Primo
Inline mixed flow fans

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 3350 m³/h
931 l/s

Design

- The casing is made of polymer (for models 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.

Primo 150, 160, 200, 250

Primo 355, 400

Motor

- Three-speed high-efficient asynchronous 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 fans are controlled by either a three-stage **CDPE-3 E5** controller or a smooth thyristor controller connected to the maximum speed terminal.

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 355 and 400).

Designation key

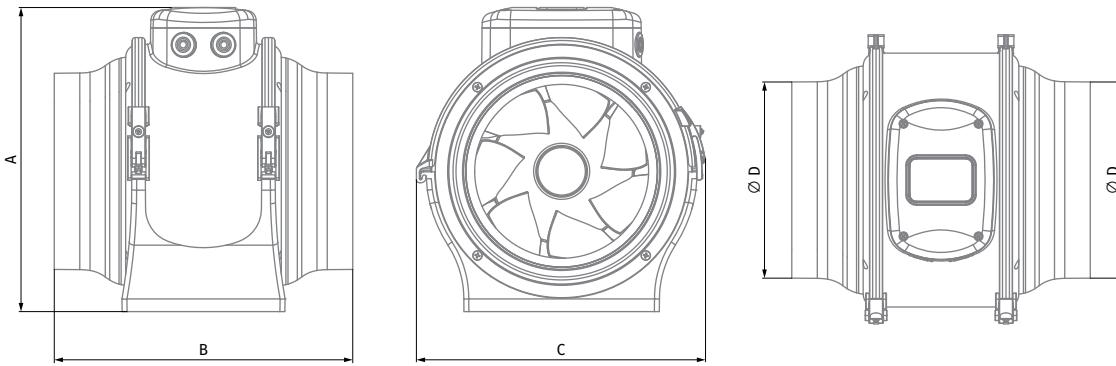| Series	Duct diameter [mm]	Modifications
Primo	150; 160; 200; 250; 355; 400	**US:** three-speed switch **FR1:** smooth speed controller adjustable from 0 to 100 % and power cable with mains plug **G1:** speed controller, temperature controller with external temperature sensor, power cable with mains plug **W1:** power cable with mains plug

Accessories

Silencers	Filter boxes		Electric heaters	Water heaters	Backdraft air dampers	Air dampers	Clamps	Speed switches	Speed controllers		
SD	KFBK	KFBT	EKH	WKH	VRV	VK / VKA	K	CDP-3/5	CDT1 E	CDT E1.8	CDTE E... TP

Dimensions [mm]

PRIMO 150, 160, 200, 250

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

*Primo ... G1/FR1

PRIMO 355, 400

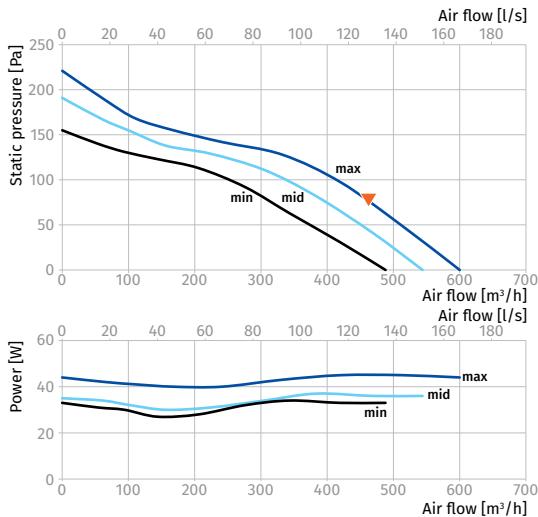| Model	∅ D	∅ d	A	L	B	B1	C	C1	Weight [kg]
Primo 355 (max)	406	350	451	372	468	566	437	439	15
Primo 400	451	395	496	415	513	623	482	484	18.5

INLINE FANS

Technical data

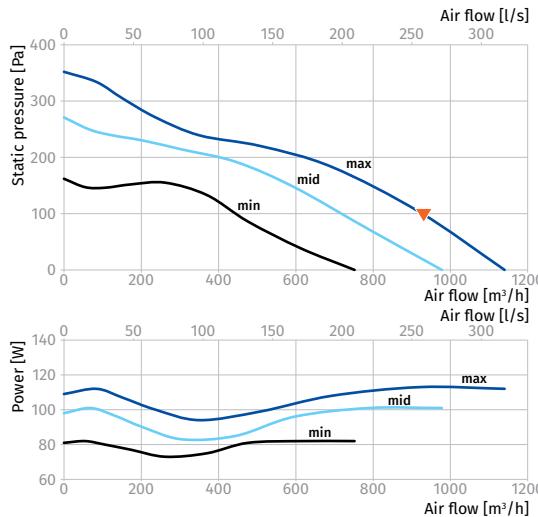| Parameters	Primo 150/160			Primo 200			Primo 250		
Speed	min	mid	max	min	mid	max	min	mid	max
Voltage [V]	1 ~ 230			1 ~ 230			1 ~ 230		
Frequency [Hz]	50			50			50		
Power [W]	34	37	45	82	101	113	144	173	188
Current [A]	0.15	0.16	0.20	0.37	0.45	0.51	0.70	0.81	0.84
Maximum air flow [m³/h (l/s)]	488 (136)	544 (151)	600 (167)	752 (209)	978 (272)	1140 (317)	1038 (288)	1447 (402)	1715 (476)
RPM [min⁻¹]	2550	2704	2816	1866	2400	2738	2292	2626	2876
Sound pressure at 3 m [dBA]	34	35	37	37	40	42	39	41	43
Transported air temperature [°C]	-25...+55			-25...+55			-25...+55		
Protection rating	IPX4			IPX4			IPX4		
Motor protection rating	IP20			IP20			IP20		
ErP compliance	2018			2018			2018		

PRIMO 150/160

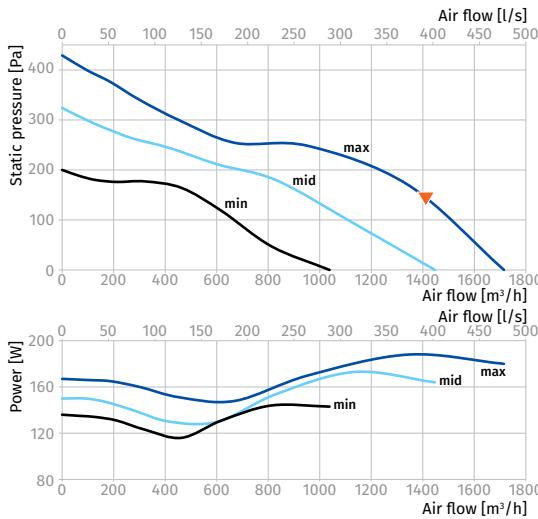| Sound power level, A-weighted ▼	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L$_{wA}$ to inlet [dBA]	69	34	38	56	67	61	60	56	48	49	59
L$_{wA}$ to outlet [dBA]	69	34	39	58	64	66	59	59	51	49	59
L$_{wA}$ to environment [dBA]	57	34	29	41	55	50	49	40	28	37	47

PRIMO 200

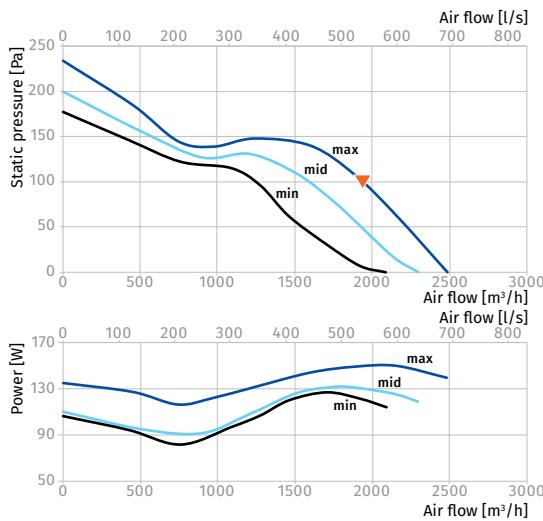| Sound power level, A-weighted ▼	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L$_{wA}$ to inlet [dBA]	77	52	73	75	60	51	47	51	42	56	66
L$_{wA}$ to outlet [dBA]	79	50	72	78	62	48	46	54	46	59	69
L$_{wA}$ to environment [dBA]	63	42	60	58	47	40	35	34	28	42	52

PRIMO 250

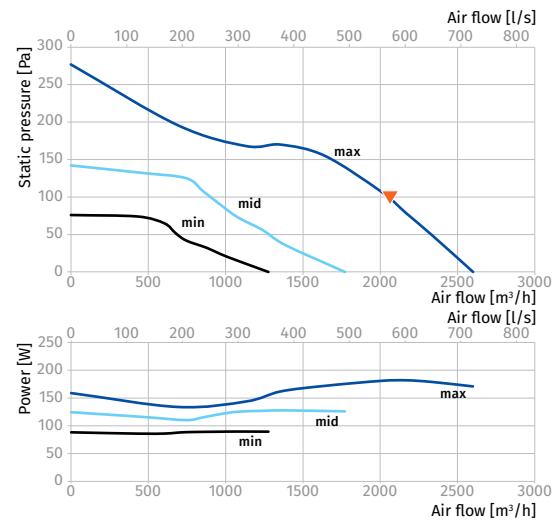| Sound power level, A-weighted ▼	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L$_{wA}$ to inlet [dBA]	78	53	74	76	61	51	47	51	42	58	68
L$_{wA}$ to outlet [dBA]	81	51	74	80	63	49	47	54	47	60	70
L$_{wA}$ to environment [dBA]	64	43	61	59	48	41	35	35	29	43	53

INLINE FANS

BLAUBERG Ventilatoren

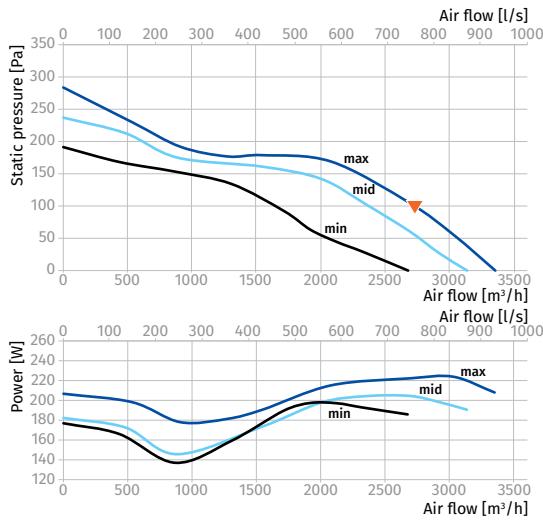| Parameters	Primo 355			Primo 355 (220/60 Hz)			Primo 400			Primo 400 (220/60 Hz)		
Speed	min	mid	max	min	mid	max	min	mid	max	min	mid	max
Voltage [V]	1 ~ 230			1 ~ 230			1 ~ 230			1 ~ 230		
Frequency [Hz}	50			60			50			60		
Power [W]	126	131	150	90	128	182	197	204	224	146	208	300
Current [A]	0.60	0.58	0.66	0.43	0.60	0.85	0.91	0.90	0.98	0.73	1.00	1.40
Maximum air flow [m³/h (l/s)]	2090 (581)	2296 (638)	2485 (690)	1277 (355)	1771 (492)	2600 (722)	2677 (744)	3136 (871)	3350 (931)	1846 (513)	2401 (667)	3390 (942)
RPM [min⁻¹]	1350	1400	1470	996	1360	1632	1320	1390	1446	1000	1320	1566
Sound pressure at 3 m [dBA]	38	38	43	37	38	43	40	42	43	38	42	43
Transported air temperature [°C]	-25…+55			-25…+55			-25…+55			-25…+55		
Protection rating	IPX4			IPX4			IPX4			IPX4		
Motor protection rating	IP20			IP20			IP20			IP20		
ErP compliance	2018			2018			2018			2018		

PRIMO 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		
L$_{wA}$ to inlet [dBA]	69	50	61	63	60	63	60	56	48	49	59
L$_{wA}$ to outlet [dBA]	69	56	61	63	61	65	59	54	48	49	59
L$_{wA}$ to environment [dBA]	63	42	49	61	53	57	50	46	35	43	53

PRIMO 355 (220/60 Hz)

Sound power level, A-weighted ▼	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L$_{wA}$ to inlet [dBA]	69	50	61	63	60	63	60	56	48	49	59
L$_{wA}$ to outlet [dBA]	69	56	61	63	61	65	59	54	48	49	59
L$_{wA}$ to environment [dBA]	63	42	49	61	53	57	50	46	35	43	53

PRIMO 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		
L$_{wA}$ to inlet [dBA]	71	57	62	66	65	64	61	55	47	51	61
L$_{wA}$ to outlet [dBA]	73	57	65	63	67	68	63	59	51	52	62
L$_{wA}$ to environment [dBA]	64	45	52	53	57	60	54	48	38	43	53

PRIMO 400 (220/60 Hz)

Sound power level, A-weighted ▼	Total	Octave frequency bands [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
L$_{wA}$ to inlet [dBA]	71	57	62	66	65	64	61	55	47	51	61
L$_{wA}$ to outlet [dBA]	73	57	65	63	67	68	63	59	51	52	62
L$_{wA}$ to environment [dBA]	64	45	52	53	57	60	54	48	38	43	53

INLINE FANS