Extero EC

Exhaust centrifugal fans

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

EC motor

ErP 2018

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.
- The turbine 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

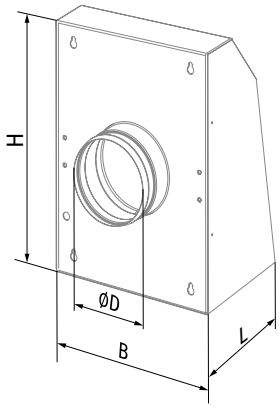
- The fan is controlled with a 0-10 V external control signal speed controller for EC motors.
- The fan air capacity could be regulated by various parameters, including temperature level, pressure, smoke, etc.
- When a control parameter changes the EC motor changes its rotation speed to provide the best suitable air flow.
- The fans with EC motors can be integrated into a building management system or similar systems to adjust ventilation system with respect to specific user's demands.

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	ØD	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



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

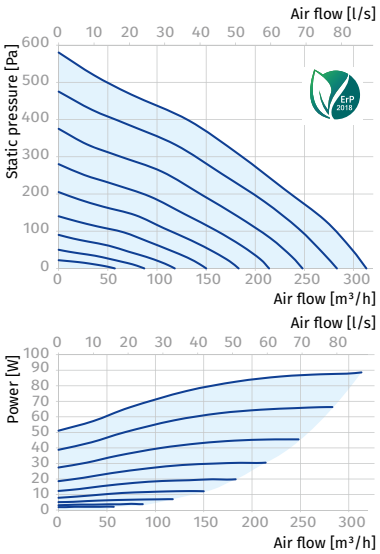
Silencer	Backdraft air damper	Air damper	Clamp	Speed controller	Timer / Sensor
SD	VRV	VKA	KZ	CDT E/0-10	TE(TI)/HSE(HSI)/ LSE(LSI)/IRSE(IRSI)

Technical data

Parameters	Extero EC 100	Extero EC 125	Extero EC 150	Extero EC 160	Extero EC 200	Extero EC 200 max
Voltage [V / 50 (60) Hz]	1~200-277	1~200-277	1~200-277	1~200-277	1~200-277	1~200-277
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
Ingress protection rating	IPX4	IPX4	IPX4	IPX4	IPX4	IPX4
Motor IP rating	IP55	IP55	IP55	IP55	IP55	IP55
ErP	2018	2018	2018	2018	2018	2018

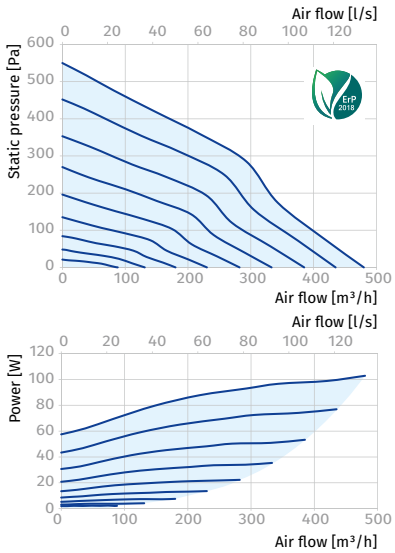
EXTERO EC 100

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



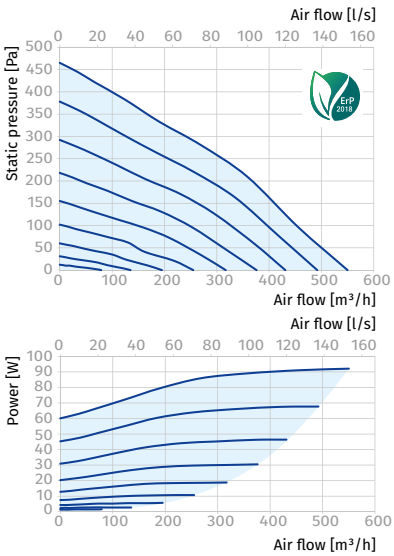
EXTERO EC 125

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



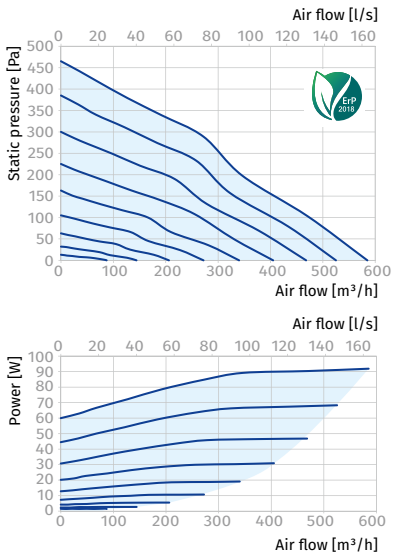
EXTERO EC 150

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



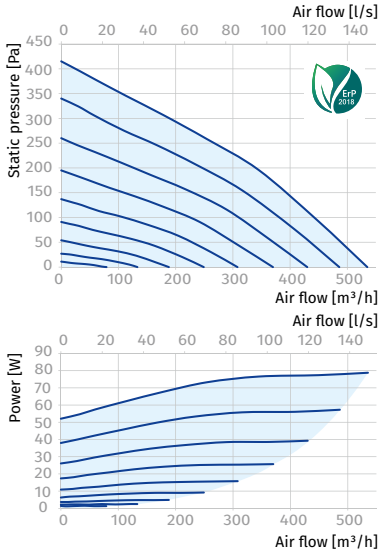
EXTERO EC 160

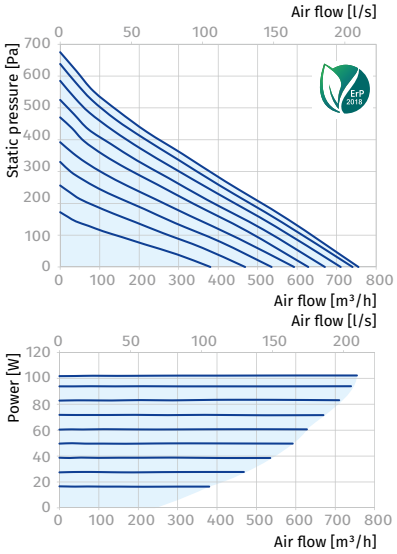
Sound power level, A-weighted	Octave frequency bands [Hz]									LpA, 3 m	LpA, 1 m
	Gen.	63	125	250	500	1000	2000	4000	8000	[dBA]	[dBA]
L_{WA} to inlet [dBA]	79	62	68	73	74	72	66	64	56	58	68
L_{WA} to environment [dBA]	76	40	52	68	71	70	68	61	52	55	65



EXTERO EC 200

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



EXTERO EC 200 MAX

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