

Technical data

Axial fans Series FL



Axial fans

Design FL

Contents of delivery

Standard version

Voltage

1~ 115 V

3~ two-speed 460 V Δ/Y

Frequency

60 Hz

Thermal insulation class

155 (previous: insulation class F)

Protection

IP 54

Motor protection

Thermostat switch (TB)

Paint finish

Standard design without paint finish

Necessary order data

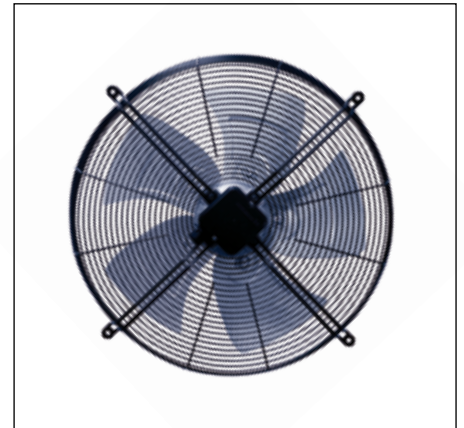
Article no., Type

On request, at extra charge

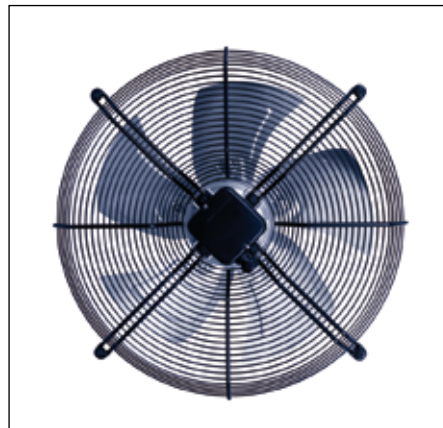
- Different voltage to 115 resp. 460 V
- 50 Hz
- Paint finish, RAL 9005, black



FL... design A



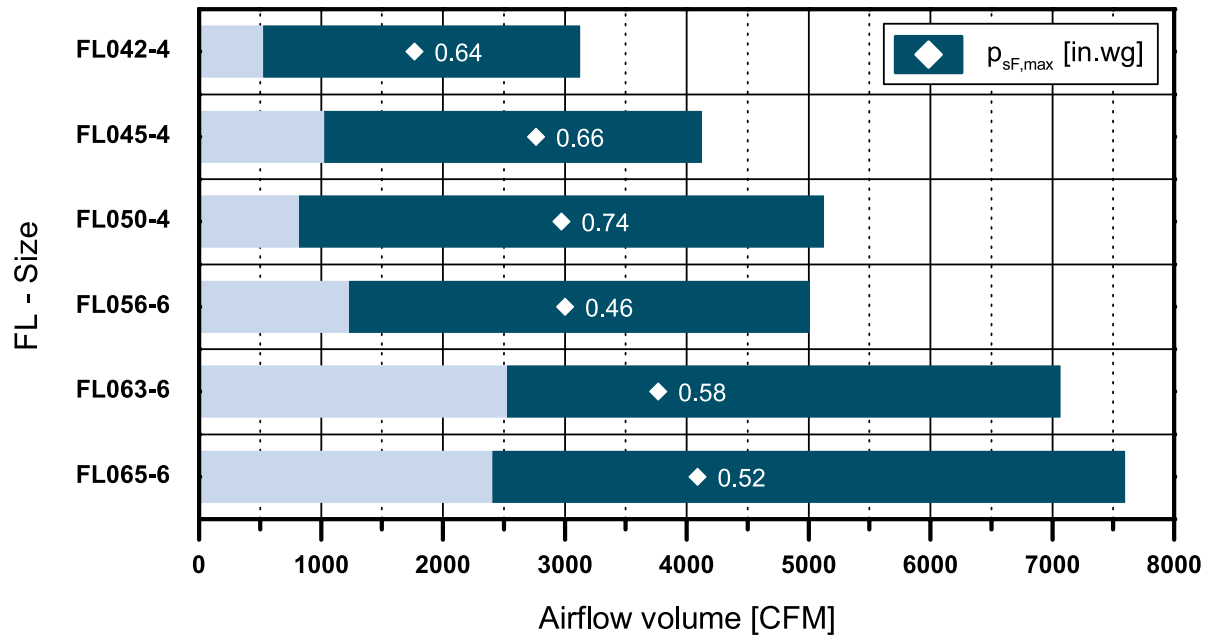
FL... design K



FL... design W

FL

Quick selection



FL

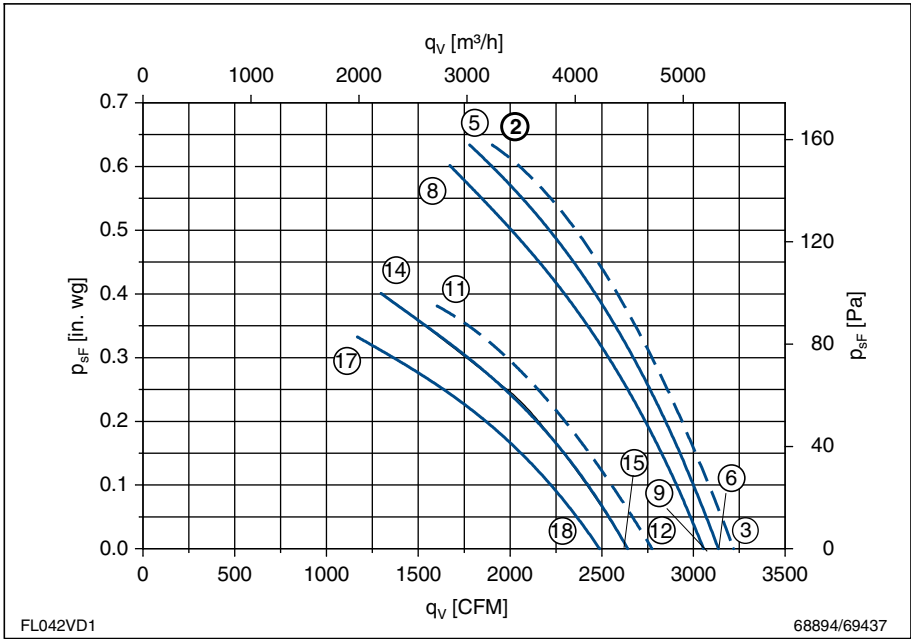
FL042-VD_.2F_.5P

Performance data

3 ~ 460V Δ/Y 60Hz

P_1	0.45/0.32	kW
I	0.75/0.44	A
n	1610/1260	rpm
I_A	3.5/1.2	A
ΔI	5	%
$t_R^{(2)}$	70/158	°C/°F
$t_R^{(5)}$	70/158	°C/°F

Characteristic data

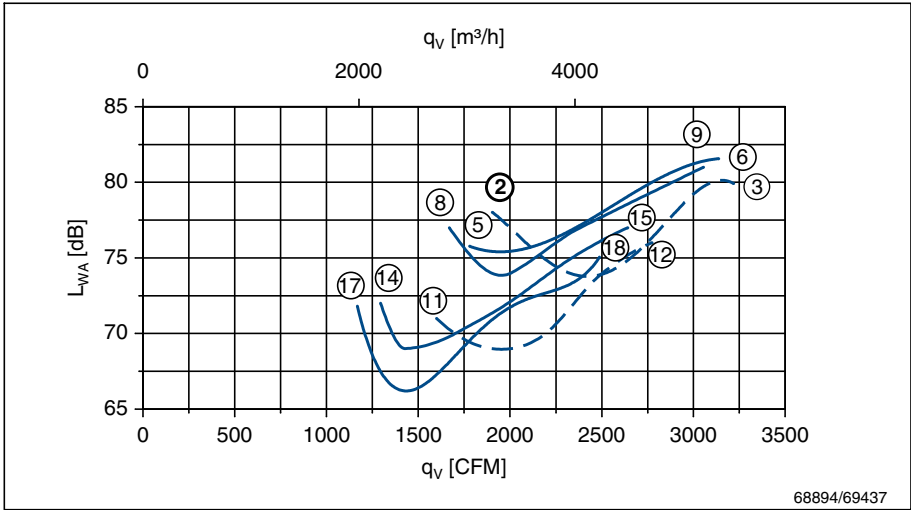


	U	I	P ₁	n
	V	A	W	rpm
②	460	0.75	450	1610
③	Δ	0.64	330	1670
⑪	460	0.44	320	1260
⑫	Y	0.35	250	1430
⑤	460	0.77	470	1600
⑥	Δ	0.67	350	1670
⑧	400	0.75	440	1540
⑨	Δ	0.60	320	1630
⑭	460	0.46	340	1220
⑮	Y	0.36	260	1400
⑰	400	0.46	290	1120
⑱	Y	0.38	230	1310

$p_{d2} = 1.4 \cdot 10^{-6} \cdot q_v^2$

--- measured in full bell mouth without guard grille in installation type A according to ISO 5801

— measured in short bell mouth with guard grille on the pressure side



Dimension sheet

Type	Article no.	Design	Airflow direction	Weight		Connection diagram	Dimension sheet	Page
				kg	lbs.			
FL042-VDW.2F.A5P	141 581	W	A	8.5	19	108XB	L-KL-2701	106
FL042-VDK.2F.V5P	141 582	K	V	8.6	19	108XA	L-KL-2702	110

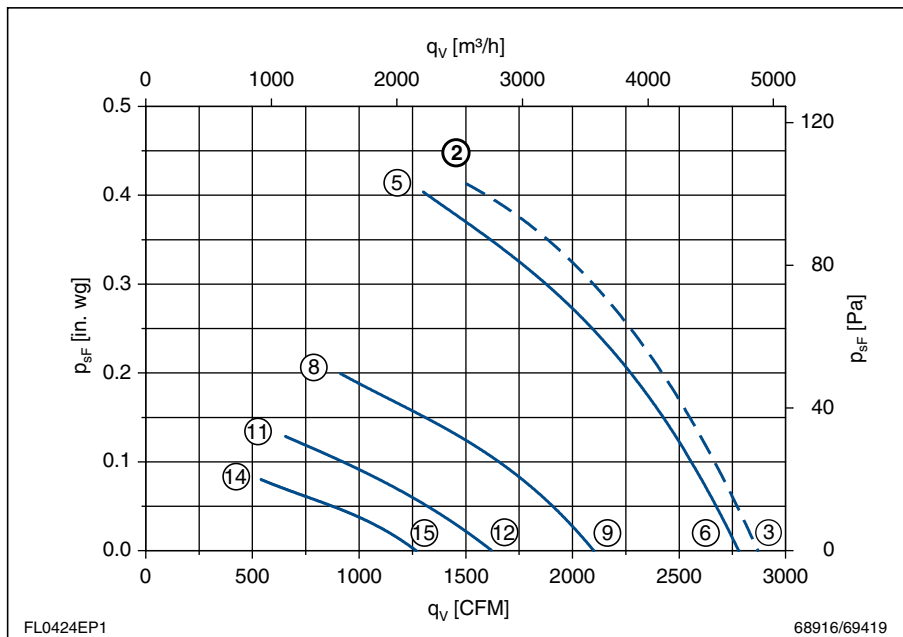
FL042-4E_.2F_.5P

Performance data

1 ~ 115V 60Hz

P_1	0.42	kW
I	3.8	A
n	1270	rpm
I_A	6.0	A
ΔI	0	%
C_{230V}	20	μF
$t_R^{(2)}$	50/122	$^{\circ}C/^{\circ}F$
$t_R^{(5)}$	50/122	$^{\circ}C/^{\circ}F$

Characteristic data

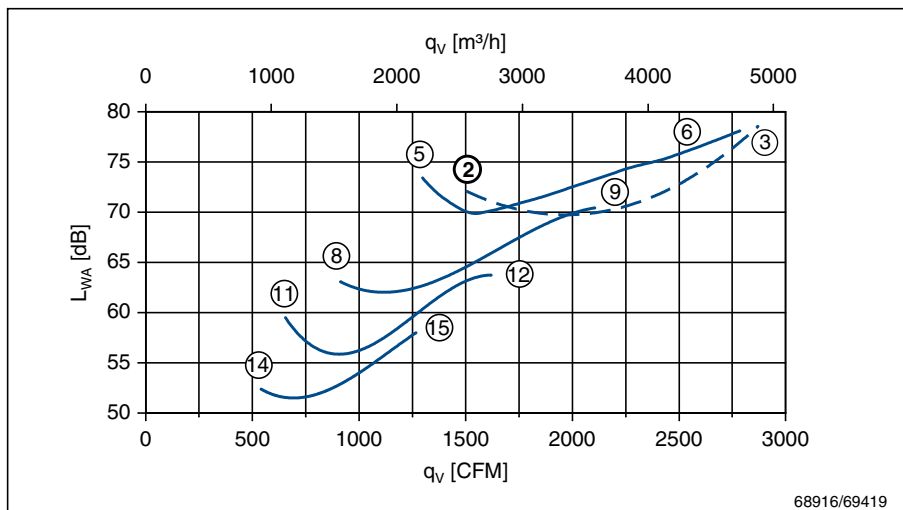


	U	I	P_1	n
	V	A	W	rpm
②	115	3.8	420	1270
③		3.3	380	1480
⑤	115	3.8	430	1230
⑥		3.4	390	1470
⑧	85	3.1	250	860
⑨		3.0	240	1100
⑪	68	2.6	170	670
⑫		2.5	165	850
⑭	55	2.1	110	530
⑮		2.1	110	660

$$p_{d2} = 2.4 \cdot 10^{-6} \cdot q_v^2$$

--- measured in full bell mouth without guard grille in installation type A according to ISO 5801

— measured in short bell mouth with guard grille on the pressure side



Dimension sheet

Type	Article no.	Design	Airflow direction	Weight		Connection diagram	Dimension sheet	Page
				kg	lbs.			
FL042-4EW.2F.A5P	141 477	W	A	8.5	19	118XB	L-KL-2703	107
FL042-4EK.2F.V5P	141 478	K	V	8.6	19	117XA	L-KL-2704	111

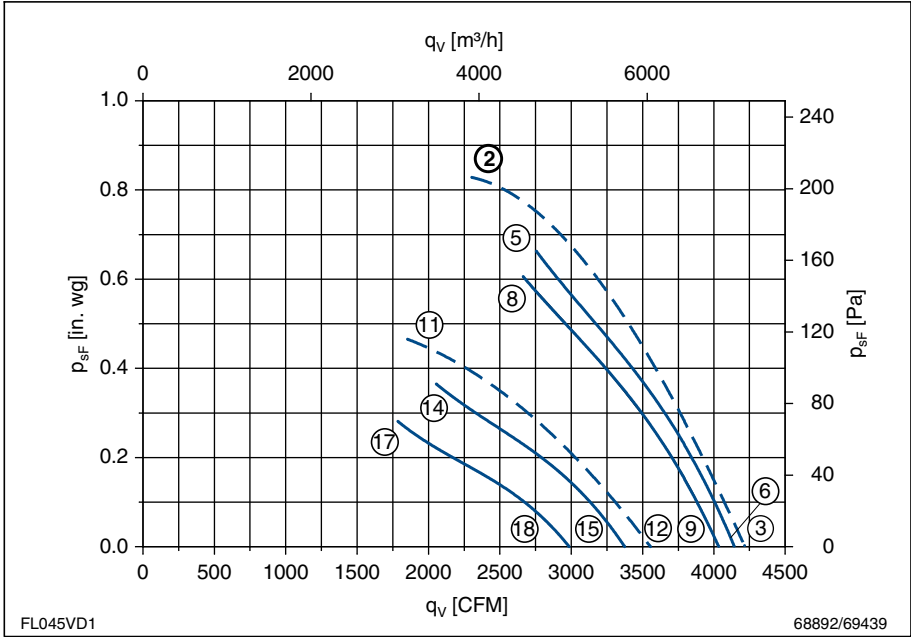
FL045-VD_.4F_.5P

Performance data

3 ~ 460V Δ/Y 60Hz

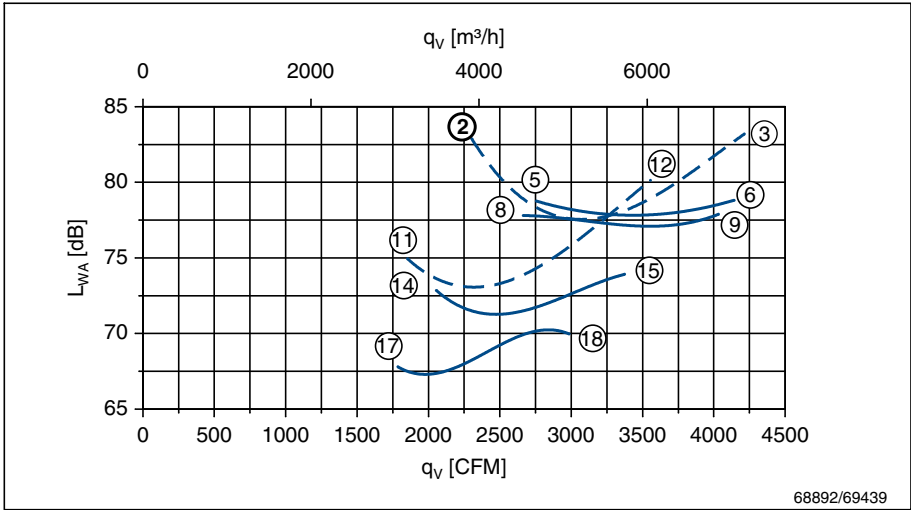
P_1	0.73/0.51	kW
I	1.20/0.79	A
n	1630/1230	rpm
I_A	4.0/1.4	A
ΔI	15	%
$t_R^{(2)}$	55/131	°C/°F
$t_R^{(5)}$	55/131	°C/°F

Characteristic data



	U	I	P ₁	n
	V	A	W	rpm
②	460	1.20	730	1630
③	Δ	1.00	530	1690
⑪	460	0.79	510	1230
⑫	Y	0.63	420	1420
⑤	460	1.20	740	1640
⑥	Δ	1.05	580	1680
⑧	400	1.25	700	1570
⑨	Δ	1.00	560	1640
⑭	460	0.80	520	1220
⑮	Y	0.69	450	1370
⑰	400	0.77	430	1060
⑱	Y	0.69	390	1200

$p_{d2} = 1.8 \cdot 10^{-6} \cdot q_v^2$



--- measured in full bell mouth without guard grille in installation type A according to ISO 5801

— measured in short bell mouth with guard grille on the pressure side

Dimension sheet

Type	Article no.	Design	Airflow direction	Weight		Connection diagram	Dimension sheet	Page
				kg	lbs.			
FL045-VDW.4F.A5P	141 492	W	A	12	26	108XB	L-KL-2708	108
FL045-VDK.4F.V5P	141 493	K	V	9.2	20	108XA	L-KL-2709	112

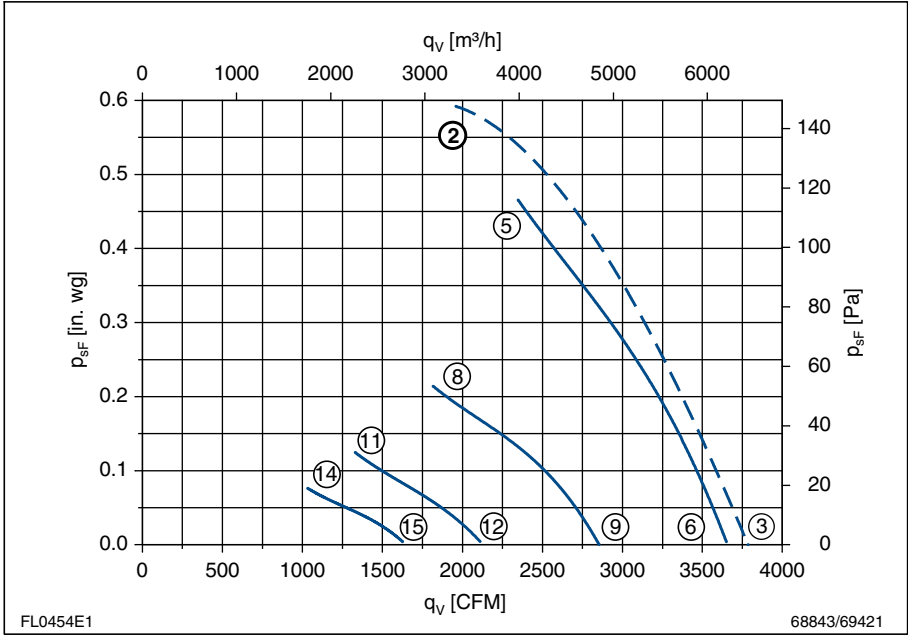
FL045-4E_.4F_.5P

Performance data

1 ~ 115V 60Hz

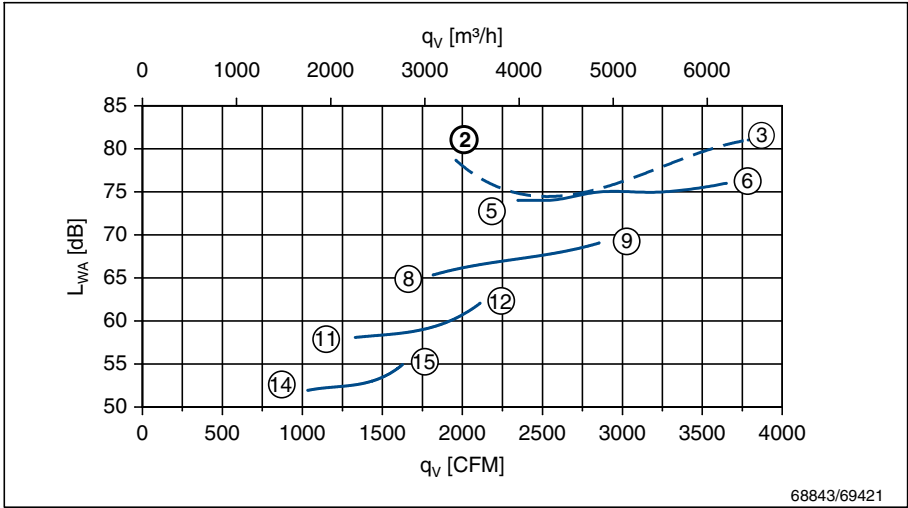
P_1	0.59	kW
I	5.2	A
n	1380	rpm
I_A	10	A
ΔI	5	%
C_{230V}	30	μF
$t_R^{(2)}$	70/158	$^{\circ}C/^{\circ}F$
$t_R^{(5)}$	70/158	$^{\circ}C/^{\circ}F$

Characteristic data



	U	I	P_1	n
	V	A	W	rpm
②	115	5.2	590	1380
③		4.1	470	1530
⑤	115	5.3	600	1380
⑥		4.4	510	1500
⑧	85	5.1	410	1000
⑨		4.6	380	1160
⑪	68	4.4	280	730
⑫		4.2	270	860
⑭	55	3.8	190	570
⑮		3.7	190	670

$$p_{d2} = 1.8 \cdot 10^{-6} \cdot q_v^2$$



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

— measured in short bell mouth with guard grille on the pressure side



Dimension sheet

Type	Article no.	Design	Airflow direction	Weight		Connection diagram	Dimension sheet	Page
				kg	lbs.			
FL045-4EW.4F.A5P	141 494	W	A	12	26	118XB	L-KL-2710	109
FL045-4EK.4F.V5P	141 495	K	V	9.2	20	117XA	L-KL-2711	113

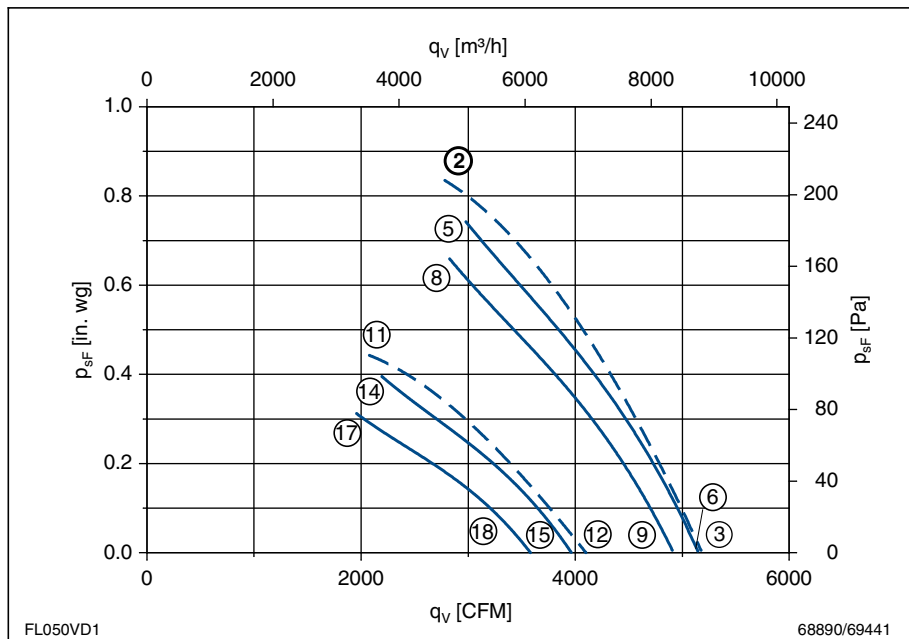
FL050-VD_.4I_.5P

Performance data

3 ~ 460V 60Hz

P_1	0.91/0.52	kW
I	1.55/0.80	A
n	1470/1070	rpm
I_A	5.5/1.8	A
ΔI	0	%
$t_R^{(2)}$	70/158	°C/°F
$t_R^{(5)}$	70/158	°C/°F

Characteristic data

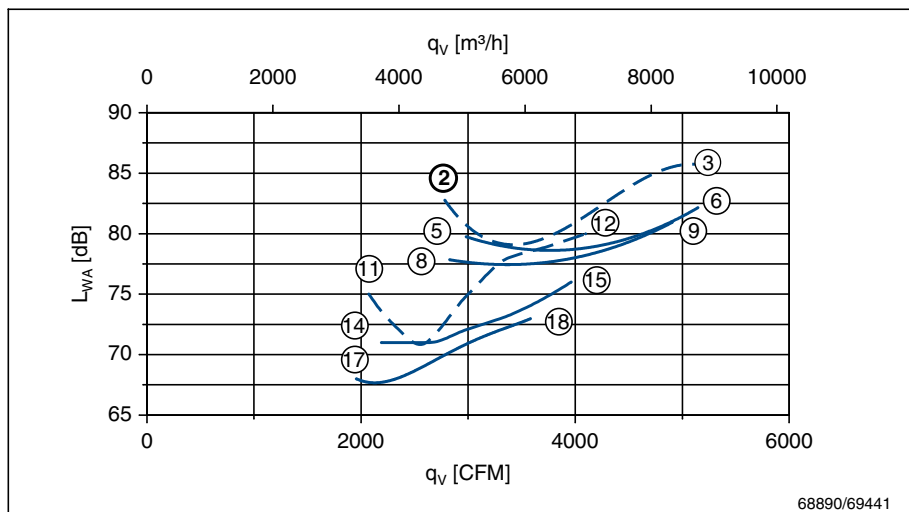


	U	I	P ₁	n
	V	A	W	rpm
②	460	1.55	910	1470
③	Δ	1.30	690	1570
⑪	460	0.79	520	1070
⑫	Y	0.68	440	1230
⑤	460	1.55	900	1470
⑥	Δ	1.35	730	1550
⑧	400	1.50	810	1380
⑨	Δ	1.30	670	1480
⑭	460	0.79	520	1060
⑮	Y	0.70	460	1190
⑰	400	0.75	420	950
⑱	Y	0.68	390	1070

$p_{d2} = 1.2 \cdot 10^{-6} \cdot q_v^2$

--- measured in full bell mouth without guard grille in installation type A according to ISO 5801

— measured in short bell mouth with guard grille on the pressure side



Dimension sheet

Type	Article no.	Design	Airflow direction	Weight		Connection diagram	Dimension sheet	Page
				kg	lbs.			
FL050-VDW.4I.A5P	141 496	W	A	11	25	108XB	L-KL-2708	108
FL050-VDK.4I.V5P	141 497	K	V	12	26	108XA	L-KL-2709	112

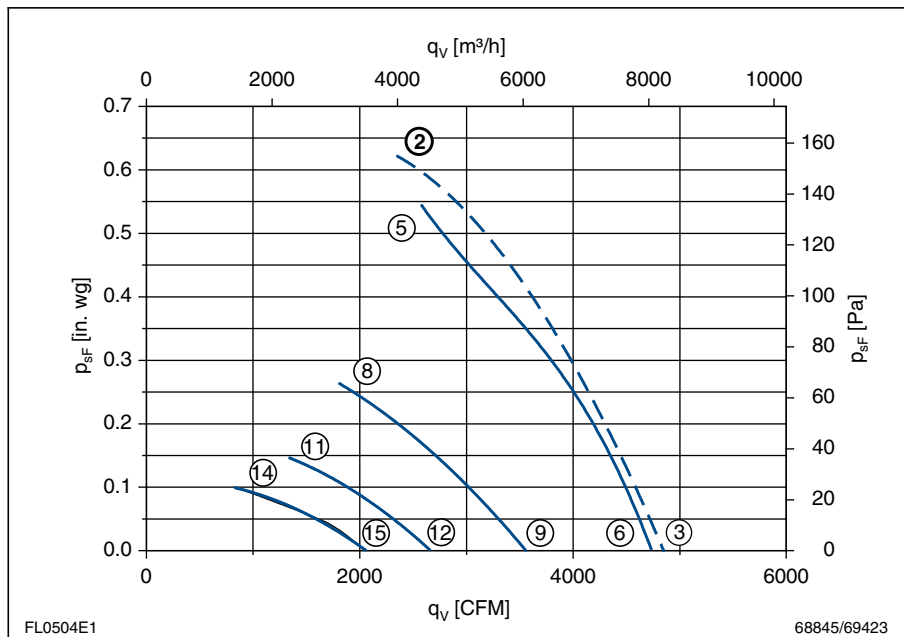
FL050-4E_.4I_.5P

Performance data

1 ~ 115V 60Hz

P_1	0.82	kW
I	7.40	A
n	1260	rpm
I_A	14.5	A
ΔI	0	%
C_{230V}	40	μF
$t_R^{(2)}$	55/131	$^{\circ}C/^{\circ}F$
$t_R^{(5)}$	55/131	$^{\circ}C/^{\circ}F$

Characteristic data



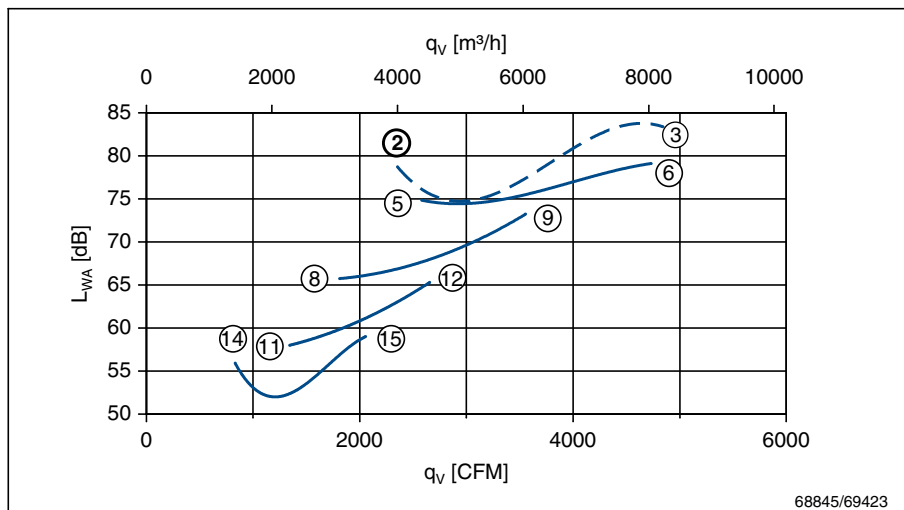
	U	I	P ₁	n
	V	A	W	rpm
②	115	7.4	820	1260
③		5.9	670	1470
⑤	115	7.3	820	1270
⑥		6.2	700	1430
⑧	85	6.5	520	880
⑨		6.1	490	1060
⑪	68	5.5	340	650
⑫		5.3	330	790
⑭	55	4.6	230	510
⑮		4.5	230	610

$$p_{d2} = 1.2 \cdot 10^{-6} \cdot q_v^2$$

--- measured in full bell mouth without guard grille in installation type A according to ISO 5801

— measured in short bell mouth with guard grille on the pressure side

FL



Dimension sheet

Type	Article no.	Design	Airflow direction	Weight		Connection diagram	Dimension sheet	Page
				kg	lbs.			
FL050-4EW.4I.A5P	141 498	W	A	11	25	118XB	L-KL-2710	109
FL050-4EK.4I.V5P	141 499	K	V	12	26	117XA	L-KL-2711	113

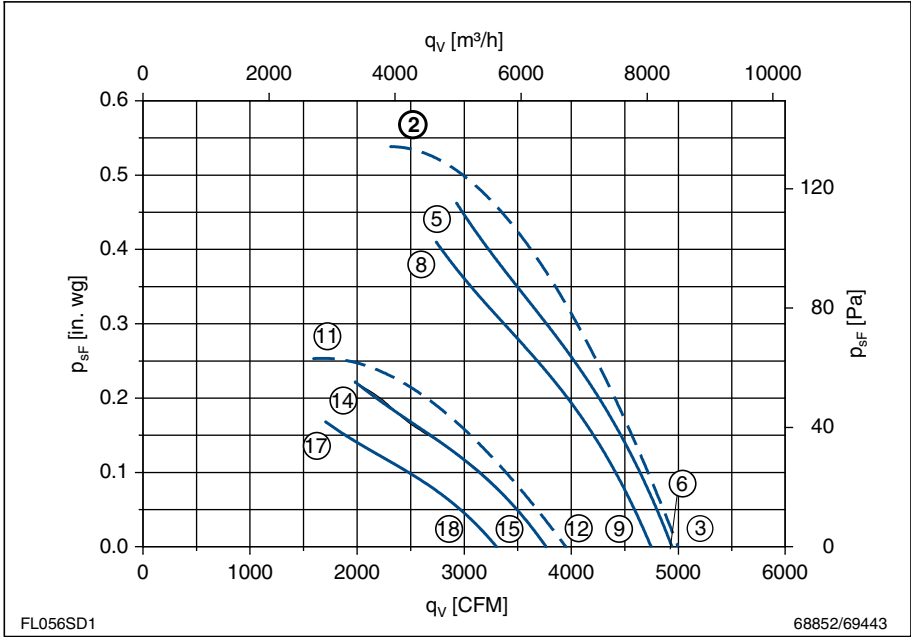
FL056-SD_4I_5P

Performance data

3 ~ 460V Δ/Y 60Hz

P_1	0.57/0.35	kW
I	0.83/0.52	A
n	1030/700	rpm
I_A	6.0/2.0	A
ΔI	10	%
$t_R^{(2)}$	70/158	°C/°F
$t_R^{(5)}$	70/158	°C/°F

Characteristic data

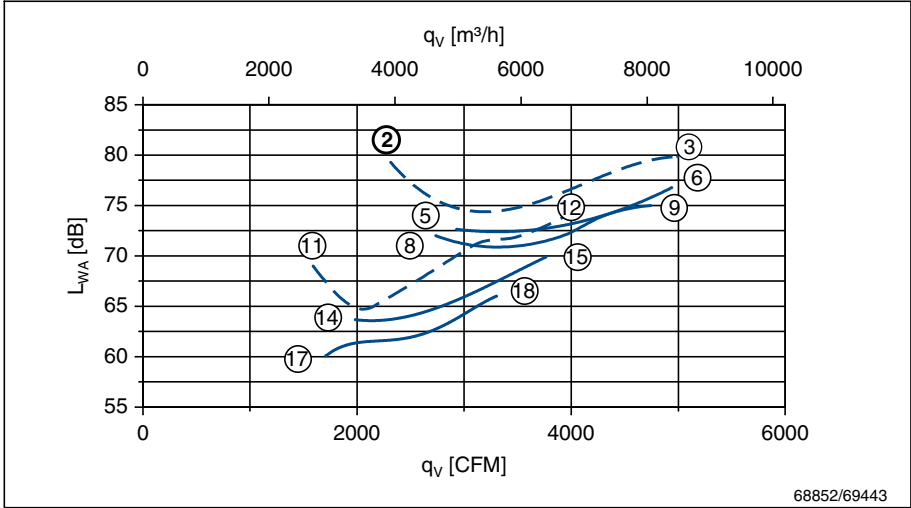


	U	I	P_1	n
	V	A	W	rpm
②	460	0.83	570	1030
③	Δ	0.62	400	1090
⑪	460	0.52	350	700
⑫	Y	0.43	290	860
⑤	460	0.81	550	1040
⑥	Δ	0.66	430	1080
⑧	400	0.86	510	980
⑨	Δ	0.69	410	1040
⑭	460	0.51	340	710
⑮	Y	0.45	310	820
⑰	400	0.48	280	610
⑱	Y	0.44	260	720

$p_{d2} = 7.7 \cdot 10^{-7} \cdot q_v^2$

--- measured in full bell mouth without guard grille in installation type A according to ISO 5801

— measured in short bell mouth with guard grille on the pressure side



Dimension sheet

Type	Article no.	Design	Airflow direction	Weight		Connection diagram	Dimension sheet	Page
				kg	lbs.			
FL056-SDW.4I.A5P	141 500	W	A	12	26	108XB	L-KL-2708	108
FL056-SDK.4I.V5P	141 501	K	V	12	27	108XA	L-KL-2709	112

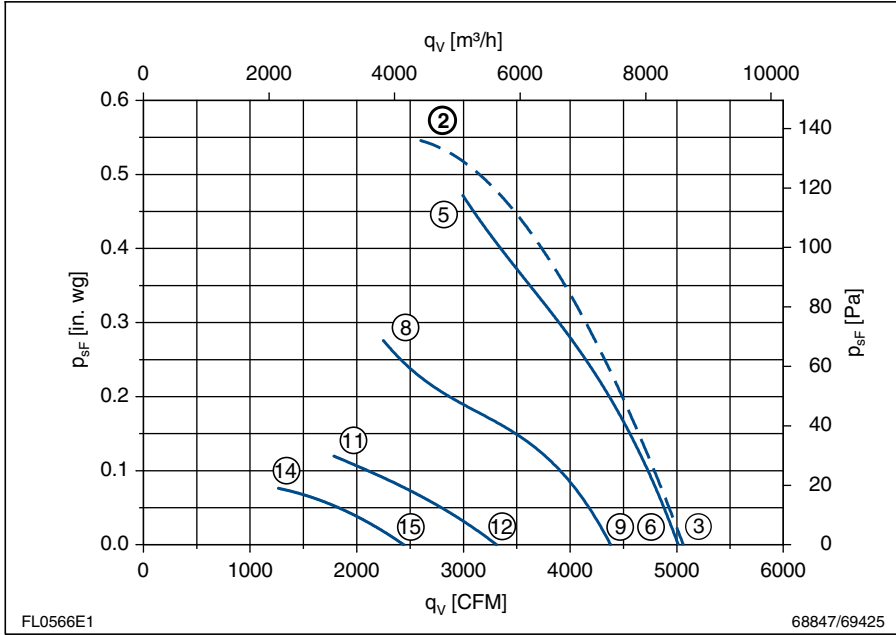
FL056-6E_.4I_.5P

Performance data

1 ~ 115V 60Hz

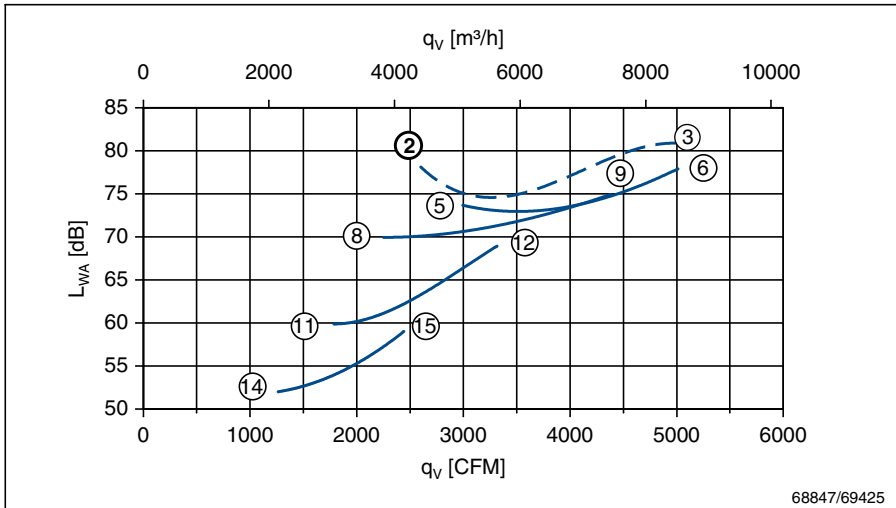
P_1	0.61	kW
I	5.4	A
n	1050	rpm
I_A	10	A
ΔI	10	%
C_{230V}	40	μF
$t_R^{(2)}$	70/158	$^{\circ}C/^{\circ}F$
$t_R^{(5)}$	70/158	$^{\circ}C/^{\circ}F$

Characteristic data



	U	I	P_1	n
	V	A	W	rpm
②	115	5.4	610	1050
③		4.2	480	1120
⑤	115	5.3	600	1060
⑥		4.4	500	1110
⑧	85	5.7	450	800
⑨		4.8	390	970
⑪	68	5.0	300	570
⑫		4.7	300	720
⑭	55	4.2	200	430
⑮		4.1	200	540

$$p_{d2} = 7.7 \cdot 10^{-7} \cdot q_v^2$$



--- measured in full bell mouth without guard grille in installation type A according to ISO 5801

— measured in short bell mouth with guard grille on the pressure side

FL

Dimension sheet

Type	Article no.	Design	Airflow direction	Weight		Connection diagram	Dimension sheet	Page
				kg	lbs.			
FL056-6EW.4I.A5P	141 502	W	A	12	26	118XB	L-KL-2710	109
FL056-6EK.4I.V5P	141 503	K	V	12	26	117XA	L-KL-2711	113

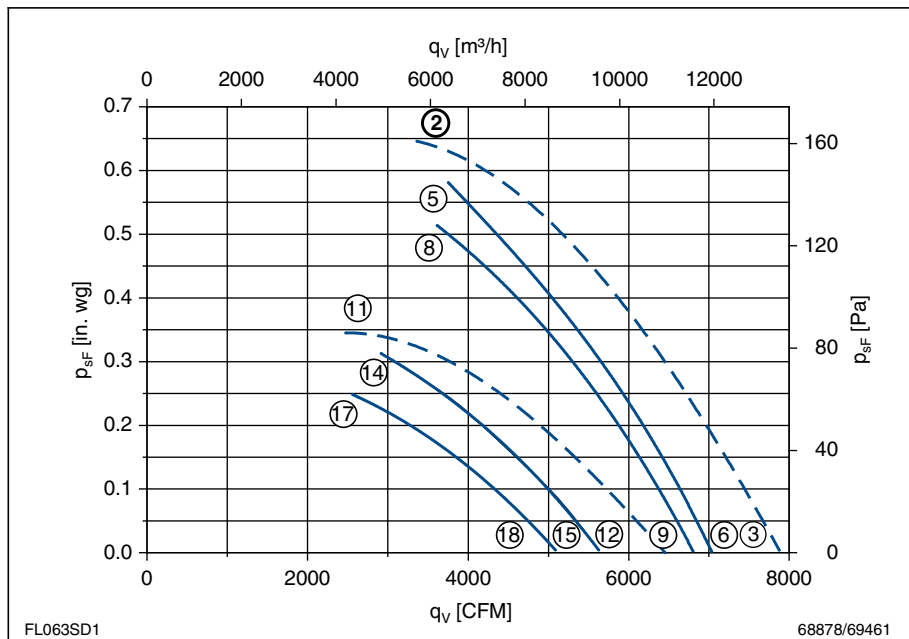
FL063-SD_4M_5P

Performance data

3 ~ 460V Δ/Y 60Hz

P_1	1.0/0.63	kW
I	1.75/1.00	A
n	1060/780	rpm
I_A	5.5/1.8	A
ΔI	0	%
$t_R^{(2)}$	70/158	°C/°F
$t_R^{(5)}$	70/158	°C/°F

Characteristic data

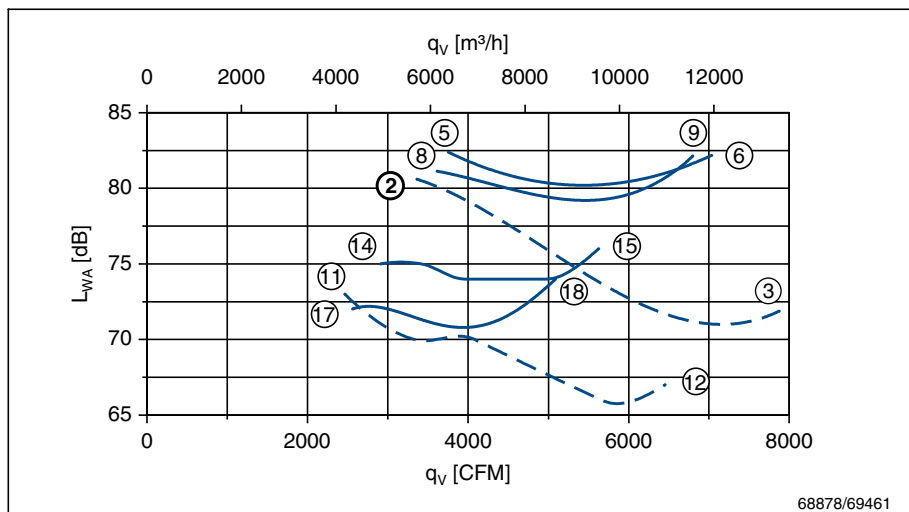


	U	I	P_1	n
	V	A	W	rpm
②	460	1.75	1020	1060
③	Δ	1.40	730	1110
⑪	460	0.99	630	780
⑫	Y	0.81	520	900
⑤	460	1.70	990	1070
⑥	Δ	1.45	770	1110
⑧	400	1.70	910	1020
⑨	Δ	1.40	720	1080
⑭	460	0.98	620	800
⑮	Y	0.85	540	890
⑰	400	0.94	510	710
⑱	Y	0.84	460	810

$p_{d2} = 7.7 \cdot 10^{-7} \cdot q_v^2$

--- measured in full bell mouth without guard grille in installation type A according to ISO 5801

— measured in short bell mouth with guard grille on the pressure side



Dimension sheet

Type	Article no.	Design	Airflow direction	Weight		Connection diagram	Dimension sheet	Page
				kg	lbs.			
FL063-SDK.4M.V5P	141 504	K	V	17	38	108XA	L-KL-2709	112

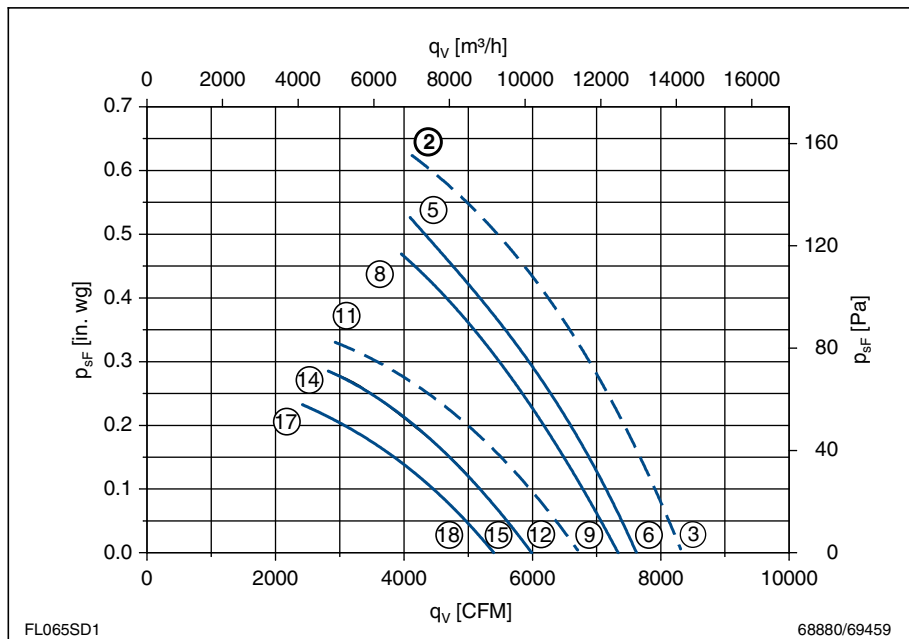
FL065-SD_4M_5P

Performance data

3 ~ 460V Δ/Y 60Hz

P_1	1.1/0.67	kW
I	1.80/1.05	A
n	1050/760	rpm
I_A	5.5/1.8	A
ΔI	0	%
$t_R^{(2)}$	55/131	°C/°F
$t_R^{(5)}$	55/131	°C/°F

Characteristic data

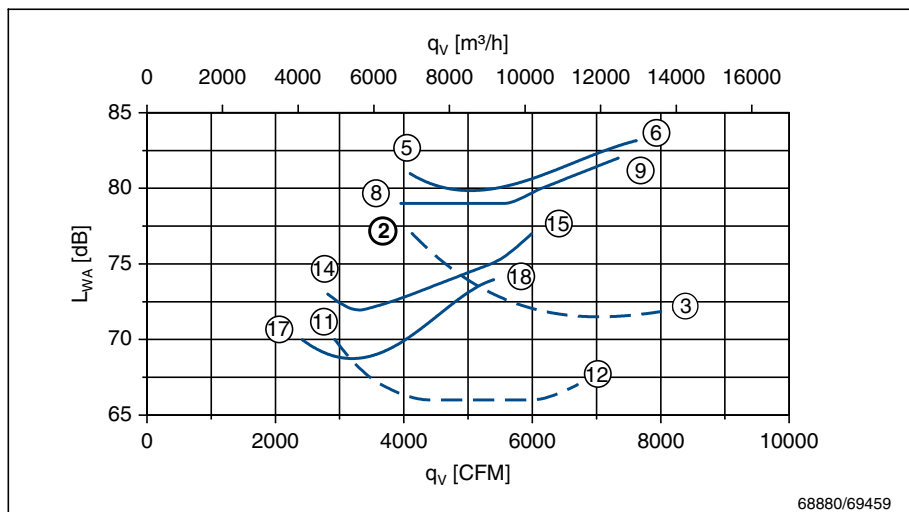


	U	I	P_1	n
	V	A	W	rpm
②	460	1.80	1100	1050
③	Δ	1.45	820	1100
⑪	460	1.05	670	760
⑫	Y	1.45	560	880
⑤	460	1.80	1090	1050
⑥	Δ	1.55	830	1100
⑧	400	1.80	1000	1000
⑨	Δ	1.50	770	1060
⑭	460	1.05	670	760
⑮	Y	0.89	580	870
⑰	400	0.99	540	700
⑱	Y	0.87	490	790

$p_{d2} = 4.0 \cdot 10^{-7} \cdot q_v^2$

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

— measured in short bell mouth with guard grille on the pressure side



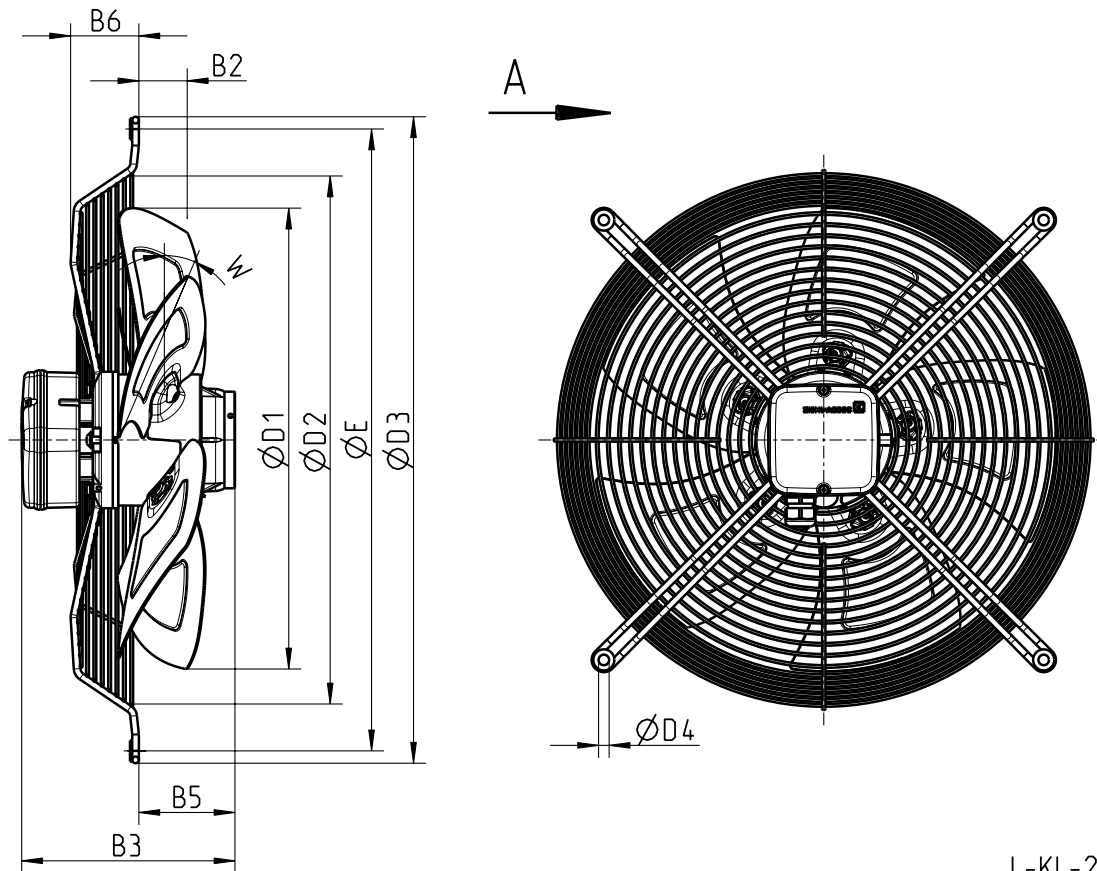
Dimension sheet

Type	Article no.	Design	Airflow direction	Weight		Connection diagram	Dimension sheet	Page
				kg	lbs.			
FL065-SDK.4M.V5P	141 505	K	V	17	38	108XA	L-KL-2709	112

FL_ _ _ - DW.2_A5_

Airflow direction A

Design W



L-KL-2701

Type	Article no.	B2		B3		B5		B6		D1		D2		D3		D4		E		W
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
FL042-4DW.2F.A5P	141 581	43	1.69	192	7.56	102	4.02	62	2.44	418	16.46	475	18.7	582	22.91	9.5	0.37	560	22.05	P

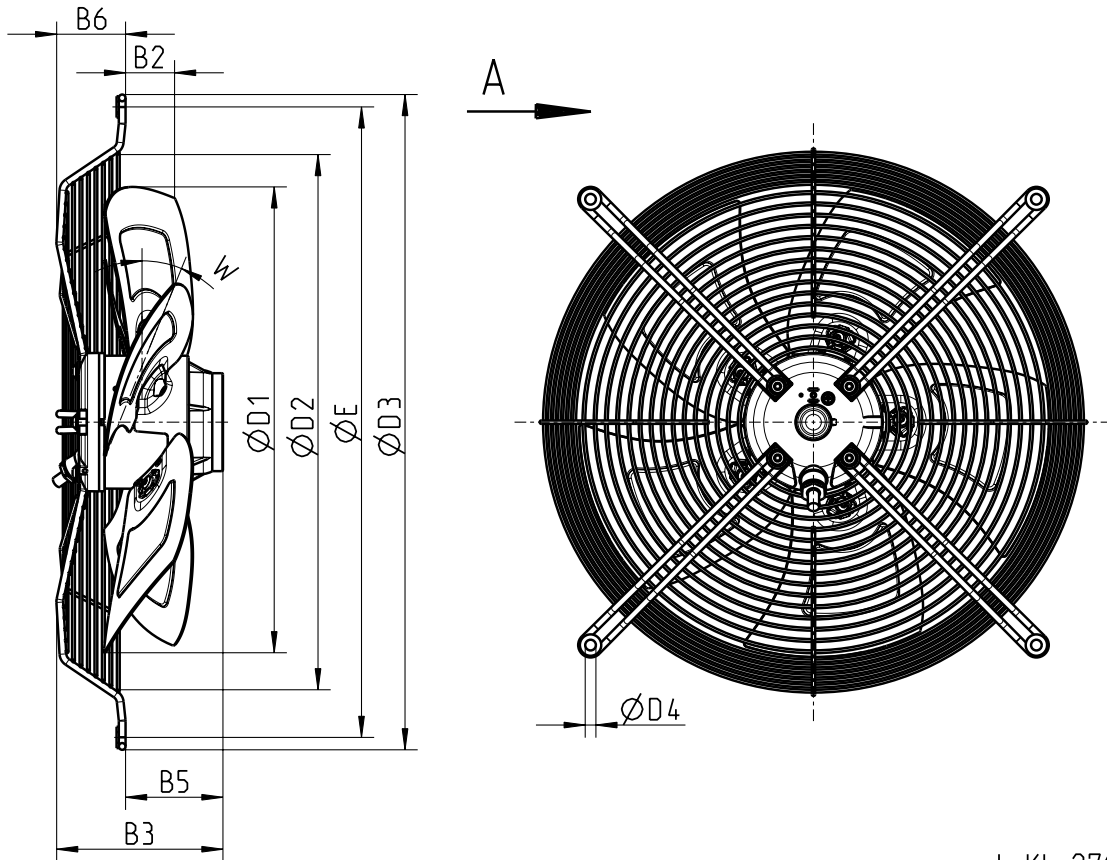
L-KL-2701

Electrical connection
Terminal box K05

FL_ _ _ - EW.2_A5_

Airflow direction A

Design W



L-KL-2703

Type	Article no.	B2		B3		B5		B6		D1		D2		D3		D4		E		W
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
FL042-4EW.2F.A5P	141 477	43	1.69	164	6.46	102	4.02	62	2.44	418	16.46	475	18.7	582	22.91	9.5	0.37	560	22.05	P

L-KL-2703

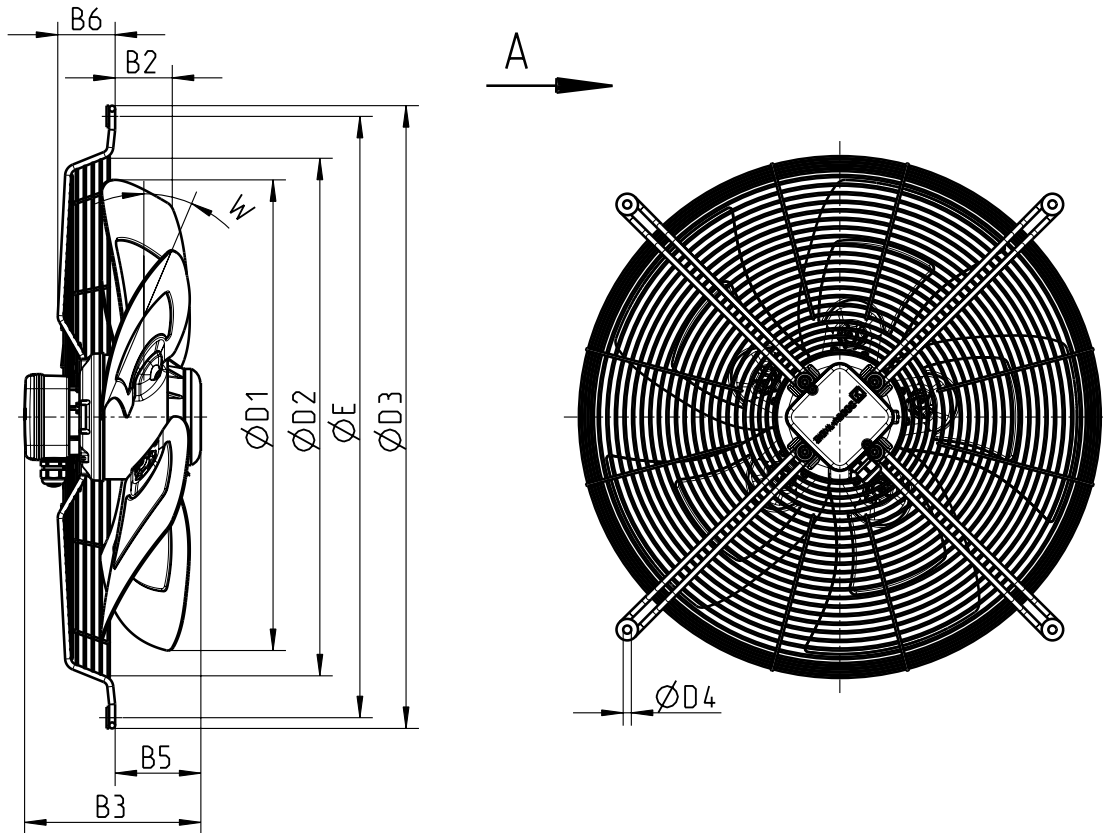
FL

Electrical connection
Connection cable

FL_ _ _ - DW.4 .A5_

Airflow direction A

Design W



L-KL-2708

FL

Type	Article no.	B2		B3		B5		B6		D1		D2		D3		D4		E		W
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
FL045-VDW.4F.A5P	141 492	67	2.64	205	8.07	94	3.7	46	1.81	445	17.52	482	18.98	582	22.91	9.5	0.37	560	22.05	P
FL050-VDW.4I.A5P	141 496	31	1.22	225	8.86	86	3.39	97	3.82	497	19.57	524	20.63	590	23.23	9.5	0.37	565	22.24	P
FL056-SDW.4I.A5P	141 500	68	2.68	225	8.86	120	4.72	67	2.64	552	21.73	645	25.39	725	28.54	9.5	0.37	700	27.56	P

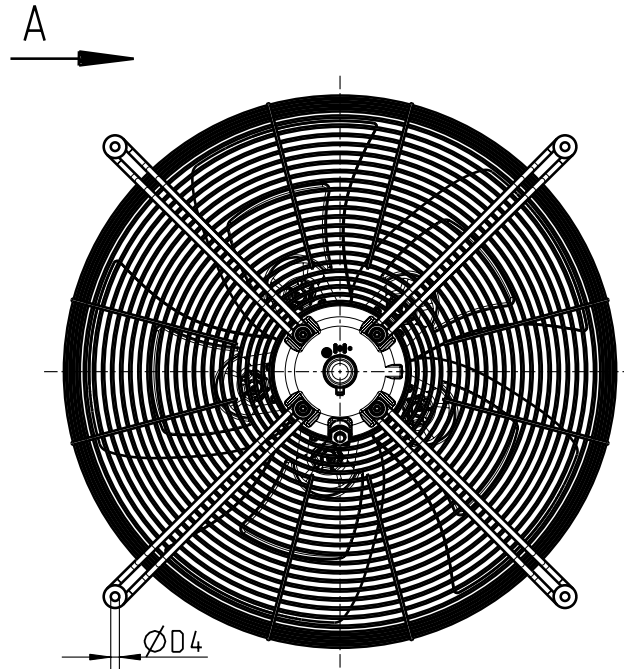
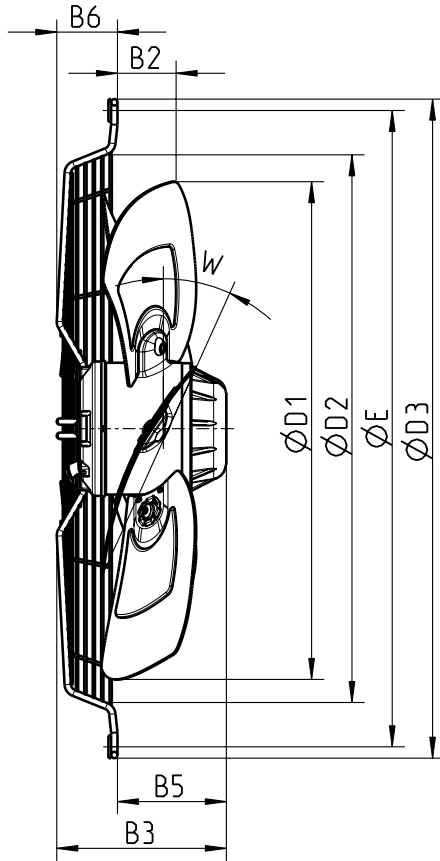
L-KL-2708

Electrical connection
Terminal box K62

FL_ _ _ - EW.4 .A5_

Airflow direction A

Design W



L-KL-2710

Type	Article no.	B2		B3		B5		B6		D1		D2		D3		D4		E		W
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
FL045-4EW.4F.A5P	141 494	67	2.64	140	5.51	94	3.7	46	1.81	445	17.52	482	18.98	582	22.91	9.5	0.37	560	22.05	P
FL050-4EW.4I.A5P	141 498	31	1.22	183	7.2	86	3.39	97	3.82	497	19.57	524	20.63	590	23.23	9.5	0.37	565	22.24	P
FL056-6EW.4I.A5P	141 502	68	2.68	187	7.36	120	4.72	67	2.64	552	21.73	645	25.39	725	28.54	9.5	0.37	700	27.56	P

L-KL-2710

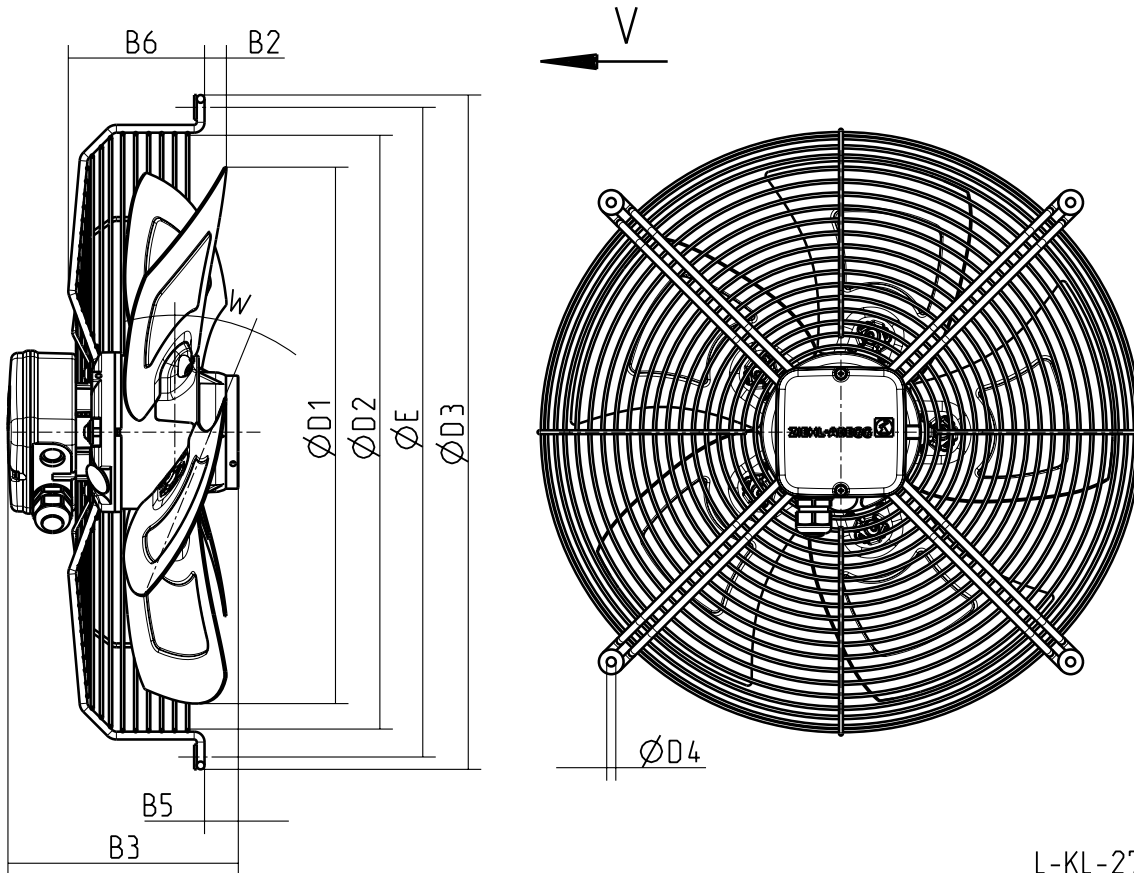
FL

Electrical connection
Connection cable

FL_ _ _ - DK.2.V5_

Airflow direction V

Design K



L-KL-2702

Type	Article no.	B2		B3		B5		B6		D1		D2		D3		D4		E		W
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
FL042-VDK.2F.V5P	141 582	17	0.67	192	7.56	41	1.61	105	4.13	418	16.46	457	17.99	519	20.43	7	0.28	500	19.69	P

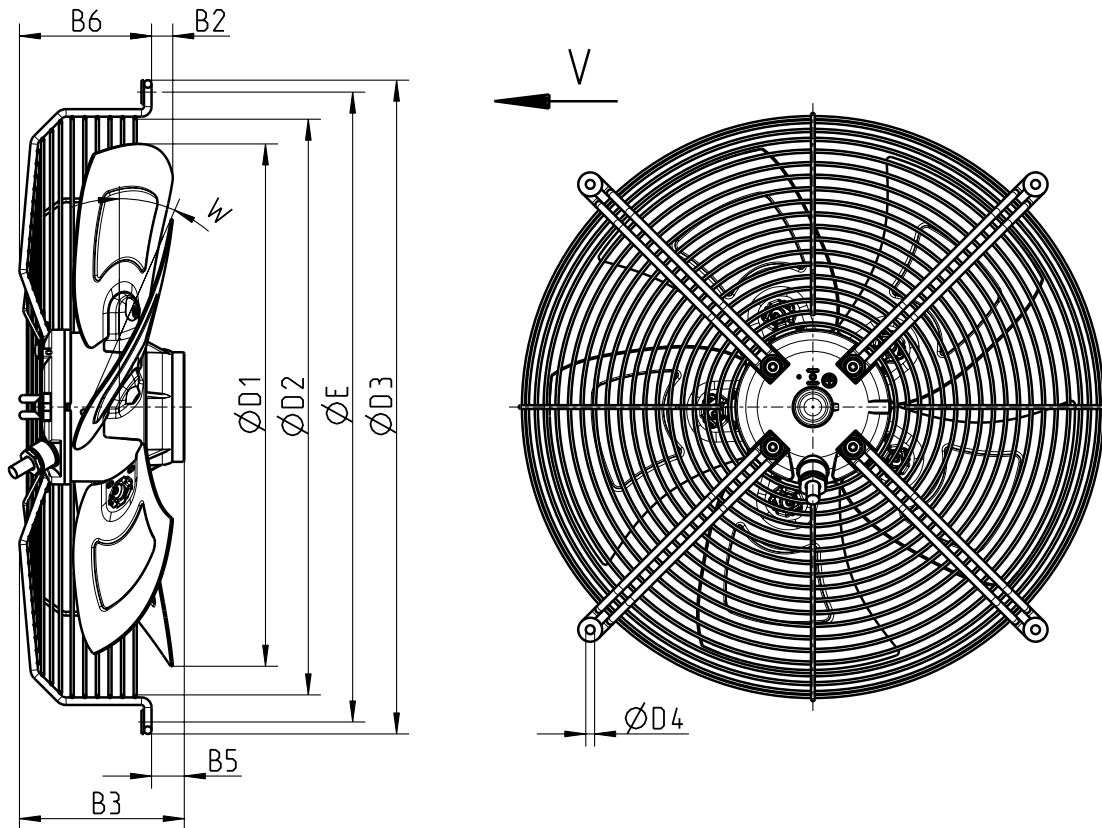
L-KL-2702

Electrical connection
Terminal box K05

FL_ _ _ -_ EK.2_.V5_

Airflow direction V

Design K



L-KL-2704

Type	Article no.	B2		B3		B5		B6		D1		D2		D3		D4		E		W
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
FL042-4EK.2F.V5P	141 478	17	0.67	146	5.75	41	1.61	105	4.13	418	16.46	457	17.99	519	20.43	7	0.28	500	19.69	P

L-KL-2704

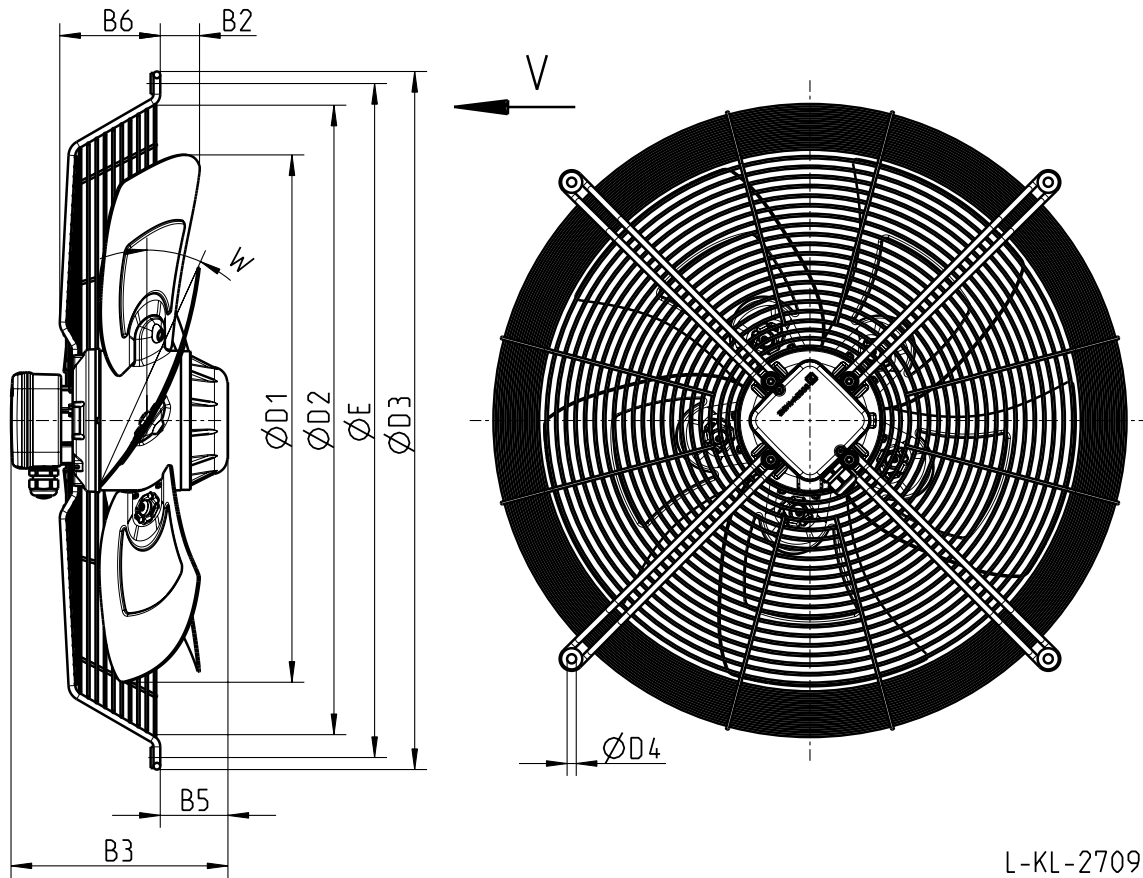
FL

Electrical connection
Connection cable

FL_ _ _ - DK.4_V5_

Airflow direction V

Design K



L-KL-2709

FL

Type	Article no.	B2		B3		B5		B6		D1		D2		D3		D4		E		W
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
FL045-VDK.4F.V5P	141 493	50	1.97	205	8.07	88	3.46	96	3.78	445	17.52	482	18.98	582	22.91	9.5	0.37	560	22.05	P
FL050-VDK.4I.V5P	141 497	33	1.3	225	8.86	68	2.68	113	4.45	497	19.57	524	20.63	590	23.23	9.5	0.37	565	22.24	P
FL056-SDK.4I.V5P	141 501	41	1.61	225	8.86	70	2.76	105	4.13	552	21.73	652	25.67	725	28.54	9.5	0.37	700	27.56	P
FL063-SDK.4M.V5P	141 504	8	0.31	245	9.65	78	3.07	144	5.67	627	24.69	715	28.15	780	30.71	9	0.35	750	29.53	P
FL065-SDK.4M.V5P	141 505	8	0.31	245	9.65	78	3.07	144	5.67	652	25.67	715	28.15	780	30.71	9	0.35	750	29.53	P

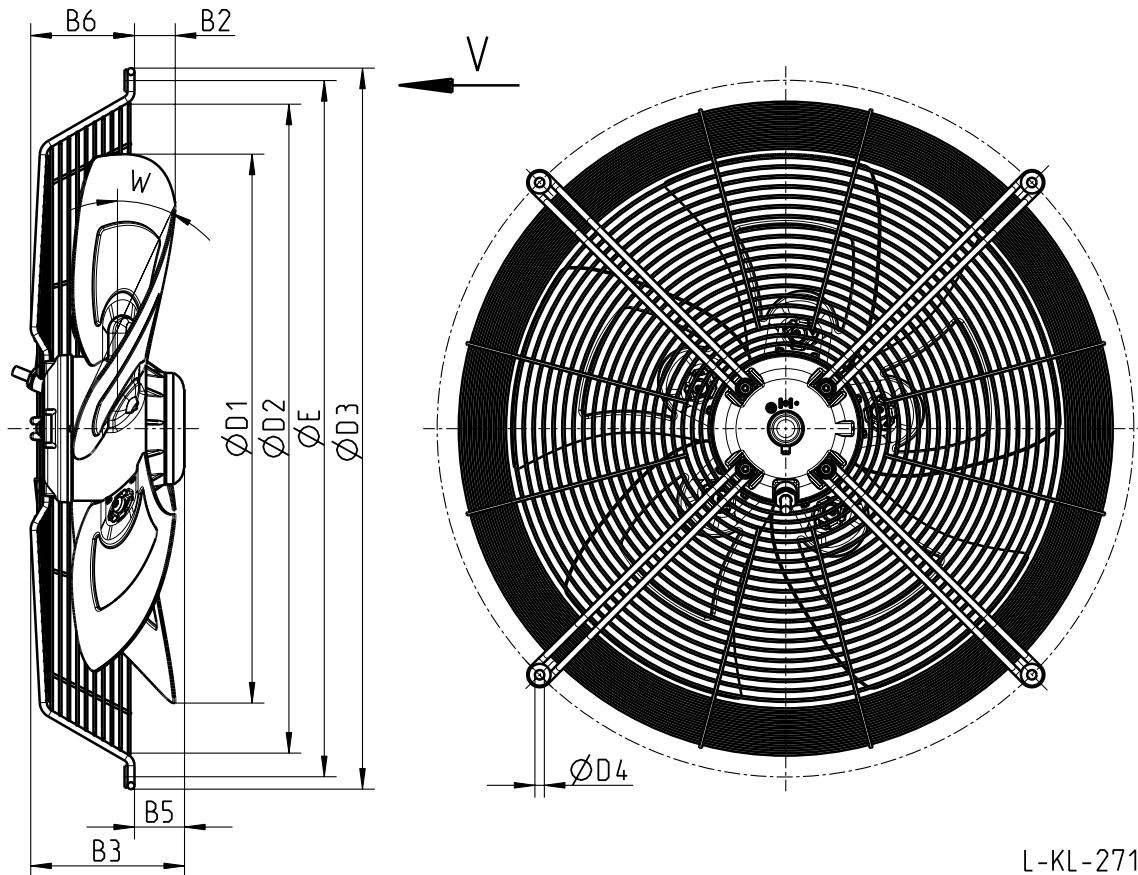
L-KL-2709

Electrical connection
Terminal box K62

FL_ _ _ - EK.4 .V5_

Airflow direction V

Design K



L-KL-2711

Type	Article no.	B2		B3		B5		B6		D1		D2		D3		D4		E		W
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
FL045-4EK.4F.V5P	141 495	50	1.97	165	6.5	68	2.68	96	3.78	445	17.52	474	18.66	539	21.22	9.5	0.37	515	20.28	P
FL050-4EK.4I.V5P	141 499	33	1.3	181	7.13	68	2.68	113	4.45	497	19.57	524	20.63	590	23.23	9.5	0.37	565	22.24	P
FL056-6EK.4I.V5P	141 503	41	1.61	175	6.89	70	2.76	105	4.13	552	21.73	652	25.67	725	28.54	9.5	0.37	700	27.56	P

L-KL-2711

FL

Electrical connection
Connection cable

