

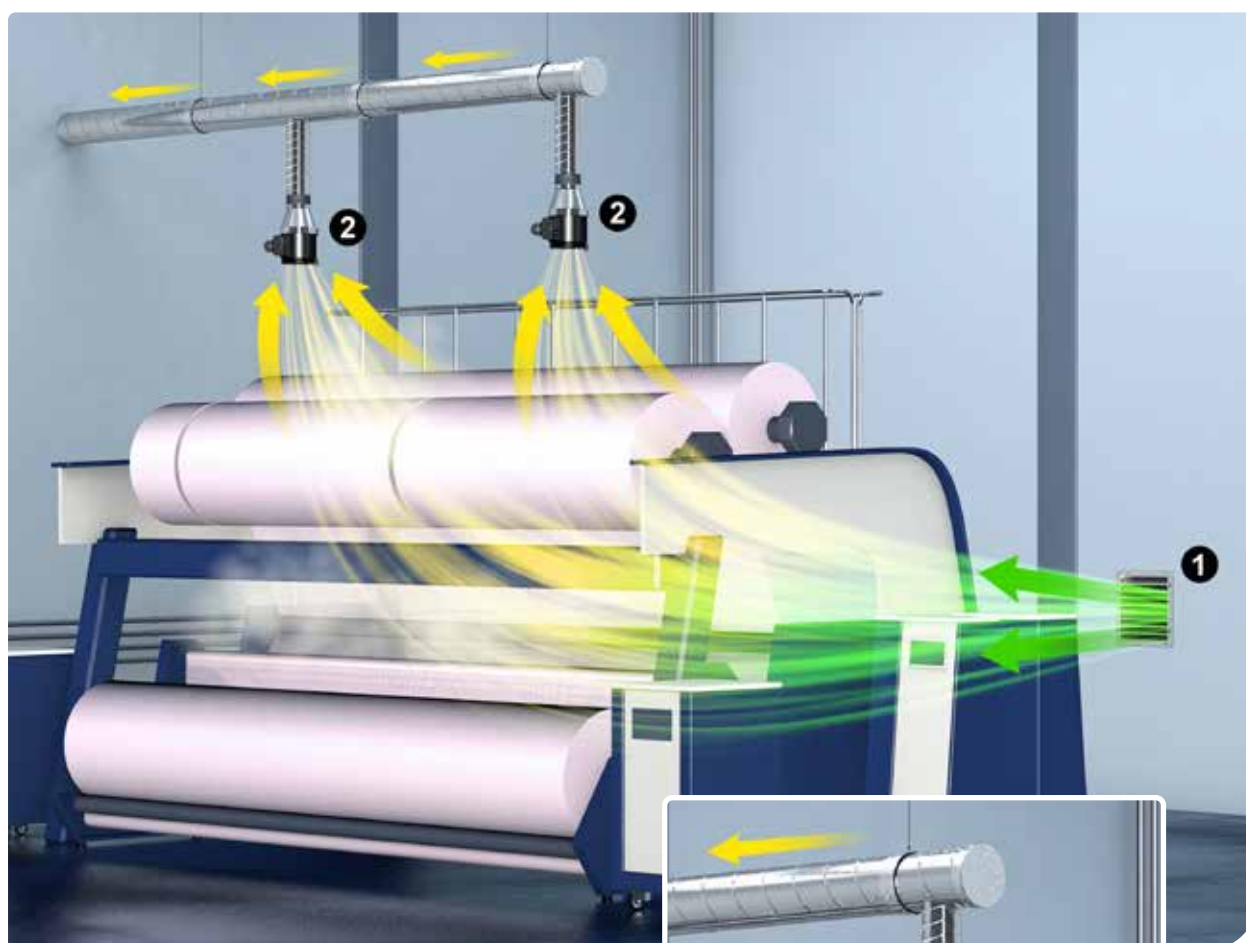
Application example

Ventilation solution in the production of textiles with explosive atmosphere



Explosion-proof duct fans are used to extract the explosive air released in the production process directly and efficiently.

The production area remains free of a flammable of air. The system operators breathe clean air.



❶ Internal grille, type MLZ, earthed

❷ ERM Ex t duct fan

↘ Exhaust air

↗ Fresh air supply



ERM 18 Ex e



Short description

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

Application examples

Environment with explosion hazard (zone 1 and 2), Dye shop, Battery room, Commercial premises, Production facility

Article number 0080.0290

Technical data

Air flow volume	310 m³/h
Rotating speed	2.780 1/min
Impeller type	semi-radial
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
Installation position	vertical / horizontal
Housing material	Synthetic material
Impeller material	Synthetic material
Colour	Signal black, similar to RAL 9004
Weight	3,57 kg
Weight including packaging	3,83 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 G
EX designation in accordance with standard	Ex eb IIB + H ₂ T4 Gb / Ex h IIB + H ₂ T4 Gb

ERM 18 Ex e

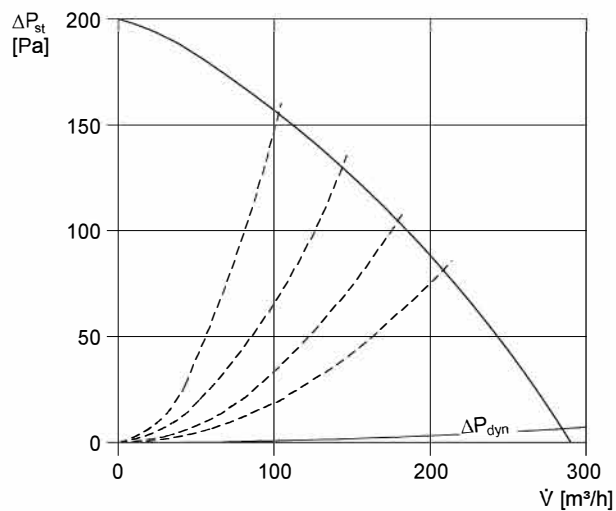
Ta ambient temperature	-20 °C ≤ Ta ≤ +50 °C
I _A /I _N	2,5
Time t _E	50 sek
Operating mode	S1
EC type examination certificate	TÜV-A 18ATEX0052 X, IECEx EPS 19.0025X
Temperature class	T4
Capacitor capacity / voltage	3μF/280V
Temperature class of insulating materials Th. Cl.	130 (B)
Packing unit	1 piece
Range	G
GTIN (EAN)	4012799802907

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

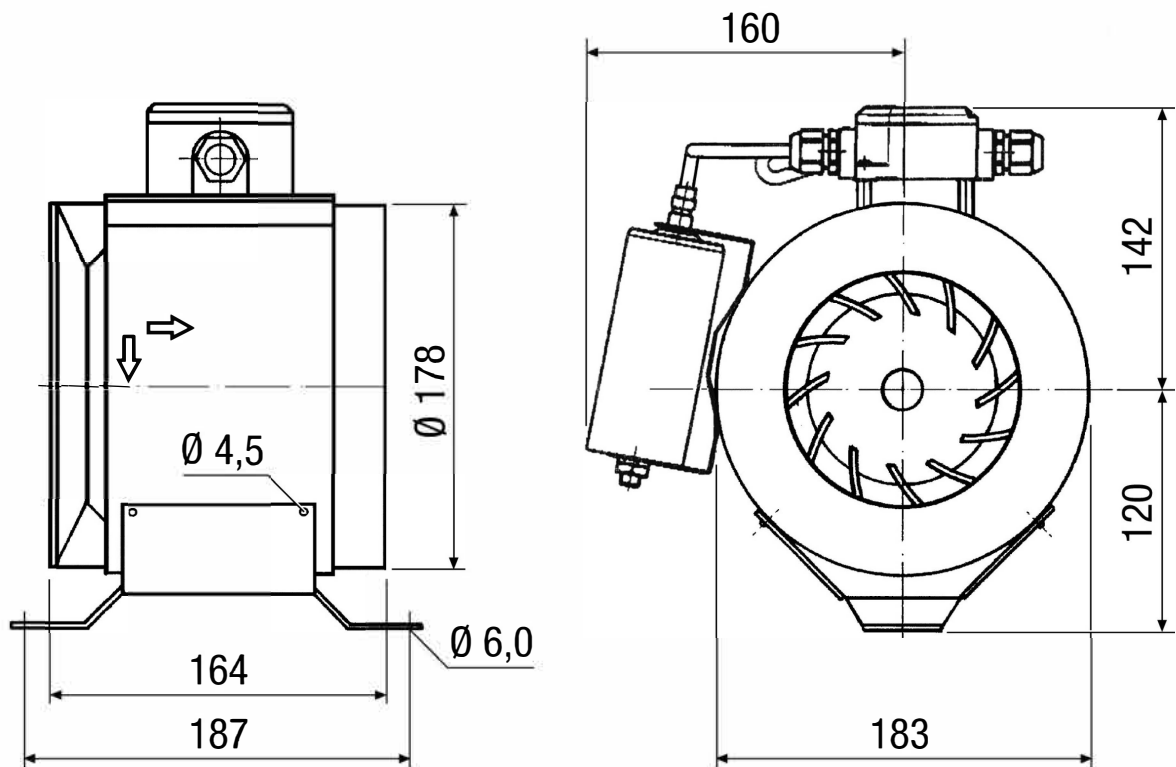
L_{WA5}= free inlet sound power level in dB.

Characteristic curve



ERM 18 Ex e

Dimensioned drawing [mm]



ERM 22 Ex e



Short description

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

Application examples

Environment with explosion hazard (zone 1 and 2), Dye shop, Battery room, Commercial premises, Production facility

Article number 0080.0288

Technical data

Air flow volume	560 m³/h
Rotating speed	2. 8601/min
Impeller type	semi-radial
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 mm²
Installation position	vertical / horizontal
Housing material	Synthetic material
Impeller material	Synthetic material
Colour	Signal black, similar to RAL 9004
Weight	6,5 kg
Weight including packaging	7,5 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 G
EX designation in accordance with standard	Ex eb IIB + H ₂ T3 Gb / Ex h IIB + H ₂ T3 Gb

ERM 22 Ex e

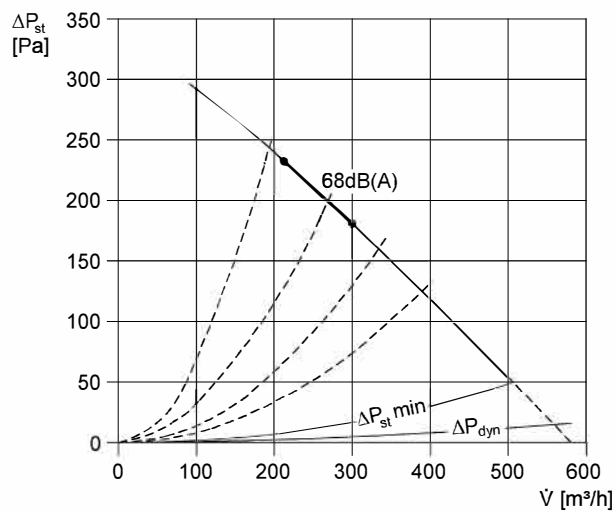
Ta ambient temperature	-20 °C ≤ Ta ≤ +50 °C
I _A /I _N	3,1
Time t _E	30
Operating mode	S1
EC type examination certificate	TÜV-A 18ATEX0055 X, IECEx EPS 19.0025X
Temperature class	T3
Capacitor capacity / voltage	12µF/280V
Temperature class of insulating materials Th. Cl.	130 (B)
Packing unit	1 piece
Range	G
GTIN (EAN)	4012799802884

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

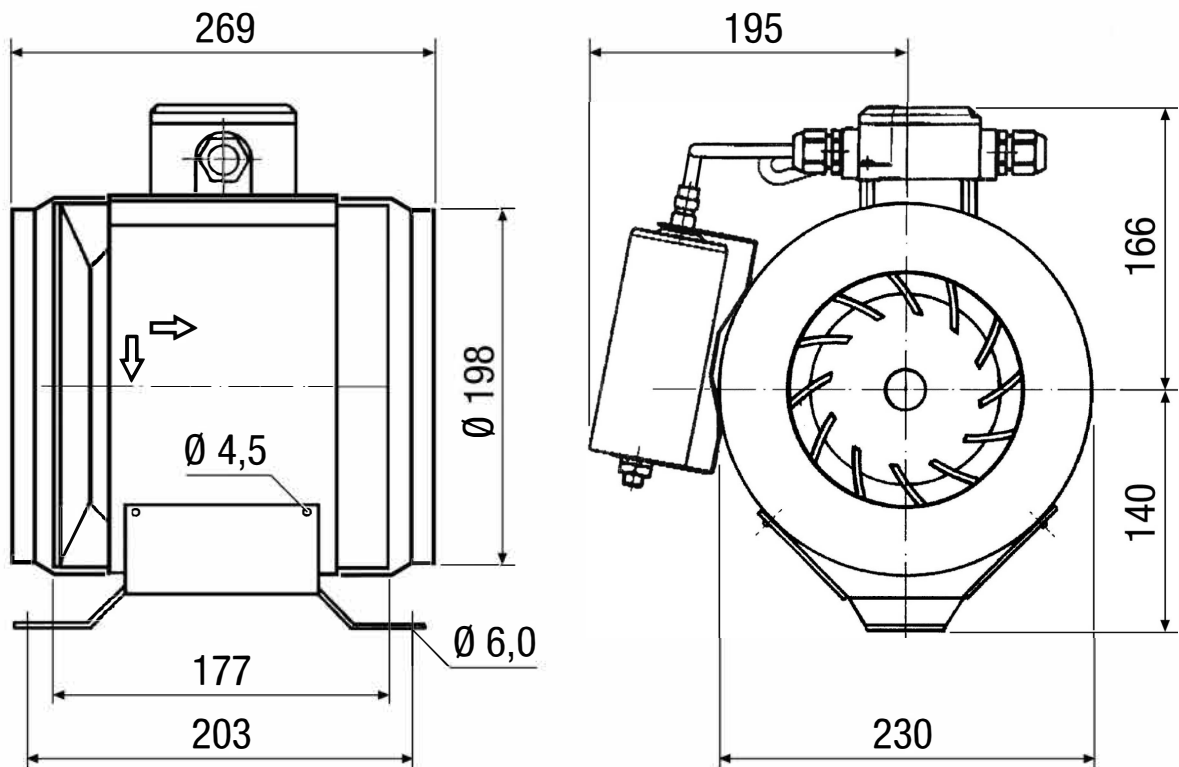
L_{WA5}= free inlet sound power level in dB.

Characteristic curve



ERM 22 Ex e

Dimensioned drawing [mm]



ERM 25 Ex e



Short description

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

Application examples

Environment with explosion hazard (zone 1 and 2), Dye shop, Battery room, Commercial premises, Production facility

Article number 0080.0249

Technical data

Air flow volume	870 m³/h
Rotating speed	2.820 1/min
Impeller type	semi-radial
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 mm²
Installation position	vertical / horizontal
Housing material	Synthetic material
Impeller material	Synthetic material
Colour	Signal black, similar to RAL 9004
Weight	7,35 kg
Weight including packaging	8,38 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 G
EX designation in accordance with standard	Ex eb IIB + H ₂ T3 Gb / Ex h IIB + H ₂ T3 Gb

ERM 25 Ex e

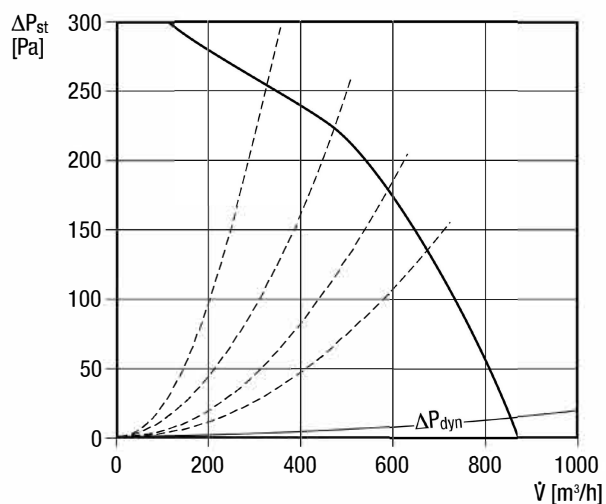
Ta ambient temperature	-20 °C ≤ Ta ≤ +50 °C
I _A /I _N	3,5
Time t _E	19
Operating mode	S1
EC type examination certificate	TÜV-A 18ATEX0054 X, IECEx EPS 19.0025X
Temperature class	T3
Capacitor capacity / voltage	16μF/280V
Temperature class of insulating materials Th. Cl.	155 (F)
Packing unit	1 piece
Range	G
GTIN (EAN)	4012799802495

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 e

Dimensioned drawing [mm]

