

COMPANY PROFILE

Elica Group motors business unit, originates from FIME, a company founded in 1974, as electric motors designer and manufacturer. FIME has always been characterized by its vertical structure which allows to create and control internally all production phases starting from raw materials. Over the years the company has expanded its market presence to become a reference both in the domestic ventilation field (fans for hoods) as well as heating field (fans for boilers). Strong of its thirty years long experience in ventilation and heating, Elica Group Company is today, under FIME Brand, leader on both markets.

Due to the spirit of complete harmony and cooperation that has always characterized relations with large industrial groups, Elica Group could develop a strong Know -how not only in the electromechanical motor design, but also in fluid dynamic and electronic design that allow us today to offer to the market integrated systems and air treatment devices. Design, is also carried out and monitored internally in the same way of production. Our technical dept. is equipped with the most modern tools for calculation and simulation in fluid dynamics, electromagnetism, integrated systems and, last but not least, mechanical structure. Besides the virtual instruments the technical dept. is equipped with tools to support and validate projects as well as products.

Aligned with the Elica Group industrial policy, the motor business has a production philosophy respectful of people and the environment welfare. FIME branded ventilation systems comply with sustainability and energy saving European standards. Nowadays the achieved technical know-how has allowed Elica to enter the commercial refrigeration business, where technologically advanced and energy saving products are required.



Wroclaw plant - Poland





Castelfidardo plant - Italy

Innovation and technology

MOTOR ADVANTAGES

"Meeting the great challenges of today requires experience and ability. Specific research focused on the development of highly innovative technology, allowed Elica, under FIME brand, to enter in the refrigeration business, creating a new range of products combining high efficiency, adaptability and reduced dimensions."

- High efficiency
- Easy replacement of traditional shaded pole motors
- Electronic control integrated in the motor
- The motor electronic board runs protection systems due to faulty motor behaviour
- Wide RPM range
- Rotation speed not affected by net power supply fluctuations
- High protection grade
- High temperature working range (-40°C / +50°C)

FEATURES

Internal rotor Brushless DC motor HOUSING Die-casted aluminium MOUNTING POSITION Horizontal/vertical ROTATION

CCW (shaft side)

INSULATION CLASS Class 130 according to EN60335

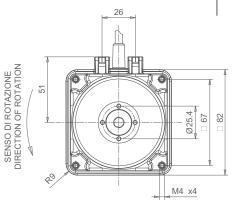
MOTOR PROTECTION Electronically protected

OPERATING TEMPERATURE RANGE -40°C / +50°C

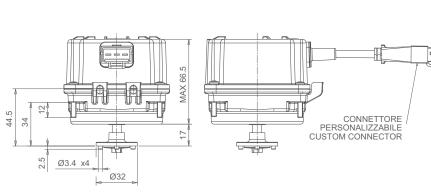
PROTECTION DEGREE IP56 (only with horizontal shaft) IP55 (any shaft position) according to EN 60529

OPTIONS

Speed, control, impeller, power cable lenght and type of connection on request.







TYPE	RATED	FREQUENCY	IMPELLER	FEATURE	INPUT POWER	NOMINAL	
IIIFL	VOLTAGE		DIAMETER	PITCH		SPEED	
		50/60 Hz	200 mm	22° deg	6 W		
B1200300 (MOT0006796)				28° deg	10 W		
	230 V ± 15%			34° deg	13 w	1050 50	
			230 mm	22° deg	12 w	1350 ± 50	
				28° deg	19 W	ipiii	
				34° deg	25 W		
			254 mm	22° deg	22 W		
					INPUT		
TYPE	RATED	FREQUENCY	IMPELLER	IMPELLER FEATURE		NOMINAL	
TTTL	VOLTAGE		DIAMETER	PITCH	POWER	SPEED	

	TYPE	RATED VOLTAGE	FREQUENCY	DIAMETER	PITCH	INPUT POWER	NOMINAL SPEED
B1200400 (MOT0006797)					22° deg	18 W	
	230 V ± 15%	50/60 Hz	200 mm	28° deg	40 W	2400 ± 50	
				34° deg	54 w		
B1200500 (MOT0014729)	230 V ± 15%	50/60 Hz	200 mm	22° deg	16 w		
				28° deg	28 W	2150 ± 50 rpm	
	(100 100 147 20)				34° deg	38 W	

50/60 Hz

50/60 Hz

IMPELLER FEATURE PITCH 15° deg

22° deg

15° deg

22° deg

31° deg

34° deg

22° deg

34° deg 13,2 W

154 mm

172 mm

2,4 W

2,5 W

2,5 w

2,9 w

4,5 W

4,7 W

4 W

1100 ± 50

rpm

TYPE	RATED	L ERECHENCY	IMPELLER FEATURE		INPUT	NOMINAL	TYPE	RATED
11172	VOLTAGE		DIAMETER	PITCH	POWER	SPEED	IIIFE	VOLTAGE
	230V ±15%	50/60 Hz	154 mm	15° deg	2,2 W		B1200700 (MOT0040331)	230V ±15%
	250V ±15/6	30/00 HZ	134 11111	22° deg	2,4 W	900 ± 50 rpm		230V ±13%
	230V ±15%	50/60 Hz	172 mm	15° deg	2,3 w			230V ±15%
D				22° deg	2,5 w			
B1200600 (MOT0040330)				31° deg	3,4 W			
(11010010000)				34° deg	3,5 W			
	230V ±15%	50/60 Hz	200 mm	22° deg	3,1 W			
				28° deg	4,2 W			230V ±15%
				34° deg	5,1 W			

		230V ±15%	50/60 Hz	200 mm	28° deg	6 W	
					34° deg	7,4 W	
		RATED		IMPELLER	FEATURE	INPUT	NOMINAL
	TYPE	VOLTAGE	FREQUENCY	DIAMETER	PITCH	POWER	SPEED
Ī		230V ±15%	50/60 Hz	154 mm	15° deg	2,9 W	
					22° deg	3,1 W	
		230V ±15% 50/60 Hz	50/60 Hz	172 mm	15° deg	3 w	
	D4000000				22° deg	4 w	1100 50
•	B1200900 (MOT0040333)		30/00 112		31° deg	7,1 W	1400 ± 50
	, ,			34° deg	7,6 W		
					22° deg	8,5 W	
		230V ±15%	50/60 Hz	200 mm	28° deg	10,5 W	

	TYPE	RATED	FREQUENCY	IMPELLER	FEATURE	INPUT	NOMINA	
	ITPE	VOLTAGE		DIAMETER	PITCH	POWER	SPEED	
		230V ±15%	50/60 Hz	154 mm	15° deg	2,6 W		
		230V ±13/6	30/00 HZ	134 11111	22° deg	2,8 W	1200 ± 5 rpm	
		230V ±15%	50/60 Hz	172 mm	15° deg	2,7 w		
	D				22° deg	3,2 w		
	B1200800 (MOT0040332)				31° deg	5,3 W		
	(1110 100 10002)				34° deg	5,5 W		
		230V ±15%	50/60 Hz	200 mm	22° deg	6 W		
					28° deg	7,2 W		
				34° deg	8,9 W			

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FEATURES

Internal rotor Brushless DC motor HOUSING Die-casted aluminium MOUNTING POSITION Horizontal/vertical

ROTATION CCW (shaft side)

INSULATION CLASS Class 130 according to EN60335

MOTOR PROTECTION Electronically protected

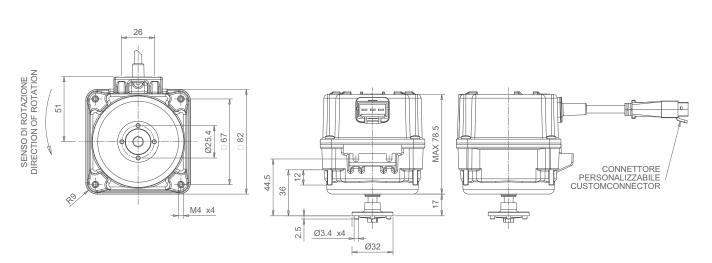
OPERATING TEMPERATURE RANGE

-40°C / +50°C

PROTECTION DEGREE IP56 (only with horizontal shaft) IP55 (any shaft position) according to EN 60529

OPTIONS

Speed, control, impeller, power cable lenght and type of connection on request.



TYPE	RATED	FREQUENCY	IMPELLER	FEATURE	INPUT POWER	NOMINAL SPEED
ITPE	VOLTAGE		DIAMETER	PITCH		
		50/60 Hz		22° deg	10 W	
			230 mm	28° deg	14 W	
	230V ±15%			34° deg	17 w	
D0100100			254 mm	22° deg	13 w	
B2400100 (MOT0018921)				28° deg	25 W	1250 ± 50
(100 100 1002 1)				34° deg	29 W	ipiii
			300 mm	19° deg	24 W	
				22° deg	26 W	
				28° deg	44 W	

FEATURES

Axial fan motor

MOTOR

External rotor Brushless DC motor

FAN TYPE

5 Blades (steel)

MOUNTING POSITION

Horizontal/vertical

DIRECTION OF AIR FLOW

Suction

ROTATION

CW (shaft side)

INSULATION CLASS Class 130 according to EN60335

MOTOR PROTECTION

Electronically protected

OPERATING TEMPERATURE RANGE

-40°C / +50°C

PROTECTION DEGREE

44 according to EN 60529

Protection grid attached to the

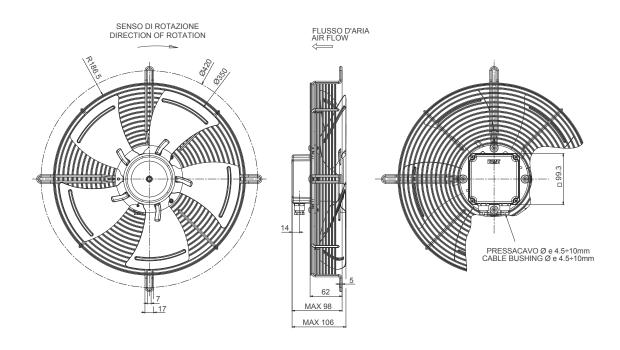
die-cast housing

OPTIONS

Customizable speed.

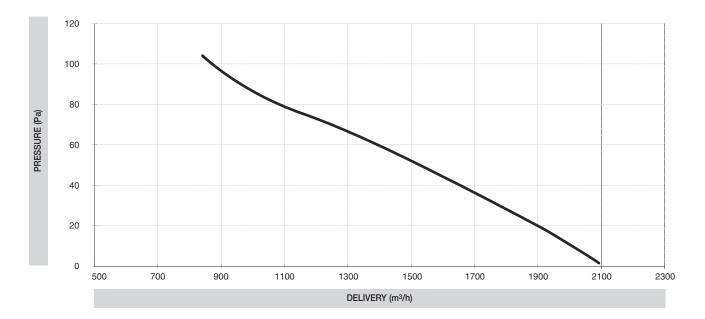




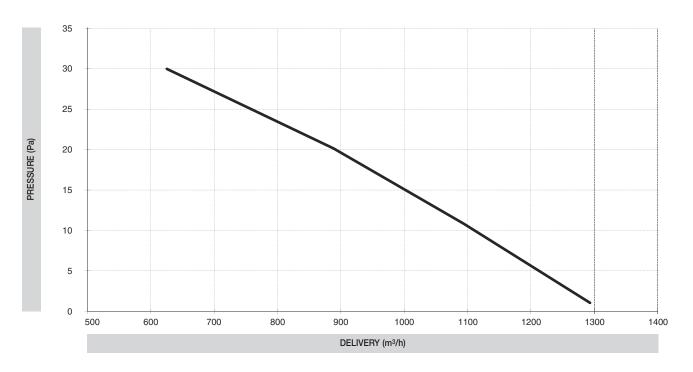


TVDE	RATED VOLTAGE	FREQUENCY	IMPELLER FEATURE		OLIDVE	INDUT DOWED	NOMINAL COFFE
TYPE			DIAMETER	STAGGER ANGLE	CURVE	INPUT POWER	NOMINAL SPEED
ECF00601 (ECF0015270)	220 V + 15%	50/60 Hz	350 mm	66 deg	A1	100 W	1475 ± 50 rpm
ECF00801 (ECF0019597)	230 V ± 15%				A2	23 W	900 ± 50 rpm

CHARACTERISTIC CURVE A1



CHARACTERISTIC CURVE A2



Test performed without inlet bell.

FEATURES

Axial fan motor

MOTOR

External rotor Brushless DC motor

FAN TYPE

5 Blades (steel)

MOUNTING POSITION

Horizontal/vertical

DIRECTION OF AIR FLOW

Suction

ROTATION

CW (shaft side)

INSULATION CLASS Class 130 according to EN60335

MOTOR PROTECTION

Electronically protected

OPERATING TEMPERATURE RANGE

-40°C / +50°C

PROTECTION DEGREE

44 according to EN 60529

Protection grid attached to the

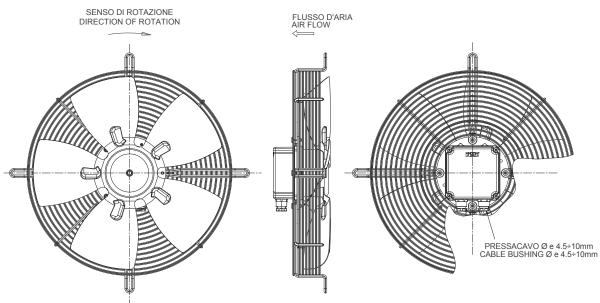
die-cast housing

OPTIONS

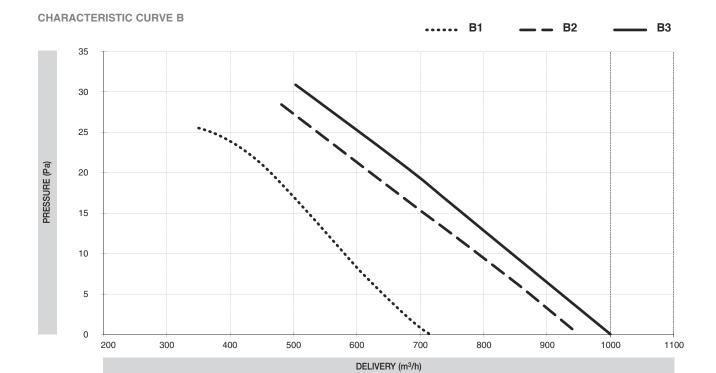
Customizable speed.

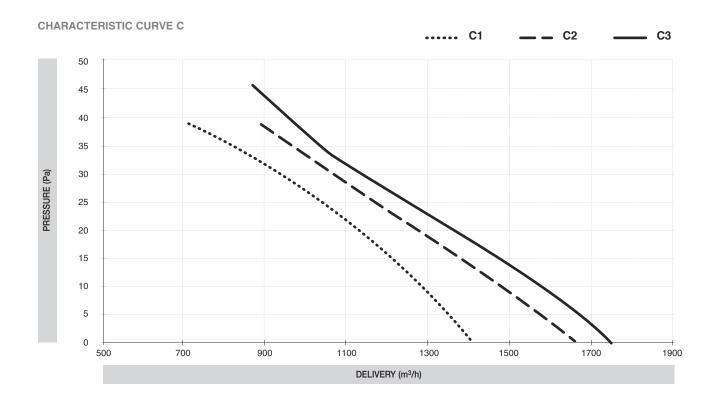


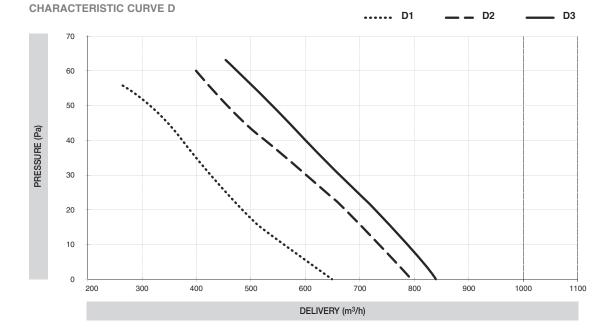


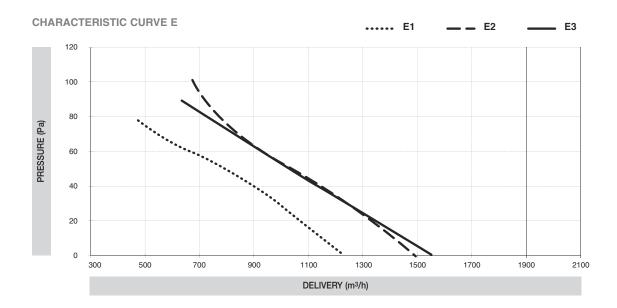


TYPE	RATED VOLTAGE	FREQUENCY	IMPELLER FEATURE		CURVE	INPUT POWER	NOMINAL SPEED
· · · · ·	TIATED VOLIAGE	THEGOENOT	DIAMETER	STAGGER ANGLE	COTIVE	INI OT TOWER	NOMINAL OF ELD
ECF00805 (ECF0086338)				21 deg	B1	13 W	
ECF00806 (ECF0086339)			300 mm	27 deg	B2	19 W	
ECF00807 (ECF0086340)				30 deg	В3	22 W	
ECF00808 (ECF0086341)				21 deg	C1	25 W	900 ± 50 rpm
ECF00809 (ECF0086342)		50/60 Hz	350 mm 250 mm	27 deg	C2	36 W	
ECF00810 (ECF0086343)				30 deg	C3	43 W	
ECF00603 (ECF0036330)	230 V ± 15%			21 deg	D1	20 W	1475 ± 50 rpm
ECF00607 (ECF0086344)				27 deg	D2	28 W	
ECF00608 (ECF0086345)				30 deg	D3	33 W	
ECF00605 (ECF0062554)				21 deg	E1	48 W	
ECF00604 (ECF0062553)			300 mm	27 deg	E2	70 W	
ECF00112 (ECF0017186)				30 deg	E3	85 W	
ECF00602 (ECF0026548)			350 mm	21 deg	F1	90 W	









CHARACTERISTIC CURVE F



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