



# FANS FOR **INDUSTRIAL** APPLICATIONS

**TOP-PERFORMING. POWERFUL. DURABLE.  
ENERGY-SAVING. SAFE.**

**The MAICO range for industrial applications:**

- ▶ High-performance axial duct fans up to 142,000 m<sup>3</sup>/h
- ▶ Very powerful centrifugal fans
- ▶ Fans for conveying acidic and corrosive media
- ▶ Fans for high airstream temperatures up to 200 °C
- ▶ Fans with energy-saving EC motors
- ▶ Ex fans for gas, hydrogen and dust applications
- ▶ Explosion protection in accordance with ATEX and IECEx



# WITH OVER 1,000 PRODUCTS, MAICO IS NOW THE **FULL-RANGE SUPPLIER FOR INDUSTRIAL VENTILATION!**

In order to ensure good air quality in assembly halls, warehouses or production facilities, particularly powerful ventilation systems are required that can convey large volumes from special application areas. Whether centrifugal blowers or wall, roof, duct or channel fans – at **MAICO** you will find suitable fans for ventilation and air extraction for a wide range of requirements and in many dimensions:

- ▶ High-performance duct fans up to 142,000 m<sup>3</sup>/h
- ▶ Fans for commercial applications: Recirculation fans, window fans, gastronomy ventilation
- ▶ Fans for special applications: Fans for high airstream temperatures, Ex fans, corrosion-resistant fans
- ▶ System accessories: Mounting material, sound absorbers, air inlets and outlets, filters, air heaters, various switches and much more.
- ▶ Sensors: Differential pressure, vibration, temperature and humidity sensors

## **OUR SERVICE FOR YOU:**

- ▶ Many years of experience in the planning of industrial and commercial properties
- ▶ Technical data such as 3D or BIM data
- ▶ Tender texts



## FANS FOR COMMERCIAL PREMISES AND WORKPLACES 4

- Nominal size 200-310 mm
- Air volume up to approx. 4,500 m<sup>3</sup>/h



## AXIAL HIGH-PERFORMANCE WALL FANS 7

- Nominal size 200-1,250 mm
- Air volume of 72,000 m<sup>3</sup>/h
- Ex wall fans



## AXIAL HIGH-PERFORMANCE DUCT FANS 18

- Nominal size 200-1,600 mm
- Air volume up to approx. 143,000 m<sup>3</sup>/h
- Ex duct fans



## CENTRIFUGAL / SEMI-CENTRIFUGAL / BOX / DIAGONAL DUCT FANS 28

- Nominal size 100-710 mm
- Air volume up to approx. 23,000 m<sup>3</sup>/h
- EC motor
- Compact ventilation boxes with EC motor
- Ex duct fans



## CENTRIFUGAL BLOWER 37

- Size 100-630 mm
- Metal, plastic, stainless steel
- Air volume up to approx. 18,000 m<sup>3</sup>/h
- Particularly powerful
- Ex centrifugal blower
- Blower for high airstream temperatures up to 150 °C



## CHANNEL FANS 44

- Channel dimensions 500 x 250 mm to 1,000 x 500 mm
- Air volume up to approx. 12,000 m<sup>3</sup>/h
- Energy-saving EC motors
- Sound-insulated versions



## ROOF FANS 48

- Nominal size 100-900 mm
- Air volume up to approx. 45,000 m<sup>3</sup>/h
- Energy-saving EC motors
- Ex roof fans

# FANS FOR COMMERCIAL PREMISES AND WORKPLACES

DISCOVER OUR WALL AND WINDOW FANS AS WELL  
AS FANS FOR AIR CIRCULATION.  
FOR A PLEASANT CLIMATE IN YOUR BUSINESS PREMISES!



## EV/EVR axial window fans

Axial window fan for ventilation and air extraction

- Nominal size 315 mm
- Air volume up to 1,400 m<sup>3</sup>/h

### EV / EVR axial flush-mounted wall fans

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
EV 31	0080.0820	1,400	110
EVR 31	0080.0821	1,400	110

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### PRODUCT FEATURES

- Suitable for windows and thin walls
- Quick installation using the enclosed screws
- Window fan for air extraction or ventilation and air extraction
- Available in nominal size 315 mm
- With internal shutter

### APPLICATION EXAMPLES

- Offices
- Business premises
- Commercial spaces
- Restaurants
- Production facilities



## ECO axial wall fan

Oscillating axial industrial fan for wall mounting

- Nominal size 300-400 mm
- Air volume up to 4,500 m<sup>3</sup>/h

### ECO axial wall fan

Article	Article no.	max. air circulation m <sup>3</sup> /h	P (watt)
ECO 30 E	0088.0010	2800	37
ECO 40 D	0088.0014	4500	44

DN: nominal size · P (watt): nominal power

### PRODUCT FEATURES

- Suitable for wall mounting
- Adjustable pivoting angle
- Fan and part-turn gearbox drive can be switched separately

### APPLICATION EXAMPLES

- Offices
- Commercial spaces
- Production facilities
- Restaurants
- Workplaces
- Showrooms



## EN / ENR axial flush-mounted wall fans

Axial flush-mounted wall fan for ventilation and air extraction

- Nominal size 200-315 mm
- Air volume up to 1,500 m<sup>3</sup>/h

### EN / ENR axial flush-mounted wall fans

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
EN 20	0081.0307	420	30
ENR 20	0081.0316	460	42
EN 25	0081.0308	630	39
ENR 25	0081.0317	840	48
EN 31	0081.0309	1,500	76
ENR 31	0081.0318	1,500	76

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power



## EVN axial window fans

Axial window fan for air extraction

- Nominal size 150-225 mm
- Air volume up to 640 m<sup>3</sup>/h

### EVN axial flush-mounted wall fans

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
EVN 15	0080.0853	240	25
EVN 22	0080.0855	490	37
EVN 22 R	0080.0857	640	49

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### PRODUCT FEATURES

- Elegant, appealing design
- Fast, problem-free replacement with predecessor models
- Easy cleaning with minimum time expenditure, as the housing can be removed without tools
- Wall fan for air extraction (EN series) or air extraction and ventilation (ENR series)

### APPLICATION EXAMPLES

- Offices
- Business premises
- Commercial spaces
- Restaurants
- Production facilities
- Workplaces
- Medical practices
- Showrooms

### PRODUCT FEATURES

- Pleasantly quiet
- Quick assembly thanks to click and screw technology
- Shutter protects against soiling
- Very easy to clean as the housing can be removed without tools
- Flexible installation, suitable for windows and thin walls

### APPLICATION EXAMPLES

- Restaurants
- Showrooms
- Construction containers
- Lecture halls
- Kindergartens
- Hospitals
- Foreman's offices



# AXIAL HIGH-PERFORMANCE WALL FANS

WE PRODUCE ROBUST AND POWERFUL WALL FANS FOR INDUSTRIAL AND PRODUCTION FACILITIES FOR EFFECTIVE VENTILATION AND AIR EXTRACTION.

Application example

## Air extraction from server/compressor/transformer rooms

The EZQ/EZS and DZQ/DZS wall fans are ideal for air extraction and thus removing high heat loads from closed rooms. A thermostat (e.g. TH 16) permanently measures the room temperature. If the setpoint temperature is exceeded, the exhaust air fan (e.g. EZQ/EZS or DZQ/DZS) is switched on and the shutter (e.g. MK type) is opened.



The fan extracts the warm exhaust air near the ceiling. Cooler supply air flows in through the fresh air/external grille near the floor. A supply air filter (e.g. ZFF) filters the dust and dirt particles out of the supply air to protect the sensitive electrical or electronic systems in the room from damage.



- ❶ External grille, type MLZ/MLA
- ❷ Internal grille, type IG (not shown)
- ❸ Fan, type EZQ, type DZQ
- ❹ External grille/shutter, type AS, type MLZ or type MLA (not shown)
- ➔ Exhaust air
- ➔ Fresh air supply

### VENTILATION SYSTEM FOR HEAT DISSIPATION IN TRANSFORMER STATIONS

Single-phase transformer  
 Maximum electrical power:  $5000 \text{ VA} = P_{\text{electr.}}$   
 $\cos \varphi = 0.8$   
 Electrical power loss:  $545 \text{ W} = Q_v$

What exhaust air volumetric flow is required for heat dissipation at a temperature difference of 5K (Kelvin)?

$$V = \frac{Q_v}{C_{\text{air}} \cdot \Delta T} \quad V = \frac{545 \text{ W}}{0.35 \text{ Wh (m}^3 \cdot \text{K)} \cdot 5 \text{ K}} \quad \mathbf{V = 312 \text{ m}^3/\text{h}}$$

Suitable duct fan: **ERR 16/1 S**  
 Suitable wall fan: **EZQ 20/4 E**



Application example

## Diluent ventilation in the storage room EZQ Ex/ DZQ Ex

With diluent ventilation, the air-gas mixture or air-dust mixture is extracted directly using wall fans – fresh air is supplied passively via the external grille. The storage room remains free of explosion hazards.

The air exchange reduces the concentration of flammable substances to such an extent that it falls below the lower explosion limit and a mixture of gases, vapours, mists or dusts cannot ignite, even if an ignition source is present.



- ❶ MLZ external grille (not shown)
- ❷ Internal grille, type MLZ
- ❸ Fan, type EZQ Ex or type DZQ Ex
- ❹ External grille, type AS Ex (not shown)
- ➡ Exhaust air
- ➡ Outside air

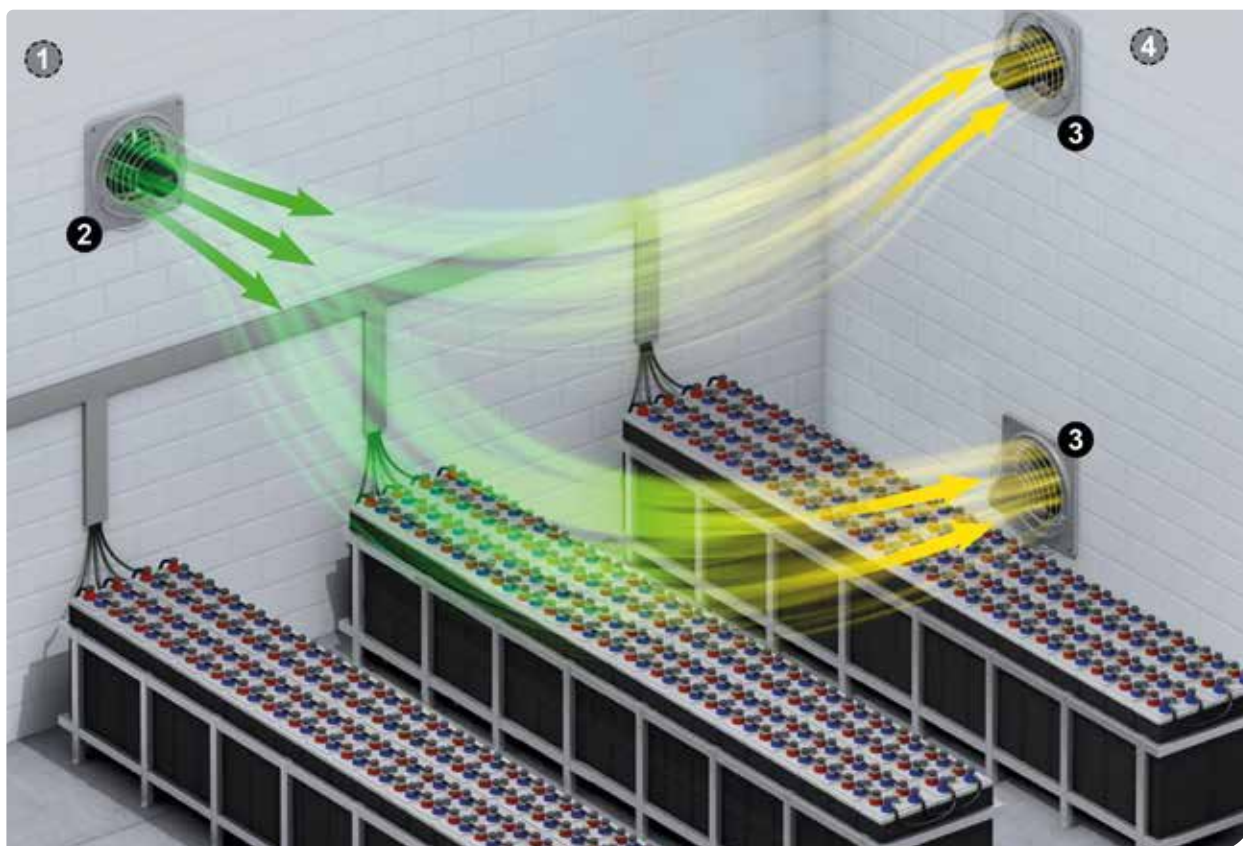
Application example

## Ventilation solution for a gas atmosphere in a battery room

When the battery cells are charged, hydrogen is produced and collects under the ceiling. With lead batteries, sulphuric acid mist forms close to the ground at the same time. Both need extracting. Cross-ventilation can be realised using supply and exhaust air fans, which effectively prevents the occurrence of an explosive atmosphere.



MAICO's ventilation and air extraction system with Ex fans at the floor and ceiling levels guarantees ensure that the risk of explosion is safely averted.



- ❶ External grille, type MLZ (not shown)
- ❷ EZQ E Ex e or DZQ Ex e supply air fan (fan with air flow direction B)
- ❸ EZQ E Ex e or DZQ Ex e exhaust air fan
- ❹ Shutter, type AS Ex (not shown)
- ➡ Exhaust air
- ➡ Outside air



## EZF, DZF flush-mounted wall fans with wall sleeve

Axial wall fan for flush-mounted installation

- Nominal size 200-500 mm
- Air volume up to 6,045 m<sup>3</sup>/h

### EZF flush-mounted wall fans with wall sleeve

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
EZF 20/4 E	0085.0484	500	30
EZF 25/4 D	0085.0487	900	30
EZF 25/4 E	0085.0486	800	40
EZF 30/6 B	0085.0053	1,100	60
EZF 30/4 B	0085.0054	1,700	90
EZF 35/6 B	0085.0055	1,600	70
EZF 35/4 B	0085.0056	2,760	120
EZF 40/6 B	0085.0057	2,400	100
EZF 40/4 B	0085.0058	4,170	230
EZF 50/8 B	0085.0061	3,800	110

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### DZF flush-mounted wall fans with wall sleeve

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
DZF 25/4 D	0085.0490	1,000	50
DZF 30/6 B	0085.0101	1,150	70
DZF 30/4 B	0085.0102	1,700	85
DZF 35/6 B	0085.0103	1,600	80
DZF 35/4 B	0085.0104	2,710	135
DZF 40/8 B	0085.0105	1,900	85
DZF 40/6 B	0085.0106	2,500	120
DZF 40/4 B	0085.0107	4,200	230
DZF 45/6 B	0085.0108	4,220	170
DZF 45/4 B	0085.0109	6,045	455
DZF 50/6 B	0085.0111	5,480	220

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### PRODUCT FEATURES

- Can be used flexibly, as it can be switched to ventilation and air extraction  
Exception: EZF 20/4 E and EZF 25/4 E
- For commercial use: durable, powerful and robust
- Can be fitted in any position
- Wall sleeve made of galvanised sheet steel
- Complete flush-mounted installation with wall sleeve
- High degree of protection IP 55 (54)
- Special versions on request

### APPLICATION EXAMPLES

- Changing rooms
- Foreman's offices
- Restaurants
- Garages
- Fitness rooms
- Workplaces
- Showrooms
- Business premises





## EZQ, EZS wall fans with wall plate / wall ring

Axial wall fan

- ➔ Nominal size 200-500 mm
- ➔ Air volume up to 6,650 m<sup>3</sup>/h

### EZQ wall fans with wall plate / wall ring

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
EZQ 20/4 E	0083.0484	475	35
EZQ 20/2 B	0083.0102	1,100	65
EZQ 25/4 D	0083.0487	1,000	35 / 80
EZQ 25/2 B	0083.0104	2,100	185 <sup>1)</sup>
EZQ 25/4 E	0083.0486	800	40 / 203 <sup>1)</sup>
EZQ 30/6 B	0083.0105	1,200	60
EZQ 30/4 B	0083.0106	1,850	90
EZQ 30/2 B	0083.0107	3,620	350 <sup>1)</sup>
EZQ 35/6 B	0083.0108	1,700	70
EZQ 35/4 B	0083.0114	2,810	128 <sup>1)</sup>
EZQ 40/6 B	0083.0110	2,600	100
EZQ 40/4 B	0083.0115	4,350	249 <sup>1)</sup>
EZQ 45/6 B	0083.0100	4,490	185 <sup>1)</sup>
EZQ 45/4 B	0083.0101	6,650	444 <sup>1)</sup>
EZQ 50/8 B	0083.0112	4,200	110
EZQ 50/6 B	0083.0113	5,860	240 <sup>1)</sup>

<sup>1)</sup> in opt. efficiency

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### EZS wall fans with wall plate / wall ring

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
EZS 20/4 E	0094.0071	475	35
EZS 20/2 B	0094.0000	1,100	65
EZS 25/4 E	0094.0073	800	40 / 203 <sup>1)</sup>
EZS 25/4 D	0094.0072	1,000	32 / 80
EZS 25/2 B	0094.0001	2,100	185 <sup>1)</sup>
EZS 30/6 B	0094.0002	1,200	60
EZS 30/4 B	0094.0003	1,850	90
EZS 30/2 B	0094.0004	3,600	350 <sup>1)</sup>
EZS 35/6 B	0094.0005	1,700	70
EZS 35/4 B	0094.0007	2,810	128 <sup>1)</sup>
EZS 40/6 B	0094.0006	2,600	100
EZS 40/4 B	0094.0009	4,350	249 <sup>1)</sup>
EZS 50/8 B	0094.0010	4,200	110
EZS 50/6 B	0094.0011	5,860	240 <sup>1)</sup>
EZQ 50/8 B	0083.0112	4,200	110
EZQ 50/6 B	0083.0113	5,860	240 <sup>1)</sup>

<sup>1)</sup> in opt. efficiency

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### PRODUCT FEATURES

- Can be used flexibly, as it can be switched to ventilation or air extraction  
Exception: EZ 20/4 E and EZ 25/4 E
- For commercial use: durable, powerful and robust
- Can be fitted in any position
- Safe operation thanks to high degree of protection
- Easy installation with help of a wall plate or a wall ring
- Special versions on request

### APPLICATION EXAMPLES

- Production facilities
- Commercial spaces
- Garages
- Construction containers
- Store rooms
- Showrooms
- Industrial halls



## DZQ, DZS wall fans with wall plate / wall ring

- ➔ Nominal size 200-600 mm
- ➔ Air volume up to 14,970 m<sup>3</sup>/h

### DZQ wall fans with wall plate / wall ring

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)	Pole-changeable
DZQ 20/2 B	0083.0116	1,150	65	–
DZQ 25/4 D	0083.0490	1,000	45	–
DZQ 25/2 B	0083.0118	2,120	175 <sup>1)</sup>	–
DZQ 25/84 B	0083.0141	500 / 1,100	32	✓
DZQ 25/42 B	0083.0142	1050 / 2,190	40	✓
DZQ 30/6 B	0083.0119	1,250	70	–
DZQ 30/4 B	0083.0120	1,850	85	–
DZQ 30/2 B	0083.0121	3,640	375 <sup>1)</sup>	–
DZQ 30/84 B	0083.0145	900 / 1,800	40 / 100	✓
DZQ 30/42 B	0083.0147	1870 / 3,680	70 / 415 <sup>1)</sup>	✓
DZQ 35/6 B	0083.0122	1,700	75	–
DZQ 35/4 B	0083.0123	2,840	133 <sup>1)</sup>	–
DZQ 35/2 B	0083.0060	5,750	760 <sup>1)</sup>	–
DZQ 35/84 B	0083.0150	1430 / 2,960	38 / 150 <sup>1)</sup>	✓
DZQ 35/42 B	0083.0066	2950 / 5,840	135 / 810 <sup>1)</sup>	✓
DZQ 40/8 B	0083.0125	2,050	75	–
DZQ 40/6 B	0083.0126	2,500	110	–
DZQ 40/4 B	0083.0127	4,260	240 <sup>1)</sup>	–
DZQ 40/2 B	0083.0061	8,920	1,550 <sup>1)</sup>	–
DZQ 40/84 B	0083.0155	2170 / 4,420	45 / 250 <sup>1)</sup>	✓
DZQ 40/42 B	0083.0067	4490 / 8,960	245 / 1,585 <sup>1)</sup>	✓
DZQ 45/6 B	0083.0137	4,460	165 <sup>1)</sup>	–
DZQ 45/4 B	0083.0138	6,580	440 <sup>1)</sup>	–
DZQ 50/6 B	0083.0130	5,880	240 <sup>1)</sup>	–
DZQ 50/4 B	0083.0062	8,700	614 <sup>1)</sup>	–
DZQ 50/84 B	0083.0160	4370 / 8,890	140 / 695 <sup>1)</sup>	–
DZQ 56/6 B	0083.0063	8,530	455 <sup>1)</sup>	–
DZQ 56/4 B	0083.0136	12,340	1170 <sup>1)</sup>	–
DZQ 60/8 B	0083.0064	7,420	243 <sup>1)</sup>	–
DZQ 60/6 B	0083.0065	9,830	525 <sup>1)</sup>	–
DZQ 60/4 B	0083.0134	14,560	1,385 <sup>1)</sup>	–
DZQ 60/84 B	0083.0164	7490 / 14,970	250 / 1,600 <sup>1)</sup>	✓

<sup>1)</sup> in opt. efficiency

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### PRODUCT FEATURES

- Can be used flexibly, since it can be switched to ventilation or air extraction
- For commercial use: durable, powerful and robust
- Safe operation thanks to high degree of protection
- Easy installation with help of a wall plate or a wall ring

### APPLICATION EXAMPLES

- Production facilities
- Commercial spaces
- Garages
- Construction containers
- Store rooms
- Showrooms
- Industrial halls





## DZQ, DZS wall fans with wall plate / wall ring

- ➔ Nominal size 200-600 mm
- ➔ Air volume up to 14,970 m<sup>3</sup>/h

### DZS wall fans with wall plate / wall ring

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)	Pole-changeable
<b>DZS 20/2 B</b>	0094.0012	1,150	65	–
<b>DZS 25/4 D</b>	0094.0074	1,000	45	–
<b>DZS 25/2 B</b>	0094.0013	2,120	185 <sup>1)</sup>	–
<b>DZS 25/84 B</b>	0094.0040	500 / 1,100	35 / 80	✓
<b>DZS 25/42 B</b>	0094.0041	1050 / 2,190	38 / 203 <sup>1)</sup>	✓
<b>DZS 30/6 B</b>	0094.0014	1,250	70	–
<b>DZS 30/4 B</b>	0094.0015	1,850	85	–
<b>DZS 30/2 B</b>	0094.0016	3,640	375 <sup>1)</sup>	–
<b>DZS 30/42 B</b>	0094.0044	1870 / 3,680	70 / 415 <sup>1)</sup>	✓
<b>DZS 35/6 B</b>	0094.0017	1,700	75	–
<b>DZS 35/4 B</b>	0094.0018	2,840	133 <sup>1)</sup>	–
<b>DZS 35/84 B</b>	0094.0045	1430 / 2,960	38 / 150 <sup>1)</sup>	✓
<b>DZS 35/2 B</b>	0094.0060	5,750	760 <sup>1)</sup>	–
<b>DZS 35/42 B</b>	0094.0065	2951 / 5,840	135 / 810 <sup>1)</sup>	✓
<b>DZS 40/8 B</b>	0094.0020	2,050	75	–
<b>DZS 40/6 B</b>	0094.0021	2,500	110	–
<b>DZS 40/4 B</b>	0094.0022	4,260	240 <sup>1)</sup>	–
<b>DZS 40/2 B</b>	0094.0061	8,920	1,550 <sup>1)</sup>	–
<b>DZS 40/84 B</b>	0094.0049	2170 / 4,420	45 / 250 <sup>1)</sup>	✓
<b>DZS 40/42 B</b>	0094.0066	3270 / 6,700	245 / 1,585 <sup>1)</sup>	✓
<b>DZS 50/6 B</b>	0094.0027	5,880	240 <sup>1)</sup>	–
<b>DZS 50/4 B</b>	0094.0062	8,700	615 <sup>1)</sup>	–
<b>DZS 50/84 B</b>	0094.0054	4370 / 8,890	140 / 695 <sup>1)</sup>	–
<b>DZS 60/8 B</b>	0094.0063	7,420	243 <sup>1)</sup>	–
<b>DZS 60/6 B</b>	0094.0064	9,830	525v	–
<b>DZS 60/4 B</b>	0094.0033	14,560	1,385 <sup>1)</sup>	–
<b>DZS 60/84 B</b>	0094.0058	7490 / 14,970	250 / 1,600 <sup>1)</sup>	✓

<sup>1)</sup> in opt. efficiency

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power



## Ex axial wall fans (gas) EZQ Ex e, EZS Ex e, DZQ Ex e, DZS Ex e



Explosion-proof axial wall fan

- Nominal size 200-600 mm
- Air volume up to 9,450 m<sup>3</sup>/h

### EZQ Ex e – GAS Ex axial wall fan

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
<b>EZQ 20/4 E Ex e</b>	0083.0850	440	45

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### EZS Ex e – GAS Ex axial wall fan

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
<b>EZS 20/4 E Ex e</b>	0094.0200	440	45

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### DZQ Ex e – GAS Ex axial wall fans

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
<b>DZQ 20/4 B Ex e</b>	0083.0170	540	30
<b>DZQ 20/2 B Ex e</b>	0083.0171	1,090	65
<b>DZQ 25/4 B Ex e</b>	0083.0172	950	38
<b>DZQ 25/2 B Ex e</b>	0083.0173	1,880	130
<b>DZQ 30/6 B Ex e</b>	0083.0174	1,100	25
<b>DZQ 30/4 B Ex e</b>	0083.0175	1,730	95
<b>DZQ 30/2 B Ex e</b>	0083.0176	3,380	240
<b>DZQ 35/6 B Ex e</b>	0083.0177	1,750	35
<b>DZQ 35/4 B Ex e</b>	0083.0178	2,660	125
<b>DZQ 35/2 B Ex e</b>	0083.0179	5,460	580
<b>DZQ 40/6 B Ex e</b>	0083.0180	2,740	95
<b>DZQ 40/4 B Ex e</b>	0083.0181	4,130	170
<b>DZQ 45/6 B Ex e</b>	0083.0182	4,240	140
<b>DZQ 45/4 B Ex e</b>	0083.0183	6,400	330
<b>DZQ 50/6 B Ex e</b>	0083.0184	5,320	165
<b>DZQ 50/4 B Ex e</b>	0083.0185	8,200	420
<b>DZQ 60/6 B Ex e</b>	0083.0186	9,450	295

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### DZS Ex e – GAS Ex axial wall fans

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
<b>DZS 20/4 B Ex e</b>	0094.0116	540	30
<b>DZS 20/2 B Ex e</b>	0094.0117	1,090	65
<b>DZS 25/4 B Ex e</b>	0094.0118	950	38
<b>DZS 25/2 B Ex e</b>	0094.0119	1,880	130
<b>DZS 30/6 B Ex e</b>	0094.0120	1,100	25
<b>DZS 30/4 B Ex e</b>	0094.0121	1,730	95
<b>DZS 30/2 B Ex e</b>	0094.0122	3,380	240
<b>DZS 35/6 B Ex e</b>	0094.0123	1,750	35
<b>DZS 35/4 B Ex e</b>	0094.0124	2,660	125
<b>DZS 35/2 B Ex e</b>	0094.0125	5,460	580
<b>DZS 40/6 B Ex e</b>	0094.0126	2,740	95
<b>DZS 40/4 B Ex e</b>	0094.0127	4,130	170
<b>DZS 50/6 B Ex e</b>	0094.0128	5,320	165
<b>DZS 50/4 B Ex e</b>	0094.0129	8,200	420
<b>DZS 60/6 B Ex e</b>	0094.0130	9,450	295

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

#### PRODUCT FEATURES

- Explosion protection and approvals in accordance with ATEX and IECEx
- Qualified for all gases and vapours of Ex group IIA and IIB and also for hydrogen
- Simple speed control with transformer Exception: EZQ 20/4-E Ex e
- For safe use in potentially explosive atmospheres
- Can be used flexibly, as it can be switched to ventilation or air extraction Exception: EZQ 20/4-E Ex e
- Safe operation thanks to high degree of protection
- Easy installation with help of a wall plate or a wall ring

#### APPLICATION EXAMPLES

- Environment with explosion hazard (zone 1 and 2)
- Dye works
- Battery rooms
- Labs
- Commercial spaces
- Production facilities





## EZQ Ex t, EZS Ex t, DZQ Ex t, DZS Ex t Ex axial wall fans (dust)



Explosion-proof axial wall fan

- ➔ Nominal size 200-600 mm
- ➔ Air volume up to 9,450 m<sup>3</sup>/h

### EZQ Ex t – DUST Ex axial wall fan

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
<b>EZQ 20/4 E Ex t</b>	0083.0217	440	45

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### EZS Ex t – DUST Ex axial wall fan

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
<b>EZS 20/4 E Ex t</b>	0094.0216	440	45

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### DZQ Ex t – DUST Ex axial wall fans

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
<b>DZQ 20/4 B Ex t</b>	0083.0200	540	30
<b>DZQ 20/2 B Ex t</b>	0083.0201	1,090	65
<b>DZQ 25/4 B Ex t</b>	0083.0202	950	38
<b>DZQ 25/2 B Ex t</b>	0083.0203	1,880	130
<b>DZQ 30/6 B Ex t</b>	0083.0204	1,100	25
<b>DZQ 30/4 B Ex t</b>	0083.0205	1,730	95
<b>DZQ 30/2 B Ex t</b>	0083.0206	3,380	240
<b>DZQ 35/6 B Ex t</b>	0083.0207	1,750	35
<b>DZQ 35/4 B Ex t</b>	0083.0208	2,660	125
<b>DZQ 35/2 B Ex t</b>	0083.0209	5,460	580
<b>DZQ 40/6 B Ex t</b>	0083.0210	2,740	95
<b>DZQ 40/4 B Ex t</b>	0083.0211	4,130	170
<b>DZQ 45/6 B Ex t</b>	0083.0212	4,240	140
<b>DZQ 45/4 B Ex t</b>	0083.0213	6,400	330
<b>DZQ 50/6 B Ex t</b>	0083.0214	5,320	165
<b>DZQ 50/4 B Ex t</b>	0083.0215	8,200	420
<b>DZQ 60/6 B Ex t</b>	0083.0216	9,450	295

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### DZS Ex t – DUST Ex axial wall fans

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
<b>DZS 20/4 B Ex t</b>	0094.0201	540	30
<b>DZS 20/2 B Ex t</b>	0094.0202	1,090	65
<b>DZS 25/4 B Ex t</b>	0094.0203	950	38
<b>DZS 25/2 B Ex t</b>	0094.0204	1,880	130
<b>DZS 30/6 B Ex t</b>	0094.0205	1,100	25
<b>DZS 30/4 B Ex t</b>	0094.0206	1,730	95
<b>DZS 30/2 B Ex t</b>	0094.0207	3,380	240
<b>DZS 35/6 B Ex t</b>	0094.0208	1,750	35
<b>DZS 35/4 B Ex t</b>	0094.0209	2,660	125
<b>DZS 35/2 B Ex t</b>	0094.0210	5,460	580
<b>DZS 40/6 B Ex t</b>	0094.0211	2,740	95
<b>DZS 40/4 B Ex t</b>	0094.0212	4,130	170
<b>DZS 50/6 B Ex t</b>	0094.0213	5,320	165
<b>DZS 50/4 B Ex t</b>	0094.0214	8,200	420
<b>DZS 60/6 B Ex t</b>	0094.0215	9,450	295

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

#### PRODUCT FEATURES

- Explosion protection and approvals in accordance with ATEX and IECEx
- Simple speed control with transformer  
Exception: EZQ 20/4-E Ex t
- Can be used flexibly, as it can be switched to ventilation or air extraction  
Exception: EZQ 20/4-E Ex t
- Safe operation thanks to high degree of protection
- Easy installation with help of a wall plate or a wall ring

#### APPLICATION EXAMPLES

- Environment with explosion hazard (zone 21 and 22)
- Woodworking
- Textile production
- Bulk storage
- Commercial spaces
- Production facilities





## DAQ Ex Ex axial wall fans (gas)



Explosion-proof axial wall fan

- ➔ Nominal size 630-710 mm
- ➔ Air volume up to 17,499 m<sup>3</sup>/h

### DAQ Ex – GAS Ex axial wall fans

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
DAQ 63/8 Ex	0073.0336	7,125	250
DAQ 63/6 Ex	0073.0335	9,500	370
DAQ 63/4 Ex	0073.0334	13,500	1100
DAQ 71/8 Ex	0073.0339	9,938	370
DAQ 71/6 Ex	0073.0338	13,251	710
DAQ 71/4 Ex	0073.0337	17,499	2200

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### PRODUCT FEATURES

- Explosion protection and approvals in accordance with ATEX
- Qualified for all gases and vapours of Ex group IIA and IIB and also for hydrogen
- Powerful fan for large air volumes
- Housing and wall plate made of sheet steel

### APPLICATION EXAMPLES

- Environment with risk of explosion (zone 1 and 2)
- Dye works
- Battery rooms
- Labs
- Commercial spaces
- Production facilities
- Process exhaust air



## DAS axial fans

Axial wall fan with wall ring and optional wall plate

- ➔ Nominal size 710-1250 mm
- ➔ Air volume up to 72,000 m<sup>3</sup>/h

### DAS axial fans

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
DAS 71/8	0083.0851	10,800	288 <sup>1)</sup>
DAS 71/6	0083.0852	15,000	570 <sup>1)</sup>
DAS 71/4	0083.0853	20,000	1,732 <sup>1)</sup>
DAS 80/8	0083.0854	13,500	666 <sup>1)</sup>
DAS 80/6	0083.0855	19,000	1,286 <sup>1)</sup>
DAS 80/4	0083.0856	28,000	4,001 <sup>1)</sup>
DAS 90/8	0083.0857	22,000	913 <sup>1)</sup>
DAS 90/6	0083.0858	30,000	1,910 <sup>1)</sup>
DAS 90/4	0083.0859	45,000	5,945 <sup>1)</sup>
DAS 100/8	0083.0860	37,000	1,122 <sup>1)</sup>
DAS 100/6	0083.0861	48,000	2,414 <sup>1)</sup>
DAS 100/4	0083.0862	69,000	7,718 <sup>1)</sup>
DAS 112/8	0083.0863	47,000	2,792 <sup>1)</sup>
DAS 112/6	0083.0864	63,000	6,002 <sup>1)</sup>
DAS 125/8	0083.0865	56,000	3,448 <sup>1)</sup>
DAS 125/6	0083.0866	72,000	7,497 <sup>1)</sup>

<sup>1)</sup> in opt. efficiency · V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### PRODUCT FEATURES

- For commercial use: durable, powerful and robust
- Easy transport and installation thanks to sturdy transport lug
- Simple installation using a wall ring
- For air extraction
- Variable speed with MFU frequency converters
- High degree of protection IP 55

### APPLICATION EXAMPLES

- Production facilities
- Commercial spaces
- Store rooms
- Process exhaust air
- Industrial halls



# AXIAL HIGH-PERFORMANCE DUCT FANS

**WE MANUFACTURE ROBUST AND POWERFUL DUCT FANS FOR  
YOUR PRODUCTION FACILITIES.  
FOR EFFECTIVE VENTILATION AND AIR EXTRACTION!**

### Application example

## Exhaust air in a machine hall via a duct fan



In industrial production facilities, the ambient air is often affected by heat, dust, dirt, etc. This polluted air must be removed in a controlled manner for various reasons:

- Occupational health and safety for employees
- Clean process air for production
- Avoidance of production impairment due to dirt

In this example, the warm, polluted air rises in the hall. This is drawn in with an axial duct fan via air grilles and transported out of the building via a ducting run. Fresh air can flow into the lower area of the hall.



❶ Intake grille, type LGR

❷ DZR duct fan

➔ Exhaust air



## EZR duct fan

- ➔ Nominal size 200-500 mm
- ➔ Air volume up to 6,670 m<sup>3</sup>/h

### EZR duct fan < 125 W

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
<b>EZR 20/2 B</b>	0086.0000	1,100	65
<b>EZR 25/4 D</b>	0086.0487	1,000	32
<b>EZR 30/6 B</b>	0086.0003	1,200	59
<b>EZR 30/4 B</b>	0086.0004	1,800	90
<b>EZR 35/6 B</b>	0086.0006	1,800	65
<b>EZR 35/4 B</b>	0086.0007	2,800	115
<b>EZR 40/6 B</b>	0086.0008	2,600	98
<b>EZR 50/8 B</b>	0086.0012	4,100	110

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### EZR duct fans > 125 W

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
<b>EZR 25/2 B</b>	0086.0002	2,200	195
<b>EZR 30/2 B</b>	0086.0005	3,690	350
<b>EZR 40/4 B</b>	0086.0009	4,550	225
<b>EZR 45/4 B</b>	0086.0011	6,670	445
<b>EZR 50/6 B</b>	0086.0013	6,030	235

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### PRODUCT FEATURES

- Can be used flexibly, as it can be switched to ventilation and air extraction
- For commercial use: durable, powerful and robust
- Can be fitted in any position
- Special versions on request

### APPLICATION EXAMPLES

- Machine extraction
- Foreman's offices
- Workshops
- Manufacturing facilities



## DZR duct fans

- ➔ Nominal size 200-600 mm
- ➔ Air volume up to 15,310 m<sup>3</sup>/h

### DZR duct fan < 125 W

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)	Pole-changeable
<b>DZR 20/2 B</b>	0086.0020	1,100	75	–
<b>DZR 25/4 D</b>	0086.0490	1,100	50	–
<b>DZR 25/84 B</b>	0086.0040	500/1,100	40/80	✓
<b>DZR 30/6 B</b>	0086.0023	1,200	70	–
<b>DZR 30/4 B</b>	0086.0024	1,800	80	–
<b>DZR 30/84 B</b>	0086.0042	900/1,800	40/100	✓
<b>DZR 35/6 B</b>	0086.0026	1,800	75	–
<b>DZR 35/4 B</b>	0086.0027	2,800	120	–
<b>DZR 40/6 B</b>	0086.0029	2,680	110	–

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

## DZR duct fans > 125 W

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
DZR 25/2 B	0086.0022	2,190	175
DZR 30/2 B	0086.0025	3,670	360
DZR 30/42 B	0086.0044	1,890/3870	70/405
DZR 35/2 B	0086.0060	5,900	750
DZR 35/42 B	0086.0065	3,050/5,960	140/2,860
DZR 40/4 B	0086.0030	4,590	230
DZR 40/2 B	0086.0061	9,030	1,525
DZR 40/84 B	0086.0048	2,270/4,540	45/250
DZR 40/42 B	0086.0066	4,550/9,140	240/1,610
DZR 45/6 B	0086.0032	4,460	160
DZR 45/4 B	0086.0033	6,720	460
DZR 50/6 B	0086.0013	6,030	235
DZR 50/4 B	0086.0062	8,900	635
DZR 50/84 B	0086.0052	4,490/8,990	135/710
DZR 56/6 B	0086.0063	8,550	440
DZR 56/4 B	0086.0037	12,640	1,170
DZR 60/6 B	0086.0064	10,060	510
DZR 60/4 B	0086.0039	14,780	1,390
DZR 60/84 B	0086.0055	7,650/15,310	280/1,630

V (m<sup>3</sup>/h): air volume · P (watt): nominal power

### PRODUCT FEATURES

- Simple speed control with transformer
- Can be used flexibly, since it can be switched to ventilation or air extraction
- For commercial use: durable, powerful and robust
- Can be fitted in any position
- Special versions on request



## DZR Ex e duct fans

Explosion-proof axial duct fan (gas)



- ➔ Nominal size 200-600 mm
- ➔ Air volume up to 9,370 m<sup>3</sup>/h

## DZR Ex e duct fans – Gas

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
DZR 20/2 B Ex e	0086.0700	1,050	65
DZR 25/4 B Ex e	0086.0701	980	38
DZR 25/2 B Ex e	0086.0702	1,950	130
DZR 30/6 B Ex e	0086.0703	1,130	25
DZR 30/4 B Ex e	0086.0704	1,760	95
DZR 30/2 B Ex e	0086.0705	3,410	240
DZR 35/6 B Ex e	0086.0706	1,700	35
DZR 35/4 B Ex e	0086.0707	2,650	125
DZR 35/2 B Ex e	0086.0708	5,230	530
DZR 40/6 B Ex e	0086.0709	2,770	95
DZR 40/4 B Ex e	0086.0710	4,200	170
DZR 45/6 B Ex e	0086.0711	4,160	150
DZR 45/4 B Ex e	0086.0712	6,200	350
DZR 50/6 B Ex e	0086.0713	5,520	175
DZR 50/4 B Ex e	0086.0714	8,190	445
DZR 60/6 B Ex e	0086.0715	9,370	295

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### PRODUCT FEATURES

- Explosion protection and approval in accordance with ATEX and IECEx
- Qualified for all gases and vapours of Ex group IIA and IIB and also for hydrogen
- For easy and direct installation in a duct system

### APPLICATION EXAMPLES

- Environment with risk of explosion (zone 1 and 2)
- Machine extraction
- Hazardous materials storage
- Paint shop
- Manufacturing facilities





## DZR Ex t duct fans

Explosion-proof axial duct fan (dust)



- ➔ Nominal size 200-600 mm
- ➔ Air volume up to 9,370 m<sup>3</sup>/h

### DZR Ex t duct fans – Dust

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
DZR 20/2 B Ex t	0086.0720	1,050	65
DZR 25/4 B Ex t	0086.0721	980	38
DZR 25/2 B Ex t	00860.722	1,950	130
DZR 30/6 B Ex t	0086.0723	1,130	25
DZR 30/4 B Ex t	0086.0724	1,760	95
DZR 30/2 B Ex t	0086.0725	3,410	240
DZR 35/6 B Ex t	0086.0726	1,700	35
DZR 35/6 B Ex t	0086.0727	2,650	125
DZR 35/2 B Ex t	0086.0728	5,230	530
DZR 40/6 B Ex t	0086.0729	2,770	95
DZR 40/4 B Ex t	0086.0730	4,200	170
DZR 45/6 B Ex t	0086.0731	4,160	150
DZR 45/4 B Ex t	0086.0732	6,200	350
DZR 50/6 B Ex t	0086.0733	5,520	175
DZR 50/4 B Ex t	0086.0734	8,190	445
DZR 60/6 B Ex t	0086.0735	9,370	295

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

#### PRODUCT FEATURES

- Explosion protection and approvals in accordance with ATEX and IECEx
- Qualified for all dusts of the Ex-group IIIA and IIIB
- Types of ignition protection: “t” – protection through housing and “c” – constructional safety
- Can be switched to ventilation or air extraction
- Can be fitted in any position

#### APPLICATION EXAMPLES

- Environment with risk of explosion (zone 21 and 22)
- Woodworking
- Textile production
- Bulk storage
- Workplace extraction



## DAR duct fans

- ➔ Nominal size 630-1,600 mm
- ➔ Air volume up to 142,920 m<sup>3</sup>/h

### DAR duct fans – nominal size 630 mm

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
DAR 63/8 0.25	0073.0128	9,540	250
DAR 63/8 0.18	0073.0127	8,100	180
DAR 63/6 0.55	0073.0126	13,838	550
DAR 63/6 0.37	0073.0125	11,390	370
DAR 63/6 0.25	0073.0124	8,460	250
DAR 63/4 2.2	0073.0123	21,701	2,200
DAR 63/4 1.5	0073.0122	17,168	1,500
DAR 63/4 1.1	0073.0121	15,084	1,100

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### DAR duct fans – nominal size 710 mm

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
DAR 71/8 0.37	0073.0136	12,708	370
DAR 71/8 0.25	0073.0135	11,628	1,100
DAR 71/6 0.75	0073.0134	16,995	750
DAR 71/6 0.55	0073.0133	15,091	550
DAR 71/6 0.37	0073.0132	13,032	370
DAR 71/4 3	0073.0131	25,920	3,000
DAR 71/4 2.2	0073.0130	23,119	2,200
DAR 71/4 1.5	0073.0129	20,491	1,500

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### DAR duct fans – nominal size 800 mm

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
DAR 80/8 1.1	0073.0150	21,528	1,100
DAR 80/8 0.75	0073.0149	20,124	750
DAR 80/8 0.55	0073.0148	17,424	550
DAR 80/6 1.5	0073.0147	19,951	1,500
DAR 80/6 1.1-1	0073.0145	20,340	1,100
DAR 80/6 1.1-2	0073.0146	18,374	1,100
DAR 80/6 0.75	0073.0144	12,758	750
DAR 80/6 0.55	0073.0143	16,596	550
DAR 80/4 5.5	0073.0142	31,500	5,500
DAR 80/4 4-1	0073.0140	31,478	4,000
DAR 80/4 4-2	0073.0141	27,299	4,000
DAR 80/4 3-1	0073.0138	26,140	3,000
DAR 80/4 3-2	0073.0139	23,627	3,000
DAR 80/4 2.2	0073.0137	22,619	2,200

V (m<sup>3</sup>/h): Air volume · watt: Nominal power

### DAR duct fans – nominal size 900 mm

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
DAR 90/8 1.5	0073.0164	29,016	1,500
DAR 90/8 1.1	0073.0163	25,812	1,100
DAR 90/6 3	0073.0162	31,921	3,000
DAR 90/6 2.2	0073.0161	28,649	2,200
DAR 90/6 1.5-2	0073.0160	25,229	1,500
DAR 90/6 1.5-1	0073.0159	28,141	1,500
DAR 90/6 1.1	0073.0158	23,231	1,100
DAR 90/6, 75	0073.0157	19,649	750
DAR 90/4 9.2	0073.0156	50,000	9,200
DAR 90/4 7.5	0073.0155	39,500	7,500
DAR 90/4 5.5-1	0073.0153	41,839	5,500
DAR 90/4 5.5-2	0073.0154	33,000	5,500
DAR 90/4 4	0073.0152	35,230	4,000
DAR 90/4 3	0073.0151	30,121	3,000

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### DAR duct fans – nominal size 1000 mm

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
DAR 100/8 2.2	0073.0180	34,999	2,200
DAR 100/8 1.5	0073.0179	25,884	1,500
DAR 100/8 1.1	0073.0178	21,787	1,100
DAR 100/6 5.5	0073.0177	49,900	5,500
DAR 100/6 4	0073.0176	34,650	4,000
DAR 100/6 3	0073.0175	27,562	3,000
DAR 100/6 2.2	0073.0174	37,861	2,200
DAR 100/6 1.5	0073.0173	29,768	1,500
DAR 100/6 1.1	0073.0172	26,050	1,100
DAR 100/4 15	0073.0171	69,998	15,000
DAR 100/4 11	0073.0170	61,841	11,000
DAR 100/4 9.2	0073.0169	51,451	9,200
DAR 100/4 7.5-1	0073.0167	59,648	7,500
DAR 100/4 7.5-2	0073.0168	43,574	7,500
DAR 100/4 5.5	0073.0166	47,812	5,500
DAR 100/4 4	0073.0165	39,802	4,000

V (m<sup>3</sup>/h): Air volume · watt: Nominal power





## DAR duct fans

- ➔ Nominal size 630-1,600 mm
- ➔ Air volume up to 142,920 m<sup>3</sup>/h

### DAR duct fans – nominal size 1120

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
<b>DAR 112/8 3</b>	0073.0185	46,080	3,000
<b>DAR 112/8 2.2</b>	0073.0184	39,600	2,200
<b>DAR 112/6 7.5</b>	0073.0183	65,520	7,500
<b>DAR 112/6 5.5</b>	0073.0182	56,880	5,500
<b>DAR 112/6 4</b>	0073.0181	48,240	4,000

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### DAR duct fans – nominal size 1250

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
<b>DAR 125/8 4</b>	0073.0191	59,040	4,000
<b>DAR 125/8 3</b>	0073.0190	51,840	3,000
<b>DAR 125/8 2.2</b>	0073.0189	45,360	2,200
<b>DAR 125/6 11</b>	0073.0188	78,840	11,000
<b>DAR 125/6 7.5</b>	0073.0187	73,080	7,500
<b>DAR 125/6 5.5</b>	0073.0186	65,160	5,500

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### DAR duct fans – nominal size 1400

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
<b>DAR 140/8 7.5</b>	0073.0195	84,960	7,500
<b>DAR 140/8 5.5</b>	0073.0194	71,280	5,500
<b>DAR 140/6 15</b>	0073.0193	104,040	15,000
<b>DAR 140/6 11</b>	0073.0192	91,800	11,000

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### DAR duct fans – nominal size 1600

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
<b>DAR 160/8 11</b>	0073.0199	114,120	11,000
<b>DAR 160/8 7.5</b>	0073.0198	93,240	7,500
<b>DAR 160/6 22</b>	0073.0197	142,920	22,000
<b>DAR 160/6 15</b>	0073.0196	119,520	15,000

V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

#### PRODUCT FEATURES

- Powerful fan for large air volumes
- For easy and direct installation in a duct system
- Can be fitted in any position
- Variable speed with frequency converter

#### APPLICATION EXAMPLES

- Machine extraction
- Manufacturing facilities





## DAR Ex duct fans (gas)



Explosion-proof axial duct fan

- ➔ Nominal size 630-1000 mm
- ➔ Air volume up to 70,000 m<sup>3</sup>/h

### DAR Ex duct fans – Gas

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
DAR 63/8 Ex	0073.0349	8,100	180
DAR 63/6 Ex	0073.0348	11,390	370
DAR 63/4-1 Ex	0073.0346	15,084	1,100
DAR 63/4-2 Ex	0073.0347	14,293	1,100
DAR 71/8 Ex	0073.0353	9,784	370
DAR 71/6 Ex	0073.0352	13,045	750
DAR 71/4-1 Ex	0073.0350	19,568	2,200
DAR 71/4-2 Ex	0073.0351	16,378	2,200
DAR 80/8-1 Ex	0073.0360	14,751	550
DAR 80/8-2 Ex	0073.0361	12,885	550
DAR 80/8-3 Ex	0073.0362	10,989	370
DAR 80/6-1 Ex	0073.0357	19,951	1,500
DAR 80/6-2 Ex	0073.0358	18,374	1,100
DAR 80/6-3 Ex	0073.0359	14,000	750
DAR 80/4-1 Ex	0073.0354	31,500	5,500
DAR 80/4-2 Ex	0073.0355	26,140	4,000
DAR 80/4-3 Ex	0073.0356	23,627	3,000
DAR 90/8-1 Ex	0073.0369	23,923	1,500
DAR 90/8-2 Ex	0073.0370	21,363	1,100
DAR 90/8-3 Ex	0073.0371	19,449	1,100
DAR 90/6-1 Ex	0073.0366	31,921	3,000
DAR 90/6-2 Ex	0073.0367	28,649	2,200
DAR 90/6-3 Ex	0073.0368	25,229	1,500
DAR 90/4-1 Ex	0073.0363	50,000	9,000
DAR 90/4-2 Ex	0073.0364	39,500	7,500
DAR 90/4-3 Ex	0073.0365	33,000	5,500
DAR 100/8-1 Ex	0073.0378	35,000	2,200
DAR 100/8-2 Ex	0073.0379	25,884	1,500
DAR 100/8-3 Ex	0073.0380	21,787	1,100
DAR 100/6-1 Ex	0073.0375	49,900	5,500
DAR 100/6-2 Ex	0073.0376	34,650	4,000
DAR 100/6-3 Ex	0073.0377	27,562	3,000
DAR 100/4-1 Ex	0073.0372	70,000	15,000
DAR 100/4-2 Ex	0073.0373	61,840	11,000
DAR 100/4-3 Ex	0073.0374	43,574	7,500

V (m<sup>3</sup>/h): Air volume · watt: Nominal power

#### PRODUCT FEATURES

- Explosion protection and approvals in accordance with ATEX
- Qualified for all gases and vapours of Ex group IIA and IIB and also for hydrogen
- Powerful fan for large air volumes
- For easy and direct installation in a duct system
- Can be fitted in any position

#### APPLICATION EXAMPLES

- Environment with risk of explosion (zone 1 and 2)
- Production facilities
- Hazardous materials storage
- Process exhaust air
- Industrial halls

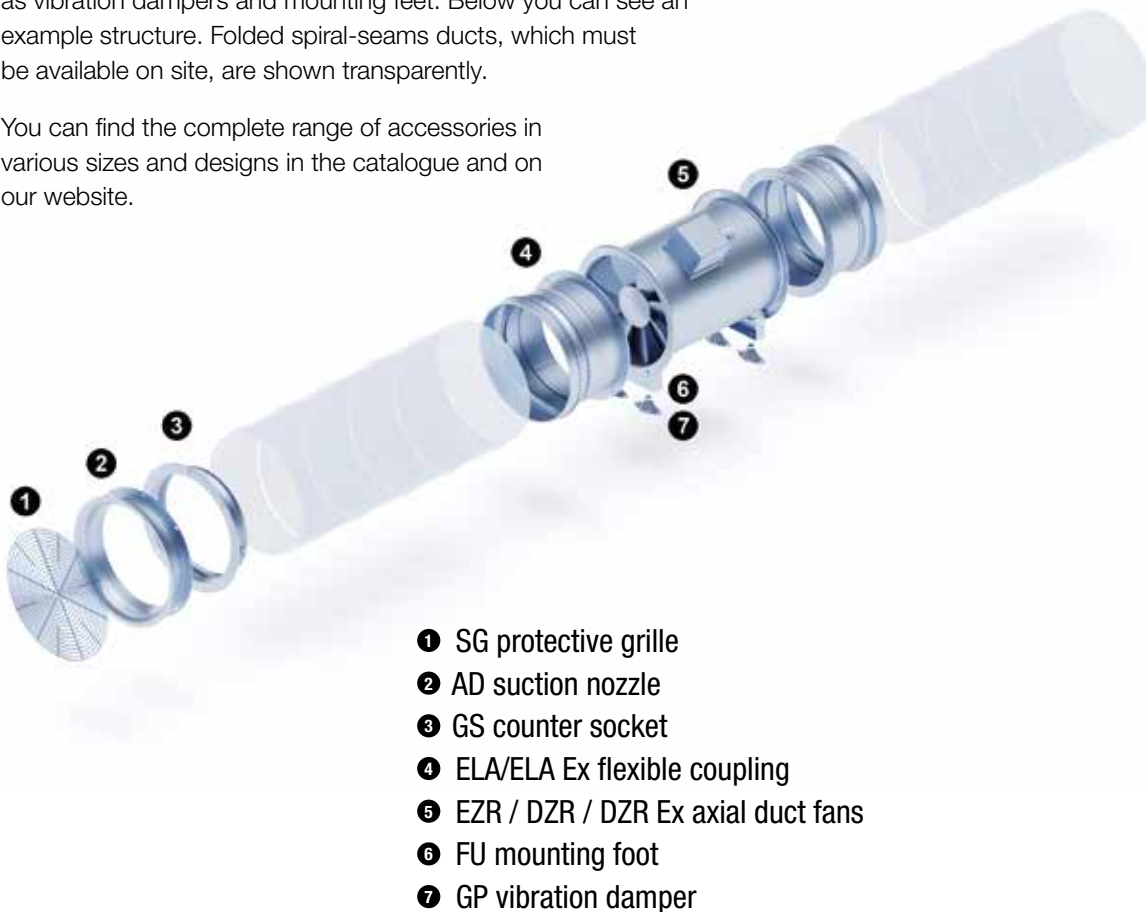


System graphics

**EZR / DZR / Ex** 

In addition to axial duct fans such as the EZR/DZR, MAICO also offers the DZR Ex variant for environments with a risk of explosion. As a system provider, we also offer a wide range of accessories such as protective grilles, suction nozzles, couplings and counter sockets as well as vibration dampers and mounting feet. Below you can see an example structure. Folded spiral-seams ducts, which must be available on site, are shown transparently.

You can find the complete range of accessories in various sizes and designs in the catalogue and on our website.



- ❶ SG protective grille
- ❷ AD suction nozzle
- ❸ GS counter socket
- ❹ ELA/ELA Ex flexible coupling
- ❺ EZR / DZR / DZR Ex axial duct fans
- ❻ FU mounting foot
- ❼ GP vibration damper

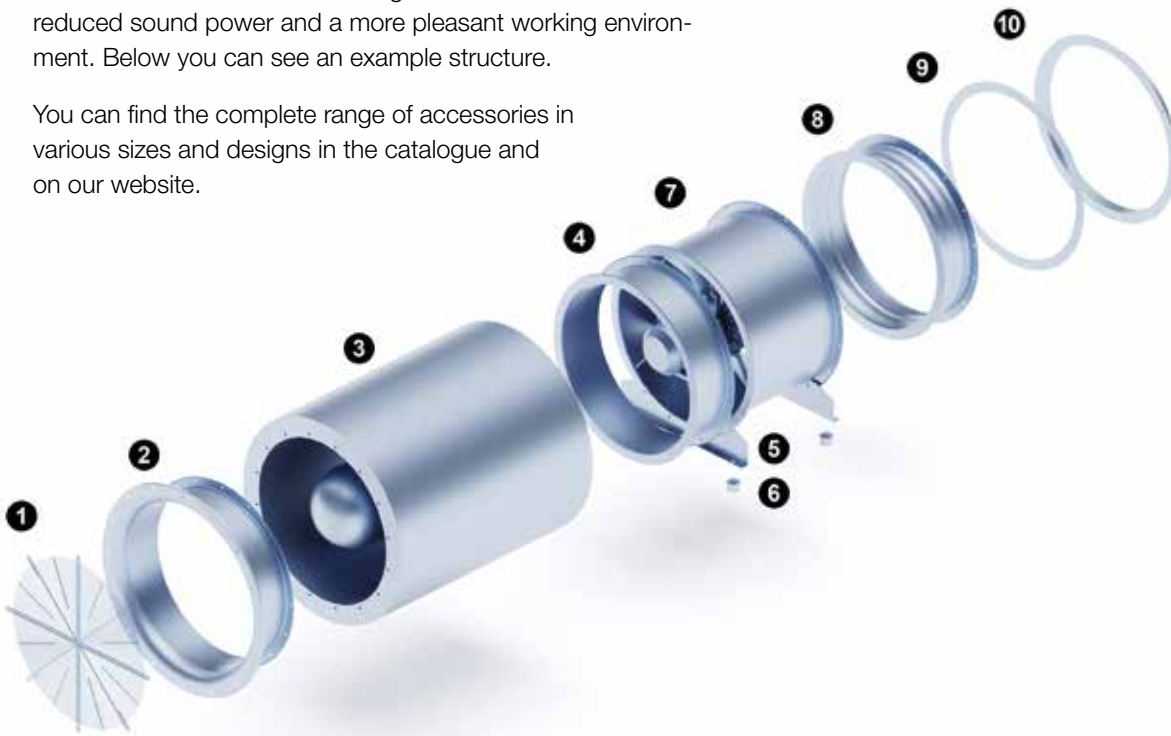
## System graphics

### DAR / Ex



The DAR axial duct fan is also available in an explosion-proof DAR Ex version. In addition to basic accessories such as the mounting foot, protective grille and suction nozzle, MAICO also offers modular accessories such as the matching tubular sound absorber for reduced sound power and a more pleasant working environment. Below you can see an example structure.

You can find the complete range of accessories in various sizes and designs in the catalogue and on our website.



- ❶ SGRI protective grille
- ❷ ADI suction nozzle
- ❸ RSI/RSKI tubular sound absorber
- ❹ GVI housing extension
- ❺ FUI mounting foot
- ❻ GPI vibration damper
- ❼ DAR / DAR Ex axial duct fan
- ❽ ELI/ELI Ex flexible coupling
- ❾ GFI counter flange
- ❿ GSI counter socket



# **CENTRIFUGAL / SEMI-CENTRIFUGAL / BOX / DIAGONAL DUCT FANS**

**OUR PORTFOLIO INCLUDES CENTRIFUGAL, SEMI-CENTRIFUGAL,  
DIAGONAL AND SOUND-INSULATED FANS  
FOR INSTALLATION IN YOUR DUCT SYSTEMS AND VENTILATION BOXES.**

Application example

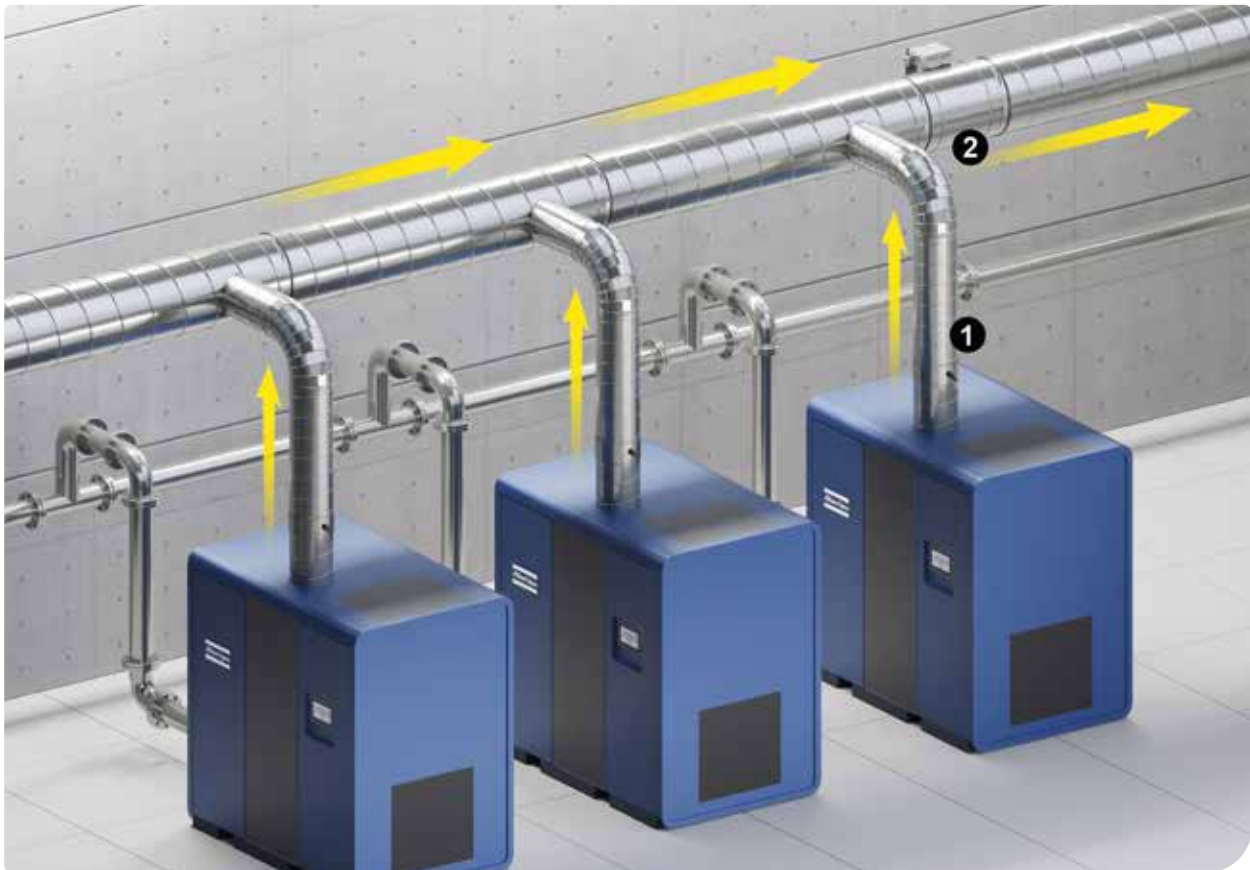
## Exhaust air system for industrial facilities

In industrial production facilities, the ambient air is often affected by heat, dust, dirt, etc. This polluted air must be removed in a controlled manner for various reasons:

- Occupational health and safety for employees
- Clean process air for production
- Avoidance of production impairment due to dirt



In the example shown, the warm compressor exhaust air is drawn directly into the duct system via connection sockets on the respective compressors. A powerful EDR diagonal fan conveys the exhaust air outside.



### HEAT EXTRACTION FROM COMPRESSORS

Electrical compressor connected load:	110 kW
Room volume of the installation room:	300 m <sup>3</sup>
Power loss of the compressors in heat: 10% of the electrical output	
Number of compressors:	4 items

- ❶ Folded spiral-seams duct
- ❷ EDR fan
- ➡ Exhaust air

What exhaust air volumetric flow is required for heat dissipation?

Heat emission to the installation room:  
 1 compressor  $\triangleq Q_k = 0.1 \cdot 110 \text{ kW} \rightarrow Q_k = 11 \text{ kW}$   
 4 compressors  $\triangleq 4 Q_k = 44 \text{ kW}$

Required volumetric air flow at a temperature difference of 8K?

$$V = \frac{4 \cdot Q_k}{C_{\text{air}} \cdot \Delta T} \quad V = \frac{4 \cdot 11 \text{ kW}}{0.35 \text{ Wh (m}^3 \cdot \text{K)} \cdot 8 \text{ K}} \quad V = \frac{4 \cdot 11000 \text{ W}}{0.35 \text{ Wh (m}^3 \cdot \text{K)} \cdot 8 \text{ K}}$$

**V = 15714 m<sup>3</sup>/h**  
**Suitable duct fan: EDR 71**

## Application example

## Supply and exhaust air with the ECR/ESR ventilation boxes

Wherever there is little space available for the ventilation system, the ECR compact boxes are ideal. Thanks to their low mounting height, they fit easily into suspended ceilings. This makes it easy to install the supply air and exhaust ducts. Special highlight: The air filter, fan and air heater are already integrated in the supply air unit. This saves you space, installation and the purchase of additional components.



In the example shown, a sound-insulated ECR compact box with heat register supplies a shop with supply air. The air inlets and outlets are distributed across the entire ceiling surface in such a way that the room is optimally cross-ventilated. The ESR ventilation box then conveys the exhaust air outside via the exhaust air system. Both ventilation boxes are controlled via a common control. This means that the two units are always perfectly harmonised.



- ❶ External grille type MLZ or type MLA (not shown)
- ❷ Compactbox ECR
- ❸ Supply air grille type LGR
- ❹ Exhaust air grille type LGR (not shown)
- ❺ ESR sound-insulated ventilation box
- ❻ External grille outgoing air type MLZ, type MLA or shutter type AS (not shown)

- ➡ Outside air
- ➡ Heated supply air
- ➡ Exhaust air
- ➡ Outgoing air



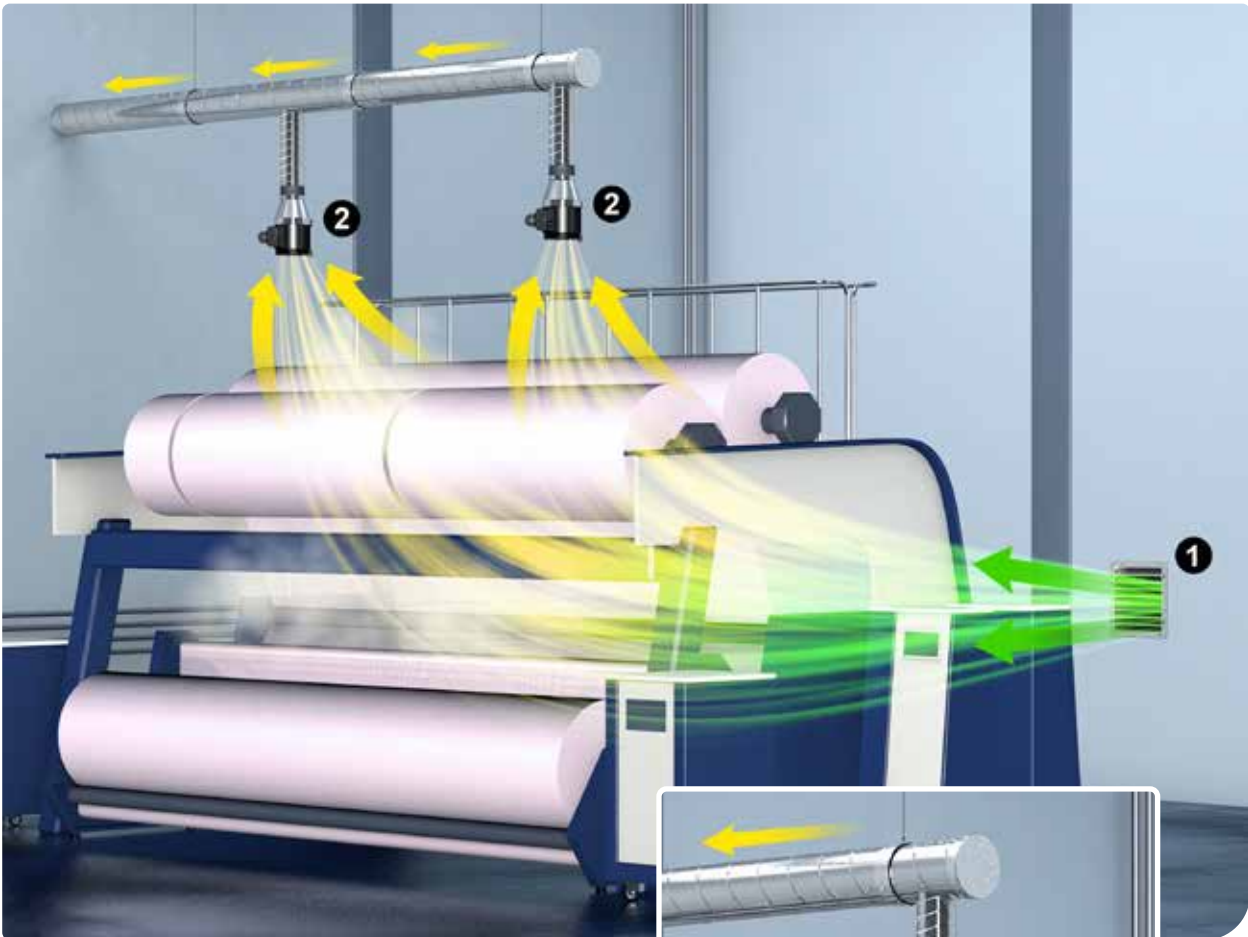
Application example

# 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



## ERR, ERR-2 EC centrifugal duct fans

- ➔ Nominal size 100-315 mm
- ➔ Air volume up to 1,370 m<sup>3</sup>/h

### ERR centrifugal duct fans

Article	Article no.	DN	V (m <sup>3</sup> /h)	P (watt)
ERR 10/1	0080.0270	100	220	27
ERR 10/1 S	0080.0271	100	250	51
ERR 12/1	0080.0272	125	270	27
ERR 16/1	0080.0273	160	350	29
ERR 16/1 S	0080.0274	160	720	112
ERR 20/1	0080.0275	200	840	116
ERR 25/1	0080.0277	250	1,060	148
ERR 31/1	0080.0278	315	1,370	258

DN: nominal size · V (m<sup>3</sup>/h): air volume · P (watt): Nominal power

### ERR-2 EC centrifugal duct fans

Article	Article no.	DN	V (m <sup>3</sup> /h)	P (watt)
ERR 10/2 EC	0073.0583	100	362	122
ERR 12/2 EC	0073.0584	125	468	122
ERR 15/2 EC	0073.0585	150	587	121
ERR 16/2 EC	0073.0586	160	903	173
ERR 20/2 EC	0073.0587	200	1,017	170
ERR 25/2 EC	0073.0588	250	1,056	171

DN: nominal size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

#### PRODUCT FEATURES

- For commercial use: durable, powerful and robust
- Can be fitted in any position
- Very compact and space-saving

#### APPLICATION EXAMPLES

- Machine extraction
- Workplace extraction
- Manufacturing facilities
- Store rooms
- Workshops
- Common rooms



## EFR centrifugal flat box

Centrifugal flat box with compact dimensions

- ➔ Nominal size 100-125 mm
- ➔ Air volume up to 255 m<sup>3</sup>/h

### EFR centrifugal flat box

Article	Article no.	DN	V (m <sup>3</sup> /h)	P (watt)
EFR 10	0080.0570	100	220	52
EFR 12	0080.0572	125	255	53

DN: nominal size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

#### PRODUCT FEATURES

- Smallest dimensions for installation where space is limited
- Ideal for redevelopment
- Simple, rapid installation
- User-friendly, uncomplicated operation

#### APPLICATION EXAMPLES

- Single-family homes
- Offices
- Foreman's offices
- WCs





## AWV, AWV-2 EC centrifugal external wall fan

- ➔ Nominal size 100-200 mm
- ➔ Air volume up to 740 m<sup>3</sup>/h

### AWV centrifugal external wall fan

Article	Article no.	DN	V (m <sup>3</sup> /h)	P (watt)
<b>AWV 10</b>	0080.0994	100	220	26
<b>AWV 15</b>	0080.0996	150	340	55
<b>AWV 15 S</b>	0080.0997	150	620	106
<b>AWV 20</b>	0080.0998	200	650	116
<b>AWV 20 S</b>	0080.0999	200	740	152

DN: nominal size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

### AWV-2 EC centrifugal external wall fan

Article	Article no.	DN	V (m <sup>3</sup> /h)	P (watt)
<b>AWV 10/2 EC</b>	0073.0595	100	347	119
<b>AWV 12/2 EC</b>	0073.0596	120	527	123
<b>AWV 15/2 EC</b>	0073.0597	150	605	122
<b>AWV 16/2 EC</b>	0073.0598	160	723	89

DN: nominal size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

#### PRODUCT FEATURES

- Ideal for redevelopments and retrofitting
- Space saving due to external installation
- Fast, cost-effective installation
- Optimum efficiency, low maintenance costs
- Pleasantly quiet
- Housing can be easily removed for cleaning

#### APPLICATION EXAMPLES

- Machine extraction
- Workplaces
- Commercial spaces
- Fitness rooms



## ESR-3 EC sound-insulated ventilation box

Sound-insulated ventilation box with swivelling fan

- ➔ Nominal size 125-315 mm
- ➔ Air volume up to 1,800 m<sup>3</sup>/h

### ESR-3 EC sound-insulated ventilation box

Article	Article no.	DN	V (m <sup>3</sup> /h)	P (watt)
<b>ESR 12-3 EC</b>	0080.1000	125	490	118
<b>ESR 16-3 EC</b>	0080.1001	160	580	120
<b>ESR 20-3 EC</b>	0080.1002	200	770	97
<b>ESR 25-3 EC</b>	0080.1003	250	1,170	148
<b>ESR 31-3 EC</b>	0080.1004	315	1,800	274

DN: nominal size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

#### PRODUCT FEATURES

- Low energy consumption thanks to EC technology
- Low power consumption, especially in the control range
- Quick, cost-effective installation thanks to standard fixing brackets
- Screwed on housing cover with rain cover
- Suitable for outdoor installation
- Inlet and outlet side connection socket for direct installation in ventilation ducts
- With 40 mm of sound-absorbing glass-fibre laminated mineral wool to meet the increased requirements for especially low noise levels
- Centrifugal impeller with backward curved blades

#### APPLICATION EXAMPLES

- Commercial spaces
- Showrooms
- Offices
- Foreman's offices
- Changing rooms



## ECR-2 EC compact boxes

Compact supply air unit with integrated electric air heater

- ➔ Nominal size 125-315 mm
- ➔ Air volume up to 1,200 m<sup>3</sup>/h

### ECR-2 EC compact boxes

Article	Article no.	DN	V (m <sup>3</sup> /h)	P (watt)
<b>ECR 12-2 EC</b>	0080.0774	125	500	3,124
<b>ECR 16-2 EC</b>	0080.0775	160	580	3,124
<b>ECR 20-2 EC</b>	0080.0776	200	620	4,662
<b>ECR 25-2 EC</b>	0080.0777	250	1,190	9,200
<b>ECR 31-2 EC</b>	0080.0778	315	1,200	9,200

DN: nominal size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power



## EKR-2 sound-insulated exhaust air box

- ➔ Nominal size 200-400 mm
- ➔ Air volume up to 7,750 m<sup>3</sup>/h

### EKR-2 sound-insulated exhaust air box

Article	Article no.	DN	V (m <sup>3</sup> /h)	P (watt)
<b>EKR 20-2</b>	0080.0882	200	1,650	260 <sup>1)</sup>
<b>EKR 25-2</b>	0080.0883	250	2,500	450 <sup>1)</sup>
<b>EKR 31-2</b>	0080.0884	315	3,400	722 <sup>1)</sup>
<b>EKR 35-2</b>	0080.0885	355	5,800	850 <sup>1)</sup>
<b>EKR 40-2</b>	0080.0886	400	7,750	1,340 <sup>1)</sup>

<sup>1)</sup>in opt. efficiency

DN: nominal size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power



## EDR diagonal fan

High-pressure diagonal duct fan

- ➔ Nominal size 250-710 mm
- ➔ Air volume up to 23,140 m<sup>3</sup>/h

### EDR diagonal fan

Article	Article no.	DN	V (m <sup>3</sup> /h)	P (watt)
<b>EDR 25</b>	0080.0656	250	1,700	170 <sup>1)</sup>
<b>EDR 31</b>	0080.0657	315	3,400	460 <sup>1)</sup>
<b>EDR 35</b>	0080.0658	355	5,000	860 <sup>1)</sup>
<b>EDR 40</b>	0080.0660	400	3,440	200 <sup>1)</sup>
<b>EDR 45</b>	0080.0661	450	5,200	410 <sup>1)</sup>
<b>EDR 50</b>	0080.0662	500	6,720	640 <sup>1)</sup>
<b>EDR 56</b>	0080.0663	560	10,800	1,445 <sup>1)</sup>
<b>EDR 63</b>	0080.0664	630	16,250	2,745 <sup>1)</sup>
<b>EDR 71</b>	0080.0665	710	23,140	5,123 <sup>1)</sup>

<sup>1)</sup>in opt. efficiency

DN: nominal size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

### PRODUCT FEATURES

- Compact supply air unit with filter, electric air heater and control
- Stepless fan control: constant volumetric flow/ constant pressure/ constant speed/ temperature/ CO<sub>2</sub> controlled.
- With insulation for the lowest noise level and best thermal insulation

### APPLICATION EXAMPLES

- Workplaces
- Medical practices
- Common rooms
- Fitness rooms
- Restaurants

### PRODUCT FEATURES

- Especially for harsh operating conditions and kitchen exhaust air
- Supply of medium to large air volumes at high resistances
- Suitable for high airstream temperatures up to 120° C
- Motor outside of the air flow

### APPLICATION EXAMPLES

- Range hoods
- Commercial kitchens
- Workplace extraction
- Machine extraction

### PRODUCT FEATURES

- Extremely high efficiency
- Minimum energy costs
- Very quiet thanks to optimised aerodynamics
- Integrated mounting bracket for easy installation

### APPLICATION EXAMPLES

- Machine extraction
- Workplace extraction
- Manufacturing facilities
- Store rooms
- Workshops



## ERM Ex e – Ex semi-centrifugal duct fans made of plastic (medium: gas)



- ➔ Nominal size 180-250 mm
- ➔ Air volume up to 1,010 m<sup>3</sup>/h

### ERM Ex e – GAS Ex semi-centrifugal duct fans

Article	Article no.	DN	V (m <sup>3</sup> /h)	P (watt)
ERM 18 Ex e	0080.0290	180	310	50
ERM 18 Ex e/60 Hz	0080.0373	180	340	88
ERM 22 Ex e	0080.0288	200	560	200
ERM 22 Ex e/60 Hz	0080.0374	200	675	310
ERM 25 Ex e	0080.0249	250	870	300
ERM 25 Ex e/60 Hz	0080.0375	250	1,010	495

DN: nominal size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

#### PRODUCT FEATURES

- Explosion protection and approvals in accordance with ATEX and IECEx
- Qualified for all gases and vapours of Ex group IIA and IIB and also for hydrogen
- Housing made of high quality, conductive plastic, antistatic
- Compact design for installation in small spaces
- Can be fitted in any position

#### APPLICATION EXAMPLES

- Environment with risk of explosion (zone 1 and 2)
- Dye works
- Battery rooms
- Commercial spaces
- Production facilities



## ERM Ex t – Ex semi-centrifugal duct fans



Semi-centrifugal duct fan made of plastic (medium: dust)

- ➔ Nominal size 180-250 mm
- ➔ Air volume up to 1,010 m<sup>3</sup>/h

### ERM Ex t – DUST Ex semi-centrifugal duct fans

Article	Article no.	DN	V (m <sup>3</sup> /h)	P (watt)
ERM 18 Ex t	0080.0466	180	310	50
ERM 18 Ex t/60 Hz	0080.0376	180	340	88
ERM 22 Ex t	0080.0467	200	560	200
ERM 22 Ex t/60 Hz	0080.0377	200	675	310
ERM 25 Ex t	0080.0468	250	870	300
ERM 25 Ex t/60 Hz	0080.0378	250	1,010	495

DN: nominal size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

#### PRODUCT FEATURES

- Explosion protection and approvals in accordance with ATEX and IECEx
- Qualified for all dusts of the Ex-group IIIA and IIIB
- Housing made of high quality, conductive plastic, antistatic
- Compact design for installation in small spaces
- Can be fitted in any position

#### APPLICATION EXAMPLES

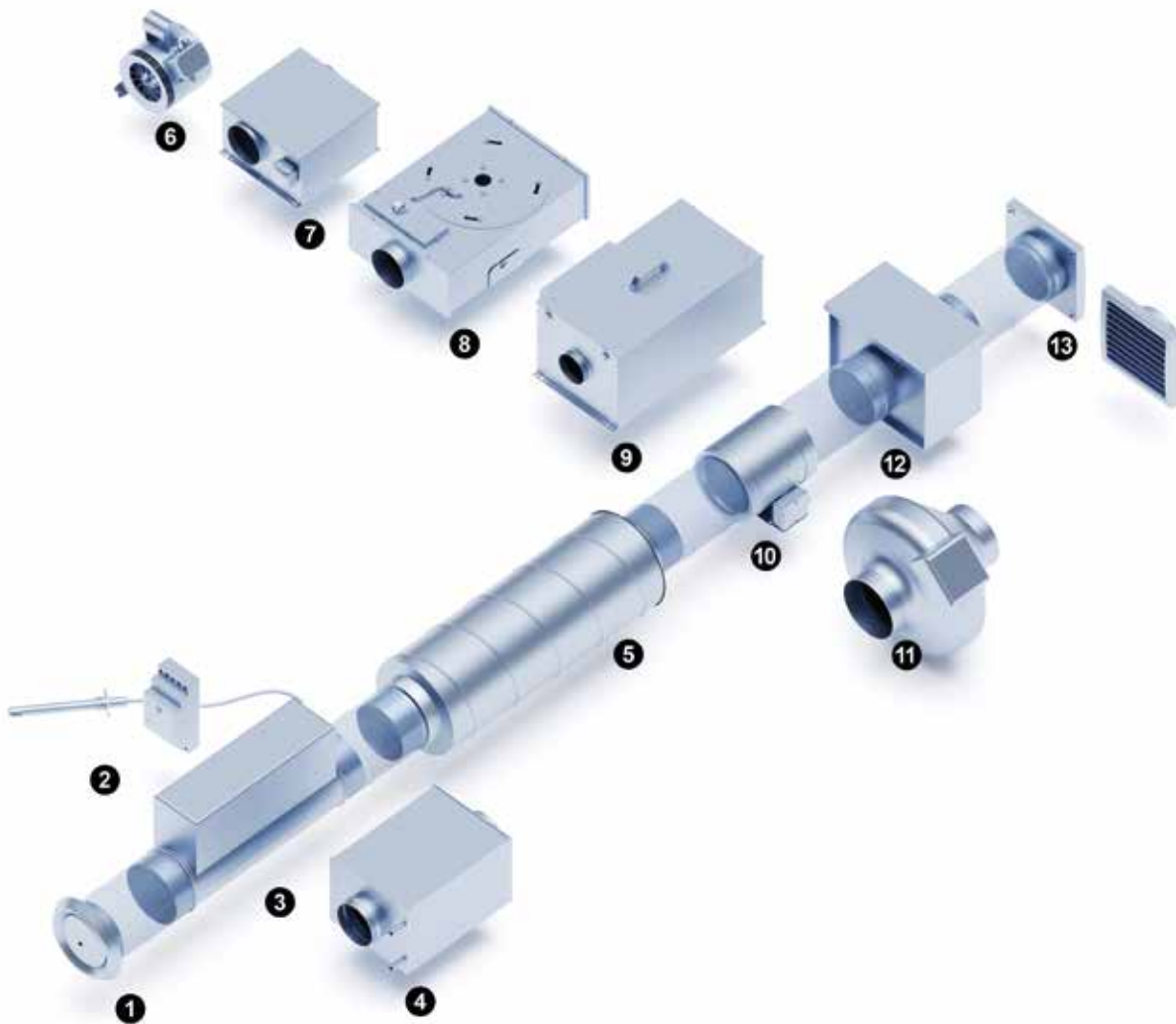
- Environment with risk of explosion (zone 21 and 22)
- Pellet storage
- Food industry
- Machine extraction

## System graphics

**Centrifugal / semi-centrifugal / box / diagonal duct fans**

In our portfolio you will find numerous centrifugal, semi-centrifugal, diagonal and sound-insulated box fans for installation in your duct systems. To fully equip you, we also stock associated accessories such as air flow monitors, electric and water air heaters as well as air filters and disc valves. Below you can see an example structure. Folded spiral-seams ducts, which must be available on site, are shown transparently.

You can find the complete range of accessories in various sizes and designs in the catalogue and on our website.



- ❶ TK disk valve
- ❷ LW 9 air flow monitor
- ❸ ERH electric air heater
- ❹ WRH water/air heater
- ❺ RSR -1 tubular sound absorber
- ❻ ERM Ex semi-centrifugal duct fans
- ❼ ESR-3 EC sound-insulated ventilation box

- ❽ EFR centrifugal flat box
- ❾ ECR-2 EC compact boxes
- ❿ EDR diagonal fan
- ⓫ ERR-2 EC centrifugal duct fans
- ⓬ TFE air filter
- ⓭ SG external grille

# CENTRIFUGAL BLOWER

OUR RANGE INCLUDES CENTRIFUGAL BLOWERS MADE OF METAL, STAINLESS STEEL AND PLASTIC WITH ROUND AND RECTANGULAR EXHAUST OPENINGS.

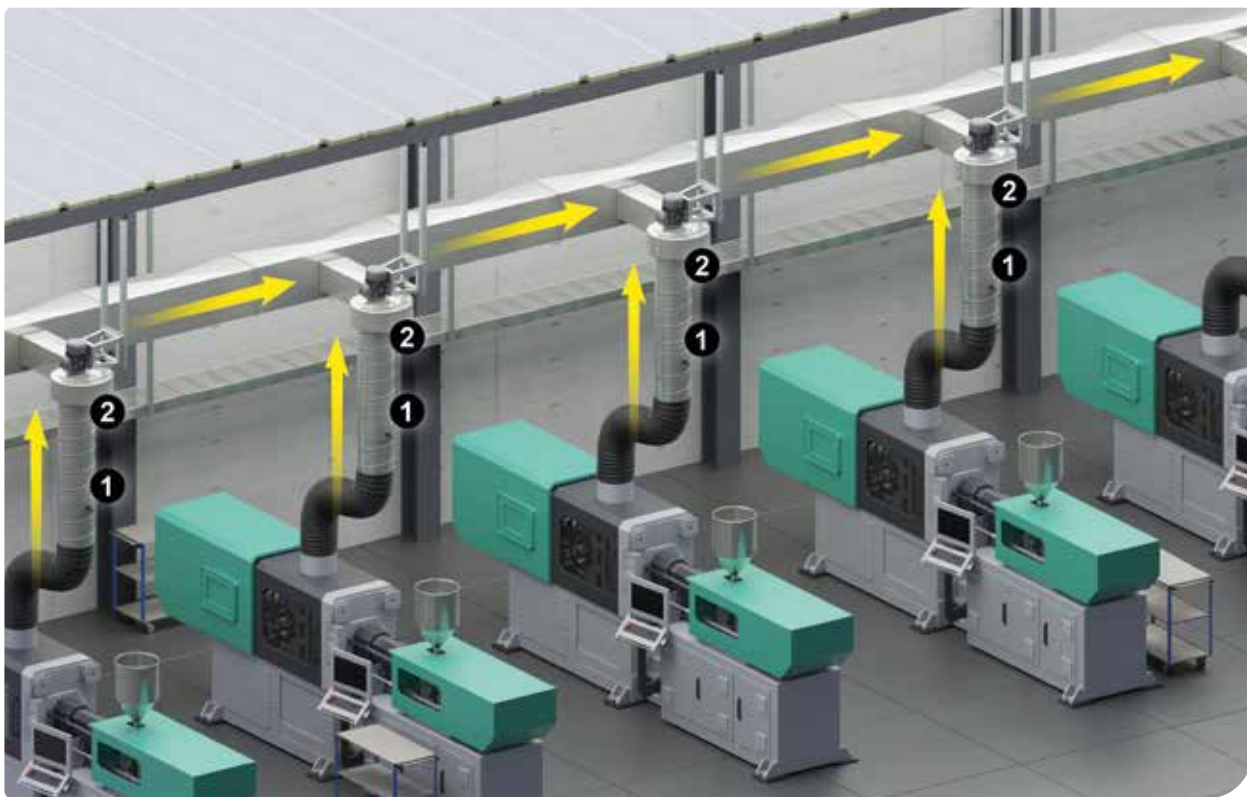
## Application example

## Avoidance of polluted indoor air

In industrial production facilities, the ambient air is often affected by heat, dust, dirt, etc. This polluted air must be removed in a controlled manner for various reasons:

- Occupational health and safety for employees
- Clean process air for production
- Avoidance of production impairment due to dirt

In this example, this contaminated air is conveyed directly from the injection moulding system via a folded spiral-seams duct. This keeps the room air clean and uncontaminated. The GRK centrifugal blower is a high-pressure fan that draws the exhaust air directly out of the machine and blows it into the exhaust duct. As the motor is located outside the air flow and the housing is made of plastic, the centrifugal blower is also particularly suitable for conveying corrosive and acidic media.



## HEAT EXTRACTION FROM INJECTION MOULDING MACHINES

Specification of the manufacturer of the injection moulding machine:  
35% power loss of the electrical output  
Electrical output of the injection moulding machine: 47 kW

Required volumetric air flow at a temperature difference of 10K?

$$Q_{\text{IMM}} = 0.35 \cdot P_{\text{el,IMM}}$$

$$Q_{\text{IMM}} = 0.35 \cdot 47 \text{ kW}$$

$$Q_{\text{IMM}} = 16.45 \text{ kW (heat load)}$$

Required volumetric air flow at a temperature difference of 8K?

$$V = \frac{Q_{\text{IMM}}}{C_{\text{air}} \cdot \Delta T} \quad V = \frac{16.45 \text{ kW}}{0.35 \text{ Wh (m}^3 \cdot \text{K)} \cdot 10 \text{ K}} \quad V = \frac{16450 \text{ W}}{0.35 \text{ Wh (m}^3 \cdot \text{K)} \cdot 10 \text{ K}}$$

① Folded spiral-seams duct

② GRK centrifugal blower

➔ Exhaust air

$$V = 4700 \text{ m}^3/\text{h}$$

Suitable channel fan: DPK 35 EC  
Suitable centrifugal blower: GRK 35/4 D



## GRK centrifugal blower, plastic

Plastic centrifugal blower with rectangular exhaust opening

- ➔ Size 120-350 mm
- ➔ Air volume up to 7,000 m<sup>3</sup>/h

### GRK centrifugal blower, plastic

Article	Article no.	Size	V (m <sup>3</sup> /h)	P (watt)
<b>GRK 12/2 E</b>	0073.0302	120	540	120
<b>GRK 12/4 D</b>	0073.0304	120	540	120
<b>GRK 16/4 E</b>	0073.0303	160	1,100	180
<b>GRK 16/4 D</b>	0073.0305	160	1,100	180
<b>GRK 16/2 D</b>	0073.0306	160	2,000	1,100
<b>GRK 20/4 D</b>	0073.0307	200	2,250	550
<b>GRK 25/4 D</b>	0073.0308	250	3,750	1,100
<b>GRK 35/4 D</b>	0073.0309	350	7,000	3,000

Size: impeller size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

### PRODUCT FEATURES

- Plastic centrifugal blower
- Powerful fan for industrial applications
- Suitable for conveying corrosive and acidic media
- The motor is outside the air flow

### APPLICATION EXAMPLES

- Machine extraction
- Fume cupboard
- Digestorium



## GRK R centrifugal blower, plastic

Plastic centrifugal blower with round exhaust opening

- ➔ Size 200-650 mm
- ➔ Air volume up to 17,500 m<sup>3</sup>/h

### GRK R centrifugal blower, plastic

Article	Article no.	Size	V (m <sup>3</sup> /h)	P (watt)
<b>GRK R 20/2 E</b>	0073.0504	200	1,100	180
<b>GRK R 20/2 D</b>	0073.0513	200	1,100	180
<b>GRK R 25/4 E</b>	0073.0506	250	1,050	110
<b>GRK R 25/2 E</b>	0073.0505	250	2,100	370
<b>GRK R 25/4 D</b>	0073.0515	250	1,050	120
<b>GRK R 25/2 D</b>	0073.0514	250	2,100	370
<b>GRK R 28/4 E</b>	0073.0508	280	1,600	180
<b>GRK R 28/2 E</b>	0073.0507	280	3,150	750
<b>GRK R 28/4 D</b>	0073.0517	280	1,600	180
<b>GRK R 28/2 D</b>	0073.0516	280	3,150	750
<b>GRK R 31/4 E</b>	0073.0510	310	2,250	240
<b>GRK R 31/2 E</b>	0073.0509	310	4,300	1,500
<b>GRK R 31/6 D</b>	0073.0520	310	1,400	180
<b>GRK R 31/4 D</b>	0073.0519	310	2,250	250
<b>GRK R 31/2 D</b>	0073.0518	310	4,300	1,500
<b>GRK R 35/4 E</b>	0073.0511	350	3,400	370
<b>GRK R 35/6 D</b>	0073.0523	350	2,100	180
<b>GRK R 35/4 D</b>	0073.0522	350	3,400	370
<b>GRK R 35/2 D</b>	0073.0521	350	6,700	2,200
<b>GRK R 40/4 E</b>	0073.0512	400	4,600	550
<b>GRK R 40/6 D</b>	0073.0525	400	2,800	250
<b>GRK R 40/4 D</b>	0073.0524	400	4,600	550
<b>GRK R 45/6 D</b>	0073.0527	450	3,800	370
<b>GRK R 45/4 D</b>	0073.0526	450	6,000	1,100
<b>GRK R 50/6 D</b>	0073.0529	500	5,600	550
<b>GRK R 50/4 D</b>	0073.0528	500	9,000	2,200
<b>GRK R 56/6 D</b>	0073.0531	560	8,000	1,500
<b>GRK R 56/6 D</b>	0073.0530	560	12,500	4,000
<b>GRK R 63/6 D</b>	0073.0533	630	11,000	17,500
<b>GRK R 63/4 D</b>	0073.0532	630	17,500	55,000

Size: impeller size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power





## GRM ES metal centrifugal blower, stainless steel housing

Centrifugal blower with stainless steel housing

- Size 100-180 mm
- Air volume up to 2,490 m<sup>3</sup>/h

### GRM ES metal centrifugal blower, stainless steel housing

Article	Article no.	Size	V (m <sup>3</sup> /h)	P (watt)
GRM ES 10/2 E	0073.0316	100	390	120
GRM ES 10/2 D	0073.0320	100	390	90
GRM ES 12/2 E	0073.0317	120	850	370
GRM ES 12/2 D	0073.0321	120	850	250
GRM ES 14/2 E	0073.0318	140	1,268	370
GRM ES 14/2 D	0073.0322	140	1,268	370
GRM ES 16/2 E	0073.0319	160	2,318	750
GRM ES 16/2 D	0073.0323	160	2,318	750
GRM ES 18/2 D	0073.0324	180	2,490	1,100

Size: impeller size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

### PRODUCT FEATURES

- Centrifugal blower with stainless steel housing
- Powerful fan for industrial applications
- Suitable for conveying corrosive and acidic media
- Motor outside of the air flow

### APPLICATION EXAMPLES

- Food industry
- Hygiene areas
- Machine extraction



## GRM HT metal centrifugal blower

Metal centrifugal blower for high temperatures

- Size 100-180 mm
- Air volume up to 2,490 m<sup>3</sup>/h

### GRM HT metal centrifugal blower

Article	Article no.	Size	V (m <sup>3</sup> /h)	P (watt)
GRM HT 10/2	0073.0279	100	390	90
GRM HT 12/2	0073.0280	120	850	250
GRM HT 14/2	0073.0281	140	1,268	370
GRM HT 16/2	0073.0282	160	2,318	750
GRM HT 18/2	0073.0283	180	2,490	1,100

Size: impeller size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

### PRODUCT FEATURES

- Centrifugal blower with metal housing for high temperatures
- Suitable for airstream temperatures up to + 150 °C
- Powerful fan for industrial applications
- Motor outside of the air flow

### APPLICATION EXAMPLES

- Machine extraction
- Hardening shop
- Foundry
- Plastic injection moulding





## GRK R Ex – Ex centrifugal blower, plastic



Centrifugal blower with plastic housing

- ➔ Size 200-630 mm
- ➔ Air volume up to 17,500 m<sup>3</sup>/h

### GRK R Ex – GAS Ex centrifugal blower, plastic

Article	Article no.	Size	V (m <sup>3</sup> /h)	P (watt)
GRK R 20/2 D Ex	0073.0441	200	1,100	180
GRK R 25/4 D Ex	0073.0443	250	1,050	120
GRK R 25/2 D Ex	0073.0442	250	2,100	370
GRK R 28/4 D Ex	0073.0445	280	1,600	180
GRK R 28/2 D Ex	0073.0444	280	3,150	750
GRK R 31/6 D Ex	0073.0448	310	1,400	180
GRK R 31/4 D Ex	0073.0447	310	2,250	250
GRK R 31/2 D Ex	0073.0446	310	4,300	1,500
GRK R 35/6 D Ex	0073.0451	350	2,100	180
GRK R 35/4 D Ex	0073.0450	350	3,400	370
GRK R 35/2 D Ex	0073.0449	350	6,700	2,200
GRK R 40/6 D Ex	0073.0453	400	2,800	250
GRK R 40/4 D Ex	0073.0452	400	4,600	550
GRK R 45/6 D Ex	0073.0455	450	3,800	370
GRK R 45/4 D Ex	0073.0454	450	6,000	1,100
GRK R 50/6 D Ex	0073.0457	500	5,600	550
GRK R 50/4 D Ex	0073.0456	500	9,000	2,200
GRK R 56/6 D Ex	0073.0459	560	8,000	1,500
GRK R 56/4 D Ex	0073.0458	560	12,500	4,000
GRK R 63/6 D Ex	0073.0461	630	11,000	2,200
GRK R 63/4 D Ex	0073.0460	630	17,500	5,500

Size: impeller size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power



## GRM ES Ex Ex centrifugal blower, metal



Centrifugal blower with stainless steel housing

- ➔ Size 100-180 mm
- ➔ Air volume up to 2,790 m<sup>3</sup>/h

### GRM ES Ex – GAS Ex centrifugal blower

Article	Article no.	Size	V (m <sup>3</sup> /h)	P (watt)
GRM ES 10/2 Ex	0073.0391	100	430	90
GRM ES 12/2 Ex	0073.0392	120	900	250
GRM ES 14/2 Ex	0073.0393	140	1,268	370
GRM ES 16/2 Ex	0073.0394	160	2,318	750
GRM ES 18/2 Ex	0073.0395	180	2,790	1,100

Size: impeller size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

#### PRODUCT FEATURES

- Centrifugal blower made of plastic for applications in areas subject to explosion hazards
- Explosion protection and approvals in accordance with ATEX
- Qualified for all gases and vapours of Ex group IIA and IIB and also for hydrogen
- Suitable for conveying corrosive and acidic air
- Motor outside of the air flow
- Powerful fan for industrial applications

#### APPLICATION EXAMPLES

- Environment with explosion hazard (Zone 2)
- Workplace extraction
- Fume cupboard
- Digestorium
- Sewage treatment plant

#### PRODUCT FEATURES

- Centrifugal blower made of metal for applications in areas subject to explosion hazards
- Explosion protection and approvals in accordance with ATEX
- Qualified for all gases and vapours of Ex group IIA and IIB and also for hydrogen
- Powerful fan for industrial applications
- Motor outside of the air flow

#### APPLICATION EXAMPLES

- Environment with risk of explosion (zone 1 and 2)
- Machine extraction
- Labs
- Store rooms



## GRM Ex, GRM HD Ex – Ex centrifugal blower, metal



Metal centrifugal blower for high-pressure applications

- Size 100-450 mm
- Air volume up to 18,412 m<sup>3</sup>/h

### GRM Ex – GAS Ex centrifugal blower

Article	Article no.	Size	V (m <sup>3</sup> /h)	P (watt)
<b>GRM 10/2 E Ex</b>	0073.0383	100	430	60
<b>GRM 10/2 D Ex</b>	0073.0386	100	430	90
<b>GRM 12/2 E Ex</b>	0073.0384	120	900	250
<b>GRM 12/2 D Ex</b>	0073.0387	120	900	250
<b>GRM 14/2 E Ex</b>	0073.0385	140	1,268	370
<b>GRM 14/2 D Ex</b>	0073.0388	140	1,268	370
<b>GRM 16/2 D Ex</b>	0073.0389	160	2,318	750
<b>GRM 18/2 D Ex</b>	0073.0390	180	2,790	1,100

Size: impeller size · V (m<sup>3</sup>/h): Air volume · watt: nominal power

#### PRODUCT FEATURES

- Centrifugal blower made of metal for applications in areas subject to explosion hazards
- Explosion protection and approvals in accordance with ATEX
- Qualified for all gases and vapours of Ex group IIA and IIB and also for hydrogen
- Powerful fan for industrial applications
- Motor outside of the air flow

#### APPLICATION EXAMPLES

- Environment with risk of explosion (zone 1 and 2)
- Machine extraction
- Labs
- Store rooms

### GRM HD Ex – GAS Ex centrifugal blower

Article	Article no.	Size	V (m <sup>3</sup> /h)	P (watt)
<b>GRM HD 20/2 Ex</b>	0073.0396	200	1,708	1,100
<b>GRM HD 20/4 Ex</b>	0073.0397	200	1,550	250
<b>GRM HD 22/2 Ex</b>	0073.0398	220	3,902	2,200
<b>GRM HD 22/4 Ex</b>	0073.0399	220	1,951	550
<b>GRM HD 25/2 Ex</b>	0073.0400	250	5,786	3,000
<b>GRM HD 25/4 Ex</b>	0073.0401	250	2,893	750
<b>GRM HD 25/6 Ex</b>	0073.0402	250	1,930	370
<b>GRM HD 28/4-1 Ex</b>	0073.0403	280	4,500	1,500
<b>GRM HD 28/4-2 Ex</b>	0073.0404	280	3,540	1,100
<b>GRM HD 28/6 Ex</b>	0073.0405	280	3,000	750
<b>GRM HD 31/4-1 Ex</b>	0073.0406	310	6,200	3,000
<b>GRM HD 31/4-2 Ex</b>	0073.0407	310	5,760	2,200
<b>GRM HD 31/6 Ex</b>	0073.0408	310	4,250	1,100
<b>GRM HD 35/4-1 Ex</b>	0073.0409	350	7,800	4,000
<b>GRM HD 35/4-2 Ex</b>	0073.0410	350	6,715	3,000
<b>GRM HD 35/6 Ex</b>	0073.0411	350	5,150	1,500
<b>GRM HD 35/8 Ex</b>	0073.0412	350	3,680	750
<b>GRM HD 40/4-1 Ex</b>	0073.0413	400	12,900	750
<b>GRM HD 40/4-2 Ex</b>	0073.0414	400	10,400	550
<b>GRM HD 40/6 Ex</b>	0073.0415	400	6,800	2,200
<b>GRM HD 40/8 Ex</b>	0073.0416	400	5,000	1,100
<b>GRM HD 45/4 Ex</b>	0073.0417	450	18,412	9,000
<b>GRM HD 45/6 Ex</b>	0073.0418	450	7,150	4,000
<b>GRM HD 45/8 Ex</b>	0073.0419	450	5,350	2,200

Size: impeller size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

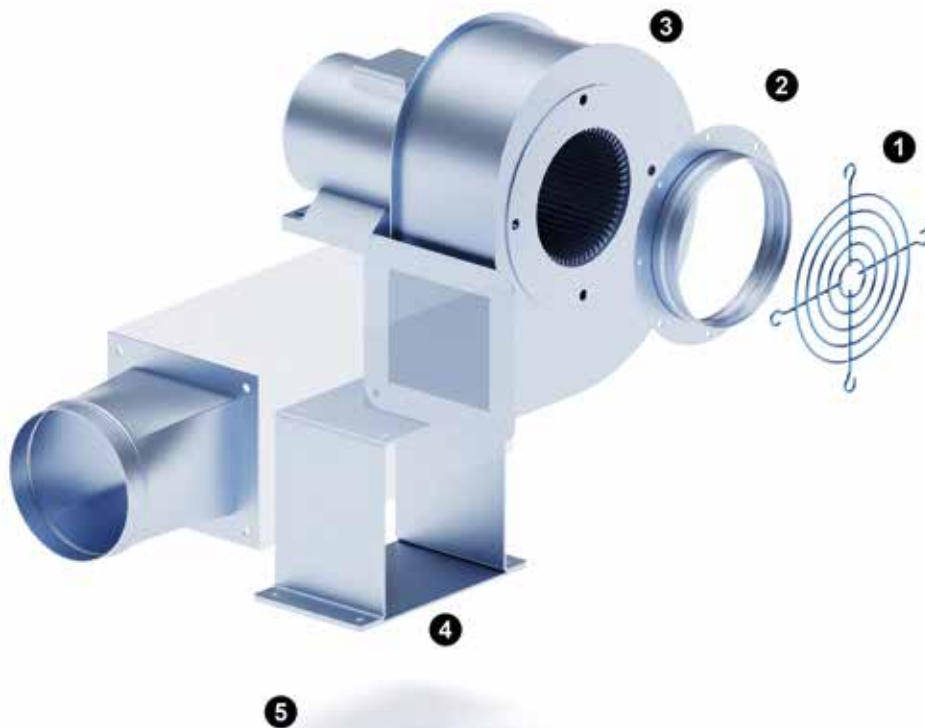
## System graphics

### GRM / GRK / Ex



The GRM centrifugal blower is also available in the GRM HT variant for high temperatures and the GRM Ex variant for use in potentially explosive atmospheres. We can also supply you with all the necessary accessories such as intake and exhaust protection grilles, intake sockets, motor bases and transition adapters. Below you can see an example structure.

You can find the complete range of accessories in various sizes and designs in the catalogue and on our website.



- ❶ SGEI inlet protective grille
- ❷ ASI intake socket
- ❸ GRM HT / GRM Ex centrifugal blower
- ❹ MSI motor base
- ❺ URR1 transition adapter



# CHANNEL FANS

FIND OUT MORE ABOUT OUR CENTRIFUGAL CHANNEL FANS WITH AND WITHOUT SOUND INSULATION FOR INSTALLATION IN YOUR CHANNEL SYSTEMS.

## Application example

# Channel fans for industrial facilities

MAICO channel fans are particularly suitable for all types of industrial applications:

- Warehouses
- Machine extraction systems
- Assembly and production halls
- Workshops

Channel fans are particularly useful for large room volumes and correspondingly large air volumes, such as those found in halls. As the system components (fan, air heater, heat exchanger, air filter, etc.) can be combined as required, the right ventilation solution can be put together for every conceivable requirement. In this example, the exhaust air is drawn in via intake grilles and the outgoing air is conveyed outside via an exhaust air grille using a channel fan. In parallel, another channel fan draws in outside air via an external grille. This flows into the warehouse via supply air grilles and provides fresh air.



- ❶ Intake grille, type MLZ or type MLA (not shown)
- ❷ Fan, type DSK EC
- ❸ Air grille, type LGA or type LGZ
- ❹ Exhaust air grille, type LGA or type LGZ (not shown)
- ❺ Fan, type DSK EC
- ❻ External grille, type MLZ or type MLA
- ➡ Supply air
- ➡ Outside air
- ➡ Exhaust air
- ➡ Outgoing air

### WAREHOUSE WITH CENTRALISED AIR VENTILATION AND EXTRACTION WITHOUT HEAT RECOVERY

Ventilation and air extraction are provided via the hall ceiling. Supply and exhaust air is discharged via the gable.

Distribution takes place via grilles in the channel system.

Area of the warehouse (A):	150m <sup>2</sup>
Height of the warehouse (h):	8 m
Desired air exchange (AE):	2.5 1/h
Calculated volumetric flow:	3,000 m <sup>3</sup> /h
Calculated system pressure loss:	approx. 550 Pa

The DSK 50 EC fan can be operated with an ST EC 230 potentiometer with 6V.

$$V = A \cdot h \cdot AE$$

$$V = 150 \text{ m}^2 \cdot 8 \text{ m} \cdot 2.5 \text{ 1/h} = 3000 \text{ m}^3/\text{h}$$



## DPK EC channel fans

Centrifugal channel fan with EC motor

- Channel dimensions 500 x 250 mm to 1,000 x 500 mm
- Air volume up to 11,990 m<sup>3</sup>/h

### DPK EC channel fans

Article	Article no.	Channel dimension (mm)	Size	V (m <sup>3</sup> /h)	P (watt)
DPK 22 EC	0086.0800	500 x 250	220	2,000	198
DPK 31 EC	0086.0802	600 x 350	310	3,500	349
DPK 31/1-S EC	0086.0812	600 x 350	310	4,750	760
DPK 35/1-S EC	0086.0813	700 x 400	350	6,470	1,250
DPK 50 EC	0086.0808	800 x 500	500	9,590	1,830
DPK 56 EC	0086.0810	1,000 x 500	560	11,990	2,470

Size: impeller size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

### PRODUCT FEATURES

- Installation in square ventilation channels
- Low energy consumption thanks to EC motors
- Reduced space requirement due to compact dimensions
- Motor impeller can be swivelled out for cleaning purposes

### APPLICATION EXAMPLES

- Commercial spaces
- Workplaces
- Showrooms
- Production facilities
- Supply air in industrial halls



## DSK EC sound-insulated channel fans

Centrifugal channel fan with EC motor

- Channel dimensions 500 x 250 mm to 1,000 x 500 mm
- Air volume up to 11,990 m<sup>3</sup>/h

### DSK EC sound-insulated channel fans

Article	Article no.	Channel dimension (mm)	Size	V (m <sup>3</sup> /h)	P (watt)
DSK 22 EC	0086.0801	500 x 250	220	2,000	198
DSK 31 EC	0086.0803	600 x 350	310	3,500	349
DSK 31/1-S EC	0086.0814	600 x 350	310	4,750	760
DSK 35/1-S EC	0086.0815	700 x 400	350	6,470	1,250
DSK 50 EC	0086.0809	800 x 500	500	9,590	1,830
DSK 56 EC	0086.0811	1,000 x 500	560	11,990	2,470

Size: impeller size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

### PRODUCT FEATURES

- Installation in square ventilation channels
- Particularly quiet due to sound-absorbing lining
- Low energy consumption due to EC motors
- Reduced space requirement due to compact dimensions
- Motor impeller can be swivelled out for cleaning purposes

### APPLICATION EXAMPLES

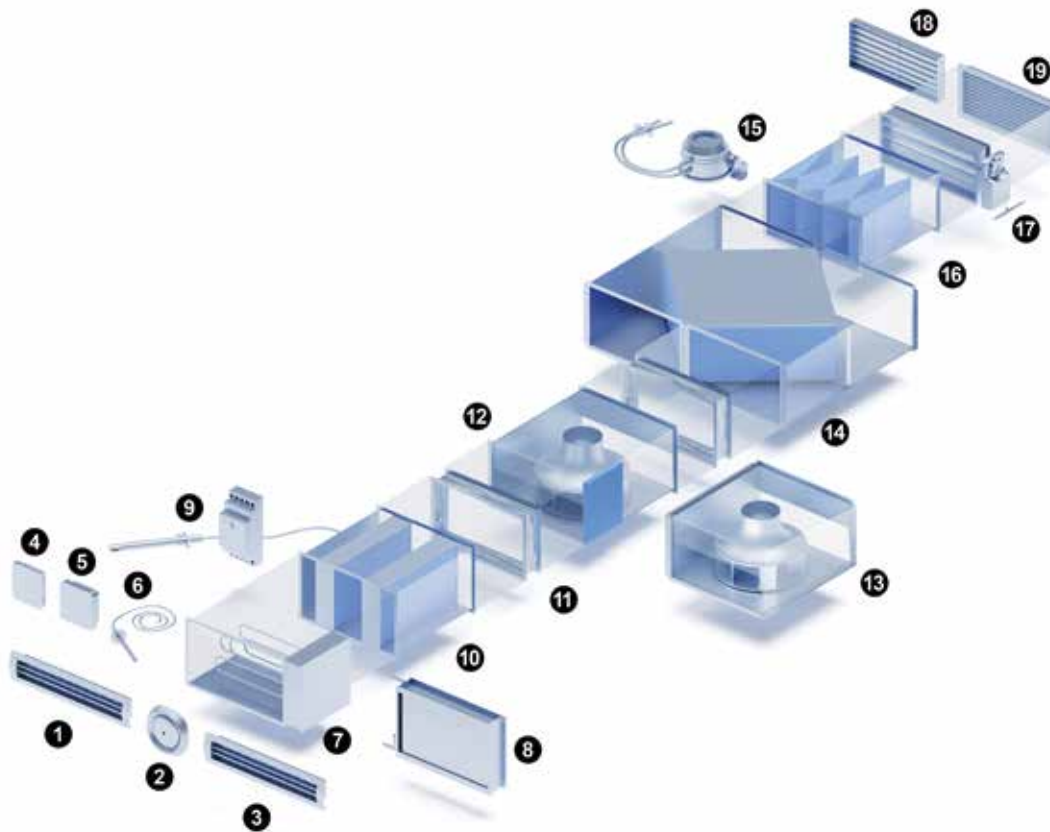
- Commercial spaces
- Workplaces
- Showrooms
- Production facilities
- Supply air in industrial halls

## System graphics

### DPK / DSK

Our range also includes centrifugal channel fans such as the DPK and sound-insulated centrifugal channel fans such as the DSK. In addition to channel fans, we also supply various sensors and controls as well as air heaters for your individual application. We also offer basic accessories such as outside air, exhaust air and supply air grilles, air filters, disk valves and various shutters. Below you can see an example structure. Channel sections and heat exchangers that must be available on site are shown transparently.

You can find the complete range of accessories in various sizes and designs in the catalogue and on our website.



- ❶ LGR exhaust air grille
- ❷ TK,TE disk valve
- ❸ LGR supply air grille
- ❹ FR 30 P room sensor
- ❺ FFT 30 K temperature controller
- ❻ FL 30 P channel sensor
- ❼ DHP electric air heater
- ❽ WHP water/air heater
- ❾ LW 9 air flow monitor
- ❿ KSP channel silencer
- ⓫ ELP flexible couplings
- ⓬ DSK EC channel centrifugal fan, sound-insulated
- ⓭ DPK EC channel centrifugal fan
- ⓮ Heat exchanger (on site)
- ⓯ DW 1000 differential pressure controller
- ⓰ TFP air filter
- ⓱ RKP electric shutter
- ⓲ Airstream-operated shutter
- ⓳ MLZ, LZP external grille



# ROOF FANS

CONVINCE YOURSELF OF OUR CENTRIFUGAL AND AXIAL FANS  
FOR UNIVERSAL APPLICATIONS ON YOUR ROOF.



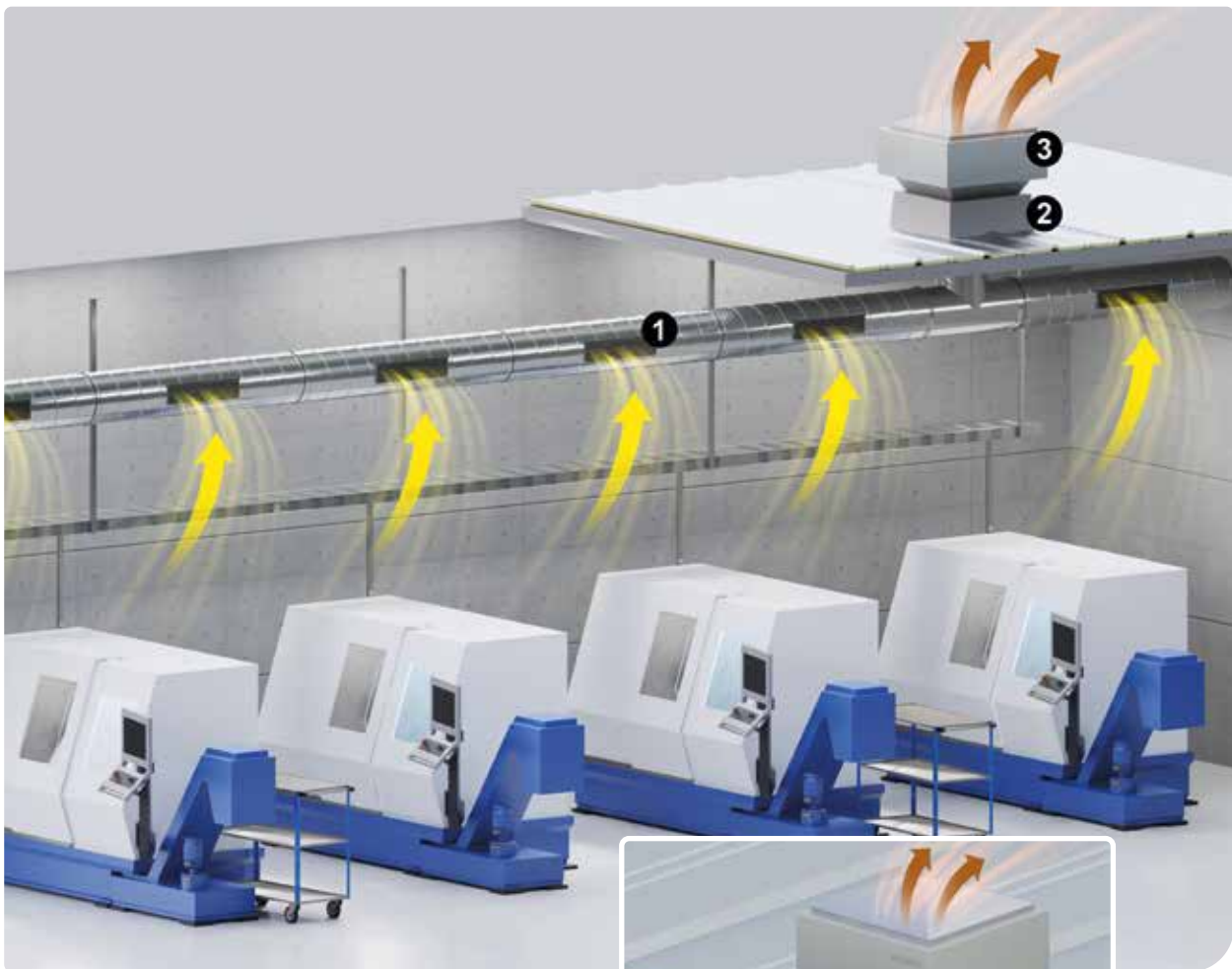
### Application example

## Exhaust air in a machine hall via a roof fan

In industrial production facilities, the ambient air is often affected by heat, dust, dirt, etc. This polluted air must be removed in a controlled manner for various reasons:

- Occupational health and safety for employees
- Clean process air for production
- Avoidance of production impairment due to dirt

In this example, the warm, polluted air rises in the hall. This is drawn in via intake grilles, then conveyed via a ducting run and finally blown out via a fan on the roof. Fresh air can flow into the lower area of the hall.



- ❶ Intake grille, type LGR
- ❷ Roof socket, type SOK or type S0
- ❸ MDR EC roof fan
- ➡ Exhaust air
- ➡ Outgoing air





## DAD axial roof fan

Axial roof fan with horizontal exhaust opening

- ➔ Nominal size 630-900 mm
- ➔ Air volume up to 45,000 m<sup>3</sup>/h

### DAD axial roof fan

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
DAD 63/6	0073.0080	7,445	370
DAD 63/4	0073.0074	13,274	1,100
DAD 71/6	0073.0081	11,598	750
DAD 71/4	0073.0075	18,237	2,200
DAD 80/6	0073.0082	16,537	1,100
DAD 80/4	0073.0076	24,569	5,500
DAD 90/6	0073.0083	28,729	3,000
DAD 90/4	0073.0077	45,000	9,200

V (m<sup>3</sup>/h): air volume - P (watt): nominal power

### PRODUCT FEATURES

- Housing made of galvanised sheet steel
- Plastic weather protection hood
- Suitable for extracting large volumes of air
- High efficiency
- Low noise level

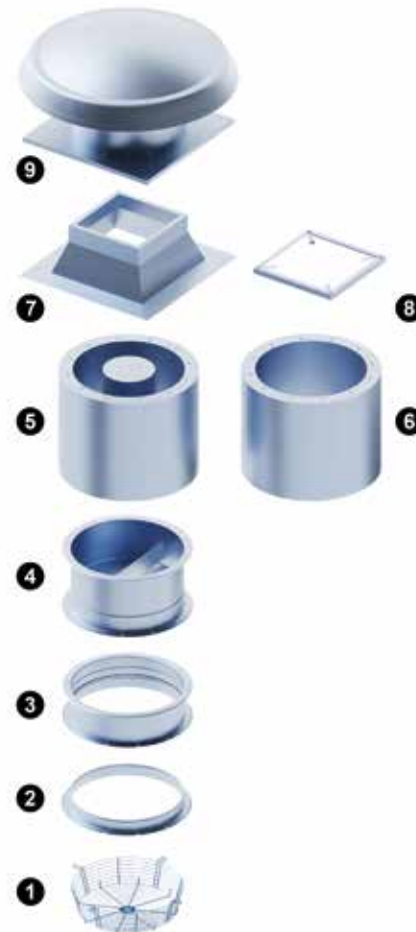
### APPLICATION EXAMPLES

- Large-volume production halls
- System extraction

## System graphics

### DAD

We are happy to supply the DAD axial roof fan with a matching roof socket for flat roofs and mounting frame. You will also find useful accessories in our portfolio, such as tubular sound absorbers or duct shutters, which you can add on a modular basis. Below you can see an example structure. You can find the complete range of accessories in various sizes and designs in the catalogue and on our website.



- ① SGCI contact protection grille
- ② GSI counter socket
- ③ ELI flexible couplings
- ④ VKRI R duct shutter
- ⑤ RSKI tubular sound absorber with baffle
- ⑥ RSI tubular sound absorber without baffle
- ⑦ SOFI insulated flat roof socket
- ⑧ MRI mounting frame
- ⑨ DAD axial roof fan



## EZD, DZD axial roof fans

- ➔ Nominal size 250-600 mm
- ➔ Air volume up to 9,920 m<sup>3</sup>/h

### EZD axial roof fans

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
EZD 25/4 D	0087.0487	750	35
EZD 25/4 E	0087.0486	720	50
EZD 25/2 B	0087.0202	1,900	180 <sup>1)</sup>
EZD 30/6 B	0087.0203	880	65
EZD 30/4 B	0087.0204	1,400	90
EZD 30/2 B	0087.0205	3,090	375 <sup>1)</sup>
EZD 35/4 B	0087.0207	2,280	125 <sup>1)</sup>
EZD 40/4 B	0087.0209	3,330	235 <sup>1)</sup>
EZD 50/6 B	0087.0211	4,040	245 <sup>1)</sup>

<sup>1)</sup> in opt. efficiency

V (m<sup>3</sup>/h): air volume · P (watt): nominal power

### DZD axial roof fans

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
DZD 25/4 D	0087.0490	800	50
DZD 25/2 B	0087.0213	1,840	170 <sup>1)</sup>
DZD 30/4 B	0087.0215	1,400	100
DZD 30/2 B	0087.0216	3,100	380 <sup>1)</sup>
DZD 35/4 B	0087.0218	2,325	145 <sup>1)</sup>
DZD 40/4 B	0087.0222	3,260	244 <sup>1)</sup>
DZD 50/6 B	0087.0225	4,160	245 <sup>1)</sup>
DZD 50/4 B	0087.0226	6,170	665 <sup>1)</sup>
DZD 60/6 B	0087.0228	7,030	530 <sup>1)</sup>
DZD 60/4 B	0087.0229	9,920	1,445 <sup>1)</sup>

<sup>1)</sup> in opt. efficiency

V (m<sup>3</sup>/h): air volume · P (watt): nominal power

### PRODUCT FEATURES

- Housing and weather protection hood made of galvanised sheet steel
- Suitable for ventilation or air extraction
- Sturdy transport lugs enable transport by crane
- For commercial use: durable, powerful and robust

### APPLICATION EXAMPLES

- Production halls
- Commercial spaces
- Container extraction



## DZD Ex t – Ex axial roof fans (dust)



- ➔ Nominal size 250-600 mm
- ➔ Air volume up to 6,510 m<sup>3</sup>/h

### DZD Ex t – DUSTEx axial roof fans

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
DZD 25/4 B Ex t	0087.0810	800	38
DZD 25/2 B Ex t	0087.0811	1,600	140
DZD 30/6 B Ex t	0087.0812	940	25
DZD 30/4 B Ex t	0087.0813	1,390	95
DZD 30/2 B Ex t	0087.0814	2,690	300
DZD 35/6 B Ex t	0087.0815	1,370	40
DZD 35/4 B Ex t	0087.0816	2,060	130
DZD 35/2 B Ex t	0087.0817	4,280	620
DZD 40/6 B Ex t	0087.0818	2,130	100
DZD 40/4 B Ex t	0087.0819	3,200	170
DZD 50/6 B Ex t	0087.0820	3,870	180
DZD 50/4 B Ex t	0087.0821	5,830	485
DZD 60/6 B Ex t	0087.0822	6,510	365

V (m<sup>3</sup>/h): air volume · P (watt): nominal power

### PRODUCT FEATURES

- Explosion protection and approvals in accordance with ATEX and IECEx
- Qualified for all dusts of the Ex-group IIIA and IIIB
- Base plate, intake nozzle and rain protection cover made of galvanised sheet steel
- Sturdy transport lugs enable transport by crane

### APPLICATION EXAMPLES

- Food industry
- Environment with risk of explosion (zone 21 and 22)
- Wood processing industry
- Store rooms



## DZD Ex e – Ex axial roof fans (gas)



- ➔ Nominal size 250-600 mm
- ➔ Air volume up to 6,510 m<sup>3</sup>/h

### DZD Ex e – GAS Ex axial roof fans

Article	Article no.	V (m <sup>3</sup> /h)	P (watt)
DZD 25/4 B Ex e	0087.0796	800	38
DZD 25/2 B Ex e	0087.0797	1,600	140
DZD 30/6 B Ex e	0087.0798	940	25
DZD 30/4 B Ex e	0087.0799	1,390	95
DZD 30/2 B Ex e	0087.0800	2,690	300
DZD 35/6 B Ex e	0087.0801	1,370	40
DZD 35/4 B Ex e	0087.0802	2,060	130
DZD 35/2 B Ex e	0087.0803	4,280	620
DZD 40/6 B Ex e	0087.0804	2,130	100
DZD 40/4 B Ex e	0087.0805	3,200	170
DZD 50/6 B Ex e	0087.0806	3,870	180
DZD 50/4 B Ex e	0087.0807	5,830	485
DZD 60/6 B EX E	0087.0808	6,510	365

V (m<sup>3</sup>/h): air volume · P (watt): nominal power

### PRODUCT FEATURES

- Explosion protection and approvals in accordance with ATEX and IECEx
- Qualified for all gases and vapours of Ex group IIA, IIB and also for hydrogen
- Base plate, intake nozzle and rain protection cover made of galvanised sheet steel
- Sturdy transport lugs enable transport by crane

### APPLICATION EXAMPLES

- Environment with risk of explosion (zone 1 and 2)
- Dye works
- Battery rooms
- Workplaces
- Store rooms

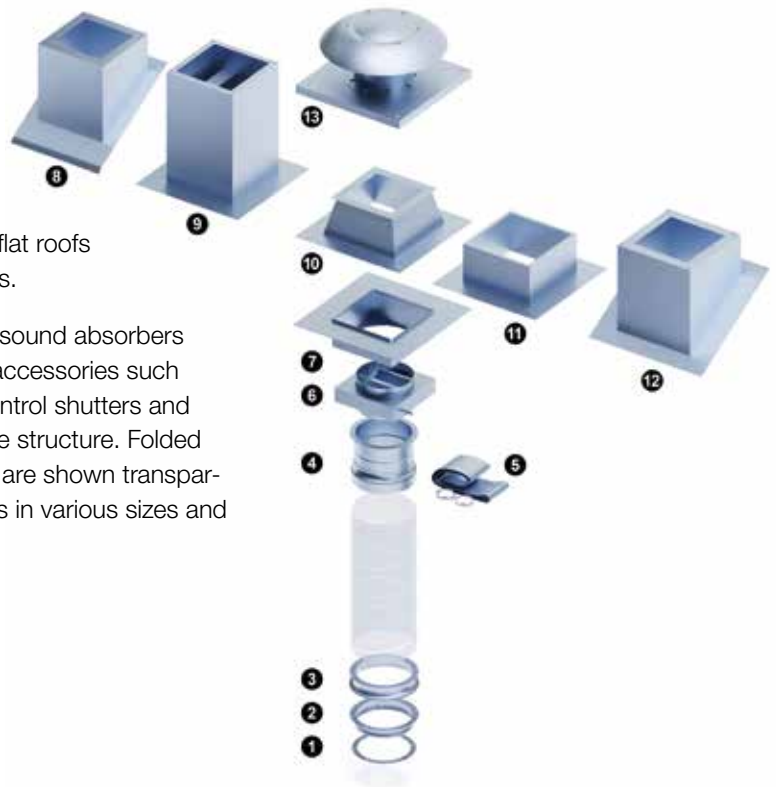
### System graphics

## EZD / DZD / DZD Ex



Our EZD/DZD axial roof fans are also available in the DZD Ex version for environments with an explosion hazard. Our wide range of roof sockets enables installation on a wide variety of roofs – from flat roofs and pitched roofs to corrugated and trapezoidal roofs.

We can also supply you with the appropriate socket sound absorbers to reduce the sound. Our range also includes other accessories such as various sockets, flexible cuffs, counter flanges, control shutters and suction nozzles. On the right you can see an example structure. Folded spiral-seams ducts, which must be available on site, are shown transparently. You can find the complete range of accessories in various sizes and designs in the catalogue and on our website.



- ❶ GF counter flange
- ❷ AD suction nozzle
- ❸ GS counter socket
- ❹ ELA/ ELA Ex flexible couplings
- ❺ EL/ EL Ex flexible cuffs
- ❻ JRE control shutter
- ❼ SZ intermediate nozzle
- ❽ SDS roof socket for pitched roofs
- ❾ SD socket sound absorber
- ❿ SO roof socket for flat roofs
- ⓫ SOK roof socket for flat roofs, tiltable
- ⓬ SOWT roof socket for corrugated and trapezoidal roofs
- ⓭ EZD / DZD / DZD Ex axial roof fan



## ERD V Ex, DRD V Ex Ex centrifugal roof fans (gas)



- Size 350-900 mm
- Air volume up to 29,986 m<sup>3</sup>/h

### ERD Ex – GAS Ex centrifugal roof fans

Article	Article no.	Size	V (m <sup>3</sup> /h)	P (watt)
ERD V 35/4 Ex	0073.0545	350	3,643	250
ERD V 40/4 Ex	0073.0547	400	5,418	550

### DRD Ex – GAS Ex centrifugal roof fans

Article	Article no.	Size	V (m <sup>3</sup> /h)	P (watt)
DRD V 35/4 Ex	0073.0546	350	3,643	250
DRD V 40/4 Ex	0073.0548	400	5,418	550
DRD V 45/4 Ex	0073.0549	450	7,596	750
DRD V 50/4 Ex	0073.0550	500	9,950	1,500
DRD V 56/6 Ex	0073.0551	560	9,032	550
DRD V 63/6 Ex	0073.0552	630	13,439	1,100
DRD V 75/6 Ex	0073.0553	750	19,235	2,200
DRD V 80/6 Ex	0073.0554	800	22,664	3,000
DRD V 90/6 Ex	0073.0555	900	29,986	5,500

Size: impeller size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

#### PRODUCT FEATURES

- Explosion protection and approvals in accordance with ATEX
- Qualified for all gases and vapours of Ex group IIA, IIB and also for hydrogen
- Low noise level
- Housing made of galvanised sheet steel
- Plastic weather protection hood
- Motor outside of the air flow
- Sturdy transport lugs enable transport by crane

#### APPLICATION EXAMPLES

- Industrial halls
- Commercial halls
- Environment with risk of explosion (zone 1 and 2)



## DRD V centrifugal roof fans

Centrifugal roof fan with vertical exhaust opening

- Size 500-900 mm
- Air volume up to 29,986 m<sup>3</sup>/h

### DRD V centrifugal roof fans

Article	Article no.	Size	V (m <sup>3</sup> /h)	P (watt)
DRD V 50/4	0073.0068	500	9,950	1,500
DRD V 56/6	0073.0069	560	9,032	550
DRD V 63/6	0073.0070	630	13,439	1,100
DRD V 75/6	0073.0071	750	19,235	2,200
DRD V 80/6	0073.0072	800	22,664	3,000
DRD V 90/6	0073.0073	900	29,986	5,500

Size: impeller size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

#### PRODUCT FEATURES

- Housing made of galvanised sheet steel
- Plastic weather protection hood
- Motor outside of the air flow
- Sturdy transport lugs enable transport by crane

#### APPLICATION EXAMPLES

- Production facilities
- Industrial halls
- Commercial spaces





## DRD H centrifugal roof fans

Centrifugal roof fan with horizontal exhaust opening

- ➔ Size 500-900 mm
- ➔ Air volume up to 29,986 m<sup>3</sup>/h

### DRD H centrifugal roof fans

Article	Article no.	Size	V (m <sup>3</sup> /h)	P (watt)
DRD H 50/4	0073.0056	500	10,008	1,500
DRD H 56/6	0073.0057	560	9,101	550
DRD H 63/6	0073.0058	630	13,676	1,100
DRD H 75/6	0073.0059	750	19,555	2,200
DRD H 80/6	0073.0060	800	22,664	3,000
DRD H 90/6	0073.0061	900	29,986	5,500

Size: impeller size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

#### PRODUCT FEATURES

- Housing made of galvanised sheet steel
- Plastic weather protection hood
- Motor outside of the air flow
- Sturdy transport lugs enable transport by crane

#### APPLICATION EXAMPLES

- Production facilities
- Industrial halls
- Commercial spaces



## ERD H Ex, DRD H Ex Ex centrifugal roof fans (gas)



- ➔ Size 350-900 mm
- ➔ Air volume up to 29,986 m<sup>3</sup>/h

### ERD H Ex – GAS Ex centrifugal roof fans

Article	Article no.	Size	V (m <sup>3</sup> /h)	P (watt)
ERD H 35/4 Ex	0073.0534	350	3,643	250
ERD H 40/4 Ex	0073.0536	400	5,418	550

### DRD H Ex – GAS Ex centrifugal roof fans

Article	Article no.	Size	V (m <sup>3</sup> /h)	P (watt)
DRD H 35/4 Ex	0073.0535	350	3,643	250
DRD H 40/4 Ex	0073.0537	400	5,418	550
DRD H 45/4 Ex	0073.0538	450	7,596	750
DRD H 50/4 Ex	0073.0539	500	10,008	1,500
DRD H 56/6 Ex	0073.0540	560	9,101	550
DRD H 63/6 Ex	0073.0541	630	13,676	1,100
DRD H 75/6 Ex	0073.0542	750	19,555	2,200
DRD H 80/6 Ex	0073.0543	800	22,664	3,000
DRD H 90/6 Ex	0073.0544	900	29,986	5,500

Size: impeller size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

#### PRODUCT FEATURES

- Explosion protection and approvals in accordance with ATEX
- Qualified for all gases and vapours of Ex group IIA, IIB and also for hydrogen
- Low noise level
- Housing made of galvanised sheet steel
- Plastic weather protection hood
- Motor outside of the air flow
- Sturdy transport lugs enable transport by crane

#### APPLICATION EXAMPLES

- Commercial halls
- Industrial halls
- Environment with risk of explosion (zone 1 and 2)



## DRD HT centrifugal roof fans

Centrifugal roof fan for high temperatures up to 200 °C

- ➔ Size 350-800 mm
- ➔ Air volume up to 20,000 m<sup>3</sup>/h

### DRD HT centrifugal roof fans

Article	Article no.	Size	V (m <sup>3</sup> /h)	P (watt)
DRD HT 35/4	0073.0012	350	3,341	250
DRD HT 40/4	0073.0013	400	4,608	550
DRD HT 45/4	0073.0014	450	4,981	750
DRD HT 50/4	0073.0015	500	7,194	1,100
DRD HT 56/6	0073.0016	560	6,252	550
DRD HT 63/6	0073.0017	630	9,958	1,100
DRD HT 75/6	0073.0018	750	13,055	2,200
DRD HT 80/6	0073.0019	800	19,667	3,000
DRD HT 40/6 2V	0073.0021	400	3072 / 4,608	200 / 550
DRD HT 45/6 2V	0073.0022	450	3400 / 5,000	270 / 750
DRD HT 50/6 2V	0073.0023	500	4796 / 7,194	450 / 1,400
DRD HT 56/8 2V	0073.0024	560	4689 / 6,252	250 / 650
DRD HT 63/8 2V	0073.0025	630	7469 / 9,958	550 / 1,300
DRD HT 75/8 2V	0073.0026	750	9791 / 13,055	900 / 2,200
DRD HT 80/8 2V	0073.0027	800	15000 / 20,000	2600 / 3,700

Size: impeller size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

#### PRODUCT FEATURES

- Housing made of galvanised sheet steel
- Aluminium weather protection hood
- Motor outside of the air flow
- Sturdy transport lugs enable transport by crane
- Suitable for the high temperature range up to +200 °C

#### APPLICATION EXAMPLES

- High temperature applications
- Foundry
- Melting shop
- Plastic injection moulding



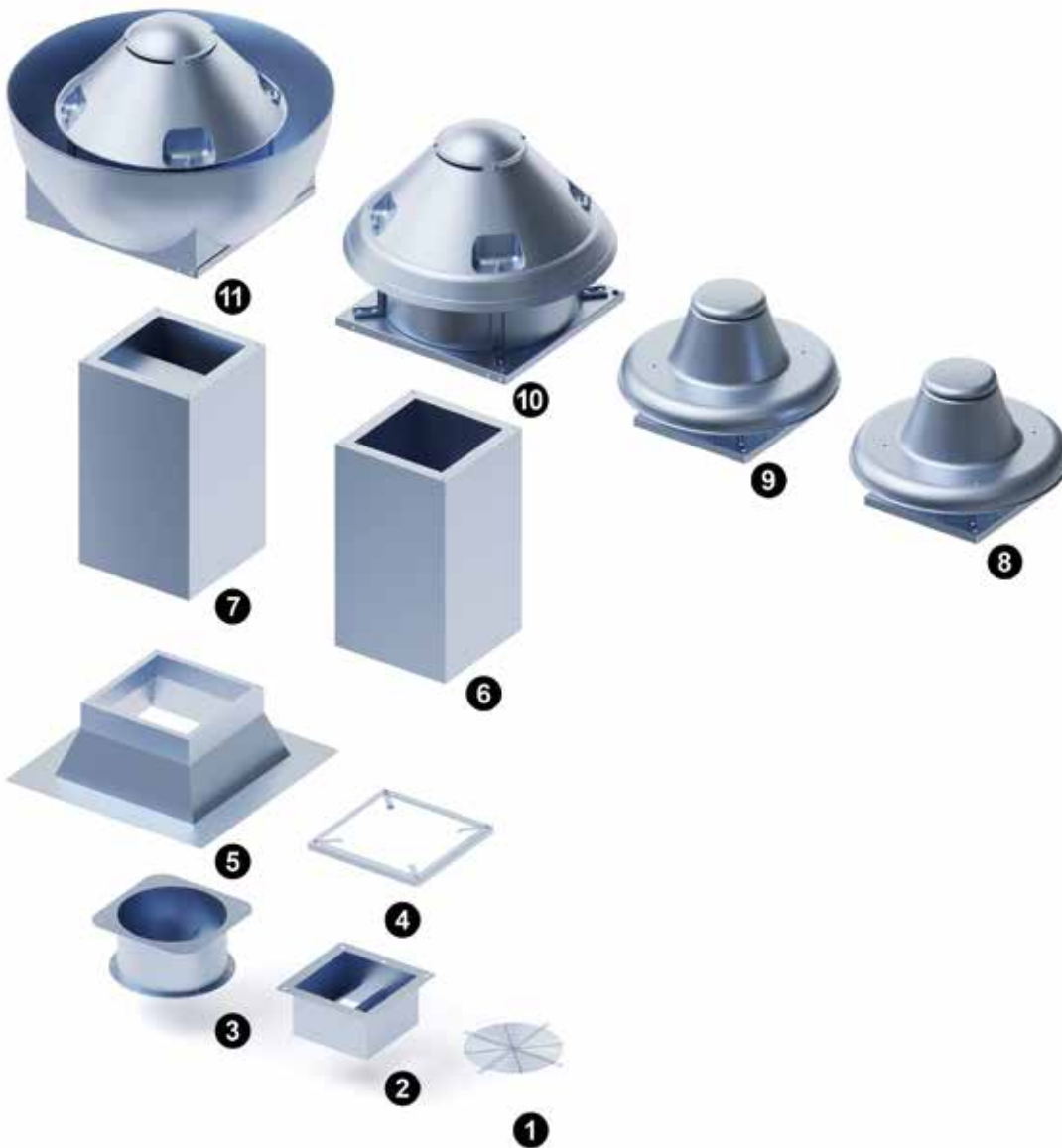
System graphics

**ERD / DRD / Ex**



We offer the DRD centrifugal roof fan in various versions with vertical and horizontal exhaust opening as well as versions suitable for high temperatures and versions for potentially explosive atmospheres. The DRD is ideally complemented by socket sound absorbers and the corresponding roof socket for flat roofs. Below you can see an example structure.

You can find the complete range of accessories in various sizes and designs in the catalogue and on our website.



- ① SGRI protective grille
- ② VKRI HV channel shutter
- ③ VKRI duct shutter
- ④ MRI mounting frame
- ⑤ SOFI roof socket for flat roofs, insulated
- ⑥ SDI socket sound absorber
- ⑦ SDVI (Ex) socket sound absorber
- ⑧ DRD HT centrifugal roof fan
- ⑨ DRD HT 2V centrifugal roof fan
- ⑩ DRD H/ Ex centrifugal roof fan
- ⑪ DRD V/ Ex centrifugal roof fan





## EHD-2 EC centrifugal roof fans

Space-saving centrifugal roof fan

- ➔ Nominal size 100-250 mm
- ➔ Air volume up to 911 m<sup>3</sup>/h

### EHD-2 EC centrifugal roof fans

Article	Article no.	DN	V (m <sup>3</sup> /h)	P (watt)
<b>EHD 10/2 EC</b>	0073.0589	100	392	121
<b>EHD 12/2 EC</b>	0073.0590	125	512	122
<b>EHD 15/2 EC</b>	0073.0591	150	773	163
<b>EHD 16/2 EC</b>	0073.0592	160	876	173
<b>EHD 20/2 EC</b>	0073.0593	200	872	173
<b>EHD 25/2 EC</b>	0073.0594	250	911	172

DN: nominal size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power



## EHD centrifugal roof fans

Space-saving centrifugal roof fan

- ➔ Nominal size 100-315 mm
- ➔ Air volume up to 1,160 m<sup>3</sup>/h

### EHD centrifugal roof fans

Article	Article no.	DN	V (m <sup>3</sup> /h)	P (watt)
<b>EHD 10</b>	0087.0300	100	300	50
<b>EHD 12</b>	0087.0301	125	325	49
<b>EHD 15</b>	0087.0302	150	550	82
<b>EHD 16</b>	0087.0303	160	700	102
<b>EHD 20</b>	0087.0304	200	755	107
<b>EHD 25</b>	0087.0305	250	825	148
<b>EHD 31</b>	0087.0306	315	1,160	247

DN: nominal size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

## System graphics

### EHD

The EHD mini centrifugal roof fan can be optimally combined with a protective grille and an automatic backflow preventer as shown.

You can find the complete range of accessories in various sizes and designs in the catalogue and on our website.



- ① AVM automatic backflow preventer
- ② SGR protective grille
- ③ EHD EC centrifugal roof fan

#### PRODUCT FEATURES

- Space-saving roof fan with extremely compact dimensions and low weight
- Attractive housing made from galvanised and powder-coated sheet steel
- Aluminium cover
- Highly efficient EC motor
- Steplessly speed controllable

#### APPLICATION EXAMPLES

- Greenhouses
- Garages
- Construction containers
- Foreman's offices



## MDR EC centrifugal roof fans

Centrifugal roof fan with EC motor and intelligent control options

- ➔ Nominal size 180-450 mm
- ➔ Air volume up to 11,010 m<sup>3</sup>/h

### MDR EC centrifugal roof fans

Article	Article no.	DN	V (m <sup>3</sup> /h)	P (watt)
<b>MDR 18 EC</b>	0087.0020	180	1,150	167 <sup>1)</sup>
<b>MDR 22 EC</b>	0087.0022	224	2,440	407 <sup>1)</sup>
<b>MDR 25 EC</b>	0087.0024	250	3,006	451 <sup>1)</sup>
<b>MDR 31 EC</b>	0087.0026	315	3,640	485 <sup>1)</sup>
<b>MDR 35 EC</b>	0087.0028	350	5,376	886 <sup>1)</sup>
<b>MDR 40 EC</b>	0087.0029	400	6,825	1,120 <sup>1)</sup>
<b>MDR 45 EC</b>	0087.0030	450	11,010	2,977 <sup>1)</sup>
<b>MDR-PG 18 EC</b>	0087.0031	180	1,150	167 <sup>1)</sup>
<b>MDR-PG 22 EC</b>	0087.0032	225	2,440	407 <sup>1)</sup>
<b>MDR-VG 25 EC</b>	0087.0033	250	3,006	451 <sup>1)</sup>
<b>MDR-VG 31 EC</b>	0087.0034	315	3,640	485 <sup>1)</sup>

<sup>1)</sup> in opt. efficiency

DN: nominal size · V (m<sup>3</sup>/h): air volume · P (watt): nominal power

### PRODUCT FEATURES

- Attractive housing made from galvanised sheet steel
- Low energy consumption thanks to EC motors
- Integrated service switch
- Variants with pressure constancy
- Variants with constant volumetric flow
- Built-in shutter

### APPLICATION EXAMPLES

- Industrial halls
- Production facilities
- Central ventilation systems
- Hotels
- Multi-storey flats

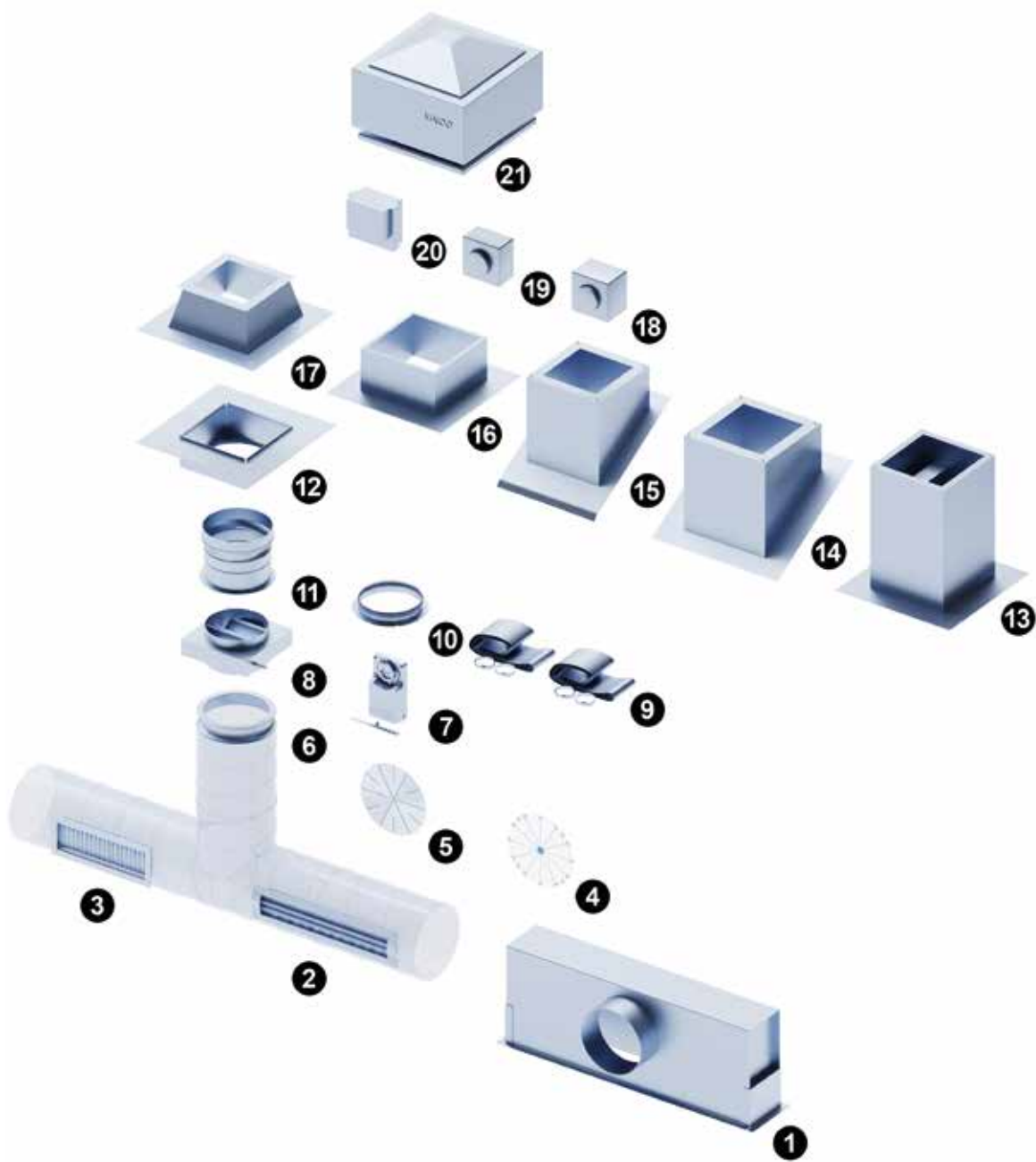
### System graphics

## MDR

As a system provider, we offer a wide range of solutions for your specific applications. The MDR centrifugal roof fan can be installed on all types of roofs with different roof sockets. With various controls and sensors such as servomotors, pressure and temperature control systems and potentiometers, you can customise your system to suit your individual requirements.

Other practical accessories such as socket sound absorbers and control shutters can also be found in our portfolio. Below you can see an example structure.

You can find the complete range of accessories in various sizes and designs in the catalogue and on our website.



- |                         |   |
|-------------------------|---|
| ① EK installation box   | ⑫ SZ intermediate nozzle                                |
| ② LGR internal grille   | ⑬ SD socket sound absorber                              |
| ③ LGA internal grille   | ⑭ SOWT roof socket for corrugated and trapezoidal roofs |
| ④ SGK protective grille | ⑮ SDS roof socket for pitched roofs                     |
| ⑤ SG protective grille  | ⑯ SOK roof socket for flat roofs, tiltable              |
| ⑥ AD suction nozzle     | ⑰ SO roof socket for flat roofs                         |
| ⑦ MS 8 servomotor       | ⑱ ST EC 010 potentiometer                               |
| ⑧ JRE control shutter   | ⑲ ST EC 230 potentiometer                               |
| ⑨ EL flexible cuff      | ⑳ EAT EC pressure and temperature control system        |
| ⑩ GS counter socket ELA | ㉑ MDR centrifugal roof fans                             |
| ⑪ flexible couplings    |   |





# MAICO. THE PROFESSIONALS FOR Ex FANS.

In many industries and applications, explosive atmospheres can occur in the form of gases, vapours or dusts. A ventilation system is therefore necessary for explosion protection in order to transport this explosive atmosphere out of the room.

Typical areas in which explosive atmospheres can occur are the chemical and petrochemical industry, hydrogen applications, the food industry, storage of hazardous substances or biogas plants.

**MAICO** has been a specialist for fans in potentially explosive atmospheres for more than five decades and has the right Ex fans in its product range for a wide variety of requirements:

- ▶ Ex fans for gas or dust atmospheres
- ▶ Ex fans for hydrogen
- ▶ Air volume up to approx. 70,000 m<sup>3</sup>/h
- ▶ Pressure up to approx. 2,000 Pa
- ▶ ATEX and IECEx approval
- ▶ A wide variety of designs
- ▶ Corrosion-resistant ex fans



**OUR EXPERTISE FOR YOUR CUSTOMISED DESIGN:** Certain applications or production processes often require special ventilation and air extraction requirements. And that's exactly where we like to show what we can do. Because exceptional requirements are our strength. We will be happy to advise you. Get in touch with us!

## MAICO CONTACT FOR INDUSTRIAL VENTILATION:

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