

# TURBO

## Inline mixed-flow fans

### Use

- Supply and extract ventilation systems installed in various premises.
- Mounting in kitchens, bathrooms and other humid premises.
- Ventilation air ducts requiring high pressure, powerful air flow and low noise level.
- Compatible with Ø 100 up to 315 mm round air ducts.



**Air flow:**  
up to 1750 m<sup>3</sup>/h  
486 l/s



**Power:**  
from 23 W



**Noise level:**  
from 27 dBA



### Design

- Casing made of low-flammable polypropylene.
- Ventilation unit with terminal box. Can be turned to any position.
- Special design of the casing permits easy dismantling of the impeller and motor block for fan servicing without dismantling the air duct.

### Motor

- Double-speed single-phase motor on ball bearings.
- Equipped with thermal overload protection.

### Speed control

- The built-in switch (option **US**) or external switch for multi-speed fans (available upon separate order) are used to select one of two capacity modes.
- Smooth speed control is possible with a built-in speed controller (option **FR**) or an external thyristor speed controller (available upon separate order).

### Mounting

- Due to compact design the fan is the ideal solution for mounting in limited spaces, including space behind a false ceiling.
- The fan can be installed in any section of the ventilation system from intake to the end of the ductworks.
- Wall or ceiling mounting with a mounting plate.
- TD:** mounting kit for installation of one diameter fans in parallel (for boosting capacity)



- TL:** mounting kit for installation of one diameter fans in series (for boosting pressure).



### Accessories

Silencer	Panel filter	Pocket filter	Electric heater	Water heater	Backdraft air damper	Shutter	Clamp	Temperature controller	Speed controller	Timer / Sensor
<b>SD</b>	<b>KFBK</b>	<b>KFBT</b>	<b>EKH</b>	<b>WKH</b>	<b>VRV</b>	<b>VKA</b>	<b>K</b>	<b>MLCD E2</b>	<b>CDP</b>	<b>CDPI/CDPE</b>

## Modifications and options

- **T:** run-out timer adjustable from 2 to 30 minutes.
- **US:** three-position speed switch integrated in the fan.



- **FR:** built-in smooth speed controller adjustable from 0 to 100 %. The fan is supplied with a pre-wired cable with IEC plug as a standard. The cable modification with a standard electric plug is also available (**FR1**).

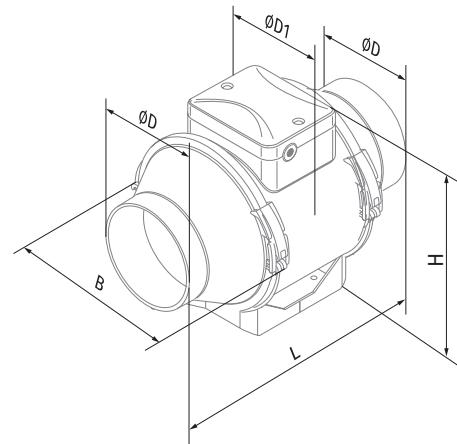


### Designation key

Series	Duct diameter [mm]	Options
Turbo	100; 125; 150; 160; 200; 250; 315	<p><b>T:</b> run-out timer adjustable from 2 to 30 minutes.</p> <p><b>US:</b> three-position speed switch integrated in the fan.</p> <p><b>FR:</b> built-in smooth speed controller adjustable from 0 to 100 %. The fan is supplied with a pre-wired cable with IEC plug as a standard.</p> <p><b>FR1:</b> built-in smooth speed controller adjustable from 0 to 100 %. The fan is supplied with a pre-wired cable with a standard electric plug.</p> <p><b>G:</b> smooth speed controller with an electronic thermostat and an external temperature sensor that is fixed on 4 m cable. The fan is supplied with a pre-wired power cable with IEC plug as a standard.</p> <p><b>G1:</b> smooth speed controller with an electronic thermostat and an external temperature sensor that is fixed on 4 m cable. The fan is supplied with a pre-wired power cable with a standard plug.</p> <p><b>G11:</b> smooth speed controller with an electronic thermostat and a temperature sensor integrated into the air duct. The fan is supplied with a pre-wired power cable with IEC plug as a standard.</p> <p><b>G11:</b> smooth speed controller with an electronic thermostat and a temperature sensor integrated into the air duct. The fan is supplied with a pre-wired power cable with a standard electric plug.</p> <p><b>W:</b> the fan is equipped with a pre-wired power cable and IEC plug as a standard.</p> <p><b>W1:</b> the fan is equipped with a pre-wired power cable and a standard electric plug.</p>

## Overall dimensions [mm]

Model	$\phi D$	$\phi D_1$	B	H	L	Weight [kg]
Turbo 100	97	164	196	241	303	1.68
Turbo 125	123	164	196	241	258	1.79
Turbo 150	148	187	220	251	289	3.18
Turbo 160	158	187	220	251	289	3.23
Turbo 200	199	209	239	261	295.5	3.8
Turbo 250	247	257	287	323	383	7.83
Turbo 315	310	323	362	408	445	11.7

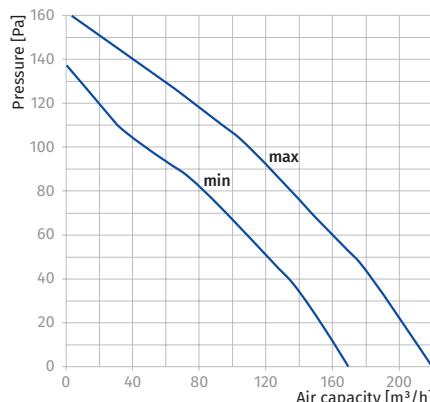


## Technical data

Parameters	Turbo 100								Turbo 125		Turbo 150 / Turbo 160	
Speed			min		max		min		max		min	
Voltage [V / 50-60 Hz]	1 ~ 230		1 ~ 230		1 ~ 230		1 ~ 230		1 ~ 230		1 ~ 230	
Power [W]	23		25		25		29		42		50	
Current [A]	0.10		0.11		0.11		0.13		0.19		0.22	
Maximum air flow [m³/h (l/s)]	170 (47)		220 (61)		230 (64)		345 (96)		430 (119)		560 (156)	
RPM [min⁻¹]	1980		2545		1535		2265		1940		2620	
Sound pressure level at 3 m [dBA]	27		32		29		34		32		44	
Max. transported air temperature [°C]			60		60				60			
SEC class	C		B				B				B	
Ingress protection rating	IPX4		IPX4		IPX4		IPX4		IPX4		IPX4	
Motor IP rating	IPX4		IPX4		IPX4		IPX4		IPX4		IPX4	
ErP	–		–		–		–		–		2016, 2018	

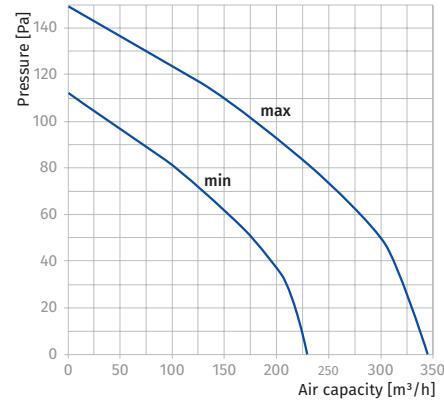
### TURBO 100

Sound power level, A-weighted	Octave frequency band, Hz									LpA, 3 m dBA	LpA, 1 m dBA	
	Gen.	63	125	250	500	1000	2000	4000	8000			
<b>Min speed</b>												
L <sub>WA</sub> to inlet [dBA]	54	16	28	51	45	49	41	35	24	33	43	
L <sub>WA</sub> to outlet [dBA]	53	15	27	50	44	48	40	35	23	32	42	
L <sub>WA</sub> to env. [dBA]	48	11	23	44	40	43	36	31	21	27	37	
<b>Max speed</b>												
L <sub>WA</sub> to inlet [dBA]	64	23	35	61	58	56	48	43	30	43	53	
L <sub>WA</sub> to outlet [dBA]	63	22	34	60	57	55	48	42	29	42	52	
L <sub>WA</sub> to env. [dBA]	56	17	29	53	51	50	43	38	26	38	46	



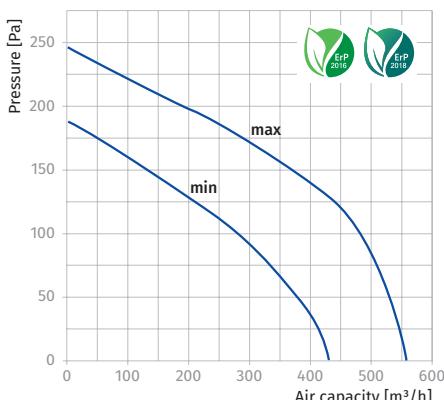
### TURBO 125

Sound power level, A-weighted	Octave frequency band, Hz									LpA, 3 m dBA	LpA, 1 m dBA	
	Gen.	63	125	250	500	1000	2000	4000	8000			
<b>Min speed</b>												
L <sub>WA</sub> to inlet [dBA]	54	26	38	52	50	44	38	27	17	34	44	
L <sub>WA</sub> to outlet [dBA]	54	25	37	51	49	43	38	28	18	33	43	
L <sub>WA</sub> to env. [dBA]	49	21	32	46	45	40	35	25	16	29	39	
<b>Max speed</b>												
L <sub>WA</sub> to inlet [dBA]	60	20	31	57	51	51	50	39	27	39	49	
L <sub>WA</sub> to outlet [dBA]	59	20	31	56	51	51	49	39	26	38	48	
L <sub>WA</sub> to env. [dBA]	54	16	27	51	46	47	45	36	24	34	44	



### TURBO 150 / 160

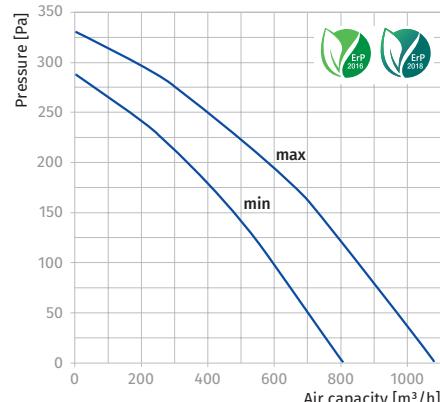
Sound power level, A-weighted	Octave frequency band, Hz									LpA, 3 m dBA	LpA, 1 m dBA	
	Gen.	63	125	250	500	1000	2000	4000	8000			
<b>Min speed</b>												
L <sub>WA</sub> to inlet [dBA]	59	31	45	54	52	54	48	35	29	38	48	
L <sub>WA</sub> to outlet [dBA]	63	37	49	56	56	60	48	39	30	42	52	
L <sub>WA</sub> to env. [dBA]	52	21	30	48	48	45	42	34	23	32	42	
<b>Max speed</b>												
L <sub>WA</sub> to inlet [dBA]	69	38	51	57	62	60	66	49	44	48	58	
L <sub>WA</sub> to outlet [dBA]	72	42	55	66	67	68	65	53	45	52	62	
L <sub>WA</sub> to env. [dBA]	65	23	37	56	59	57	61	47	35	44	54	



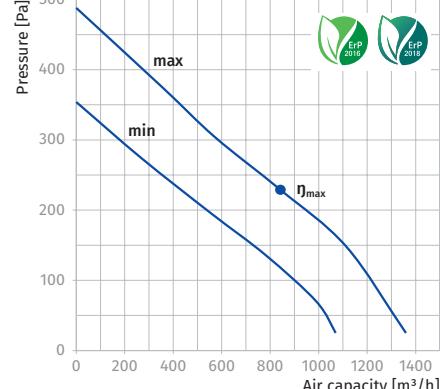
Parameters	Turbo 200								Turbo 250				Turbo 315			
Speed	min				max				min				max			
Voltage [V / 50-60 Hz]	1 ~ 230				1 ~ 230				1 ~ 230				1 ~ 230			
Power [W]	76				108				125				177			
Current [A]	0.34				0.48				0.54				0.79			
Maximum air flow [m³/h (l/s)]	805 (224)				1080 (300)				1070 (297)				1360 (378)			
RPM [min⁻¹]	1915				2380				1955				2440			
Sound pressure level at 3 m [dBA]	39				45				44				51			
Max. transported air temperature [°C]	60				60				60				60			
SEC class	B				-				-				-			
Ingress protection rating	IPX4															
Motor IP rating	IPX4															
ErP	2016, 2018								2016, 2018				2016, 2018			

**TURBO 200**

Sound power level, A-weighted	Octave frequency band, Hz								LpA, 3 m dBA	LpA, 1 m dBA	
	Gen.	63	125	250	500	1000	2000	4000			
<b>Min speed</b>											
L <sub>WA</sub> to inlet [dBA]	66	38	50	58	59	60	59	55	45	45	55
L <sub>WA</sub> to outlet [dBA]	64	40	50	54	58	59	57	51	44	43	53
L <sub>WA</sub> to env. [dBA]	60	27	42	49	54	55	54	46	34	39	49
<b>Max speed</b>											
L <sub>WA</sub> to inlet [dBA]	71	41	50	63	64	65	64	62	52	50	60
L <sub>WA</sub> to outlet [dBA]	70	43	52	61	66	64	63	58	51	50	60
L <sub>WA</sub> to env. [dBA]	65	34	43	54	60	60	60	53	41	45	55

**TURBO 250**

Sound power level, A-weighted	Octave frequency band, Hz								LpA, 3 m dBA	LpA, 1 m dBA	
	Gen.	63	125	250	500	1000	2000	4000			
<b>Min speed</b>											
L <sub>WA</sub> to inlet [dBA]	72	48	57	63	66	69	64	54	45	52	62
L <sub>WA</sub> to outlet [dBA]	75	48	56	64	70	71	66	56	45	54	64
L <sub>WA</sub> to env. [dBA]	65	32	51	57	61	59	56	45	32	44	54
<b>Max speed</b>											
L <sub>WA</sub> to inlet [dBA]	78	52	62	66	71	75	72	62	52	58	68
L <sub>WA</sub> to outlet [dBA]	81	52	60	66	76	77	74	63	52	60	70
L <sub>WA</sub> to env. [dBA]	72	35	50	63	69	66	63	53	40	51	61

**TURBO 315**

Sound power level, A-weighted	Octave frequency band, Hz								LpA, 3 m dBA	LpA, 1 m dBA	
	Gen.	63	125	250	500	1000	2000	4000			
<b>Min speed</b>											
L <sub>WA</sub> to inlet [dBA]	72	43	54	62	67	66	67	58	47	52	62
L <sub>WA</sub> to outlet [dBA]	70	45	57	59	64	66	63	56	46	50	60
L <sub>WA</sub> to env. [dBA]	62	28	51	53	57	57	54	46	36	41	51
<b>Max speed</b>											
L <sub>WA</sub> to inlet [dBA]	80	50	59	68	73	77	74	70	59	60	70
L <sub>WA</sub> to outlet [dBA]	78	51	60	66	70	75	71	66	57	58	68
L <sub>WA</sub> to env. [dBA]	72	37	51	66	66	67	65	58	48	52	62

