

KVK Silent 160

Centrifugal circular duct fan <125W

Item number: 92160

Variant: 230V 1~ 50Hz



- Low sound level, thick and high density insulation
- Compact design, easy installation
- Easy maintenance, service cover
- Air tight design
- High efficiency and low SFP in a real working point
- Speed-controllable
- Simple to install, mounting brackets included
- Integrated motor protection
- Casing according to classification EI30
- Aluzinc casing, C4 corrosion class

KVK Silent is a box fan with circular duct connections. The casing is insulated with thick and high density mineral wool insulation. Due to this insulation the casing has classification according to EI30. The casing is manufactured from Aluzinc in corrosion class C4. A service cover with screw connection and hinges with pins make cleaning and service easy.

KVK Silent can be demand controlled via sensors and controllers for CO₂, temperature, humidity, presence indication and VAV or manually speed controlled via a stepless thyristor or a 5-step transformer. To protect the motor from overheating, the fans have integral thermal contacts with manual reset (reset by disconnecting the power).

KVK Silent can be installed in any position.

The FK mounting clamp (accessory) facilitates easy installation and removal and prevents the transfer of vibration to the duct.



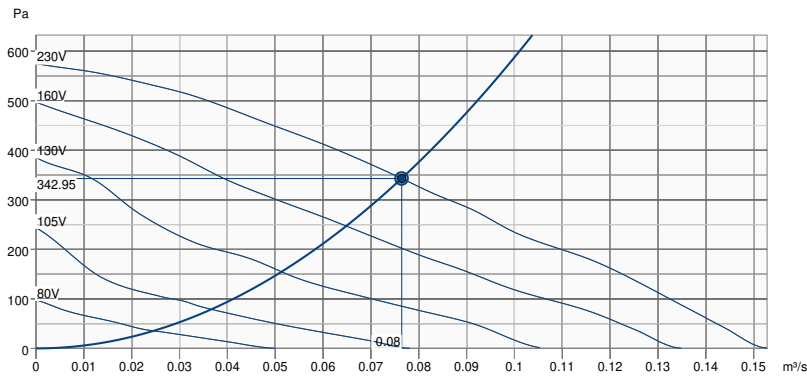
Technical parameters

Nominal data		
Voltage (nominal)	230	V
Frequency	50	Hz
Phase(s)	1~	
Input power	88	W
Input current	0.402	A
Impeller speed	2,647	r.p.m.
Air flow	max 551	m ³ /h
Capacitance of capacitor	2.5	µF
Temperature of transported air	max 70	°C
Max temperature of transported air, when speed controlled	70	°C
Sound data		
Sound pressure level at 3m (20m ² Sabin)	37	dB(A)
Protection/Classification		
Enclosure class, motor	IP44	
Insulation class	F	

Data according to ErP		
Energy class, Basic unit	E	
Energy class, Local demand	C	
ErP ready	ErP 2018	
Dimensions and weights		
Duct dimension; Circular, inlet	160	mm
Duct dimension; Circular, outlet	160	mm
Weight	17.2	kg
Others		
Duct connection type	Circular	
Motor type	AC	

Performance

Performance curve

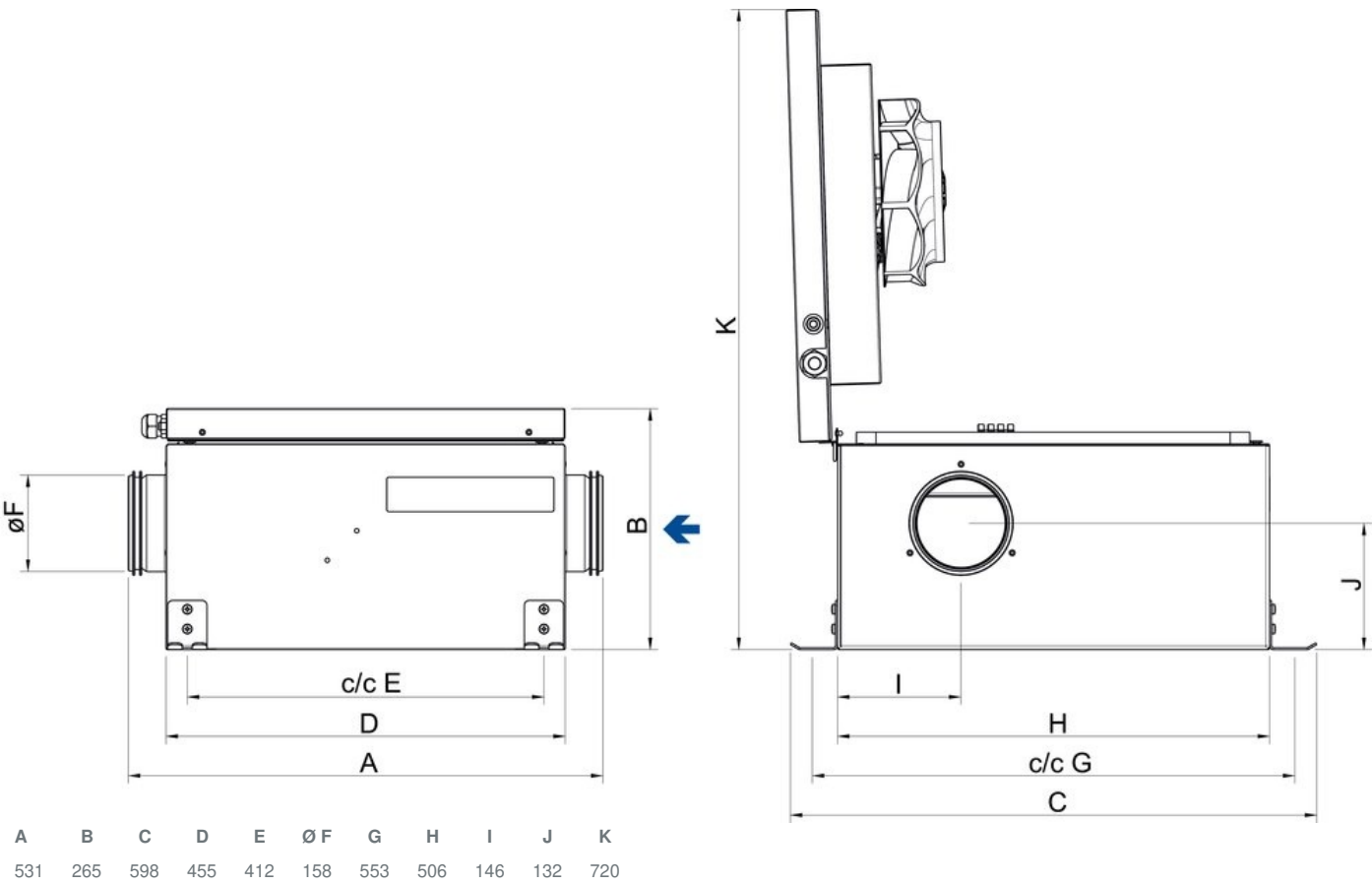


Hydraulic data

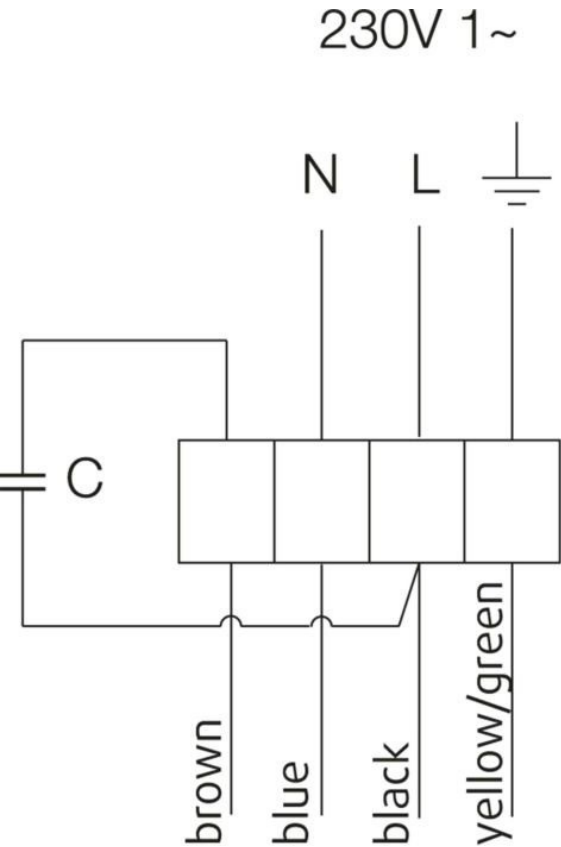
Required air flow	0.08 m³/s
Required static pressure	343 Pa
Working air flow	0.08 m³/s
Working static pressure	343 Pa
Air density	1.204 kg/m³
Power	88.3 W
Fan control - RPM	2632 rpm
Current	0.40 A
SFP	1.156 kW/m³/s
Control voltage	230.0 V
Supply voltage	230 V

Sound power level		63	125	250	500	1k	2k	4k	8k	Total
Inlet	dB(A)	52	51	57	46	44	40	35	28	60
Outlet	dB(A)	54	59	65	65	63	60	52	40	70
Surrounding	dB(A)	26	35	41	36	32	31	31	22	44
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	37
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	23

Dimension



Wiring



Product		
Trade name	Systemair	
Product name	KVK Silent 160	
Basic unit		
ErP compliance	2016	
SEC Average	-12.6	kWh/(m².a)
SEC Cold	-29	kWh/(m².a)
SEC Warm	-3.2	kWh/(m².a)
SEC Class	E	
Unit category	RVU	
Unit type	UVU	
Drive	External MSD or VSD	
Heat recovery type	None	
Temperature ratio (UVU)	Not applicable	
qv max	479	m³/h
P max	84	W
Sound power level LWA	40	dB(A)
qv ref	0.093	m³/s
Ps ref	50	Pa
SPI	0.146	W/(m³/h)
CTRL	1	
MISC	1.1	
x-value	1.5	
External Leakage	4.6	%
AEC average	183	kWh
AHS Cold	183	kWh
AEC warm	183	kWh
AHS Average	17	kWh/a
AHS Cold	34	kWh/a
AHS Warm	8	kWh/a

Units with local demand control		
ErP compliance	2018	
SEC Average	-25.9	kWh/(m².a)
SEC Cold	-53	kWh/(m².a)
SEC Warm	-10.4	kWh/(m².a)
SEC Class	C	
Unit category	RVU	
Unit type	UVU	
Drive	External MSD or VSD	
Heat recovery type	None	
Temperature ratio (UVU)	Not applicable	
qv max	479	m³/h
P max	84	W
Sound power level LWA	40	dB(A)
qv ref	0.093	m³/s
Ps ref	50	Pa
SPI	0.146	W/(m³/h)
CTRL	0.65	
MISC	1.1	
x-value	1.5	
External Leakage	4.6	%
AEC average	96	kWh
AEC cold	96	kWh
AEC warm	96	kWh
AHS Average	28	kWh/a
AHS Cold	55	kWh/a
AHS Warm	13	kWh/a

Accessories

- FRQ5S-E-6A (37421)
- RE 1,5 Speed control (5000)
- REPT 6 Digital regulator (5698)
- REU 1.5 Speed control (5004)
- SG 160 Protection guard (5608)
- CO2RT-R-D Transmitter (6993)
- FRQS-E-6A (37419)
- Presence detector/IR24-P (6995)
- Safety switch 2-pole grey (210679)
- CB 160-1,2 230V/1 Duct heater (5291)
- CB 160-2,7 230V/1 Duct heater (5382)
- CBM 160-2,1 230V/1 Duct heater (5482)
- CWK 160-3-2,5 Duct cooler,circ (30022)
- FGR 160 Filter cassette (1809)
- LDC 160-300 Silencer (53108)
- LDC 160-900 Silencer (5193)
- THB 160 Hood w.cover pl. black (1764)
- VBC 160-2 Water heating batt (5458)
- VBF 160 Water heating battery (1731)
- IGK-160 Wall Grid (1632)
- REE 1 Speed control (5314)
- RETP 6 Temp/Pressure regulator (32293)
- REV-3POL/03-7,5kW R/Y (33978)
- VKK-160 Back draft damper (1625)
- DTV500A (96807)
- HR1 Room Humidistat (215150)
- RT 0-30 Room Thermostat (5151)
- T 120 Timer (5165)
- CB 160-2,1 230V/1 Duct heater (5292)
- CB 160-5,0 400V/2 Duct heater (5383)
- CBMF 160-2,1 230V/1 Duct heater (12244)
- FFR 160 Filter cassette (1770)
- FK 160 Fast clamp (1610)
- LDC 160-600 Silencer (5192)
- RSK-160 Back draft damper (5601)
- THS 160 Hood w.cover pl. black (1839)
- VBC 160-3 Water heating batt (9840)

Documents

- Fans_Operating and Maintenance_instr_202341_CE_multilingual.pdf

Specification

KVK Silent 160 Circular duct fan DN 160, 230V/50Hz, 1~, sound insulated Centrifugal circular duct fan designed for easy and direct installation in ducts. Compact design with duct connections on both sides. The casing is manufactured from galvanised sheet steel, thermally and sound insulated with a 50 mm layer of mineral wool, internal surfaces protected by perforated, galvanized steel sheet. Service cover with quick release fasteners. The fan unit is mounted on the service cover for easy cleaning and maintenance. The service cover can be easily removed by withdrawing the hinge pin. Backward curved centrifugal impeller made of plastic. Impeller acc. to VDI 2060, balancing quality G 6.3, dynamically balanced in two planes. Voltage controllable external rotor motor (IP44), maintenance-free, the motor is placed inside the air flow for cooling. Integral thermal contact with automatic reset acc. to EN 60335-2-80. Speed-controlled by voltage reduction via transformer or thyristor. Terminal box on the casing. For extract and supply air. Installation in any mounting position. For indoor installation.