

ETRI®

400Hz Axial Fans

10/2008


rosenberg
THE AIR MOVEMENT GROUP



We are proud to form a part of the ROSENBERG family:



Rosenberg Ventilatoren GmbH
Künzelsau, Germany



ECOFIT S.A.
Vendôme, France

- Technical Expertise & Application Engineering
- Outstanding Customer Service
- Design Flexibility & Custom Fan/Motor Equipment
- Stock Fans for Immediate Shipment
- Full Line of Accessory Products & Controls
- Value Added Fabrication

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400 Hz Fans

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The following data tables give the main characteristics of our standard fans ; for detailed information or specific request, call our local sales team.

Les tableaux suivants indiquent les caractéristiques principales de nos ventilateurs standards ; pour des informations plus détaillées ou des demandes spécifiques, contactez nos équipes techniques et commerciales.

Visit ETRI on line at :
www.etrinet.com

Catalogue data

In this 400 Hz Fans catalogue, we offer models which are in general use.

Our standard product range includes many other versions with variations in supply voltage and speed.

Specific fans are available and can be made to customers specification.

Our application engineers work constantly with our customers specification to offer the best fan selection..

In this way, many special units are produced both for commercial and military applications.

Our test laboratories in Vendôme (France) are available for customers to test their prototype equipment in order to determine the optimum cooling solution.

Further products catalogues:

- AC Axial Fans
- DC Axial Fans
- High Performance Fans
- Accessories

All the datasheets are still available on the website:

www.etrinet.com

ELECTRICAL, AERODYNAMIC AND INDUSTRIAL DATA

The following information can be found in the data tables:

- Nominal voltages
- Rated speed which is an approximate value of the fan speed operating at free air
- Power consumption and line current at free air
- Maximum static pressure corresponding to the pressure at no flow condition
- Maximum air delivery corresponding to airflow at no static pressure value
- Total noise level in decibels from the equilibrium curve
A measured 1 meter from the air inlet, the fan operating in free air.

TOLERANCES (Indicative values)

Speed / airflow	+/- 4 %
Static pressure	+/- 8 %
Input power	+/- 10 %
Current	+/- 10 %
Voltage	+/- 5 %

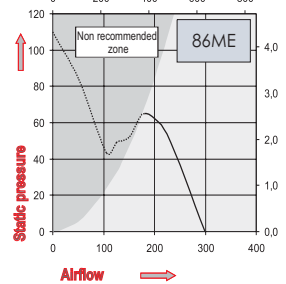
EXAMPLE OF CODIFICATION

Series code	106	ZA	05	60	XXX
Speed					
Mechanical (flange position)					
Voltage: 60 = 200V 400Hz; 62 = 115V 400Hz					

CONDITIONS OF USE

Unstable operating zone for ETRI 400 Hz fans

Many axial flow fan characteristics have a “stall point”, also referred to as the “unstable zone” or “pumping zone”. It is recommended that fans should not be allowed to operate around the fan stall point otherwise there are serious risks of:



- impeller speed fluctuation causing mechanical instability
- increased motor temperature rise, especially on the bearings
- increased noise and vibration levels
- destruction of the motor mountings, motor bearings, and the fan impeller.

Some small diameter fans may be operated around the stall point, or at higher pressures and lower flow rates, but strictly with the written approval of manufacturer ETRI.

AERODYNAMIC CURVES

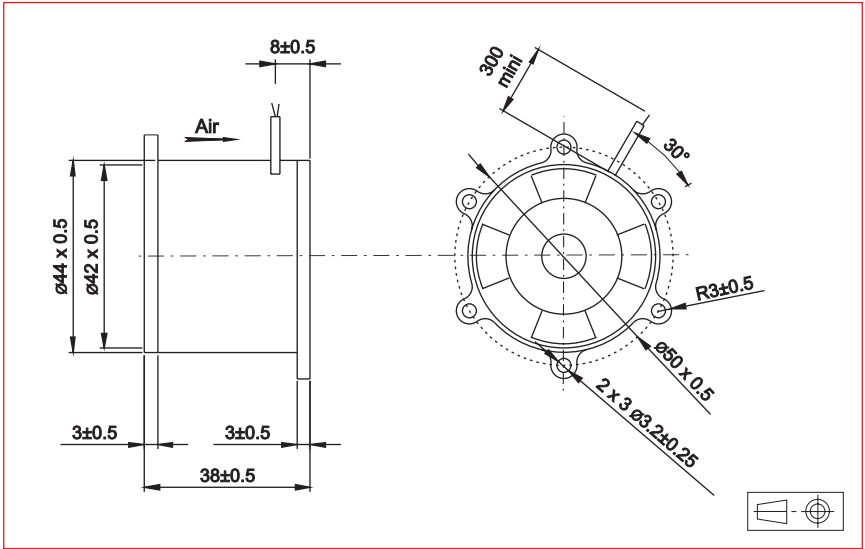
The aerodynamic graphs are constructed using a test chamber and method described in CCT Standard 18.10. They are drawn up for an air density of 1,2 kg/m³.

TOLERANCES

The values shown in the data tables and the various curves have been measured from standard design equipment and should be considered nominal. Without particular specifications, we accept the tolerances given at the beginning of each catalogue. Drawings: without particular specifications, we accept a tolerance of ± 1 mm.



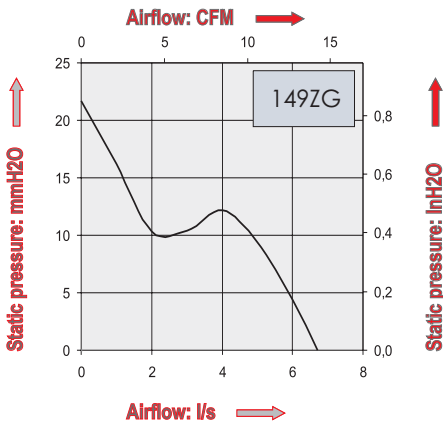
Approvals



Life expectancy

L-10 LIFE AT 40°C:
25 000 hours

400 Hz Motor Connection: flying leads
 Housing material: aluminium
 Impeller material: aluminium
 Weight: 140 g
 Bearing system: ball bearings



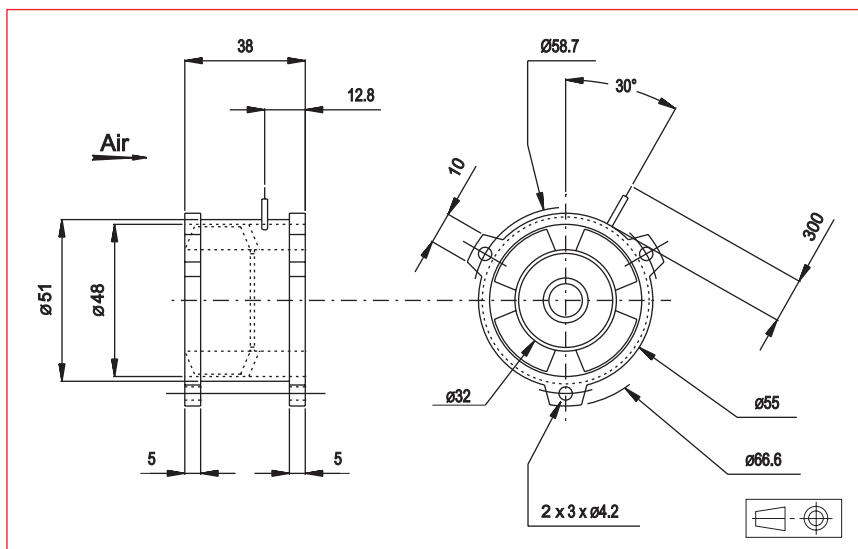
Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Phases	Capacitor <small>(not included)</small>	Input power	Nominal Current	Starting Current	Operating temperature	
	V	l/s	dB(A)	RPM		µF	W	mA	mA	Min.°C	Max.°C
149ZG0562005	115	6,7	52,5	11500	3		9	96	208	-20	85
149ZG0560005	200	6,7	52,5	11500	3		9	55	120	-20	85

Additional versions:
 Salt spray protected - Shock and vibration protected - Marine specifications
 Wide temperature range

Ø 66,6 x 38 mm

ETRI®

400 Hz Fans



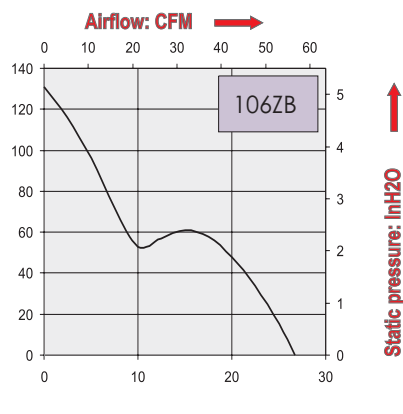
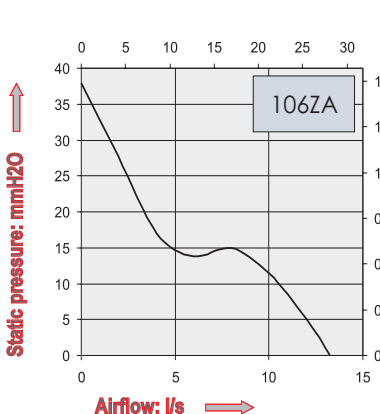
Approvals

NATO codification

Life expectancy

L-10 LIFE AT 40°C:
25 000 hours

400 Hz Motor Connection: flying leads
 Housing material: aluminium
 Impeller material: aluminium
 Weight: 170 g
 Bearing system: ball bearings



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Phases	Capacitor (not included)	Input power	Nominal Current	Starting Current	Operating temperature	
	V	l/s	dB(A)	RPM		µF	W	mA	mA	Min.°C	Max.°C
106ZA0562C13	115	13	51	11500	3		15	160	350	-10	70
	115	13	51	11500	1	0,47	15	180	350	-10	70
106ZA0560C13	200	13	51	11500	3		15	95	205	-10	70
	200	13	51	11500	1	0,15	15	105	205	-10	70
106ZB0562C13	115	27	72	22700	3		42	335	1250	-10	70
106ZB0560C13	200	27	72	22700	3		42	195	720	-10	70
	200	27	72	22700	1	0,32	43	215	455	-10	70

Additional versions: Salt spray protected - Shock and vibration protected - Marine specifications - Wide temperature range
Accessories: Refer to Accessories leaflet



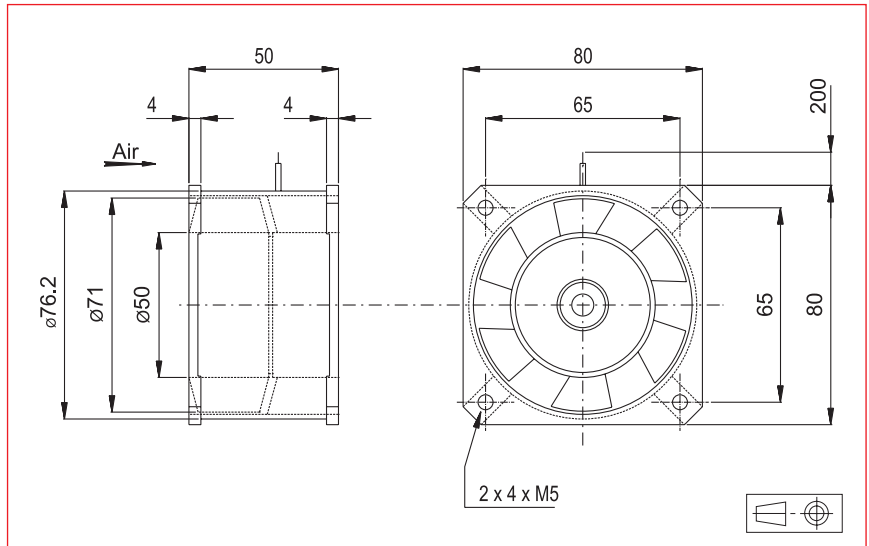
Approvals

NATO codification

Life expectancy

L-10 LIFE AT 40°C:
25 000 hours

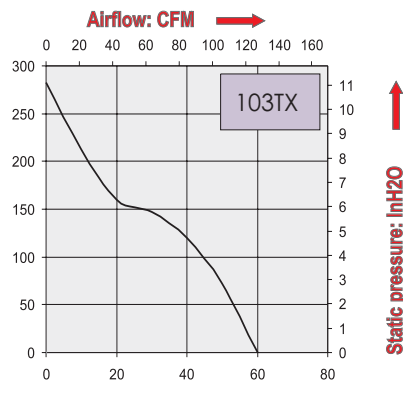
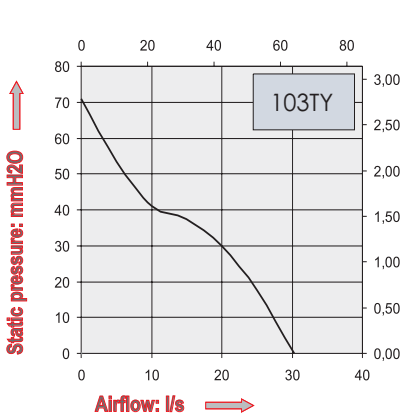
80 x 80 x 50 mm



400 Hz Motor

Housing material: aluminium
Impeller material: aluminium
Weight: 480 g
Bearing system: ball bearings

Connection: flying leads



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Phases	Capacitor	Input power	Nominal Current	Starting Current	Operating temperature	
	V	l/s	dB(A)	RPM		(not included)		µF	W	mA	mA
103TY0562C13	115	30	65	11400	3		19	160	460	-10	70
	115	30	65	11400	1	0,69	21	180	390	-10	70
103TY0560C13	200	30	65	11400	3		19	95	270	-10	70
	200	30	65	11400	1	0,22	21	105	230	-10	70
103TX0562C13	115	60	80	23000	3		110	690	3300	-10	70
	115	60	80	23000	1	3,2	120	1050	2800	-10	70
103TX0560C13	200	60	80	23000	3		110	400	1900	-10	70
	200	60	80	23000	1	1	120	580	1600	-10	70

Additional versions:

Salt spray protected - Shock and vibration protected - Marine specifications - Wide temperature range

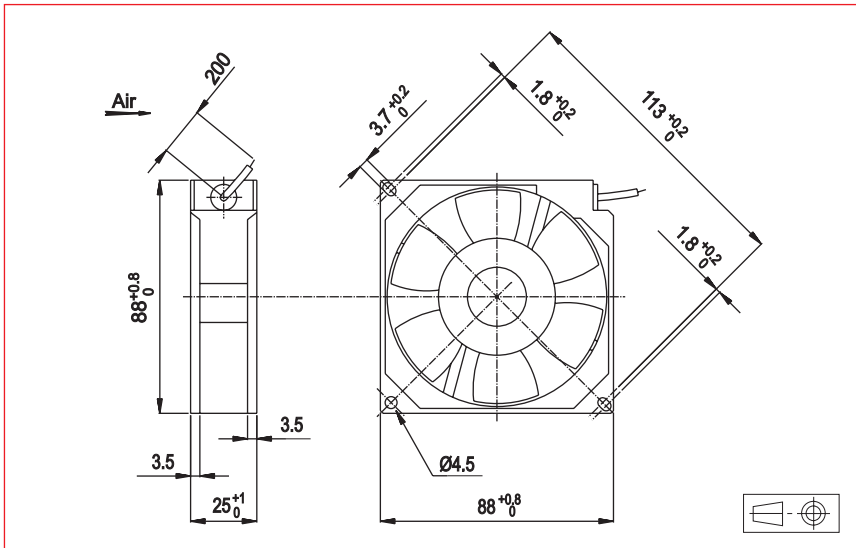
Accessories:

Refer to Accessories leaflet

88 x 88 x 25 mm

ETRI®

400 Hz Fans



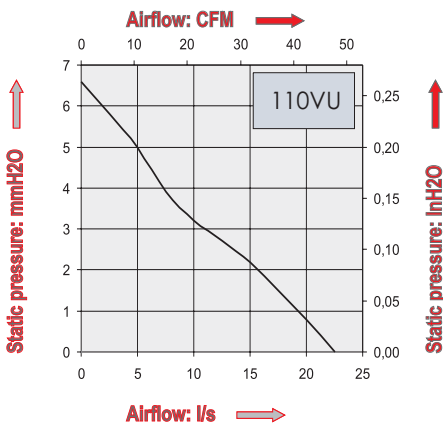
Approvals

NATO codification

Life expectancy

L-10 LIFE AT 40°C:
35 000 hours

400 Hz Motor
 Housing material: aluminium
 Impeller material: plastic
 Weight: 200 g
 Bearing system: ball bearings
 Connection: flying leads
 Electrical protection: impedance protected



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Phases	Capacitor (not included)	Input power	Nominal Current	Starting Current	Operating temperature	
	V	l/s	dB(A)	RPM		µF	W	mA	mA	Min.°C	Max.°C
110VU0162001	15	22,5	43	3300	1	0,47	14	130	140	-10	70
110VU0160001	200	22,5	43	3300	1	0,15	14	75	80	-10	70

Additional versions:
 Salt spray protected - Shock and vibration protected - Marine specifications
 Wide temperature range



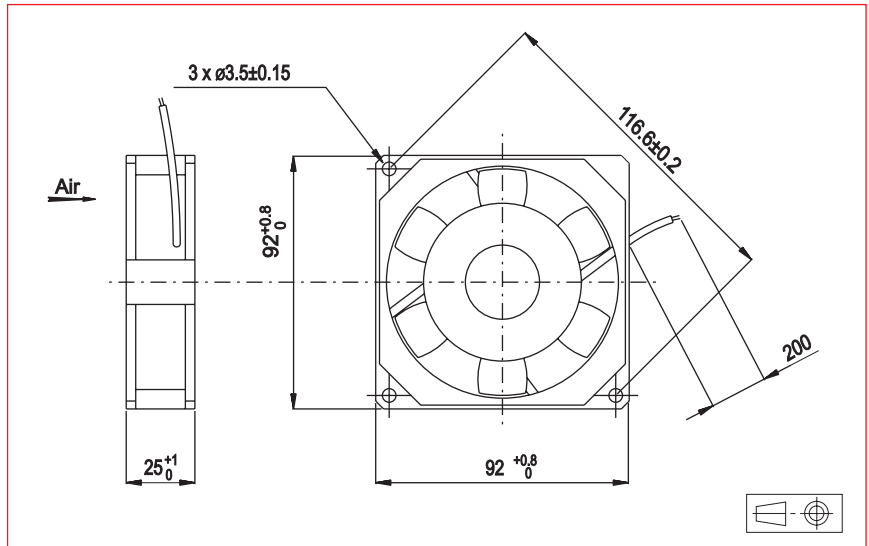
Approvals

NATO codification

Life expectancy

L-10 LIFE AT 40°C:
35 000 hours

92 x 92 x 25 mm

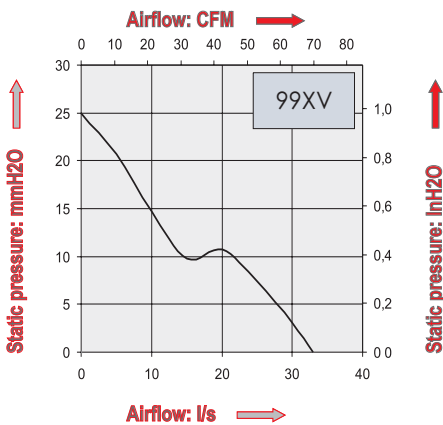


400 Hz Motor

Housing material: zamak
Impeller material: plastic UL 94 VO
Weight: 390 g
Bearing system: ball bearings

Connection: flying leads

Available with:
- Speed sensor



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Phases	Capacitor <small>(not included)</small>	Input power	Nominal Current	Starting Current	Operating temperature	
	V	l/s	dB(A)	RPM		µF	W	mA	mA	Min.°C	Max.°C
99XV0162001	115	33	55	5500	3		14	130	280	-10	70
	115	33	55	5500	1	0,47	14	145	225	-10	70
99XV0160001	200	33	55	5500	3		14	75	160	-10	70
	200	33	55	5500	1	0,15	14	85	130	-10	70

Additional versions:
Salt spray protected - Shock and vibration protected - Marine specifications
Wide temperature range

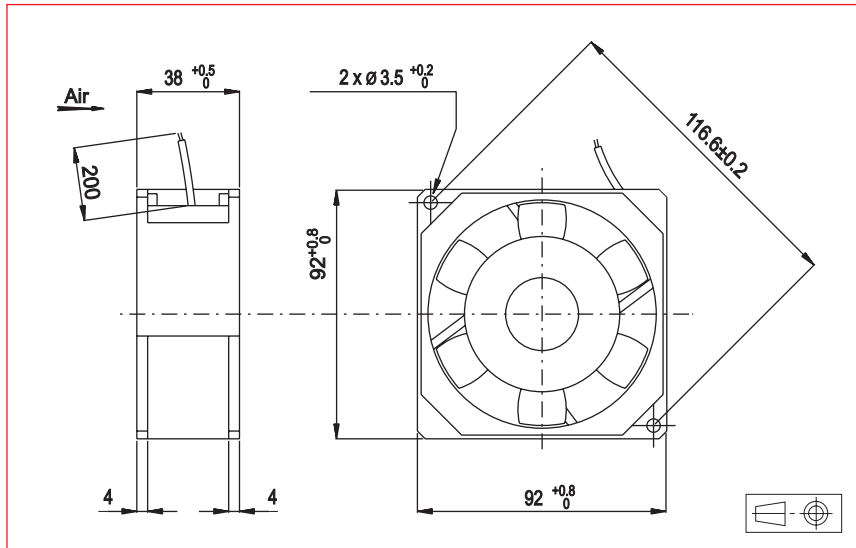
Accessories:
Refer to Accessories leaflet



92 x 92 x 38 mm

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400 Hz Fans



Approvals

NATO codification

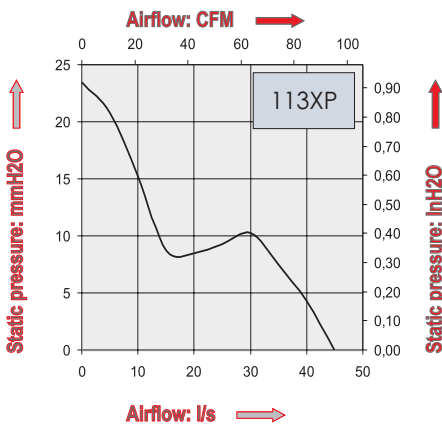
Life expectancy

L-10 LIFE AT 40°C:
35 000 hours

400 Hz Motor

Housing material: aluminium
Impeller material: plastic UL 94 VO
Weight: 480 g
Bearing system: ball bearings

Connexion: flying leads



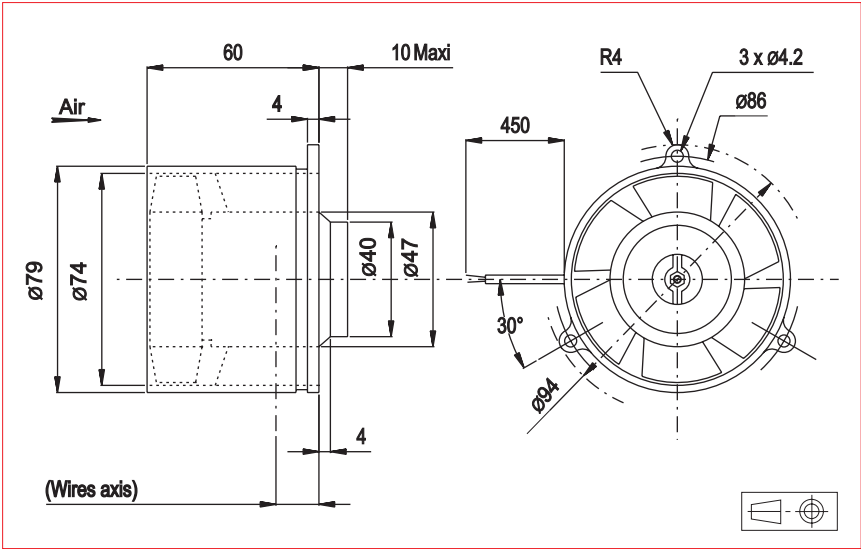
Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Phases	Capacitor	Input power	Nominal Current	Starting Current	Operating temperature	
	V	l/s	dB(A)	RPM		(not included) µF		W		mA	Min.°C
113XP0162001	115	45	58	5500	3		19	180	435	-10	70
	115	45	58	5500	1	0,69	20	200	350	-10	70
113XP0160001	200	45	58	5500	3		19	105	250	-10	70
	200	45	58	5500	1	0,22	20	110	200	-10	70

Additional versions:
Salt spray protected - Shock and vibration protected - Marine specifications
Wide temperature range

Accessories:
Refer to Accessories leaflet



Ø 94 x 70 mm

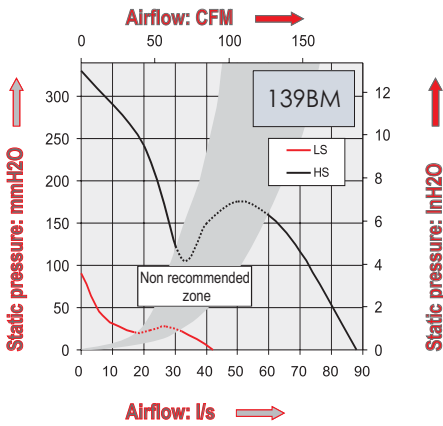


Approvals

Life expectancy

L-10 LIFE AT 40°C:
25 000 hours

400 Hz Motor Connection: flying leads
 Housing material: aluminium
 Impeller material: aluminium
 Weight: 610 g
 Bearing system: ball bearings



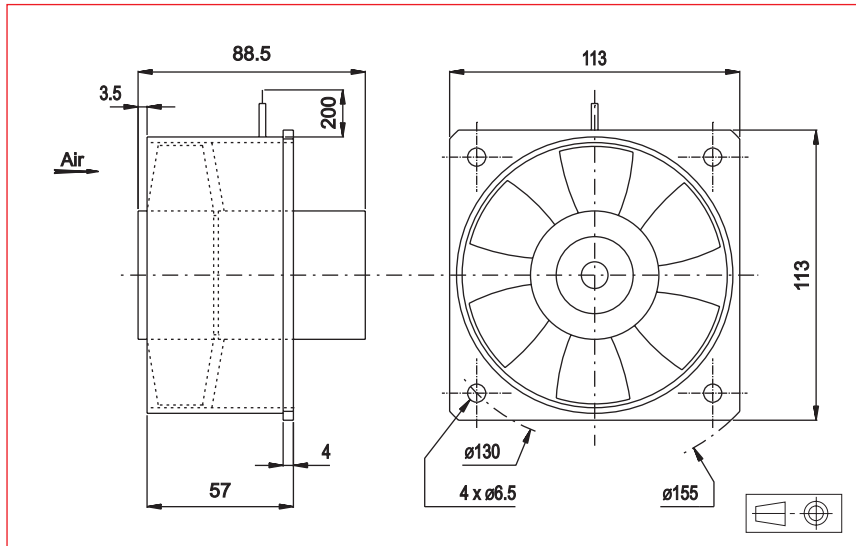
Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Phases	Capacitor <small>(not included)</small>	Input power	Nominal Current	Starting Current	Operating temperature	
	V	l/s	dB(A)	RPM		µF	W	mA	mA	Min.°C	Max.°C
139BM0460005	200	42	67	11500	3		55	450	1500	-40	90
		88	83	23000	3		200	1000	5200	-40	90

Additional versions:
 Salt spray protected - Shock and vibration protected - Marine specifications
 Wide temperature range

113 x 113 x 88,5 mm

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400 Hz Fans



Approvals

Life expectancy

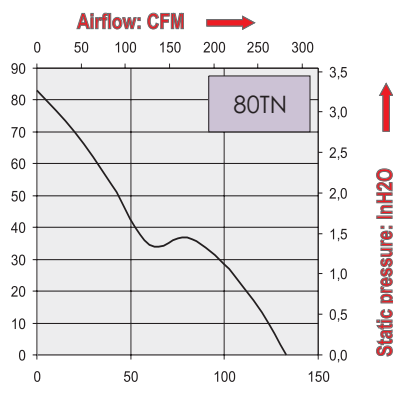
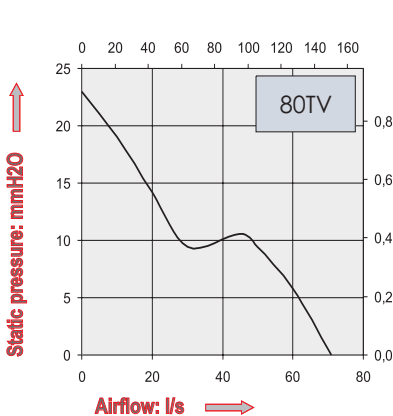
L-10 LIFE AT 40°C:
25 000 hours

400 Hz Motor

Housing material: aluminium
Impeller material: aluminium
Weight: 940 g
Bearing system: ball bearings

Connection: flying leads

Available with:
- Round Housing



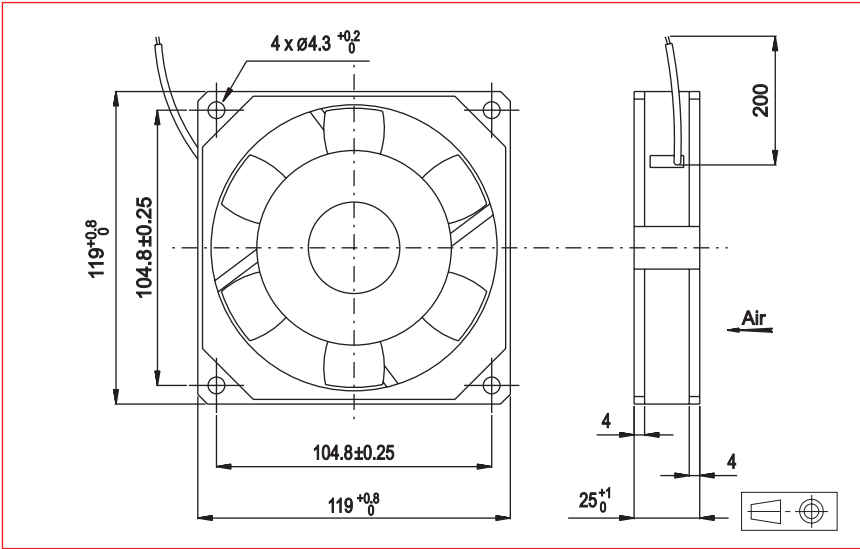
Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Phases	Capacitor	Input power	Nominal Current	Starting Current	Operating temperature	
	V	l/s	dB(A)	RPM		(not included) µF		W	mA	mA	Min.°C
80TV0562C13	115	71	61	5200	3		52	435	645	-10	70
	115	71	61	5200	1	1,47	47	445	540	-10	70
80TV0560C13	200	71	61	5200	3		52	250	370	-10	70
	200	71	61	5200	1	0,47	47	255	310	-10	70
80TN0562C13	115	135	76	9700	3		153	1150	2800	-10	70
	115	135	76	9700	1	4,7	147	1400	2350	-10	70
80TN0560C13	200	135	76	9700	3		153	650	1600	-10	70
	200	135	76	9700	1	1,47	147	785	1350	-10	70

Additional versions:

Salt spray protected - Shock and vibration protected - Marine specifications
Wide temperature range

Accessories:

Refer to Accessories leaflet



Approvals

NATO codification (not on all part numbers, please consult the factory for more detailed information)

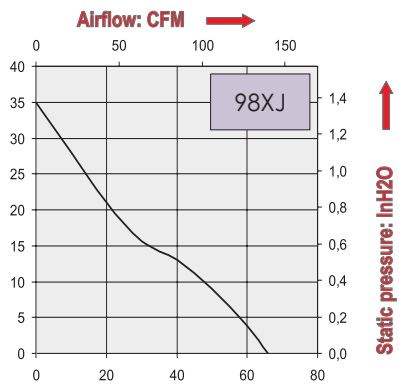
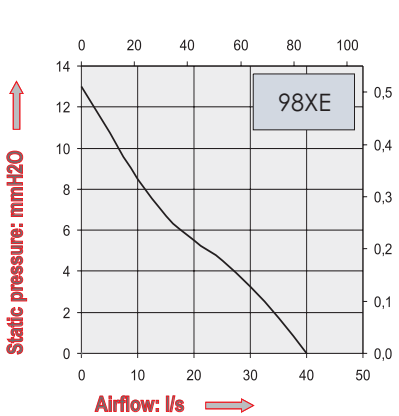
Life expectancy

L-10 LIFE AT 40°C:
35 000 hours

400 Hz Motor

Housing material: zamak
Impeller material: plastic UL 94 VO
Weight: 500 g
Bearing system: ball bearings

Connection: flying leads



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Phases	Capacitor <small>(not included)</small>	Input power	Nominal Current	Starting Current	Operating temperature	
	V	l/s	dB(A)	RPM		µF	W	mA	mA	Min. °C	Max. °C
98XE0162001	115	40	52	3500	1	0,15	13	113	135	-10	70
98XE0160001	200	40	52	3500	1	0,05	13	70	80	-10	70
98XJ0162001	115	66	65	5500	3	1	30	310	490	-10	70
	115	66	65	5500	1		30	310	610	-10	70
98XJ0160001	200	66	65	5500	3	0,32	30	180	280	-10	70
	200	66	65	5500	1		30	180	350	-10	70

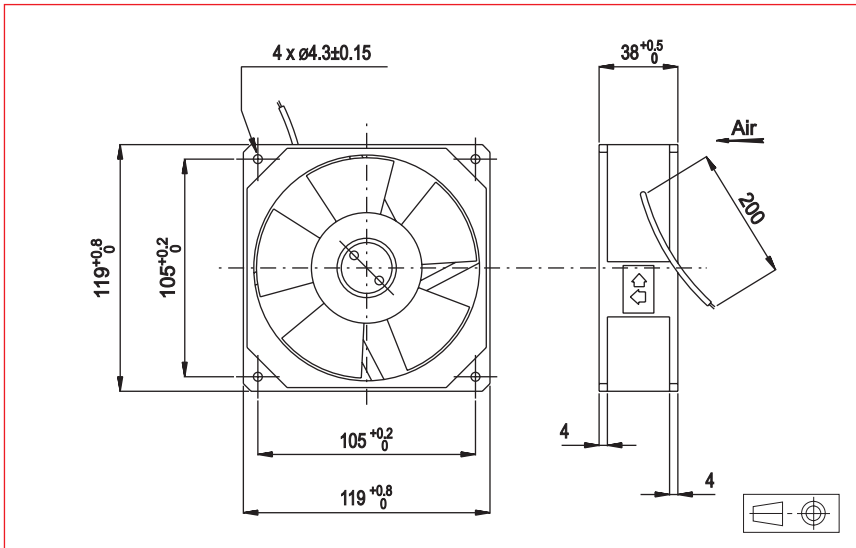
Additional versions:
Salt spray protected - Shock and vibration protected - Marine specifications
Wide temperature range

Accessories:
Refer to Accessories leaflet

120 x 120 x 38 mm

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400 Hz Fans



Approvals

NATO codification

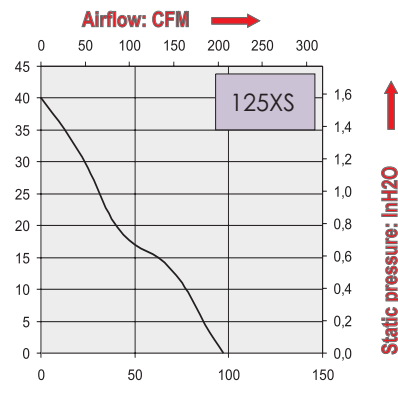
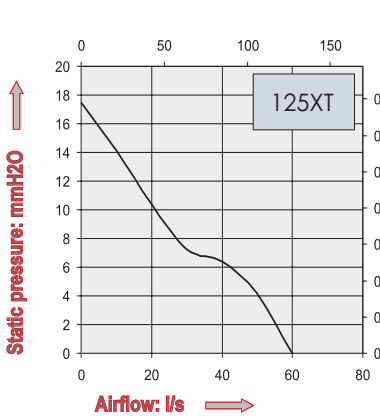
Life expectancy

L-10 LIFE AT 40°C:
35 000 hours

400 Hz Motor
 Housing material: aluminium
 Impeller material: plastic UL 94 VO
 Weight: 530 kg
 Bearing system: ball bearings

Connection: flying leads

Available with:
 - Speed sensor
 - Impedance protection



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Phases	Capacitor (not included)	Input power	Nominal Current	Starting Current	Operating temperature	
	V	l/s	dB(A)	RPM		µF	W	mA	mA	Min.°C	Max.°C
125XT0162301	115	60	50	3600	3		15	140	220	-10	70
125XT0162101	115	60	50	3750	1	0,15	19	170	200	-10	70
125XT0160301	200	60	50	3600	3		15	75	115	-10	70
125XT0160101	200	60	50	3750	1	0,05	19	100	120	-10	70
125XS0162001	115	94	60	5700	3		32	415	1150	-10	70
	115	94	60	5700	1	1,47	35	365	870	-10	70
125XS0160001	200	94	60	5700	3		32	240	650	-10	70
	200	94	60	5700	1	0,47	35	210	500	-10	70

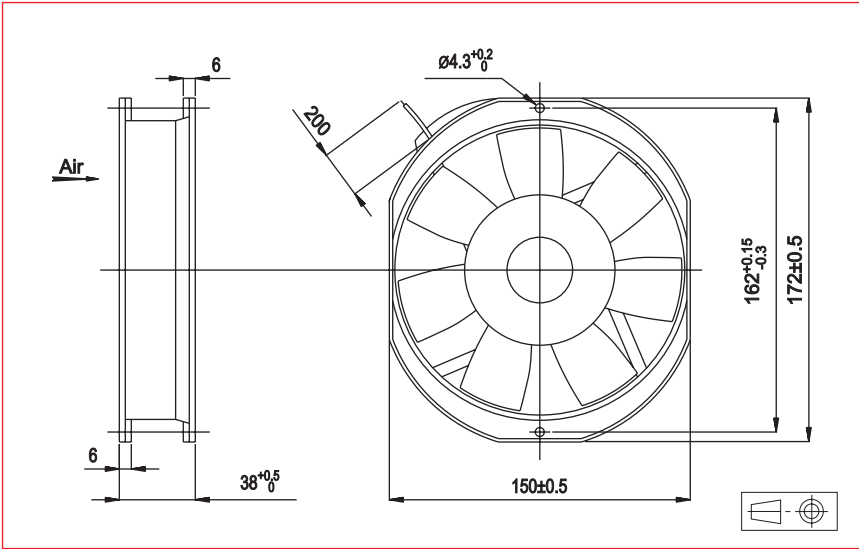
Additional versions:
 Salt spray protected - Shock and vibration protected - Marine specifications
 Wide temperature range

Accessories:
 Refer to Accessories leaflet





172 x 150 x 38 mm



Approvals

NATO codification

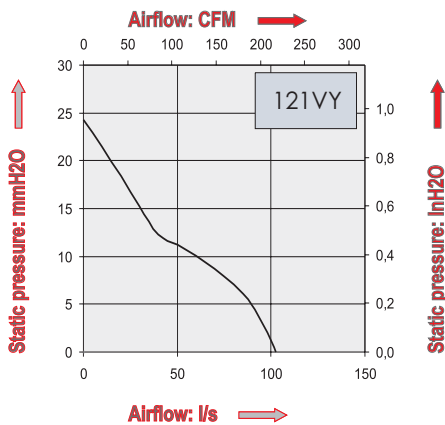
Life expectancy

L-10 LIFE AT 40°C:
35 000 hours

400 Hz Motor

Housing material: aluminium
Impeller material: plastic UL 64 VO
Weight: 775 g
Bearing system: ball bearings

Connection: flying leads



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Phases	Capacitor <small>(not included)</small>	Input power	Nominal Current	Starting Current	Operating temperature	
	V	l/s	dB(A)	RPM		µF	W	mA	mA	Min.°C	Max.°C
121VY0162001	115	103	62	3750	1	0,32	39	410	550	-10	70
121VY0160001	200	103	62	3750	1	0,1	39	345	490	-10	70

Additional versions:
Salt spray protected - Shock and vibration protected - Marine specifications
Wide temperature range

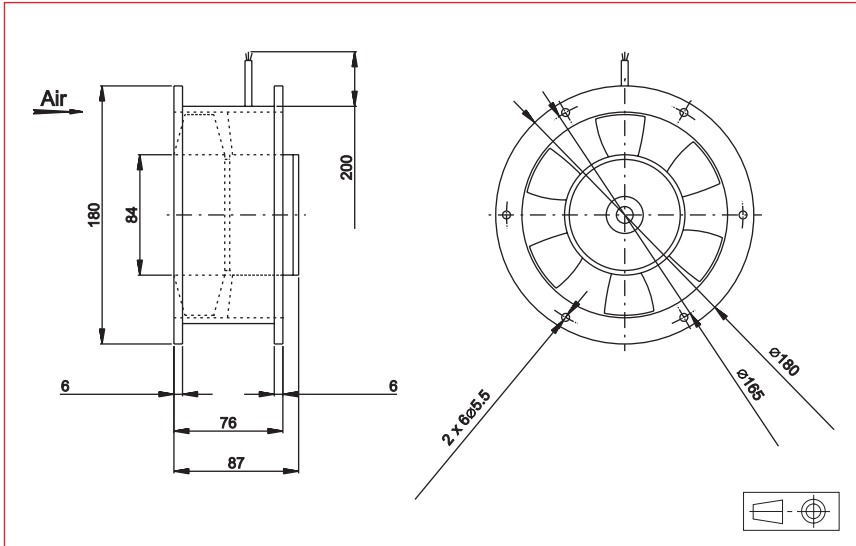
Accessories:
Refer to Accessories leaflet



Ø 180 x 87 mm

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400 Hz Fans



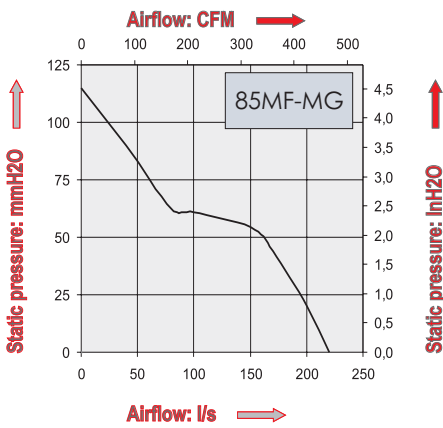
Approvals

NATO codification

Life expectancy

L-10 LIFE AT 40°C:
25 000 hours

400 Hz Motor Connection: flying leads
 Housing material: aluminium
 Impeller material: aluminium
 Weight: 2,1 kg
 Bearing system: ball bearings



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Phases	Capacitor	Input power	Nominal Current	Starting Current	Operating temperature	
	V	l/s	dB(A)	RPM		(not included)		µF	W	mA	mA
85MF0160C13	200	220	83	7600	3		205	1100	3600	-10	70
85MF0162C13	115	220	83	7600	3		205	1900	6200	-10	70
85MG0160C13	200	220	82	7600	1	1	230	1150	2400	-10	70
85MG0162C13	115	220	82	7600	1	3,2	230	2000	4000	-10	70

Additional versions: Salt spray protected - Shock and vibration protected
Accessories: Refer to Accessories leaflet



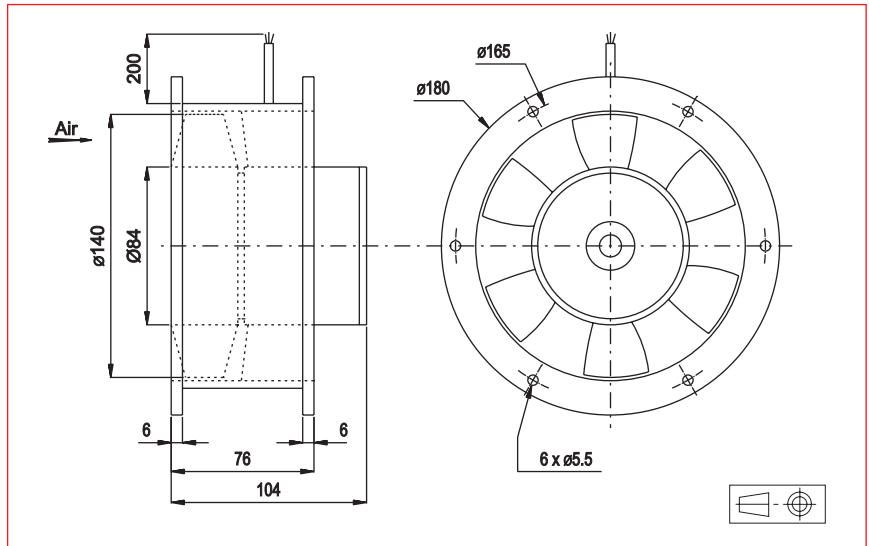
Approvals

NATO codification

Life expectancy

L-10 LIFE AT 40°C:
25 000 hours

Ø 180 x 104 mm



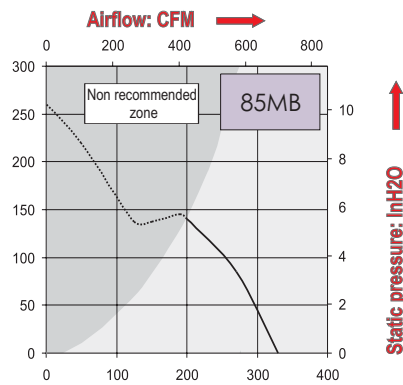
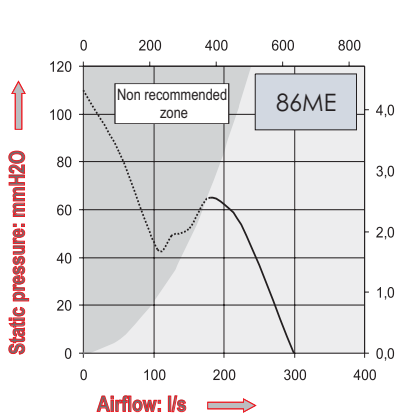
400 Hz Motor

Housing material: aluminium
Impeller material: aluminium
Weight: 2,6 kg
Bearing system: ball bearings

Connection: flying leads

Available with:

- safety switch
- Single phase (80MZ)



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Phases	Capacitor (not included)	Input power	Nominal Current	Starting Current	Operating temperature	
	V	l/s	dB(A)	RPM		µF	W	mA	mA	Min.°C	Max.°C
86ME0162C13	115	300	80	7400	3		400	3700	10000	-10	70
86ME0160C13	200	300	80	7400	3		400	2100	5700	-10	70
85MB0160C13	200	330	90	11000	3		660	2750	1100	-10	70
85MB0162C13	115	330	90	11000	3		660	4800	1900	-10	70

Additional versions: Salt spray protected - Shock and vibration protected - Marine specifications - Wide temperature range

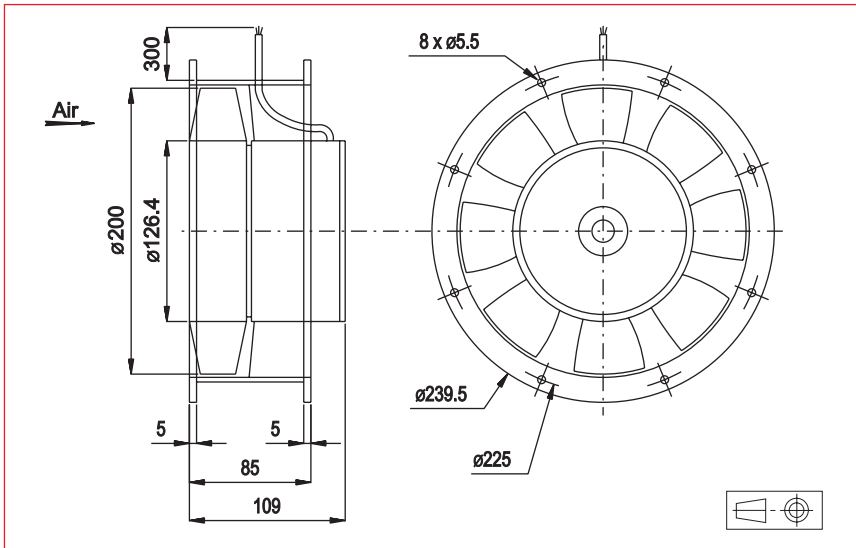
Accessories: Refer to Accessories leaflet



Ø 239,5 x 109 mm

ETRI®

400 Hz Fans



Approvals

NATO codification

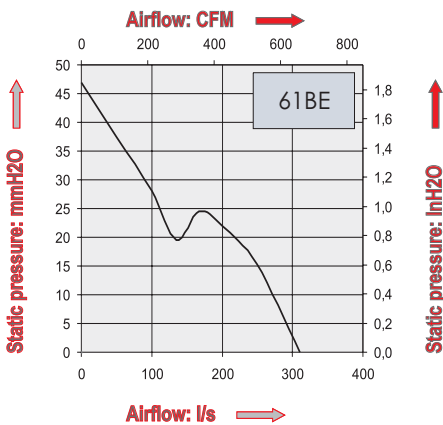
Life expectancy

L-10 LIFE AT 40°C:
25 000 hours

400 Hz Motor
 Housing material: aluminium
 Impeller material: aluminium
 Weight: 4,7 kg
 Bearing system: ball bearings

Connection: flying leads

Available with:
 - Safety switch



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Phases	Capacitor (not included)	Input power	Nominal Current	Starting Current	Operating temperature	
	V	l/s	dB(A)	RPM		µF	W	mA	mA	Min.°C	Max.°C
61BE0162C13	115	310	68	3500	3		126	1800	3650	-10	70
	115	310	68	3500	1	5,7	134	1450	2800	-10	70
61BE0160C13	200	310	68	3500	3		126	1030	2100	-10	70
	200	310	68	3500	1	2	134	840	1600	-10	70

Additional versions:
 Salt spray protected - Shock and vibration protected - Marine specifications
 Wide temperature range

Accessories:
 Refer to Accessories leaflet

Non contractual document. Specifications are subject to change without prior notice. Pictures for information only. Edition 2008

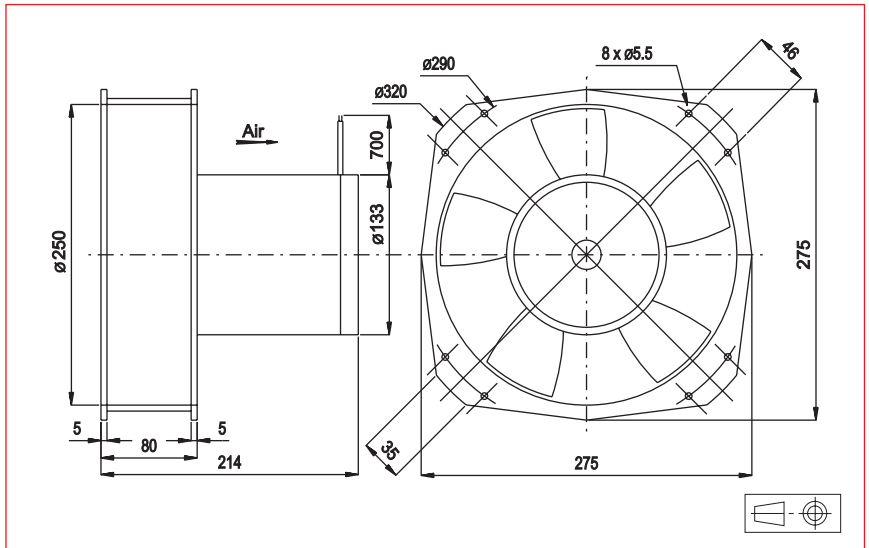


Approvals

Life expectancy

L-10 LIFE AT 40°C:
25 000 hours

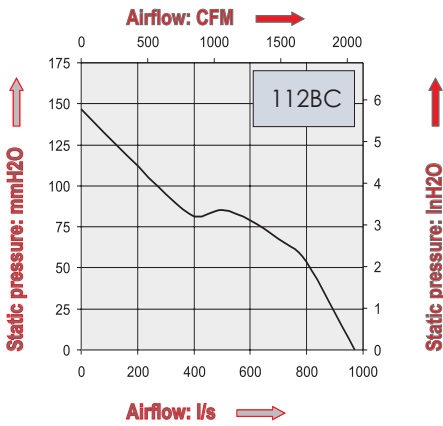
Ø 320 x 214 mm



400 Hz Motor

Housing material: aluminium
Impeller material: aluminium
Weight: 9,5 kg
Bearing system: ball bearings

Connection: flying leads



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Phases	Capacitor <small>(not included)</small>	Input power	Nominal Current	Starting Current	Operating temperature	
	V	l/s	dB(A)	RPM		µF	W	mA	mA	Min.°C	Max.°C
112BC0162C13	115	970	85	5500	3		1250	7250	24000	-10	70
112BC0160C13	200	970	85	5500	3		1250	4200	14000	-10	70

Additional versions:
Salt spray protected - Shock and vibration protected - Marine specifications
Wide temperature range

Accessories:
Refer to Accessories leaflet



92 x 102 x 98,5 mm

ETRI®

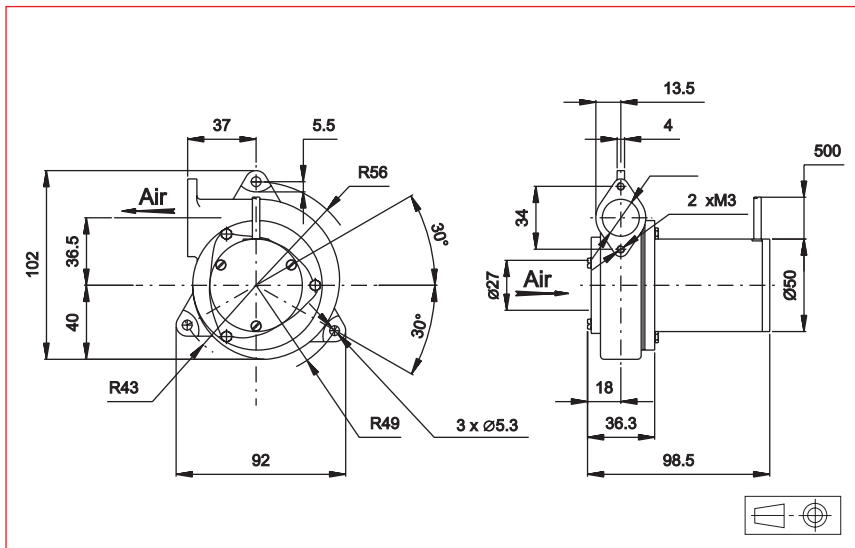
400Hz Fans



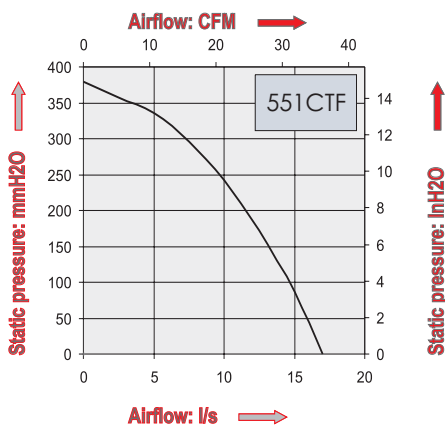
Approvals

Life expectancy

L-10 LIFE AT 40°C :
25000 hours



400 Hz Motor Connection: flying leads
 Housing material: aluminium
 Impeller material: plastic
 Weight: 140 g
 Bearing system: ball bearings



Part Number	Nominal voltage	Airflow	Noise level	Nominal speed	Phases	Capacitor (not included)	Input power	Nominal Current	Starting Current	Operating temperature	
	V	l/s	dB(A)	RPM		µF	W	mA	mA	Min.°C	Max.°C
551CTF0062C13	115	17	82	23000	3		120	800	4700	-10	70
	115	17	82	23000	1	3,2	130	1150	3900	-10	70
551CTF0060C13	200	17	82	23000	3		120	465	2700	-10	70
	200	17	82	23000	1	1	130	665	2250	-10	70

Additional versions:
 Salt spray protected - Shock & Vibration protected
 Air specifications



A key partner in cooling solutions

ETRI's comprehensive fan line includes over 7000 fans which operate under a wide variety of voltages and frequencies. Thanks to extensive designing and testing equipment, our engineers are able to offer the best technical solution suitable to various applications, such as industrial, electronics, telecom, railway or military.

High quality fans

ETRI has been known for more than 60 years as a global leader in cooling products, and carries on its tradition of excellence using innovative designs and materials to produce high quality fans and blowers, through its ISO 9002 certified manufacturing plant. Most of ETRI fans are UL and CSA approved, and according to the European directives, they comply with EMI and electrical safety standards. Certificates are available on request.

An international presence

ETRI offers an international presence through its network of local offices (Europe & USA) distributors and representative offices in more than 50 countries. Complete list is available on our web site.

Votre partenaire en ventilation

Avec plus de 7000 références, ETRI propose une large gamme de ventilateurs répondant aux exigences les plus sévères pour des applications industrielles, électroniques, ferroviaires ou militaires. La gamme de produits standard est régulièrement complétée par des développements spécifiques réalisés sur cahier des charges.

Le choix de la qualité

ETRI vous apporte la réponse adaptée à vos besoins en vous proposant des solutions innovantes dans le domaine de la ventilation industrielle tout en garantissant les meilleurs niveaux de qualité. Les ventilateurs ETRI sont pour la plupart homologués UL et CSA, et conformément aux directives européennes, répondent aux normes EMI et de sécurité électrique. Les certificats sont disponibles sur simple demande.

Une présence internationale

Grâce à ses agences implantées en Europe et aux Etats-Unis, et à son large réseau de distributeurs, ETRI vous offre une présence internationale dans plus de 50 pays. La liste complète de nos représentants est disponible sur notre site internet.

www.etrinet.com

Votre agence locale ou distributeur / Your local agency or distributor:



About Rosenberg...

Rosenberg is a competitive medium sized company with around 1400 employees worldwide.

During the last 25 years the Rosenberg group has been complemented in Europe by six additional works in France, Italy, Hungary, Czech Republic and Germany, in addition to the numerous subsidiaries and partners around the world.

Our aim is for high quality production backed by top class service for our clients. Thus a continuous flow of information and good cooperation between you, our dear customers, and us is most important, to jointly achieve a continuous evolution of our products and their quality.

A propos de Rosenberg...

Rosenberg est une entreprise performante à taille humaine qui emploie environ 1400 collaborateurs dans le monde entier.

Durant ces 25 dernières années, le Groupe Rosenberg s'est développé en Europe avec 6 nouvelles implantations en France, Italie, Hongrie, République Tchèque ainsi qu'en Allemagne, en plus des nombreux partenaires et distributeurs déjà présents à l'échelle mondiale.

Notre objectif est d'assurer un très haut niveau de qualité de produits doublé d'un service clients irréprochable.

De ce fait, maintenir une communication constante et une bonne coopération entre vous, nos chers clients, et nous, est la condition clé pour le développement de nos produits et de notre savoir-faire.

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