

# KVK Slim 100 EC

Centrifugal circular duct fan <125W

Item Number: 92149

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. A service cover with screw connection makes it easy to open for service and cleaning.



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

Nominal data		
Voltage (nominal)	230	V
Frequency	60; 50	Hz
Phase(s)	1~	
Input power	60	W
Input current	0.483	A
Impeller speed	2,499	rpm
Air flow	max 0.0866	m <sup>3</sup> /s
Temperature of transported air	max 55	°C
Max temperature of transported air, when speed controlled	55	°C
Sound data		
Sound pressure level at 3m (20m <sup>2</sup> Sabin)	43	dB(A)
Protection/Classification		
Enclosure class, motor	IP44	
Insulation class	B	

**Data according to ErP**

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

**Dimensions and weights**

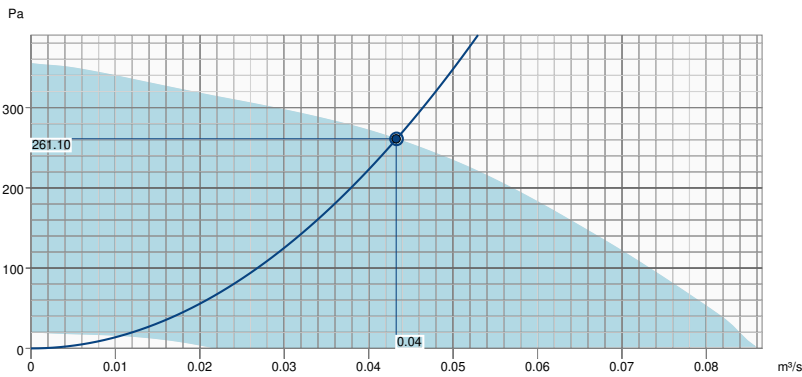
Duct dimension; Circular, inlet	100 mm
Duct dimension; Circular, outlet	100 mm
Weight	5.6 kg

**Others**

Duct connection type	Circular
Motor type	EC

# Performance

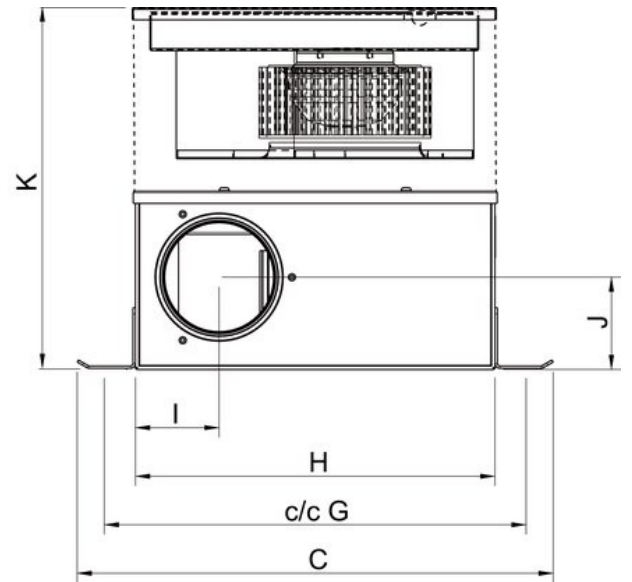
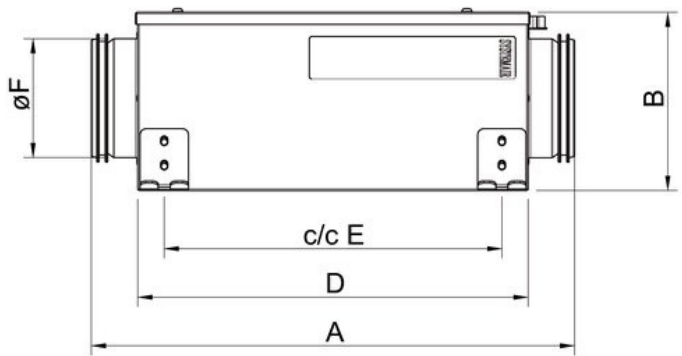
## Performance curve



Hydraulic data	
Required air flow	0.04 m³/s
Required static pressure	261 Pa
Working air flow	0.04 m³/s
Working static pressure	261 Pa
Air density	1.204 kg/m³
Power	49.7 W
Fan control - RPM	2640 rpm
Current	0.40 A
SFP	1.149 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)	53	57	60	59	58	55	51	43	65
Outlet	dB(A)	55	64	62	63	65	63	56	47	71
Surrounding	dB(A)	16	31	40	41	46	46	38	28	50
Sound pressure level at 3m (20m² Sabine)	dB(A)	-	-	-	-	-	-	-	-	43
Sound pressure level at 3m free field	dB(A)	-	-	-	-	-	-	-	-	29

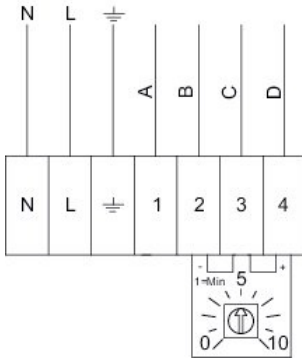
## Dimension



	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

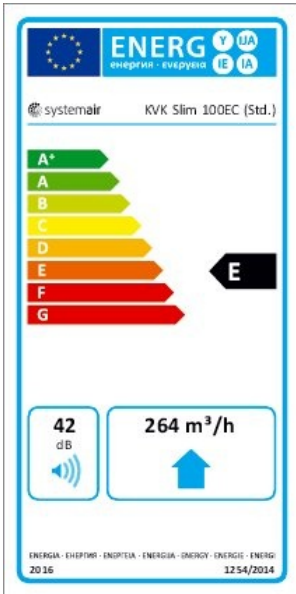
## Ecodesign

Product	
Trade name	Systemair
Product name	KVK Slim 100 EC
Basic unit	
ErP compliance	2016
SEC Average	-13.1 kWh/(m <sup>2</sup> .a)
SEC Cold	-29.5 kWh/(m <sup>2</sup> .a)
SEC Warm	-3.7 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	263 m <sup>3</sup> /h
P max	57 W
Sound power level LWA	42 dB(A)
qv ref	0.051 m <sup>3</sup> /s
Ps ref	50 Pa
SPI	0.128 W/(m <sup>3</sup> /h)
CTRL	1
MISC	1.1
x-value	1.5
External Leakage	5 %
AEC average	160.6 kWh
AHS Cold	160.6 kWh
AEC warm	160.6 kWh
AHS Average	1,715.2 kWh/a
AHS Cold	3,355.3 kWh/a
AHS Warm	775.6 kWh/a

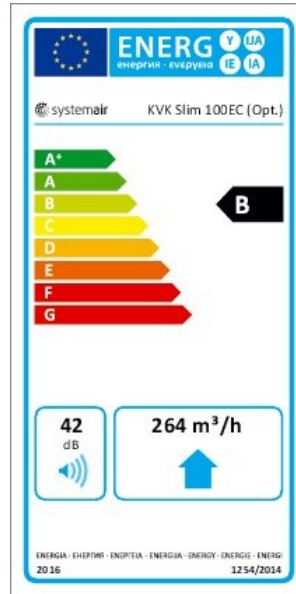
Units with local demand control		
ErP compliance		2018
SEC Average	-26.2	kWh/(m <sup>2</sup> .a)
SEC Cold	-53.3	kWh/(m <sup>2</sup> .a)
SEC Warm	-10.7	kWh/(m <sup>2</sup> .a)
SEC Class		B
Unit category		RVU
Unit type		UVU
Drive		Integrated VSD
Heat recovery type		None
Temperature ratio (UVU)		Not applicable
qv max	264	m <sup>3</sup> /h
P max	57	W
Sound power level LWA	42	dB(A)
qv ref	0.0513	m <sup>3</sup> /s
Ps ref	50	Pa
SPI	0.128	W/(m <sup>3</sup> /h)
CTRL	0.65	
MISC	1.1	
x-value	1.5	
External Leakage	5	%
AEC average	84.2	kWh
AEC cold	84.2	kWh
AEC warm	84.2	kWh
AHS Average	2,830	kWh/a
AHS Cold	5,536.2	kWh/a
AHS Warm	1,279.7	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 20, on/off, 3-step (310220)
- REV-3POL/03-7,5kW R/Y (33978)
- SG 100 Protection guard (5606)
- CO2RT-R-D Transmitter (6993)
- IGK-100 Wall Grid (1630)
- RT 0-30 Room Thermostat (5151)
- CB 100-0,4 230V/1 Duct heater (5288)
- CBM 100-0,6 230V/1 Duct heater (5479)
- CWK 100-3-2,5 Duct cooler,circ (30019)
- FGR 100 Filter cassette (1802)
- LDC 100-300 Silencer (8180)
- LDC 100-900 Silencer (5189)
- VBC 100-2 Water heating batt (5456)
- BMS Trickle & Boost Switch (120363)
- DMD-C Pressure controller (15793)
- 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)
- VKK-100 Back draft damper (1623)
- HR1 Room Humidistat (215150)
- Presence detector/IR24-P (6995)
- VBC 125-3 Water heating batt (9839)
- CB 100-0,6 230V/1 Duct heater (5376)
- CBMF 100-0,6 230V/1 Duct heater (12241)
- FFR 100 Filter cassette (1766)
- FK 100 Fast clamp (1607)
- LDC 100-600 Silencer (5188)
- RSK-100 Back draft damper (5597)
- VBF 100 Water heating battery (1724)