NEW RANGE

Bifurcated Case Axial Fans (BIFA)

Features and Benefits

- Sizes 250 to 1000 dia
- Motors protected to IP55
- Motor insulation Class 'F'
- Maximum ambient temperature 200°C
- Speed controllable via transformer or inverter (when the ambient air temperature is not higher than 60°C)
- IP55 terminal box
- Suitable for relative humidity levels up to 95% R.H
- Manufactured to BS EN ISO 9001
- Performance tested to BS 848 parts 1, 2 and ISO 5801
- 2 Year Guarantee

The Bifurcated Case Axial range has been specifically developed to meet the need for an axial fan which can handle atmospheres normally detrimental to the life of the fan motor.

By isolating the motor from the system airstream, the bifurcated fan can handle a wide variety of saturated and dust-laden atmospheres, heated air and hot gases.

The range has a split airway with a direct driven motor operating in ambient air within the motor compartment. They are suitable, as standard, for handling air temperatures up to +200°C.

The Bifurcated Case Axial range has a range of accessories available which include: Axial Ancillary Pack, Attenuator, Wire Inlet Guard, Coupling Flanges, Mounting Feet, AV Mounts and Speed Controllers.

Motors

The motors are specially selected to operate within the motor compartment with the airstream in the duct system, at an elevated temperature.

Motors are of the B3 foot mounting type, totally enclosed and fan cooled. Being foot mounted the motors can, in the event of a failure, be readily interchanged with a comparable frame size from a wide range of manufacturers to cover temperatures of up to 200°C.

Where indicated, the motor is suitable for speed control by either an inverter or a 5-step auto transformer speed controller when the ambient air temperature is not higher than 60°C.

Electrical

Single phase 220-240V/50 Hz supply are available in two sizes 250 and 315 dia. in either 2 or 4 pole versions. Three phase 380-440V/50Hz supply are available in nine sizes 250, 315, 400, 500, 630, 710, 800, 900 and 1000 dia. in either 2 or 4 pole versions (710, 800, 900 and 1000 dia are only available as 4 pole).

Impellers and Casing

The aluminium alloy impellers are die cast and have an adjustable pitch which allows a wide range of air outputs to be selected. All the casings are manufactured in steel and hot dipped galvanised to BS EN ISO 1461 after fabrication. Motor mountings and fixings used in the assembly of the fan are zinc plated and passivated.

Form of Running

Bifurcated fans have arrows showing the direction of the impeller rotation and airflow. All models are Form B running.

Terminal Box

To IP55, protected against dust and water jets from any angle, allowing outside applications.

Performance

Tested to BS 848 Part 1 & 2. Published dB(A) figures are free field sound pressure levels at 3m with spherical propagation at a reference level of 2×10^{-5}Pa (20 micro-Pascal). The inlet and outlet sound power level spectra figures are dB with a reference of 10^{-12} Watts (1 pico-watt).

Cooling

External cooling is provided by a fan mounted at the non-drive end of the motor, protected by a cover with a grid air intake. The airflow, guided by the fan cover, is directed longitudinally on the entire periphery of the motor in the channels formed by the frame ribs.

Adequate space is provided within the motor compartment to ensure a plentiful supply of cooling air. The air within the motor compartment must not exceed 40°C. For ambients in excess of this, please consult our Technical Services Department for further information.

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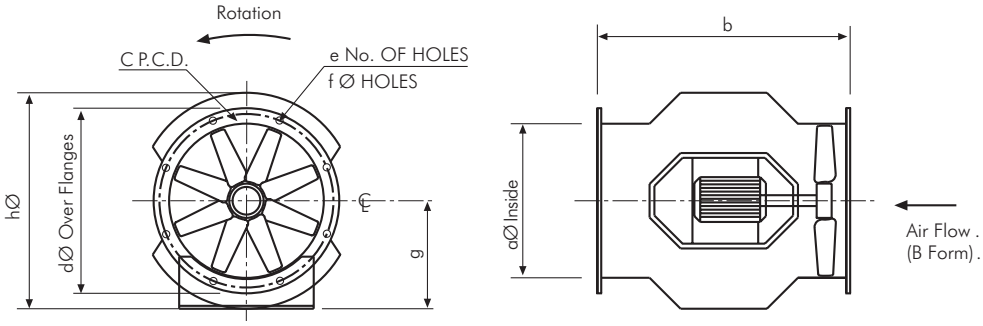
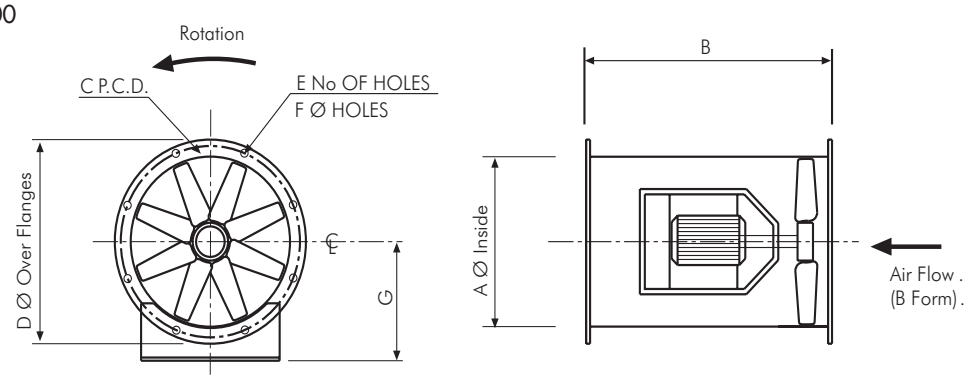
Fan Dimensions (mm)

BIFA25 - BIFA50



Model No.	Pole	Phase	Pitch Angle	aØ	b	c	d	e	f	g	hØ	Approx. Weight Kg
BIFA25	2&4	1&3	25-50	250	535	302	328	8	10	240	452	30
BIFA31	2&4	1&3	10-40	315	535	355	385	8	10	240	452	35
BIFA40	2&4	1&3	10-40	400	625	450	480	8	10	335	585	49
BIFA45	2&4	1&3	10-40	450	625	500	535	8	12	360	650	60
BIFA50	4	1&3	10-40	500	660	560	590	12	12	360	695	66
BIFA50	2	3	10-40	500	710	560	590	12	12	360	695	87

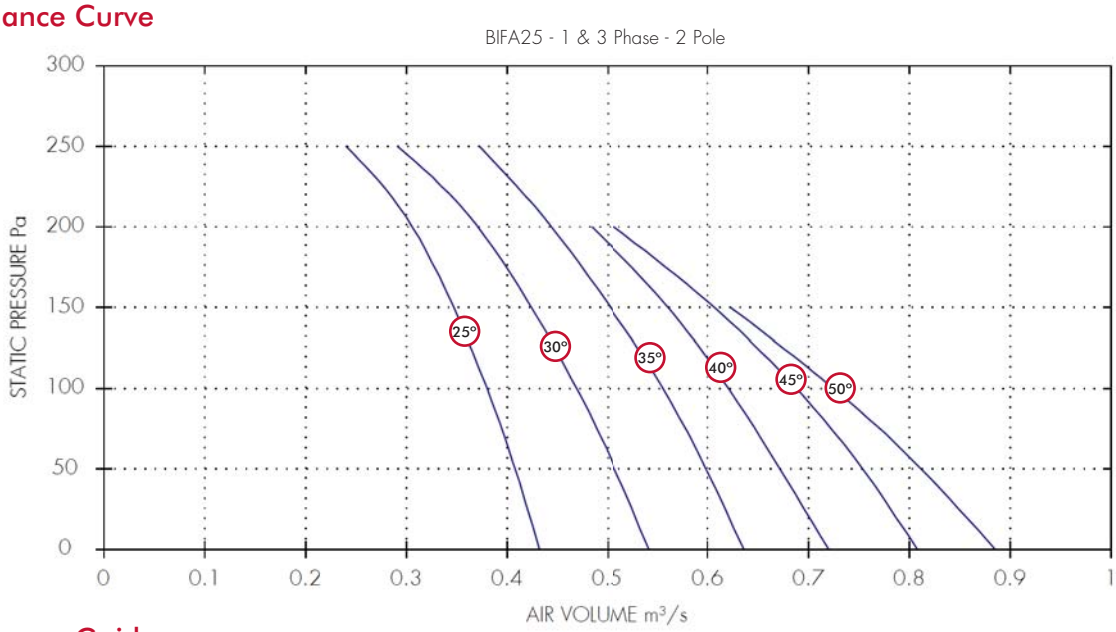
BIFA63 - BIFA100



Model No.	Pole	Phase	Pitch Angle	a	b	c	d	e	f	g	Approx. Weight Kg
BIFA56	2&4	3	10-40	560	800	604	644	12	12	350	80
BIFA63	2&4	3	10-40	630	790	690	728	12	12	400	106
BIFA71	4	3	10-40	710	800	754	784	16	12	435	120
BIFA80	4	3	10-40	800	880	860	890	16	12	450	155
BIFA90	4	3	10-40	900	900	970	1038	16	14	535	170
BIFA100	4	3	10-40	1000	1000	1070	1138	16	14	575	275

Bifurcated Case Axial Fans (BIFA)

Performance Curve



Performance Guide

Dia.	1 Phase Stock Ref	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	50	100	150	200	250	Motor kW	dBA @3m
250	BIFA251225	BIFA253225	2	2800	IP55	25°	0.43	0.41	0.38	0.35	0.31	0.24	0.37	58
250	BIFA251230	BIFA253230	2	2800	IP55	30°	0.54	0.51	0.47	0.42	0.37	0.29	0.37	57
250	BIFA251235	BIFA253235	2	2800	IP55	35°	0.64	0.6	0.56	0.5	0.44	0.37	0.37	58
250	BIFA251240	BIFA253240	2	2800	IP55	40°	0.72	0.67	0.62	0.56	0.48		0.37	59
250	BIFA251245	BIFA253245	2	2800	IP55	45°	0.81	0.75	0.69	0.61	0.51		0.37	59
250	BIFA251250	BIFA253250	2	2800	IP55	50°	0.88	0.81	0.72	0.62			0.37	60

Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	1 Phase Stock Ref	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
250	BIFA251225	BIFA253225	2	Inlet/Outlet	73	74	82	75	73	70	67	64	58
250	BIFA251230	BIFA253230	2	Inlet/Outlet	72	73	81	74	72	69	66	63	57
250	BIFA251235	BIFA253235	2	Inlet/Outlet	73	74	82	75	73	70	67	64	58
250	BIFA251240	BIFA253240	2	Inlet/Outlet	74	75	83	76	74	71	68	65	59
250	BIFA251245	BIFA253245	2	Inlet/Outlet	74	75	83	76	74	71	68	65	59
250	BIFA251250	BIFA253250	2	Inlet/Outlet	75	76	84	77	75	72	69	66	60

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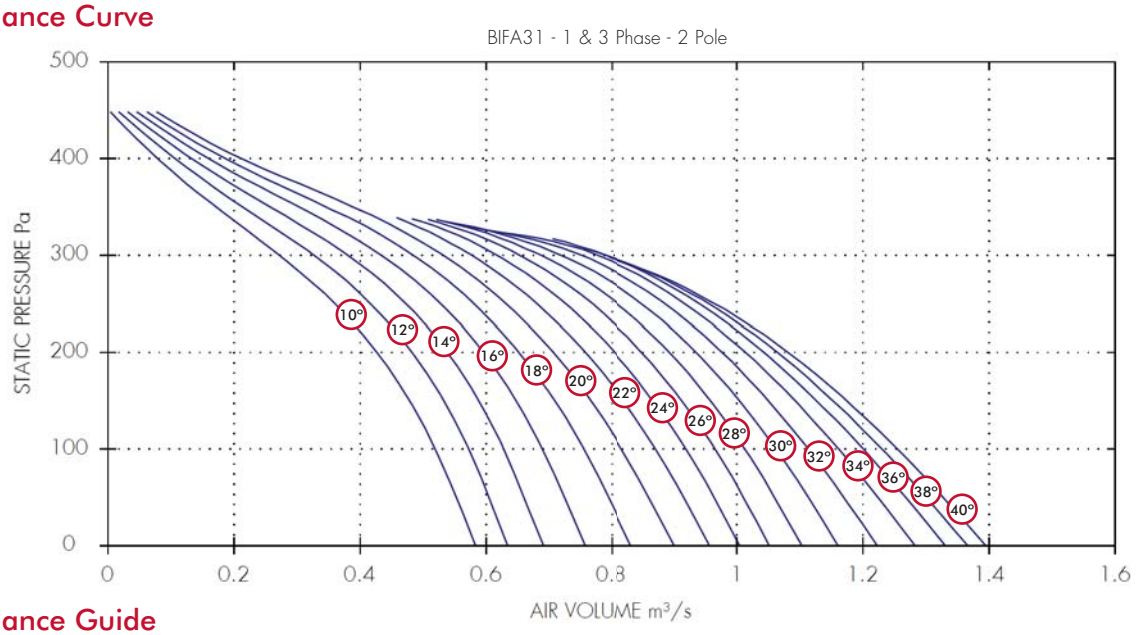
Performance Curve



Performance Guide

Dia.	1 Phase Stock Ref	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	100	200	300	400	Motor kW	dBA @3m
315	BIFA311210	BIFA313210	2	2800	IP55	10°	0.58	0.52	0.43	0.27	0.08	0.37	65
315	BIFA311212	BIFA313212	2	2800	IP55	12°	0.63	0.57	0.48	0.33	0.11	0.37	65
315	BIFA311214	BIFA313214	2	2800	IP55	14°	0.69	0.63	0.54	0.38	0.13	0.37	65
315	BIFA311216	BIFA313216	2	2800	IP55	16°	0.76	0.69	0.6	0.43	0.16	0.37	63
315	BIFA311218	BIFA313218	2	2800	IP55	18°	0.83	0.76	0.65	0.48	0.19	0.37	61
315	BIFA311220	BIFA313220	2	2800	IP55	20°	0.9	0.82	0.71	0.53	0.21	0.37	61
315	BIFA311222	BIFA313222	2	2800	IP55	22°	0.96	0.87	0.76	0.58		0.37	62
315	BIFA311224	BIFA313224	2	2800	IP55	24°	1	0.92	0.8	0.62		0.37	63
315	BIFA311226	BIFA313226	2	2800	IP55	26°	1.05	0.97	0.85	0.65		0.55	63
315	BIFA311228	BIFA313228	2	2800	IP55	28°	1.1	1.01	0.89	0.69		0.55	63
315	BIFA311230	BIFA313230	2	2800	IP55	30°	1.16	1.06	0.94	0.72		0.55	64
315	BIFA311232	BIFA313232	2	2800	IP55	32°	1.22	1.11	0.98	0.75		0.55	66
315	BIFA311234	BIFA313234	2	2800	IP55	34°	1.28	1.16	1.01	0.78		0.75	66
315	BIFA311236	BIFA313236	2	2800	IP55	36°	1.33	1.2	1.04	0.79		0.75	66
315	BIFA311238	BIFA313238	2	2800	IP55	38°	1.37	1.23	1.06	0.79		0.75	66
315	BIFA311240	BIFA313240	2	2800	IP55	40°	1.39	1.25	1.08			1.1	66

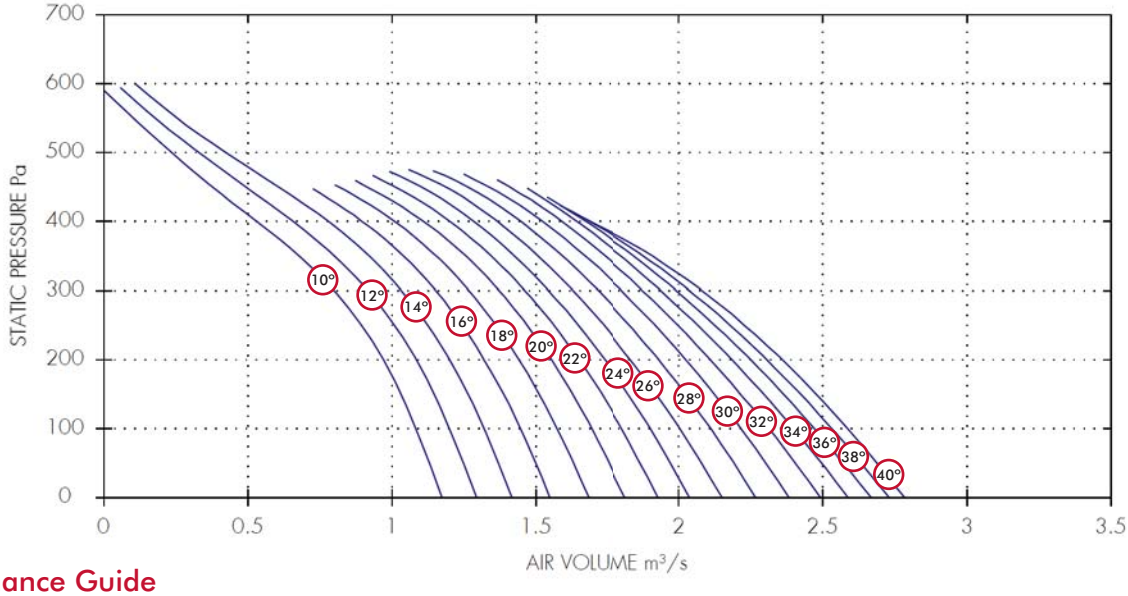
Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	1 Phase Stock Ref	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
315	BIFA311210	BIFA313210	2	Inlet/Outlet	83	82	82	79	81	80	76	68	65
315	BIFA311212	BIFA313212	2	Inlet/Outlet	83	82	82	79	81	80	76	68	65
315	BIFA311214	BIFA313214	2	Inlet/Outlet	83	82	82	79	81	80	76	68	65
315	BIFA311216	BIFA313216	2	Inlet/Outlet	81	80	80	77	79	78	74	66	63
315	BIFA311218	BIFA313218	2	Inlet/Outlet	79	78	78	75	77	76	72	64	61
315	BIFA311220	BIFA313220	2	Inlet/Outlet	79	78	78	75	77	76	72	64	61
315	BIFA311222	BIFA313222	2	Inlet/Outlet	80	79	79	76	78	77	73	65	62
315	BIFA311224	BIFA313224	2	Inlet/Outlet	81	80	80	77	79	78	74	66	63
315	BIFA311226	BIFA313226	2	Inlet/Outlet	81	80	80	77	79	78	74	66	63
315	BIFA311228	BIFA313228	2	Inlet/Outlet	81	80	80	77	79	78	74	66	63
315	BIFA311230	BIFA313230	2	Inlet/Outlet	82	81	81	78	80	79	75	67	64
315	BIFA311232	BIFA313232	2	Inlet/Outlet	84	83	83	80	82	81	77	69	66
315	BIFA311234	BIFA313234	2	Inlet/Outlet	84	83	83	80	82	81	77	69	66
315	BIFA311236	BIFA313236	2	Inlet/Outlet	84	83	83	80	82	81	77	69	66
315	BIFA311238	BIFA313238	2	Inlet/Outlet	84	83	83	80	82	81	77	69	66
315	BIFA311240	BIFA313240	2	Inlet/Outlet	84	83	83	80	82	81	77	69	66

Bifurcated Case Axial Fans (BIFA)

Performance Curve

BIFA40 - 1 & 3 Phase - 2 Pole



Performance Guide

Dia.	1 Phase Stock Ref	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	100	200	300	400	500	Motor kW	dBA @3m
400	BIFA401210	BIFA403210	2	2800	IP55	10°	1.17	1.08	0.97	0.8	0.53	0.23	0.55	71
400	BIFA401212	BIFA403212	2	2800	IP55	12°	1.29	1.2	1.09	0.92	0.66	0.33	0.55	71
400	BIFA401214	BIFA403214	2	2800	IP55	14°	1.42	1.32	1.2	1.03	0.78	0.42	0.75	71
400	BIFA401216	BIFA403216	2	2800	IP55	16°	1.55	1.45	1.32	1.15	0.9		0.75	71
400	BIFA401218	BIFA403218	2	2800	IP55	18°	1.68	1.57	1.44	1.27	1.01		0.75	71
400	BIFA401220	BIFA403220	2	2800	IP55	20°	1.81	1.69	1.55	1.37	1.11		1.1	71
400	BIFA401222	BIFA403222	2	2800	IP55	22°	1.93	1.8	1.65	1.46	1.2		1.1	66
400	BIFA401224	BIFA403224	2	2800	IP55	24°	2.04	1.9	1.74	1.54	1.28		1.1	66
400	BIFA401226	BIFA403226	2	2800	IP55	26°	2.15	2	1.83	1.63	1.37		1.1	67
400	BIFA401228	BIFA403228	2	2800	IP55	28°	2.27	2.11	1.93	1.72	1.45		1.5	68
400	BIFA401230	BIFA403230	2	2800	IP55	30°	2.38	2.22	2.03	1.8	1.52		1.5	68
400	BIFA401232	BIFA403232	2	2800	IP55	32°	2.49	2.31	2.11	1.88	1.59		1.5	68
400	-	BIFA403234	2	2800	IP55	34°	2.59	2.4	2.19	1.94	1.64		2.2	67
400	-	BIFA403236	2	2800	IP55	36°	2.67	2.47	2.25	1.99	1.67		2.2	66
400	-	BIFA403238	2	2800	IP55	38°	2.73	2.53	2.31	2.04	1.69		2.2	66
400	-	BIFA403240	2	2800	IP55	40°	2.78	2.59	2.36	2.08	1.69		3	66

Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	1 Phase Stock Ref	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
400	BIFA401210	BIFA403210	2	Inlet/Outlet	89	86	89	86	87	84	81	74	71
400	BIFA401212	BIFA403212	2	Inlet/Outlet	89	86	89	86	87	84	81	74	71
400	BIFA401214	BIFA403214	2	Inlet/Outlet	89	86	89	86	87	84	81	74	71
400	BIFA401216	BIFA403216	2	Inlet/Outlet	89	86	89	86	87	84	81	74	71
400	BIFA401218	BIFA403218	2	Inlet/Outlet	89	86	89	86	87	84	81	74	71
400	BIFA401220	BIFA403220	2	Inlet/Outlet	89	86	89	86	87	84	81	74	71
400	BIFA401222	BIFA403222	2	Inlet/Outlet	84	81	84	81	82	79	76	69	66
400	BIFA401224	BIFA403224	2	Inlet/Outlet	84	81	84	81	82	79	76	69	66
400	BIFA401226	BIFA403226	2	Inlet/Outlet	85	82	85	82	83	80	77	70	67
400	BIFA401228	BIFA403228	2	Inlet/Outlet	86	83	86	83	84	81	78	71	68
400	BIFA401230	BIFA403230	2	Inlet/Outlet	86	83	86	83	84	81	78	71	68
400	BIFA401232	BIFA403232	2	Inlet/Outlet	86	83	86	83	84	81	78	71	68
400	-	BIFA403234	2	Inlet/Outlet	85	82	85	82	83	80	77	70	67
400	-	BIFA403236	2	Inlet/Outlet	84	81	84	81	82	79	76	69	66
400	-	BIFA403238	2	Inlet/Outlet	84	81	84	81	82	79	76	69	66
400	-	BIFA403240	2	Inlet/Outlet	84	81	84	81	82	79	76	69	66

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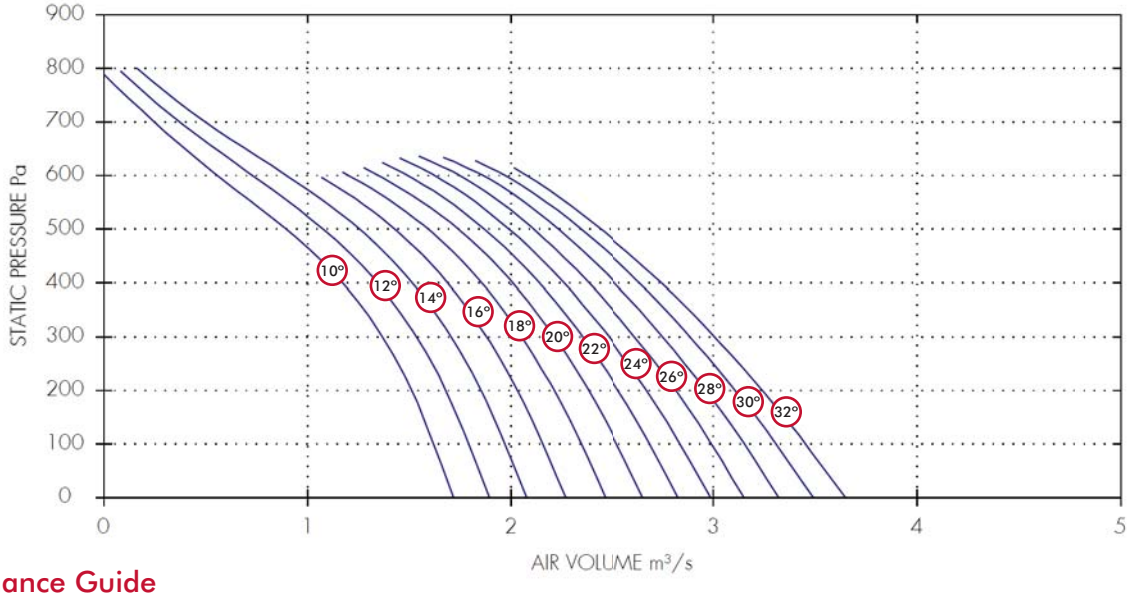
Performance Curve

BIFA45 - 3 Phase - 2 Pole



Performance Guide

Dia.	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	150	300	450	600	750	Motor kW	dBA @3m
450	BIFA453210	2	2880	IP55	10°	1.72	1.57	1.37	1.04	0.56	0.11	1.1	74
450	BIFA453212	2	2880	IP55	12°	1.89	1.74	1.54	1.22	0.73	0.21	1.1	73
450	BIFA453214	2	2880	IP55	14°	2.08	1.91	1.7	1.4	0.9	0.32	1.5	72
450	BIFA453216	2	2880	IP55	16°	2.27	2.1	1.88	1.57			1.5	71
450	BIFA453218	2	2880	IP55	18°	2.47	2.28	2.05	1.74	1.2		1.5	70
450	BIFA453220	2	2880	IP55	20°	2.65	2.46	2.21	1.88	1.35		2.2	70
450	BIFA453222	2	2880	IP55	22°	2.82	2.61	2.35	2.01	1.49		2.2	70
450	BIFA453224	2	2880	IP55	24°	2.99	2.76	2.48	2.13	1.62		2.2	70
450	BIFA453226	2	2880	IP55	26°	3.15	2.91	2.61	2.25	1.75		2.2	70
450	BIFA453228	2	2880	IP55	28°	3.32	3.06	2.75	2.38	1.86		3	70
450	BIFA453230	2	2880	IP55	30°	3.49	3.21	2.89	2.5	1.97		3	70
450	BIFA453232	2	2880	IP55	32°	3.65	3.35	3.01	2.6	2.08		3	70

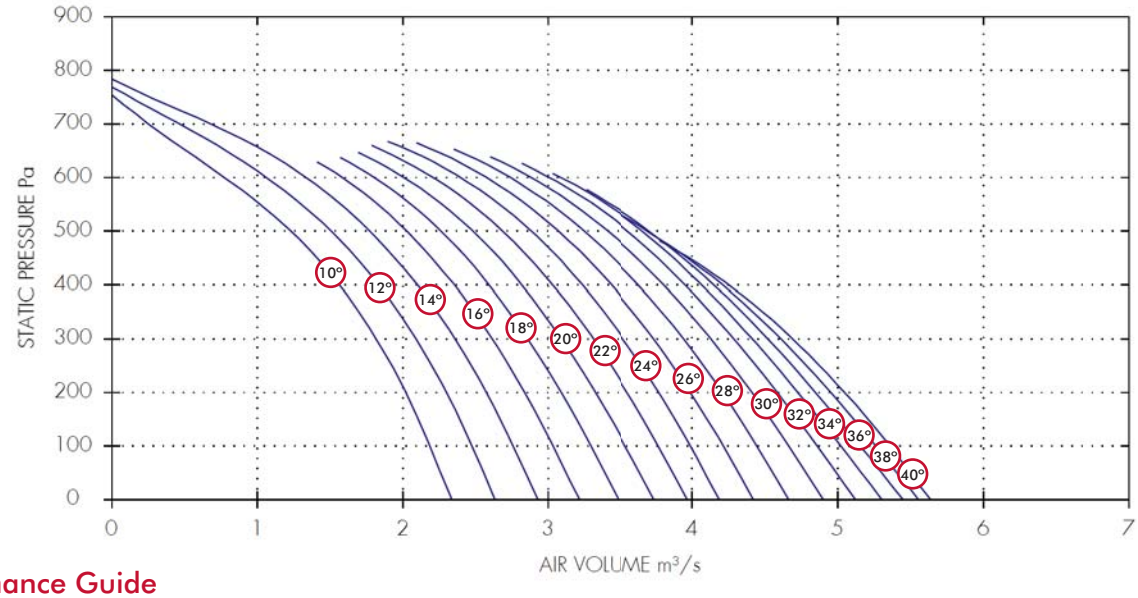
Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
450	BIFA453210	2	Inlet/Outlet	92	89	92	89	90	87	84	77	74
450	BIFA453212	2	Inlet/Outlet	91	88	91	88	89	86	83	76	73
450	BIFA453214	2	Inlet/Outlet	90	87	90	87	88	85	82	75	72
450	BIFA453216	2	Inlet/Outlet	89	86	89	86	87	84	81	74	71
450	BIFA453218	2	Inlet/Outlet	88	85	88	85	86	83	80	73	70
450	BIFA453220	2	Inlet/Outlet	88	85	88	85	86	83	80	73	70
450	BIFA453222	2	Inlet/Outlet	88	85	88	85	86	83	80	73	70
450	BIFA453224	2	Inlet/Outlet	88	85	88	85	86	83	80	73	70
450	BIFA453226	2	Inlet/Outlet	88	85	88	85	86	83	80	73	70
450	BIFA453228	2	Inlet/Outlet	88	85	88	85	86	83	80	73	70
450	BIFA453230	2	Inlet/Outlet	88	85	88	85	86	83	80	73	70
450	BIFA453232	2	Inlet/Outlet	88	85	88	85	86	83	80	73	70

Bifurcated Case Axial Fans (BIFA)

Performance Curve

BIFA50 - 3 Phase - 2 Pole



Performance Guide

Dia.	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	150	300	450	600	750	Motor kW	dBA @3m
500	BIFA503210	2	2880	IP55	10°	2.34	2.11	1.82	1.41	0.77	0.02	1.5	74
500	BIFA503212	2	2880	IP55	12°	2.64	2.39	2.09	1.68	1.06	0.12	1.5	73
500	BIFA503214	2	2880	IP55	14°	2.93	2.67	2.36	1.95	1.33	0.26	2.2	72
500	BIFA503216	2	2880	IP55	16°	3.21	2.94	2.62	2.2	1.58		2.2	71
500	BIFA503218	2	2880	IP55	18°	3.48	3.19	2.86	2.44	1.8		2.2	71
500	BIFA503220	2	2880	IP55	20°	3.73	3.43	3.09	2.66	2.01		3	71
500	BIFA503222	2	2880	IP55	22°	3.96	3.66	3.31	2.87	2.21		3	71
500	BIFA503224	2	2880	IP55	24°	4.19	3.88	3.52	3.07	2.4		3	71
500	BIFA503226	2	2880	IP55	26°	4.42	4.11	3.73	3.26	2.58		4	71
500	BIFA503228	2	2880	IP55	28°	4.66	4.33	3.94	3.45	2.74		4	72
500	BIFA503230	2	2880	IP55	30°	4.9	4.54	4.13	3.62	2.88		4	72
500	BIFA503232	2	2880	IP55	32°	5.12	4.72	4.28	3.76	3		5.5	72
500	BIFA503234	2	2880	IP55	34°	5.3	4.88	4.41	3.87	3.08		5.5	72
500	BIFA503236	2	2880	IP55	36°	5.45	5	4.52	3.94			5.5	72
500	BIFA503238	2	2880	IP55	38°	5.55	5.11	4.61	3.97			7.5	72
500	BIFA503240	2	2880	IP55	40°	5.64	5.21	4.69	3.98			7.5	72

Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
500	BIFA503210	2	Inlet/Outlet	93	84	91	91	91	87	85	78	74
500	BIFA503212	2	Inlet/Outlet	92	83	90	90	90	86	84	77	73
500	BIFA503214	2	Inlet/Outlet	91	82	89	89	89	85	83	76	72
500	BIFA503216	2	Inlet/Outlet	90	81	88	88	88	84	82	75	71
500	BIFA503218	2	Inlet/Outlet	90	81	88	88	88	84	82	75	71
500	BIFA503220	2	Inlet/Outlet	90	81	88	88	88	84	82	75	71
500	BIFA503222	2	Inlet/Outlet	90	81	88	88	88	84	82	75	71
500	BIFA503224	2	Inlet/Outlet	90	81	88	88	88	84	82	75	71
500	BIFA503226	2	Inlet/Outlet	90	81	88	88	88	84	82	75	71
500	BIFA503228	2	Inlet/Outlet	91	82	89	89	89	85	83	76	72
500	BIFA503230	2	Inlet/Outlet	91	82	89	89	89	85	83	76	72
500	BIFA503232	2	Inlet/Outlet	91	82	89	89	89	85	83	76	72
500	BIFA503234	2	Inlet/Outlet	91	82	89	89	89	85	83	76	72
500	BIFA503236	2	Inlet/Outlet	91	82	89	89	89	85	83	76	72
500	BIFA503238	2	Inlet/Outlet	91	82	89	89	89	85	83	76	72
500	BIFA503240	2	Inlet/Outlet	91	82	89	89	89	85	83	76	72

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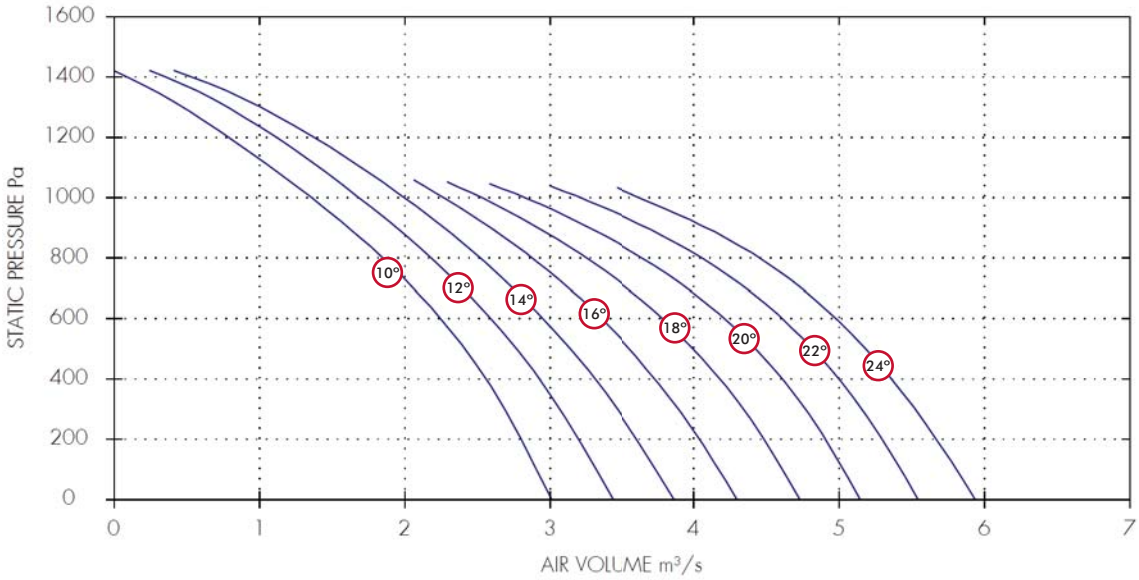
Performance Curve

BIFA56 - 3 Phase - 2 Pole



Performance Guide

Dia.	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	0	200	400	600	800	1000	1200	1400	Motor kW	dBA @3m
						m^3/s at Pa									
560	BIFA563210	2	2880	IP55	10°	3.01	2.8	2.56	2.25	1.85	1.36	0.79	0.09	4	79
560	BIFA563212	2	2880	IP55	12°	3.44	3.2	2.93	2.59	2.18	1.69	1.11	0.35	4	79
560	BIFA563214	2	2880	IP55	14°	3.87	3.61	3.31	2.95	2.52	1.99	1.37	0.53	4	79
560	BIFA563216	2	2880	IP55	16°	4.3	4.04	3.73	3.36	2.88	2.27			5.5	79
560	BIFA563218	2	2880	IP55	18°	4.73	4.48	4.18	3.79	3.25	2.53			5.5	79
560	BIFA563220	2	2880	IP55	20°	5.15	4.91	4.61	4.21	3.65	2.83			7.5	79
560	BIFA563222	2	2880	IP55	22°	5.54	5.3	5	4.61	4.05	3.21			7.5	79
560	BIFA563224	2	2880	IP55	24°	5.94	5.67	5.36	4.98	4.45	3.62			7.5	79

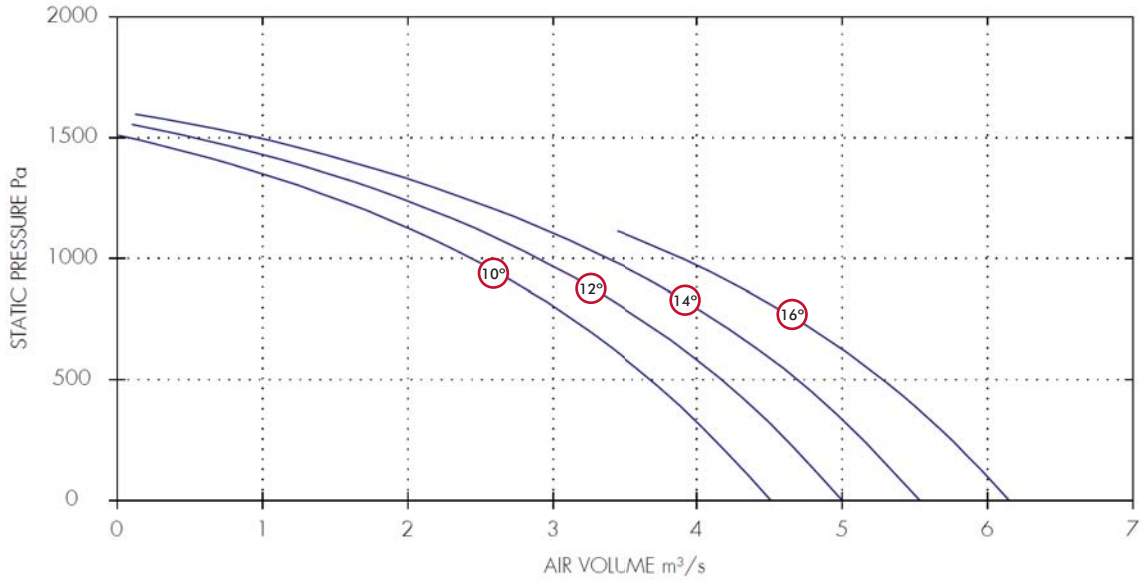
Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
560	BIFA563210	2	Inlet/Outlet	94	89	97	98	94	91	86	82	79
560	BIFA563212	2	Inlet/Outlet	94	89	97	98	94	91	86	82	79
560	BIFA563214	2	Inlet/Outlet	94	89	97	98	94	91	86	82	79
560	BIFA563216	2	Inlet/Outlet	94	89	97	98	94	91	86	82	79
560	BIFA563218	2	Inlet/Outlet	94	89	97	98	94	91	86	82	79
560	BIFA563220	2	Inlet/Outlet	94	89	97	98	94	91	86	82	79
560	BIFA563222	2	Inlet/Outlet	94	89	97	98	94	91	86	82	79
560	BIFA563224	2	Inlet/Outlet	94	89	97	98	94	91	86	82	79

Bifurcated Case Axial Fans (BIFA)

Performance Curve

BIFA63 - 3 Phase - 2 Pole



Performance Guide

Dia.	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	200	400	600	800	1000	1200	1400	Motor kW	dBA @3m
630	BIFA633210	2	2940	IP55	10°	4.51	4.2	3.87	3.47	3.01	2.44	1.7	0.72	5.5	84
630	BIFA633212	2	2940	IP55	12°	5	4.7	4.36	3.96	3.48	2.9	2.16	1.17	5.5	84
630	BIFA633214	2	2940	IP55	14°	5.53	5.22	4.88	4.48	3.98	3.38	2.61	1.6	7.5	84
630	BIFA633216	2	2940	IP55	16°	6.15	5.84	5.48	5.06	4.54	3.89			7.5	84

Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
630	BIFA633210	2	Inlet/Outlet	99	94	102	103	99	96	91	87	84
630	BIFA633212	2	Inlet/Outlet	99	94	102	103	99	96	91	87	84
630	BIFA633214	2	Inlet/Outlet	99	94	102	103	99	96	91	87	84
630	BIFA633216	2	Inlet/Outlet	99	94	102	103	99	96	91	87	84

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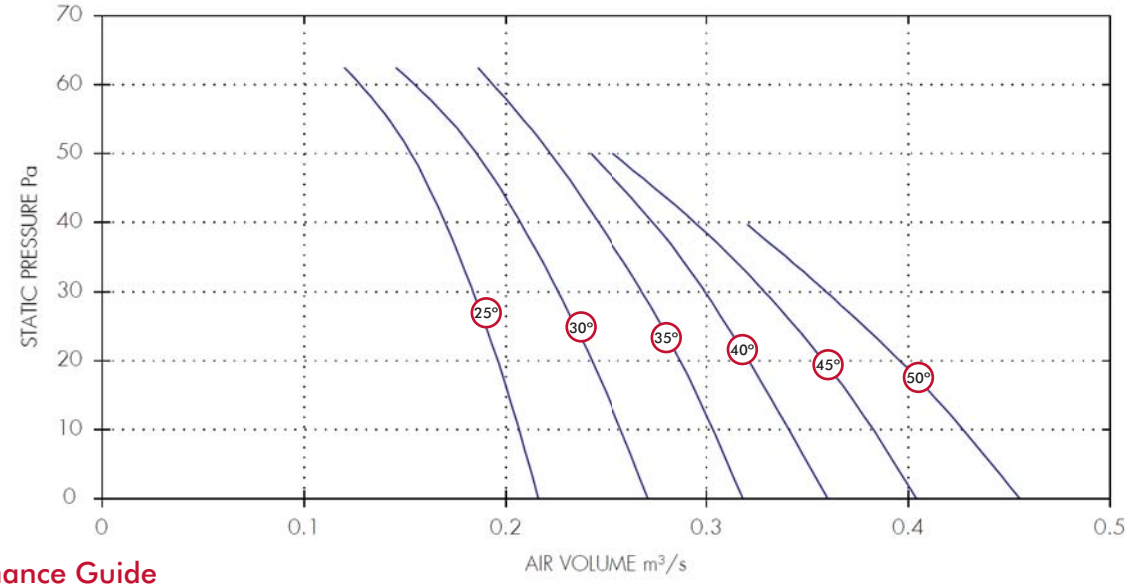
Performance Curve

BIFA25 - 1 & 3 Phase - 4 Pole



Performance Guide

Dia.	1 Phase Stock Ref	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	0	10	20	30	40	50	60	Motor kW	dBA @3m
							m³/s at Pa								
250	BIFA251425	BIFA253425	4	1400	IP55	25°	0.22	0.21	0.2	0.18	0.17	0.15	0.13	0.25	46
250	BIFA251430	BIFA253430	4	1400	IP55	30°	0. 27	0.26	0.24	0.23	0.21	0.19	0.15	0.25	45
250	BIFA251435	BIFA253435	4	1400	IP55	35°	0.32	0.3	0.29	0.27	0.25	0.22	0.19	0.25	46
250	BIFA251440	BIFA253440	4	1400	IP55	40°	0.36	0.34	0.32	0.3	0.27	0.24		0.25	46
250	BIFA251445	BIFA253445	4	1400	IP55	45°	0.4	0.38	0.36	0.33	0.29	0.25		0.25	46
250	BIFA251450	BIFA253450	4	1440	IP55	50°	0.46	0.43	0.4	0.36				0.25	46

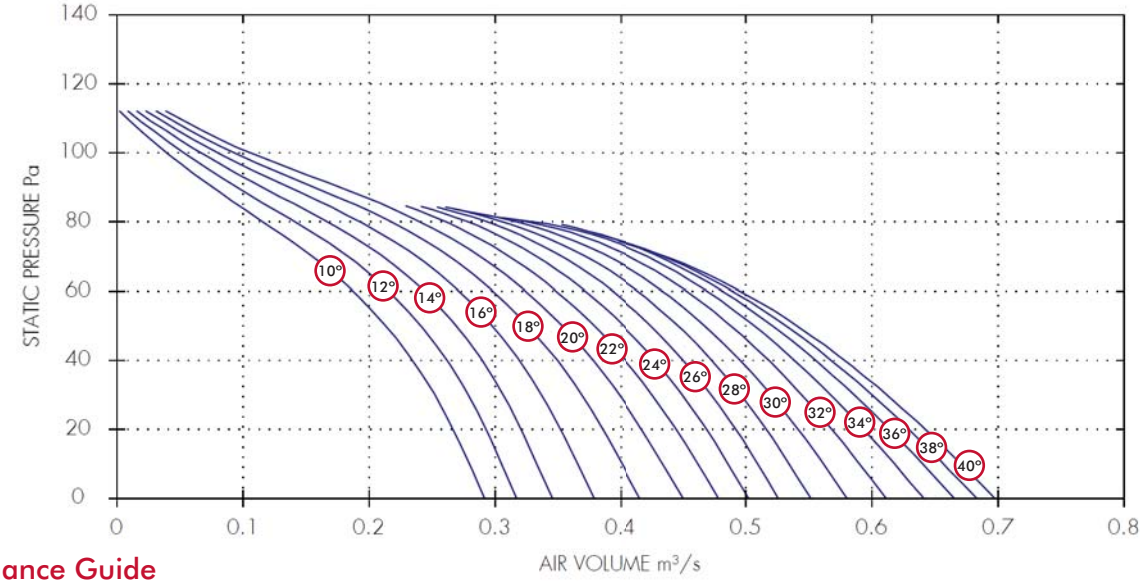
Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	1 Phase Stock Ref	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
250	BIFA251425	BIFA253425	4	Inlet/Outlet	61	68	64	63	61	58	55	52	46
250	BIFA251430	BIFA253430	4	Inlet/Outlet	60	67	63	62	60	57	54	51	45
250	BIFA251435	BIFA253435	4	Inlet/Outlet	61	68	64	63	61	58	55	52	46
250	BIFA251440	BIFA253440	4	Inlet/Outlet	61	68	64	63	61	58	55	52	46
250	BIFA251445	BIFA253445	4	Inlet/Outlet	61	68	64	63	61	58	55	52	46
250	BIFA251450	BIFA253450	4	Inlet/Outlet	61	68	64	63	61	58	55	52	46

Bifurcated Case Axial Fans (BIFA)

Performance Curve

BIFA31 - 1 & 3 Phase - 4 Pole



Performance Guide

Dia.	1 Phase Stock Ref	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	20	40	60	80	100	Motor kW	dBA @3m
315	BIFA311410	BIFA313410	4	1400	IP55	10°	0.29	0.27	0.23	0.19	0.12	0.04	0.25	49
315	BIFA311412	BIFA313412	4	1400	IP55	12°	0.32	0.29	0.26	0.22	0.14	0.05	0.25	49
315	BIFA311414	BIFA313414	4	1400	IP55	14°	0.35	0.32	0.29	0.24	0.17	0.07	0.25	49
315	BIFA313416	BIFA313416	4	1400	IP55	16°	0.38	0.35	0.32	0.27	0.19	0.08	0.25	44
315	BIFA311418	BIFA313418	4	1400	IP55	18°	0.42	0.39	0.35	0.3	0.22	0.09	0.25	44
315	BIFA311420	BIFA313420	4	1400	IP55	20°	0.45	0.42	0.38	0.32	0.24	0.11	0.25	44
315	BIFA311422	BIFA313422	4	1400	IP55	22°	0.48	0.45	0.4	0.35	0.26		0.25	44
315	BIFA311424	BIFA313424	4	1400	IP55	24°	0.5	0.47	0.43	0.37	0.28		0.25	46
315	BIFA311426	BIFA313426	4	1400	IP55	26°	0.53	0.49	0.45	0.39	0.29		0.25	46
315	BIFA311428	BIFA313428	4	1400	IP55	28°	0.55	0.52	0.47	0.41	0.31		0.25	46
315	BIFA311430	BIFA313430	4	1400	IP55	30°	0.58	0.54	0.5	0.43	0.32		0.25	46
315	BIFA311432	BIFA313432	4	1400	IP55	32°	0.61	0.57	0.52	0.45	0.32		0.25	48
315	BIFA311434	BIFA313434	4	1400	IP55	34°	0.64	0.59	0.54	0.47	0.33		0.25	48
315	BIFA311436	BIFA313436	4	1400	IP55	36°	0.67	0.61	0.56	0.48			0.25	48
315	BIFA311438	BIFA313438	4	1400	IP55	38°	0.68	0.63	0.57	0.49			0.25	48
315	BIFA311440	BIFA313440	4	1400	IP55	40°	0.7	0.64	0.58	0.5			0.25	48

Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	1 Phase Stock Ref	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
315	BIFA311410	BIFA313410	4	Inlet/Outlet	66	69	67	64	65	63	58	48	49
315	BIFA311412	BIFA313412	4	Inlet/Outlet	66	69	67	64	65	63	58	48	49
315	BIFA311414	BIFA313414	4	Inlet/Outlet	66	69	67	64	65	63	58	48	49
315	BIFA313416	BIFA313416	4	Inlet/Outlet	61	64	62	59	60	58	53	43	44
315	BIFA311418	BIFA313418	4	Inlet/Outlet	61	64	62	59	60	58	53	43	44
315	BIFA311420	BIFA313420	4	Inlet/Outlet	61	64	62	59	60	58	53	43	44
315	BIFA311422	BIFA313422	4	Inlet/Outlet	61	64	62	59	60	58	53	43	44
315	BIFA311424	BIFA313424	4	Inlet/Outlet	63	66	64	61	62	60	55	45	46
315	BIFA311426	BIFA313426	4	Inlet/Outlet	63	66	64	61	62	60	55	45	46
315	BIFA311428	BIFA313428	4	Inlet/Outlet	63	66	64	61	62	60	55	45	46
315	BIFA311430	BIFA313430	4	Inlet/Outlet	63	66	64	61	62	60	55	45	46
315	BIFA311432	BIFA313432	4	Inlet/Outlet	65	68	66	63	64	62	57	47	48
315	BIFA311434	BIFA313434	4	Inlet/Outlet	65	68	66	63	64	62	57	47	48
315	BIFA311436	BIFA313436	4	Inlet/Outlet	65	68	66	63	64	62	57	47	48
315	BIFA311438	BIFA313438	4	Inlet/Outlet	65	68	66	63	64	62	57	47	48
315	BIFA311440	BIFA313440	4	Inlet/Outlet	65	68	66	63	64	62	57	47	48

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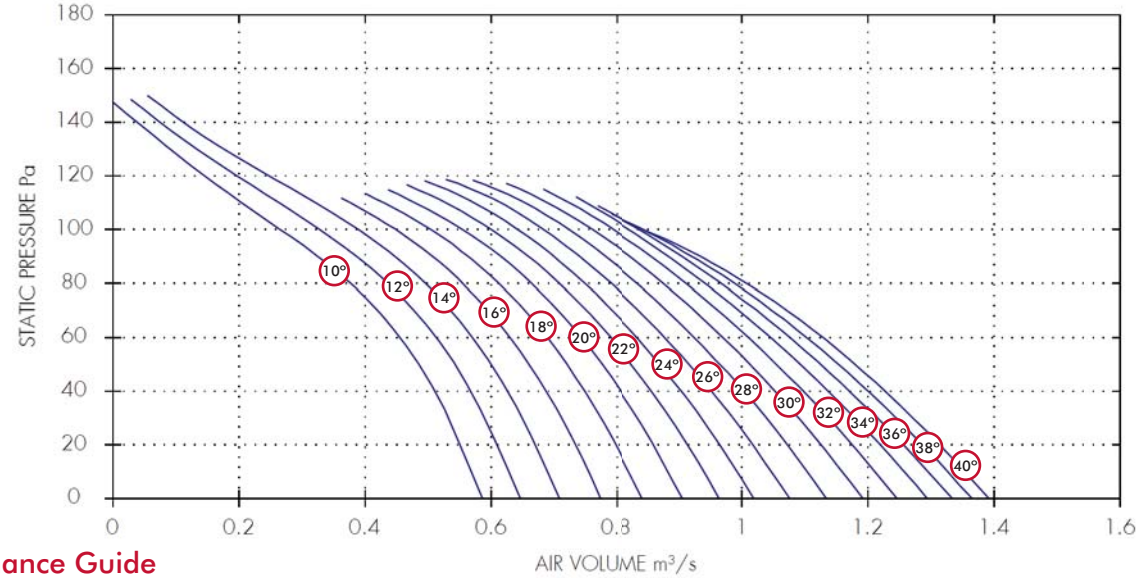
Performance Curve

BIFA40 - 1 & 3 Phase - 4 Pole



Performance Guide

Dia.	1 Phase Stock Ref	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	20	40	60	80	100	120	140	Motor kW	dBA @3m
400	BIFA401410	BIFA403410	4	1400	IP55	10°	0.59	0.55	0.51	0.46	0.38	0.27	0.15	0.04	0.25	54
400	BIFA401412	BIFA403412	4	1400	IP55	12°	0.65	0.61	0.57	0.51	0.44	0.33	0.2	0.08	0.25	54
400	BIFA401414	BIFA403414	4	1400	IP55	14°	0.71	0.67	0.63	0.57	0.5	0.39	0.25	0.11	0.25	54
400	BIFA401416	BIFA403416	4	1400	IP55	16°	0.77	0.73	0.69	0.63	0.56	0.45			0.25	54
400	BIFA401418	BIFA403418	4	1400	IP55	18°	0.84	0.8	0.75	0.69	0.61	0.5			0.25	54
400	BIFA401420	BIFA403420	4	1400	IP55	20°	0.91	0.86	0.81	0.74	0.66	0.55			0.25	54
400	BIFA401422	BIFA403422	4	1400	IP55	22°	0.96	0.91	0.86	0.79	0.71	0.6			0.25	48
400	BIFA401424	BIFA403424	4	1400	IP55	24°	1.02	0.97	0.9	0.83	0.75	0.64			0.25	48
400	BIFA401426	BIFA403426	4	1400	IP55	26°	1.08	1.02	0.95	0.88	0.79	0.68			0.25	50
400	BIFA401428	BIFA403428	4	1400	IP55	28°	1.13	1.07	1	0.92	0.83	0.72			0.25	51
400	BIFA401430	BIFA403430	4	1400	IP55	30°	1.19	1.13	1.05	0.97	0.88	0.76			0.25	52
400	BIFA401432	BIFA403432	4	1400	IP55	32°	1.25	1.18	1.1	1.01	0.91	0.79			0.25	52
400	BIFA401434	BIFA403434	4	1400	IP55	34°	1.29	1.22	1.14	1.05	0.94	0.82			0.25	51
400	BIFA401436	BIFA403436	4	1400	IP55	36°	1.33	1.26	1.17	1.08	0.97	0.84			0.25	51
400	BIFA401438	BIFA403438	4	1400	IP55	38°	1.36	1.29	1.2	1.1	0.99	0.84			0.25	50
400	BIFA401440	BIFA403440	4	1400	IP55	40°	1.39	1.31	1.23	1.13	1.01	0.84			0.37	50

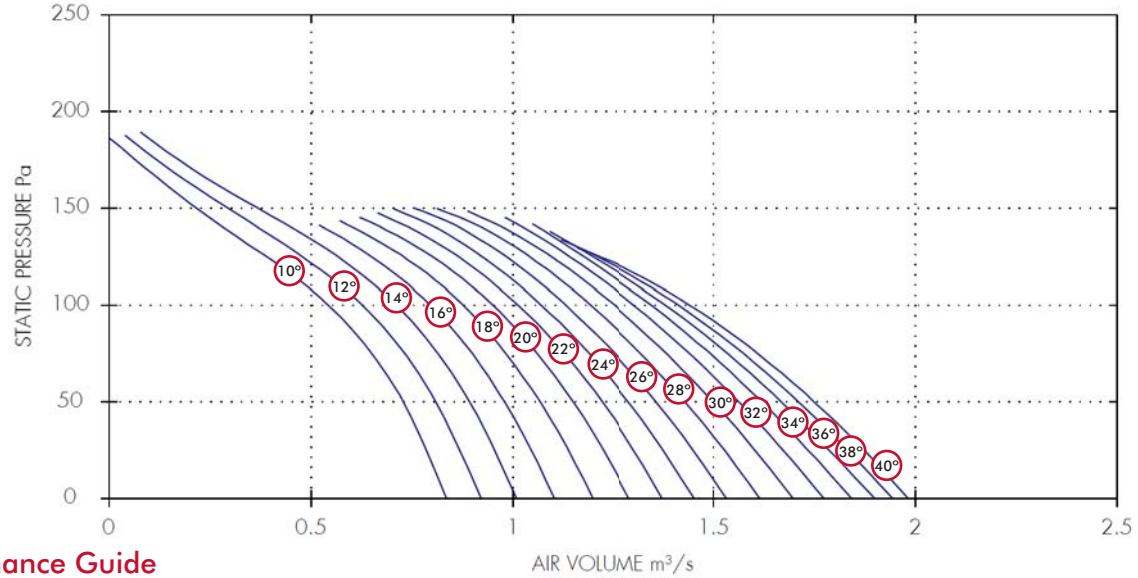
Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	1 Phase Stock Ref	1 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
400	BIFA401410	BIFA403410	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54
400	BIFA401412	BIFA403412	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54
400	BIFA401414	BIFA403414	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54
400	BIFA401416	BIFA403416	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54
400	BIFA401418	BIFA403418	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54
400	BIFA401420	BIFA403420	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54
400	BIFA401422	BIFA403422	4	Inlet/Outlet	66	68	67	63	64	61	57	48	48
400	BIFA401424	BIFA403424	4	Inlet/Outlet	66	68	67	63	64	61	57	48	48
400	BIFA401426	BIFA403426	4	Inlet/Outlet	68	70	69	65	66	63	59	50	50
400	BIFA401428	BIFA403428	4	Inlet/Outlet	69	71	70	66	67	64	60	51	51
400	BIFA401430	BIFA403430	4	Inlet/Outlet	70	72	71	67	68	65	61	52	52
400	BIFA401432	BIFA403432	4	Inlet/Outlet	70	72	71	67	68	65	61	52	52
400	BIFA401434	BIFA403434	4	Inlet/Outlet	69	71	70	66	67	64	60	51	51
400	BIFA401436	BIFA403436	4	Inlet/Outlet	69	71	70	66	67	64	60	51	51
400	BIFA401438	BIFA403438	4	Inlet/Outlet	68	70	69	65	66	63	59	50	50
400	BIFA401440	BIFA403440	4	Inlet/Outlet	68	70	69	65	66	63	59	50	50

Bifurcated Case Axial Fans (BIFA)

Performance Curve

BIFA45 - 1 & 3 Phase - 4 Pole



Performance Guide

Dia.	1 Phase Stock Ref	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	40	80	120	160	Motor kW	dBA @3m
450	BIFA451410	BIFA453410	4	1400	IP55	10°	0.83	0.75	0.63	0.42	0.15	0.25	59
450	BIFA451412	BIFA453412	4	1400	IP55	12°	0.92	0.83	0.71	0.51	0.22	0.25	59
450	BIFA451414	BIFA453414	4	1400	IP55	14°	1.01	0.92	0.8	0.6	0.28	0.25	59
450	BIFA451416	BIFA453416	4	1400	IP55	16°	1.1	1.01	0.88	0.68		0.25	59
450	BIFA451418	BIFA453418	4	1400	IP55	18°	1.2	1.1	0.96	0.76		0.25	54
450	BIFA451420	BIFA453420	4	1400	IP55	20°	1.29	1.18	1.04	0.83		0.25	55
450	BIFA451422	BIFA453422	4	1400	IP55	22°	1.37	1.25	1.11	0.9		0.25	54
450	BIFA451424	BIFA453424	4	1400	IP55	24°	1.45	1.32	1.17	0.96		0.25	54
450	BIFA451426	BIFA453426	4	1400	IP55	26°	1.53	1.4	1.23	1.01		0.37	54
450	BIFA451428	BIFA453428	4	1400	IP55	28°	1.61	1.47	1.29	1.07		0.37	54
450	BIFA451430	BIFA453430	4	1400	IP55	30°	1.7	1.54	1.36	1.13		0.37	54
450	BIFA451432	BIFA453432	4	1400	IP55	32°	1.77	1.61	1.41	1.17		0.37	54
450	BIFA451434	BIFA453434	4	1400	IP55	34°	1.84	1.67	1.46	1.21		0.55	54
450	BIFA451436	BIFA453436	4	1400	IP55	36°	1.9	1.72	1.51	1.24		0.55	54
450	BIFA451438	BIFA453438	4	1400	IP55	38°	1.94	1.76	1.54	1.25		0.55	54
450	BIFA451440	BIFA453440	4	1400	IP55	40°	1.98	1.8	1.58	1.27		0.55	54

Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	1 Phase Stock Ref	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
450	BIFA451410	BIFA453410	4	Inlet/Outlet	77	79	78	74	75	72	68	59	59
450	BIFA451412	BIFA453412	4	Inlet/Outlet	77	79	78	74	75	72	68	59	59
450	BIFA451414	BIFA453414	4	Inlet/Outlet	77	79	78	74	75	72	68	59	59
450	BIFA451416	BIFA453416	4	Inlet/Outlet	77	79	78	74	75	72	68	59	59
450	BIFA451418	BIFA453418	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54
450	BIFA451420	BIFA453420	4	Inlet/Outlet	73	75	74	70	71	68	64	55	55
450	BIFA451422	BIFA453422	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54
450	BIFA451424	BIFA453424	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54
450	BIFA451426	BIFA453426	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54
450	BIFA451428	BIFA453428	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54
450	BIFA451430	BIFA453430	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54
450	BIFA451432	BIFA453432	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54
450	BIFA451434	BIFA453434	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54
450	BIFA451436	BIFA453436	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54
450	BIFA451438	BIFA453438	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54
450	BIFA451440	BIFA453440	4	Inlet/Outlet	72	74	73	69	70	67	63	54	54

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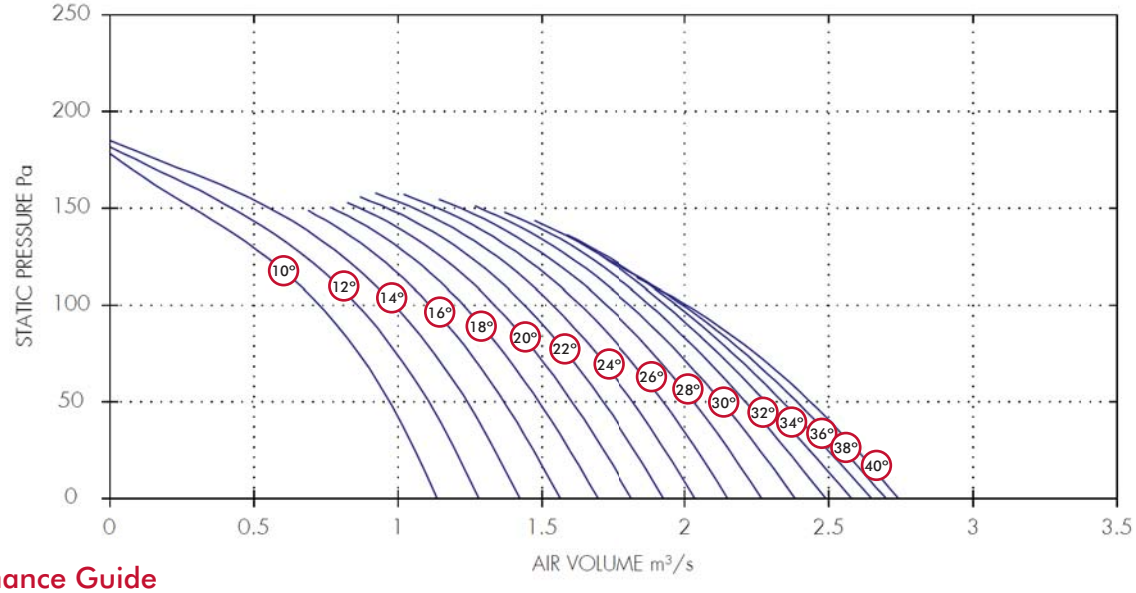
Performance Curve

BIFA50 - 1 & 3 Phase - 4 Pole



Performance Guide

Dia.	1 Phase Stock Ref	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	40	80	120	160	Motor kW	dBA @3m
500	BIFA501410	BIFA503410	4	1400	IP55	10°	1.14	1.01	0.84	0.58	0.18	0.25	58
500	BIFA501412	BIFA503412	4	1400	IP55	12°	1.28	1.15	0.97	0.72	0.3	0.25	58
500	BIFA501414	BIFA503414	4	1400	IP55	14°	1.42	1.28	1.1	0.85	0.42	0.25	58
500	BIFA501416	BIFA503416	4	1400	IP55	16°	1.56	1.41	1.22	0.97		0.25	58
500	BIFA501418	BIFA503418	4	1400	IP55	18°	1.69	1.53	1.34	1.09		0.25	58
500	BIFA501420	BIFA503420	4	1400	IP55	20°	1.82	1.65	1.45	1.19		0.37	58
500	BIFA501422	BIFA503422	4	1400	IP55	22°	1.93	1.76	1.56	1.29		0.37	58
500	BIFA501424	BIFA503424	4	1400	IP55	24°	2.04	1.87	1.66	1.39		0.37	58
500	BIFA501426	BIFA503426	4	1400	IP55	26°	2.15	1.97	1.76	1.48		0.37	60
500	BIFA501428	BIFA503428	4	1400	IP55	28°	2.27	2.08	1.86	1.56		0.55	60
500	BIFA501430	BIFA503430	4	1400	IP55	30°	2.38	2.18	1.95	1.64		0.55	61
500	BIFA501432	BIFA503432	4	1400	IP55	32°	2.49	2.27	2.02	1.71		0.55	61
500	BIFA501434	BIFA503434	4	1400	IP55	34°	2.58	2.34	2.08	1.76		0.55	61
500	BIFA501436	BIFA503436	4	1400	IP55	36°	2.65	2.4	2.13	1.78		0.75	61
500	BIFA501438	BIFA503438	4	1400	IP55	38°	2.7	2.46	2.17	1.77		0.75	61
500	BIFA501440	BIFA503440	4	1400	IP55	40°	2.74	2.5	2.2			0.75	61

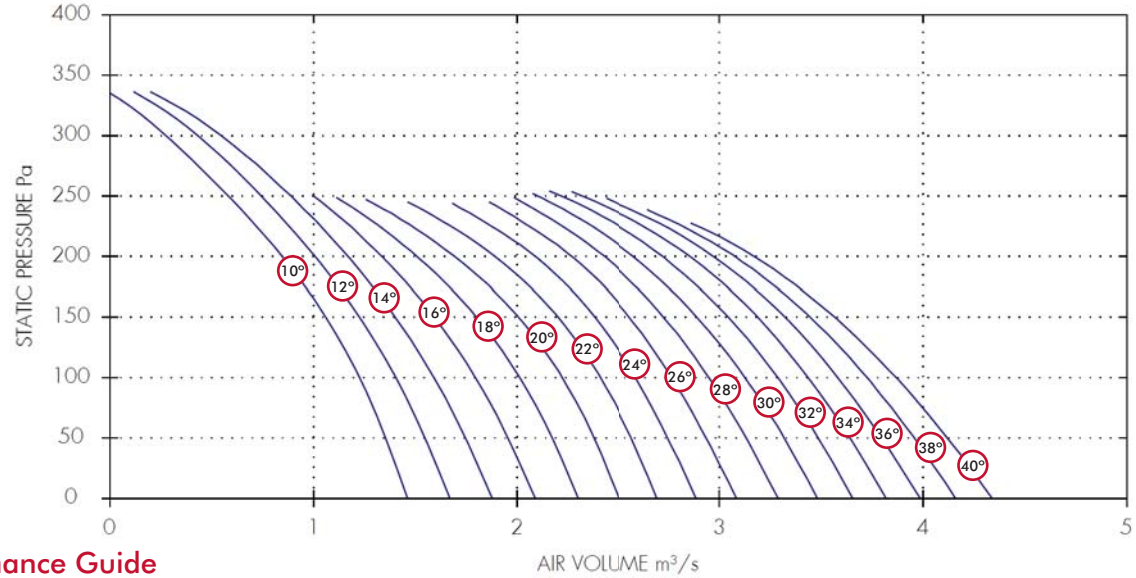
Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	1 Phase Stock Ref	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
500	BIFA501410	BIFA503410	4	Inlet/Outlet	76	78	74	75	74	71	68	58	58
500	BIFA501412	BIFA503412	4	Inlet/Outlet	76	78	74	75	74	71	68	58	58
500	BIFA501414	BIFA503414	4	Inlet/Outlet	76	78	74	75	74	71	68	58	58
500	BIFA501416	BIFA503416	4	Inlet/Outlet	76	78	74	75	74	71	68	58	58
500	BIFA501418	BIFA503418	4	Inlet/Outlet	76	78	74	75	74	71	68	58	58
500	BIFA501420	BIFA503420	4	Inlet/Outlet	76	78	74	75	74	71	68	58	58
500	BIFA501422	BIFA503422	4	Inlet/Outlet	76	78	74	75	74	71	68	58	58
500	BIFA501424	BIFA503424	4	Inlet/Outlet	76	78	74	75	74	71	68	58	58
500	BIFA501426	BIFA503426	4	Inlet/Outlet	78	80	76	77	76	73	70	60	60
500	BIFA501428	BIFA503428	4	Inlet/Outlet	78	80	76	77	76	73	70	60	60
500	BIFA501430	BIFA503430	4	Inlet/Outlet	79	81	77	78	77	74	71	61	61
500	BIFA501432	BIFA503432	4	Inlet/Outlet	79	81	77	78	77	74	71	61	61
500	BIFA501434	BIFA503434	4	Inlet/Outlet	79	81	77	78	77	74	71	61	61
500	BIFA501436	BIFA503436	4	Inlet/Outlet	79	81	77	78	77	74	71	61	61
500	BIFA501438	BIFA503438	4	Inlet/Outlet	79	81	77	78	77	74	71	61	61
500	BIFA501440	BIFA503440	4	Inlet/Outlet	79	81	77	78	77	74	71	61	61

Bifurcated Case Axial Fans (BIFA)

Performance Curve

BIFA56 - 3 Phase - 4 Pole



Performance Guide

Dia.	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	50	100	150	200	250	300	Motor kW	dBA @3m
560	BIFA563410	4	1400	IP55	10°	1.46	1.36	1.23	1.06	0.85	0.58	0.28	0.55	64
560	BIFA563412	4	1400	IP55	12°	1.67	1.55	1.41	1.23	1.01	0.74	0.43	0.55	64
560	BIFA563414	4	1400	IP55	14°	1.88	1.75	1.59	1.4	1.17	0.89	0.55	0.55	64
560	BIFA563416	4	1400	IP55	16°	2.09	1.96	1.8	1.59	1.34			0.55	64
560	BIFA563418	4	1400	IP55	18°	2.3	2.17	2.01	1.8	1.51			0.75	64
560	BIFA563420	4	1400	IP55	20°	2.5	2.38	2.22	2.01	1.69			0.75	64
560	BIFA563422	4	1400	IP55	22°	2.7	2.57	2.41	2.2	1.89			0.75	64
560	BIFA563424	4	1400	IP55	24°	2.89	2.75	2.59	2.38	2.09			1.1	64
560	BIFA563426	4	1400	IP55	26°	3.08	2.94	2.77	2.56	2.27			1.1	64
560	BIFA563428	4	1400	IP55	28°	3.29	3.13	2.95	2.73	2.43			1.1	64
560	BIFA563430	4	1400	IP55	30°	3.48	3.32	3.13	2.89	2.58	2.1		1.1	64
560	BIFA563432	4	1400	IP55	32°	3.66	3.49	3.29	3.04	2.72	2.21		1.5	64
560	BIFA563434	4	1400	IP55	34°	3.82	3.64	3.44	3.19	2.85	2.32		1.5	64
560	BIFA563436	4	1400	IP55	36°	3.99	3.8	3.58	3.32	2.97			1.5	64
560	BIFA563438	4	1400	IP55	38°	4.16	3.96	3.73	3.45	3.08			2.2	64
560	BIFA563440	4	1400	IP55	40°	4.34	4.12	3.87	3.57	3.17			2.2	64

Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
560	BIFA563410	4	Inlet/Outlet	75	75	80	81	81	77	74	64	64
560	BIFA563412	4	Inlet/Outlet	75	75	80	81	81	77	74	64	64
560	BIFA563414	4	Inlet/Outlet	75	75	80	81	81	77	74	64	64
560	BIFA563416	4	Inlet/Outlet	75	75	80	81	81	77	74	64	64
560	BIFA563418	4	Inlet/Outlet	75	75	80	81	81	77	74	64	64
560	BIFA563420	4	Inlet/Outlet	75	75	80	81	81	77	74	64	64
560	BIFA563422	4	Inlet/Outlet	75	75	80	81	81	77	74	64	64
560	BIFA563424	4	Inlet/Outlet	75	75	80	81	81	77	74	64	64
560	BIFA563426	4	Inlet/Outlet	75	75	80	81	81	77	74	64	64
560	BIFA563428	4	Inlet/Outlet	75	75	80	81	81	77	74	64	64
560	BIFA563430	4	Inlet/Outlet	75	75	80	81	81	77	74	64	64
560	BIFA563432	4	Inlet/Outlet	75	75	80	81	81	77	74	64	64
560	BIFA563434	4	Inlet/Outlet	75	75	80	81	81	77	74	64	64
560	BIFA563436	4	Inlet/Outlet	75	75	80	81	81	77	74	64	64
560	BIFA563438	4	Inlet/Outlet	75	75	80	81	81	77	74	64	64
560	BIFA563440	4	Inlet/Outlet	75	75	80	81	81	77	74	64	64

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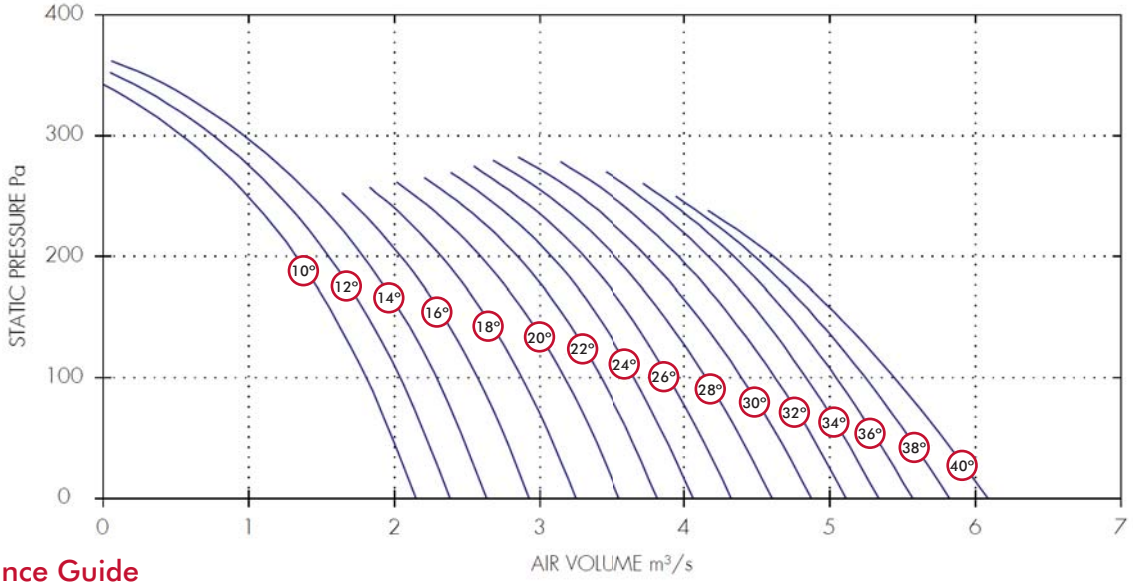
Performance Curve

BIFA63 - 3 Phase - 4 Pole



Performance Guide

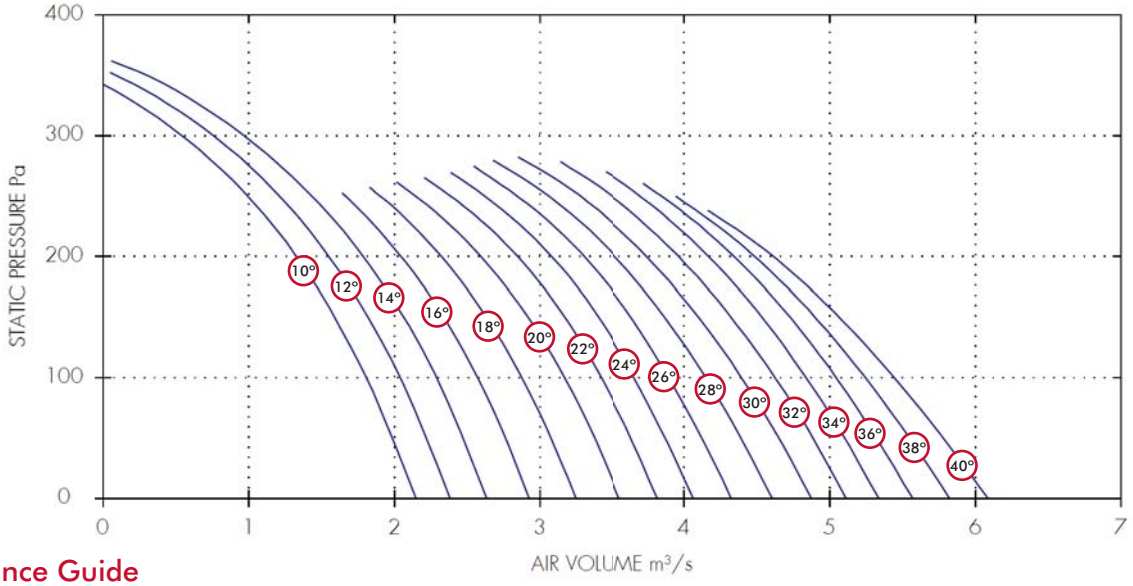
Dia.	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	50	100	150	200	250	300	350	Motor kW	dBA @3m
630	BIFA633410	4	1400	IP55	10°	2.15	1.99	1.81	1.59	1.33	0.99	0.54		0.55	64
630	BIFA633412	4	1400	IP55	12°	2.38	2.22	2.04	1.82	1.55	1.21	0.76	0.09	0.75	64
630	BIFA633414	4	1400	IP55	14°	2.64	2.47	2.29	2.06	1.79	1.43	0.97	0.29	0.75	64
630	BIFA633416	4	1400	IP55	16°	2.93	2.76	2.57	2.34	2.05	1.66			1.1	64
630	BIFA633418	4	1400	IP55	18°	3.24	3.08	2.88	2.63	2.32	1.9			1.1	64
630	BIFA633420	4	1400	IP55	20°	3.55	3.37	3.17	2.92	2.59	2.14			1.1	64
630	BIFA633422	4	1400	IP55	22°	3.82	3.63	3.42	3.17	2.85	2.38			1.5	65
630	BIFA633424	4	1400	IP55	24°	4.06	3.87	3.66	3.4	3.08	2.62			1.5	65
630	BIFA633426	4	1400	IP55	26°	4.32	4.12	3.9	3.63	3.3	2.84			1.5	65
630	BIFA633428	4	1400	IP55	28°	4.61	4.39	4.15	3.87	3.52	3.06			2.2	65
630	BIFA633430	4	1400	IP55	30°	4.88	4.65	4.4	4.1	3.74	3.27			2.2	65
630	BIFA633432	4	1400	IP55	32°	5.11	4.89	4.63	4.32	3.96	3.5			2.2	65
630	BIFA633434	4	1400	IP55	34°	5.34	5.1	4.84	4.54	4.17	3.7			2.2	65
630	BIFA633436	4	1400	IP55	36°	5.57	5.32	5.04	4.73	4.34	3.84			3	65
630	BIFA633438	4	1400	IP55	38°	5.82	5.55	5.25	4.9	4.48				3	65
630	BIFA633440	4	1400	IP55	40°	6.09	5.78	5.44	5.06	4.61				3	65

Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
630	BIFA633410	4	Inlet/Outlet	75	71	79	82	81	77	74	66	64
630	BIFA633412	4	Inlet/Outlet	75	71	79	82	81	77	74	66	64
630	BIFA633414	4	Inlet/Outlet	75	71	79	82	81	77	74	66	64
630	BIFA633416	4	Inlet/Outlet	75	71	79	82	81	77	74	66	64
630	BIFA633418	4	Inlet/Outlet	75	71	79	82	81	77	74	66	64
630	BIFA633420	4	Inlet/Outlet	75	71	79	82	81	77	74	66	64
630	BIFA633422	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633424	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633426	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633428	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633430	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633432	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633434	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633436	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633438	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633440	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65

Performance Curve

BIFA63 - 3 Phase - 4 Pole



Performance Guide

Dia.	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	50	100	150	200	250	300	350	Motor kW	dBA @3m
630	BIFA633410	4	1400	IP55	10°	2.15	1.99	1.81	1.59	1.33	0.99	0.54		0.55	64
630	BIFA633412	4	1400	IP55	12°	2.38	2.22	2.04	1.82	1.55	1.21	0.76	0.09	0.75	64
630	BIFA633414	4	1400	IP55	14°	2.64	2.47	2.29	2.06	1.79	1.43	0.97	0.29	0.75	64
630	BIFA633416	4	1400	IP55	16°	2.93	2.76	2.57	2.34	2.05	1.66			1.1	64
630	BIFA633418	4	1400	IP55	18°	3.24	3.08	2.88	2.63	2.32	1.9			1.1	64
630	BIFA633420	4	1400	IP55	20°	3.55	3.37	3.17	2.92	2.59	2.14			1.1	64
630	BIFA633422	4	1400	IP55	22°	3.82	3.63	3.42	3.17	2.85	2.38			1.5	65
630	BIFA633424	4	1400	IP55	24°	4.06	3.87	3.66	3.4	3.08	2.62			1.5	65
630	BIFA633426	4	1400	IP55	26°	4.32	4.12	3.9	3.63	3.3	2.84			1.5	65
630	BIFA633428	4	1400	IP55	28°	4.61	4.39	4.15	3.87	3.52	3.06			2.2	65
630	BIFA633430	4	1400	IP55	30°	4.88	4.65	4.4	4.1	3.74	3.27			2.2	65
630	BIFA633432	4	1400	IP55	32°	5.11	4.89	4.63	4.32	3.96	3.5			2.2	65
630	BIFA633434	4	1400	IP55	34°	5.34	5.1	4.84	4.54	4.17	3.7			2.2	65
630	BIFA633436	4	1400	IP55	36°	5.57	5.32	5.04	4.73	4.34	3.84			3	65
630	BIFA633438	4	1400	IP55	38°	5.82	5.55	5.25	4.9	4.48				3	65
630	BIFA633440	4	1400	IP55	40°	6.09	5.78	5.44	5.06	4.61				3	65

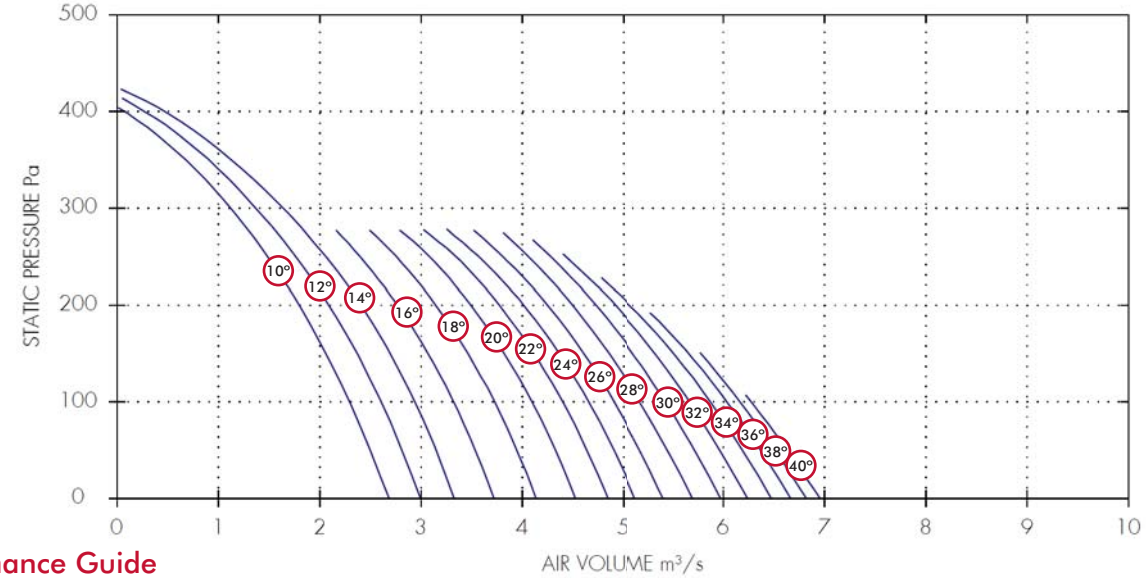
Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
630	BIFA633410	4	Inlet/Outlet	75	71	79	82	81	77	74	66	64
630	BIFA633412	4	Inlet/Outlet	75	71	79	82	81	77	74	66	64
630	BIFA633414	4	Inlet/Outlet	75	71	79	82	81	77	74	66	64
630	BIFA633416	4	Inlet/Outlet	75	71	79	82	81	77	74	66	64
630	BIFA633418	4	Inlet/Outlet	75	71	79	82	81	77	74	66	64
630	BIFA633420	4	Inlet/Outlet	75	71	79	82	81	77	74	66	64
630	BIFA633422	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633424	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633426	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633428	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633430	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633432	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633434	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633436	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633438	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65
630	BIFA633440	4	Inlet/Outlet	76	72	80	83	82	78	75	67	65

Bifurcated Case Axial Fans (BIFA)

Performance Curve

BIFA71 - 3 Phase - 4 Pole



Performance Guide

Dia.	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	50	100	150	200	250	300	350	400	Motor kW	dBA @3m
710	BIFA713410	4	1420	IP55	10°	2.68	2.5	2.3	2.06	1.8	1.49	1.12	0.68	0.07	0.75	74
710	BIFA713412	4	1420	IP55	12°	2.99	2.81	2.61	2.37	2.09	1.76	1.37	0.9	0.27	1.1	74
710	BIFA713414	4	1420	IP55	14°	3.33	3.15	2.94	2.7	2.41	2.06	1.64	1.13	0.47	1.1	74
710	BIFA713416	4	1420	IP55	16°	3.72	3.53	3.32	3.07	2.77	2.4				1.5	74
710	BIFA713418	4	1420	IP55	18°	4.14	3.95	3.73	3.46	3.15	2.76				1.5	74
710	BIFA713420	4	1420	IP55	20°	4.53	4.33	4.1	3.82	3.49	3.08				2.2	71
710	BIFA713422	4	1420	IP55	22°	4.84	4.64	4.4	4.12	3.77	3.34				2.2	71
710	BIFA713424	4	1420	IP55	24°	5.12	4.9	4.66	4.36	4.01	3.57				2.2	71
710	BIFA713426	4	1420	IP55	26°	5.4	5.17	4.91	4.61	4.25	3.81				3	71
710	BIFA713428	4	1420	IP55	28°	5.69	5.45	5.17	4.86	4.49	4.06				3	71
710	BIFA713430	4	1420	IP55	30°	5.98	5.71	5.43	5.1	4.73	4.28				3	71
710	BIFA713432	4	1420	IP55	32°	6.24	5.97	5.67	5.32	4.92	4.42				4	71
710	BIFA713434	4	1420	IP55	34°	6.47	6.19	5.87	5.51	5.07					4	71
710	BIFA713436	4	1420	IP55	36°	6.67	6.37	6.04	5.66						4	71
710	BIFA713438	4	1420	IP55	38°	6.82	6.51	6.17	5.78						5.5	71
710	BIFA713440	4	1420	IP55	40°	6.96	6.63	6.28							5.5	71

Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
710	BIFA713410	4	Inlet/Outlet	89	84	92	92	90	85	82	75	74
710	BIFA713412	4	Inlet/Outlet	89	84	92	92	90	85	82	75	74
710	BIFA713414	4	Inlet/Outlet	89	84	92	92	90	85	82	75	74
710	BIFA713416	4	Inlet/Outlet	89	84	92	92	90	85	82	75	74
710	BIFA713418	4	Inlet/Outlet	89	84	92	92	90	85	82	75	74
710	BIFA713420	4	Inlet/Outlet	86	81	89	89	87	82	79	72	71
710	BIFA713422	4	Inlet/Outlet	86	81	89	89	87	82	79	72	71
710	BIFA713424	4	Inlet/Outlet	86	81	89	89	87	82	79	72	71
710	BIFA713426	4	Inlet/Outlet	86	81	89	89	87	82	79	72	71
710	BIFA713428	4	Inlet/Outlet	86	81	89	89	87	82	79	72	71
710	BIFA713430	4	Inlet/Outlet	86	81	89	89	87	82	79	72	71
710	BIFA713432	4	Inlet/Outlet	86	81	89	89	87	82	79	72	71
710	BIFA713434	4	Inlet/Outlet	86	81	89	89	87	82	79	72	71
710	BIFA713436	4	Inlet/Outlet	86	81	89	89	87	82	79	72	71
710	BIFA713438	4	Inlet/Outlet	86	81	89	89	87	82	79	72	71
710	BIFA713440	4	Inlet/Outlet	86	81	89	89	87	82	79	72	71

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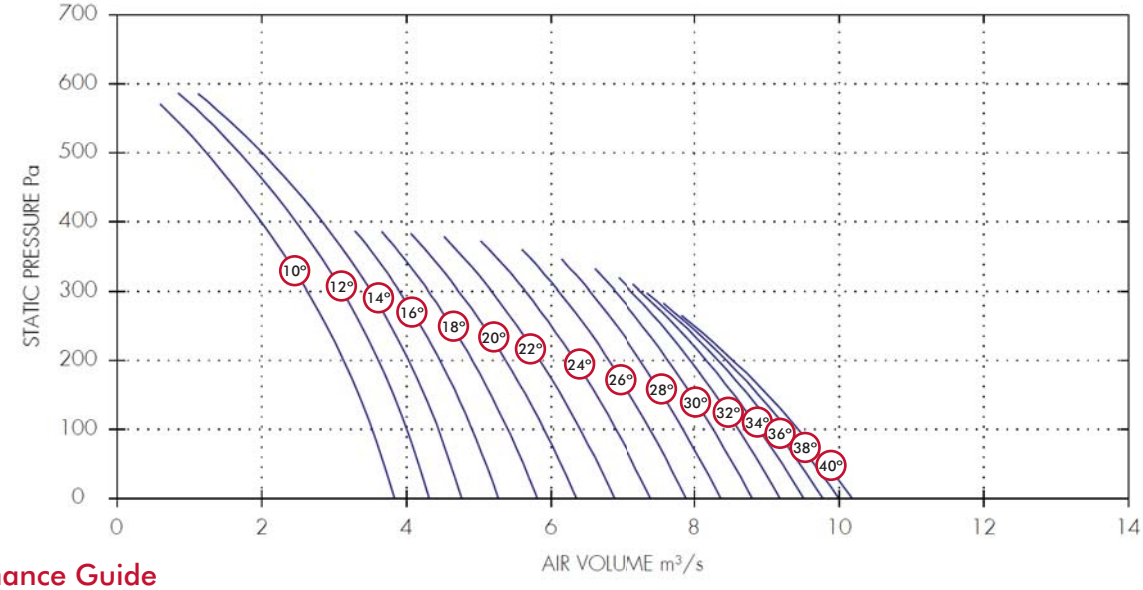
Performance Curve

BIFA80 - 3 Phase - 4 Pole



Performance Guide

Dia.	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	100	200	300	400	500	Motor kW	dBA @3m
800	BIFA803410	4	1420	IP55	10°	3.84	3.53	3.13	2.63	1.99	1.24	2.2	80
800	BIFA803412	4	1440	IP55	12°	4.32	4	3.61	3.11	2.47	1.69	2.2	80
800	BIFA803414	4	1440	IP55	14°	4.76	4.44	4.03	3.51	2.84	2	3	80
800	BIFA803416	4	1440	IP55	16°	5.27	4.91	4.46	3.9			3	80
800	BIFA803418	4	1440	IP55	18°	5.81	5.4	4.91	4.3			3	80
800	BIFA803420	4	1440	IP55	20°	6.35	5.9	5.37	4.72			3	77
800	BIFA803422	4	1440	IP55	22°	6.88	6.4	5.84	5.17			4	78
800	BIFA803424	4	1440	IP55	24°	7.39	6.9	6.33	5.64			4	78
800	BIFA803426	4	1440	IP55	26°	7.89	7.38	6.8	6.1			5.5	78
800	BIFA803428	4	1440	IP55	28°	8.36	7.84	7.25	6.53			5.5	79
800	BIFA803430	4	1440	IP55	30°	8.8	8.26	7.64	6.89			7.5	79
800	BIFA803432	4	1440	IP55	32°	9.19	8.61	7.94	7.12			7.5	79
800	BIFA803434	4	1440	IP55	34°	9.51	8.9	8.17	7.25			7.5	79
800	BIFA803436	4	1440	IP55	36°	9.78	9.12	8.33				11	79
800	BIFA803438	4	1440	IP55	38°	9.99	9.29	8.44				11	79
800	BIFA803440	4	1440	IP55	40°	10.18	9.44	8.54				11	79

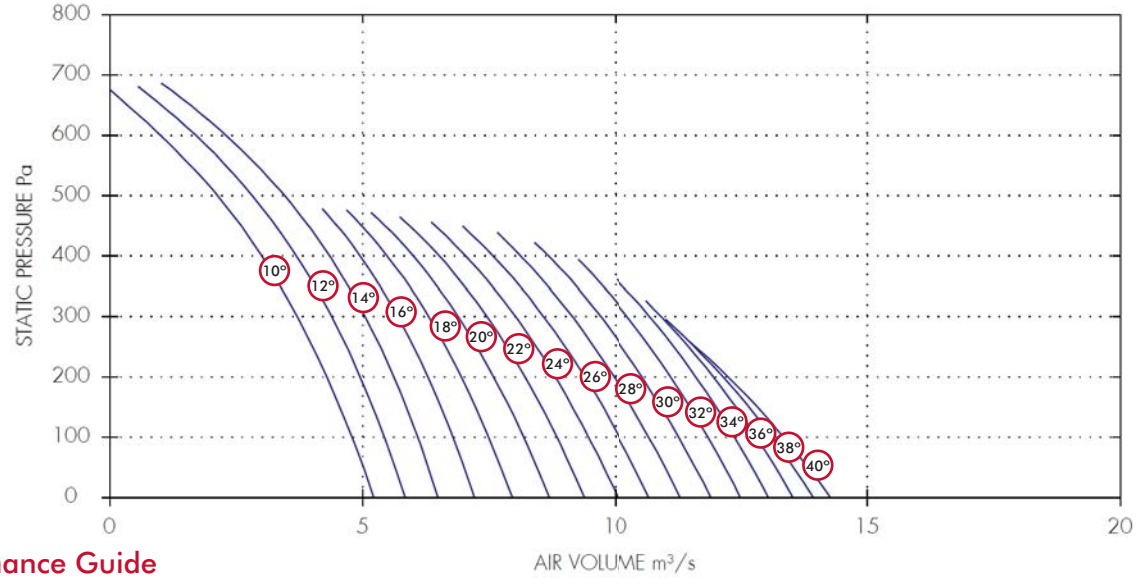
Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
800	BIFA803410	4	Inlet/Outlet	93	87	93	98	96	93	88	80	80
800	BIFA803412	4	Inlet/Outlet	93	87	93	98	96	93	88	80	80
800	BIFA803414	4	Inlet/Outlet	93	87	93	98	96	93	88	80	80
800	BIFA803416	4	Inlet/Outlet	93	87	93	98	96	93	88	80	80
800	BIFA803418	4	Inlet/Outlet	93	87	93	98	96	93	88	80	80
800	BIFA803420	4	Inlet/Outlet	90	84	90	95	93	90	85	77	77
800	BIFA803422	4	Inlet/Outlet	91	85	91	96	94	91	86	78	78
800	BIFA803424	4	Inlet/Outlet	91	85	91	96	94	91	86	78	78
800	BIFA803426	4	Inlet/Outlet	91	85	91	96	94	91	86	78	78
800	BIFA803428	4	Inlet/Outlet	92	86	92	97	95	92	87	79	79
800	BIFA803430	4	Inlet/Outlet	92	86	92	97	95	92	87	79	79
800	BIFA803432	4	Inlet/Outlet	92	86	92	97	95	92	87	79	79
800	BIFA803434	4	Inlet/Outlet	92	86	92	97	95	92	87	79	79
800	BIFA803436	4	Inlet/Outlet	92	86	92	97	95	92	87	79	79
800	BIFA803438	4	Inlet/Outlet	92	86	92	97	95	92	87	79	79
800	BIFA803440	4	Inlet/Outlet	92	86	92	97	95	92	87	79	79

Bifurcated Case Axial Fans (BIFA)

Performance Curve

BIFA90 - 3 Phase - 4 Pole



Performance Guide

Dia.	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	100	200	300	400	500	600	Motor kW	dBA @3m
900	BIFA903410	4	1440	IP55	10°	5.22	4.79	4.29	3.71	3	2.12	1	3	79
900	BIFA903412	4	1440	IP55	12°	5.84	5.43	4.95	4.38	3.69	2.82	1.7	4	80
900	BIFA903414	4	1440	IP55	14°	6.49	6.09	5.62	5.05	4.34	3.45	2.29	4	80
900	BIFA903416	4	1440	IP55	16°	7.21	6.79	6.29	5.69	4.94			4	80
900	BIFA903418	4	1440	IP55	18°	7.96	7.49	6.95	6.3	5.49			5.5	81
900	BIFA903420	4	1440	IP55	20°	8.69	8.18	7.59	6.89	6			5.5	81
900	BIFA903422	4	1440	IP55	22°	9.39	8.84	8.21	7.46	6.51			7.5	81
900	BIFA903424	4	1440	IP55	24°	10.04	9.47	8.81	8.02	7.04			7.5	81
900	BIFA903426	4	1440	IP55	26°	10.69	10.08	9.39	8.58	7.57			7.5	82
900	BIFA903428	4	1440	IP55	28°	11.31	10.69	9.97	9.14	8.12			11	82
900	BIFA903430	4	1440	IP55	30°	11.91	11.28	10.55	9.71	8.67			11	82
900	BIFA903432	4	1440	IP55	32°	12.5	11.85	11.12	10.26				11	82
900	BIFA903434	4	1440	IP55	34°	13.05	12.39	11.62	10.7				15	82
900	BIFA903436	4	1440	IP55	36°	13.54	12.82	11.97	10.93				15	82
900	BIFA903438	4	1440	IP55	38°	13.94	13.13	12.15					15	82
900	BIFA903440	4	1440	IP55	40°	14.27	13.36	12.26					15	82

Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
900	BIFA903410	4	Inlet/Outlet	89	83	91	97	95	92	87	79	79
900	BIFA903412	4	Inlet/Outlet	90	84	92	98	96	93	88	80	80
900	BIFA903414	4	Inlet/Outlet	90	84	92	98	96	93	88	80	80
900	BIFA903416	4	Inlet/Outlet	90	84	92	98	96	93	88	80	80
900	BIFA903418	4	Inlet/Outlet	91	85	93	99	97	94	89	81	81
900	BIFA903420	4	Inlet/Outlet	91	85	93	99	97	94	89	81	81
900	BIFA903422	4	Inlet/Outlet	91	85	93	99	97	94	89	81	81
900	BIFA903424	4	Inlet/Outlet	91	85	93	99	97	94	89	81	81
900	BIFA903426	4	Inlet/Outlet	92	86	94	100	98	95	90	82	82
900	BIFA903428	4	Inlet/Outlet	92	86	94	100	98	95	90	82	82
900	BIFA903430	4	Inlet/Outlet	92	86	94	100	98	95	90	82	82
900	BIFA903432	4	Inlet/Outlet	92	86	94	100	98	95	90	82	82
900	BIFA903434	4	Inlet/Outlet	92	86	94	100	98	95	90	82	82
900	BIFA903436	4	Inlet/Outlet	92	86	94	100	98	95	90	82	82
900	BIFA903438	4	Inlet/Outlet	92	86	94	100	98	95	90	82	82
900	BIFA903440	4	Inlet/Outlet	92	86	94	100	98	95	90	82	82

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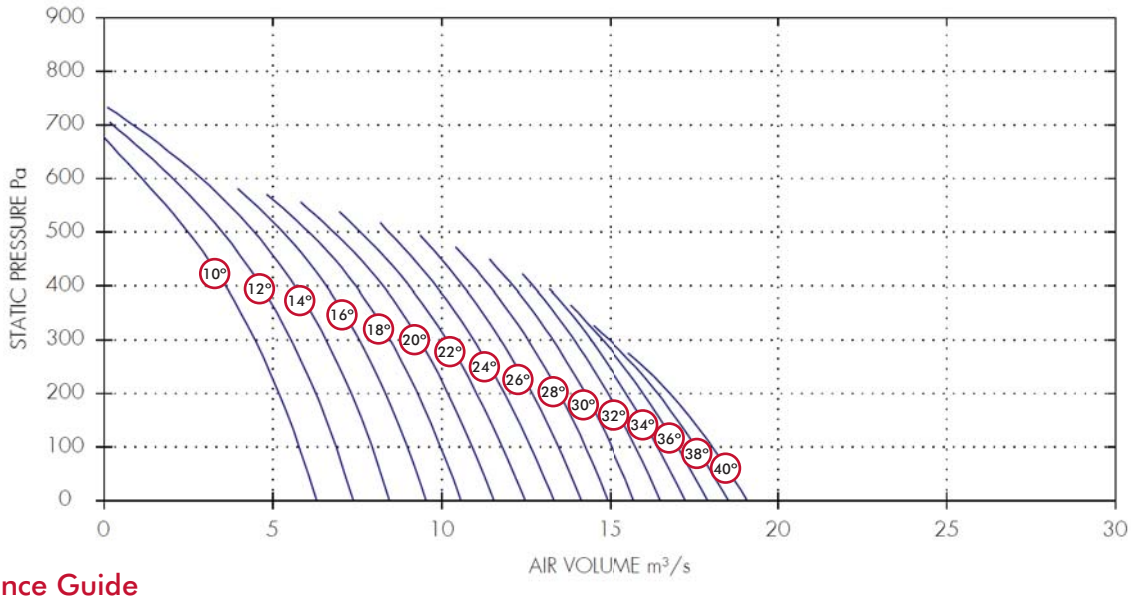
Performance Curve

BIFA100 - 3 Phase - 4 Pole



Performance Guide

Dia.	3 Phase Stock Ref	Poles	r.p.m	IP Rating	Curve Ref.	m³/s at Pa 0	100	200	300	400	500	600	700	Motor kW	dBA @3m
1000	BIFA1003410	4	1440	IP55	10°	6.3	5.78	5.18	4.47	3.6	2.49	1.12		4	89
1000	BIFA1003412	4	1440	IP55	12°	7.38	6.87	6.27	5.54	4.64	3.5	2.04	0.26	4	89
1000	BIFA1003414	4	1440	IP55	14°	8.46	7.94	7.33	6.57	5.64	4.45	2.88	0.86	5.5	89
1000	BIFA1003416	4	1440	IP55	16°	9.54	8.98	8.33	7.55	6.58	5.3			5.5	89
1000	BIFA1003418	4	1440	IP55	18°	10.57	9.97	9.29	8.47	7.45	6.06			7.5	89
1000	BIFA1003420	4	1440	IP55	20°	11.55	10.91	10.19	9.33	8.26	6.8			7.5	89
1000	BIFA1003422	4	1440	IP55	22°	12.46	11.79	11.04	10.15	9.04	7.59			7.5	89
1000	BIFA1003424	4	1440	IP55	24°	13.32	12.64	11.86	10.94	9.82	8.44			11	89
1000	BIFA1003426	4	1440	IP55	26°	14.13	13.45	12.67	11.75	10.63				11	89
1000	BIFA1003428	4	1440	IP55	28°	14.93	14.26	13.48	12.55	11.41				15	89
1000	BIFA1003430	4	1440	IP55	30°	15.73	15.05	14.25	13.29	12.11				15	89
1000	BIFA1003432	4	1440	IP55	32°	16.52	15.78	14.92	13.91	12.7				15	89
1000	BIFA1003434	4	1440	IP55	34°	17.26	16.44	15.5	14.42					18.5	89
1000	BIFA1003436	4	1440	IP55	36°	17.92	17.03	16.01	14.77					18.5	89
1000	BIFA1003438	4	1440	IP55	38°	18.53	17.57	16.44	14.97					18.5	89
1000	BIFA1003440	4	1440	IP55	40°	19.1	18.06	16.8						22	89

Sound Power Level Spectra dB (ref 10^{-12} Watts)

Dia.	3 Phase Stock Ref	Poles	Spectrum	63	125	250	500	1k	2k	4k	8k	dBA @ 3m
1000	BIFA1003410	4	Inlet/Outlet	99	94	101	106	106	102	97	89	89
1000	BIFA1003412	4	Inlet/Outlet	99	94	101	106	106	102	97	89	89
1000	BIFA1003414	4	Inlet/Outlet	99	94	101	106	106	102	97	89	89
1000	BIFA1003416	4	Inlet/Outlet	99	94	101	106	106	102	97	89	89
1000	BIFA1003418	4	Inlet/Outlet	99	94	101	106	106	102	97	89	89
1000	BIFA1003420	4	Inlet/Outlet	99	94	101	106	106	102	97	89	89
1000	BIFA1003422	4	Inlet/Outlet	99	94	101	106	106	102	97	89	89
1000	BIFA1003424	4	Inlet/Outlet	99	94	101	106	106	102	97	89	89
1000	BIFA1003426	4	Inlet/Outlet	99	94	101	106	106	102	97	89	89
1000	BIFA1003428	4	Inlet/Outlet	99	94	101	106	106	102	97	89	89
1000	BIFA1003430	4	Inlet/Outlet	99	94	101	106	106	102	97	89	89
1000	BIFA1003432	4	Inlet/Outlet	99	94	101	106	106	102	97	89	89
1000	BIFA1003434	4	Inlet/Outlet	99	94	101	106	106	102	97	89	89
1000	BIFA1003436	4	Inlet/Outlet	99	94	101	106	106	102	97	89	89
1000	BIFA1003438	4	Inlet/Outlet	99	94	101	106	106	102	97	89	89
1000	BIFA1003440	4	Inlet/Outlet	99	94	101	106	106	102	97	89	89

Bifurcated Case Axial Fans (BIFA)

Electrical Details

1 Phase 2 Pole

Stock Ref	r.p.m	Pitch Angle	Motor kW	S.C. Amps	F.L.C Amps	Starting Method	Starter Ref	Overload Ref	Transform Controller	*eDemand Controller		
										Voltage Control	1/3 Phase Inverter	3 Phase Inverter
BIFA25	2800	25°-50°	0.37	8	2.6	D.O.L.	444744	444702	-	-	-	-
BIFA31	2800	10°-24°	0.37	8	2.6	D.O.L.	444744	444702	-	-	-	-
BIFA31	2800	26°-32°	0.55	14	3.6	D.O.L.	444744	444703	-	-	-	-
BIFA31	2800	34°-38°	0.75	16	4.5	D.O.L.	444744	444703	-	-	-	-
BIFA31	2800	40°	1.1	23	6.6	D.O.L.	444744	444704	-	-	-	-
BIFA40	2800	10°-18°	0.75	16	4.5	D.O.L.	444744	444703	-	-	-	-
BIFA40	2800	20°-24°	1.1	23	6.6	D.O.L.	444744	444704	-	-	-	-
BIFA40	2800	26°-32°	1.5	31	8.5	D.O.L.	444744	444705	-	-	-	-

*1 phase 2 pole are not speed controlable

3 Phase 2 Pole

Stock Ref	r.p.m	Pitch Angle	Motor kW	S.C. Amps	F.L.C Amps	Starting Method	Starter Ref	Overload Ref	Transform Controller	eDemand Controller		
										Voltage Control	1/3 Phase Inverter	3 Phase Inverter
BIFA25	2800	25°-50°	0.37	5.82	0.97	D.O.L.	444747	444700	-	-	444177	444172
BIFA31	2800	10°-24°	0.37	5.82	0.97	D.O.L.	444747	444700	-	-	444177	444172
BIFA31	2800	26°-32°	0.55	8.52	1.42	D.O.L.	444747	444701	-	-	444177	444172
BIFA31	2800	34°-38°	0.75	10.62	1.77	D.O.L.	444747	444701	-	-	444177	444172
BIFA31	2800	40°	1.1	15.06	2.51	D.O.L.	444747	444702	-	-	444177	444173
BIFA40	2800	10°-18°	0.75	10.62	1.77	D.O.L.	444747	444701	-	-	444177	444172
BIFA40	2800	20°-26°	1.1	15.06	2.51	D.O.L.	444747	444702	-	-	444177	444173
BIFA40	2800	28°-32°	1.5	19.68	3.28	D.O.L.	444747	444702	-	-	444177	444173
BIFA40	2800	34°-38°	2.2	27.66	4.61	D.O.L.	444747	444703	-	-	-	444174
BIFA40	2800	40°	3	42.2	6.03	D.O.L.	444747	444704	-	-	-	444174
BIFA45	2880	10°-12°	1.1	15.06	2.51	D.O.L.	444747	444702	-	-	444177	444173
BIFA45	2880	14°-18°	1.5	19.68	3.28	D.O.L.	444747	444702	-	-	444177	444173
BIFA45	2880	20°-26°	2.2	27.66	4.61	D.O.L.	444747	444703	-	-	-	444174
BIFA45	2880	28°-32°	3	42.2	6.03	D.O.L.	444747	444704	-	-	-	444174
BIFA50	2880	10°-12°	1.5	19.68	3.28	D.O.L.	444747	444702	-	-	444177	444173
BIFA50	2880	14°-18°	2.2	27.66	4.61	D.O.L.	444747	444703	-	-	-	444174
BIFA50	2880	20°-24°	3	42.2	6.03	D.O.L.	444747	444704	-	-	-	444174
BIFA50	2880	26°-30°	4	59.1	7.88	D.O.L.	444747	444705	-	-	-	444175
BIFA50	2880	32°-36°	5.5	78.8	10.5	D.O.L.	444748	444706	-	-	-	444175
BIFA50	2880	38°-40°	7.5	106	14.1	D.O.L.	444748	444707	-	-	-	444176
BIFA56	2880	10°-14°	4	59.1	7.88	D.O.L.	444747	444705	-	-	-	444175
BIFA56	2880	16°-18°	5.5	78.8	10.5	D.O.L.	444748	444706	-	-	-	444175
BIFA56	2880	20°-24°	7.5	106	14.1	D.O.L.	444748	444707	-	-	-	444176
BIFA63	2940	10°-12°	5.5	78.8	10.5	D.O.L.	444748	444706	-	-	-	444175
BIFA63	2940	14°-16°	7.5	106	14.1	D.O.L.	444748	444707	-	-	-	444176

1 Phase 4 Pole

Stock Ref	r.p.m	Pitch Angle	Motor kW	S.C. Amps	F.L.C Amps	Starting Method	Starter Ref	Overload Ref	Transform Controller	eDemand Controller		
										Voltage Control	1/3 Phase Inverter	3 Phase Inverter
BIFA25	1440	25°-50°	0.25	5	2	D.O.L.	444744	444701	10314103	444164	-	-
BIFA31	1400	10°-40°	0.25	5	2	D.O.L.	444744	444701	10314103	444164	-	-
BIFA40	1400	10°-40°	0.55	11	3.9	D.O.L.	444744	444703	10314105	444164	-	-
BIFA45	1400	10°-40°	0.55	11	3.9	D.O.L.	444744	444703	10314105	444164	-	-
BIFA50	1400	10°-34°	0.55	11	3.9	D.O.L.	444744	444703	10314105	444164	-	-
BIFA50	1400	36°-40°	0.75	15	5.3	D.O.L.	444744	444704	10314107	444165	-	-

Electrical Details

3 Phase 4 Pole

Stock Ref	r.p.m	Pitch Angle	Motor kW	S.C. Amps	F.L.C Amps	Starting Method	Starter Ref	Overload Ref	Transform Controller	eDemand Controller: Voltage Control	eDemand Controller: 1/3 Phase Inverter	eDemand Controller: 3 Phase Inverter
BIFA25	1440	25°-50°	0.25	5.04	0.84	D.O.L.	444747	444699	10314301	444166	444177	444172
BIFA31	1400	10°-40°	0.25	5.04	0.84	D.O.L.	444747	444699	10314301	444166	444177	444172
BIFA40	1400	10°-40°	0.55	9.48	1.58	D.O.L.	444747	444701	10314304	444166	444177	444172
BIFA45	1400	10°–40°	0.55	9.48	1.58	D.O.L.	444747	444701	10314304	444166	444177	444172
BIFA50	1400	10°-34°	0.55	9.48	1.58	D.O.L.	444747	444701	10314304	444166	444177	444172
BIFA50	1400	36°-40°	0.75	11.58	1.93	D.O.L.	444747	444701	10314304	444166	444177	444172
BIFA56	1400	10°-16°	0.55	9.48	1.58	D.O.L.	444747	444701	10314304	444166	444177	444172
BIFA56	1400	18°-22°	0.75	11.58	1.93	D.O.L.	444747	444701	10314304	444166	444177	444172
BIFA56	1400	24°-30°	1.1	15.84	2.64	D.O.L.	444747	444702	10314304	444166	444177	444173
BIFA56	1400	32°-36°	1.5	20.7	3.45	D.O.L.	444747	444702	10314304	444166	444177	444173
BIFA56	1400	38°-40°	2.2	33.9	4.84	D.O.L.	444747	444703	10314307	444167	-	444173
BIFA63	1400	10°	0.55	9.48	1.58	D.O.L.	444747	444701	10314304	444166	444177	444172
BIFA63	1400	12°-14°	0.75	11.58	1.93	D.O.L.	444747	444701	10314304	444166	444177	444172
BIFA63	1400	16°-20°	1.1	15.84	2.64	D.O.L.	444747	444702	10314304	444166	444177	444173
BIFA63	1400	22°-26°	1.5	20.7	3.45	D.O.L.	444747	444702	10314304	444166	444177	444173
BIFA63	1400	28°-34°	2.2	33.9	4.84	D.O.L.	444747	444703	10314307	444167	-	444174
BIFA63	1400	36°-40°	3	45.3	6.47	D.O.L.	444747	444704	10314311	444167	-	444174
BIFA71	1420	10°	0.75	11.58	1.93	D.O.L.	444747	444701	10314304	444166	444177	444172
BIFA71	1420	12°-14°	1.1	15.84	2.64	D.O.L.	444747	444702	10314304	444166	444177	444173
BIFA71	1420	16°-18°	1.5	20.7	3.45	D.O.L.	444747	444702	10314304	444166	444177	444173
BIFA71	1420	20°-24°	2.2	33.9	4.84	D.O.L.	444747	444703	10314307	444167	-	444174
BIFA71	1420	26°-30°	3	45.3	6.47	D.O.L.	444747	444704	10314311	444167	-	444174
BIFA71	1420	32°-36°	4	57.8	8.26	D.O.L.	444747	444705	10314311	444167	-	444175
BIFA71	1420	38°-40°	5.5	77	11	D.O.L.	444748	444706	-	444168	-	444175
BIFA80	1420	10°-12°	2.2	33.9	4.84	D.O.L.	444747	444703	10314307	444167	-	444174
BIFA80	1440	14°-20°	3	45.3	6.47	D.O.L.	444747	444704	10314311	444167	-	444174
BIFA80	1440	22°-24°	4	57.8	8.26	D.O.L.	444747	444705	10314311	444167	-	444175
BIFA80	1440	26°-28°	5.5	77	11	D.O.L.	444748	444706	-	444168	-	444175
BIFA80	1440	30°-34°	7.5	102.2	14.6	D.O.L.	444748	444707	-	-	-	444176
BIFA80	1440	36°-40°	11	52.3	20.9	Star Delta	444843	444707	-	-	-	-
BIFA90	1440	10°	3	45.3	6.47	D.O.L.	444747	444704	10314311	444167	-	444174
BIFA90	1440	12°-16°	4	57.8	8.26	D.O.L.	444747	444705	10314311	444167	-	444175
BIFA90	1440	18°-20°	5.5	77	11	D.O.L.	444748	444706	-	444168	-	444175
BIFA90	1440	22°-26°	7.5	102.2	14.6	D.O.L.	444748	444707	-	-	-	444176
BIFA90	1440	28°-32°	11	52.3	20.9	Star Delta	444843	444707	-	-	-	-
BIFA90	1440	34°-40°	15	75.3	30.1	Star Delta	-	-	-	-	-	-
BIFA100	1440	10°-12°	4	57.8	8.26	D.O.L.	444747	444705	10314311	444167	-	444175
BIFA100	1440	14°-16°	5.5	77	11	D.O.L.	444748	444706	-	444168	-	444175
BIFA100	1440	18°-22°	7.5	102.2	14.6	D.O.L.	444748	444707	-	-	-	444176
BIFA100	1440	24°-26°	11	52.3	20.9	Star Delta	444843	444707	-	-	-	-
BIFA100	1440	28°-32°	15	75.3	30.1	Star Delta	-	-	-	-	-	-
BIFA100	1440	34°-38°	18.5	86	34.3	Star Delta	-	-	-	-	-	-
BIFA100	1440	40°	22	102	40.6	Star Delta	-	-	-	-	-	-

Speed Controllers

Used in conjunction with speed controllable fans Vent-Axia offers a choice of speed controllers, the traditional Five-Step Auto Transformer or the Inverter Speed Controller.

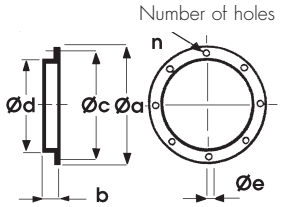
The Five-Step-Auto Transformer provides five stepped speed settings without the electronic motor harmonic noise associated with all electronic or solid state type Speed Controllers.

eDemand Speed Controllers & Inverters see Accessories & Controls Section.

Accessory Dimensions (mm)

Coupling Flange

Rolled from mild steel. Dimensionally matched to fan flange and fixing holes

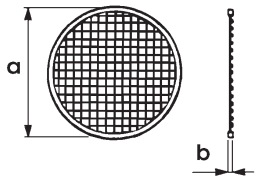


Stock Ref. No.	overall a	spigot b	pcd c	int dia d	hole dia e	No. holes
10506250	327	55	292	254	10	4
10506315	385	30	355	315	10	8
10506400	480	45	450	400	12	8
10506450	530	60	500	450	12	8
10506500	590	0	560	500	12	12
10506560	650	75	620	560	12	12
10506630	720	75	690	630	12	12
10506710A	794	40	770	710	12	13
10506800A	884	40	860	800	12	13
10506900A	1100	50	970	900	14	15
105061000A	1100	50	1070	1000	14	15

Inlet Wire Guard

'K' factor loss 0.25

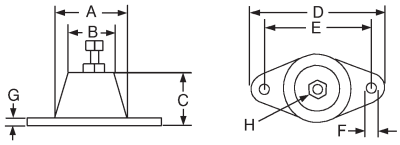
Available for direct fixing to either side of the fan using flange sizing holes. Constructed to meet BS 848 Part 5



Stock Ref.	a	b
10505250	245	3
10505315	380	3
10505400	475	3
10505450	525	3
10505500	595	3
10505560	655	3
10505630	725	3
10505710A	784	10
10505800A	870	10
10505900A	970	10
105051000A	1090	10

For more information on the 'K' factor, refer to General Information Section

*Anti-Vibration Mounts

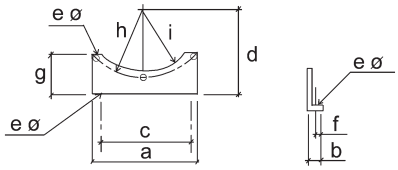


Max. Load

Stock Ref.	A	B	C	D	E	F	G	H	kg
10523033	37	26	27	67	54	7	3	M 8	23
10523055	37	26	27	67	54	7	3	M8	36
10523133	57	46	35	95	76	10.5	4	M12	91
10523165	57	46	35	95	76	10.5	4	M12	245

*4 required per fan

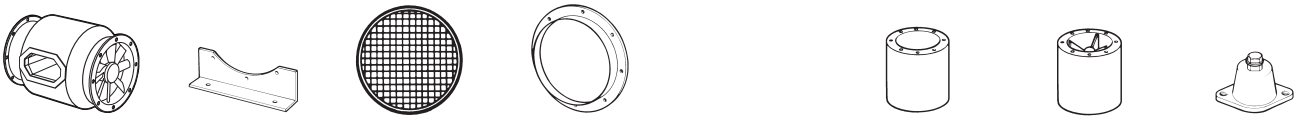
*Mounting Feet



Stock Ref.	a	b	c	d	e	f	g	h	i
10503250	232	24	180	240	10	14	115	146	130
10503315	275	24	224	240	10	14	115	177.5	167
10503400	348	24	280	300	12	14	135	225	213
10503450	384	24	315	360	12	14	155	250	238
10503500	425	24	315	360	12	14	135	280	268
10503560	475	24	355	355	12	14	155	310	298
10503630	520	24	400	400	12	14	175	345	333
10503710A	710	40	610	435	13	18	240	385	365
10503800A	800	40	700	480	13	18	262	430	410
10503900A	900	40	800	535	13	18	288	485	460
105031000A	1000	40	900	580	15	18	314	535	510

*Supplied as a pair

Accessories

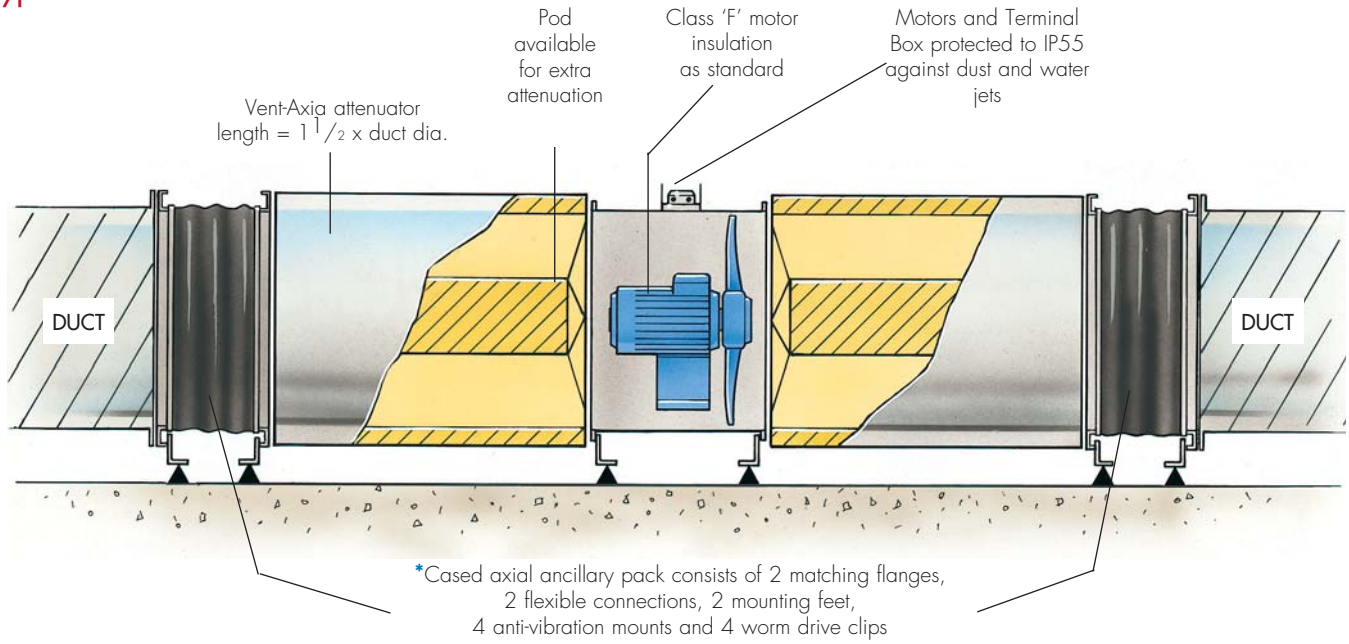


Model	Mounting Feet	Inlet Wire Guard	Coupling Flange	Ancillary Pack*	Attenuator	Attenuator inc. Pod	Anti-Vibration Mount**
BIFA25	10503250	10505250	10506250	10513250HT	10514250	-	10523033
BIFA31	10503315	10505315	10506315	10513315HT	10514315	10500315	10523033
BIFA40	10503400	10505400	10506400	10513400HT	10514400	10500400	10523033
BIFA45	10503450	10505450	10506450	10513450HT	10514450	10500450	10523033
BIFA50	10503500	10505500	10506500	10513500HT	10514500	10500500	10523033
BIFA56	10503560	10505560	10506560	10513560HT	10514560	10500560	10523033
BIFA63	10503630	10505630	10506630	10513630HT	10514630	10500630	10523033
BIFA71	10503710A	10505710	10506710A	10513710HT	10514710A	10500710	10523055
BIFA80	10503800A	10505800	10506800A	10513800HT	10514800A	10500800	10523055
BIFA90	10503900A	10505900	10506900A	10513900HT	10514900A	10500900	10523133
BIFA100	105031000A	105051000	105061000A	105131000HT	105141000A	105001000	10523133

*Axial Ancillary Pack consists of 2 Matching flanges, 2 Flexible connectors, 2 Mounting feet, 4 Anti vibration mounts and 4 Worm drive clips

**4 required per fan

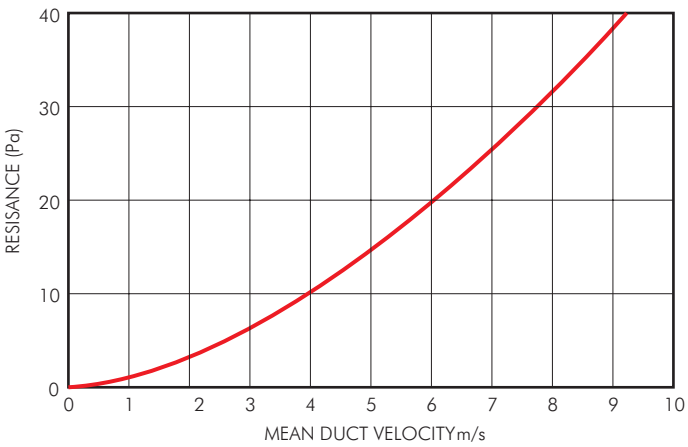
Typical Installation



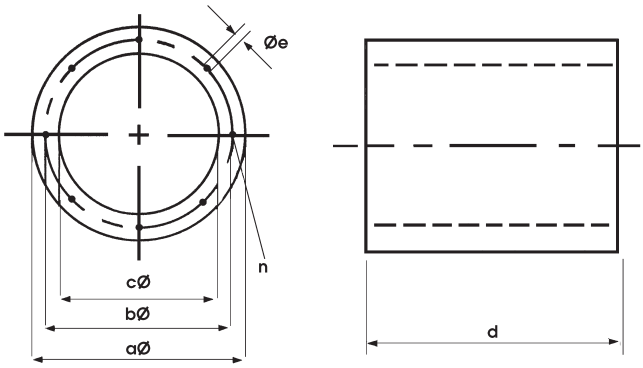
Fan Attenuator Details

An attenuator without pod offers negligible resistance to air flow, and therefore the pressure loss can be considered to be the same as that for the equivalent length of ducting.

Resistance Graph for Axial Attenuator with Pod



Attenuator Dimensions (mm)



Attenuator Insertion Loss Data

Dia	Stock Ref.	63	125	250	500	1k	2k	4k	8k	kg approx
250	10514250	2	3	6	11	16	11	10	6	20
315	10514315	2	3	6	11	16	11	10	6	22
400	10514400	2	3	6	13	16	12	10	6	41
450	10514450	2	4	6	14	17	12	10	6	50
500	10514500	3	4	7	14	17	14	11	7	59
560	10514560	2	4	8	15	18	14	11	7	70
630	10514630	3	4	8	16	18	14	11	7	82
710	10514710A	1	2	6	9	12	10	6	2	90
800	10514800A	1	2	6	9	12	10	6	2	100
800	10514800A	1	2	6	9	12	10	6	2	100
1000	105141000A	1	2	6	9	12	10	6	2	184

Melinex lined attenuators are available on request

Attenuator without Pod

Model	Stock Ref. No.	Dia a	Dia b	Dia c	Length d	Dia e	No. holes
BIFA25	10514250	350	292	254	375	M8	4
BIFA31	10514315	415	355	315	475	M8	8
BIFA40	10514400	500	450	400	600	M10	8
BIFA45	10514450	550	500	450	675	M10	8
BIFA50	10514500	600	560	500	750	M10	12
BIFA56	10514560	660	620	560	810	M10	12
BIFA63	10514630	730	690	630	940	M10	12
BIFAA71	10514710A	814	700	710	1070	M10	16
BIFAA80	10514800A	900	860	796	1200	M10	16
BIFAA90	10514900A	999	970	893	1350	M10	16
BIFAA100	105141000A	1108	1070	1070	1500	M10	16

Case Axial Attenuator Fitted with Pod Insertion Losses

Dia	Stock Ref.	63	125	250	500	1k	2k	4k	8k	kg approx + POD
315	10500315	6	7	12	18	27	25	22	19	32
400	10500400	3	8	12	18	28	26	23	19	60
450	10500450	4	8	14	20	28	26	23	19	73
500	10500500	4	8	14	20	29	26	23	19	87
560	10500560	4	9	14	20	29	26	23	19	102
630	10500630	4	9	14	20	29	26	23	19	120
710	10500710A	6	10	20	30	35	28	25	22	134
800	10500800A	6	10	20	30	35	28	25	22	149
900	10500900A	6	10	20	30	35	28	25	22	211
1000	105001000A	6	10	20	30	35	28	25	22	267

Attenuator with Pod

Model	Stock Ref. No.	Dia a	Dia b	Dia c	Length d	Dia e	No. holes
BIFA25	10500250	350	292	254	375	M8	4
BIFA31	10500315	415	355	315	475	M8	8
BIFA40	10500400	500	450	400	600	M10	8
BIFA45	10500450	550	500	450	675	M10	8
BIFA50	10500500	600	560	500	750	M10	12
BIFA56	10514560	660	620	560	810	M10	12
BIFA63	10500630	730	690	630	940	M10	12
BIFAA71	10500710A	814	700	710	1070	M10	16
BIFAA80	10500800A	900	860	796	1200	M10	16
BIFAA90	10500900A	999	970	893	1350	M10	16
BIFAA100	105001000A	1108	1070	1070	1500	M10	16

T: 0844 856 0591