

Movement by Perfection

Fans and Control Technology

for Agriculture
03/2016 Edition

Addendum
60 Hz

The Royal League in ventilation, control and drive technology

FC with ZPlus

for single phase alternating current, 4 pole

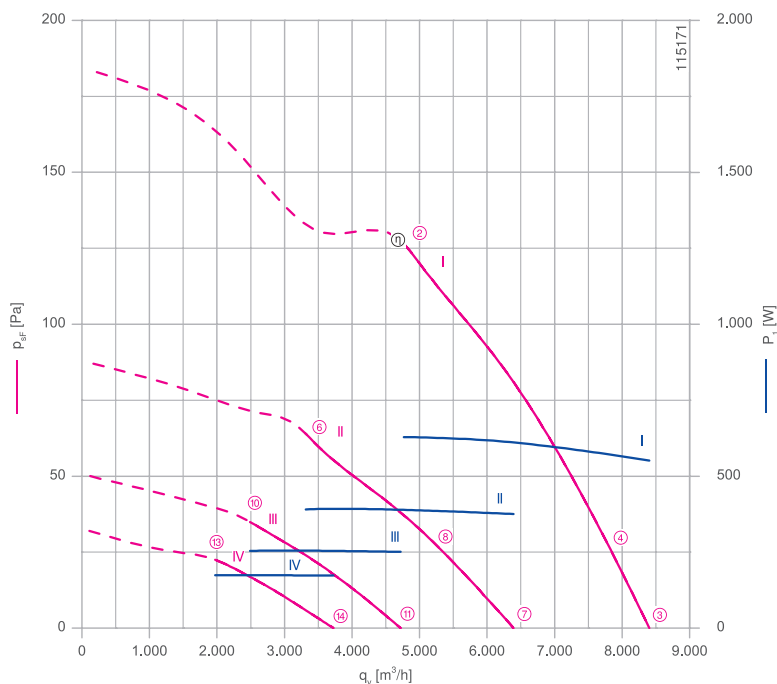
ZC050-4E



Description

Motor technology: AC
 Rated voltage U: 1~ 230 V ±10 %*
 Rated frequency f_N : 60 Hz* (50 Hz data available)
 Input power P_i : 0.61 kW*
 Rated current I_N : 2.70 A*
 Rated speed n_N : 1270min⁻¹*
 Starting current I_s : 4.00 A
 Current increase ΔI : 0 %
 Service capacitor C_{400V} : 8,0 μ F
 Thermal class: THCL155*
 Min. permitted ambient temperature $t_{R(min)}$: -25 °C
 Max. permitted ambient temperature $t_{R(max)}$: 70 °C
 Electrical connection: Terminal box
 Number of blades: 7
 Degree of protection : IP54
 Motor protection: thermal contact
 Blades: Aluminium, 1 coat paint, jet black
 Rotor: Aluminium, 1 coat paint, jet black
 Conformity: ErP 2015, CE
 * Rated data

Characteristic curve



Measured in ZPlus without guard grille in installation type A according to ISO 5801

Connection diagram

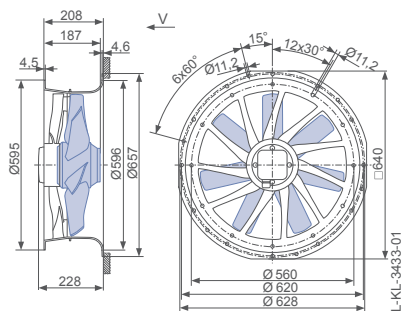
1360-104XA

System components

Dimensions mm



Design L - ZPlus Ontop without guard grille



Performance data

Type	Characteristic curve	Voltage	Operating point	Current	Input power	Speed	Acoustic pressure level 7m L_{pA} dB(A)	Specific power P_{spez} Wh/1000m ³
		U V		I A	P_1 W	n min ⁻¹		
ZC050-4E_4F_7	I	230	②	2.80	620	1230		133.5
			③	2.40	560	1390	53	65.6
			④	2.50	580	1350	52	74.1
			⑤	2.40	390	880		117.8
	II	170	⑦	2.30	380	1060	48	58.7
			⑧	2.40	390	950	46	75.0
			⑩	2.00	250	670		103.1
	III	135	⑪	2.00	250	790	42	53.2
			⑬	1.75	170	530		88.3
	IV	110	⑭	1.70	170	620	39	46.5

Fan ordering information

Airflow direction V

Design L (without guard grille)
Ontop



Type ZC050-4EL.4F.V7
Article no. 169857

Weight kg 11.50

Control technology

Frequency inverters Fcontrol 1~



Motor protection units 1~



Electronic voltage controllers 1~



FFowlet

for single phase alternating current, 6 pole

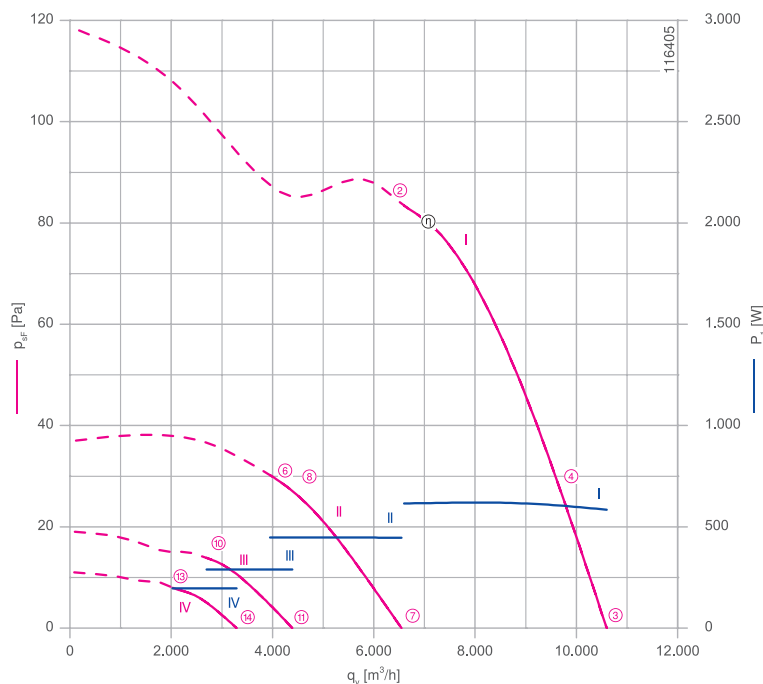
FF056-6E



Description

Motor technology: AC
 Rated voltage U: 1~ 230 V ±10 %*
 Rated frequency f_N : 60 Hz* (50 Hz data available)
 Input power P_i : 0.62 kW*
 Rated current I_N : 2.80 A*
 Rated speed n_N : 1000min⁻¹*
 Current increase ΔI : 10 %
 Service capacitor C_{400V} : 7,0 μ F
 Thermal class: THCL155*
 Min. permitted ambient temperature $t_{R(min)}$: -25 °C
 Max. permitted ambient temperature $t_{R(max)}$: 55 °C
 Electrical connection: Terminal box
 Number of blades: 5
 Degree of protection : IP54
 Motor protection: thermal contact
 Blades: Aluminium, 2 coat paint, jet black
 Rotor: Aluminium, 2 coat paint, jet black
 Conformity: ErP 2015, CE
 * Rated data

Characteristic curve



Measured in full bell mouth without guard grille in installation type A according to ISO 5801.

Connection diagram

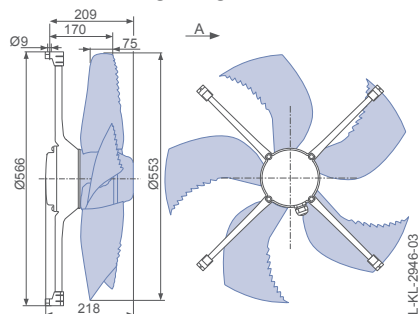
1360-104XB

System components

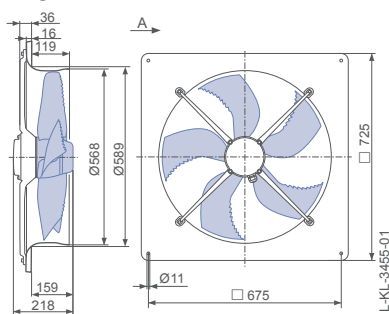
Dimensions mm

Airflow direction A

Design T - for installation in chimney ex-hausts, without guard grille

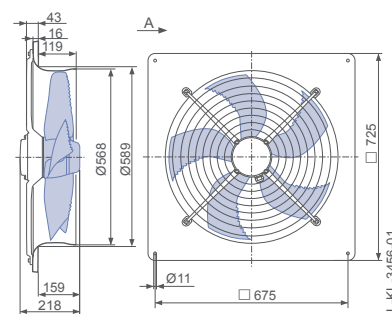


Design Q - square full bell mouth, without guard grille



Wall ring plate made of galvanized sheet steel

Design Q - square full bell mouth, guard grille suction side



Wall ring plate made of galvanized sheet steel



Performance data

Type	Characteristic curve	Voltage	Operating point	Current	Input power	Speed	Acoustic pressure level 7m L_{pA} dB(A)	Specific power P_{spez} Wh/1000m ³
		U V		I A	P_1 W	n min ⁻¹		
FF056-6E_4I_5R2	I	230	②	2.80	620	1000		94.4
			③	2.60	580	1030	49	55.1
			④	2.70	620	1010	50	63.7
			⑤	2.90	440	610		114.0
	II	170	⑦	2.90	440	640	44	68.0
			⑧	2.90	440	610	44	112.8
			⑩	2.40	290	410		108.7
			⑪	2.40	290	430	37	65.9
	III	135	⑬	2.10	200	320		97.4
			⑭	2.00	200	330	35	59.5

Fan ordering information

Airflow direction A 

Design	T (without guard grille)	Q (without guard grille)	Q (guard grille suction side)
			
Type	FF056-6ET.4I.A5R2	FF056-6EQ.4I.A5R2	FF056-6EQ.4I.A5R2
Article no.	170492	170491	170515
Wall ring plate		Wall ring plate made of galvanized sheet steel	Wall ring plate made of galvanized sheet steel
Weight kg	11.60	20.60	22.00

Control technology

Frequency inverters Fcontrol 1~	Motor protection units 1~	Electronic voltage controllers 1~
		

FFowlet

for three phase alternating current, 6 pole

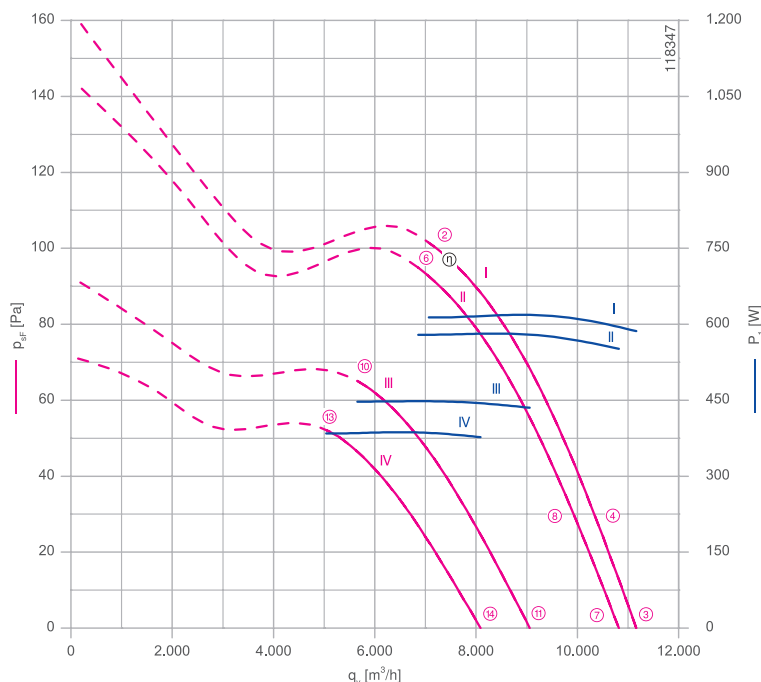
FF056-6D



Description

Motor technology: AC
 Rated voltage U_N :
3~ 230/400 V (Δ/Y) $\pm 10\%$ | 3~ 265/460 V (Δ/Y) $\pm 10\%$ *
 Rated frequency f_N : **60 Hz*** (50 Hz data available)
 Input power P_i : **0.58 kW*** | **0.62 kW***
 Rated current I_N :
1.75/1.00 A | 1.75/1.00 A*
 Rated speed n_N : **1050 min⁻¹ | 1090 min⁻¹***
 Starting current I_s : 5.50 / 3.20 A | **6.50 / 3.80 A**
 Current increase ΔI : 10 % | 10 %
 Thermal class: **THCL155***
 Min. permitted ambient temperature $t_{R(min)}$: -40 °C
 Max. permitted ambient temperature $t_{R(max)}$: 70 °C | **70 °C**
 Electrical connection: Terminal box
 Number of blades: 5
 Degree of protection : IP54
 Motor protection: thermal contact
 Blades: Aluminium, 1 coat paint, jet black
 Rotor: Aluminium, 1 coat paint, jet black
 Conformity: ErP 2015, CE
 * Rated data

Characteristic curve



Measured in full bell mouth without guard grille in installation type A according to ISO 5801.

Connection diagram

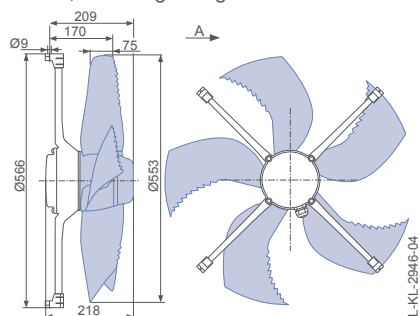
1360-106XB

System components

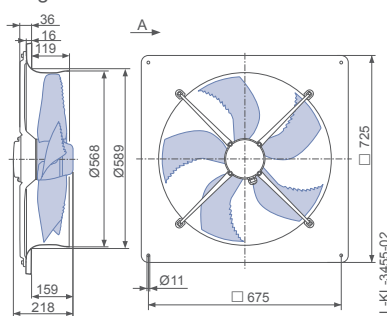
Dimensions mm

Airflow direction A

Design T - for installation in chimney ex-hausts, without guard grille

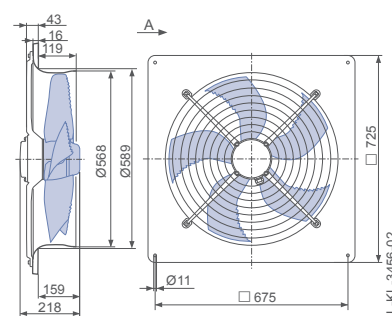


Design Q - square full bell mouth, without guard grille



Wall ring plate made of galvanized sheet steel

Design Q - square full bell mouth, guard grille suction side



Wall ring plate made of galvanized sheet steel



Performance data

Type	Characteristic curve	Voltage	Operating point	Current	Input power	Speed	Acoustic pressure level 7m L _{pA} dB(A)	Specific power P _{spez} Wh/1000m ³
		U V		I A	P ₁ W	n min ⁻¹		
FF056-6D_.4I_.5R2	I	460	②	1.00	620	1090		87.5
		460	③	0.96	580	1090	52	52.5
		460	④	1.00	620	1090	52	58.8
	II	400	⑤	1.00	580	1050		85.3
		400	⑦	0.98	560	1060	51	51.0
		400	⑧	1.00	580	1050	51	57.9
	III	265	⑩	1.10	440	870		79.6
		265	⑪	1.10	440	890	47	48.0
	IV	230	⑬	1.10	380	780		76.5
		230	⑭	1.10	380	800	45	46.6

Fan ordering information

Airflow direction A

Design	T (without guard grille)	Q (without guard grille)	Q (guard grille suction side)
			
Type	FF056-GDT.4I.A5R2	FF056-6DQ.4I.A5R2	FF056-6DQ.4I.A5R2
Article no.	171007	171009	171075
Wall ring plate		Wall ring plate made of galvanized sheet steel	Wall ring plate made of galvanized sheet steel
Weight kg	11.60	20.60	22.00

Control technology

Frequency inverters Fcontrol 3~	Motor protection units 3~	Electronic voltage controllers 3~
		

FFowlet

for single phase alternating current, 6 pole

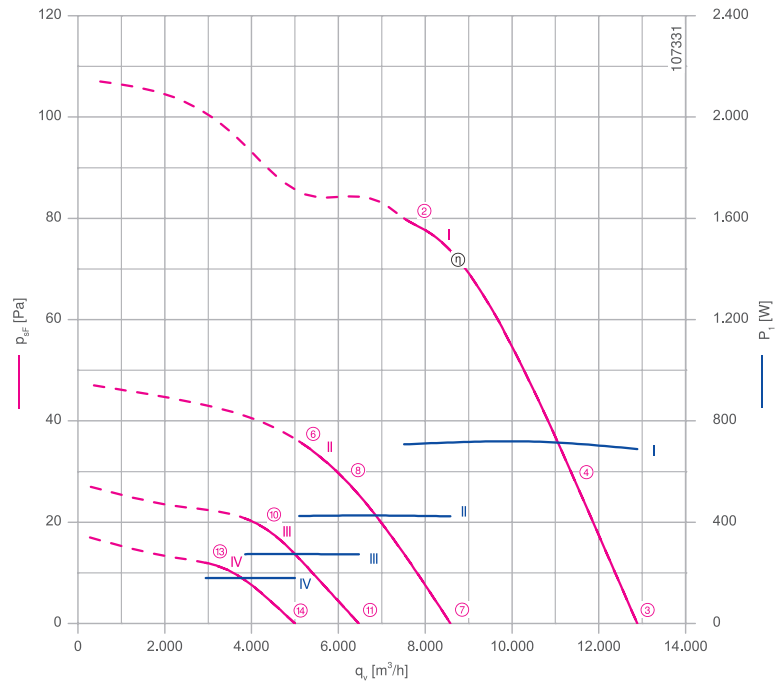
FF063-6E



Description

Motor technology: AC
 Rated voltage U: 1~ 230 V ±10 %*
 Rated frequency f_N : 60 Hz* (50 Hz data available)
 Input power P_i : 0.72 kW*
 Rated current I_N : 3.30 A*
 Rated speed n_N : 920 min⁻¹*
 Starting current I_s : 4.60 A
 Current increase ΔI : 0 %
 Service capacitor C_{400V} : 10,0 μ F
 Thermal class: **THCL155***
 Min. permitted ambient temperature $t_{R(min)}$: -25 °C
 Max. permitted ambient temperature $t_{R(max)}$: 55 °C
 Electrical connection: Terminal box
 Number of blades: 5
 Degree of protection : IP54
 Motor protection: thermal contact
 Blades: Aluminium, 1 coat paint, jet black
 Rotor: Aluminium, 1 coat paint, jet black
 Conformity: ErP 2015, CE
 * Rated data

Characteristic curve



Measured in full bell mouth without guard grille in installation type A according to ISO 5801.

Connection diagram

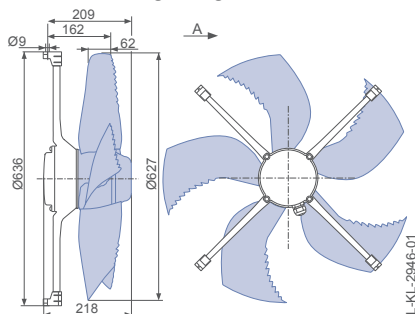
1360-104XB

System components

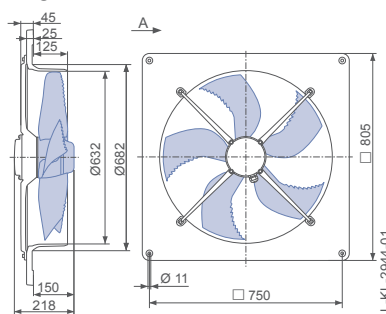
Dimensions mm

Airflow direction A

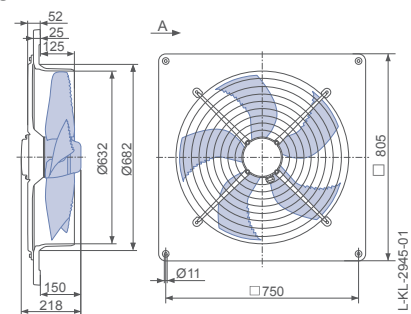
Design T - for installation in chimney ex-hausts, without guard grille



Design Q - square full bell mouth, without guard grille



Design Q - square full bell mouth, guard grille suction side




Wall ring plate made of composite material




Wall ring plate made of composite material

Performance data

Type	Characteristic curve	Voltage	Operating point	Current	Input power	Speed	Acoustic pressure level 7m L_{pA} dB(A)	Specific power P_{spez} Wh/1000m ³
		U V		I A	P_1 W	n min ⁻¹		
FF063-6E_.4I_.5R2	I	230	②	3.20	700	940		94.2
			③	3.10	680	970	48	53.5
			④	3.20	720	930	47	62.9
			⑤	2.80	420	630		84.0
	II	170	⑦	2.70	420	650	41	49.3
			⑧	2.80	420	610	43	70.6
			⑩	2.30	270	470		71.4
			⑪	2.30	270	490	37	42.2
	III	135	⑬	1.85	180	370		61.7
			⑭	1.85	180	380	35	35.9

Fan ordering information

Airflow direction A 

Design	T (without guard grille)	Q (without guard grille)	Q (guard grille suction side)
			
Type	FF063-6ET.4I.A5R2	FF063-6EQ.4I.A5R2	FF063-6EQ.4I.A5R2
Article no.	159968	159966	159967
Wall ring plate		Wall ring plate made of composite material	Wall ring plate made of composite material
Weight kg	12.00	17.20	19.00
Supply temperature -10°C - max 40°C in design with wall ring plate made of composite material			

Control technology

Frequency inverters Control 1~	Motor protection units 1~	Electronic voltage controllers 1~
		

FFowlet with ZAplus

for single phase alternating current, 6 pole

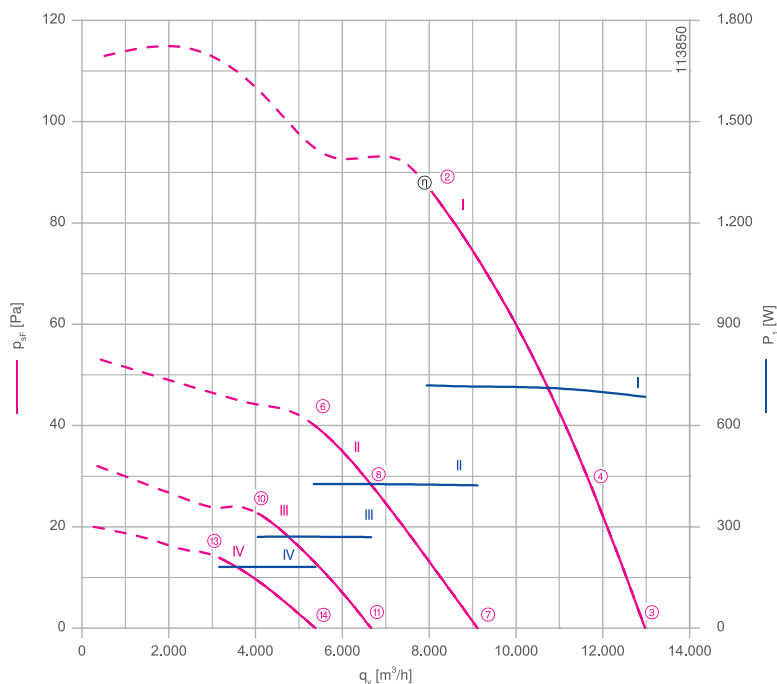
ZF063-6E



Description

Motor technology: AC
 Rated voltage U: 1~ 230 V ±10 %*
 Rated frequency f_N : 60 Hz* (50 Hz data available)
 Input power P_i : 0.72 kW*
 Rated current I_N : 3.30 A*
 Rated speed n_N : 920min⁻¹*
 Starting current I_s : 4.60 A
 Current increase ΔI : 0 %
 Service capacitor C_{400V} : 10,0 μ F
 Thermal class: **THCL155***
 Min. permitted ambient temperature $t_{R(min)}$: -25 °C
 Max. permitted ambient temperature $t_{R(max)}$: 50 °C
 Electrical connection: Terminal box
 Number of blades: 5
 Degree of protection : IP54
 Motor protection: thermal contact
 Blades: Aluminium, 1 coat paint, jet black
 Rotor: Aluminium, 1 coat paint, jet black
 Conformity: ErP 2015, CE
 * Rated data

Characteristic curve



Measured in ZAplus without guard grille in installation type A according to ISO 5801

Connection diagram

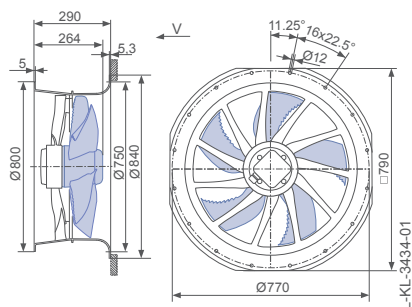
1360-104XA

System components

Dimensions mm



Design L - ZAplus Ontop without guard grille




Performance data

Type	Characteristic curve	Voltage	Operating point	Current	Input power	Speed	Acoustic pressure level 7m L_{pA} dB(A)	Specific power P_{spez} Wh/1000m ³
		U V		I A	P_1 W	n min ⁻¹		
ZF063-6E_4I_5R2	I	230	②	3.30	720	910		91.1
			③	3.10	680	970	49	52.8
			④	3.20	700	930	48	60.4
			⑤	2.70	420	620		80.0
	II	170	⑥	2.70	420	680	42	46.4
			⑦	2.70	420	620	42	66.5
			⑧	2.70	420	620	42	66.5
			⑨	2.20	270	460		67.2
	III	135	⑩	2.20	270	500	38	40.5
			⑪	2.20	270	500	38	40.5
	IV	110	⑫	1.85	180	370		57.9
			⑬	1.85	180	370		57.9
			⑭	1.85	180	400	37	33.6
			⑮	1.85	180	400	37	33.6

Fan ordering information

Airflow direction V

Design L (without guard grille)
Ontop



Type ZF063-6EL.4I.V5R2
Article no. 169858

Weight kg 18.60

Control technology

Frequency inverters Fcontrol 1~



Motor protection units 1~



Electronic voltage controllers 1~



FFowlet

for three phase alternating current, 6 pole

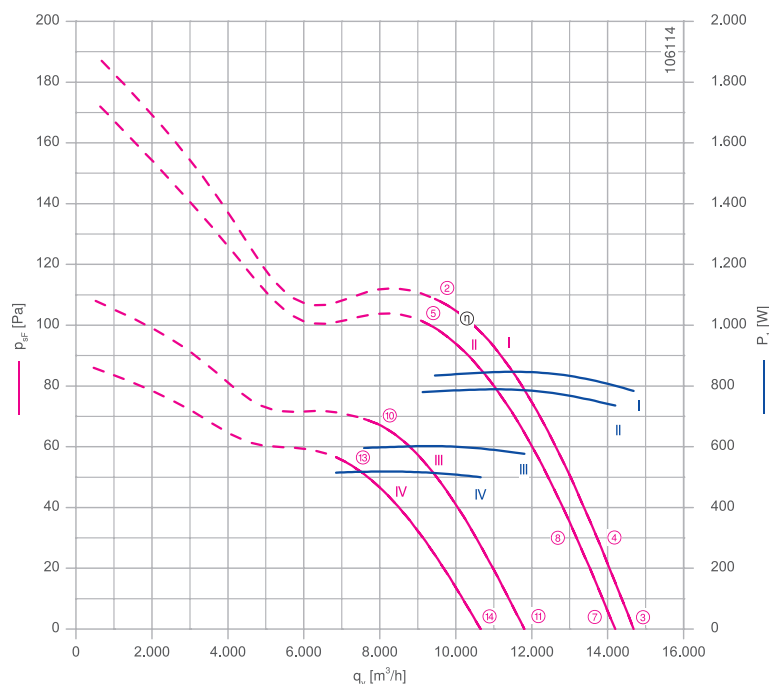
FF063-6D



Description

Motor technology: AC
 Rated voltage U_N :
3~ 230/400 V (Δ/Y) $\pm 10\%$ | 3~ 265/460 V (Δ/Y) $\pm 10\%$ *
 Rated frequency f_N : **60 Hz*** (50 Hz data available)
 Input power P_i : **0.80 kW*** | **0.86 kW***
 Rated current I_N :
2.50/1.40 A | 2.50/1.45 A*
 Rated speed n_N : **1050 min⁻¹ | 1080 min⁻¹***
 Starting current I_s : 8.00 / 4.60 A | **9.50 / 5.50 A**
 Current increase ΔI : 10 % | 10 %
 Thermal class: **THCL155***
 Min. permitted ambient temperature $t_{R(min)}$: -40 °C
 Max. permitted ambient temperature $t_{R(max)}$: 70 °C | **70 °C**
 Electrical connection: Terminal box
 Number of blades: 5
 Degree of protection : IP54
 Motor protection: thermal contact
 Blades: Aluminium, 1 coat paint, jet black
 Rotor: Aluminium, 1 coat paint, jet black
 Conformity: ErP 2015, CE
 * Rated data

Characteristic curve



Measured in full bell mouth without guard grille in installation type A according to ISO 5801.

Connection diagram

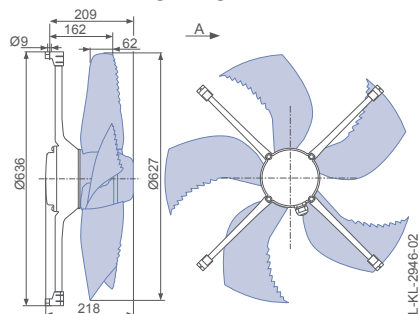
1360-106XB

System components

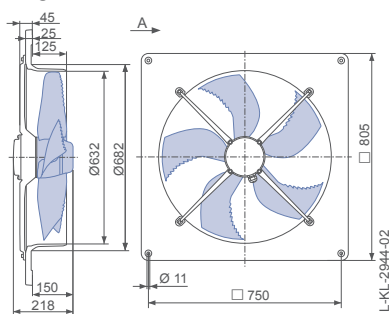
Dimensions mm

Airflow direction A

Design T - for installation in chimney ex-hausts, without guard grille

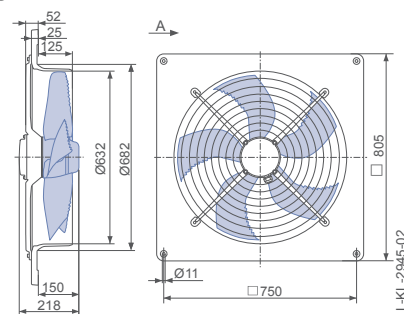


Design Q - square full bell mouth, without guard grille



Wall ring plate made of composite material

Design Q - square full bell mouth, guard grille suction side




Wall ring plate made of composite material






Performance data

Type	Characteristic curve	Voltage	Operating point	Current	Input power	Speed	Acoustic pressure level 7m L_{pA} dB(A)	Specific power P_{spez} Wh/1000m ³
		U V		I A	P_1 W	n min ⁻¹		
FF063-6D_4I_5R2	I	460	②	1.45	840	1090		88.8
			③	1.40	780	1100	51	53.4
			④	1.40	820	1090	50	59.7
			⑤	1.40	780	1050		85.8
	II	400	⑥	1.40	780	1060	50	51.8
			⑦	1.35	740	1060	49	57.9
			⑧	1.40	760	1060	46	48.8
			⑨	1.40	760	1060	46	48.8
	III	265	⑩	1.50	600	870		79.4
			⑪	1.45	580	900		48.8
	IV	230	⑬	1.50	520	790		75.8
			⑭	1.45	500	810		46.9

Fan ordering information

Airflow direction A 

Design	T (without guard grille)	Q (without guard grille)	Q (guard grille suction side)
			
Type	FF063-6DT.4I.A5R2	FF063-6DQ.4I.A5R2	FF063-6DQ.4I.A5R2
Article no.	159958	159956	159957
Wall ring plate		Wall ring plate made of composite material	Wall ring plate made of composite material
Weight kg	12.00	17.20	19.00
Supply temperature -10°C - max 40°C in design with wall ring plate made of composite material			

Control technology

Frequency inverters Fcontrol 3~	Motor protection units 3~	Electronic voltage controllers 3~
		

FFowlet

for three phase alternating current, 6 pole

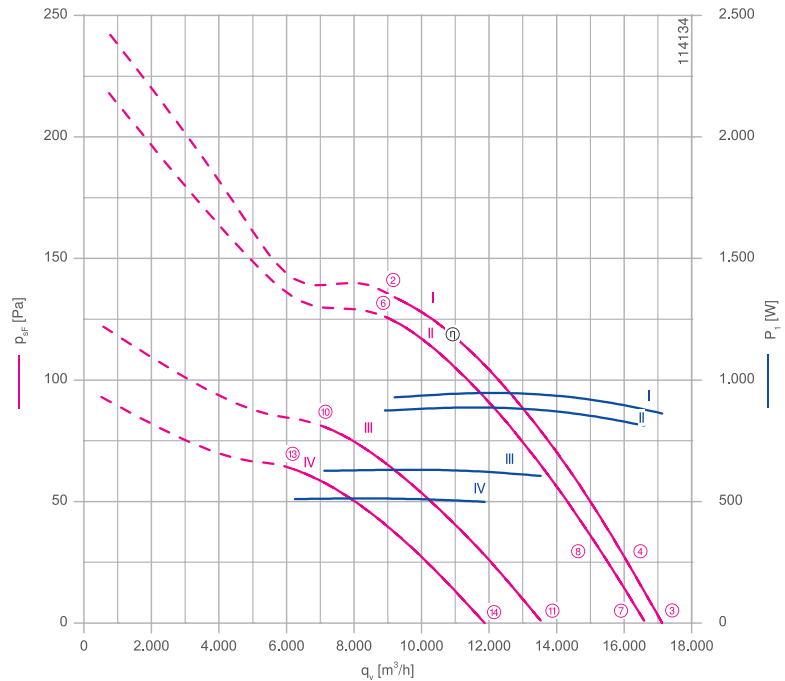
FFO71-6D



Description

Motor technology: AC
 Rated voltage U_N :
3~ 230/400 V (Δ/Y) $\pm 10\%$ | 3~ 265/460 V (Δ/Y) $\pm 10\%$ *
 Rated frequency f_N : **60 Hz*** (50 Hz data available)
 Input power P_i : **0.88 kW*** | **0.94 kW***
 Rated current I_N :
3.10/1.75 A | 3.10/1.80 A*
 Rated speed n_N : **1060 min⁻¹ | 1100 min⁻¹***
 Starting current I_s : 9.00 / 5.50 A | 11.00 / 6.00 A
 Current increase ΔI : 5 % | 5 %
 Thermal class: **THCL155***
 Min. permitted ambient temperature $t_{R(min)}$: -40 °C
 Max. permitted ambient temperature $t_{R(max)}$: 70 °C | **70 °C**
 Electrical connection: Terminal box
 Number of blades: 3
 Degree of protection : IP54
 Motor protection: thermal contact
 Blades: Aluminium, 1 coat paint, jet black
 Rotor: Aluminium, 1 coat paint, jet black
 Conformity: ErP 2015, CE
 * Rated data

Characteristic curve



Measured in full bell mouth without guard grille in installation type A according to ISO 5801.

Connection diagram

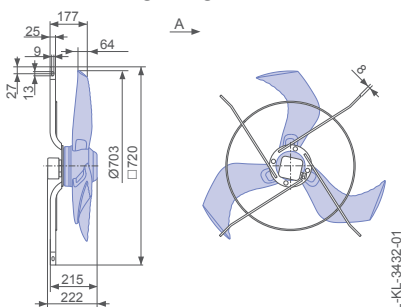
1360-106XB

System components

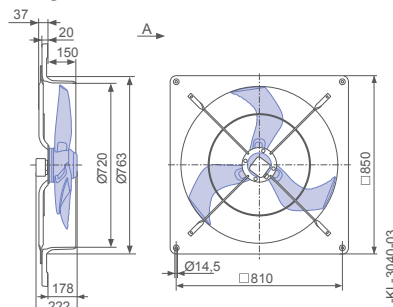
Dimensions mm

Airflow direction A

Design T - for installation in chimney ex-hausts, without guard grille

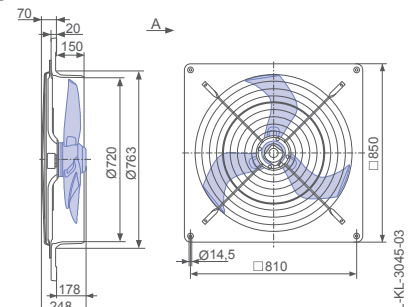


Design Q - square full bell mouth, without guard grille



Wall ring plate made of galvanized sheet steel

Design Q - square full bell mouth, guard grille suction side




Wall ring plate made of galvanized sheet steel



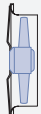


Performance data

Type	Characteristic curve	Voltage	Operating point	Current	Input power	Speed	Acoustic pressure level 7m L_{pA} dB(A)	Specific power P_{spez} Wh/1000m ³
		U V		I A	P_1 W	n min ⁻¹		
FF071-6D_6F_3P2	I	460	②	1.75	920	1100		102.4
			③	1.70	860	1110	55	50.3
			④	1.75	900	1100	54	56.6
			⑤	1.75	880	1060		99.2
	II	400	⑦	1.65	820	1080	54	48.9
			⑧	1.70	860	1070	53	55.5
			⑩	1.85	620	850		89.0
			⑪	1.80	600	880	49	44.8
	III	265	⑬	1.80	520	750		82.1
			⑭	1.75	500	780	46	42.0

Fan ordering information

Airflow direction A 

Design	T (without guard grille)	Q (without guard grille)	Q (guard grille suction side)
			
Type	FF071-6DT.6F.A3P2	FF071-6DQ.6F.A3P2	FF071-6DQ.6F.A3P2
Article no.	169735	169731	169734
Wall ring plate		Wall ring plate made of galvanized sheet steel	Wall ring plate made of galvanized sheet steel
Weight kg	17.90	29.30	32.80

Control technology

Frequency inverters Fcontrol 3~	Motor protection units 3~	Electronic voltage controllers 3~
		

FFowlet

for three phase alternating current, 6 pole

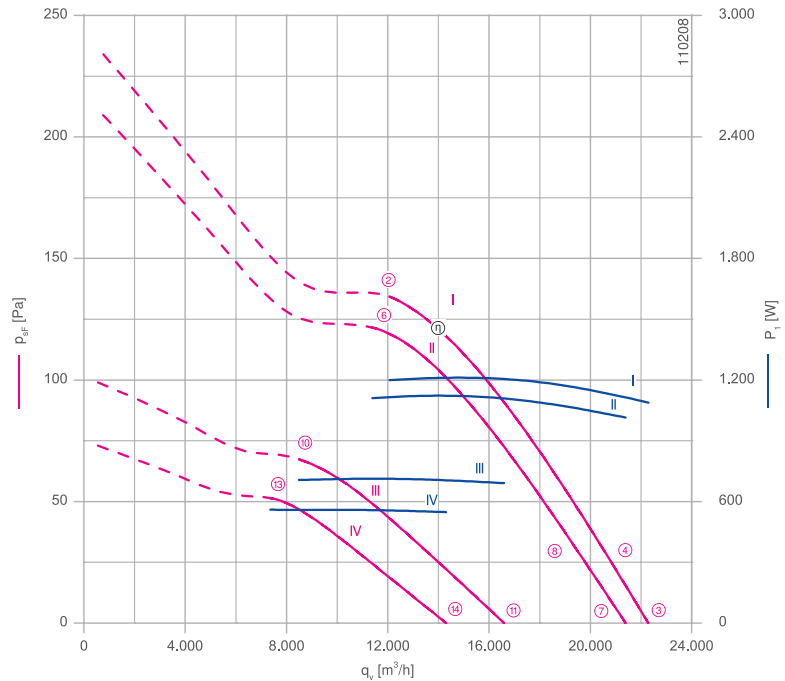
FF080-6D



Description

Motor technology: AC
 Rated voltage U_N :
3~ 230/400 V (Δ/Y) $\pm 10\%$ | 3~ 265/460 V (Δ/Y) $\pm 10\%$ *
 Rated frequency f_N : **60 Hz*** (50 Hz data available)
 Input power P_i : **1.10 kW*** | **1.20 kW***
 Rated current I_N :
3.80/2.20 A | 3.80/2.20 A*
 Rated speed n_N : **1020 min⁻¹ | 1070 min⁻¹***
 Starting current I_s : 9.00 / 5.50 A | 11.00 / 6.00 A
 Current increase ΔI : 0 % | 0 %
 Thermal class: **THCL155***
 Min. permitted ambient temperature $t_{R(min)}$: -40 °C
 Max. permitted ambient temperature $t_{R(max)}$: 55 °C | **45 °C**
 Electrical connection: Terminal box
 Number of blades: 3
 Degree of protection : IP54
 Motor protection: thermal contact
 Blades: Aluminium, 1 coat paint, jet black
 Rotor: Aluminium, 1 coat paint, jet black
 Conformity: ErP 2015, CE
 * Rated data

Characteristic curve



Measured in full bell mouth without guard grille in installation type A according to ISO 5801.

Connection diagram

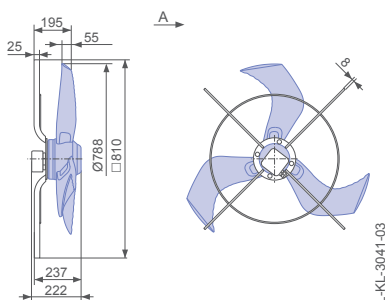
1360-106XB

System components

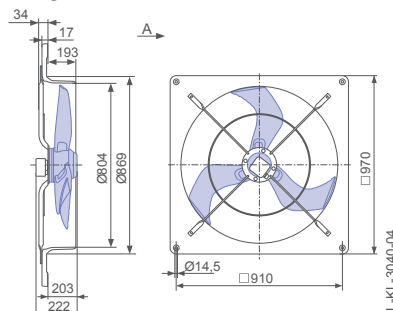
Dimensions mm

Airflow direction A

Design T - for installation in chimney ex-hausts, without guard grille

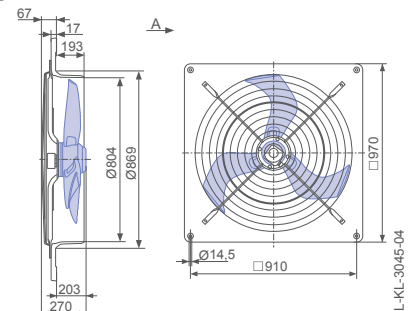


Design Q - square full bell mouth, without guard grille



Wall ring plate made of galvanized sheet steel

Design Q - square full bell mouth, guard grille suction side




Wall ring plate made of galvanized sheet steel



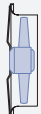


Performance data




Type	Characteristic curve	Voltage	Operating point	Current	Input power	Speed	Acoustic pressure level 7m L_{pA} dB(A)	Specific power P_{spez} Wh/1000m ³
		U V		I A	P_1 W	n min ⁻¹		
FF080-6D_6F_3P2	I	460	②	2.10	1200	1070		101.1
			③	2.00	1100	1090	54	48.8
			④	2.10	1150	1080	53	55.5
			⑤	2.20	1100	1020		98.4
	II	400	⑦	2.00	1000	1050	53	47.4
			⑧	2.10	1050	1030	52	55.2
			⑩	2.20	700	760		84.2
			⑪	2.10	700	810	47	41.6
	III	265	⑬	2.00	560	660		76.4
			⑭	2.00	540	700	44	38.3

Fan ordering information

Airflow direction A 

Design	T (without guard grille)	Q (without guard grille)	Q (guard grille suction side)
			
Type	FF080-6DT.6F.A3P2	FF080-6DQ.6F.A3P2	FF080-6DQ.6F.A3P2
Article no.	169851	169849	169850
Wall ring plate		Wall ring plate made of galvanized sheet steel	Wall ring plate made of galvanized sheet steel
Weight kg	18.50	33.80	37.70

Control technology

Frequency inverters Fcontrol 3~	Motor protection units 3~	Electronic voltage controllers 3~
		

FFowlet

for three phase alternating current, 6 pole

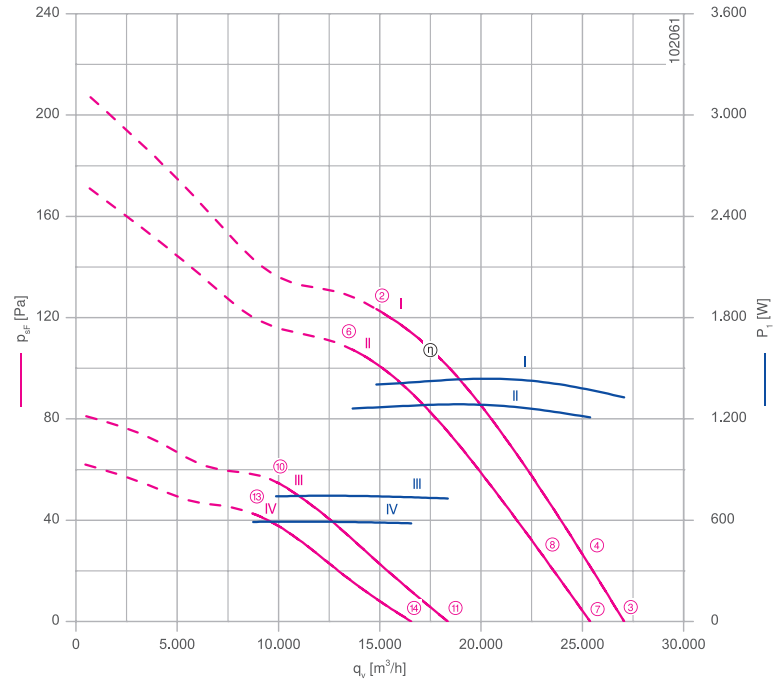
FF091-6D



Description

Motor technology: AC
 Rated voltage U_N :
3~ 230/400 V (Δ/Y) $\pm 10\%$ | 3~ 265/460 V (Δ/Y) $\pm 10\%$ *
 Rated frequency f_N : **60 Hz*** (50 Hz data available)
 Input power P_i : **1.30 kW*** | **1.45 kW***
 Rated current I_N :
4.20/2.40 A | 4.20/2.40 A*
 Rated speed n_N : **930 min⁻¹ | 1000 min⁻¹***
 Starting current I_s : 11.00 / 6.00 A | 9.00 / 5.50 A
 Current increase ΔI : 0 % | 0 %
 Thermal class: **THCL155***
 Min. permitted ambient temperature $t_{R(min)}$: -40 °C
 Max. permitted ambient temperature $t_{R(max)}$: 45 °C | **45 °C**
 Electrical connection: Terminal box
 Number of blades: 3
 Degree of protection : IP54
 Motor protection: thermal contact
 Blades: Aluminium, 1 coat paint, jet black
 Rotor: Aluminium, 1 coat paint, jet black
 Conformity: ErP 2015, CE
 * Rated data

Characteristic curve



Measured in full bell mouth without guard grille in installation type A according to ISO 5801.

Connection diagram

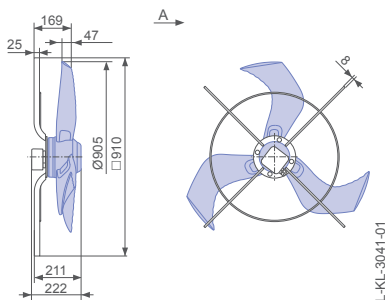
1360-106XB

System components

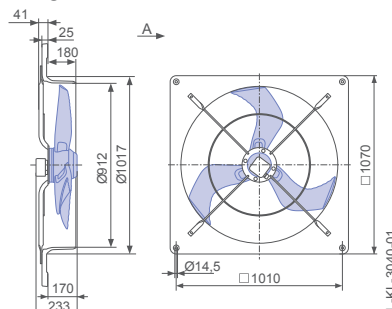
Dimensions mm

Airflow direction A

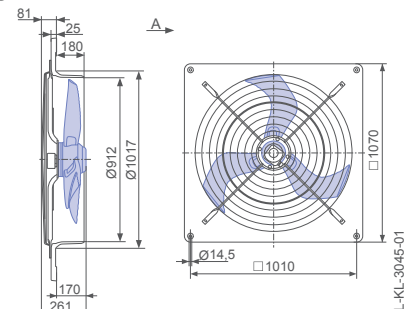
Design T - for installation in chimney ex-hausts, without guard grille



Design Q - square full bell mouth, without guard grille



Design Q - square full bell mouth, guard grille suction side



Wall ring plate made of composite material


Wall ring plate made of composite material






Performance data

Type	Characteristic curve	Voltage	Operating point	Current	Input power	Speed	Acoustic pressure level 7m L_{pA} dB(A)	Specific power	
		U V		I A	P_1 W	n min ⁻¹		P_{spez} Wh/1000m ³	
FF091-6D_.6F_.3P2	I	460	②	2.30	1400	1020	55	95.5	
			③	2.20	1350	1030		49.0	
			④	2.30	1400	1020		56.3	
			⑤	2.40	1250	950		92.3	
	II	400	⑥	2.40	1250	950	53	47.6	
			⑦	2.30	1200	970		47.6	
			⑧	2.40	1250	940		52	55.8
			⑨	2.40	1250	940		52	55.8
	III	265	⑩	2.20	740	680	45	75.4	
			⑪	2.10	720	700		39.7	
	IV	230	⑬	2.00	580	600	43	68.3	
			⑭	2.00	580	630		35.2	

Fan ordering information

Airflow direction A 

Design	T (without guard grille)	Q (without guard grille)	Q (guard grille suction side)
			
Type	FF091-6DT.6F.A3P2	FF091-6DQ.6F.A3P2	FF091-6DQ.6F.A3P2
Article no.	159993	159991	159992
Wall ring plate		Wall ring plate made of composite material	Wall ring plate made of composite material
Weight kg	19.50	29.10	34.20
Supply temperature -10°C - max 40°C in design with wall ring plate made of composite material			

Control technology

Frequency inverters Fcontrol 3~	Motor protection units 3~	Electronic voltage controllers 3~
		

FFowlet with ZAplus

for three phase alternating current, 6 pole

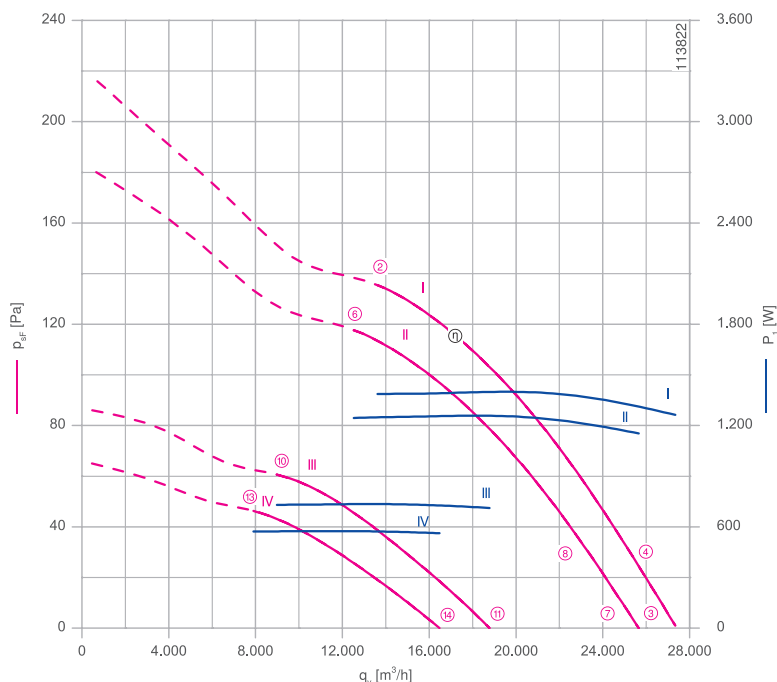
ZF091-6D



Description

Motor technology: AC
 Rated voltage U_N :
3~ 230/400 V (Δ/Y) $\pm 10\%$ | 3~ 265/460 V (Δ/Y) $\pm 10\%$ *
 Rated frequency f_N : **60 Hz*** (50 Hz data available)
 Input power P_i : **1.25 kW*** | **1.40 kW***
 Rated current I_N :
4.20/2.40 A | 4.20/2.40 A*
 Rated speed n_N : **940 min⁻¹ | 1010 min⁻¹***
 Starting current I_s : 9.00 / 5.50 A | **11.00 / 6.00 A**
 Current increase ΔI : 0 % | 0 %
 Thermal class: **THCL155***
 Min. permitted ambient temperature $t_{R(min)}$: -40 °C
 Max. permitted ambient temperature $t_{R(max)}$: 45 °C | **45 °C**
 Electrical connection: Terminal box
 Number of blades: 3
 Degree of protection : IP54
 Motor protection: thermal contact
 Blades: Aluminium, 1 coat paint, jet black
 Rotor: Aluminium, 1 coat paint, jet black
 Conformity: ErP 2015, CE
 * Rated data

Characteristic curve



Measured in ZAplus without guard grille in installation type A according to ISO 5801

Connection diagram

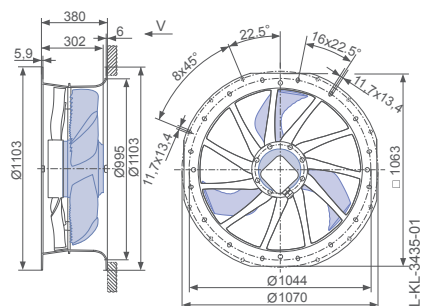
1360-106XA

System components

Dimensions mm



Design L - ZAplus Ontop without guard grille




Performance data

Type	Characteristic curve	Voltage	Operating point	Current	Input power	Speed	Acoustic pressure level 7m L_{pA} dB(A)	Specific power P_{spez} Wh/1000m ³
		U V		I A	P_1 W	n min ⁻¹		
ZF091-6D_6F_3P2	I	460	②	2.40	1400	1010		103.0
			③	2.20	1250	1040	60	46.2
			④	2.30	1350	1020	59	52.5
			⑤	2.40	1250	940		99.5
	II	400	⑥	2.40	1250	940		99.5
			⑦	2.20	1150	980	58	44.9
			⑧	2.30	1200	960	57	51.8
			⑨	2.10	740	680		81.4
	III	265	⑩	2.10	740	680		81.4
			⑪	2.10	720	720	50	37.9
	IV	230	⑬	2.00	580	600		72.9
			⑭	1.95	560	630	46	34.1

Fan ordering information

Airflow direction V

Design L (without guard grille)
Ontop



Type ZF091-6DL.6F.V3P2
Article no. 169697

Weight kg 31.20

Control technology

Frequency inverters Fcontrol 3~



Motor protection units 3~



Electronic voltage controllers 3~



The Royal League



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