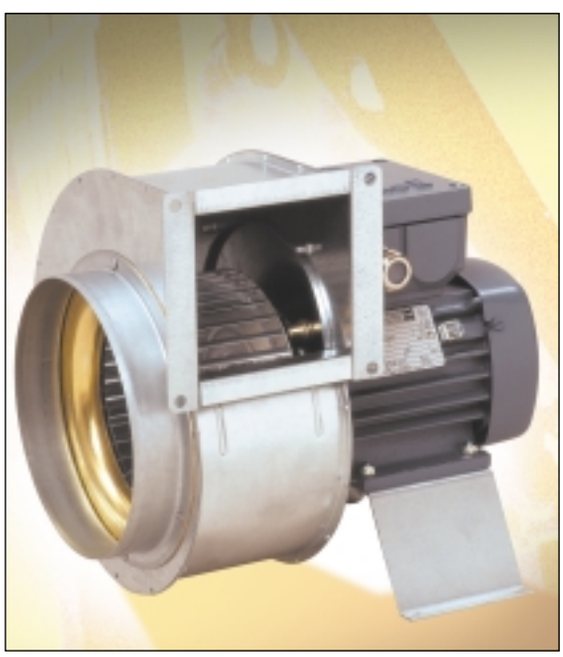
ÖSTBERG
THE FAN COMPANY



Explosionproof Radial Fan

RFTX

web-version

RFTX explosionproof radial fan

ATEX

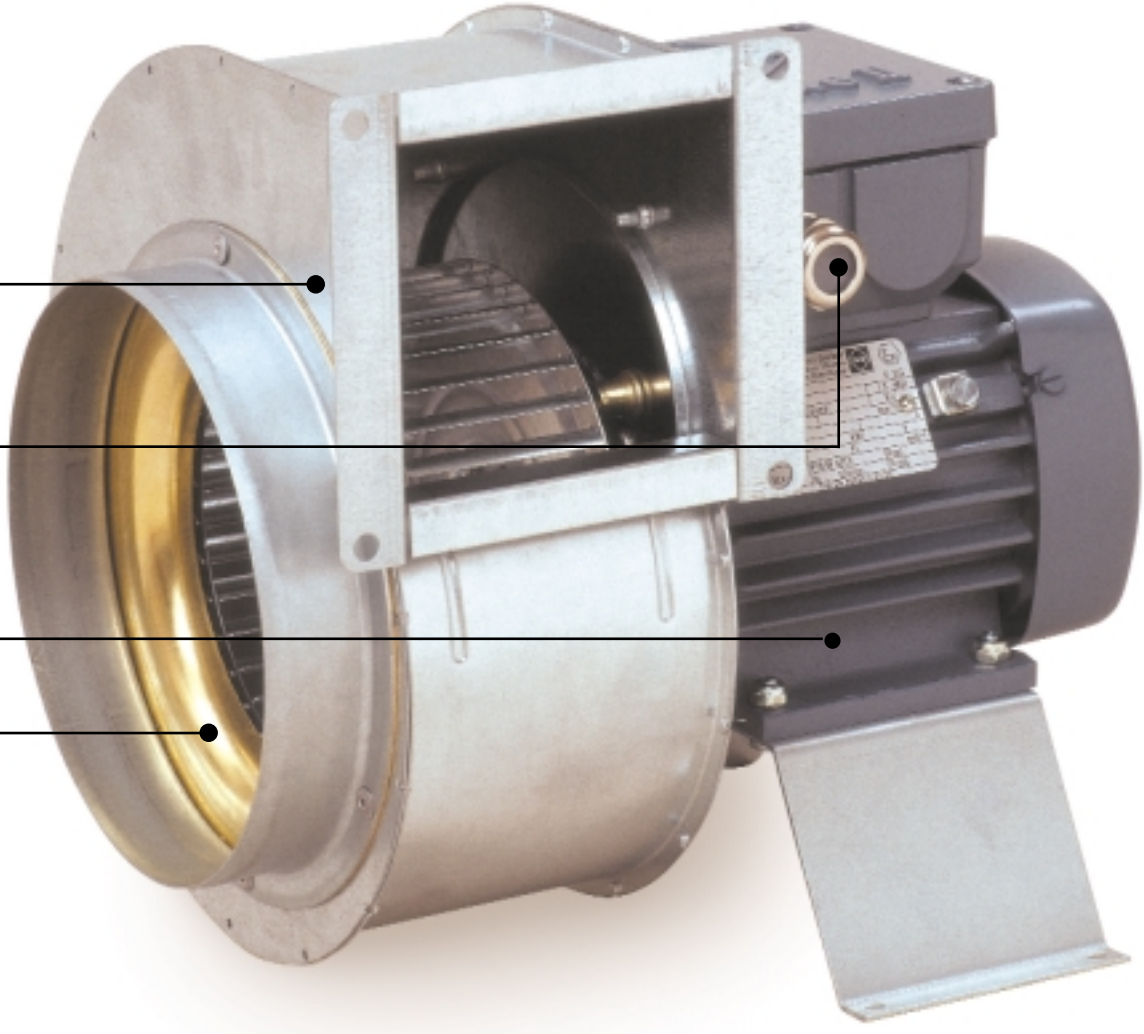
The quality and security norm for explosionproof fans is called ATEX. C A Östberg is one of the first fanproducers in Europe to receive ATEX-certification. This certification means that the production of RFTX is carefully controlled by the certification institute.

FOCUSED ON SAFETY

RFTX is developed by C A Östberg with the aim to produce a high quality product easy to use for our customers. Therefor only top quality components are used. It makes RFTX a safe choise for a number of different applications within the industry.

RFTX is made in a non-sparking performance, powered by a high quality motor separated from the air stream. Seven models available giving 0,08 to 0,5 m3/s flow.

FOCUSED ON SAFETY



EG-ensurance of agreement

We hereby confirm that our products comply with with the requirements in the in ATEX -directives and harmonized standards as well as other EU-directives as below.

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Org. nr 556043-2691

Products: RFTX 140 A art.nr 7730001
RFTX 140 C art.nr 7730002
RFTX 160 C art.nr 7730003
RFTX 160 A art.nr 7730004
RFTX 200 A art.nr 7730005
RFTX 200 B art.nr 7730006
RFTX 200 C art.nr 7730007

ATEX-directive (ATEX) 94/9/EEC
Certificate no: DEMKO 01 ATEX 129153X

HARMONIZED STANDARDS:

- SS-EN 50014:1997 »*Electrical apparatus for potentially explosive atmospheres - General principles*«
- SS-EN 50019:1994 »*Electrical apparatus for potentially explosive atmospheres - Increased safety* [*e*]«.

Machinery Directive (MD) 98/37/EEC

HARMONISED STANDARDS:

- EN 292-1 »*Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology*«
- EN292-2 »*Safety of machinery - Basic concepts, general principles for design - Part 2: Technical principles and specifications*«
- EN 294 »*Safety of machinery - Safety distances to prevent danger zones being reached by the upper limbs*«

Installation must be done in accordance with the attached »*Directions for use*«.

Low Voltage Directive (LVD) 73/23/EEC and changes 93/68/EEC

HARMONISED STANDARDS:

- EN 60 335-1 »*Safety of household and similar electrical appliances - Part 1: General requirements*«
- EN 60 335-2-80 »*Safety of household and similar electrical appliances - Part 2: Particular requirements for fans*«
- EN 60 204-1 1 »*Safety of machinery - Electrical equipment of machines - Part 1: General requirements*« is valid for fans including motor with automatic thermo protector.

Directive for Electromagnetic Compatibility (EMC) 89/336/EEC and changes 92/31/EEC and 93/68/EEC

HARMONISED STANDARDS:

- EN 50 081-1 »*Electromagnetic compatibility - Generic emission standard - Part 1: Residential, commercial and light industry*«
- EN 50 081-2 »*Electromagnetic compatibility - Generic emission standard - Part 2: Industrial environment*«
- EN 50 082-1 »*Electromagnetic compatibility - Generic immunity standard - Part 1: Residential, commercial and light industry*«
- EN 50 082-2 »*Electromagnetic compatibility - Generic immunity standard - Part 2: Industrial environment*«

Avesta 2001-01-31

Jirry Svedlund
DESIGN MANAGER

Technical data, RFTX

		RFTX 140 A	RFTX 140 C	RFTX 160 A	RFTX 160 C	RFTX 200 A	RFTX 200 B	RFTX 200 C
Voltage	V	400	400	400	400	400	400	400
Current	A	0,52	0,53	0,53	0,97	0,60	0,79	0,79
Power	W	110	300	143	590	270	388	385
Speed	Rpm	1300	2810	1300	2740	1300	1380	1380
Weight	Kg	7,3	7,3	7,9	9,5	9,1	10,7	11,0

Sound data, RFTX

	Flow/ Static pressure	Point of measuring	LpA dB(A)	LwA tot	63	125	250	500	1k	2k	4k	8k
RFTX 140 A	70 l/s, 105 Pa	Inlet	53	57	40	52	52	52	49	46	38	26
		Outlet	54	58	44	53	53	52	51	43	37	26
		To environment	52	56	30	25	39	47	54	52	40	39
RFTX 140 C	150 l/s, 335 Pa	Inlet	72	76	58	65	72	72	67	68	62	56
		Outlet	77	81	64	75	76	74	71	72	64	59
		To environment	60	64	34	35	51	55	60	60	57	51
RFTX 160 A	105 l/s, 110 Pa	Inlet	59	63	50	56	58	57	56	53	47	37
		Outlet	60	64	50	56	58	57	59	53	48	40
		To environment	53	57	29	28	39	48	52	54	43	40
RFTX 160 C	190 l/s, 510 Pa	Inlet	74	78	59	66	74	73	70	69	65	57
		Outlet	80	84	71	78	80	77	73	72	67	61
		To environment	64	68	43	35	54	58	62	64	62	54
RFTX 200 A	150 l/s, 255 Pa	Inlet	64	68	59	60	57	60	63	60	57	49
		Outlet	66	70	61	63	61	61	64	60	60	52
		To environment	54	58	29	30	43	51	54	54	48	44
RFTX 200 B	230 l/s, 205 Pa	Inlet	70	74	62	69	68	63	67	64	61	54
		Outlet	72	76	65	71	70	65	68	64	64	57
		To environment	56	60	33	32	46	53	56	54	50	47
RFTX 200 C	380 l/s, 165 Pa	Inlet	78	82	67	77	80	73	71	67	64	57
		Outlet	82	86	68	79	84	75	73	69	66	59
		To environment	60	64	38	38	51	56	60	58	55	50

Explanations to sound data

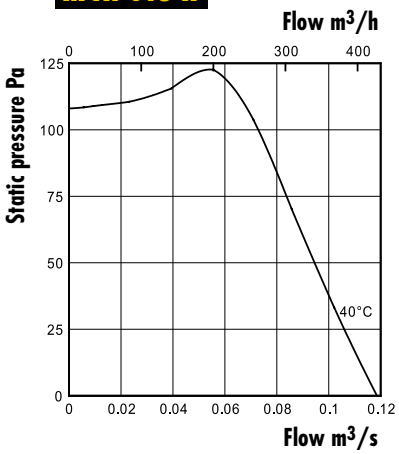
The sound data have been compiled by means of sound measurement methods as follows:
Pressure and flow: SS-ISO 5801.
Determination of acoustic sound level in duct: SS-ISO 5136.
Determination of acoustic sound level in reverberation room: SS-ISO 3741.

Designations

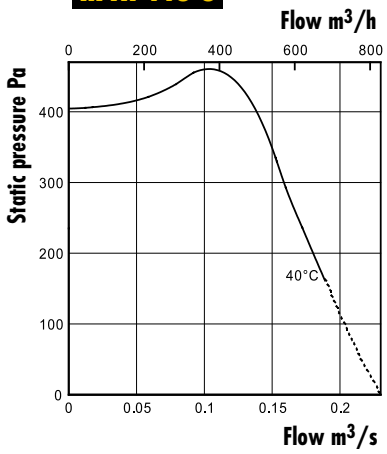
L_{WA} tot: Total A-weighted sound power level dB(A) (ref 10^{-12} W)=the sum of the sound power level in the octave ranges.
L_{WA}: A-weighted sound power level in octave range dB(A) (ref 10^{-12} W).
L_{pA}: A-weighted sound pressure level in dB(A) according to normed A-weightening correction and relating to an effective absorption area of 10 m^2 with half spherical translation at 2 mtr distance.

Pressure and flow

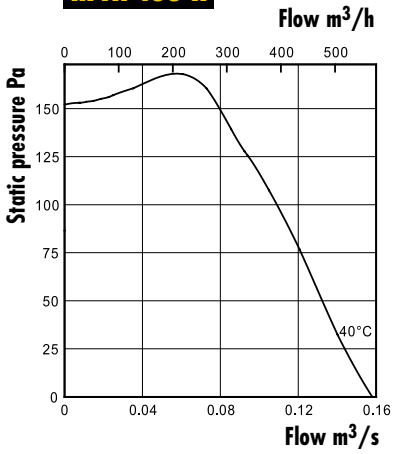
RFTX 140 A



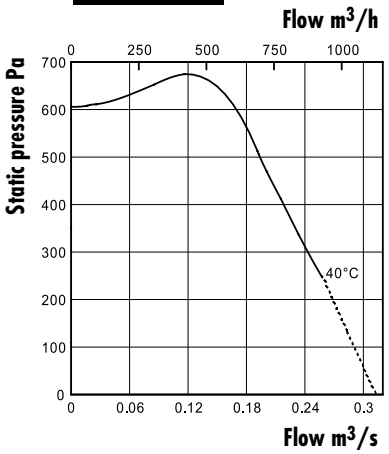
RFTX 140 C



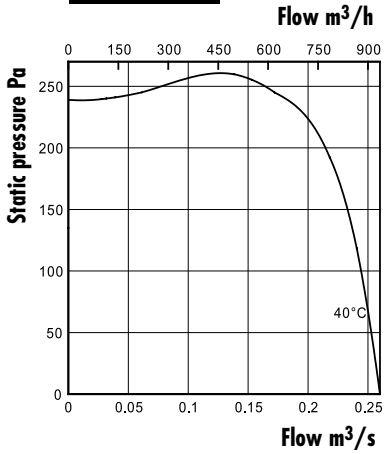
RFTX 160 A



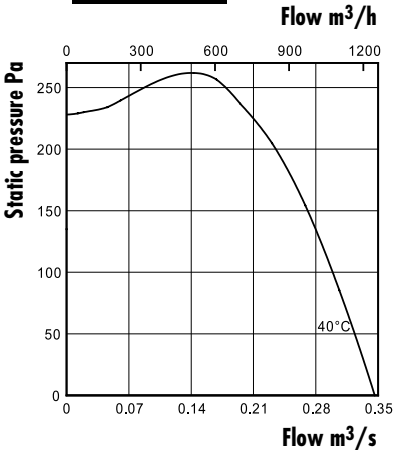
RFTX 160 C



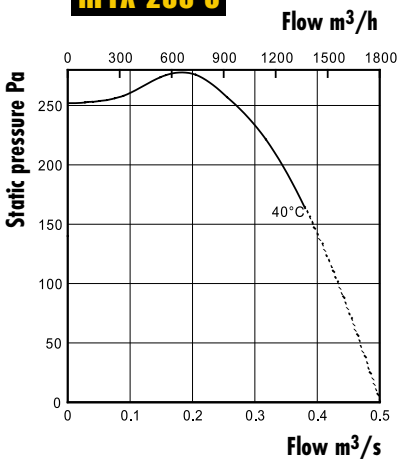
RFTX 200 A



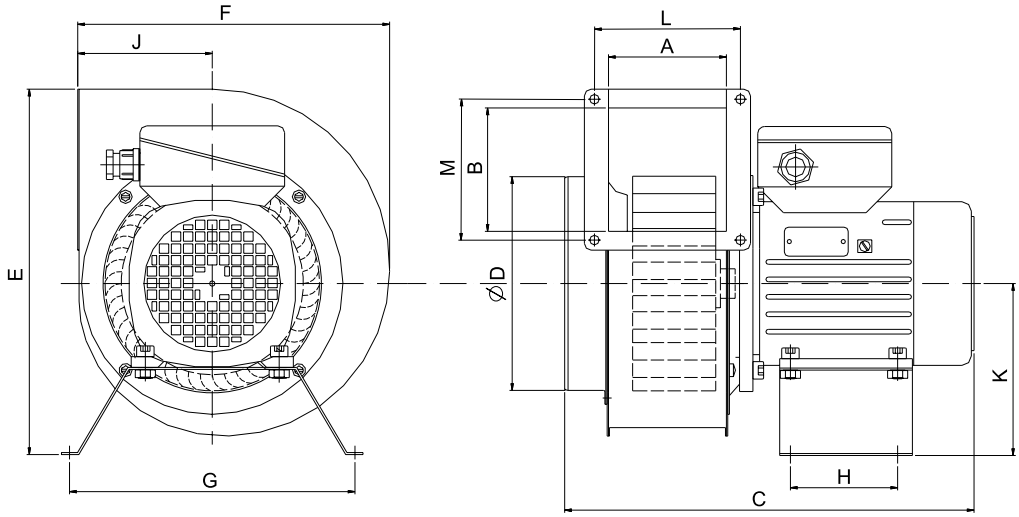
RFTX 200 B



RFTX 200 C



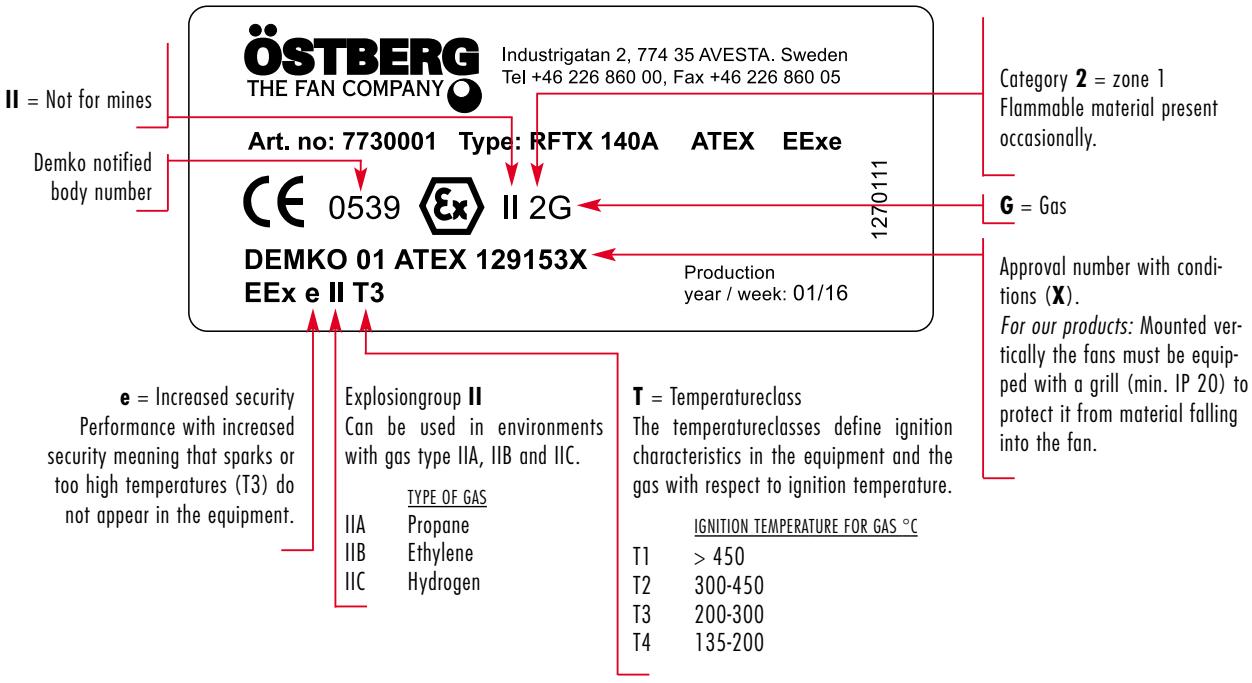
RFTX 140 / 160 / 200



Dimensions, RFTX

	A	B	C	D	E	F	G	H	J	K	L	M
RFTX 140 A	94	90	284	159,3	266	218	193	71	98	122	117	105
RFTX 140 C	94	90	284	159,3	266	218	193	71	98	122	117	105
RFTX 160 A	88	92	285,5	159,3	267	233	193	71	100	122	109	105
RFTX 160 C	88	92	305	159,3	272	233	213	80	100	128	109	105
RFTX 200 A	89	156	292	199,3	399	320	241	71	135	169	109	250
RFTX 200 B	89	156	312	199,3	399	320	262	80	135	169	109	250
RFTX 200 C	119	156	342	199,3	399	320	262	80	135	169	139	250

Marking terminology ATEX



Instructions, RFTX

This direction for use contains following products:
RFTX 140A, RFTX 140C, RFTX 160A, RFTX 160C, RFTX 200A, RFTX 200B, RFTX 200C.

Description

- The fans are certified according to ATEX 84/9/EEC
- EExe class II, temperatureclass T3
- Execution: Increased security
- Area zone:1
- Explosion group: II (IIA, IIB, IIC)
- Temperatureclass: T3
- Standards: SS-EN 50014:1997 och SS-EN 50019:1994.
- The fans are powered by short-circuited 3-phasemotors ***not*** possible to regulate.
- The fan can be installed outside or in damp environments. Make sure that the fan-house is equipped with drainage.
- All fans are as standard 3-phase 400V, 50 Hz.
- The fan can be installed vertically or horizontally.

Installation

- The fan must be installed according to the air direction label at the fan.
- The fan must be connected to duct or equipped with a safety grill.
- The fan should be installed in a safe way not to cause vibrations or risking the fan to fall of.
- Precautions must be taken, min.IP 20, to prevent material to fall into the fan, when vertically mounted.
- The fan should be installed in a way that makes service and maintenance easy.
- Installation according to wiring diagram.
- An external motor protection must be installed.
- Electrical installations must be made by an authorised electrician.

Operation

BEFORE STARTING, MAKE SURE THAT:

- the fan is installed and electrically connected in the correct way to ground and a motor-protection
- the current does not exceed what is stated on the label
- no foreign objects are placed in the fan and no noise appears when starting the fan
- the rotation direction at 3-phase motors are according to the label.

How to handle

The fan must be transported in its packing until installation. This prevents transport damages, scratches and the fan from getting dirty.

Maintenance

- Before service, maintenance or repair begins, the fan must be tension free and the impeller must have stopped.
- Consider the weight of the fan when removing larger fans to avoid jamming and contusions.
- The fan must be cleaned when needed, at least once a year to maintain the capacity and to avoid unbalance which may cause unnecessary damages on the bearings.
- The fan bearings are maintenance-free.
- When cleaning the fan, high-pressure cleaning or strong dissolvents ***must not*** be used. Cleaning should be done without dislodging or damaging the impeller.
- Make sure that there is no noise from the fan.

Fault detection

1. Make sure that there is tension to the fan.
2. Cut the tension and verify that the impeller is not blocked.
3. Check the thermo-contact/motor protector. If it is dis connected the cause of overheating must be taken care of, not to be repeated.
4. If nothing of this works, contact your fan supplier.
5. If the fan is returned to the supplier, it must be cleaned, the motor cable undamaged and a detailed nonconformity report enclosed.

Visit us on the Internet!

www.ostberg.com

Östberg is one of the leading manufacturers of in-line duct fans with its head office and manufacturing facility based in Avesta Sweden. Östberg products are available in most countries around the world.

Quality and innovation are the two basic words for CA Östberg. This is why an early ISO-9001accreditation was natural for us. ISO-9001 guarantees the efficient production of consistent high quality fans which benefits customers and end users alike.

Östberg fans have a good reputation amongst contractors and installers all over the world. By listening to our customers many ideas of product improvement arise helping us in the continuing development of our product range. This communication has lead us to produce efficient, maintenance free fans that are easy to install. Before new products are released they are carefully tested in our modern laboratory to ensure quality and performance.

All CA Östberg fans are manufactured from the best quality components and prior to despatch every fan is tested and the results are computer stored for future reference.

Östberg is a company you can rely on today and in the future.

ÖSTBERG
THE FAN COMPANY

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