In-line fans with explosion protection according to Directive 2014/34/EU (ATEX).

The requirements for equipment and operating materials which may pose a risk of ignition are standardised across Europe and stated in the Directive 2014/34/EU (ATEX).
These contain the fundamental health and safety requirements for products with explosion protection and describe the conformity evaluation process for appliances used in potentially explosive atmospheres.

The small RRK Ex fans from Helios are suitable for operation in potentially explosive atmospheres and for conveying potentially explosive mixtures of gas, steam and air and satisfy the requirements of Directive 2014/34/EU (ATEX). They are in ignition protection category "e" (= increased safety) and therefore comply with equipment group II, category 2G for operation in zone 1 and 2. In these areas, hazardous, potentially explosive atmospheres arise occasionally or rarely and briefly.

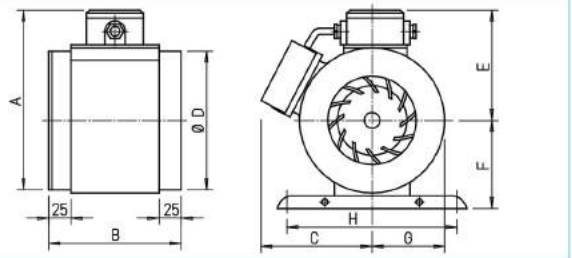
When installed properly, RRK Ex appliances fulfill all fundamental health and safety requirements.

RRK Ex appliances are suitable for carrying small air flow volumes for ventilating areas in commercial and industrial applications.
Ø 180 – 250 mm
$\dot{V}$ = 290 – 970 m³/h

RRK 180 Ex

RRK 200 Ex

RRK 250 Ex



Type	RRK 180 Ex	200 Ex	250 Ex
A	231	278	304
B	164	267	205
C	160	195	210
D	Ø 178	Ø 198[1]	Ø 248
E	142	166	180
F	120	140	160
G	92	115	128
H	275	299	311

All dimensions in mm
[1] with reducers mounted on intake and exhaust

Designed to ventilate rooms and working places in commercial and industrial applications where a hazardous atmosphere can occur. Suitable for in-line duct installation.
Approved for installation in zones 1 and 2 to DIN EN 60079-10.
Specially designed for ventilating chemical and pharmaceutical laboratories, warehouses. dye works, battery rooms etc.

Ex e II 2G

Special features

- EC-Type Examination Certificate according to Directive 2014/34/EU (ATEX) .
- Explosion proof E Exe II 2G, increased safety to DIN EN 60079-0, 60079-7, 1127-1, 14986.
- Single phase 230 V, 50 Hz.
- Ideally to be installed in-line with ducting. Three performances for model RRK 180 Ex by use of reducers (see perf. curve).
- Very compact in design and low installation cost through straight air flow.
- Installation in any position.

Specification

Casing and impeller
Made from impact resistant, anti-static polymers offering an electrical resistance of less than $10^9\Omega$.

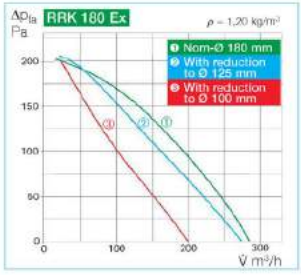
Motor Totally enclosed, IP 54, suitable for continuous operation. Maintenance free ball bearing motor with tropical protection of windings and interference-free.

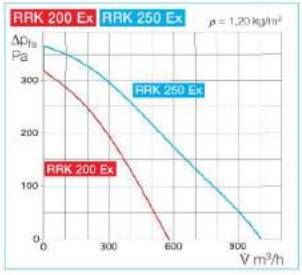
Electrical connection terminal box made from polymer, IP 54, ex-proofed, mounted on the fan casing.

Installation in any position. Suitable for intake and extract.

Installation notes

The regulations of DIN EN 60079-10 apply. The motor must be protected by a circuit breaker which isolates the equipment in case of a short circuit within the time shown on the explosion proof certificate. The inlet and exhaust must be protected by guards or other devices to prevent items bigger than 12 mm from entering the fan.
Admitted operation mode according to VDE 0530 / DIN EN 60034-1 = S1 (continuous operation). Speed control is not allowed.





Accessories for RRK 180 Ex

Reducers

Type RZ 180/125	Ref. no. 5876
Type RZ 180/100	Ref. no. 5877

Accessory for all models

Mounting feet

Type MK 4	Ref. no. 5824

Flexible sleeve
For installation between fan and ducting.

Type FM 180 Ex	Ref. no. 1685
Type FM 200 Ex	Ref. no. 1686
Type FM 250 Ex	Ref. no. 1688

Guard

Type SGR 180 Ex	Ref. no. 5051
Type SGR 200 Ex	Ref. no. 5049
Type SGR 250 Ex	Ref. no. 5052

Backdraught shutter

Type RSK 180	Ref. no. 5662
Type RSK 200	Ref. no. 5074
Type RSK 250	Ref. no. 5673

Other accessories	Page
Filters and attenuators	421 on
Flexible ventilation ducts, grilles, adaptors and roof terminations	487 on
Poppet valves	508 on

Note	Page
Explosion protection	
– Zone allocation	14
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Type	Ref. no.	Impeller Ø	Air flow volume (FID)	Nominal R.P.M.	Sound power level L_{WA}	Sound press. level 1 m	Power consumption	Current	Wiring diagram	Maximum air flow temperature	Weight net approx.
		mm	V̇ m³/h	min⁻¹	dB (A)	dB (A)	W	A	No.	+ °C	kg
Explosion proof Ex e II, 1 phase motor, 230 V, 50 Hz, capacitor motor, protection to IP 54											
RRK 180 Ex [1]	5889	170	290	2780	66	58	50	0.25	453	50	3.0
RRK 200 Ex [2]	5890	215	560	2860	64	65	200	0.92	453	50	5.5
RRK 250 Ex [2]	5891	240	970	2860	77	69	300	1.40	453	50	7.0

[1] Temperature class T1-T4 [2] Temperature class T1-T3