

KTEX Rectangular Duct Fans

Reliable inline fan for hazardous professional environments

- ATEX certified according to ATEX 2014/34/EU
- Suitable for high risk environments
- Swing out lid for easy maintenance

[Find more details in our online catalogue](#)



Designed for demanding environment

KTEX series of explosion-proof inline fans are designed for potentially hazardous premises like **battery charging rooms, fume cupboards** or other **high-risk environments**.

High performance

The KTEX fans combine a **compact streamline design** with a **high performance** forward curved radial impeller paired with **reliable** ATEX-rated AC motors.

Flexible installation

KTEX fans can be installed in **any position**, in rectangular duct air extract systems which makes them easy to fit in all different application.

Explosion-Proof

KTEX series is classified as **II 2 G Ex eb h IIB+H₂ T3 Gb**. Intended to use in explosion **zone 1 and 2** for extracting **gases and mixes** of groups **IIA, IIB** and also **hydrogen (H₂)** with temperature **classes T1, T2 and T3**. Comply with EN 60079-7:2015, EN 14986:2007, EN 60079-0:2012.

Certifications



AMCA Worldwide Certified Ratings: Air Performance



AMCA Worldwide Certified Ratings: Sound and Air Performance

Features

Casing

Casing made of **galvanised sheet steel**, corrosion **class C3** with a **copper inlet cone**. Motor of the unit mounted on **swing-out lid** to simplify service and maintenance. KTEX fans are equipped with **connection cable** to connect to the **ATEX rated external connection box** (separate accessory) for wiring on site.

Impeller

KTEX fans use single inlet **radial impellers** with **forward-curved** blades. Made of **lightweight, galvanised** sheet steel. Impellers dynamically **balanced** and paired with corresponding external rotor motors.

Motor

KTEX fans are equipped with ATEX certified, voltage controllable **AC** external rotor motors supported by **long-life** ball bearings.

Motor protection

KTEX fans have **integrated** PTC (Positive Temperature Coefficient) protective circuits with **external leads** for connection to a motor protection device (separate accessory). We recommend to use **UEK230E motor protection**, certified according to ATEX directive 2014/34/EU.

Control

Motors of KTEX fans can be controlled by **5-step** speed regulator as separate accessory. Speed regulation can be combined with timer, thermostat, hygrostat, etc. by using wide range of electrical accessories.

Mounting

KTEX fans can be installed **indoor in any position**. To avoid vibration transfer to the duct system we recommend to install **flexible connections** (accessory) .

Technical parameters

Nominal data

Voltage (nominal)	400	V
Frequency	50	Hz
Phases	3~	
Input power	888	W
Input power kW	0.888	kW
Input current	1.77	A
Impeller speed	1,359	rpm
Air flow	max 2,552	m³/h
Minimum static back pressure	40	Pa
Temperature of transported air	max 40	°C
Max temperature of transported air, when speed controlled	40	°C

Sound data

Sound pressure level at 3m (20m² Sabin)	57	dB(A)
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Protection/Classification

Enclosure class, motor	IP44
Insulation class	F
Explosion proof marking	II 2 G Ex eb h IIB+H₂ T3 Gb
Certificate	Presafe 17ATEX9970X

Data according to ErP

ErP ready	Not ErP relevant
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Ambient and duct temperature

Ambient and duct temperature	-20 to 40	°C
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Dimensions and weights

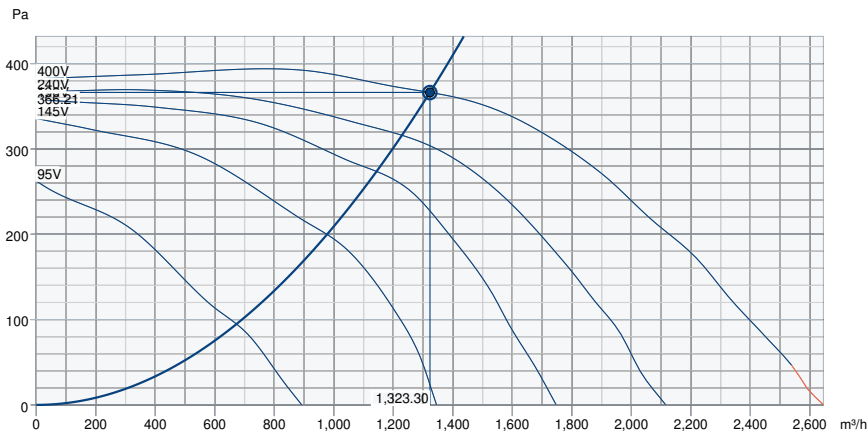
Duct dimension, inlet (height x width)	300 x 500	mm
Duct dimension, outlet (height x width)	300 x 500	mm
Weight	22.8	kg

Others

Duct connection type	Rectangular
Motor type	AC

Performance

Performance curve



Hydraulic data

Required air flow	1,323 m³/h
Required static pressure	366 Pa
Working air flow	1,323 m³/h
Working static pressure	366 Pa
Air density	1.204 kg/m³
Power	438.1 W
Fan control - RPM	1,439 rpm
Current	1.34 A
SFP	1.192 kW/m³/s
Control voltage	400.0 V
Supply voltage	400 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	63	71	65	63	69	68	67	62	76
Outlet	dB(A)	58	69	67	71	76	73	73	66	80
Surrounding	dB(A)	48	57	56	53	59	55	54	50	64
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	57
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	43

AMCA Certified Rating statements

• AMCA Worldwide Certified Ratings: Air Performance

• 2024-01

• Performance certified is for installation type A & C – Free or ducted inlet, Free outlet.

• FEI calculation is based on wire-to-air tests

• The sound power level ratings shown are in decibels, referred to 10-12 watts, calculated per AMCA Standard 301.

• The A-weighted sound power ratings shown have been calculated per AMCA Standard 301.

• Sound pressure level at 3m (20m3 Sabin) dB(A) & Sounds pressure level at 3m free field dB(A) are not licensed by AMCA International.

• Surrounding dB(A) is not licensed by AMCA International.

• Ratings do not include the effect of duct end correction.

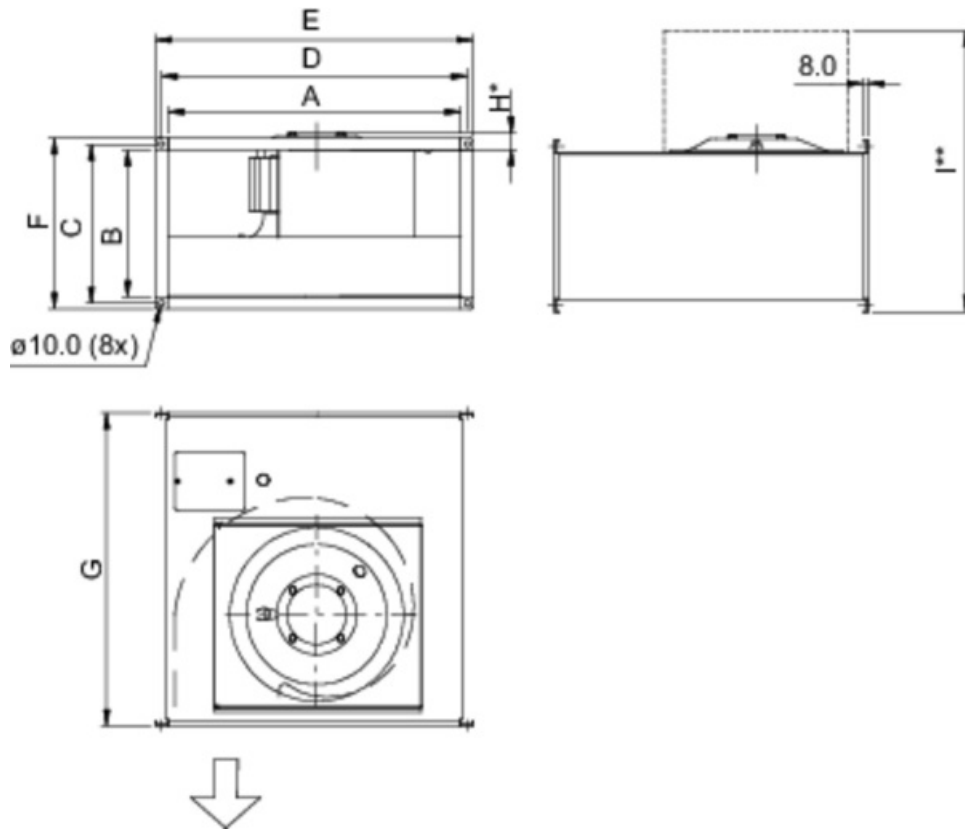
• Values shown are for outlet dB(A) sound power levels for Installation Type B: free inlet, ducted outlet.

• The sound ratings shown are loudness values in spherical sones at 1.5 m (5 ft) in a spherical free field calculated per ANSI/AMCA Standard 301. Values shown are for Installation Type C: free outlet spherical sone levels.

• Power rating W does not include transmission losses.

• Speed rpm shown is nominal. Performance is based on actual speed of test.

Dimension



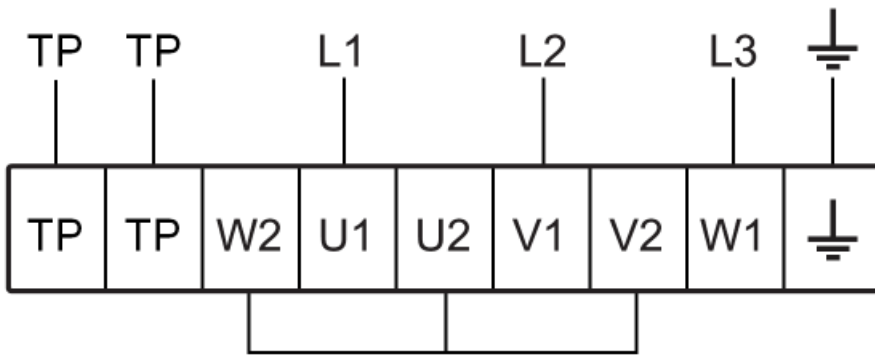
H* = Dimensions from the engine bolts

I** = Dimension with fully open hatch.

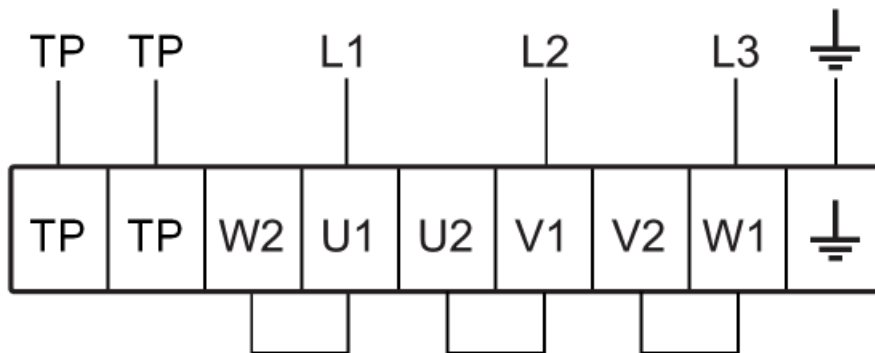
	A	B	C	D	E	F	G	H*	I**
KTEX 50-25	498	248	270	520	540	290	532	34,5	610
KTEX 50-30	498	298	320	520	540	340	562	34,5	695
KTEX 60-30	598	298	320	620	640	340	642	52	715
KTEX 60-35	598	348	370	620	640	390	717	54,5	805
KTEX 70-40	698	398	420	720	740	440	787	50	900

Wiring

400V 3~ (Y)



230V 3~ (D)



Accessories

- R-DK4 KT Transformer (302568) (6051)
- RTRDU 4 Speed contr. Systemair (5946)
- REV-3POL/ATEX-11kW R/Y (36414)
- FFK 50-30 Filter cassette rect (1755)
- DS-EX 50-30 Flex. connection (4117)
- RTRD 4 Speed cont. Systemair (5942)
- U-EK230E Motor protection (30199)
- Safety switch 3-pole grey (210680)
- LDR 50-30 Silencer (5071)
- Ex e-Terminal box 1,5/6mm² 32A (2704)

Documents

- IMO(CE)_DKEX-KTEX.pdf
- DNV_22_UKQAN_44923_EX_FANS_20220829.PDF
- Presafe 17 ATEX 9970X_KTEX_DKEX.PDF
- Presafe_Production Quality_16 ATEX 8871Q_issue 2.PDF