CI/SfB
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Precise Air Management

Product Range > e3-line M

- Volume flow up to 5.6m³/s
- Static Pressures up to 1160 Pa
- Operating temperatures up to 80°C
- Specific Fan Powers of 0.71 or less when speed controlled
- Suitable for use with high pressure systems

e³-LINE

FläktWoods

Energy Efficient Fan Solution

e^3- Line M – Inline Mixed Flow

- Volume flow up to 5.6m³/s
- Static Pressures up to 1160 Pa
- Maximum operating temperature up to 80°C
- Low specific fan powers
- Specific Fan Powers of 0.71 or less when speed controlled
- Suitable for use with high pressure systems (i.e. installed with carbon filters)

e^3-Line M saves ENERGY

The facts speak for themselves: 50% increase in fan efficiency. 30% reduction of energy usage. This all helps to preserve the natural environment and reduce running costs. In addition, it is often possible to select a more compact solution and benefit from speed control to further reduce energy usage.

e^3-Line M saves SPACE

The low power to air flow output ratio of the e^3-Line M product results in compact dimensions of the fan, which keeps mounting space to a minimum, making this product ideal for saving plant room space.

e^3-Line M saves MONEY

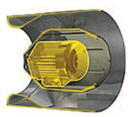
About 70% to 90% of the total cost, associated with running a fan, is often directly related to the cost of electricity. With e^3-Line M this cost is reduced by more than 30%! In Addition: Despite the superior product features of the e^3-Line M, it is surprisingly inexpensive.

Product Features

- Mixed Flow Fan with guide vanes
- Integrated thermal contact
- Terminal Box with cable gland IP44
- Maintenance-free, long-life ball bearings
- Max Operating Temperature up to 45°C to 80°C (depending on model)

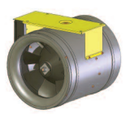
Complex blade contours

The product's exceptional performance, is in particular related to the unique and complex 3D guide vane and impeller geometry, which results in very low energy losses as air flows through the fan.



Motor mounted "out of airstream"

As the motors are mounted within a motor housing, they do not have a disruptive effect on the airflow. The motor housing also provides additional protection to the motor.



Integral Mounting bracket for easy installation

Each fan is complete with an integral mounting bracket

Accessories

A range of accessories such as fast clamps, inlet guards, backdraft dampers and speed controllers are available for this product.

Technical Data

Electrical, Efficiency, Temperature and Specific Fan Power Data

Model/ Product Number	Electrical Supply	Speed [RPM]	Input Power [kW]	Input Power [kW]	Fan Eff: [%]	SFP @ Max Fan %	SFP @ Max Fan %	FLC [Amps]	SC [Amps]	Max. Temp. [°C]	Speed Controller	
											Model	Part Number
230v 1ph		100% Duty	100% Duty	80% Duty		100% Duty	80% Duty					
ILMF 200 21-01 (IM219201)	230V/1/50Hz	2780	0.105	0.05376	33	0.62	0.40	0.5	2	45	MT1.1.5	DA402008
ILMF 250 21-01 (IM269201)	230V/1/50Hz	2810	0.18	0.09216	44.7	0.58	0.37	1	4	55	MT1.1.5	DA402008
ILMF 280 21-02 (IM299202)	230V/1/50Hz	2820	0.27	0.13824	50.6	0.71	0.45	1.6	6.4	55	MT1.5	DA423099
ILMF 315 21-01 (IM329201)	230V/1/50Hz	2760	0.51	0.26112	51.3	0.84	0.53	3.2	12.8	55	MT1.5	DA423099
ILMF 355 21-01 (IM369201)	230V/1/50Hz	2810	0.95	0.4864	50.6	1.12	0.71	5.4	21.6	45	MT1.8	DA402009
ILMF 355 41-01 (IM369401)	230V/1/50Hz	1440	0.15	0.0768	44.4	0.33	0.21	1.2	4.8	60	MT1.5	DA423099
ILMF 400 41-01 (IM419401)	230V/1/50Hz	1440	0.21	0.10752	46	0.31	0.20	1.5	6	80	MT1.5	DA423099
ILMF 450 41-01 (IM469401)	230V/1/50Hz	1440	0.45	0.2304	50.3	0.46	0.30	3.1	12.4	80	MT1.5	DA423099
ILMF 500 41-01 (IM519401)	230V/1/50Hz	1340	0.71	0.36352	49.8	0.58	0.37	3.7	14.8	80	MT1.5	DA423099
ILMF 560 41-01 (IM579401)	230V/1/50Hz	1420	1.17	0.59904	48.7	0.65	0.41	6.7	26.8	80	MT1.8	DA402009
ILMF 630 41-01 (IM649401)	230V/1/50Hz	1370	2.14	1.09568	55.4	0.81	0.58	11.4	45.6	50	MT1.12	DA402010
400v 3ph												
ILMF 560 43-01 (IM599401)	400V/3/50Hz	1540	1.36	0.69632	54.6	0.73	0.47	2.8	11.2	80	MT3.7	DA402013
ILMF 630 43-01 (IM669401)	400V/3/50Hz	1560	2.62	1.34144	61.5	1.02	0.66	5.4	21.6	70	MT3.7	DA402013
ILMF 710 43-01 (IM749401)	400V/3/50Hz	1360	3.60	1.8432	63	1.07	0.68	7.7	30.8	55	-	-
400v EC Motors												
ILMF 500 91-01 (IM539901)	400V/3/50Hz	2060	1.85	0.9472	69.1	0.96	0.62	3.3	13.2	55	MT3.7	DA402013
ILMF 630 91-01 (IM669901)	400V/3/50Hz	1490	2.13	1.09056	69.4	0.89	0.57	3.8	15.2	50	MT3.7	DA402013

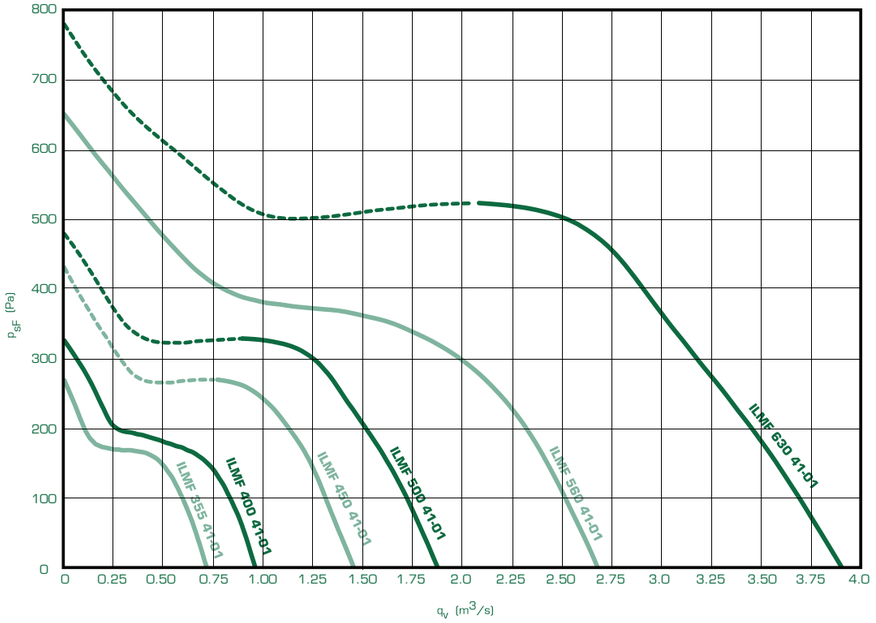
Sound Data

Fan Model	Inlet Sound Spectra (Lw) @ 100% Duty							Lw	LwA	Inlet LpA [dB(A) @ 3m]	Inlet LpA [dB(A) @ 3m]	Outlet LpA [dB(A) @ 3m]
	125Hz	250Hz	500Hz	1KHz	2KHz	4KHz	8KHz					
230v 1ph								100% Duty	100% Duty	100% Duty	80% Duty	100% Duty
ILMF 200 21-01	72	68	68	67	63	60	54	76	71	50	45	54
ILMF 250 21-01	54	63	64	66	65	62	55	71	71	50	45	54
ILMF 280 21-02	65	71	71	70	68	65	58	77	75	54	49	61
ILMF 315 21-01	64	73	72	70	69	68	67	78	76	55	50	61
ILMF 355 21-01	68	78	74	74	72	70	69	82	79	58	53	63
ILMF 355 41-01	60	64	61	60	56	54	45	68	64	43	38	46
ILMF 400 41-01	79	73	72	64	61	55	49	81	72	51	46	57
ILMF 450 41-01	79	76	69	67	64	58	53	81	73	52	47	58
ILMF 500 41-01	80	75	72	70	67	61	54	82	75	54	49	62
ILMF 560 41-01	97	88	84	75	71	65	59	98	86	65	60	69
ILMF 630 41-01	98	90	86	75	74	69	62	99	87	66	61	74
400v 3ph												
ILMF 560 43-01	101	95	84	78	73	66	59	102	90	69	64	72
ILMF 630 43-01	104	92	84	77	73	73	66	104	90	69	64	72
ILMF 710 43-01	99	102	85	80	76	72	66	104	94	73	68	75
400v EC Motors												
ILMF 500 91-01	90	88	81	78	73	70	66	93	84	63	58	74
ILMF 630 91-01	104	92	84	77	73	73	66	104	90	69	64	72

Performance Data

Composite Chart - e³-Line M 200mm to 355mm 2 pole - Single Phase

Composite Chart - e³-Line M 355mm to 630mm 4 pole - Single Phase



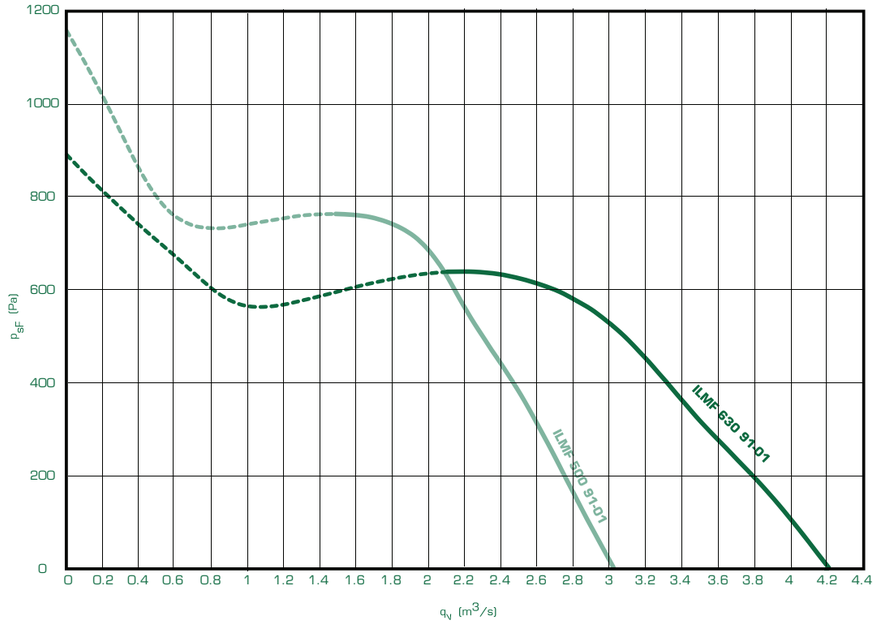
Please seek advice if you wish to select within non-preferred region (denoted by the broken line)

Performance Data

Composite Chart - e³-Line M 560mm to 710mm - Three Phase

Please seek advice if you wish to select within non-preferred region (denoted by the broken line)

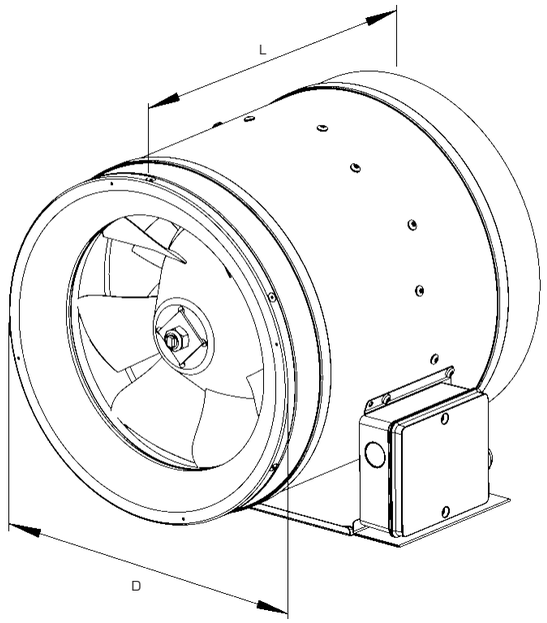
Composite Chart - e³-Line M EC 500mm and 630mm - Three Phase EC Motors



Please seek advice if you wish to select within non-preferred region (denoted by the broken line)

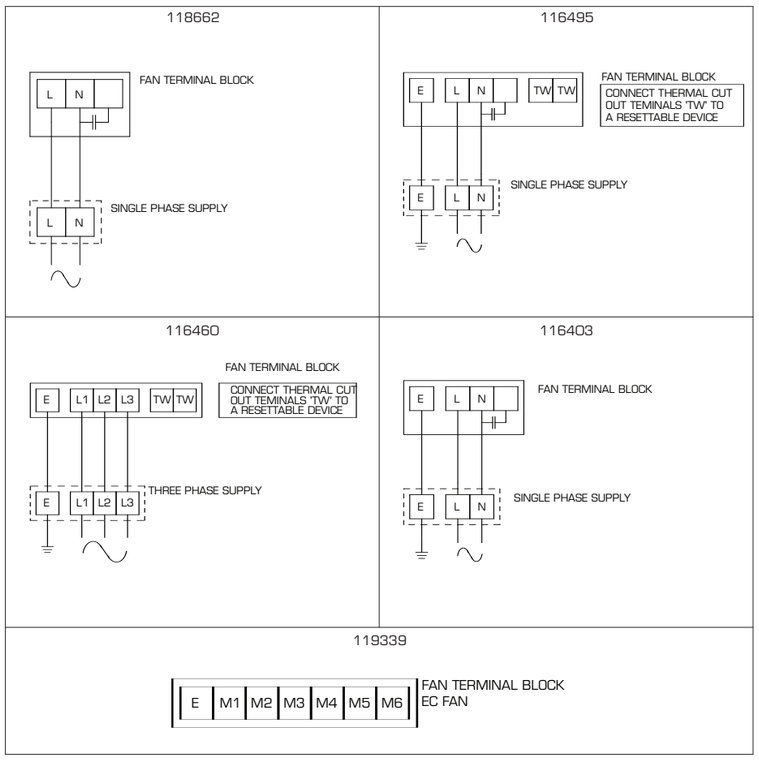
Drawings & Dimensional Data

Model	Product Number	D [mm]	L [mm]	Weight [kg]
ILMF 200 21-01	IM219201	201	225	2.9
ILMF 250 21-01	IM269201	250	278	6.4
ILMF 280 21-02	IM299202	278	308	8.3
ILMF 315 21-01	IM329201	315	351	14.2
ILMF 355 41-01	IM369401	354	396	13.5
ILMF 355 21-01	IM369201	354	396	17.3
ILMF 400 41-01	IM419401	403	417	16.0
ILMF 450 41-01	IM469401	453	467	19.3
ILMF 500 41-01	IM519401	504	515	23.2
ILMF 500 91-01	IM539901	504	515	27.5
ILMF 560 41-01	IM579401	564	582	37.2
ILMF 560 43-01	IM599401	564	582	29.0
ILMF 630 41-01	IM649401	634	654	43.5
ILMF 630 43-01	IM669401	634	654	39.0
ILMF 630 91-01	IM669901	634	654	36.8
ILMF 710 43-01	IM749401	714	732	48.0



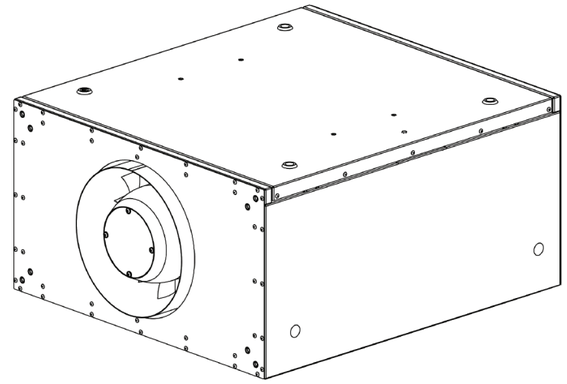
Wiring Diagrams

Model/ Product Number	Diagram ID
230v 1ph	
ILMF 200 21-01 (IM219201)	118622
ILMF 250 21-01 (IM269201)	116403
ILMF 280 21-02 (IM299202)	116403
ILMF 315 21-01 (IM329201)	116495
ILMF 355 21-01 (IM369201)	116495
ILMF 355 41-01 (IM369401)	116403
ILMF 400 41-01 (IM419401)	116403
ILMF 450 41-01 (IM469401)	116495
ILMF 500 41-01 (IM519401)	116495
ILMF 560 41-01 (IM579401)	116460
ILMF 630 41-01 (IM649401)	116495
400v 3ph	
ILMF 560 43-01 (IM599401)	116460
ILMF 630 43-01 (IM669401)	116460
ILMF 710 43-01 (IM749401)	116460
400v EC Motors	
ILMF 500 91-01 (IM539901)	119339
ILMF 630 91-01 (IM669901)	119339



Acoustic Low Profile Solution

For details please enquire



Whatever the size of your planned air management systems installation, you can be sure that, at Fläkt Woods, we're always ready to help.

From providing expert advice, information and guidance, to ensuring selection and specification of an integrated system that exactly matches the detailed needs of each building.

We're also equipped to provide the best possible support throughout the operational service life of each installed system.

Fläkt Woods systems in more detail

For more specific information, request introductory literature for all our air management systems:

- Air Handling Units
- Chillers
- Chilled Beams

and for our comprehensive range of

- Fans

Unrivalled R&D facilities

As leading pioneers in our specialist fields, Fläkt Woods has one of the world's largest networks of facilities for testing entire air climate solutions.

Our dedicated laboratory in Colchester, unique in the UK, is equipped to demonstrate and prove product performance and control strategies. We have further R&D facilities in Sweden, Finland, France and the USA.

Specific dynamic testing capabilities include measurement and study of:

- Comfort levels
- Cooling and heating outputs
- Velocity profiles
- Noise criteria

We also use advanced software tools for theoretical design, covering:

- Computational fluid dynamics (CFD)
- Product/component design
- System selection

In all, across Europe, there are 6 Fläkt Woods Technical Centres. More than 270 skilled personnel are constantly focused on maintaining technological progress, system performance and product quality.

Selection and specification advice

01206 222555

Precise Air Management

Fläkt Woods is a global leader in air management. We specialise in the design and manufacture of a wide range of air climate and air movement solutions. And our collective experience is unrivalled.

Our constant aim is to provide systems that precisely deliver required function and performance, as well as maximise energy efficiency.

Solutions for all your air climate and air movement needs

Fläkt Woods is the only company in the UK capable of providing total system solutions from the following portfolio:

- **Fans**

  Advanced axial, centrifugal and boxed fans for general and specialist applications. Comprehensive range including high temperature and ATEX compliant options. Engineered for energy efficiency and minimised life cycle cost.

- **Air Handling Units (AHUs)**

  Modular, compact and small AHU units. Designed to ensure optimisation of indoor air quality, operational performance and service life.

- **Chillers**

  Air-cooled and water-cooled chillers with cooling capacity up to 1800kW. Designed to minimise annual energy consumption in all types of buildings.

- **Chilled Beams**

  Active induction beams for ventilation, cooling and heating, and passive convection beams for cooling. For suspended or flush-mounted ceiling installation – and multi-service configuration. With unique Comfort Control and Flow Pattern Control features.

- **Smoke control and car park ventilation systems**

  Unique approach to car park ventilation, aided and optimised by Computational Fluid Dynamics (CFD) software. Complete turnkey solutions for designing, installing and commissioning mechanical and natural smoke ventilation.

- **Controls and drives**

  Variable speed drives and control systems, all tested to ensure total compatibility with our products. Specialist team can advise on energy saving and overall system integration.

- **Technical Site Services**

  Our dedicated team providing comprehensive post-installation services. Including condition-based contract monitoring, preventative and routine maintenance, refurbishment and system upgrades.

UK/e3-IMPO-01/0509

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