

Primo EC

Inline mixed flow fans with EC motors

Use

- Inline fans for supply and exhaust ventilation of various commercial and industrial premises requiring powerful air flow.
- Combines wide capabilities and high performance features of axial and centrifugal fans, providing powerful air flow.



Air flow:
up to 5700 m³/h
1583 l/s



Design

- The casing is made of polymer (for models 315, 355 and 400 the casing is additionally reinforced with a metal housing).
- Due to the conically shaped polymer impeller with specially profiled blades, the air stream circular velocity increases, which results in higher air flow and pressure, as compared to characteristics of standard axial fans.
- The specially designed diffuser, impeller and airflow rectifier at the fan outlet provide smooth air flow distribution and enable the best combination of high capacity, powerful pressure and low noise.
- The fan casing is equipped with an airtight terminal box for connection to power mains.

Motor

- Energy efficient EC motor.
- 220–240 V single phase at 50 (60) Hz.
- Equipped with ball bearings for longer service life (up to 40 000 hours).
- All motors have thermal overload protection.

Speed control

- The fan speed is regulated by a smooth 0-10 V controller.

Mounting

- The fans can be mounted at any place and at any angle within the ductwork system. Several fans may be installed in one system in parallel to attain higher air capacity or in series to increase operating pressure in the system. The fan casing is equipped with fixing brackets for suspended mounting.
- The fans can be installed using the appropriately sized **UM Primo** bracket (ordered separately, available for models 315, 355 and 400).



Primo EC 150, 160, 200, 250



Primo EC 315 max, 355 (max), 400

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Designation key

Series	Motor type	Duct diameter [mm]	Motor modifications	Modifications
Primo	EC: electronically commutated motor	150; 160; 200; 250; 315; 355; 400	max: high-powered motor	FR1: smooth speed controller adjustable from 0 to 100 % and power cable with mains plug G1: speed controller, temperature controller with external temperature sensor, power cable with mains plug W1: power cable with mains plug

Accessories

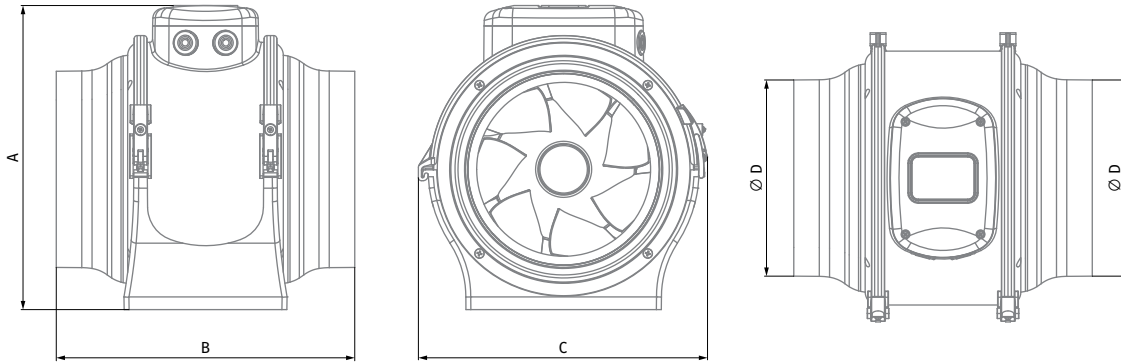
Silencers	Filter boxes	Electric heaters	Water heaters	Backdraft air dampers	Air dampers	Clamps	Speed controllers	
SD	KFBK	KFBT	EKH	WKH	VRV	VK / VKA	K	CDT E/0-10

Dimensions [mm]

PRIMO EC 150, 160, 200, 250

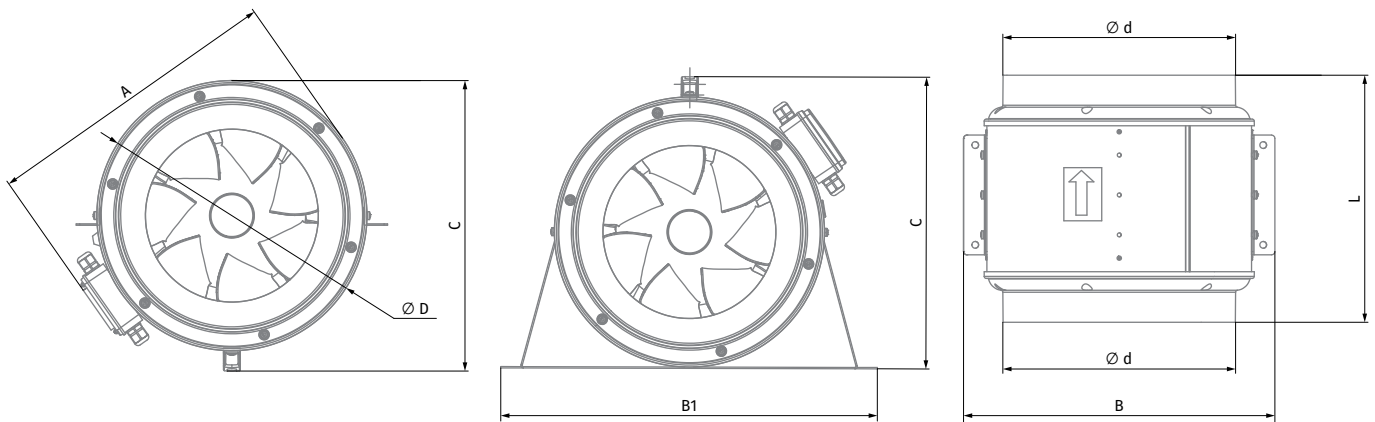
Model	A	B	C	Ø D	Weight [kg]
Primo EC 150	267/287*	301	247	150	2.8/3*
Primo EC 160	267/287*	301	251	160	2.9/3.1*
Primo EC 200	308/328*	302	293	200	4.2/3*
Primo EC 250	342/362*	293	326	250	6.4/5*

*Primo EC ... G1/FR1



PRIMO EC 315, 355, 400

Model	Ø D	Ø d	A	L	B	B1	C	C1	Weight [kg]
Primo EC 315 max	406	310	451	468	468	566	437	439	15
Primo EC 355 (max)	406	350	451	372	468	566	437	439	15
Primo EC 400	451	395	496	415	513	623	482	484	18.5



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Technical data

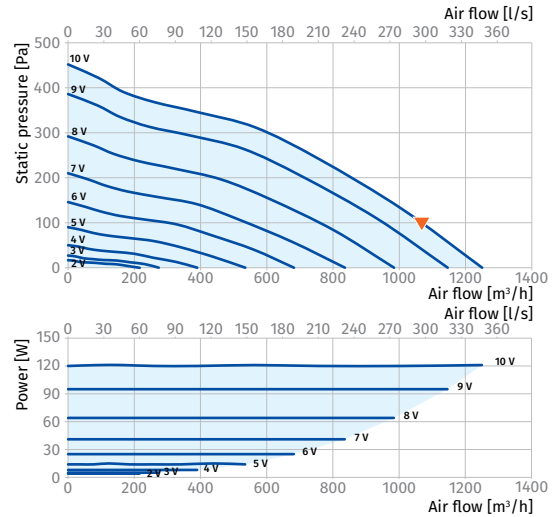
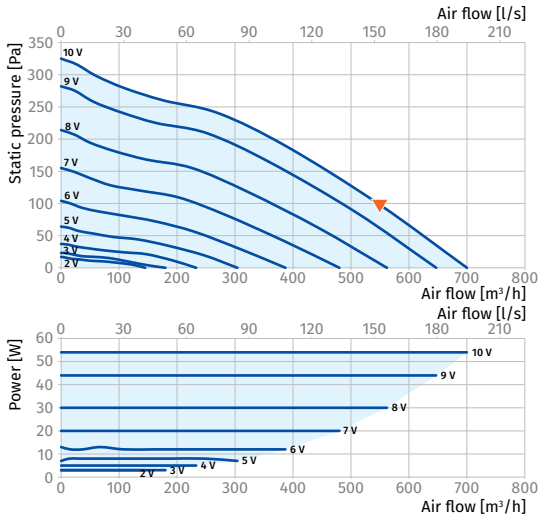
Parameters	Primo EC 150/160	Primo EC 200	Primo EC 250	Primo EC 315 max
Voltage [V]	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Frequency [Hz]	50/60	50/60	50/60	50/60
Power [W]	54	121	168	353
Current [A]	0.48	0.96	1.34	1.56
Maximum air flow [m³/h (l/s)]	700 (194)	1250 (347)	1800 (500)	3250 (903)
RPM [min ⁻¹]	3700	3100	3282	2424
Sound pressure at 3 m [dBA]		50	49	55
Transported air temperature [°C]	-25...+55	-25...+55	-25...+55	-25...+55
Protection rating	IPX4	IPX4	IPX4	IPX4
Motor protection rating	IP44	IP44	IP44	IP44
Erp compliance	2018	2018	2018	2018

PRIMO EC 150/160

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]	70	45	65	68	55	46	43	47	38	49	59
LWA to outlet [dBA]	71	43	64	70	56	43	42	49	42	51	61
LWA to environment [dBA]	59	39	57	55	45	39	33	33	27	39	49

PRIMO EC 200

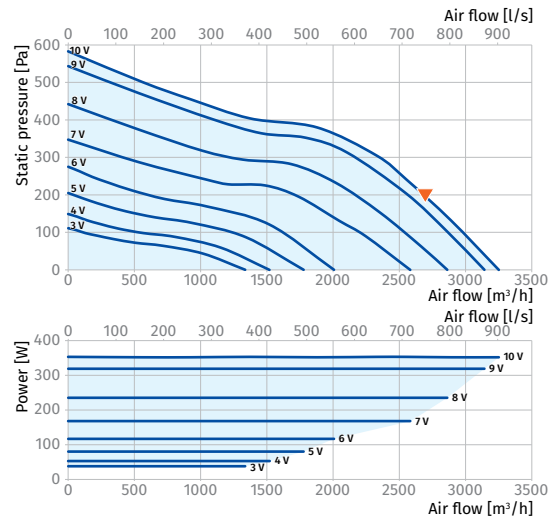
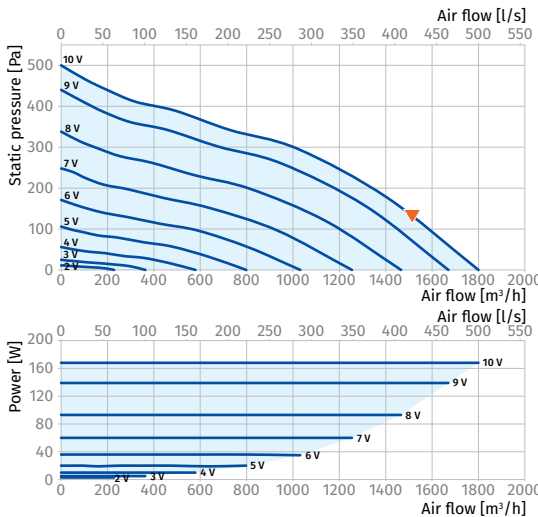
Sound power level, A-weighted	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
LWA to inlet [dBA]	78	53	62	70	73	72	70	64	53	57	67
LWA to outlet [dBA]	81	57	65	73	77	74	71	64	54	60	70
LWA to environment [dBA]	71	47	50	63	66	66	62	55	44	50	60


PRIMO EC 250

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]	77	73	74	69	64	55	49	49	43	57	67
LWA to outlet [dBA]	78	75	74	69	66	56	53	52	42	58	68
LWA to environment [dBA]	70	60	56	66	65	44	43	31	24	49	59

PRIMO EC 315 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]	83	73	76	75	75	78	74	69	61	63	73
LWA to outlet [dBA]	85	70	79	75	77	81	76	71	64	65	75
LWA to environment [dBA]	76	56	64	67	70	71	68	63	53	55	65



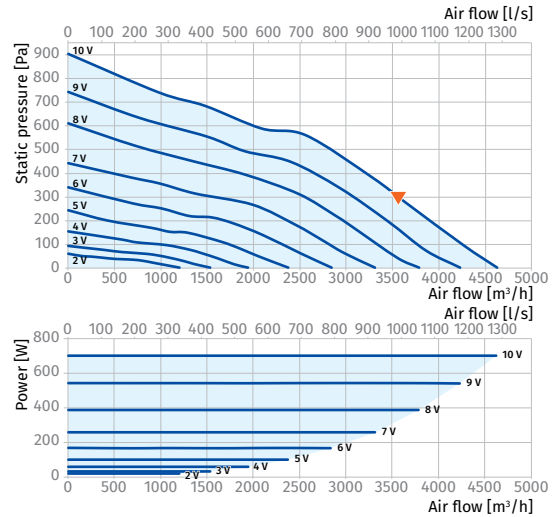
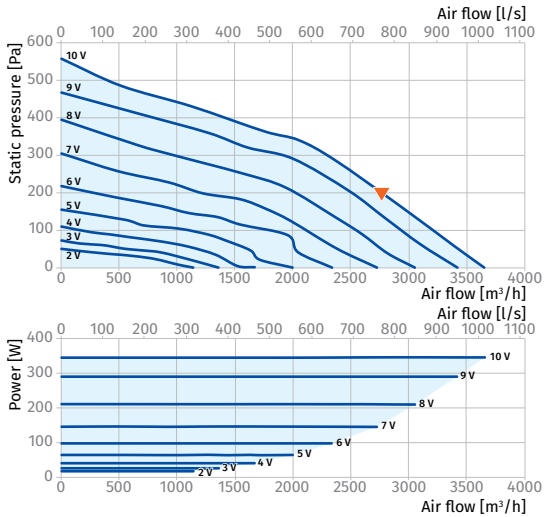
Parameters	Primo EC 355	Primo EC 355 max	Primo EC 400
Voltage [V]	1 ~ 230	1 ~ 230	1 ~ 230
Frequency [Hz]	50	50	50
Power [W]	353	701	726
Current [A]	1.56	3.10	3.23
Maximum air flow [m³/h (l/s)]	3685 (1024)	4630 (1286)	5700 (1583)
RPM [min⁻¹]	2470	3175	2580
Sound pressure at 3 m [dBA]	55	60	60
Transported air temperature [°C]	-25...+55	-25...+55	-25...+55
Protection rating	IPX4	IPX4	IPX4
Motor protection rating	IP44	IP44	IP44
Erp compliance	2018	2018	2018

PRIMO EC 355

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]	83	73	76	75	75	78	74	69	61	63	73
LWA to outlet [dBA]	85	70	79	75	77	81	76	71	64	65	75
LWA to environment [dBA]	76	56	64	67	70	71	68	63	53	55	65

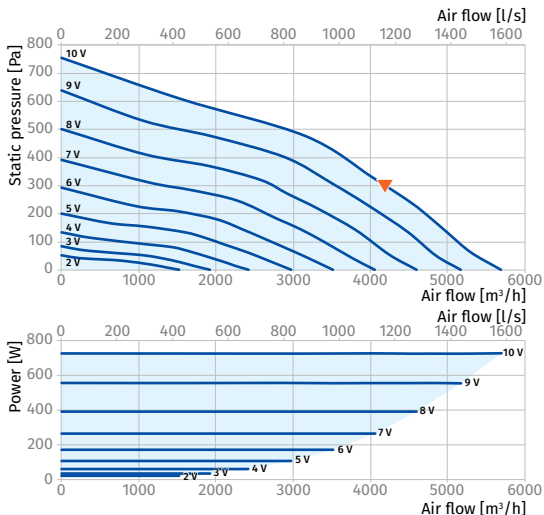
PRIMO EC 355 MAX

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]	88	74	82	79	79	83	80	75	66	68	78
LWA to outlet [dBA]	90	72	83	79	81	86	82	77	70	70	80
LWA to environment [dBA]	80	45	63	66	73	77	74	68	57	60	70



PRIMO EC 400

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]	87	70	77	78	81	81	79	74	67	66	76
LWA to outlet [dBA]	88	62	76	78	83	84	80	75	66	68	78
LWA to environment [dBA]	80	59	66	69	74	77	72	67	58	60	70



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