

## 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+H<sub>2</sub> T3 Gb**. Intended to use in explosion **zone 1 and 2** for extracting **gases** and **mixes** of groups **IIA, IIB** and also **hydrogen (H<sub>2</sub>)** with temperature **classes T1, T2 and T3**. Comply with EN 60079-7:2015, EN 14986:2007, EN 60079-0:2012.

## 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	1,533	W
Input power kW	1.533	kW
Input current	3.56	A
Impeller speed	840	rpm
Air flow	max 4,986	m³/h
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

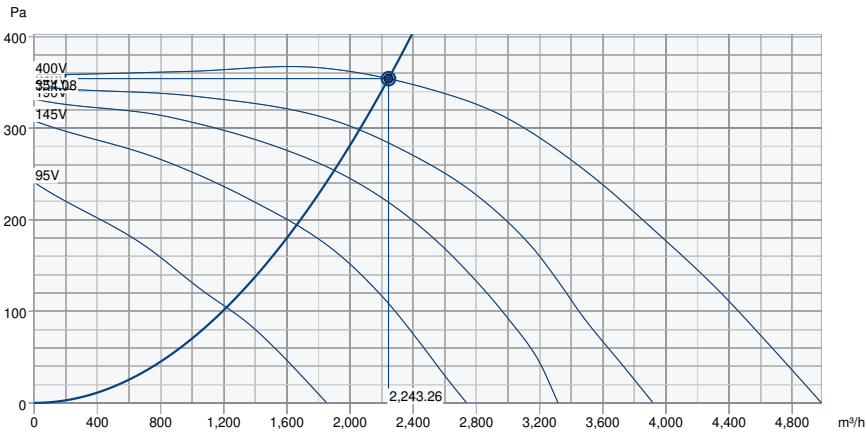
Duct dimension, inlet (height x width)	400 x 700	mm
Duct dimension, outlet (height x width)	400 x 700	mm
Weight	48.5	kg

### Others

Duct connection type	Rectangular
Motor type	AC

Performance

Performance curve

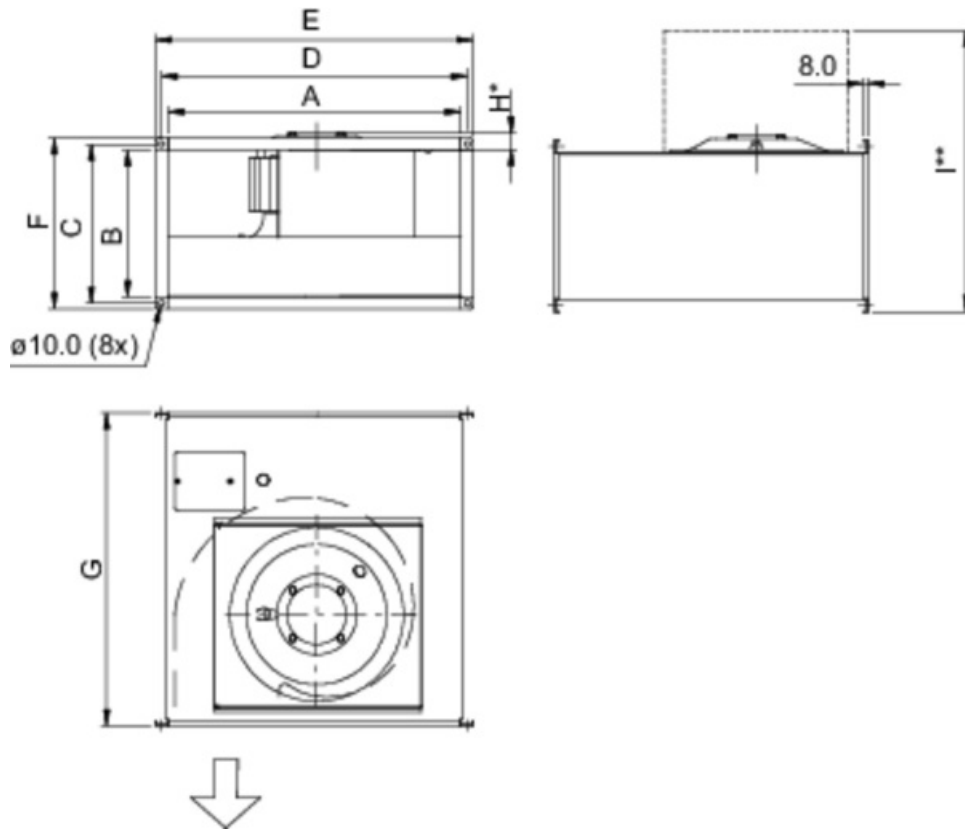


Hydraulic data

Required air flow	2,243 m³/h
Required static pressure	354 Pa
Working air flow	2,243 m³/h
Working static pressure	354 Pa
Air density	1.204 kg/m³
Power	651.3 W
Fan control - RPM	950 rpm
Current	2.61 A
SFP	1.045 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	66	62	63	68	68	68	62	75
Outlet	dB(A)	62	66	64	72	74	73	73	66	80
Surrounding	dB(A)	46	58	55	57	55	53	54	52	64
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	57
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	43

**Dimension**



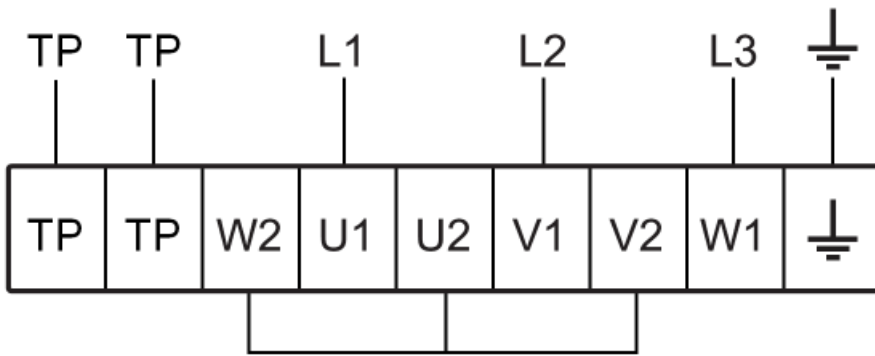
H\* = Dimensions from the engine bolts

I\*\* = Dimension with fully open hatch.

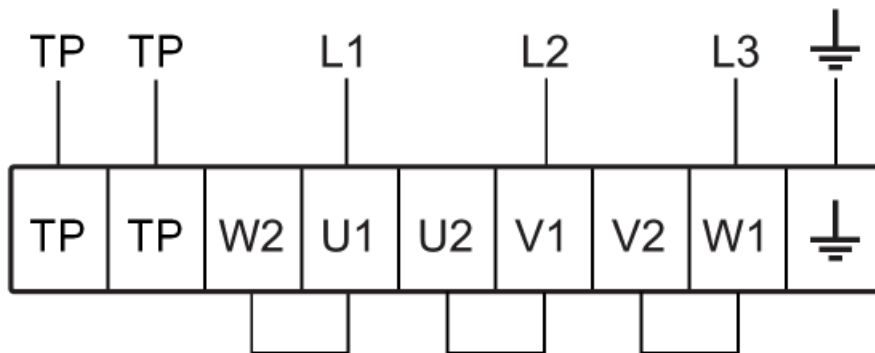
	A	B	C	D	E	F	G	H*	I**
KTEX 50-25	498	248	270	520	540	290	532	34,5	610
KTEX 50-30	498	298	320	520	540	340	562	34,5	695
KTEX 60-30	598	298	320	620	640	340	642	52	715
KTEX 60-35	598	348	370	620	640	390	717	54,5	805
KTEX 70-40	698	398	420	720	740	440	787	50	900

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 70-40 Filter cassette rect (1762)
- DS-EX 70-40 Flex. connection (4120)
- RTRD 4 Speed cont. Systemair (5942)
- U-EK230E Motor protection (30199)
- Safety switch 3-pole grey (210680)
- LDR 70-40 Silencer (5074)
- Ex e-Terminal box 1,5/6mm<sup>2</sup> 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