

# 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

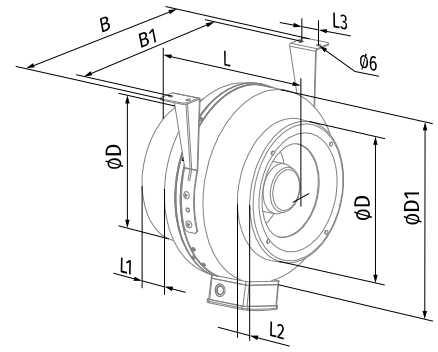
Series	Motor type	Duct diameter [mm]	Motor modifications
Centro-M	EC: electronically commutated motor	100; 125; 150; 160; 200; 250; 315	max: high-powered motor L: low-powered motor

### 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**

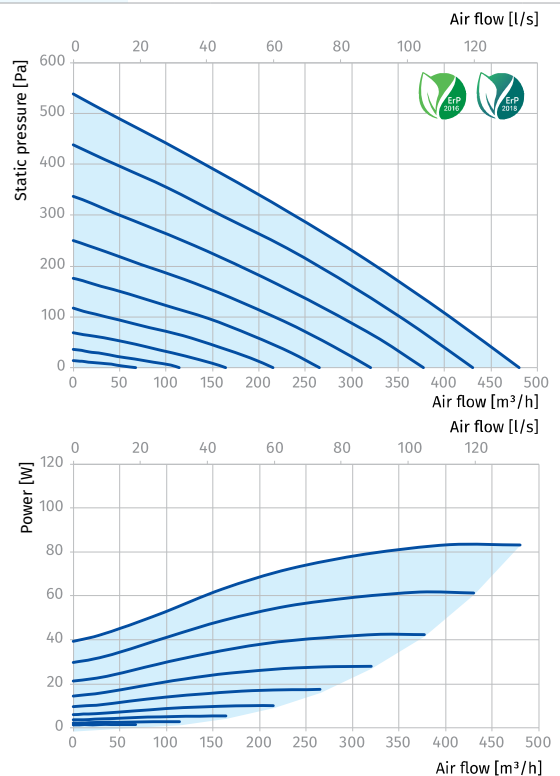
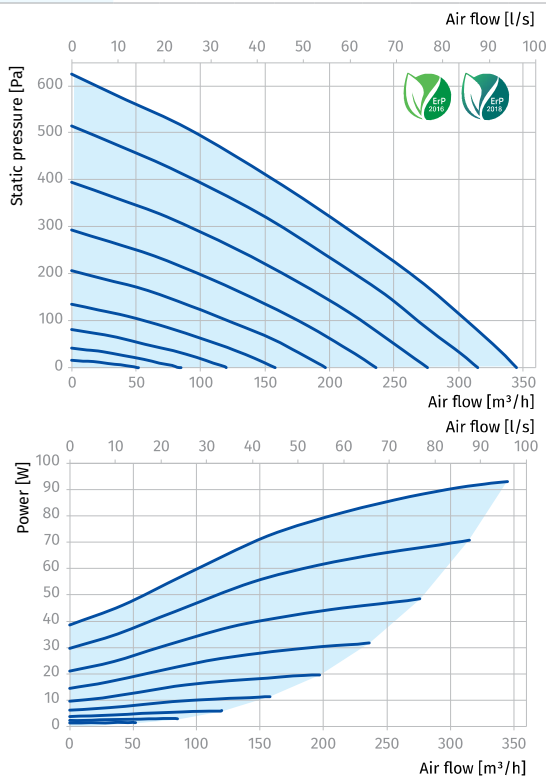
Sound power level, A-filter applied

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



INLINE FANS

**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**

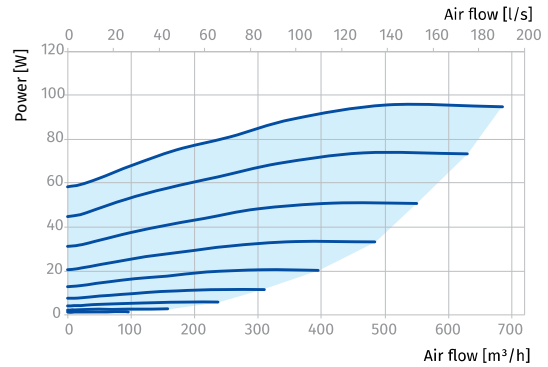
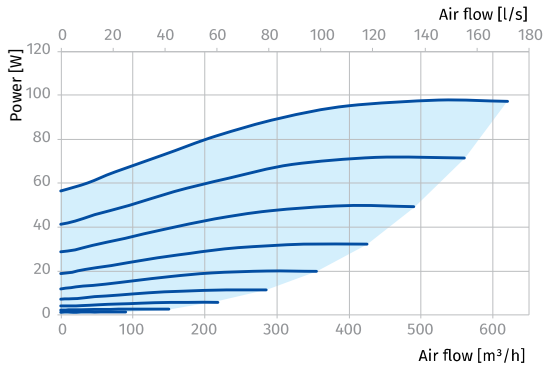
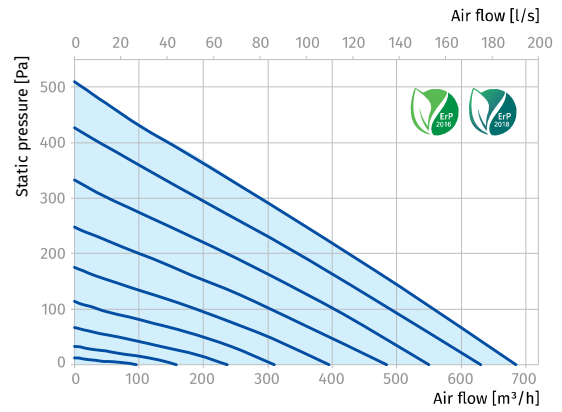
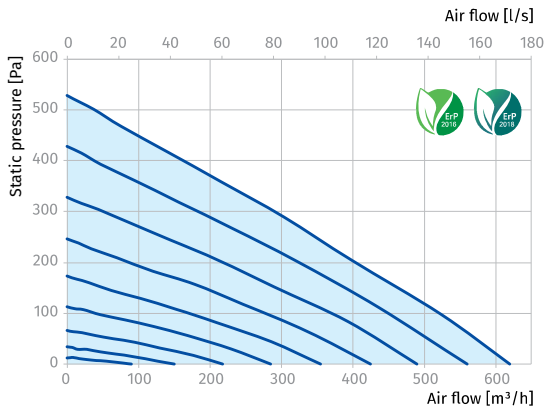
Sound power level, A-filter applied

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]	<b>88</b>	52	85	84	73	72	69	67	53	<b>67</b>	<b>77</b>
LWA to outlet [dBA]	<b>86</b>	51	84	81	69	67	63	62	50	<b>66</b>	<b>76</b>
LWA to environment [dBA]	<b>68</b>	27	49	60	63	62	61	53	40	<b>47</b>	<b>57</b>

**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]	<b>88</b>	64	80	86	78	72	68	61	50	<b>67</b>	<b>77</b>
LWA to outlet [dBA]	<b>87</b>	71	80	85	77	68	65	59	48	<b>67</b>	<b>77</b>
LWA to environment [dBA]	<b>67</b>	32	49	58	63	62	60	49	35	<b>47</b>	<b>57</b>



INLINE FANS

### 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

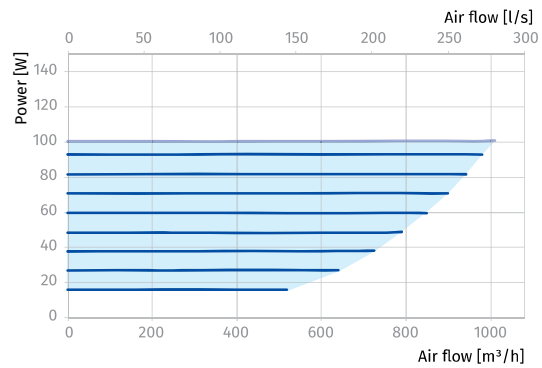
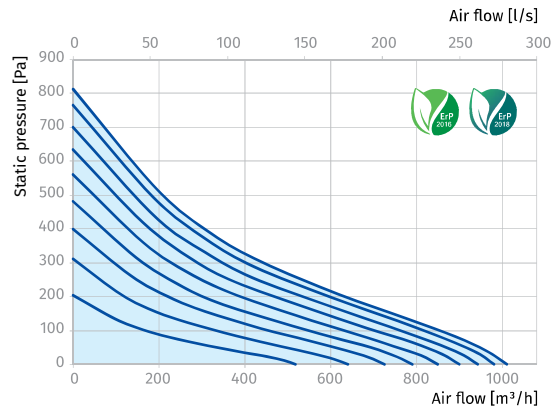
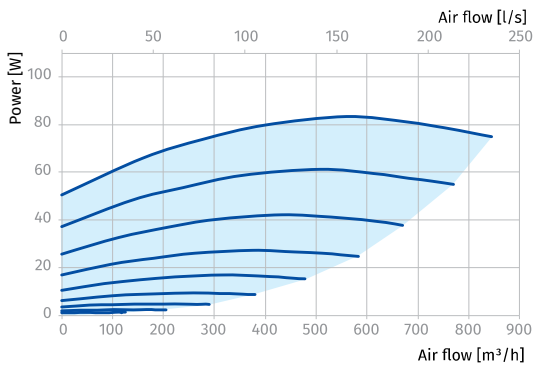
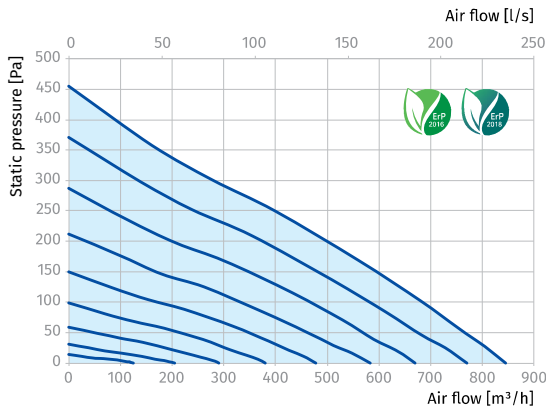
Sound power level, A-filter applied

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		
L <sub>WA</sub> to inlet [dBA]	<b>87</b>	48	76	84	79	79	80	72	61	<b>67</b>	<b>77</b>
L <sub>WA</sub> to outlet [dBA]	<b>85</b>	45	75	79	77	77	80	72	62	<b>64</b>	<b>74</b>
L <sub>WA</sub> to environment [dBA]	<b>67</b>	27	49	60	62	61	60	52	39	<b>47</b>	<b>57</b>

#### 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		
L <sub>WA</sub> to inlet [dBA]	<b>93</b>	63	80	88	85	87	84	79	67	<b>72</b>	<b>82</b>
L <sub>WA</sub> to outlet [dBA]	<b>89</b>	65	77	74	83	84	83	77	64	<b>68</b>	<b>78</b>
L <sub>WA</sub> to environment [dBA]	<b>68</b>	30	49	58	62	65	61	52	38	<b>48</b>	<b>58</b>



**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 [m <sup>3</sup> /h (l/s)]	985 (274)	1230 (342)
RPM [min <sup>-1</sup> ]	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	2016, 2018

**CENTRO-M EC 250 L**

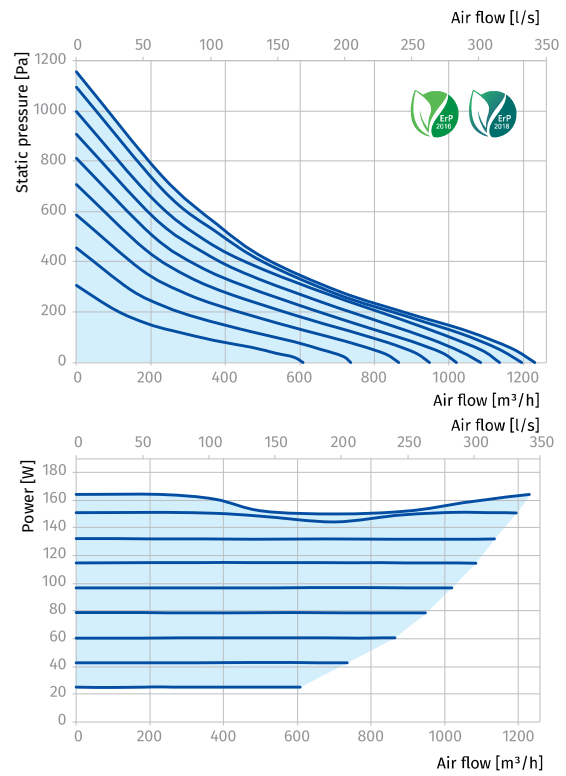
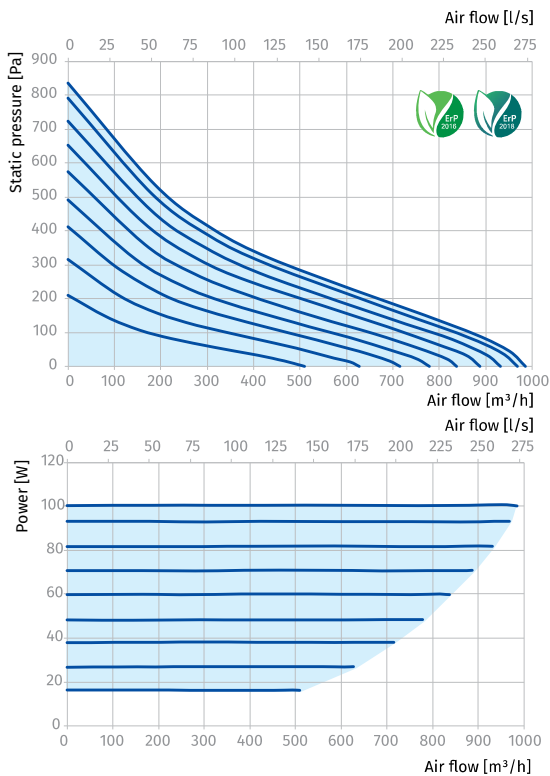
Sound power level, A-filter applied

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]	<b>88</b>	60	76	83	81	83	79	75	63	<b>68</b>	<b>78</b>
LWA to outlet [dBA]	<b>87</b>	63	75	72	81	82	81	76	62	<b>67</b>	<b>77</b>
LWA to environment [dBA]	<b>65</b>	28	46	55	58	61	57	49	36	<b>44</b>	<b>54</b>

**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]	<b>90</b>	61	77	85	83	84	81	76	65	<b>69</b>	<b>79</b>
LWA to outlet [dBA]	<b>89</b>	65	77	74	83	85	83	78	64	<b>69</b>	<b>79</b>
LWA to environment [dBA]	<b>67</b>	29	48	57	60	63	59	51	37	<b>46</b>	<b>56</b>



INLINE FANS

### 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	2016, 2018	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		
L <sub>WA</sub> to inlet [dBA]	86	51	73	71	75	81	82	77	68	66	76
L <sub>WA</sub> to outlet [dBA]	87	55	66	76	73	81	84	77	69	67	77
L <sub>WA</sub> 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		
L <sub>WA</sub> to inlet [dBA]	93	63	80	88	86	88	84	80	68	73	83
L <sub>WA</sub> to outlet [dBA]	91	67	79	76	85	87	85	80	65	71	81
L <sub>WA</sub> to environment [dBA]	72	32	51	61	65	68	64	55	40	51	61

