

Fans & Drives

ZIEHL-ABEGG 



Fans • Motors • Control Systems

1st Edition

Welcome to the first edition of Ziehl-Abegg Australia's exclusive condensed catalogue. This publication is a quick reference guide for those working in the HVAC & R markets requiring fans, motors and speed controllers.

Local Product

This catalogue contains information on fans and motors supplied locally into the Australian and New Zealand HVAC & R markets. Several new products are also included in this catalogue. Please check availability of products before ordering.

Imported Product

There are assembled products imported into Australia and New Zealand using Ziehl-Abegg fans

and motors. Whilst we may not stock the exact item, a locally stocked fan or motor may satisfactorily replace the original. It is very important to check the operating voltage, frequency and airflow direction when replacing fans and motors on imported product.

Product Identification

Identification information is on all fans and motors when manufactured. Pages 2 to 8 provide information on identification of Ziehl-Abegg products.

Warranty

All Ziehl-Abegg products carry 2 years warranty from the date of purchase, subject to correct use and application. Specific warranty details are available on request.

Availability

To locate your nearest wholesaler, contact Ziehl-Abegg Australia on 03 9931 0899

Disclaimer

Whilst every care has been taken in compilation of this catalogue, Ziehl-Abegg Australia take no responsibility for any errors or inaccuracies. Further product details are available in the specialized Ziehl-Abegg catalogues or online at www.ziehl-abegg.com

Sound Data

For the purpose of this catalogue, all sound data has been corrected to approximate sound pressure (dBA) at 1 metre.

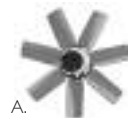
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1. What style of impeller does it have?

Looks like a propeller	Axial (A)
Looks like a rotating drum	Centrifugal or radial
Blades look like a venetian blind	Forward curve (B)
Blades look like they are running backwards	Backward curve (C)



2. What is the diameter?

Axial

315mm +	Ziehl-Abegg
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Radial

220mm +	Ziehl-Abegg
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3. How many blades?

Axial

4 Blades	Ziehl-Abegg FB style axial (D)
5 Blades or more	Ziehl-Abegg axial (E)

Radial

8-12 Blades	Probably a backward curve centrifugal (N)
More than 12 Blades	Forward curve centrifugal (O)



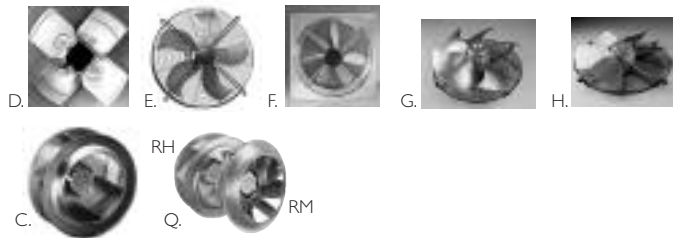
4. What type of blade material?

Axial

Die cast alloy	FC (F) , FE (G) , FA (H)
Aluminium sheet	FB (D) , FL (E)

Radial

Sheet steel	Ziehl-Abegg (EXe) backward curved (C)
Aluminium sheet	RH or RM series (Q)



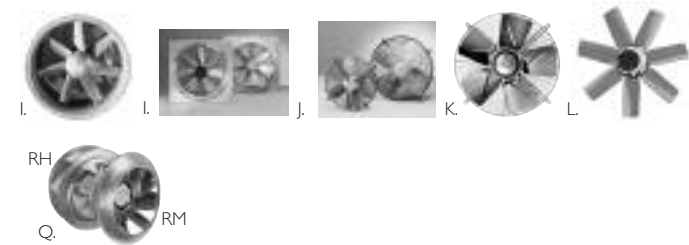
5. What mounting style or housing?

Axial

Wall plate square or round?	(I)
Basket grille?	(J)
Flat grille?	(K)
No mounting?	(L)

Radial

No housing	(commonly) backward curve
	Ziehl-Abegg RH, RM (Q)



3

Photos and drawings may not be a correct representation of all products.

General Information
Humidity/Temperature Sensors
Airflow Velocity Sensors
Pressure Sensors
Motor Protection Devices
Noise filters
Frequency Controllers
Voltage Controllers
Transformer Controllers
Backward Curved Radial

Mixed Flow Radial
Centrifugal Impeller
Basket Grille Axial
Flanged Tube Axial
Square Plate Axial
Axial Fan
Part Number Locations
Ziehl-Abegg Part Nos
Fan Identification

5. What mounting style or housing? (continued)

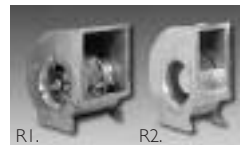
Radial

Snail shell housing 1 inlet

	Ziehl-Abegg RG series (R2)
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Snail shell with 2 inlets

	Ziehl-Abegg RD series (R1)
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6. Which way does the air flow?

Axial

When looking at rotor (spinning part) does the air:

Blow in your face?	Airflow 'A'
Blow away from your face?	Airflow 'V' (out over mounting brackets) (M)

Radial

Not really applicable



M.

7. What is the power supply?

Single Phase (230V), Three Phase (400V) or DC	
Don't count the leads, this is not an indication.	
If a capacitor is present	Single phase

(Other Voltage may apply if from imported equipment)

8. What speed?

(most customers may not know this if the label has worn off)

~2800rpm	2 pole
~1440rpm	4 pole
~960rpm	6 pole

~720rpm	8 pole
~540rpm	10 pole
~400rpm	12 pole

9. What colour?

Axial

Beige	FC
Black	Either FE, FA or FB
Grey	Usually FC

Radial

Radial fans are usually not painted any specific colour.	
Blue	RH..C impeller

10. What has it come off?

Imported equipment	We can only offer the closest alternative
Local equipment	Which brand?
	We may be able to work out what the model is.

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General Information

Humidity/Temperature Sensors

Airflow Velocity Sensors

Pressure Sensors

Motor Protection Devices

Noise filters

Frequency Controllers

Voltage Controllers

Transformer Controllers

5

Backward Curved Radial

Mixed Flow Radial

Centrifugal Impeller

Basket Grille Axial

Flanged Tube Axial

Square Plate Axial

Axial Fan

Part Number Locations

Ziehl-Abegg Part Nos

Fan Identification

Ziehl-Abegg Radial/Centrifugal Part No.

1	2	3	4	5	6	7	8	9	10	11	12	
<input type="text" value="R"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	—	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

1
 radial / centrifugal

2
 fan type (H = single inlet backward curved, M = mixed flow)

3

4
 fan size (cm)

5
 fan Series

6
 number of poles

7
 power supply (D = 3 phase, E = 1 phase, G = D.C., K = electronic)

8
 motor pattern

9
 motor group

10
 motor length & details

11

12
 blade details

1	2	3	4	5	6	7	8	9	10	11	12
F					-						

- 1 axial fan
- 2 Fan series
- 3 4 5 fan size (cm)
- 6 number of poles
- 7 power supply (D = 3 phase, E = 1 phase, G = D.C., K = electronic)
- 8 pattern (A = bare fan, K = basket grille, Q = wall plate)
- 9 motor group (size)
- 10 motor length & details
- 11 direction of flow
- 12 blade angle



Typical Location of Part Numbers



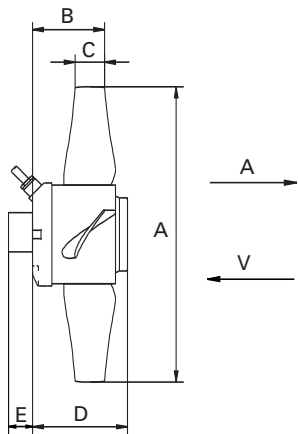
Ziehl Abegg Axial



Ziehl Abegg Mixed Flow



Ziehl Abegg Radial



MAY HAVE LEAD OR TERMINAL BOX



'FC'



'FB'



'FE'

Dimensions

	A	B	C	D	E
FB045-4EA.4F.1P	445	135	96	141	-
FC035-4EA.2C.1	353	87	36	113	35
FC035-VDA.2C.1	353	87	36	113	35
FC040-4EA.2F.1	396	92	36	130	35
FC040-6EA.2F.1	396	92	36	130	35
FC040-VDA.2F.1	396	92	36	130	35
FC045-4EA.4C.1	447	99	33	126	35
FC045-4EA.4C.2	447	93	33	126	35
FC045-6EA.4C.1	447	99	33	126	35
FC045-VDA.4C.1	447	99	33	126	35
FC045-VDA.4C.2	447	93	33	126	35

* APPROX

Part No.	Article No.	Air Flow Direction	Voltage (V)	Phase	Air Volume (m ³ /Hr)	Speed (RPM)	Power Input (W)	Current (A)	Capacitor (µF)	Noise Level (dBA@1M) see inside cover	Min-Static Pressure (Pa)	MaxAirTemperature(°C)	Approx Weight (Kg)	Colour	Wiring Diagram
FB045-4EA.4F.1P	108380	A	230	1	5900	1325	480	2.30	10	70		60			104XB
FC035-4EA.2C.1	209444/I	A	230	1	3500	1270	210	1.05	5	68		50			104XB
FC035-VDA.2C.1	100533	A	400	3	3500	1320	150	.31	-	68		70			104XA
FC040-4EA.2F.1	209445/I	A	230	1	5150	1330	330	1.65	6	74		40			104XB
FC040-6EA.2F.1		A	230	1	3550	940	130	.65	4	63		70			104XB
FC040-VDA.2F.1	100576A	A	400	3	5100	1310	240	.50	-	73		70			104XA
FC045-4EA.4C.1	200948	A	230	1	6300	1310	400	1.95	8	71		40			104XB
FC045-4EA.4C.2	205552	V	230	1	6300	1310	400	1.95	8	71		40		GRY	104XA
FC045-6EA.4C.1	100630	A	230	1	4250	915	170	.84	5	62		70		GRY	104XB
FC045-VDA.4C.1	209421	A	400	3	6200	1350	340	.74	-	71		60		GRY	104XA
FC045-VDA.4C.2	204408	V	400	3	6200	1350	340	.74	-	71		60		GRY	104XA

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General Information

Humidity/Temperature Sensors

Airflow Velocity Sensors

Pressure Sensors

Motor Protection Devices

Noise filters

Frequency Controllers

Voltage Controllers

Transformer Controllers

Backward Curved Radial

Mixed Flow Radial

Centrifugal Impeller

Basket Grille Axial

Flanged Tube Axial

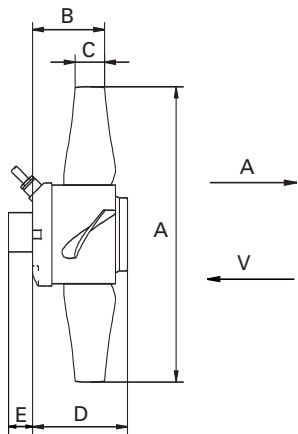
Square Plate Axial

Axial Fan

Part Number Locations

Ziehl-Abegg Part Nos

Fan Identification



MAY HAVE LEAD OR TERMINAL BOX



'FC'



'FB'

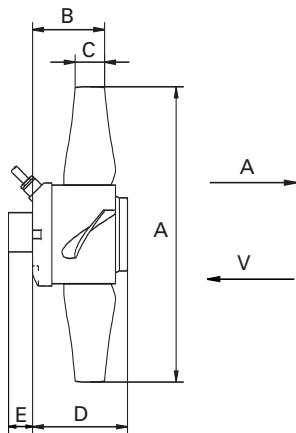


'FE'

Dimensions

	A	B	C	D	E
FC050-4EA.4F.1	497	100	37	141	35
FC050-VDA.4F.1	497	100	37	141	35
FC050-VDA.4F.2	497	79	37	141	35
FC056-VDA.4I.1	553	95	46	161	35
FC063-VDA.6K.2	627	97	43	161	35
FE035-4EA.OF.1	353	104	66	118	-
FE035-4EA.OF.2	353	96	66	118	-
FE035-VDA.OC.1	353	104	66	118	-
FE035-VDA.OC.2	353	96	66	118	-
FE040-4EA.2F.1	396	94	57	129	62
FE040-4EA.2F.2	396	86	57	129	62
FE040-VDA.2C.1	396	94	57	129	62
FE040-VDA.2C.2	396	86	57	129	62

Part No.	Article No.	Air Flow Direction	Voltage (V)	Phase	Air Volume (m ³ /Hr)	Speed (RPM)	Power Input (W)	Current (A)	Capacitor (µF)	Noise Level (dBA@1M) see inside cover	Min-Static Pressure (Pa)	MaxAirTemperature(°C)	Approx Weight (Kg)	Colour	Wiring Diagram
FC050-4EA.4F.1	209424	A	230	1	8100	1230	580	2.70	10	75		50		GRY	104XB
FC050-VDA.4F.1 BLACK	122751	A	400	3	8300	1400	550	1.15	-	76		45		BLK	104XA
FC050-VDA.4F.2	204409	V	400	3	8300	1400	550	1.15	-	76		45		GRY	104XA
FC056-VDA.4I.1	209453	A	400	3	12900	1280	1050	2.1	-	82		40		GRY	104XA
FC063-VDA.6K.2	209406	V	400	3	18200	1310	1900	3.45	-	83		40		GRY	104XA
FE035-4EA.OF.1	120847	A	230	1	3140	1400	200	.9	5	62		70	5.3	BLK	104XB
FE035-4EA.OF.2	120920	V	230	1	3140	1400	200	.9	5	62		70	5.3	BLK	104XA
FE035-VDA.OC.1	128643	A	400	3	3100	1360	180	0.35	-	61		70	4	BLK	108XA
FE035-VDA.OC.2	128644	V	400	3	3100	1360	180	0.35	-	61		70	4	BLK	108XA
FE040-4EA.2F.1	120848	A	230	1	4700	1320	310	1.35	4	67		60	7.4	BLK	104XB
FE040-4EA.2F.2	121961	V	230	1	4700	1320	310	1.35	4	67		60	7.4	BLK	104XA
FE040-VDA.2C.1	120849	A	400	3	4650	1300	270	.48	1	66		70	6.2	BLK	108XA
FE040-VDA.2C.2	120921	V	400	3	4650	1300	270	.48	1	66		70	6.2	BLK	108XA



MAY HAVE LEAD OR TERMINAL BOX



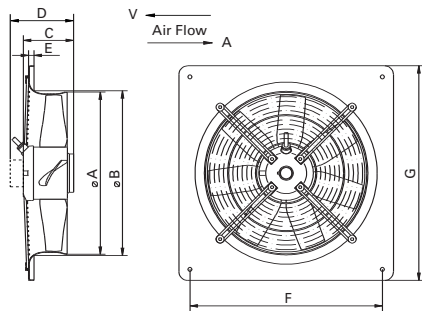
Dimensions

	A	B	C	D	E
FE045-4EA.4I.1	446	111	84	160	62
FE045-4EA.4I.2	446	123	84	160	62
FE045-6EA.4F.2	446	123	84	160	62
FE045-VDA.4F.1	446	111	84	160	62
FE045-VDA.4F.2	446	123	84	160	62
FE050-4EA.4I.1	497	111	88	160	62
FE050-4EA.4I.2	497	127	88	160	62
FE050-6EA.4F2 LEAD	497	127	88	160	62
FE050-VDA.4I.1STDV	497	111	88	160	62
FE050-VDA.4I.2STDV	497	127	88	160	62
FE080-ADA.6K.2	788	144	92	207	-
FS045-6EA.2C.2	454	-	125	140	-
FE050-VDA.4I.2JBOX	497	127	88	161	62

Part No.	Article No.	Air Flow Direction	Voltage (V)	Phase	Air Volume (m ³ /Hr)	Speed (RPM)	Power Input (W)	Current (A)	Capacitor (µF)	Noise Level (dBA@1M) see inside cover	Max Air Temperature (C)	Approx Weight (Kg)	Colour	Wiring Diagram	Replacement For
FE045-4EA.4I.1	I20011	A	230	1	7200	1310	610	2.8	14	69	60	12.0	BLK	I04XB	
FE045-4EA.4I.2	I20430	V	230	1	7200	1310	610	2.8	14	69	60	12.0	BLK	I04XA	
FE045-6EA.4F.2	I20043	V	230	1	4910	910	210	.91	6	62	70	10.7	BLK	I04XA	
FE045-VDA.4F.1	I20851	A	400	3	7350	1340	610	.61	3	71	60	10.7	BLK	I08XA	
FE045-VDA.4F.2	I21609	V	400	3	7350	1340	610	.61	3	71	60	10.7	BLK	I08XA	
FE050-4EA.4I.1	I20852	A	230	1	9050	1210	770	3.4	16	68	60	13.0	BLK	I04XB	
FE050-4EA.4I.2	I20201	V	230	1	9050	1210	770	3.4	16	68	60	13.0	BLK	I04XA	
FE050-6EA.4F.2 LEAD	I20042	V	230	1	6400	890	290	1.25	10	61	60	11.0	BLK	I04XA	
FE050-VDA.4I.1STDV	I20853/I	A	400	3	9700	1340	780	1.35	3	69	60	13.0	BLK	I08XA	
FE050-VDA.4I.2STDV	I20922	V	400	3	9700	1340	780	1.35	3	69	60	13.0	BLK	I08XA	K,LL
FE080-ADA.6K.2	I20823	V	400	3	18000	630	930	2.0	6	69	50	43.0	BLK	I08XA	
FS045-6EA.2C.2	I09850/I	V	230	1	3850	840	160	.73	5	59	60		BLK	I04XA	
FE050-VDA.4I.2 JBOX	I07736	V	400	3	9750	1340	780	1.35	3	76	60	11.2	BLK	I08XA	

LL=LOVELOCK LUKE, BT=BUFFALO TRIDENT, K=KIRBY, GH=GREENHALGH

Square Plate Axials



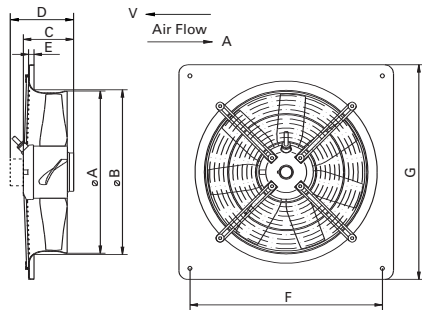
'FC'

GRILLE MAY BE ON AIR INLET 'A' (.3) FLOW
OR OUTLET 'V' (.5) FLOW
PICTURE & DRAWING 'A' (.3) FLOW

Dimensions	Art #	A	B	C	D	E	F	G
FB050-4EQ.4I.5P	203616	549	580	155	207	16	615	655
FC031-4EQ.2A.3	206806	324	330	100	135	11	380	430
FC031-VDQ.2A.3	100516	324	330	100	135	11	380	430
FC035-4EQ.2C.3	103136	368	375	113	148	12	435	485
FC035-6EQ.2C.3	103134	368	375	113	148	12	435	485
FC035-VDQ.2C.3	103288/1	368	375	113	148	12	435	485
FC040-4EQ.2F.3	101215	412	420	130	165	12	490	540
FC040-6EQ.2F.3	204606/2	412	420	130	165	12	490	540
FC040-VDQ.2F.3	206826/1	412	420	130	165	12	490	540
FC045-4EQ.4C.3	102144	463	480	126	161	14	535	575
FC045-6EQ.4C.3	104772	463	480	126	161	14	535	575
FC045-SDQ.4C.3	201954	463	480	126	161	14	535	575
FC045-VDQ.4C.3	104783/1	463	480	126	161	14	535	575

Part No.	Article No.	Air Flow Direction	Voltage (V)	Phase	Air Volume (m ³ /Hr)	Speed (RPM)	Power Input (W)	Current (A)	Capacitor (µF)	Noise Level (dBA@1M) see inside cover	Min-Static Pressure (Pa)	MaxAirTemperature(°C)	Approx Weight (Kg)	Colour	Wiring Diagram
FB050-4EQ.4I.5P	203616	V	230	1	7900	1220	640	3.0	12	73		50		GRY	104XA
FC031-4EQ.2A.3	206806	A	230	1	2050	1300	150	.75	3	61		65		GRY	104XB
FC031-VDQ.2A.3	100516	A	400	3	2040	1350	90	.2		60		70		GRY	108XA
FC035-4EQ.2C.3	103136	A	230	1	3500	1270	210	1.05	5	68		50		GRY	104XB
FC035-6EQ.2C.3	103134	A												GRY	104XB
FC035-VDQ.2C.3	103288/1	A	400	3	3500	1320	150	.31	-	68		70		GRY	108XA
FC040-4EQ.2F.3	101215	A	230	1	5150	1330	330	1.65	6	74		40		GRY	104XB
FC040-6EQ.2F.3	204606/2	A	230	1	3550	940	130	.65	4	63		70		GRY	104XB
FC040-VDQ.2F.3	206826/1	A	400	3	5100	1310	240	.50	-	73		70		GRY	108XA
FC045-4EQ.4C.3	102144	A	230	1	6300	1310	400	1.95	8	71		40		GRY	104XB
FC045-6EQ.4C.3	104772	A	230	1	4250	915	170	.84	5	62		70		GRY	104XB
FC045-SDQ.4C.3	201954	A	400	3	4100	910	110	.31	-	62		70		GRY	108XA
FC045-VDQ.4C.3	104783/1	A	400	3	6200	1350	340	.74	-	71		60		GRY	108XA

Square Plate Axials



'FC'

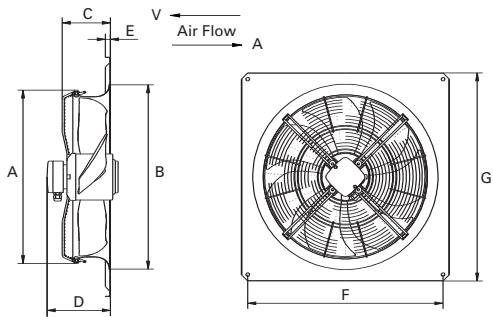
GRILLE MAY BE ON AIR INLET 'A' (.3) FLOW
OR OUTLET 'V' (.5) FLOW
PICTURE & DRAWING 'A' (.3) FLOW

FC071-SDQ.6K.3 DOES NOT INCLUDE GRILLE

Dimensions	Art #	A	B	C	D	E	F	G
FC050-4EQ.4F.3	104347M/	517	535	185	198	16	615	655
FC050-6EQ.4F.3	104742/1	517	535	185	198	16	615	655
FC050-VDQ.4F.3	104757/1	517	535	185	198	16	615	655
FC050-VDQ.4F.5	102719	517	535			16	560	600
FC056-4EQ.6K.3	200731	568	590	205	218	16	675	725
FC056-6EQ.4F.3	104741	568	590	205	218	16	675	725
FC056-VDQ.4I.3	100727	568	590	205	218	16	675	725
FC056-VDQ.6F.3	202136	568	600	223	245	16	675	725
FC056-VDQ.6F.5	207403	568	600			16	675	725
FC063-6EQ.4I.3	104743	643	670	205	218	20	750	805
FC063-SDQ.4I.3	205881	643	670	205	218	20	750	805
FC063-VDQ.6K.3	100774	643	670	205	218	20	750	805
FC063-VDQ.6K.5 L/T	204718	643	670	230	256	20	750	805
FC071-SDQ.6K.3	100817A	721	765	222	245	20	810	850

Part No.	Article No.	Air Flow Direction	Voltage (V)	Phase	Air Volume (m ³ /Hr)	Speed (RPM)	Power Input (W)	Current (A)	Capacitor (µF)	Noise Level (dBA@1M see inside cover)	Max Air Temperature (°C)	Approx Weight (Kg)	Colour	Wiring Diagram	Replacement For
FC050-4EQ.4F.3	101494M	A	230	1	8100	1230	580	2.7	10	75	50		GRY	I04XB	
FC050-6EQ.4F.3	104742/I	A	230	1	5400	890	280	1.6	8	67	60		GRY	I04XB	
FC050-VDQ.4F.3	104757/I	A	400	3	8300	1400	550	1.15	-	76	45		GRY	I08XA	
FC050-VDQ.4F.5	102719	V	400	3	8300	1400	550	1.15	-	77	60		GRY	I08XA	GH,BT,K,LL
FC056-4EQ.6K.3	200731	A	230	1	13000	1300	1600	7.5	35	69	50		GRY	I04XB	
FC056-6EQ.4F.3	104741	A	230	1	9000	880	510	2.55	10	68	45		GRY	I04XB	
FC056-VDQ.4I.3	100727	A	400	3	12900	1280	1050	2.1	-	74	40		GRY	I08XA	
FC056-VDQ.6F.3	202136	A											GRY	I08XA	
FC056-VDQ.6F.5	207403	V	400	3	13300	1340	1370	2.7	-	76	60		GRY	I08XA	
FC063-6EQ.4I.3	104743	A	230	1	12400	870	700	3.4	14	72	40		GRY	I04XB	
FC063-SDQ.4I.3	205881	A	400	3	12200	900	600	1.45	-	73	40		GRY	I08XA	
FC063-VDQ.6K.3	100774	A	400	3	18200	1310	1900	3.45	-	83	40		GRY	I08XA	
FC063-VDQ.6K.5 L/T	204718	V	400	3	18200	1310	1900	3.45	-	83	60		GRY	I08XA	GH,BT,K,LL
FC071-SDQ.6K.3	100817A	A	400	3	16800	880	880	1.95	-	75	65		GRY	I08XA	

LL=LOVELOCK LUKE, BT=BUFFALO TRIDENT, K=KIRBY, GH=GREENHALGH



'FE'

GRILLE MAY BE ON AIR INLET 'A' (.3) FLOW
OR OUTLET 'V' (.5) FLOW
PICTURE & DRAWING 'V' (.5) FLOW

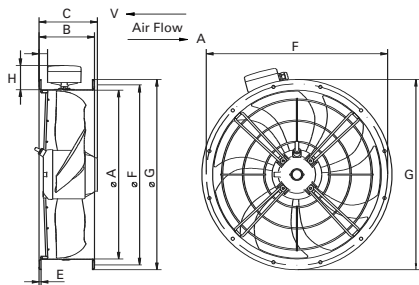
Dimensions

	Art #	A	B	C	D	E	F	G
FE050-4EQ.4I.5-BLACK	123217	548	580	153	201	16	560	600
FE050-SDQ.4F.5-GREY	123216	548	580	153	201	16	615	655
FE050-VDQ.4I.5-GREY	123218	548	580	153	201	16	560	600
FE050-VDQ.4I.5STDPLT	108070	548	580	153	201	16	615	655
FE063-VDQ.6N.5-GREY	125077	638	696	191	239	20	750	805
FE071-SDQ.6F.5	207929	792	795	245	265	20	810	850
FE080-ADQ.6K.5	109542	878	910	309	309	20	910	970
FE080-NDQ.6K.5-GREY	125214	878	910	309	309	20	910	970
FE080-SDQ.6N.5	109541	878	910	309	309	20	910	970
FE091-SDQ.6N.5STD	106860	1007	1025	315	315	20	1010	1070
FE100-NDQ.6N.5	109026	1092	1100	337	337	20	1110	1170

Part No.	Article No.	Air Flow Direction	Voltage (V)	Phase	Air Volume (m ³ /Hr)	Speed (RPM)	Power Input (W)	Current (A)	Capacitor (µF)	Noise Level (dBA@1M) see inside cover	Max Air Temperature (C)	Approx Weight (Kg)	Colour	Wiring Diagram	Replacement For	
FE050-4EQ.4I.5-BLACK	I23217	V	230	1	9050	1210	770	3.4	16	16	68	60	13.0	BLK	I04XA	K,LL, BT
FE050-SDQ.4F.5-GREY	I23216	V	400	3	6350	900	320	.74	2.5	2.5	60	70	11.0	GRY	I08XA	BT & BITZER
FE050-VDQ.4I.5-GREY	I23218	V	400	3	9700	1340	780	1.35	3	3	69	60	20.6	GRY	I08XA	GH,BT,K
FE050-VDQ.4I.5STD	I08070	V	400	3	9700	1340	780	1.35	3	3	69	60	20.6	BLK	I08XA	
FE063-VDQ.6N.5-GR	I25077	V	400	3	20200	1310	2600	4.8	12	12	82	65	39.5	GRY	I08XA	GH,BT,K
FE071-SDQ.6F.5	207929	V	400	3	15000	900	980	1.75	4	4	70	60	33.0	BLK	I08XA	
FE080-ADQ.6K.5	I09542	V	400	3	18000	630	930	2.0	6	6	69	50	43.0	BLK	I08XA	BT
FE080-NDQ.6K.5-GREY	I25214	V	400	3	12300	440	370	1.2	5	5	61	70	43.0	GRY	I08XA	K
FE080-SDQ.6N.5	I09541	V	400	3	25600	880	2000	4.0	12	12	77	50	48.0	BLK	I08XA	BT,K
FE091-SDQ.6N.5STD	I06860	V	400	3	26000	860	1650	3.5	10	10	78	60	54.0	BLK	I08XA	
FEI00-NDQ.6N.5	I09026	V	400	3	25500	420	860	2.0	6	6	65	50	57.0	BLK	I08XA	

LL=LOVELOCK LUKE, BT=BUFFALO TRIDENT, K=KIRBY, GH=GREENHALGH

Flanged Tube Axial



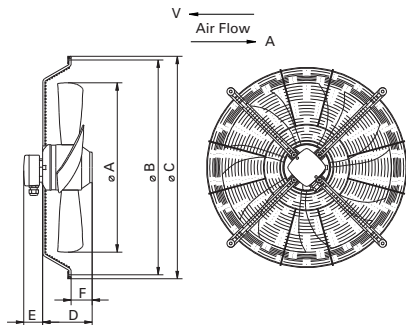
'FE'

AIR FLOW DIRECTION MAY VARY

Dimensions

	Art #	A	B	C	D	E	F	G	H
FE035-4EF.0F.6L		356	135	-	-	6	395	420	72
FE035-VDF.0C.6L		356	135			6	395	421	72
FE040-4EF.2F.6L		400	155	-	-	6	438	466	72
FE040-VDF.2C.6		400	155	-	-	6	438	466	72
FE045-4EF.4I.6L		451	160	173.5	-	6	487	515	72
FE045-VDF.4F.6L		451	160	173.5	-	6	487	515	72
FE050-4EF.4I.6L		503	165	173.5	-	6	541	567	72
FE050-VDF.4I.6L		503	165	173.5	-	6	541	567	72
FC056-6EF.4F.3	104299	559	210	200	-	6	605	636	72
FC056-VDF.4I.3L		559	210	200	-	6	605	636	72

Part No.	Article No.	Air Flow Direction	Voltage (V)	Air Volume (m ³ /Hr)	Speed (RPM)	Power Input (W)	Current (A)	Capacitor (µF)	Noise Level (dBA@1M) see inside cover	Min-Static Pressure (Pa)	MaxAirTemperature(°C)	Approx Weight (Kg)	Colour	Wiring Diagram
FE035-4EF.0F.6L			V	230	1	3140	1400	200	.9	5	62	70	5.3	104XA
FE035-VDF.0C.6L			V		1									108XA
FE040-4EF.2F.6L			V	230	1	4700	1320	310	1.35	4	67	60	7.4	104XA
FE040-VDF.2C.6			V	400	3	4650	1300	270	.48	1	66	70	6.2	108XA
FE045-4EF.4I.6L			V	230	1	7200	1310	610	2.8	14	69	60	12.0	104XA
FE045-VDF.4F.6L			V	400	3	7350	1340	610	1.15	3	71	60	10.7	108XA
FE050-4EF.4I.6L			V	230	1	9050	1210	770	3.4	16	68	60	13.0	104XA
FE050-VDF.4I.6L			V	400	3	9700	1340	780	1.35	3	69	60	13.0	108XA
FC056-6EF.4F.3	104299		A	230	1	9000	880	510	2.55	10	73	45		104XB
FC056-VDF.4I.3L			A	400	3	12900	1280	1050	2.10	-	82	40		108XA



SHAPE OF BASKET GRILLE VARIES



'FB'



'FE'



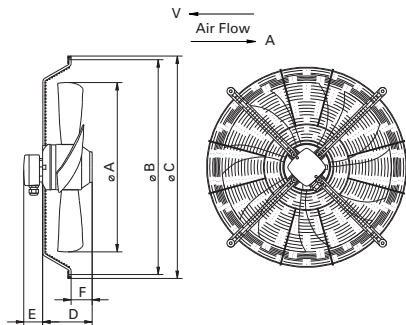
'FL'

Dimensions

	Art #	A	B	C	D	E	F
FA040-4EK.2F.6	104317L	395	455	479	129	63	75
FA065-SDK.4I.6 J/BO	206815	652	750	778	141	63	49
FB040-4EK.2F.6P	105318	395	455	477	125		
FB045-4EK.4F.6P	205582	445	515	539	144		
FB050-4EK.4F.6L 'P'	203352	497	597	621	135		
FB050-4EK.4F.6L	101633	497	565	589	135		
FB050-4EK.4I.6P - STD	101643	497	565	589	135		
FB050-VDK.4F.6L	104982	497	597	621	135		
FB050-VDK.4I.6P	108125	497	597	621	144		
FB050-VDK.4I.6P KIRB	125973	497	565	589			
FB056-6EK.4I.6P	101662	552	700	725	148		
FB056-SDK.4F.6P	207608	552	700	725	148		
FB063-6EK.4I.6P	101680	627	750	778	148		
FB063-VDK.4M.6L	128540	627	750	778	181	64	76

Part No.	Article No.	Air Flow Direction	Voltage (V)	Phase	Air Volume (m ³ /Hr)	Speed (RPM)	Power Input (W)	Current (A)	Capacitor (µF)	Noise Level (dBA@1M) see inside cover	Max Air Temperature (C)	Approx Weight (Kg)	Colour	Wiring Diagram	Replacement For
FA040-4EK.2F.6	104317L	V	230	1	4000	1260	320	1.65	6	69	40				104XA
FA065-SDK.4I.6 J/BO	206815	V	400	3	12100	880	750	1.65	-	74	40				108XA
FB040-4EK.2F.6P	105318	V	230	1	4100	1350	280	1.45	6	66	50				104XA LL,K
FB045-4EK.4F.6P	205582	V	230	1	5900	1325	480	2.3	10	70	60				104XA
FB050-4EK.4F.6L 'P'	203352	V	230	1	7100	1240	570	2.7	12	68	50				104XA K
FB050-4EK.4F.6L	101633	V	230	1	7100	1240	570	2.7	12	68	50				104XA K
FB050-4EK.4I.6P - STD	101634	V	230	1	7100	1180	640	2.8	10	-	60				104XA
FB050-VDK.4F.6L	104982	V	400	3	7100	1370	580	1.15	-	69	40				108XA K,LL
FB050-VDK.4I.6P	108125	V	400	3	8300	1330	650	1.15	-	73	55				108XA K,LL
FB050-VDK.4I.6P KIRB	125973	V	400	3	8300	1330	650	1.15		73	55				108XA
FB056-6EK.4I.6P	101662	V	230	1	8300	930	470	2.5	12	67	55				104XA
FB056-SDK.4F.6P	207608	V	400	3	7900	860	390	.92	-	66	50				108XA
FB063-6EK.4I.6P	101680	V	230	1	11200	830	670	3.3	14	72	40				104XA
FB063-VDK.4M.6L	128540	V	400	3	12500	1300	1100	2.2	-	83	60	-	BLACK		108XA

LL=LOVELOCK LUKE, BT=BUFFALO TRIDENT, K=KIRBY, GH=GREENHALGH



SHAPE OF BASKET GRILLE VARIES



'FB'



'FE'



'FL'

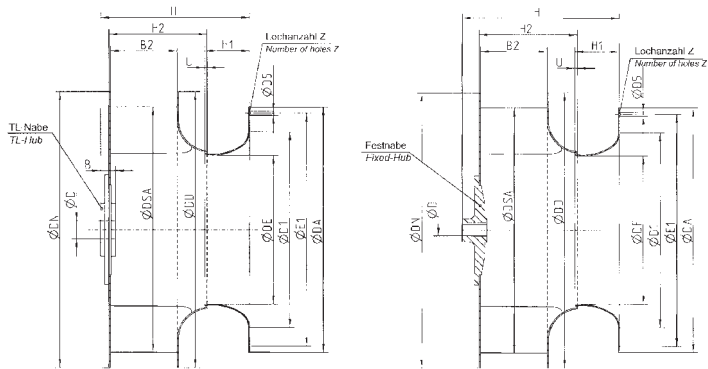
Dimensions

	Art #	A	B	C	D	E	F
FE045-6EK.4F.6 LEA	120043	446	519	539	183	39	87
FE050-4EK.4I.6 J/BO	108121	497	565	589	183	39	87
FE050-6EK.4F.6 J/BO	108423	497	565	589	183	39	87
FE063-SDK.4I.6	121238	627	750	778	218	25	88
FL050-4EK.4I.6P	132160	497	565	589	181	45	68
FL050-VDK.4I.6P	132154	497	565	589	181	45	68
FL050-VDK.4I.6S	132156	497	565	589	181	45	68
FL063-6EK.4I.6P	132948	627	750	778	188	37	58
FL063-SDK.4I.6P	132961	627	750	778	188	37	58

Part No.	Article No.	Air Flow Direction	Voltage (V)	Phase	Air Volume (m ³ /Hr)	Speed (RPM)	Power Input (W)	Current (A)	Capacitor (µF)	Noise Level (dBA@1M) see inside cover	Max Air Temperature (C)	Approx Weight (Kg)	Colour	Wiring Diagram	Replacement For
FE045-6EK.4F.6 LEA	I20043	V	230	1	4910	910	210	.91	6	60	70	10.7			I04XA
FE050-4EK.4I.6 J/BO	I08121	V	230	1	9050	1210	770	3.4	16	68	60	13.0			I04XA
FE050-6EK.4F.6 J/BO	I08423	V	230	1	6400	890	290	1.25	10	61	60	11.0			I04XA
FE063-SDK.4I.6	I21238	V	400	3	11200	900	690	1.25	3	70	65	15.0			I08XA
FL050-4EK.4I.6P	I32160	V	230	1	7300	1290	480	2.1	10	72	70	12.2			I04XA
FL050-VDK.4I.6P	I32154	V	400	3	7800	1370	540	1.05	3	79	60	12.2			I08XA
FL050-VDK.4I.6S	I32156	V	400	3	8600	1380	580	1.15	3	73	60	12.2			I08XA
FL063-6EK.4I.6P	I32948	V	230	1	9800	920	500	2.3	12	68	60	13.2			I04XA
FL063-SDK.4I.6P	I32961	V	400	3	9600	890	400	0.77	2	68	70	13.2			I08XA

LL=LOVELOCK LUKE, BT=BUFFALO TRIDENT, K=KIRBY, GH=GREENHALGH

Centrifugal Impeller



'RH'

Ziehl-Abegg impellers are supplied with inlet rings. Please refer to pages 28–30 for impeller and inlet ring dimensions. For "Ex" applications, please contact Ziehl-Abegg Australia.

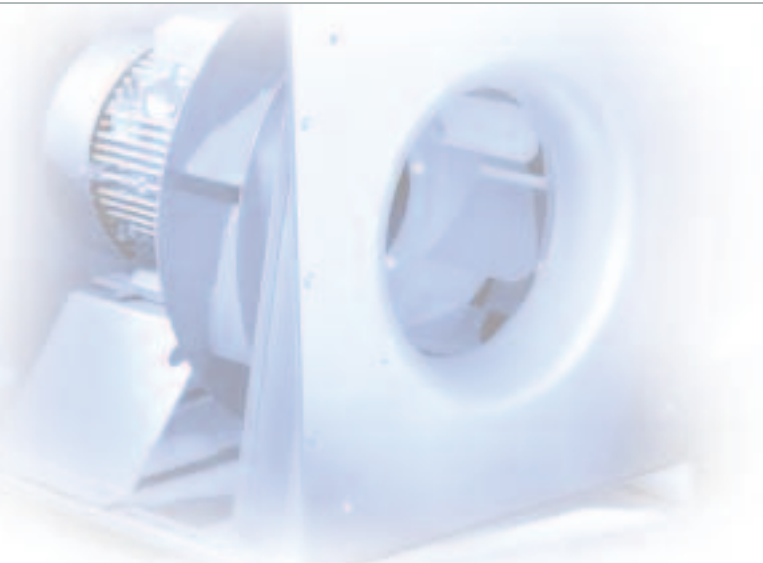
Part No.	Min. RPM	Max. RPM	Max. airflow (m ³ /h) @ 500Pa	Max. static pressure (Pa.)
RH22C	2800	5940	3450	2600
RH25C	2855	5350	4350	2680
RH28C	2855	4775	5450	2620
RH31C	2320	4245	6750	2600
RH35C	1900	3765	8600	2600
RH40C	1560	3340	10800	2590
RH45C	1620	2970	13800	2590
RH50C	1470	2675	17500	2680
RH56C	1230	2310	21400	2460
RH63C	1020	2060	27000	2450
RH71C	950	1840	34000	2480
RH80C	950	1620	43000	2450
RH90C	710	1465	55400	2540
RH10C	715	1280	69500	2450

Type	Article No.	D	B	B2	DA	DD	DE	DN	DSA	DI	D5	EI	H	HI	H2	U	Z
RH22C/SMI2-1	I12261VAR	14-19	25	62	253	257	135	257	229	179	8,5	233	147	42	92	2,0	3x120°
RH25C/SMI2-1	I12262VAR	19-24	25	70	277	290	153	290	258	202	8,5	257	163	47	103	2,5	3x120°
RH28C/SMI2-2	I12263VAR	19-28	25	78	303	322	171	322	286	225	8,5	283	179	52	115	3,0	3x120°
RH31C/SMI2-2	I12264VAR	19-28	25	87	343	360	193	360	320	253	8,5	317	199	59	128	3,0	4x90°
RH35C/SMI2-2	I12265VAR	19-28	25	98	378	406	218	406	360	286	8,5	352	222	66	144	3,5	4x90°
RH40C/SMI2-2	I12266VAR	19-28	25	110	418	457	246	457	406	322	8,5	392	248	74	163	4,0	4x90°
RH40C/SM20	I12275VAR	38	32	110	418	457	246	457	406	322	8,5	392	250	74	163	4,0	4x90°
RH45C/SM20	I12267VAR	19-38	32	124	464	515	278	515	458	364	8,5	438	279	83	183	4,5	4x90°
RH50C/SM20	I12268VAR	24-42	32	140	514	579	312	579	515	410	8,5	488	312	94	206	5,0	4x90°
RH56C/SM20	I12269VAR	28-42	32	155	564	644	347	644	572	455	8,5	538	344	104	229	6,0	4x90°
RH63C/SM25	I12270VAR	28-42	45	174	634	721	389	721	641	510	10,5	600	392	117	256	6,0	6x60°
RH71C/SM25	I12271VAR	28-48	45	196	704	811	437	811	721	573	10,5	670	437	131	288	7,0	6x60°
RH80C/SM25	I12272VAR	38-48	45	221	784	914	493	914	813	646	10,5	750	490	148	325	8,0	6x60°
RH90C/SM30	I12273VAR	38-55	51	249	874	1030	555	1030	916	728	10,5	840	552	167	366	9,0	8x45°
RH10C/SM30	I12274VAR	42-65	51	280	974	1159	625	1159	1030	819	10,5	940	617	187	412	10,0	8x45°

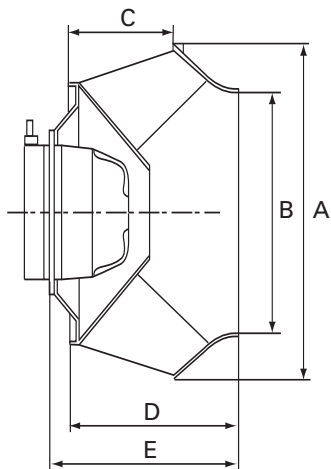
Photos and drawings may not be a correct representation of all products.

Type	Article No.	D	B2	DA	DD	DE	DN	DSA	DI	D5	EI	H	HI	H2	U	Z
RH22C/NA02	112276VAR	14	62	253	257	135	257	229	179	8,5	233	152	42	92	2,0	3x120°
RH22C/NA02	112276VAR	19	62	253	257	135	257	229	179	8,5	233	162	42	92	2,0	3x120°
RH25C/NA02	112277VAR	19-24	70	277	290	153	290	258	202	8,5	257	178	47	103	2,5	3x120°
RH28C/NA04	112278VAR	19-28	78	303	322	171	322	286	225	8,5	283	194	52	115	3,0	3x120°
RH31C/NA04	112279VAR	19-28	87	343	360	193	360	320	253	8,5	317	214	59	128	3,0	4x90°
RH35C/NA04	112280VAR	19-28	98	378	406	218	406	361	286	8,5	352	237	66	144	3,5	4x90°
RH40C/NA04	112281VAR	19-28	110	418	457	246	457	406	322	8,5	392	263	74	163	4,0	4x90°
RH40C/NS06	112290VAR	38	110	418	457	246	457	406	322	8,5	392	268	74	163	4,0	4x90°
RH45C/NS06	112282VAR	19	124	464	515	278	515	458	364	8,5	438	287	83	183	4,5	4x90°
RH45C/NS06	112282VAR	24-38	124	464	515	278	515	458	364	8,5	438	297	83	183	4,5	4x90°
RH50C/NS06	112283VAR	24-42	140	514	579	312	579	515	410	8,5	488	330	94	206	5,0	4x90°
RH56C/NS06	112284VAR	28-42	155	564	644	347	644	572	455	8,5	538	362	104	229	6,0	4x90°
RH63C/NS07	112285VAR	28-42	174	634	721	389	721	641	510	10,5	600	402	117	256	6,0	6x60°
RH71C/NS07	112286VAR	28-48	196	704	811	437	811	721	573	10,5	670	448	131	288	7,0	6x60°
RH80C/NS07	112287VAR	38-48	221	784	914	493	914	813	646	10,5	750	500	148	325	8,0	6x60°
RH90C/NS08	112288VAR	38-55	249	874	1030	555	1030	916	728	10,5	840	559	167	366	9,0	8x45°
RH10C/NS08	112289VAR	42-65	280	974	1159	625	1159	1030	819	10,5	940	624	187	412	10,0	8x45°

Centrifugal Impeller Notes



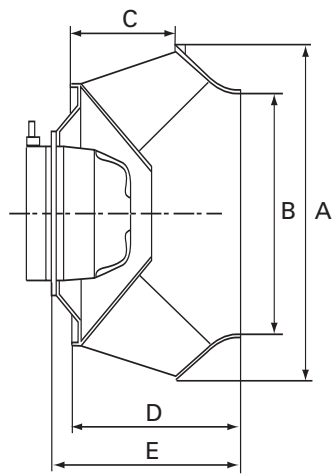
- General Information
- Humidity/Temperature Sensors
- Airflow Velocity Sensors
- Pressure Sensors
- Motor Protection Devices
- Noise Filters
- Frequency Controllers
- Voltage Controllers
- Transformer Controllers
- 31**
- Backward Curved Radial
- Mixed Flow Radial
- Centrifugal Impeller**
- Basket Grille Axial
- Flanged Tube Axial
- Square Plate Axial
- Axial Fan
- Part Number Locations
- Ziehl-Abegg Part Nos
- Fan Identification



Dimensions

	Art #	A	B	C	D	E
RM35D-4EK.4C.1R	106012	360	267	113	184	242
RM35D-6EK.4A.1R	106013	360	267	113	184	242
RM35D-VDK.4A.1R	106011	360	267	113	184	242
RM40D-4EK.4I.1R	106018	422	298	131	213	268
RM40D-6EK.4C.1R	106021	422	298	131	213	268
RM40D-SDK.4A.1R	106020	422	298	131	213	268
RM40D-VDK.4F.1R	106017	422	298	131	213	268
RM45D-4EK.6F.1R	106024	472	336	146	238	311
RM45D-6EK.4I.1R	205829	472	336	146	238	300

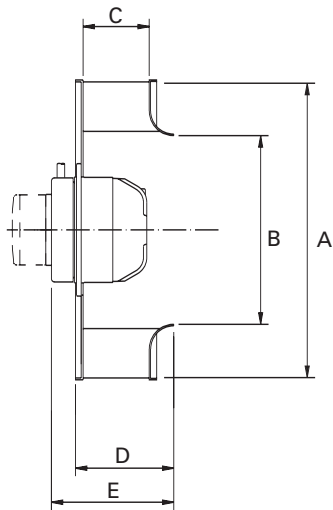
Part No.	Article No.	Air Flow Direction	Voltage (V)	Air Volume (m ³ /Hr) Phase	Speed (RPM)	Power Input (W)	Current (A)	Capacitor (µF)	Noise Level (dBA@1M) see inside cover	Min-Static Pressure (Pa)	MaxAirTemperature(°C)	Approx Weight (Kg)	Colour	Wiring Diagram
RM35D-4EK.4C.1R	106012		230	1	3300	1390	310	1.35	6	70		60		104XA
RM35D-6EK.4A.1R	106013		230	1	1980	800	90	.40	2	56		70		104XA
RM35D-VDK.4A.1R	106011		400	3	3220	1330	250	.48	-	68		50		108XA
RM40D-4EK.4I.1R	106018		230	1	5050	1280	520	2.2	10	72		60		104XA
RM40D-6EK.4C.1R	106021		230	1	3300	800	190	.81	4	59		50		104XA
RM40D-SDK.4A.1R	106020		400	3	3450	890	180	.40	-	61		60		108XA
RM40D-VDK.4F.1R	106017		400	3	5500	1350	540	1.05	-	74		40		108XA
RM45D-4EK.6F.1R	106024		230	1	7700	1330	960	4.3	16	78		40		104XA
RM45D-6EK.4I.1R	205829		230	1	5400	940	400	2.1	8	66		55		104XA



Dimensions

	Art #	A	B	C	D	E
RM45D-SDK.4F.IR	106026	472	336	146	238	300
RM45D-VDK.6C.IR	106023	472	336	146	238	311
RM50D-4EK.6K.IR	106030	522	373	160	262	335
RM50D-6EK.6C.IR	106033	522	373	160	262	335
RM50D-SDK.6C.IR	106032	522	373	160	262	335
RM50D-VDK.6F.IR	106029	522	373	160	262	335
RM56D-6EK.6F.IR	106038	582	420	177	285	358
RM56D-SDK.6C.IR	106037	582	420	177	285	358
RM56D-VDK.6N.IR	106035	582	420	177	285	358

Part No.	Article No.	Air Flow Direction	Voltage (V)	Air Volume (m ³ /Hr) Phase	Speed (RPM)	Power Input (W)	Current (A)	Capacitor (µF)	Noise Level (dBA@1M) see inside cover	Min-Static Pressure (Pa)	MaxAirTemperature(°C)	Approx Weight (Kg)	Colour	Wiring Diagram
RM45D-SDK.4F.IR	I06026		400	3	5100	890	310	.72	-	65		60		I08XA
RM45D-VDK.6C.IR	I06023		400	3	7700	1330	890	1.65	-	77		40		I08XA
RM50D-4EK.6K.IR	I06030		230	1	9700	1310	1450	6.1	30	80		40		I04XA
RM50D-6EK.6C.IR	I06033		230	1	6800	850	430	1.95	8	68		65		I04XA
RM50D-SDK.6C.IR	I06032		400	3	6650	860	410	1.0	-	67		70		I08XA
RM50D-VDK.6F.IR	I06029		400	3	10500	1320	1350	2.4	-	80		40		I08XA
RM56D-6EK.6F.IR	I06038		230	1	8900	830	680	3.0	14	70		50		I04XA
RM56D-SDK.6C.IR	I06037		400	3	9200	850	670	1.45	-	70		40		I08XA
RM56D-VDK.6N.IR	I06035		400	3	15000	1350	2400	4.3	-	82		40		I08XA



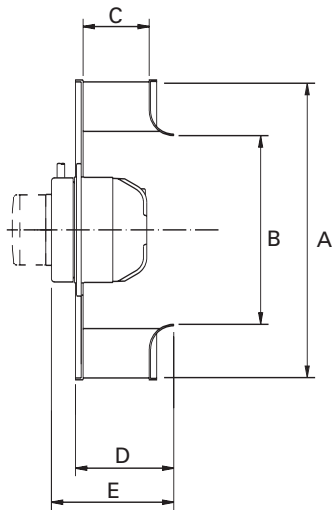
Dimensions

	Art #	A	B	C	D	E	
	RH31M-4EK.2C.IR	103588K/	317	200	100	135	165
	RH31M-6EK.2A.IR	108501	317	200	100	135	165
	RH31M-SDK.2A.IR	100116	317	200	100	135	165
*	RH31M-VDK.2C.IR	103160K	317	200	100	135	165
	RH35M-4EK.4C.IR	107836/2	365	236.5	125	168.5	206
	RH35M-6EK.4A.IR	104770K/	365	236.5	126	170	206
*	RH35M-SDK.4A.IR	100122	365	236.5	125	168.5	206
*	RH35M-VDK.4A.IR	104774K	365	236.5	125	168.5	206
	RH40M-4EK.4F.IR	107722/1	404	265.5	140	188	224
	RH40M-6EK.4C.IR	104778K/	404	265.5	140	188	224
*	RH40M-SDK.4A.IR	200939K	404	265.5	140	188	224
*	RH40M-VDK.4C.IR	200941K	404	265.5	140	188	224
	RH45M-4EK.4I.IR	104761K/	454	298	160	214.5	250

* Exé available in this size.

Part No.	Article No.	Air Flow Direction	Voltage (V)	Phase	Air Volume (m ³ /Hr)	Speed (RPM)	Power Input (W)	Current (A)	Capacitor (µF)	Noise Level (dBA@1M) see inside cover	Min-Static Pressure (Pa)	MaxAirTemperature(°C)	Approx Weight (Kg)	Colour	Wiring Diagram
RH31M-4EK.2C.1R	103588K/		230	1	1840	1300	170	.9	4	65		50	4.1		104XA
RH31M-6EK.2A.1R	108501		230	1	1280	900	80	.39	2	58		60	3.5		104XA
RH31M-SDK.2A.1R	100116		400	3	990	890	50	.12		57		70	3.5		108XA
* RH31M-VDK.2C.1R	103160K		400	3	1830	1330	130	.27		66		70	4.1		108XA
RH35M-4EK.4C.1R	107836/2		230	1	2850	1370	310	1.35	6	69		65	7.0		104XA
RH35M-6EK.4A.1R	104770K/		230	1	1920	900	120	.54	4	59		60	6.0		104XA
* RH35M-SDK.4A.1R	100122		400	3	1910	900	90	.25		61		65	6.0		108XA
* RH35M-VDK.4A.1R	104774K		400	3	2850	1310	270	.47		70		60	6.2		108XA
RH40M-4EK.4F.1R	107722/1		230	1	4100	1360	520	2.2	10	70		40	8.7		104XA
RH40M-6EK.4C.1R	104778K/		230	1	2680	880	170	.85		61		70	9.2		104XA
* RH40M-SDK.4A.1R	200939K		400	3	2700	900	160	.36		61		60	6.5		108XA
* RH40M-VDK.4C.1R	200941K		400	3	4100	1340	460	.85		70		40	7.3		108XA
RH45M-4EK.4I.1R	104761K/		230	1	5400	1280	740	3.2	12	76		60	11.5		104XA

* Exé available in this size. Ask for details & Part No.

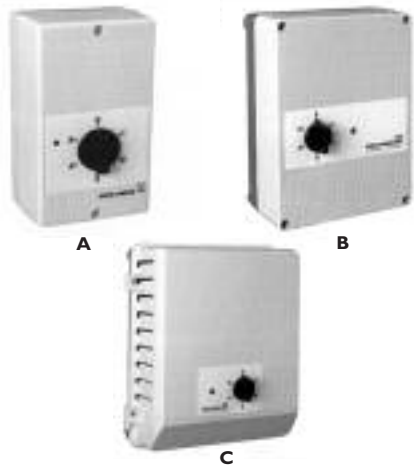


Dimensions	Art #	A	B	C	D	E
RH45M-6EK.4F.IR	104765K/	454	298	160	214	250
* RH45M-SDK.4C.IR	107716	454	298	160	214.5	250
* RH45M-VDK.4F.IR	107724	454	298	160	214.5	250
RH50M-4EK.6K.IR	201226/1	504	334.5	180	241	287
RH50M-6EK.4I.IR	201725K/	504	334.5	180	241	275
* RH50M-SDK.4F.IR	104760K	504	334.5	180	241	275
* RH50M-VDK.6F.IR	104752	504	334.5	180	241	287
RH56M-6EK.6F.IR	202107/1	570	375	200	267	313
* RH56M-SDK.4F.IR	107693	570	375	200	267	302
* RH56M-VDK.6K.IR	107730	570	375	200	267	313
RH63M-SDK.6K.IR	200015	635	418	224	300	345
RH63M-VDK.7Q.IR	207240	635	418	224	300	352
RH71M-SDK.7M.IR	101271	715	472	250	327	387

* Exé available in this size.

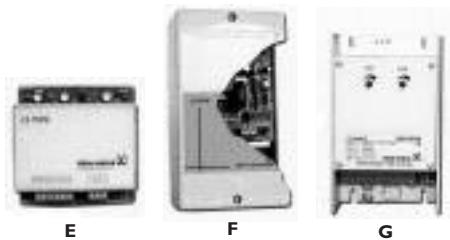
Part No.	Article No.	Air Flow Direction	Voltage (V)	Phase	Air Volume (m ³ /Hr)	Speed (RPM)	Power Input (W)	Current (A)	Capacitor (µF)	Noise Level (dBA@1M) see inside cover	Min-Static Pressure (Pa)	MaxAirTemperature(°C)	Approx Weight (Kg)	Colour	Wiring Diagram
RH45M-6EK.4F.1R	104765K/		230	1	3750	840	240	1.05	8	66		60	9.2		104XA
* RH45M-SDK.4C.1R	107716		400	3	4000	880	250	.6		67		60	9.2		108XA
* RH45M-VDK.4F.1R	107724		400	3	5600	1230	690	1.3		76		40	9.7		108XA
RH50M-4EK.6K.1R	201226/1		230	1	7650	1320	1300	5.7	30	76		50	22		104XA
RH50M-6EK.4I.1R	201725K/		230	1	5150	820	380	1.65	12	66		40	11		104XA
* RH50M-SDK.4F.1R	104760K		400	3	5150	850	390	.81		56		45	11		108XA
* RH50M-VDK.6F.1R	104752		400	3	8200	1320	1200	2.2		76		45	17		108XA
RH56M-6EK.6F.1R	202107/1		230	1	7500	810	670	3.0	14	70		50	22		104XA
* RH56M-SDK.4F.1R	107693		400	3	7550	830	610	1.05		71		40	14.5		108XA
* RH56M-VDK.6K.1R	107730		400	3	10200	1230	1800	3.4		79		40	23		108XA
RH63M-SDK.6K.1R	200015		400	3	10000	850	1050	2.1		73		50	31		108XA
RH63M-VDK,7Q.1R	207240		400	3	15200	1340	390	6.8		85		40	50		108XA
RH71M-SDK.7M.1R	101271		400	3	16000	890	2000	4.0		78		40	55		108XA

* Exé available in this size. Ask for details & Part No.



Part No.	Article No.	Voltage (V)	Phase	Frequency	Amps (A)	Weight (kg)	IP Rating	Dimensions (HxWxD)	Type
RE 1.5 G	302001	230	1	50/60	1.5	2.00	54	180 x 105 x 98	A
RE 2 G	302047	230	1	50/60	2.0	2.20	54	230 x 166 x 118	B
RE 3.5 G	302048	230	1	50/60	3.5	3.50	54	230 x 166 x 118	B
RE 6 G	302049	230	1	50/60	6.0	5.00	54	230 x 166 x 118	B
RE 7.5 G	302053	230	1	50/60	7.5	6.00	54	284 x 240 x 131	B
RD 1 G	302571	400	3	50/60	1.0	4.50	54	284 x 240 131	B
RD 2 G	302572	400	3	50/60	2.0	7.20	54	284 x 240 131	B
RD 3 G	302503	400	3	50/60	3.0	12.50	54	323 X 270 X 163	B
RD4	302504	400	3	50/60	4.0	12.50	21	323 X 270 X 163	C
RD5.2G	302505	400	3	50/60	5.2	18.10	54	323 X 270 X 163	C
RD7	302506	400	3	50/60	7.0	18.10	21	323 X 270 X 163	C
RD14	302560	400	3	50/60	14.0	30.20	21	290 x 450 x 174	C

Ziehl-Abegg transformer speed controllers offer simple, 5 stage control of 1 or several voltage controllable 1~ or 3~ fans.



E

F

G



H

I

Part No.	Article No.	Voltage (V)	Phase	Frequency	Amps (A)	Weight (kg)	IP Rating	Dimensions (HxWxD)	Type
PKE-2.5VE	303500	230	I	50/60	2.5	0.26	20	96 x 93 x 65	E
PKE2.5V	303512	230	I	50/60	2.5	0.50	54	180 x 105 x 80	F
PSE-6V	303570	230	I	50/60	6.0	0.65	54	180 x 105 x 80	F
PAE10E-M	303510	230	I	50/60	10.0	0.63	20	165 X 100 X 50	G
PASTE6-M	303530	230	I	50/60	6.0	1.40	54	239 x 185 x 118	H
PASTE10-M	303531	230	I	50/60	10.0	1.70	54	239 x 185 x 118	H
PTXE6A-M	303540	230	I	50/60	6.0	1.70	54	184 x 239 x 118	I
PTXE10A-M	303541	230	I	50/60	1.8	1.80	54	185 x 239 x 118	I

Ziehl-Abegg manufacture a comprehensive product range of electronic control units for continuously variable speed control of voltage controllable fans.

When selecting electronic controllers, the controller amperage should be rated 20% higher than the rated fan amperage.

Ziehl-Abegg offer a range of sensors suitable for these controllers. See pages 45–48.

Photos and drawings may not be a correct representation of all products.


J

K

Image not
available at time
of print

L

Part No.	Article No.	Voltage (V)	Phase	Frequency	Amps (A)	Weight (kg)	IP Rating	Dimensions (HxWxD)	Type
PKDM5	304558	208-400	3	50/60	5.0	2.40	54	284 x 240 x 131	J
PKDM10	304559	208-400	3	50/60	10.0	2.80	54	284 x 240 x 131	J
PKDM12	304570	208-400	3	50/60	12.0	3.40	54	323 x 270 x 163	J
PKDM15	304560	208-400	3	50/60	15.0	4.70	54	323 x 270 x 163	J
PKDM25	305532	208-400	3	50/60	25.0	12.70	54	435 x 304 x 261	K
PKDM25E	305547	208-400	3	50/60	25.0	7.20	20	355 x 246 x 180	L
PKDM35	305533	208-400	3	50/60	35.0	13.00	54	435 x 304 x 261	K
PKDM35E	305548	208-400	3	50/60	35.0	7.40	20	355 x 246 x 180	L
PKDM50	305563	208-400	3	50/60	50.0	20.00	54	524 x 386 x 300	K
PKDM50E	305588	208-400	3	50/60	50.0	13.80	20	465 x 336 x 220	L
PKDM80	305564	208-400	3	50/60	80.0	21.00	54	524 x 386 x 300	K
PKDM80E	305589	208-400	3	50/60	80.0	15.40	20	465 x 336 x 220	L

Ziehl-Abegg manufacture a comprehensive product range of electronic control units for continuously variable speed control of voltage controllable fans.

When selecting electronic controllers, the controller amperage should be rated 20% higher than the rated fan amperage. Ziehl-Abegg offer a range of sensors suitable for these controllers. See page 45–47.



M



N

Image not available at time of print

O

Part No.	Article No.	Voltage (V)	Phase	Frequency	Amps (A)	Weight (kg)	IP Rating	Dimensions (HxWxD)	Type
FXDM4AM	308035	208-480	3	50/60	4.0	16.20	54	435 x 304 x 261	M
FXDM4AME	308015	208-480	3	50/60	4.0	8.50	20	355 x 246 x 180	N
FXDM7AM	308037	208-480	3	50/60	7.0	17.20	54	435 x 304 x 261	M
FXDM7AME	308018	208-480	3	50/60	7.0	10.00	20	355 x 246 x 180	N
FXDMI3AM	308039	208-480	3	50/60	13.0	26.40	54	524 x 386 x 300	M
FXDMI3AME	308021	208-480	3	50/60	13.0	18.60	20	413 x 336 x 220	N
FXDMI8AM	308041	208-480	3	50/60	18.0	28.40	54	524 x 386 x 300	M
FXDMI8AME	308024	208-480	3	50/60	18.0	23.20	20	413 x 336 x 220	N
FXDM25AME	308054	400	3	50/60	25.0	43.40	20	700 x 358 x 251	O

The Ziehl-Abegg frequency converters with integrated, all-pole effective sinusoidal-filters are conceived for problem free, silent and economical operation of 3~ fans.

Shielded motor lines are not required with Ziehl-Abegg frequency controllers

Ziehl-Abegg offer a range of sensors suitable for these controllers. See pages 45-47.



Part No.	Article No.	Voltage (V)	Phase	Frequency	Amps (A)	Weight (kg)	IP Rating	Dimensions (HxWxD)
GFD1.25E	349002	400	3	50/60	1.25	6.00	00	132 x 150 x 90
GFD3E	157029	400	3	50/60	3.00	6.00	00	132 x 150 x 90
GFD7E	157044	400	3	50/60	7.00	6.00	00	132 x 150 x 90
GFD10E	157046	400	3	50/60	10.00	16.00	00	200 x 228 x 134
GFD1.25	349010	400	3	50/60	1.25	7.75	54	284 x 240 x 115
GFD3	349011	400	3	50/60	3.00	7.75	54	284 x 240 x 115

During speed control of fans using electronic voltage control units, electromagnetic noises can arise at low speed. Ziehl-Abegg noise filters can be installed to minimise these noises.

Noise filters require additional capacitors. Please contact Ziehl-Abegg for further information.

Part No.	Article No.	Voltage (V)	Phase	Frequency (Hz)	Amps (A)	Mounting
S-ET10E	382021	230	1	50/60	10	Switchgear cabinet on top hat mounting rail
S-ET10	382020	230	1	50/60	10	In IP55 housing
STDT16E	382012	400	3	50/60	16	Switchgear cabinet on top hat mounting rail
STDT25E	382015	400	3	50/60	25	Switchgear cabinet on top hat mounting rail
STDT16	382011	400	3	50/60	16	In IP55 housing
STDT25	382014	400	3	50/60	25	In IP55 housing
AWE/SK	153498	250	1	50/60	2	Switchgear cabinet on top hat mounting rail

Ziehl-Abegg protection devices are recommended for monitoring motors with integrated thermocontacts.



'DSG'



'MPR'

Part No.	Article No.	Description	Range	Output	Supply	I.P. Rating	Application
MBG-301	384000	pressure sensor	0-30 Bar	4-20mA	24V	67	refrigeration liquids
DSG50	155595	differential pressure sensor	0-50 Pa	0-10V	24V	65	air conditioning
DSG200	150229	differential pressure sensor	0-200 Pa	0-10V	24V	65	air conditioning
DSG500	150230	differential pressure sensor	0-500 Pa	0-10V	24V	65	air conditioning
DSG1000	150231	differential pressure sensor	0-1000 Pa	0-10V	24V	65	air conditioning
DSG2000	150684	differential pressure sensor	0-2000 Pa	0-10V	24V	65	air conditioning
DSG4000	150685	differential pressure sensor	0-4000 Pa	0-10V	24V	65	air conditioning
DSG600	150694	differential pressure sensor	0-6000 Pa	0-10V	24V	65	air conditioning
MPR300	384020	high precision differential pressure switch	20-300 Pa			55	refrigeration monitoring functions

Ziehl-Abegg DSG series pressure sensors and the MPR300 pressure switch are designed for use with non-aggressive, gaseous mediums. Part MBG-301 is suitable for all refrigerants including NH₃.



Part No.	Article No.	Description	Range	Output	Supply	I.P. Rating	Application
MALI	384008	airflow velocity sensor	0-1 m/s	0-10V	24V	40	air conditioning / clean room
MALI	384019	airflow velocity sensor	0-1 m/s	0-10V	24V	40	air conditioning / clean room with test certificate
MALI-X	384018	airflow velocity sensor	0-1 m/s	0-10V	24V	40	air conditioning / clean room inc. 2mt cable
MALI-X	384021	airflow velocity sensor	0-1 m/s	0-10V	24V	40	air conditioning / clean room with test certificate
MALI0	384009	airflow velocity sensor	0-10 m/s	0-10V	24V	40	air conditioning / clean room

Ziehl-Abegg MAL series airflow velocity sensors are suitable for non-aggressive, gaseous media.

Photos and drawings may not be a correct representation of all products.

<i>Part No.</i>	<i>Article No.</i>	<i>Description</i>	<i>I.P. Rating</i>
TFA	153407	4mm x 50mm Temperature sensor , 2mt lead,	64
TFR	89846	Temperature sensor, 75mm x 75mm x 37mm	54
TFT	154797	7mm x 50mm temperature sensor, 1.9mt lead	43
TFW	154798	Temperature sensor, 84mm x 84mm x 22mm	20
TFK	384022	Temperature sensor, 50mm x 65mm x 44mm housing with 7mm x 135mm element	65
MAF	384016	Humidity / Temperature sensor, measurement range 0 -100% relative humidity, size 80mm x 80mm x 35mm	66

Most Ziehl-Abegg temperature sensors are passive sensors and do not need a supply voltage. Type MAF does require +24V when used in humidity sensing mode.



'TFR'



'TFT'



'TFA'



'TFW'



'TFK'



'MAF'

Velocity Pressure – Air (P_V)

Velocity (m/s)	Velocity pressure (Pa)
1.00	0.60
1.25	0.94
1.50	1.35
1.75	1.84
2.00	2.40
2.25	3.04
2.50	3.75
2.75	4.54
3.00	5.40
3.25	6.34
3.50	7.35
3.75	8.44
4.00	9.6
4.25	10.8
4.50	12.2
4.75	13.5

Velocity (m/s)	Velocity pressure (Pa)
5.00	15.0
5.25	16.5
5.50	18.2
5.75	19.8
6.00	21.6
6.25	23.4
6.50	25.4
6.75	27.3
7.00	29.4
7.25	32
7.50	34
7.75	36
8.00	38
8.25	41
8.50	43
8.75	46

Velocity (m/s)	Velocity pressure (Pa)
9.00	49
9.25	51
9.50	54
9.75	57
10.0	60
12.5	94
15.0	135
17.5	184
20.0	240
22.5	304
25.0	375
27.5	454
30.0	735
40.0	960
45.0	1215
50.0	1500

$$P_V = V^2 \times 0.6 @ 20^\circ\text{C}$$

Refrigerant Pressure – Temperature Chart

°C	R134a	R401A	R401B	R402A	R402B	R404A	HFC 125	RI23	HCFC 124	R717
Pressure (gauge) kPa										
-60	-85	-84	83	-50	-55	53	-47	-100	-93	-79
-55	-80	-78	-76	-34	-41	-38	-40	-100	-90	-73
-50	-72	-70	-67	-14	-23	-19	-9	-99	-86	-61
-45	-62	-60	-56	10	-1	4	17	-99	-81	-47
-40	-50	-48	-43	39	26	31	47	-98	-75	-30
-35	-35	-33	-26	74	58	64	84	-96	-66	-8
-30	-17	-14	-6	114	95	103	128	-94	-56	18
-25	5	8	18	162	140	148	178	-92	-44	50
-20	31	35	47	217	191	200	237	-89	-29	89
-18	44	47	59	242	214	224	263	-87	-22	106
-16	56	59	73	268	238	248	291	-86	-15	125
-14	70	73	88	295	263	274	320	-84	08	145
-12	84	88	103	324	290	302	351	-83	1	167
-10	100	103	120	355	318	331	384	-81	9	190
-8	116	119	137	387	348	261	418	-78	19	214
-6	133	137	156	420	380	393	454	-77	29	240
-5	142	146	166	438	396	410	472	-75	34	254
-4	152	155	176	456	413	427	491	-74	39	268
-3	161	165	186	474	430	445	511	-73	45	283
-2	172	175	196	493	447	463	531	-71	51	298

-1	181	185	207	512	465	481	551	-70	56	313
0	192	195	218	532	484	500	572	-69	62	329
1	202	206	230	553	503	519	594	-67	68	345
2	214	217	242	573	522	539	616	-66	75	362
3	225	228	254	595	542	559	638	-64	81	379
4	237	240	266	616	562	580	662	-62	89	397
5	249	252	279	639	583	601	685	-60	95	415
6	261	264	292	661	604	623	709	-58	103	434
8	287	290	319	709	648	558	759	-54	118	474
10	314	316	348	758	695	715	811	-51	133	515
12	342	429	462	839	778	776	865	-46	150	559
14	372	462	496	893	830	828	923	-41	168	605
16	404	496	533	950	883	881	982	-36	187	653
18	437	532	571	1009	939	938	1043	-31	207	704
20	471	570	611	1071	997	996	1108	-26	226	758
25	565	672	718	1236	1153	1154	1280	-10	281	904
30	670	784	837	1418	1325	1327	1470	8	344	1070
35	787	909	968	1618	1513	1518	1679	29	414	1250
40	916	1046	1112	1837	1720	1728	1909	53	492	1460
45	1060	1197	1270	2077	1946	1957	2160	80	578	1680
50	1218	1361	1443	2338	2192	2207	2435	111	674	1930
55	1391	1541	1632	2621	2459	2479	2737	146	779	2210
60	1581	1736	1836	2928	2749	2774	3067	185	895	2510
65	1789	1948	2058	3259	3062	3093	3432	228	1021	
70	2016	2177	2299		3399			276	1159	

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General Information

Humidity/Temperature Sensors

Airflow Velocity Sensors

Pressure Sensors

Motor Protection Devices

Noise Filters

Frequency Controllers

Voltage Controllers

Transformer Controllers

Backward Curved Radial

Mixed Flow Radial

Centrifugal Impeller

Basket Grille Axial

Flanged Tube Axial

Square Plate Axial

Axial Fan

Part Number Locations

Ziehl-Abegg Part Nos

Fan Identification

Speed variation at constant fan size and constant density:

$$V_2 = V_1 \times \frac{n_2}{n_1}$$

The volume flow changes proportional to the speed

$$P_2 = P_1 \times \left(\frac{n_2}{n_1}\right)^2$$

All pressures (static, dynamic, total) Change proportionately to the square of the speed

$$P_2 = P_1 \times \left(\frac{n_2}{n_1}\right)^3$$

The power requirement at the shaft changes proportionately to the third power of the speed

Change in density at constant speed (or change of the Kelvin temperature at a constant flow medium)

$$V = \text{Const}$$

The volume flow is not affected

$$P_2 = P_1 \times \frac{Q_2}{Q_1} = \frac{T_2}{T_1}$$

The pressures (static, dynamic, and total) change proportionately to the density

$$P_2 = P_1 \times \frac{Q_2}{Q_1} = \frac{T_2}{T_1}$$

The power requirement at the shaft changes proportionately to the density

Change in wheel diameter of geometrically similar wheels at constant speed

$$V_2 = \left(\frac{D_2}{D_1}\right)^3 \times V_1$$

The volume flow changes proportionately to the third power of the wheel diameter

$$P_2 = P_1 \times \left(\frac{D_2}{D_1}\right)^2$$

The pressure (static Dynamic, total) change proportionately to the square of the wheel diameter

$$P_2 = P_1 \times \left(\frac{D_2}{D_1}\right)^5$$

The power requirement at the shaft changes proportionately to the fifth power of the wheel diameter

Photos and drawings may not be a correct representation of all products.

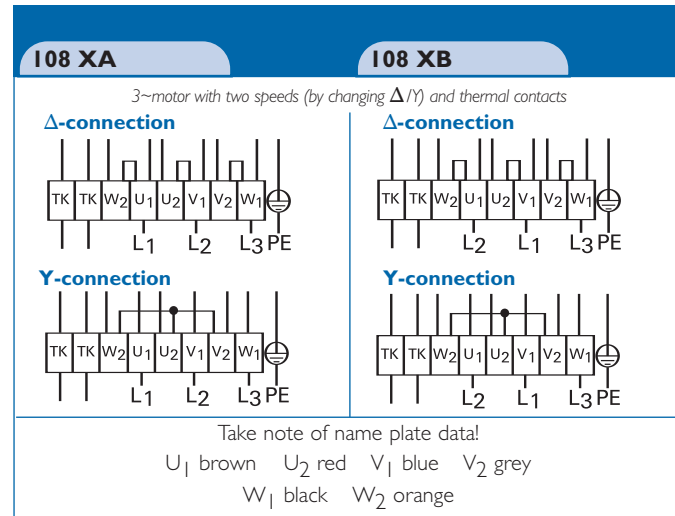
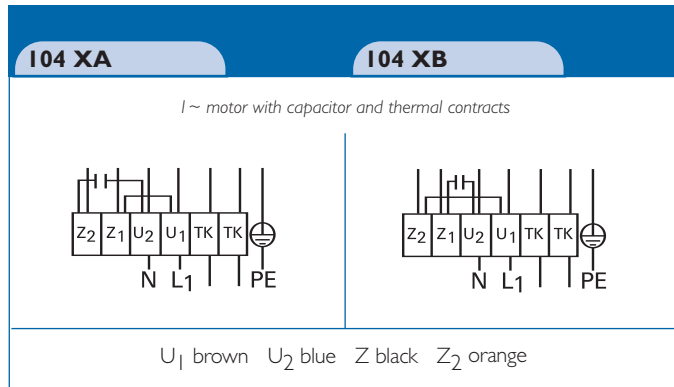
The following information applies generally, but not exhaustively, to the majority of A.C. products sold in Australia & New Zealand.

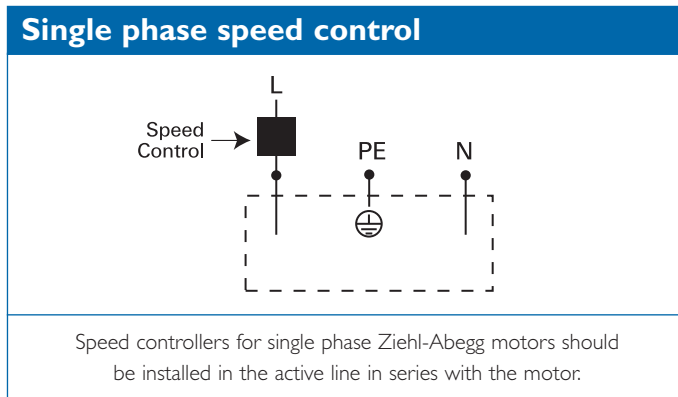
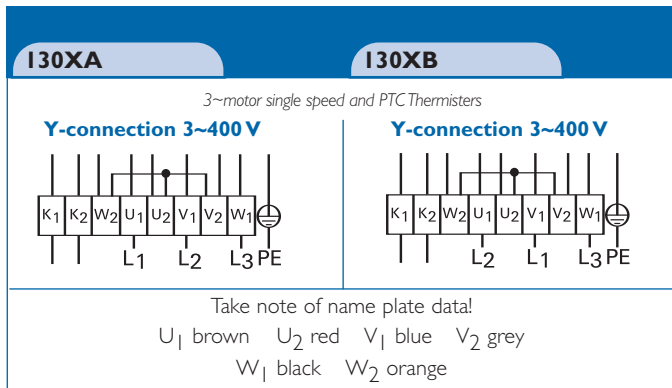
TYPE OF FAN	SINGLE PHASE		THREE PHASE		
	104 XA	104 XB	108 XA/XB	130 XA	130 XB
Backward curved radial	X		X		
Backward curved radial – Exe (note 3)				X	
Forward curved radial DWDI & SWSI	X	X	X		
Axial	“V” flow	“A” flow	X		
Axial – Exe (note 3)				“V” flow	“A” flow

DIAGRAM NUMBER

Notes

- 1 BE CAREFUL – always check the data on the motor, if in doubt ask “Product Support”.
- 2 104 XA / XB, and 108 XA / XB, and 130 XA / XB change the direction of rotation
- 3 Exe must always be connected in “Y” star. Motor will fail if connected in Delta
- 4 3 phase – change direction of rotation by changing any 2 phases
- 5 “PE” = Earth





Ziehl-Abegg recommend Ziehl-Abegg speed controllers.







Ziehl-Abegg Australia Pty Ltd (VIC)

39A Swann Drive

Derrimut, Vic 3030

Phone (+61 3) 9931 0899

Fax (+61 3) 9931 0499

Ziehl-Abegg Australia Pty Ltd (NSW)

Suite 307/12 Century Circuit

Norwest Business Park, NSW 2153

Phone (+61 2) 9634 7377

Fax (+61 2) 8850 0399

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