

# KVK Slim 160 EC

Centrifugal circular duct fan <125W

Item Number: 92151

Variant: 230V 1~ 50/60Hz



- Slim design, easy to install
- Easy maintenance, service cover
- Low sound level, insulated cover
- High efficiency and low SFP in a real working point
- Potentiometer included, possible to speed control 0-100%
- Simple to install, mounting brackets included
- Integrated motor protection
- Aluzinc casing, C4 corrosion class

KVK Slim is a box fan with circular duct connections. The lid is insulated to keep a low sound level. The fan can be installed in any position. The casing is manufactured from Aluzinc in corrosion class C4.

KVK Slim EC is delivered with integrated motor protection and pre-wired potentiometer (0-10V) that allows you to easily find the desired working point. The fan can be demand controlled via sensors for CO<sub>2</sub>, temperature, humidity, presence indication and VAV.

Size 315-500 also offers possibility to communication via Modbus.

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



## Technical parameters

Norminal data		
Voltage (Nominal)	230	V
Frequency	50; 60	Hz
Phase(s)	1~	
Input power	118	W
Input current	0.923	A
Impeller speed	2,500	r.p.m.
Air flow	max 0.148	m <sup>3</sup> /s
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 <sup>2</sup> Sabin)	49	dB(A)

**Protection/Classification**

Enclosure class, motor	IP54
Insulation class	B

**Data according to ErP**

Energy class, Basic unit	E
Energy class, Local demand	B
ErP ready	ErP 2018

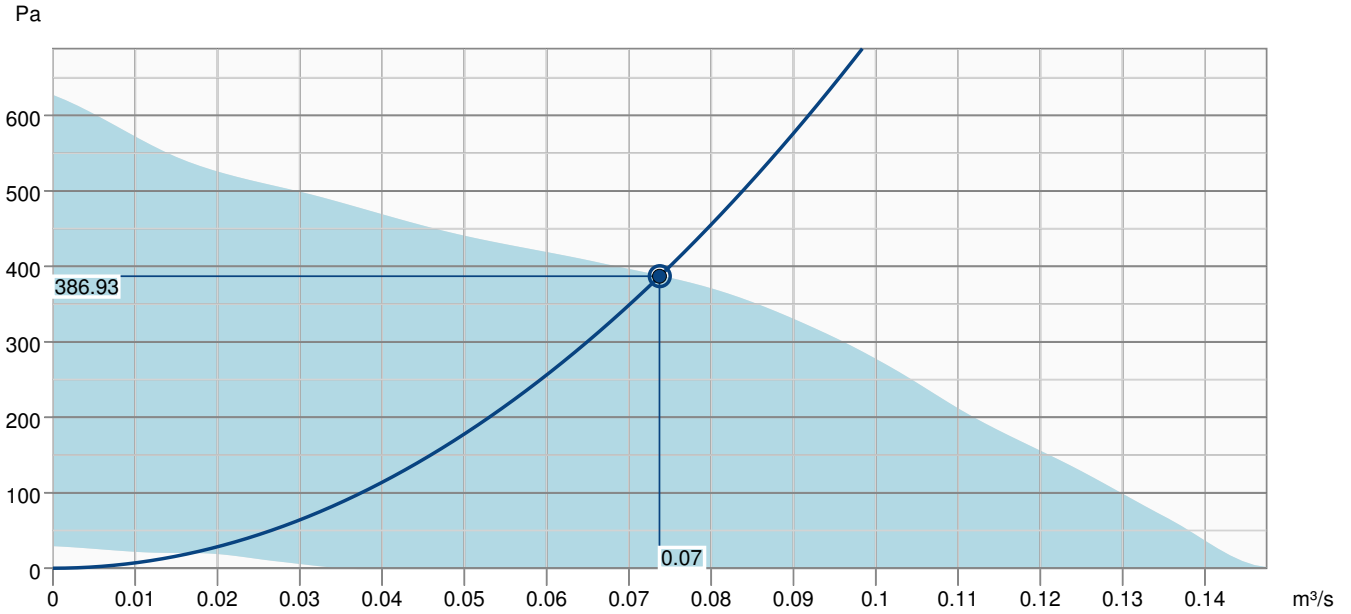
**Dimensions and weights**

Duct dimension; Circular, inlet	160	mm
Duct dimension; Circular, outlet	160	mm
Weight	6	kg

**Others**

Duct connection type	Circular
Motor type	EC

## Performance curve

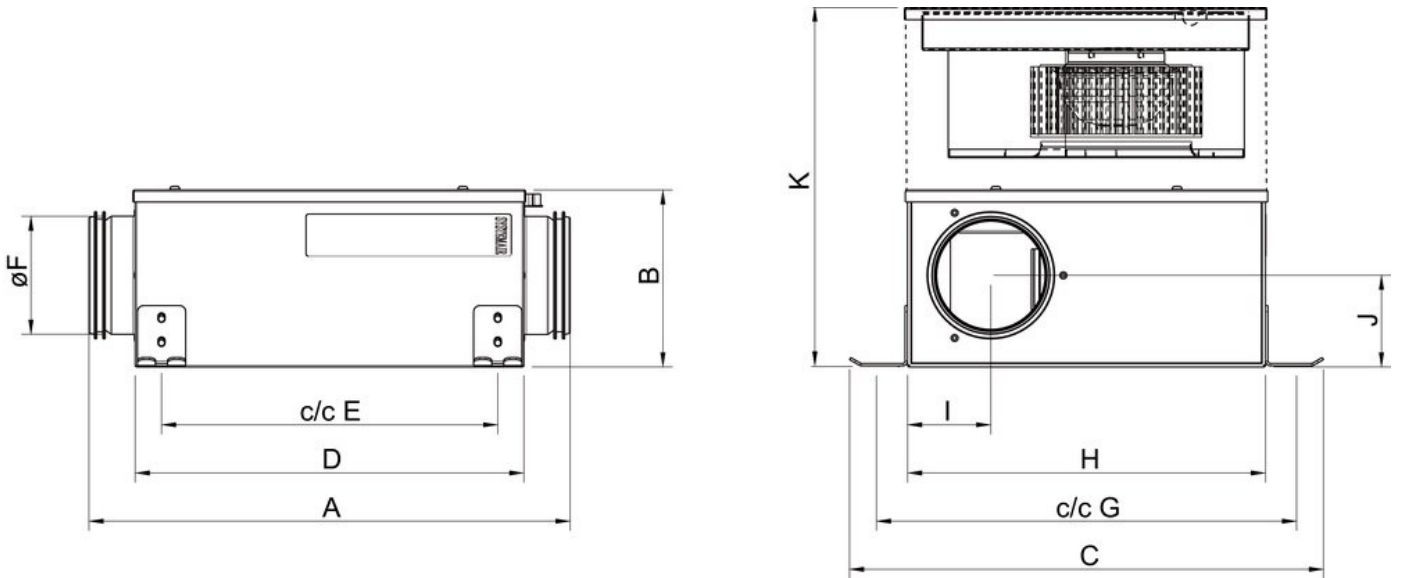


### Hydraulic data

Required air flow	0.07 m³/s
Required static pressure	387 Pa
Working air flow	0.07 m³/s
Working static pressure	387 Pa
Air density	1.204 kg/m³
Power	100.6 W
Fan control - RPM	2819 rpm
Current	0.78 A
SFP	1.365 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)	62	65	67	64	61	62	60	55	72
Outlet	dB(A)	57	69	72	71	67	68	64	59	77
Surrounding	dB(A)	37	44	52	49	46	48	43	36	56
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	49
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	35

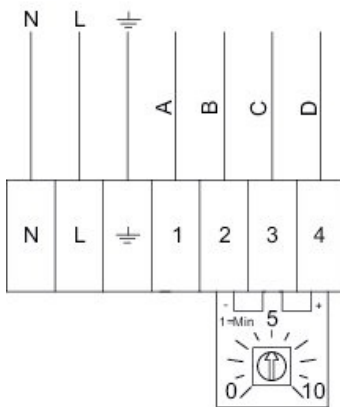
## Dimension



	A	B	C	D	E	øF	G	H	I	J	K
KVK Slim 100	400	150	392	325	278	98	348	300	69	76	300
KVK Slim 125	400	150	392	325	278	123	348	300	84	72	300
KVK Slim 160	400	185	392	325	278	158	348	300	99	90	370
KVK Slim100 EC	400	150	392	325	278	98	348	300	69	76	300
KVK Slim120 EC	400	150	392	325	278	123	348	300	84	72	300
KVK Slim160 EC	400	185	392	325	278	158	348	300	99	90	370

## Wiring

230V 1~



Terminal	Cable	Description
1	Black 1	Tacho output, Isink max 10mA
2	Black 2	GND
3	Black 3	Control input 0-10 VDC/PWM
4	Black 4	Output 10 VDC max 1.1 mA

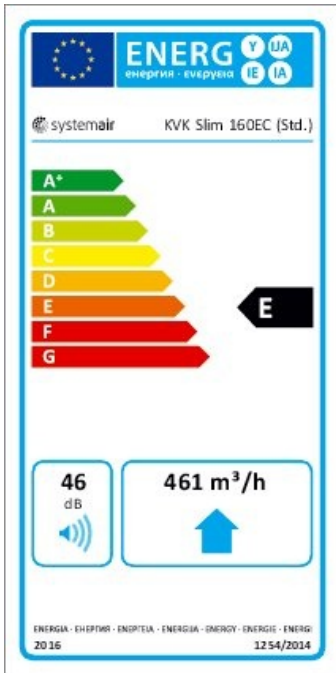
## Ecodesign

Product		
Trade name	Systemair	
Product name	KVK Slim 160 EC	
Basic unit		
ErP compliance	2016	
SEC Average	-12.9	kWh/(m <sup>2</sup> .a)
SEC Cold	-29.3	kWh/(m <sup>2</sup> .a)
SEC Warm	-3.5	kWh/(m <sup>2</sup> .a)
SEC Class	E	
Unit category	RVU	
Unit type	UVU	
Drive	Integrated VSD	
Heat recovery type	None	
Temperature ratio (UVU)	Not applicable	
qv max	461	m <sup>3</sup> /h
P max	116	W
Sound power level LWA	46	dB(A)
qv ref	0.09	m <sup>3</sup> /s
Ps ref	50	Pa
SPI	0.136	W/(m <sup>3</sup> /h)
CTRL	1	
MISC	1.1	
x-value	2	
External Leakage	0.3	%
AEC average	171	kWh
AHS Cold	171	kWh
AEC warm	171	kWh
AHS Average	1,715	kWh/a
AHS Cold	3,355	kWh/a
AHS Warm	776	kWh/a

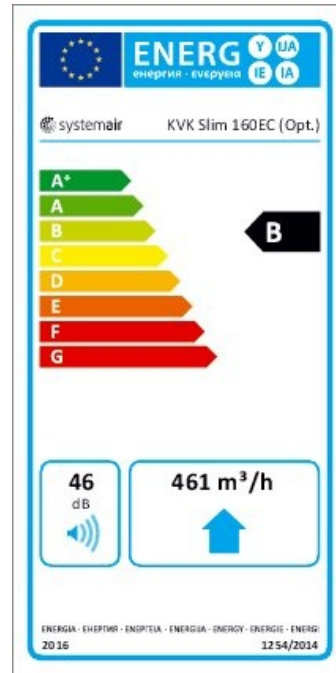
Units with local demand control		
ErP compliance		2018
SEC Average	-26.5	kWh/(m <sup>2</sup> .a)
SEC Cold	-53.6	kWh/(m <sup>2</sup> .a)
SEC Warm	-11	kWh/(m <sup>2</sup> .a)
SEC Class		B
Unit category		RVU
Unit type		UVU
Drive		Integrated VSD
Heat recovery type		None
Temperature ratio (UVU)		Not applicable
qv max	461	m <sup>3</sup> /h
P max	116	W
Sound power level LWA	46	dB(A)
qv ref	0.0896	m <sup>3</sup> /s
Ps ref	50	Pa
SPI	0.136	W/(m <sup>3</sup> /h)
CTRL	0.65	
MISC	1.1	
x-value	2	
External Leakage	0.3	%
AEC average	72	kWh
AEC cold	72	kWh
AEC warm	72	kWh
AHS Average	2,830	kWh/a
AHS Cold	5,536	kWh/a
AHS Warm	1,280	kWh/a

# Energy class label

## Energy class, Basic unit



## Energy class, Local demand





## Accessories

- CXE/AVC Modbus (37256)
- EC-Basic-CO2 and temperature (24808)
- EC-Basic-T temperature (24805)
- EC-Selector (9908)
- EC-Vent Room Unit (3018)
- MTP 10, 10K, Speed control (32731)
- MTV-1/010 Controller 0..10V+ (30650)
- S-5EC/FRQ (76738)
- VKK-160 Back draft damper (1625)
- Presence detector/IR24-P (6995)
- 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)
- FFR 160 Filter cassette (1770)
- FK 160 Fast clamp (1610)
- LDC 160-600 Silencer (5192)
- RSK-160 Back draft damper (5601)
- VBC 160-3 Water heating batt (9840)
- DMD-C Pressure controller (15793)
- EC-Basic-H humidity (24807)
- EC-Basic-U universal 0-10V (24806)
- EC-Vent control board (3115)
- IGK-160 Wall Grid (1632)
- MTP 20, on/off, 3-step (310220)
- REV-3POL/03 ON/OFF (33978)
- SG 160 Protection guard (5608)
- CO2RT-R-D Transmitter (6993)
- RT 0-30 Room Thermostat (5151)
- CB 160-2,1 230V/1 Duct heater (5292)
- CB 160-5,0 400V/2 Duct heater (5383)
- CWK 160-3-2,5 Duct cooler,circ (30022)
- FGR 160 Filter cassette (1809)
- LDC 160-300 Silencer (53108)
- LDC 160-900 Silencer (5193)
- VBC 160-2 Water heating batt (5458)
- VBF 160 Water heating battery (1731)

## Documents

- EC-fans\_Operating\_and\_Maintenance\_instr\_206268\_CE\_multilingual.pdf