

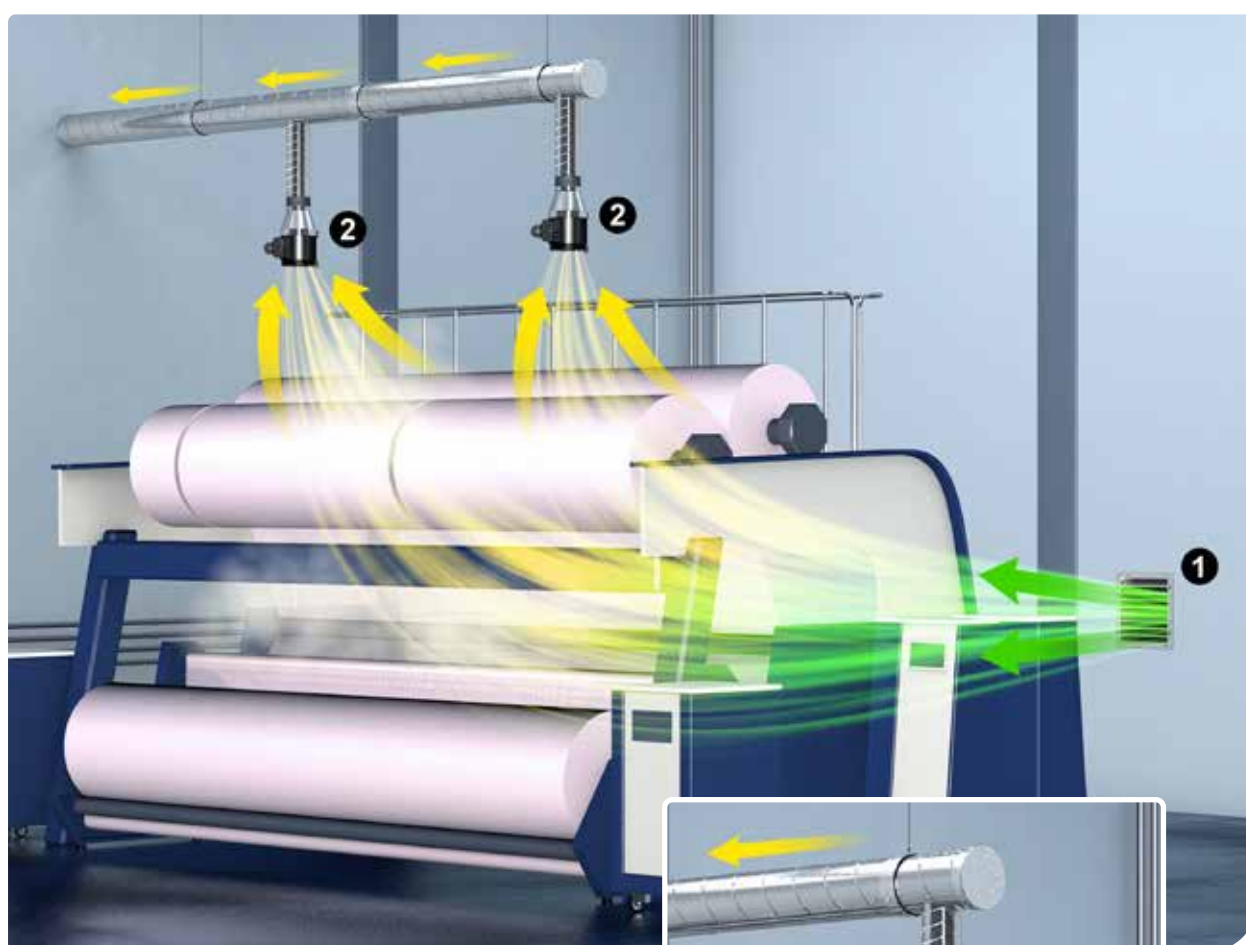
Application example

Ventilation solution in the production of textiles with explosive dust atmosphere



Explosion-proof duct fans are used to extract the textile fibres released during the production process directly and efficiently.

The production area remains free of a flammable mixture of air and dust. The system operators breathe clean air, free from textile fibres, while working on the machine.



❶ Internal grille, type MLZ, earthed

❷ ERM Ex t duct fan

↘ Exhaust air

↗ Fresh air supply

ERM 18 Ex t



Short description

Semi-centrifugal duct fan, DN 180, single-phase AC 230 V/50 Hz, explosion-proof, medium: dust

Article number 0080.0466

Technical data

Air flow volume	310 m³/h
Rotating speed	2.780 1/min
Speed controllable	—
Type of voltage	Alternating current
Rated voltage	230 V
Frequency	50 Hz
Nominal output	50 W
cosφ	0,9
I _{nom}	0,25 A
I _{max} at U _{Nominal}	0,25 A
Degree of protection	IP 64
Insulation class	B
Mains cable	3 x 1,5 mm²
Housing material	Synthetic material
Impeller material	Synthetic material
Colour	Signal black, similar to RAL 9004
Weight	3,54 kg
Weight including packaging	4,11 kg
Nominal size	180 mm
Width	262 mm
Height	252 mm
Depth	187 mm
Width with packaging	255 mm
Height with packaging	190 mm
Depth with packaging	240 mm
EX designation in accordance with the ATEX Directive	Ex II 2 D
EX designation in accordance with standard	Ex tb IIIB T135°C Db IP64 / Ex h IIIB T135°C Db
Ta ambient temperature	-20 °C ≤ Ta ≤ +50 °C
I _A /I _N	2,5

ERM 18 Ex t

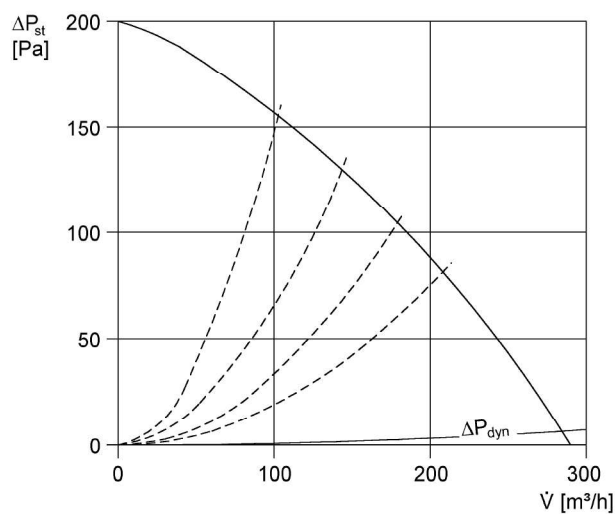
Time t_E	50 sek
Operating mode	S1
EC type examination certificate	TÜV-A 18ATEX0052 X, IECEx EPS 19.0025X
Temperature class	T135°C
Capacitor capacity / voltage	3 μ F/280V
Temperature class of insulating materials Th. Cl.	130 (B)
Packing unit	1 piece
Range	G
GTIN (EAN)	4012799804666

Sound power level in octave range

	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	Total
L_{WA5, S5} (dB(A))	32	46	54	58	61	58	54	48	65

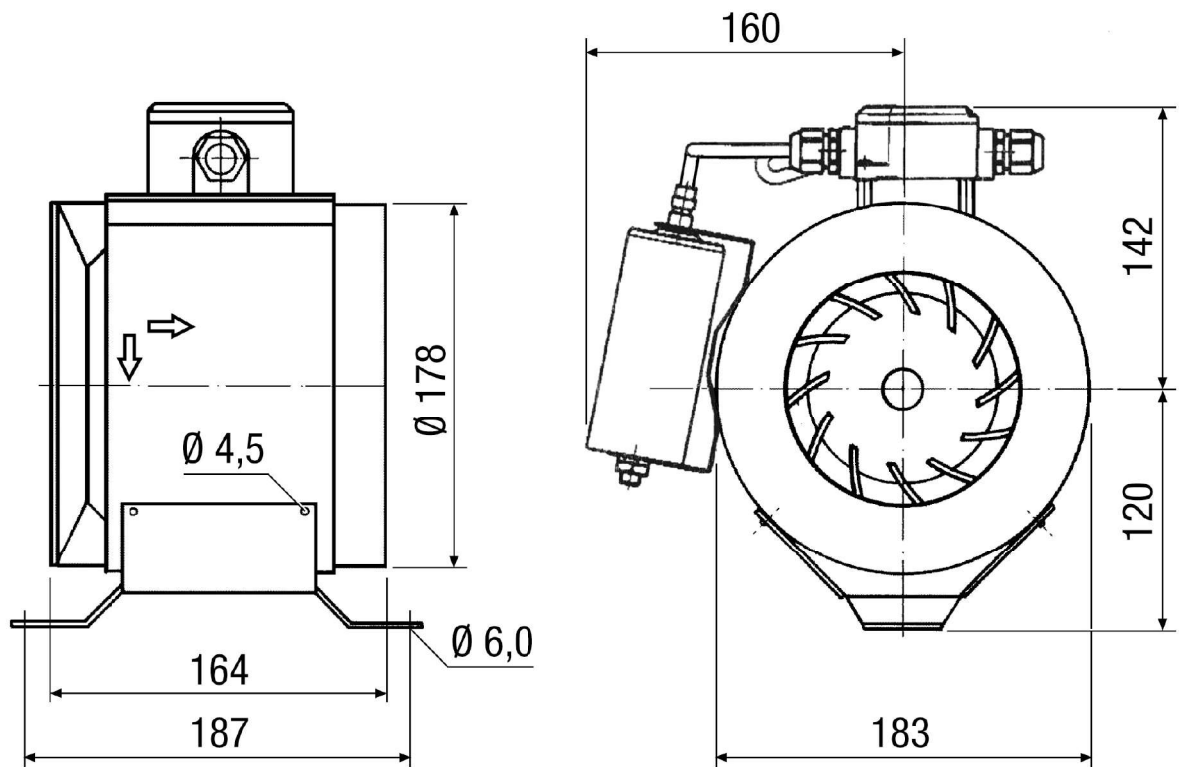
L_{WA5}= free inlet sound power level in dB.

Characteristic curve



ERM 18 Ex t

Dimensioned drawing [mm]



ERM 22 Ex t



Short description

Semi-centrifugal duct fan, DN 220, single-phase AC 230 V/50 Hz, explosion-proof, medium: dust

Article number 0080.0467

Technical data

Air flow volume	560 m ³ /h
Rotating speed	2.860 1/min
Speed controllable	—
Type of voltage	Alternating current
Rated voltage	230 V
Frequency	50 Hz
Nominal output	200 W
cosφ	0,92
I _{nom}	0,92 A
I _{max} at U _{Nominal}	0,92 A
Degree of protection	IP 64
Insulation class	B
Mains cable	3 x 1,5 mm ²
Housing material	Synthetic material
Impeller material	Synthetic material
Colour	Signal black, similar to RAL 9004
Weight	6,48 kg
Weight including packaging	7,66 kg
Nominal size	200 mm
Width	306 mm
Height	310 mm
Depth	269 mm
Width with packaging	340 mm
Height with packaging	310 mm
Depth with packaging	340 mm
EX designation in accordance with the ATEX Directive	Ex II 2 D
EX designation in accordance with standard	Ex tb IIIB T200°C Db IP64 / Ex h IIIB T200°C Db
Ta ambient temperature	-20 °C ≤ Ta ≤ +50 °C
I _A /I _N	3,1

ERM 22 Ex t

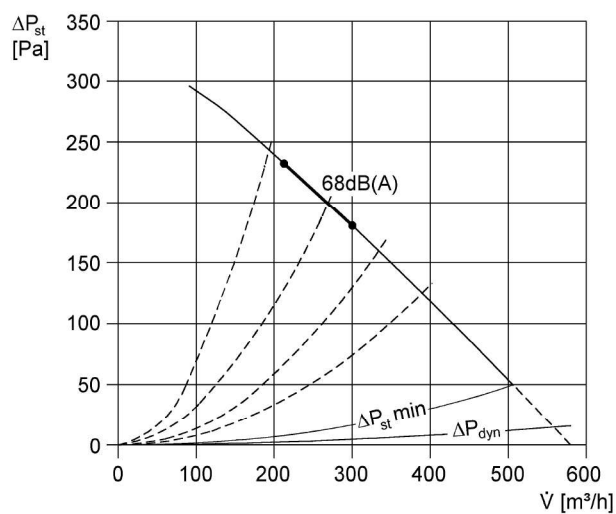
Time t_E	30
Operating mode	S1
EC type examination certificate	TÜV-A 18ATEX0055 X, IECEx EPS 19.0025X
Temperature class	T200°C
Capacitor capacity / voltage	12 μ F/280V
Temperature class of insulating materials Th. Cl.	130 (B)
Packing unit	1 piece
Range	G
GTIN (EAN)	4012799804673

Sound power level in octave range

	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	Total
L_{WA5, S5} (dB(A))	39	53	60	67	68	67	61	56	73

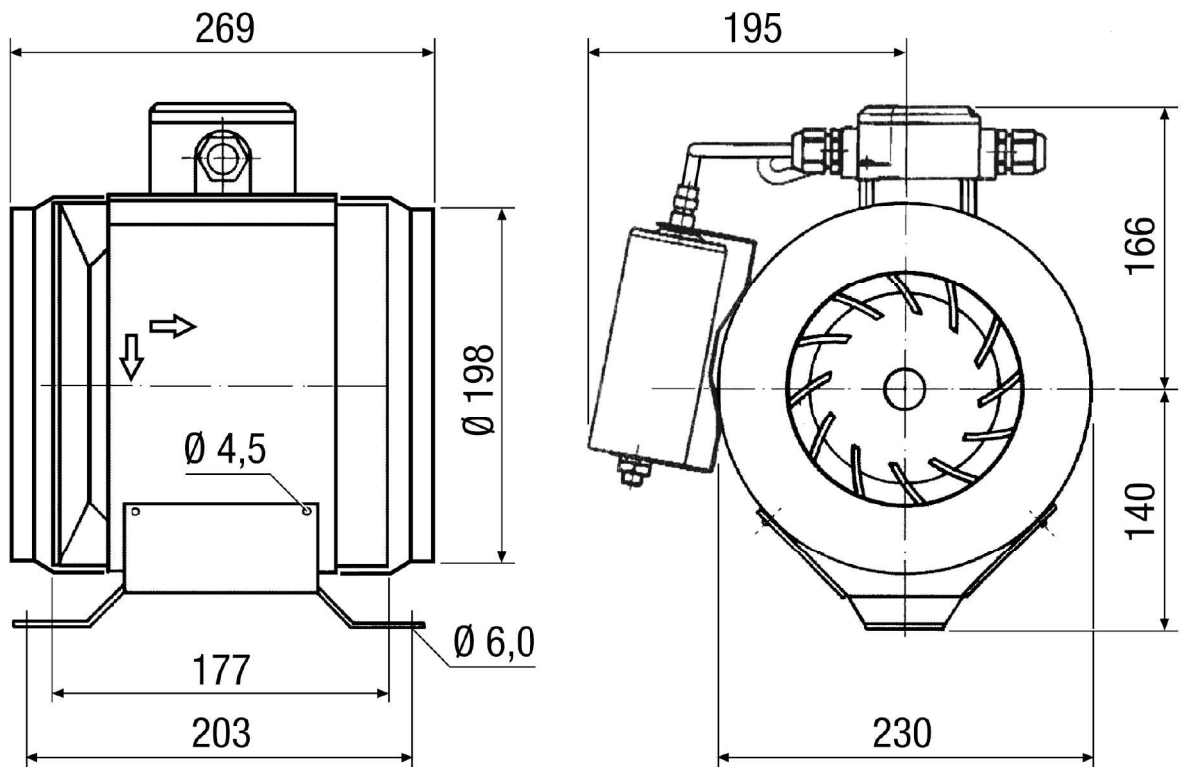
L_{WA5}= free inlet sound power level in dB.

Characteristic curve



ERM 22 Ex t

Dimensioned drawing [mm]



ERM 25 Ex t



Short description

Semi-centrifugal duct fan, DN 250, single-phase AC 230 V/50 Hz, explosion-proof, medium: dust

Article number 0080.0468

Technical data

Air flow volume	870 m ³ /h
Rotating speed	2.820 1/min
Speed controllable	—
Type of voltage	Alternating current
Rated voltage	230 V
Frequency	50 Hz
Nominal output	300 W
cosφ	0,93
I _{nom}	1,4 A
I _{max} at U _{Nominal}	1,4 A
Degree of protection	IP 64
Insulation class	F
Mains cable	3 x 1,5 mm ²
Housing material	Synthetic material
Impeller material	Synthetic material
Colour	Signal black, similar to RAL 9004
Weight	7,18 kg
Weight including packaging	7,38 kg
Nominal size	250 mm
Width	340 mm
Height	337,5 mm
Depth	232 mm
Width with packaging	365 mm
Height with packaging	365 mm
Depth with packaging	250 mm
EX designation in accordance with the ATEX Directive	Ex II 2 D
EX designation in accordance with standard	Ex tb IIIB T200°C Db IP64 / Ex h IIIB T200°C Db
Ta ambient temperature	-20 °C ≤ Ta ≤ +50 °C
I _A /I _N	3,5

ERM 25 Ex t

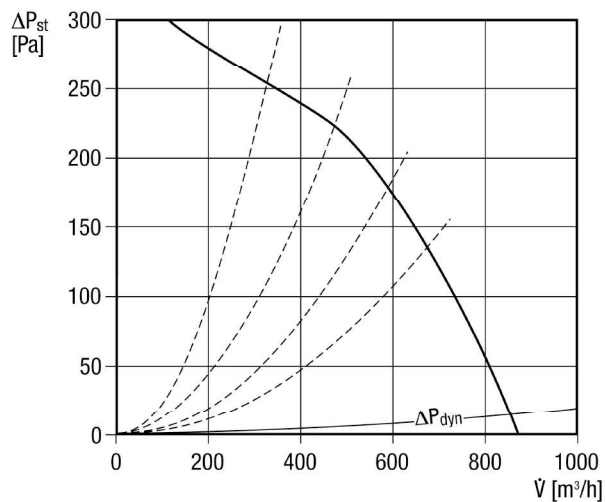
Time t_E	19
Operating mode	S1
EC type examination certificate	TÜV-A 18ATEX0054 X, IECEx EPS 19.0025X
Temperature class	T200°C
Capacitor capacity / voltage	16µF/280V
Temperature class of insulating materials Th. Cl.	155 (F)
Packing unit	1 piece
Range	G
GTIN (EAN)	4012799804680

Sound power level in octave range

	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	Total
L_{WA5, high} (dB(A))	43	57	65	70	74	69	64	58	77

L_{WA5}= free inlet sound power level in dB.

Characteristic curve



ERM 25 Ex t

Dimensioned drawing [mm]

