very pressure-stable. It is typically used in special systems with common duct or the like. High output and noise level must be expected.



409159 DCT 920-2F VFD fan 400V3 50/60Hz

This product consists of the fan 409153 + a frequency converter.

The frequency controller reduces the power consumption of the individual fan at partial load.

The frequency converter included is controlled via a 0-10 V signal.

A shielded cable is not used between the motor and the frequency converter, as a sinus filter is incorporated into the frequency converter. The supply to the frequency converter does not require a shielded cable either. The distance between the frequency converter and the motor is not limited to 2 m as is the case when DOL 38 is applied.



409158 DCT 920-4E EC stepl. fan 400V3 50/60Hz

Five fan blades, 3x400 V fan with aluminium fan blades which fits a duct with an inside duct dimension of 920mm. It is equipped with an EC motor (internal fan speed controller). Can be used for biological air cleaning as the fan has a special fan blade coating for maximum protection.

It is used as stepless or ON/OFF fan.

High output and very pressure-stable. It is typically used in special systems of high standards as regards pressure requirements. High power consumption and noise level must be anticipated at maximum output.

3 Technical data

		409150 DCT 920-1	409152 DCT 920-1E	409153 DCT 920-2
Electrical				
Rated voltage	V AC	3x400 ± 10%	1x230 ± 10%	3x400 ± 10%
Operating voltage	V AC	360 - 440	207 - 253	360 - 440
Frequency	Hz	50		
Max. current consumption at 230 V	A	-	3.98	-
Max. current consumption at 400 V	A	1.90		4.32
Max. input power (P1)	W	881	881	1889
Regulation ability		Use sinus filter in connection with frequency converter		
Motor protection		Termistor	Integrated	Termistor
Mechanical				
Cable length	mm	2000		
Min. duct diameter	mm	920		
The diameter of the fan blade	mm	905	905	905.5
Number of fan blades	pcs.	3	3	5
Fan output				
Revolutions (rated current) per minute	RPM	880	950	880
Air output at -0 Pa	m ³ /h	26800	25700	29600
Air output at -10 Pa	m ³ /h	25900	25100	28800
Air output at -20 Pa	m ³ /h	24900	24500	28200
Air output at -30 Pa	m ³ /h	24000	23800	27600
Air output at -40 Pa	m ³ /h	22800	23100	27000
Air output at -50 Pa	m ³ /h	21600	22300	26400
Air output at -60 Pa	m ³ /h	20300	21200	25700
Air output at -70 Pa	m ³ /h	18800	19900	25000
Air output at -80 Pa	m ³ /h	16800	18000	24300
Air output at -90 Pa	m ³ /h	-	-	23700
Air output at -100 Pa	m ³ /h	-	-	22900
Air output at -110 Pa	m ³ /h	-	-	22000
Air output at -120 Pa	m ³ /h	-	-	21100
Air output at -130 Pa	m ³ /h	-	-	20200
Air output at -140 Pa	m ³ /h	-	-	19200
Air output at -150 Pa	m ³ /h	-	-	17900
Power consumption at -10 Pa	W	744	729	1301
Specific output at -10 Pa	m ³ /kWh	34800	34300	44900
Specific energy at -10 Pa	Watt/1000 m ³ /h	29	29	45
Testing body		AMCA Standard 210 ISO 13347 Part 3		
Environment				

		409150 DCT 920-1	409152 DCT 920-1E	409153 DCT 920-2
Temperature, operation	°C	70	55	70
Start temperature	°C	÷ 40° C to 70° C	÷ 35° C to + 55° C	÷ 40° C to 70° C
Storage temperature	°C	÷ 40° C to 80° C		
Ambient humidity, operation	% RH	85		
Protection class	IP	54	55	54
Fan noise, outside (2 m, 45 degrees)	dB (A)	50Hz-400V: Lp=69	U_c=10V: Lp=69	50Hz-400V: LpA5=73.9/ LpA6=73.6
Shipment				
Dimensions (H x W x D)	mm	910 x 910 x 210	910 x 910 x 192	910 x 910 x 293
Dimensions crated H x W x D	mm	940 x 940 x 325	940 x 940 x 325	980 x 980 x 360
Weight	g	19500	16000	40300
Shipping weight	g	25800	22300	48300

		409159 DCT 920-2F	409158 DCT 920-4E
Electrical			
Rated voltage	V AC	3x400 ± 10%	
Operating voltage	V AC	360 - 440	
Frequency	Hz	50	
Max. current consumption at 400 V	A	3.02	7.10
Max. input power (P1)	W	1898	4660
Regulation ability		Use sinus filter in connection with frequency converter	0-10 V
Motor protection		Termistor	Integrated
Mechanical			
Cable length	mm	2000	
Min. duct diameter	mm	920	
The diameter of the fan blade	mm	905.5	905
Number of fan blades	pcs.	5	
Fan output			
Revolutions (rated current) per minute	RPM	880	1280
Air output at -0 Pa	m ³ /h	29600	41900
Air output at -10 Pa	m ³ /h	29000	41600
Air output at -20 Pa	m ³ /h	28400	41300
Air output at -30 Pa	m ³ /h	27700	41000
Air output at -40 Pa	m ³ /h	26900	40600
Air output at -50 Pa	m ³ /h	26200	40200
Air output at -60 Pa	m ³ /h	25500	39800
Air output at -70 Pa	m ³ /h	24800	39400
Air output at -80 Pa	m ³ /h	24100	39000
Air output at -90 Pa	m ³ /h	23500	38600
Air output at -100 Pa	m ³ /h	22600	38200
Air output at -110 Pa	m ³ /h	21700	37800
Air output at -120 Pa	m ³ /h	20700	37400
Air output at -130 Pa	m ³ /h	19700	37000
Air output at -140 Pa	m ³ /h	18400	36600
Air output at -150 Pa	m ³ /h	17400	36300
Air output at -160 Pa	m ³ /h	-	35900
Air output at -170 Pa	m ³ /h	-	35600
Power consumption at -10 Pa	W	-	2600
Specific output at -10 Pa	m ³ /kWh	22500	15900
Specific energy at -10 Pa	Watt/1000 m ³ /h	44	62
Testing body		AMCA Standard 210 ISO 13347 Part 3	
Environment			
Temperature, operation	°C	70	40

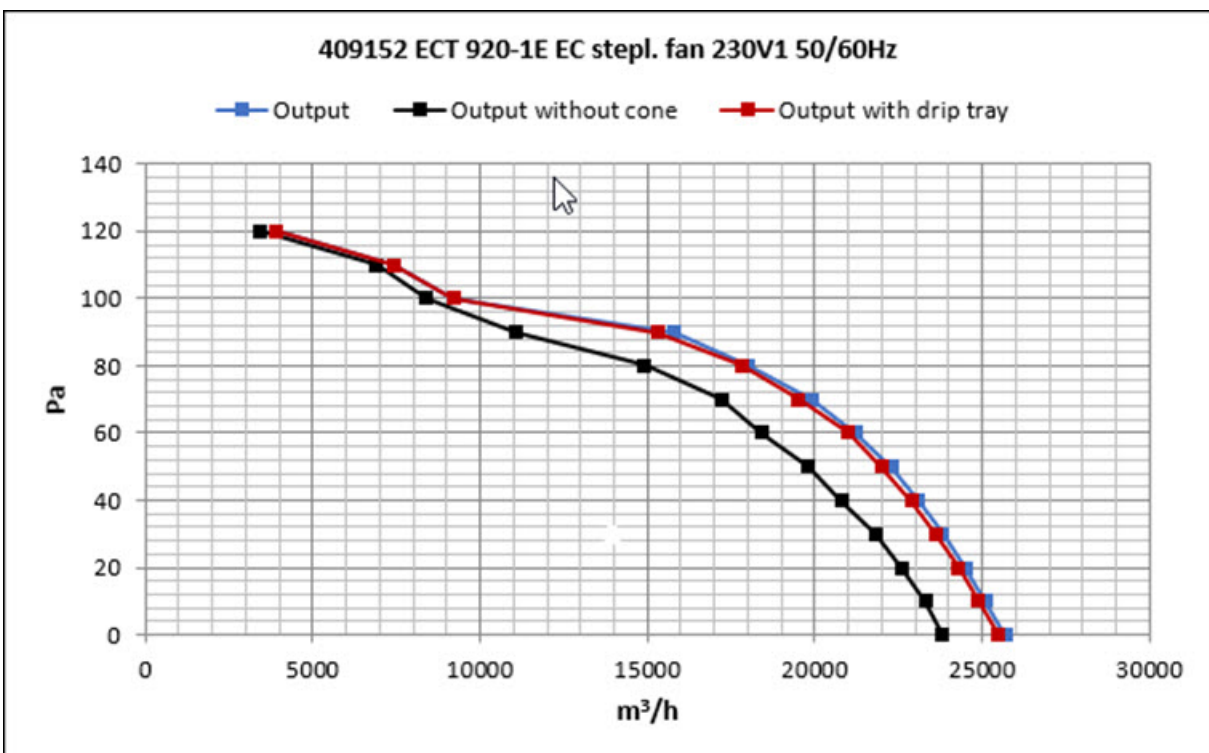
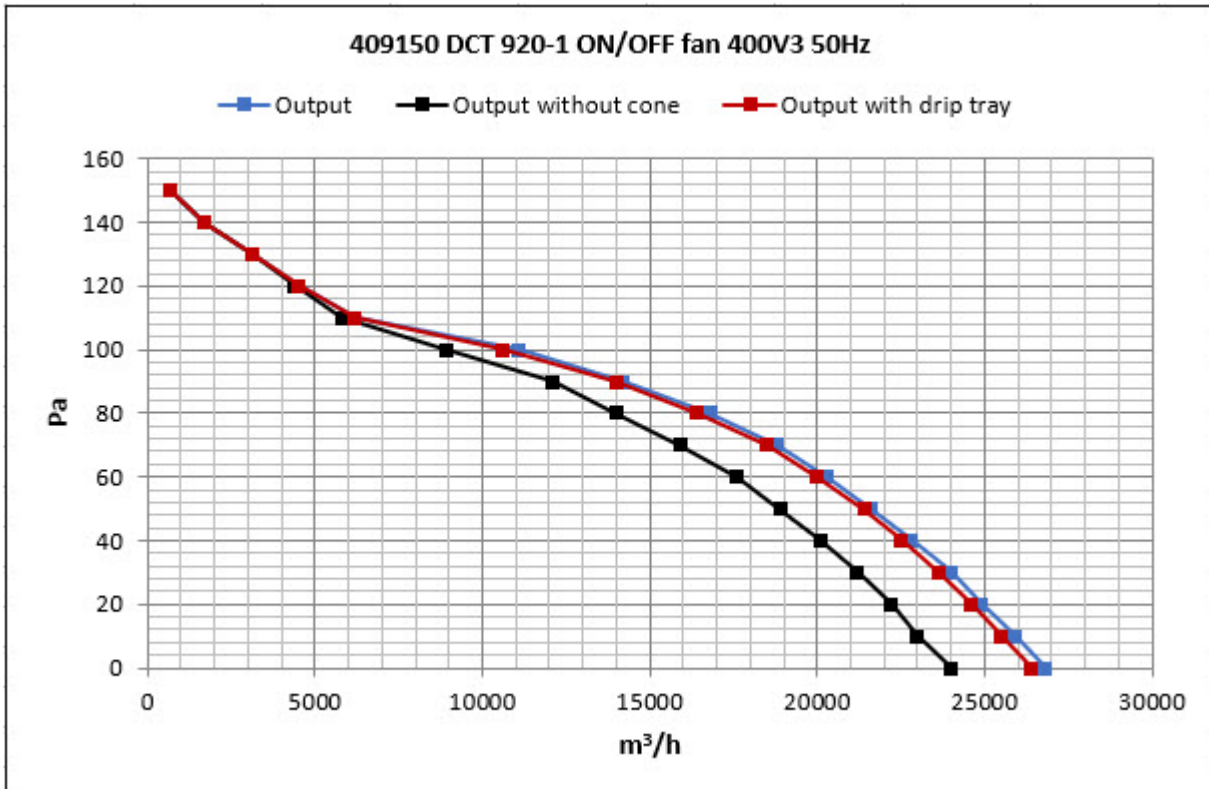
		409159 DCT 920-2F	409158 DCT 920-4E
Start temperature	°C	÷ 40° C to 70° C	÷ 35° C to 70° C
Storage temperature	°C	÷ 40° C to + 80° C	÷ 40° C to + 80° C
Ambient humidity, operation	% RH	85	
Protection class	IP	54	55
Fan noise, outside (2 m, 45 degrees)	dB (A)	50Hz-400V: LpA5=73.9/ LpA6=73.6	U_c=10V: Lp=83
Shipment			
Dimensions (H x W x D)	mm	910 x 910 x 293	910 x 910 x 250
Dimensions crated H x W x D	mm	980 x 980 x 360	980 x 980 x 360
Weight	g	40300	40550
Shipping weight	g	48300	48600

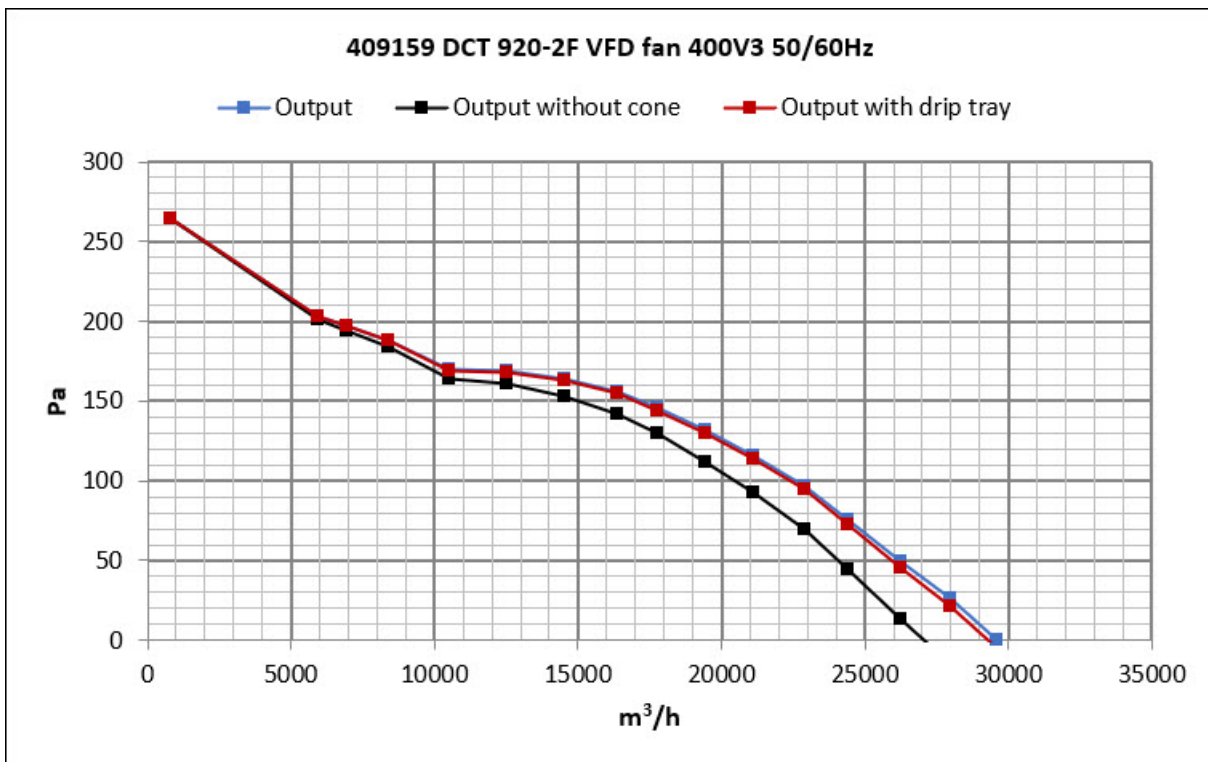
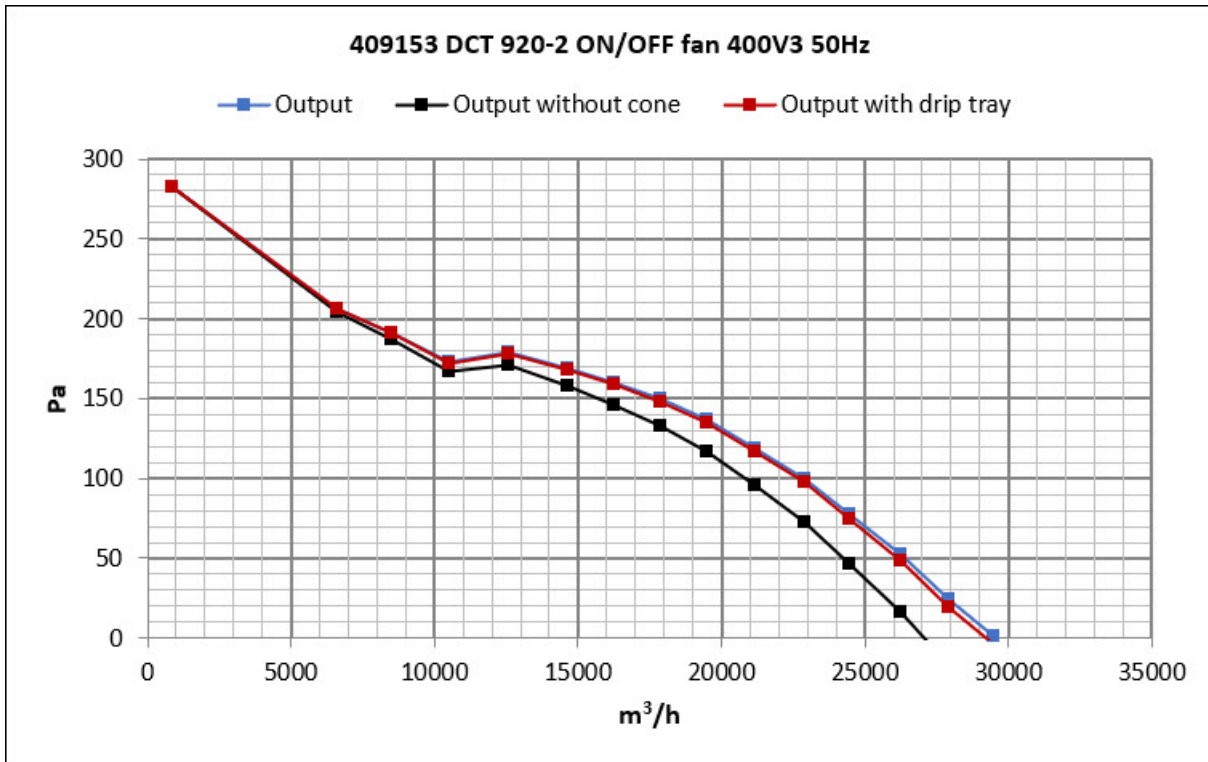
3.1 ErP/Ecodesign

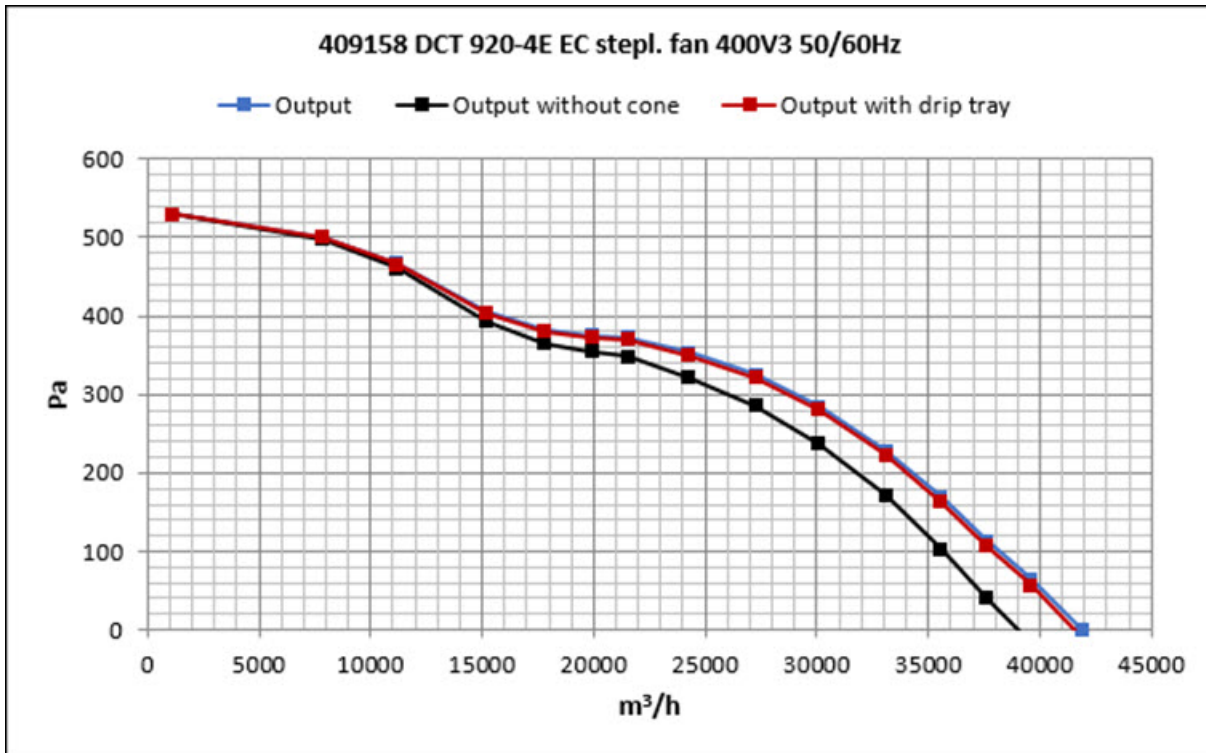
Fan type		409150 DCT 920-1	409152 ECT 920-1E	409153 DCT 920-2	409159 DCT 920-2F	409158 DCT 920-4E
Ecodesign		ErP 2015 (40)				
Efficiency classification	N	46.9	57.8	45.4	45.4	55.4
Efficiency (η)	%	40.3	51.3	40.8	40.8	53.3
Measurement setup		A				
Efficiency category		Static				
VSD required		No				
Year of manufacture		2014				
Name of manufacturer		ZIEHL-ABEGG				
Item number		168108 FF091-6DT. 6F.A3P2	159983 FF091- ZIT.DG.A3P 1	163810 FN091- SDT.7M.A5P 1	163810 FN091- SDT.7M.A5P 1	FN091- ZIT.GQ.A5P 1 L-MM- K0991
Motor power input	kW	0.894	0.94	1.880	1.880	5.0
Flow rate	m ³ /s	4.13	4.27	4.54	4.54	7.04
Optimum pressure	Pa	85	126	165	165	334
Total pressure	Pa	85	126	165	165	334
Revolutions per minute	RPM	886	950	888	888	1280
Pressure conditions		1.00				
Recycling/Disposal		The product is designed to be recycled and customers will be able to deliver their used products to SKOV A/S or their local collection points/recycling centers in accordance with local instructions.				
Environmental impact		-*				
Components used to determine the energy efficiency of the fan		-*				

*Not relevant.

3.2 Performance diagrams







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