

Centro-M EC

Inline centrifugal fans with EC motor

Use

- Supply and extract ventilation systems installed in various premises.
- Direct mounting inside air ductworks.
- For arranging energy-saving and controllable ventilation systems.
- Compatible with Ø100 to 315 mm round air ducts.



Air flow:
up to 2100 m³/h
583 l/s



Power:
from 83 W



Noise level:
from 44 dBA



Design

- The casing is made of steel with a special polymer coating.
- Aerodynamically shaped casing.
- External terminal box for connection to power mains.

Motor

- High-efficient direct current EC motor with external rotor and backward curved blades.
- EC technologies meet the latest requirements to arrange high-efficient energy saving ventilation.
- EC motors have energy demand by 35 % less as compared to standard motors and have efficiency up to 90 %.
- EC motors are featured with high performance, low noise level and well controllable total speed range.
- Overheating protection by built-in thermal switches with automatic restart.
- Dynamically balanced turbine.

Operation and speed control

- The fan is controlled with a 0-10 V external control signal, e.g. CDT E/0-10 speed controller for EC motors.
- The fan capacity is regulated by various parameters, including temperature level, pressure, smoke, etc.
- EC motor changes its rotation speed synchronously with the fluctuation of the control parameter to ensure the best suitable air flow.
- The fan is compatible with 50 and 60 Hz power mains with the same maximum speed.
- The parameters may be set and controlled due to data exchange between a PC and the fan.
- The fans can be integrated into a unified decentralized computerized network to adjust ventilation system with respect to specific user's demands.

Mounting

- Any mounting position.
- Fans are fixed to wall or ceiling with mounting brackets supplied as a standard.
- Flexible air ducts are fixed on the fan spigots with clamps.

Designation key

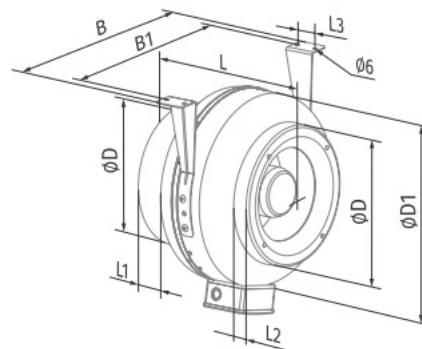
Series	Motor type	Duct diameter	Motor modifications
Centro-M	EC: electronically commutated motor	100; 125; 150; 160; 200; 250; 315	max: high-powered motor L: low-powered motor

Accessories

Silencer	Panel filter	Pocket filter	Electric heater	Water heater	Backdraft air damper	Shutter	Clamp	Speed controller
								
SD	KFBK	KFBT	EKH	WKH	VRV	VKA	KZ	CDT E/0-10

Overall dimensions [mm]

Type	ØD	ØD1	B	B1	L	L1	L2	L3	Weight [kg]
Centro-M EC 100	98	255	310	270	203	20	25	30	3.45
Centro-M EC 125	123	255	310	270	203	20	25	30	3.58
Centro-M EC 150	149	305	360	320	220	25	25	30	4.17
Centro-M EC 160	159	305	360	320	220	25	25	30	4.32
Centro-M EC 200	198	345	395	355	245	25	30	40	5.70
Centro-M EC 200 max	198	345	395	355	255	25	30	40	5.70
Centro-M EC 250 L	248	345	395	355	250	25	30	40	5.09
Centro-M EC 250	248	345	395	355	250	25	30	40	5.09
Centro-M EC 315	314	405	455	415	260	30	30	40	7.30
Centro-M EC 315 max	313	410	505	475	440	60	60	50	16.00



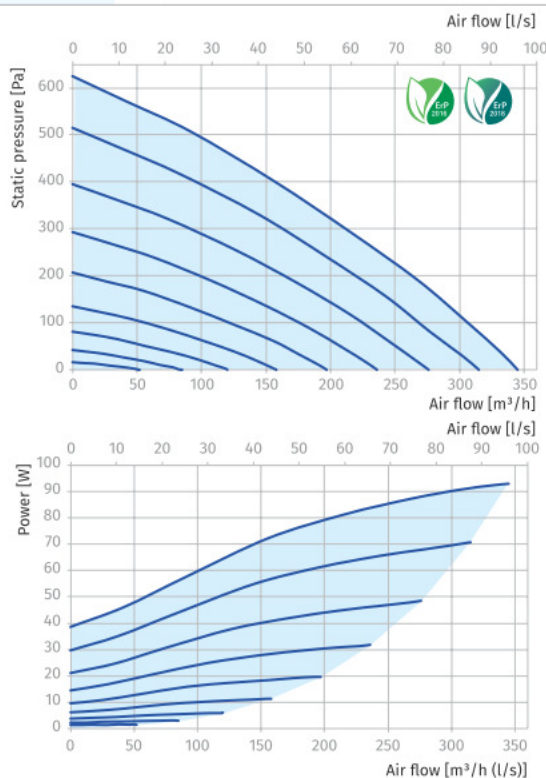
Technical data

Parameters	Centro-M EC 100	Centro-M EC 125
Voltage [V / 50-60 Hz]	1~ 220-277	1~ 220-277
Power [W]	90	83
Current [A]	0.70	0.58
Maximum air flow [m³/h (l/s)]	345 (96)	480 (133)
RPM [min⁻¹]	3600	3400
Sound pressure at 3 m [dBA]	44	45
Transported air temperature [°C]	-25...+60	-25...+60
SEC class	B	B
Ingress protection rating	IPX4	IPX4
ErP compliance	2016, 2018	2016, 2018

CENTRO-M EC 100

Sound power level, A-filter applied

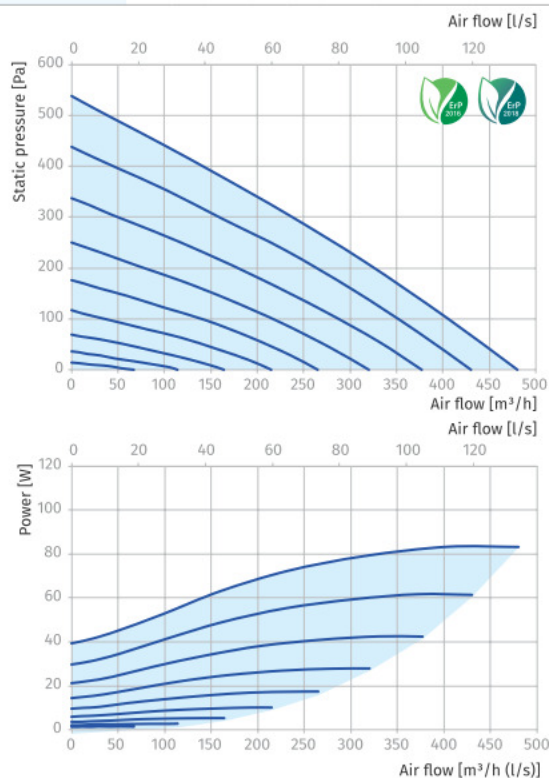
Sound power level, A-weighted	Gen.	Octave frequency band [Hz]								LpA, 3 m [dBA]	LpA, 1 m [dBA]
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	90	66	82	89	80	74	70	63	51	70	80
LWA to outlet [dBA]	89	73	82	88	79	70	66	61	49	69	79
LWA to environment [dBA]	65	31	47	56	60	59	58	47	33	44	54



CENTRO-M EC 125

Sound power level, A-filter applied

Sound power level, A-weighted	Gen.	Octave frequency band [Hz]								LpA, 3 m [dBA]	LpA, 1 m [dBA]
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	91	62	83	90	79	74	71	65	54	71	81
LWA to outlet [dBA]	90	69	83	89	78	71	68	63	52	70	80
LWA to environment [dBA]	65	27	48	58	59	60	60	49	37	45	55



Technical data

Parameters	Centro-M EC 150	Centro-M EC 160
Voltage [V / 50-60 Hz]	1~ 220-277	1~ 220-277
Power [W]	98	95
Current [A]	0.73	0.72
Maximum air flow [m³/h (l/s)]	620 (172)	685 (190)
RPM [min⁻¹]	2800	2800
Sound pressure at 3 m [dBA]	47	47
Transported air temperature [°C]	-25...+60	-25...+60
SEC class	B	B
Ingress protection rating	IPX4	IPX4
ErP compliance	2016, 2018	2016, 2018

CENTRO-M EC 150

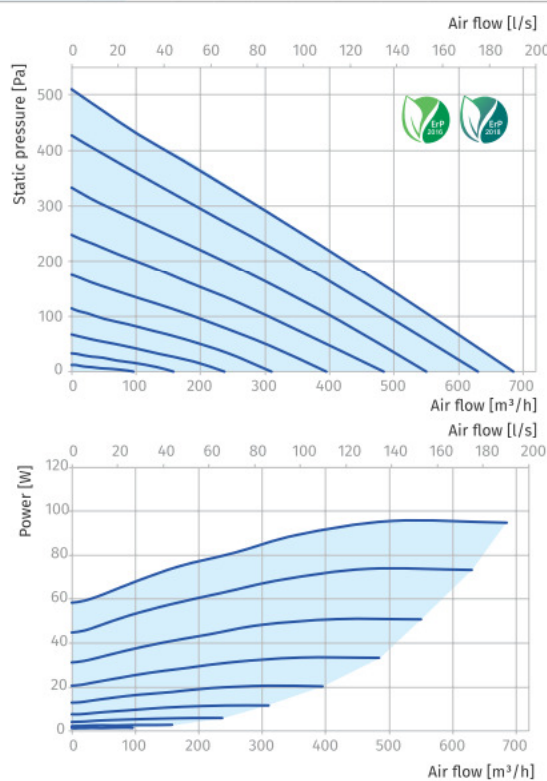
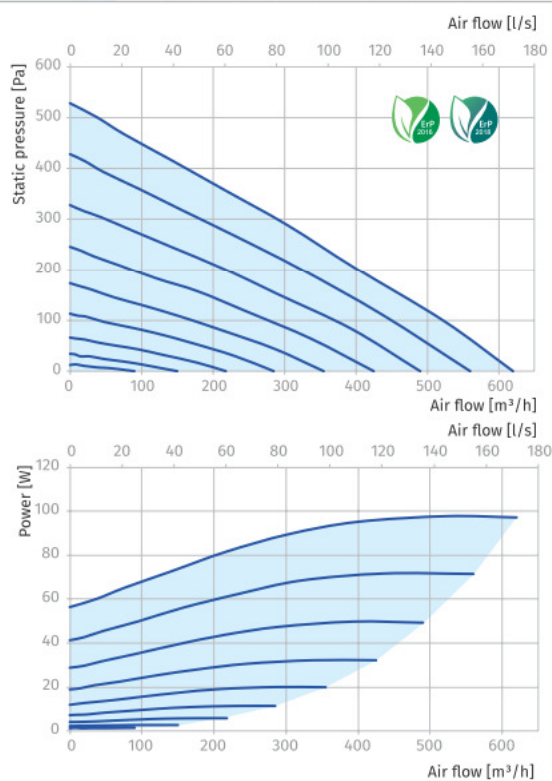
Sound power level, A-filter applied

Sound power level, A-weighted	Gen.	Octave frequency band [Hz]								LpA, 3 m [dBA]	LpA, 1 m [dBA]
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	88	52	85	84	73	72	69	67	53	67	77
LWA to outlet [dBA]	86	51	84	81	69	67	63	62	50	66	76
LWA to environment [dBA]	68	27	49	60	63	62	61	53	40	47	57

CENTRO-M EC 160

Sound power level, A-filter applied

Sound power level, A-weighted	Gen.	Octave frequency band [Hz]								LpA, 3 m [dBA]	LpA, 1 m [dBA]
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	88	64	80	86	78	72	68	61	50	67	77
LWA to outlet [dBA]	87	71	80	85	77	68	65	59	48	67	77
LWA to environment [dBA]	67	32	49	58	63	62	60	49	35	47	57



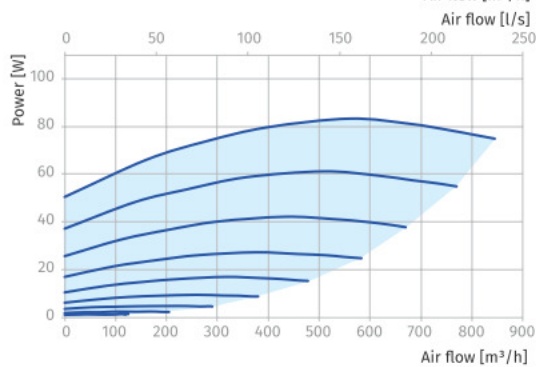
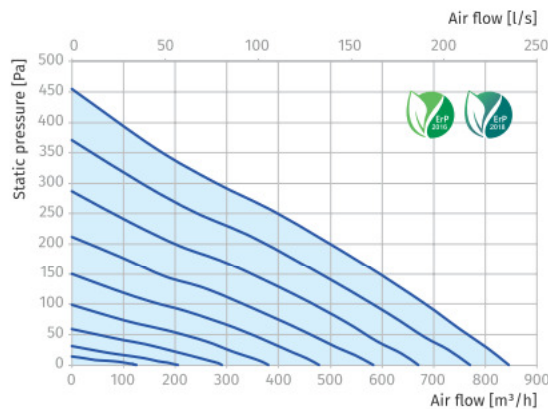
Technical data

Parameters	Centro-M EC 200	Centro-M EC 200 max
Voltage [V / 50-60 Hz]	1~ 220-277	1~ 220-277
Power [W]	83	100
Current [A]	0.63	0.74
Maximum air flow [m³/h (l/s)]	845 (235)	1010 (281)
RPM [min⁻¹]	2500	2400
Sound pressure at 3 m [dBA]	47	48
Transported air temperature [°C]	-25...+60	-25...+60
SEC class	B	B
Ingress protection rating	IPX4	IPX4
ErP compliance	2016, 2018	2016, 2018

CENTRO-M EC 200

Sound power level, A-filter applied

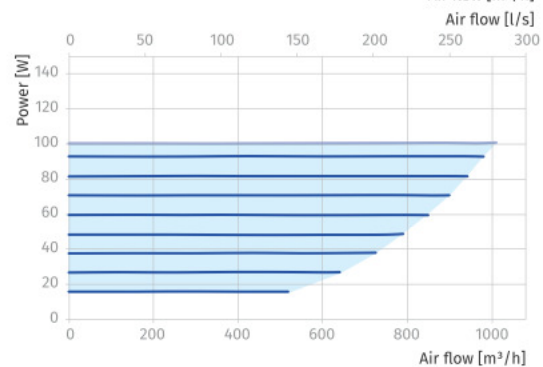
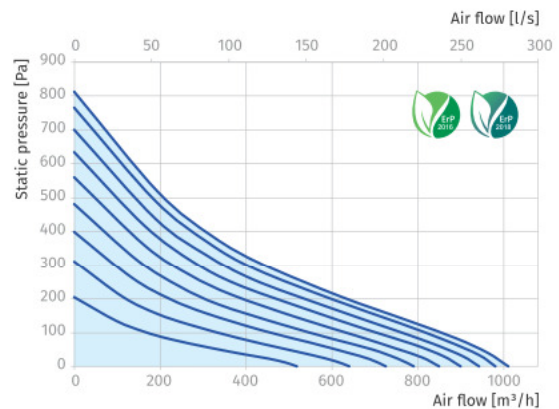
Sound power level, A-weighted	Gen.	Octave frequency band [Hz]								LpA, 3 m [dBA]	LpA, 1 m [dBA]
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	87	48	76	84	79	79	80	72	61	67	77
LWA to outlet [dBA]	85	45	75	79	77	77	80	72	62	64	74
LWA to environment [dBA]	67	27	49	60	62	61	60	52	39	47	57



CENTRO-M EC 200 MAX

Sound power level, A-filter applied

Sound power level, A-weighted	Gen.	Octave frequency band [Hz]								LpA, 3 m [dBA]	LpA, 1 m [dBA]
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	93	63	80	88	85	87	84	79	67	72	82
LWA to outlet [dBA]	89	65	77	74	83	84	83	77	64	68	78
LWA to environment [dBA]	68	30	49	58	62	65	61	52	38	48	58



Technical data

Parameters	Centro-M EC 250 L	Centro-M EC 250
Voltage [V / 50-60 Hz]	1~ 220-277	1~ 220-277
Power [W]	100	164
Current [A]	0.74	1.15
Maximum air flow [m³/h (l/s)]	985 (274)	1230 (342)
RPM [min⁻¹]	2500	2900
Sound pressure at 3 m [dBA]	44	46
Transported air temperature [°C]	-25...+60	-25...+60
SEC class	B	-
Ingress protection rating	IPX4	IPX4
ErP compliance	2016, 2018	2015, 2016, 2018

CENTRO-M EC 250 L

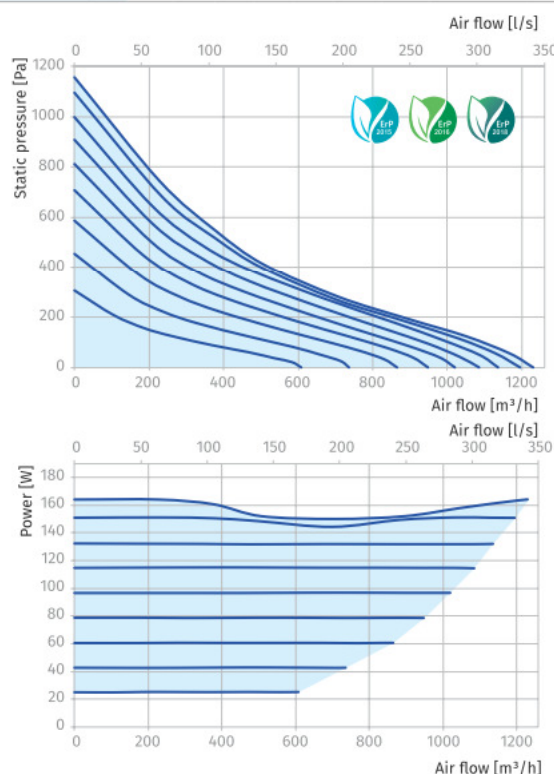
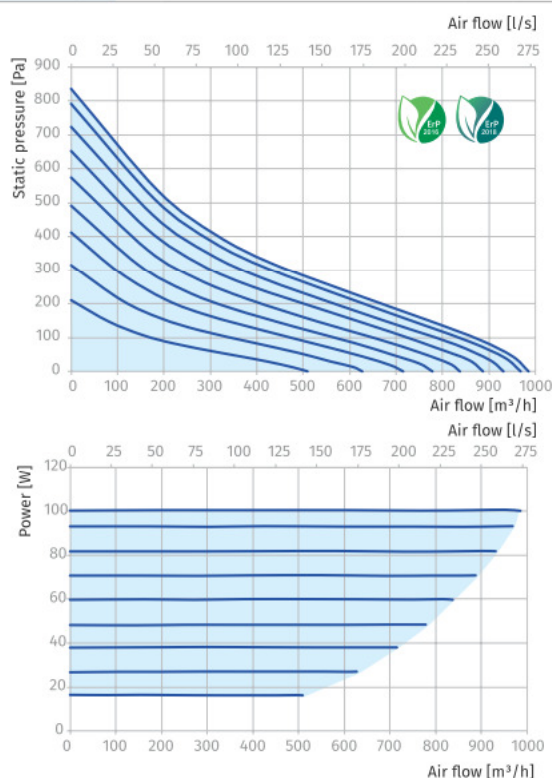
Sound power level, A-filter applied

Sound power level, A-weighted	Gen.	Octave frequency band [Hz]								LpA, 3 m [dBA]	LpA, 1 m [dBA]
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	88	60	76	83	81	83	79	75	63	68	78
LWA to outlet [dBA]	87	63	75	72	81	82	81	76	62	67	77
LWA to environment [dBA]	65	28	46	55	58	61	57	49	36	44	54

CENTRO-M EC 250

Sound power level, A-filter applied

Sound power level, A-weighted	Gen.	Octave frequency band [Hz]								LpA, 3 m [dBA]	LpA, 1 m [dBA]
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	90	61	77	85	83	84	81	76	65	69	79
LWA to outlet [dBA]	89	65	77	74	83	85	83	78	64	69	79
LWA to environment [dBA]	67	29	48	57	60	63	59	51	37	46	56



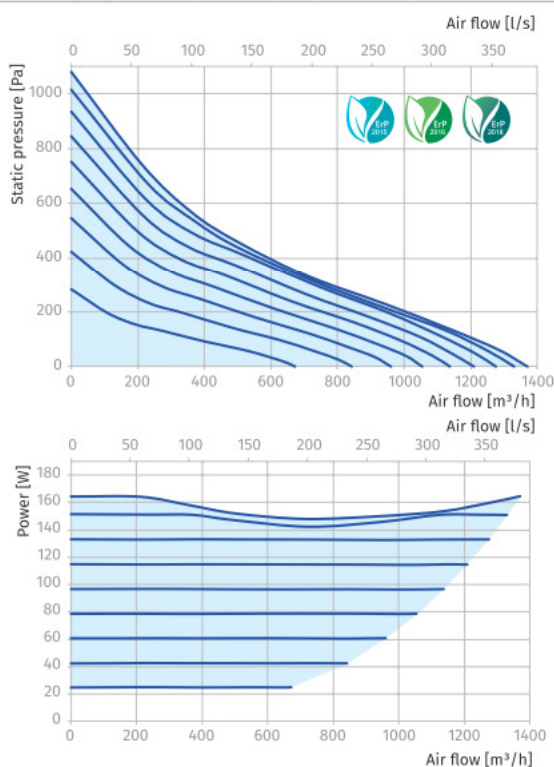
Technical data

Parameters	Centro-M EC 315	Centro-M EC 315 max
Voltage [V / 50-60 Hz]	1~ 220-277	1~ 220-277
Power [W]	164	270
Current [A]	1.15	1.80
Maximum air flow [m³/h (l/s)]	1370 (381)	2100 (583)
RPM [min⁻¹]	2900	2300
Sound pressure at 3 m [dBA]	48	51
Transported air temperature [°C]	-25...+60	-25...+60
SEC class	-	-
Ingress protection rating	IPX4	IPX4
ErP compliance	2015, 2016, 2018	2015, 2016, 2018

CENTRO-M EC 315

Sound power level, A-filter applied

Sound power level, A-weighted	Gen.	Octave frequency band [Hz]								LpA, 3 m [dBA]	LpA, 1 m [dBA]
		63	125	250	500	1000	2000	4000	8000		
LwA to inlet [dBA]	86	51	73	71	75	81	82	77	68	66	76
LwA to outlet [dBA]	87	55	66	76	73	81	84	77	69	67	77
LwA to environment [dBA]	69	30	48	56	62	64	64	56	49	48	58



CENTRO-M EC 315 MAX

Sound power level, A-filter applied

Sound power level, A-weighted	Gen.	Octave frequency band [Hz]								LpA, 3 m [dBA]	LpA, 1 m [dBA]
		63	125	250	500	1000	2000	4000	8000		
LwA to inlet [dBA]	93	63	80	88	86	88	84	80	68	73	83
LwA to outlet [dBA]	91	67	79	76	85	87	85	80	65	71	81
LwA to environment [dBA]	72	32	51	61	65	68	64	55	40	51	61

