

# Extero EC

## Exhaust centrifugal fans with EC motor

### Use

- Extract ventilation systems installed in various premises.
- External wall mounting from outside.
- Compatible with Ø 100 up to 200 mm round air ducts.



**Air flow:**  
up to 755 m³/h  
210 l/s



**Power:**  
from 79 W



**Noise level:**  
from 55 dBA



### Design

- Steel casing with a special polymer atmospheric resistant coating.
- Special design of the casing protects the motor against direct sprays of water.
- Back side has a special sealant for tight contact and adaption to the wall.
- Vertical air exhaust downwards through a protecting screen against birds and rodents.
- The connection spigot is equipped with rubber seal.

### Motor

- High-efficient direct current EC motor with external rotor and backward curved blades.
- EC technology meets the up-to-date requirements to energy-saving and controllable ventilation and provides up to 35 % energy saving as compared to asynchronous motors.
- EC motor ensures totally controllable speed range for the fan and has integrated overheating protection with automatic restart.
- EC motor has no friction and wearing parts as capacitor and brushes. Instead a maintenance-free EC controller electronic circuit board is used.
- The impeller is dynamically balanced.
- The fan is compatible with 50 Hz and 60 Hz power mains and the maximum speed does not depend on power mains frequency.

### Speed control

- The fan speed is controlled with a 0–10 V control signal from the following sources:
  - integrated or external speed controller
  - controller with sensors
  - central BMS system.
- The control signal value changes depending on air temperature, pressure, smoke concentration and other parameters.
- During signal value change the fan with EC motor correspondingly changes the rotations speed and delivers required air volume to the ventilation system.
- The computer central building management systems (BMS) enable integration of several EC motors in network and precise individual operation control for each fan.

### Designation key

Series	Motor type	Duct diameter [mm]	Motor modifications
Extero	EC: electronically commutated motor	100; 125; 150; 160; 200	max: high-powered motor

### Accessories

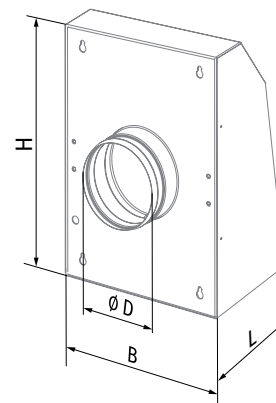
Silencers	Backdraft air dampers	Air dampers	Clamps	Speed controllers	Timers/Sensors
 SD	 VRV	 VK / VKA	 KZ	 CDT E/0-10	 TE(TI) / HSE(HSI) / LSE(LSI) / IRSE(IRSI)

### Mounting

- Vertical mounting on external walls of buildings and premises.
- Flexible air duct is fixed on the fan spigot with a clamp.
- The fan with connected air duct is fixed at the wall on a mounting plate. Power supply through the external terminals. After mounting of the ventilator a protection cover is mounted over the mounting plate.

### Overall dimensions [mm]

Type	Ø D	B	H	L	Weight [kg]
Extero EC 100	100	260	355	140	3.6
Extero EC 125	125	260	355	140	3.6
Extero EC 150	150	300	400	140	4.7
Extero EC 160	160	300	400	140	4.7
Extero EC 200	200	300	400	140	4.7
Extero EC 200 max	200	326	400	182	5.3

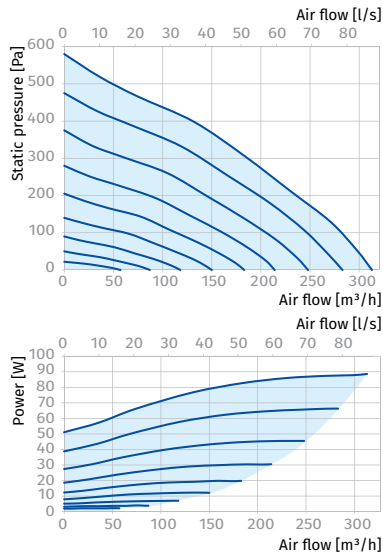


### Technical data

Parameters	Extero EC 100	Extero EC 125	Extero EC 150	Extero EC 160	Extero EC 200	Extero EC 200 max
Voltage [V]	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Frequency [Hz]	50/60	50/60	50/60	50/60	50/60	50/60
Power [W]	89	103	92	92	79	102
Current [A]	0.53	0.83	0.75	0.75	0.67	0.86
Maximum air flow [m³/h (l/s)]	313 (87)	480 (133)	550 (153)	585 (163)	535 (149)	755 (210)
RPM [min⁻¹]	3460	3600	2840	2840	2680	2800
Sound pressure at 3 m [dBA]	55	57	56	55	55	58
Max. transported air temperature [°C]	-25...+40	-25...+40	-25...+40	-25...+40	-25...+40	-25...+40
SEC class	B	B	B	B	B	B
IP rating	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4
Motor IP rating	IP55	IP55	IP55	IP55	IP55	IP55
ErP	2018	2018	2018	2018	2018	2018

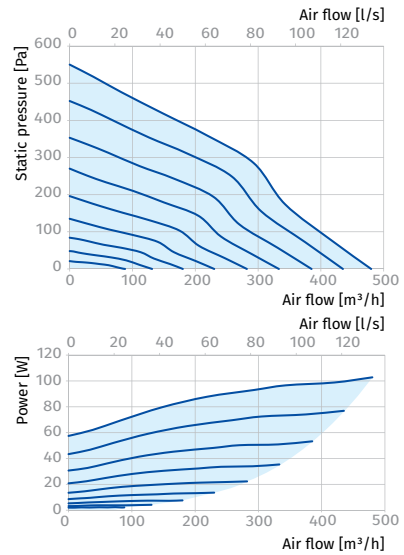
#### EXTERO EC 100

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	71	60	57	62	65	67	62	56	49	50	60
LWA to environment [dBA]	76	33	44	62	73	68	68	62	51	55	65



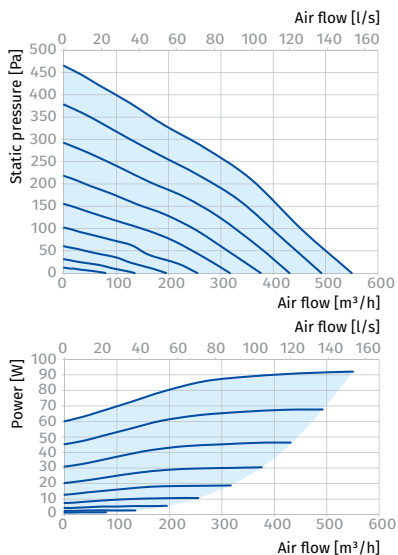
#### EXTERO EC 125

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	73	62	59	64	67	69	64	58	51	52	62
LWA to environment [dBA]	78	34	45	64	75	71	71	64	53	57	67



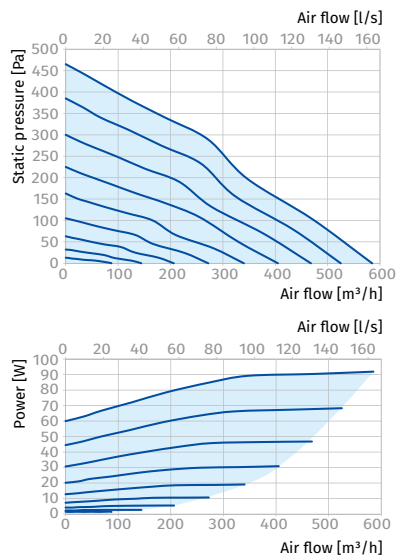
**EXTERO EC 150**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	80	68	65	72	76	71	70	67	61	59	69
LWA to environment [dBA]	77	43	53	66	72	70	71	66	60	56	66



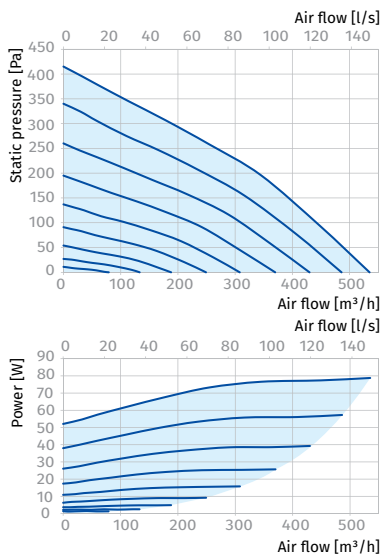
**EXTERO EC 160**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	79	62	68	73	74	72	66	64	56	58	68
LWA to environment [dBA]	76	40	52	68	71	70	68	61	52	55	65



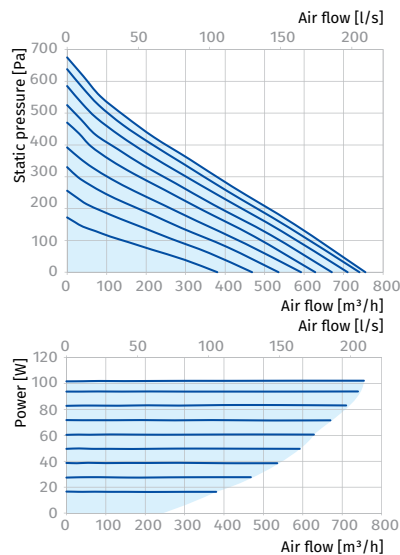
**EXTERO EC 200**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	79	59	61	67	76	71	69	67	60	58	68
LWA to environment [dBA]	75	42	52	65	71	69	70	65	59	55	65



**EXTERO EC 200 MAX**

Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	82	61	63	69	80	73	71	69	62	61	71
LWA to environment [dBA]	79	44	55	68	74	72	73	68	62	58	68



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