

KV DUO 315 EC

Centrifugal circular duct fan

Item number: 76833

Variant: 230V 1~ 50Hz

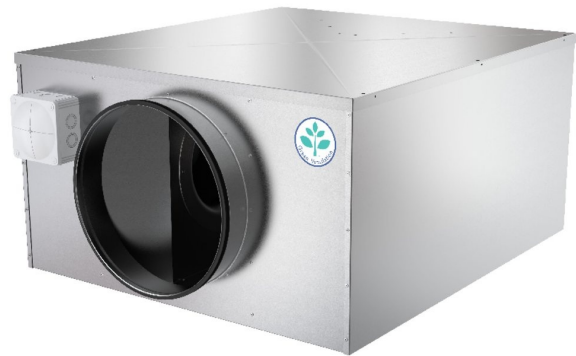


- Speed-controllable
- Integrated electronic motor protection
- Safe and maintenance free operation
- Energy-saving
- Suitable for External Mounting as standard
- Low noise level
- Twin fan – Run & Standby

The KV DUO fans are driven by EC-external rotor motors. These are energy saving motors with high efficiency. The power electronics are integrated in the motor housing. All models have one potential-free terminal for error message. All motors are suitable to be used for 50/60Hz. The input voltage for single phase units can vary between 200 and 277V, for three phase units between 380 and 480V. Speed control by a 0-10V signal.

The fans are easy to connect to spiral ducts using FK mounting clamps.

The KV DUO models are manufactured from Aluzinc sheet steel with acoustic insulation and are suitable for external mounting on roofs. All models are equipped with backward curved centrifugal impellers wired out to an IP65 Terminal box.



Technical parameters

Nominal data	
Voltage (nominal)	230 V
Frequency	50 Hz
Phase(s)	1~
Input power	169 W
Input current	1.17 A
Impeller speed	1,824 r.p.m.
Air flow	max ; 2,009; m ³ /h
Temperature of transported air	max 60 °C
Max temperature of transported air, when speed controlled	60 °C
Sound data	
Sound pressure level at 3m (20m ² Sabin)	56 dB(A)
Protection/Classification	
Enclosure class, motor	IP54
Insulation class	B

Data according to ErP

ErP ready

ErP 2016; ErP 2018

Dimensions and weights

Duct dimension; Circular, inlet

315 mm

Duct dimension; Circular, outlet

315 mm

Weight

37.5 kg

Others

Duct connection type

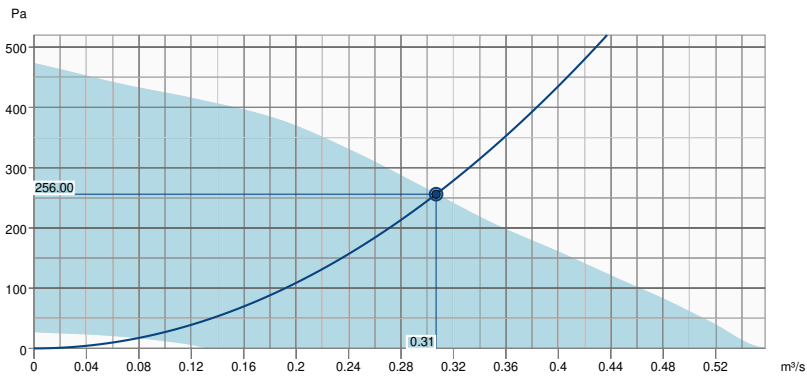
Circular

Motor type

EC

Performance

Performance curve

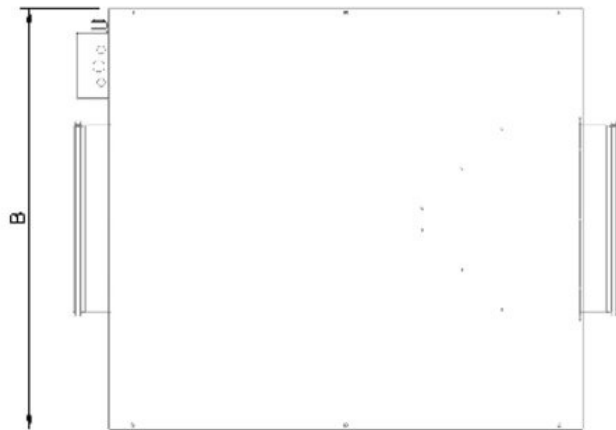
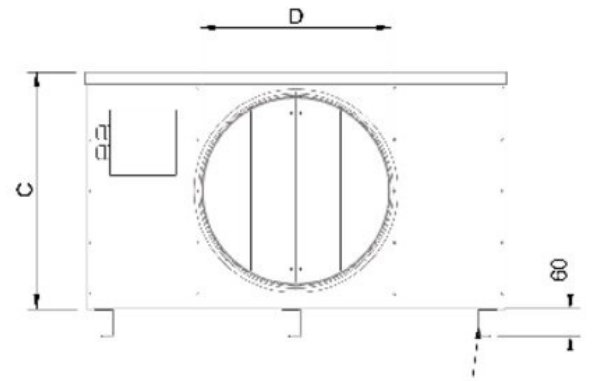
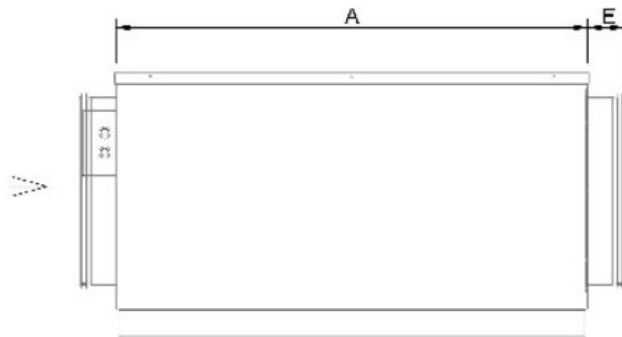


Hydraulic data

Required air flow	0.31 m³/s
Required static pressure	256 Pa
Working air flow	0.31 m³/s
Working static pressure	256 Pa
Air density	1.204 kg/m³
Power	159.6 W
Fan control - RPM	1791 rpm
Current	1.12 A
SFP	0.520 kW/m³/s
Control voltage	10.0 V
Supply voltage	230 V

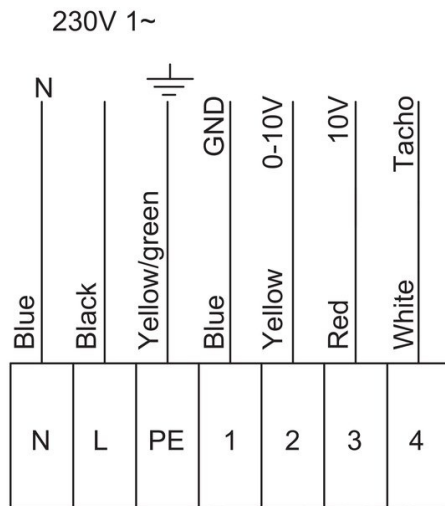
Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	48	69	69	58	58	55	50	44	72
Outlet	dB(A)	50	67	67	63	61	60	52	48	72
Surrounding	dB(A)	27	61	59	48	44	39	32	26	63
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	56
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	42

Dimension

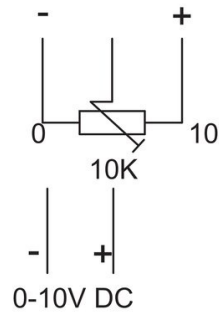


KV DUO	A	B	C	D	E
150	500	360	280	150	40
250	580	430	360	250	60
315	740	650	425	315	60
400	1000	895	505	400	65
500	1265	940	605	500	80
630	1383	1205	884	630	80

Wiring



External potentiometer
Optional



N	Blue
L	Black
PE	Yellow/green
1	Blue
2	Yellow
3	Red
4	White
External potentiometer optional	

Ecodesign

Product	
Trade name	Systemair
Product name	KV DUO 315 EC
Ecodesign	
ErP compliance	2018
Unit category	NRVU
Drive	Integrated VSD
Unit type	UVU
Heat recovery type	None
Temperature ratio (UVU)	Not applicable
qv nom	0.307 m ³ /s
P nom	0.16 kW
Ps nom	256 Pa
Fan efficiency	49.1 %
External Leakage	5 %
Sound power level LWA	52 dB(A)

Accessories

- CXE/AVC Modbus (37256)
- EC-Basic-H humidity (24807)
- EC-Basic-U universal 0-10V (24806)
- EC-Vent control board (3115)
- MTP 10, 10K, Speed control (32731)
- MTV-1/010 Controller 0..10V+ (30650)
- S-5EC/FRQ (76738)
- HR1 Room Humidistat (215150)
- RT 0-30 Room Thermostat (5151)
- ACO8AC/EC ACO Panel IP40 (93042)
- EC-Basic-CO2 and temperature (24808)
- EC-Basic-T temperature (24805)
- EC-Selector (9908)
- EC-Vent Room Unit (3018)
- MTP 20, on/off, 3-step (310220)
- PCA 1000D2 Pressure controller (76739)
- CO2RT-R-D Transmitter (6993)
- Presence detector/IR24-P (6995)
- Safety switch 2-pole grey (210679)

Documents

- EC-fans_Operating_and_Maintenance_instr_206268_CE_multilingual.pdf
- KV DUO 150-315 EC - ACO EC.PDF