

Fan solutions for underground and car parks

motralec

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NICOTRA | Gebhardt

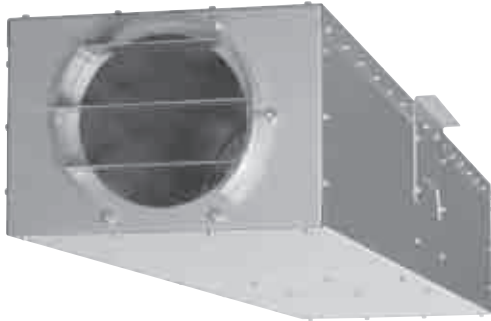


fan|tastic solutions

Cleaner air for underground car parks:



Jetfan AGM premium
Pulse fan systems
Thrust up to 52 N
300 °C – 120 min.
No. 0036 CPD RG 01 09



Jetfan AGM
Pulse fan systems
Thrust up to 52 N
300 °C – 120 min.
No. 0036 CPD RG 01 09



Jetfan RGM
Pulse centrifugal fan systems
Thrust up to 75 N
300 °C – 120 min.
No. 0036 CPD RG01 11

What should the perfect smoke extraction system for underground car parks offer? This was the question on our minds when we came up with our new pulse fan system. The result is the Jetfan, a solution which boasts impressive technology, functionality and a striking design.

Interested in rock-bottom prices?

With the Jetfan, you save on investments across the board. Thanks to the pulse fan system, there is no need to invest in expensive, large-scale duct systems and high-maintenance smoke extraction flaps. The bigger the garage or ventilation system, the more money you save with the jet system. What's more, you will benefit from our computer-aided smoke flow simulation during the planning stage. Discover low, low prices for underground car park smoke extraction: with the Jetfan.

The ultimate system for ultimate safety



The Jetfan is the ideal solution for heightened safety in underground car parks and underpasses. Choose the ultimate system for safer and more aesthetic underground constructions.

- Both models have CE certification.
- The Jetfan can be used for partial smoke extraction or ventilation.
- The flexible positioning of the Jetfan makes sure there are no areas where air does not circulate.
- The Jetfan makes expensive, large-scale duct systems unnecessary.
- Fresh air fans can become superfluous if there is a free flow of new air.
- The flexible fans can be adapted to cater for a change in the use of space.
- The Jetfan is available as an affordable standard version or as the Jetfan premium with a high-end design.
- Then Jetfan is available in two sizes and as a reversible fan.
- Pole-changing motors offer greater ventilation flexibility.
- Non-corrosive materials guarantee a long life.
- Integrated silencers for quieter permanent ventilation (approved for up to +40 °C)
- **Nicotra Gebhardt** offers the complete system solution:
 - Jetfan pulse fans
 - Jetfan premium AGM 06/16 for ventilation of CO-gases up to +40 °C
 - axial or radial shaft fans and roof fans
 - switchgear cabinets with or without CO warning systems or SPS control
 - complete system sensors
 - right the way through to commissioning and official approval



The system.
The safety.
The service.

The Jetfan – more safety for underground car parks and passages

The architects of today are designing buildings on a larger scale than ever before. Giant buildings are being erected, often with labyrinthine underground car parks and passages.

The result: people often can't find their way back to ground level in a fire. Those trapped are placed in serious danger. It is therefore crucial that effective smoke extraction systems are installed in underground public spaces. The new Jetfan concept from Nicotra Gebhardt is pioneering a new generation of smoke extraction solutions to meet this need.

Ductless ventilation and safe smoke ex- traction – the Jetfan provides both

Jetfan serves to provide both normal ventilation and smoke extraction in equal measure. In doing so, it has a twofold function: it improves the air quality during normal operation and guarantees a higher level of safety in a fire. And all this at a fraction of the price of conventional systems.



Cost, safety, design – the benefits of Jetfan

Jetfan has many advantages over classic duct systems:

- The Jetfan can partially ventilate or extract smoke
- The dynamic airflow means that all layers of air throughout the entire car park are intermingled; the concentration of toxic substances is much lower than in the case of conventional units with ventilation ducts.
- The flexible positioning of Jetfans means that “dead spots” (where there is no airflow) are prevented.
- Jetfans are flexible and can be adapted to suit changes in the use of space.
- Expensive large-scale ducts are not required. Such ducts are not effective if air inlet and outlet ducts are more than a certain distance apart.
- The car park becomes lighter and more pleasing for clients, as no bulky ventilation ducts impinge upon the environment. This means an enormous saving of space, along with increased efficiency in comparison with conventional systems.
- Air outlet fans operate at significantly lower thrust levels, as no duct network is required (energy saving).
- Air inlet fans are not required at all if free slipstreaming is in place.



available as a one-way airflow or reversible fan. Each type of fan is available in two sizes.

The principle behind Jetfan air extraction systems: construction and positioning

As with tunnel ventilation, Jetfans are mounted on the ceiling and achieve their effect by means of the thrust (impulse) of the air outflow. A high induction of the surrounding air is produced here, and after a short time the volume of air in the entire space begins to circulate. This effect results in the transferred volume of air being several times greater than the actual flow volume of the fan. This central airflow is then drawn into the low-pressure area of the centrally aligned outlet air channel. The advantage: duct systems are not required.

Both the alignment of fans and the positioning and dimensions of the slipstream air vents are of decisive importance for the effectiveness of such a system. The formation of a continuous airflow in the direction of the outlet air channel is significant here.

available as a one-way airflow or reversible fan. Each type of fan is available in two sizes.



Technology and material: Jetfan AGM 01/11 and Jetfan premium AGM 02/12, AGM 06/16

Jetfan is available in the form of a reasonably priced standard version and an elaborately designed premium version.

All three of these models are available in two versions (AGM 01, AGM 02 and AGM 06 or AGM 11, AGM 12 and AGM 16), which are in turn available in two sizes (0315 and 0400). The casing for all of these products is made of galvanised sheet steel and features noise suppressors integrated on both sides.

The axial fan built into the AGM 01 transports the air by exerting pressure from the motor as standard. The AGM 11, on the other hand, is designed for reversible operation. It can exert both pressure, via the motor, and suction on the flow medium.

In all models, the impeller wheel is made of pressure die-cast aluminium and is wheel-balanced according to DIN ISO 1940. It adopts a “flying” position on the shaft of the drive motor located within the flow of air.

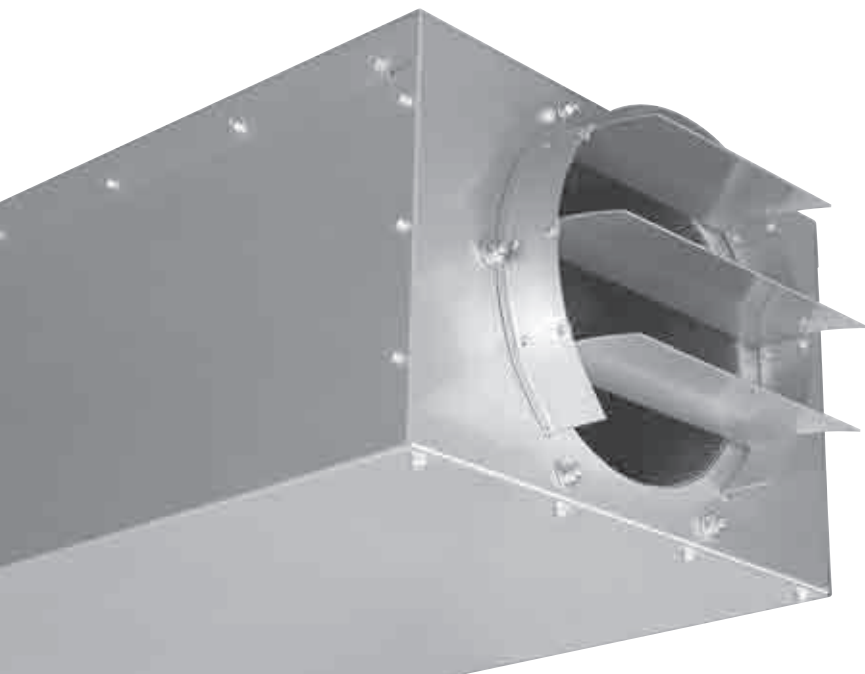
The thermally resistant connecting cable is protected against mechanical damage.

A temperature-resistant, metal connection box is located on the side of the casing. An air-conveyance unit made of sheet steel slats is mounted on the pressure side (AGM 01) or on the pressure and suction side (AGM 11). This serves to draw the airflow in the direction required. On the suction side of the AGM 01 there is protective grating made of steel.

Jetfan **AGM 01/11** and Jetfan **premium AGM 02/12** have been tested according to EN 12101-3 at 300 °C/120 min in a testing laboratory at TUM (Munich Technical University) and exceed the legally required standards.

Jetfan **premium AGM 06/16** is suited for the ventilation of dangerous CO-gases up to +40 °C.





Our service: smoke flow simulation for perfect planning

We will assist you in the detailed planning and dimensioning of car park ventilation equipment, by means of a smoke flow simulation using computational fluid dynamics (CFD).

With the help of CFD, the ideal smoke extraction and ventilation system – including the number and positioning of Jetfans required – can be determined for each construction project, based on the legal requirements (GarVO).

We recommend the use of an airflow-simulation for large garages with difficult geometries. It offers maximum planning security and is an invaluable tool for assessing the entire system.

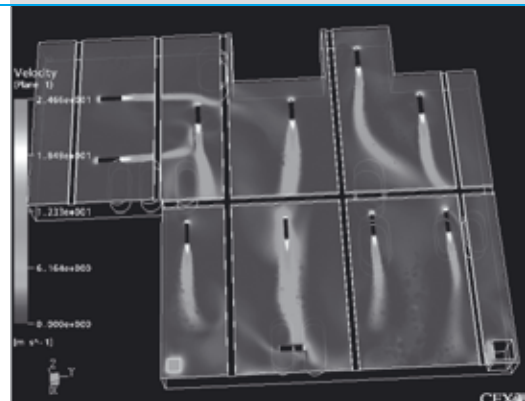
Ventilation – the Jetfan air outlet system

In normal day-to-day operation, the Jetfans are controlled by the CO system – in accordance with the concentration threshold setting. In this way, carbon monoxide-contaminated air is extracted from the car park. This takes place with either just a few Jetfans operating at a low speed, or with all system components operating at a higher output level, depending on the concentration in the air.

Smoke extraction – the Jetfan smoke extraction system

In the event of smoke needing to be extracted, the Jetfans are immediately activated at maximum speed by smoke detectors, regardless of the CO system setting, in order to extract smoke from the area of the fire. The central ventilation shafts are switched to full power at the same time.

A significant advantage of the Jetfan smoke extraction system lies in the fact that smoke can be partially extracted from the immediate area of the fire. In other words, the Jetfans can be used to control smoke levels as well. This avoids the costly process of dividing a car park up into separate sections to reduce the spread of fire.





**In short:
more safety, less costs**

The largest financial benefit of Jetfans lies in the savings made in investment costs. Depending on the results of the smoke flow simulation, experience shows that lower investment costs are involved in installing the respective number of Jetfans, compared with the complete installation of a duct system with a central air outlet unit.

No penetration of the ceiling is required for the installation of Jetfans either, meaning that the structural concept of the underground car park is simplified significantly as well, therefore contributing further to the reduction of investment costs. Jetfans can also be expected to generate very low operating costs on the whole because partial ventilation is also possible.

And in addition to all of this: Jetfan systems offer maximum safety in a fire and meet all statutory requirements.

Your contact at Nicotra Gebhardt will be happy to provide you with further information. Alternatively, you can contact us by telephone on +49 (0) 7942 101-0.



AGM 01-/11-0315, 300 °C – 120 min. AGM 02-/12-0315, 300 °C – 120 min.

Technical Data													
	Thrust	Discharge speed	Poles	Voltage/ Connection	Fre- quency	Speed	Nominal power	Nominal current	Starting/Full load current	Motor size	Sound pressure level L _{pA} at 1m distance	Weight	
⑤	N	m/s		V (3~)	Hz	1/min	kW	A			dB ⑩	kg	
AGM 01-							not reversible						
0315-2D-10	30	21	2	230/400 Δ/Y	50	2830	0.75	3.70/2.10	5.6	80	64	92	
0315-FD-11	30/7.5	21/10	2/4	400 YY/Y	50	2820/1385	0.95/0.25	2.35/0.63	4.2/3.8	80	64/46	92	
AGM 11-							reversed operation - data indicating flow direction over motor						
0315-2D-10	18	16	2	230/400 Δ/Y	50	2830	0.75	3.70/2.10	5.6	80	62	93	
0315-FD-11	18/4.5	16/ 8	2/4	400 YY/Y	50	2820/1385	0.95/0.25	2.35/0.63	4.2/3.8	80	62/46	93	

Accessories (on request)

- Smoke detecting switch unit
- Optical smoke detector with mounting base
- Manual switch
- CO-measuring unit

Accessories / Index

- ⑤ Connection diagrams for fan and isolator to be found online at www.nicotra-gebhardt.com
- ⑩ Sound pressure measurement measured at the centre line below the fan

Technical Data													
	Thrust	Discharge speed	Poles	Voltage/ Connection	Fre- quency	Speed	Nominal power	Nominal current	Starting/Full load current	Motor size	Sound pressure level L _{pA} at 1m distance	Weight	
⑤	N	m/s		V (3~)	Hz	1/min	kW	A			dB ⑩	kg	
AGM 02-							not reversible						
0315-2D-10	30	21	2	230/400 Δ/Y	50	2830	0.75	3.70/2.10	5.6	80	64	92	
0315-FD-11	30/7.5	21/10	2/4	400 YY/Y	50	2820/1385	0.95/0.25	2.35/0.63	4.2/3.8	80	64/46	92	
AGM 12-							reversed operation - data indicating flow direction over motor						
0315-2D-10	18	16	2	230/400 Δ/Y	50	2830	0.75	3.70/2.10	5.6	80	62	93	
0315-FD-11	18/4.5	16/ 8	2/4	400 YY/Y	50	2820/1385	0.95/0.25	2.35/0.63	4.2/3.8	80	62/46	93	

Accessories (on request)

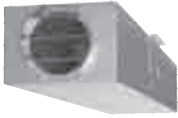
- Smoke detecting switch unit
- Optical smoke detector with mounting base
- Manual switch
- CO-measuring unit

Accessories / Index

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- ⑩ Sound pressure measurement measured at the centre line below the fan

AGM 01-/11-0315, 300 °C – 120 min.
AGM 02-/12-0315, 300 °C – 120 min.

Dimensions in mm, Subject to change.



Fan and accessories tested to EN 12101-3

Certificate of EC conformity: 0036 CPD RG01 09

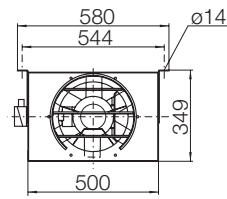
Impulse smoke extraction fan

AGM 01

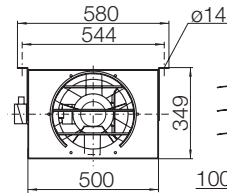
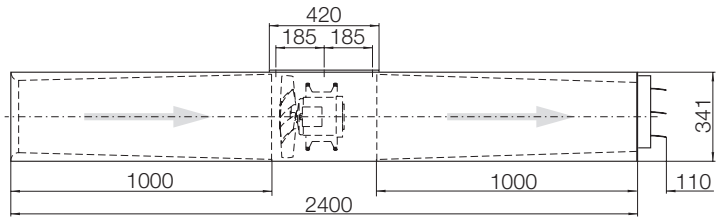
Air flow in direction of motor (pressure) - not reversible

AGM 11

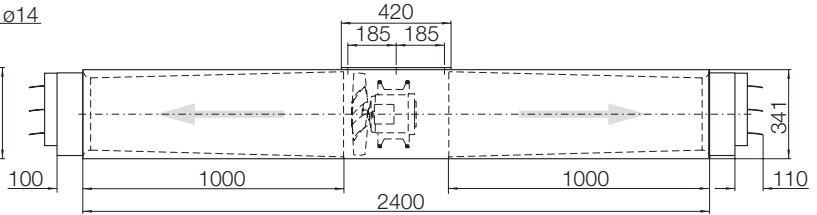
Air flow in direction of motor (pressure/suction) - reversible



AGM 01-0315-..
not reversible



AGM 11-0315-..
reversible



Dimensions in mm, Subject to change.



Fan and accessories tested to EN 12101-3

Certificate of EC conformity: 0036 CPD RG01 10

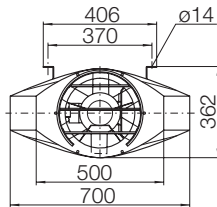
Impulse smoke extraction fan premium

AGM 02

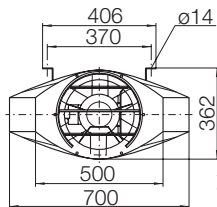
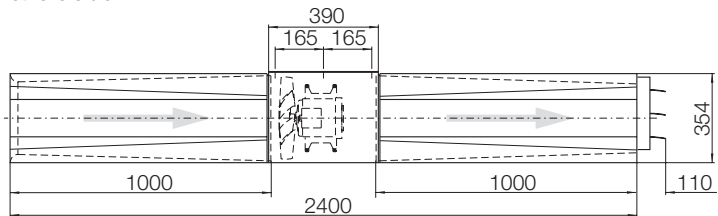
Air flow in direction of motor (pressure) - not reversible

AGM 12

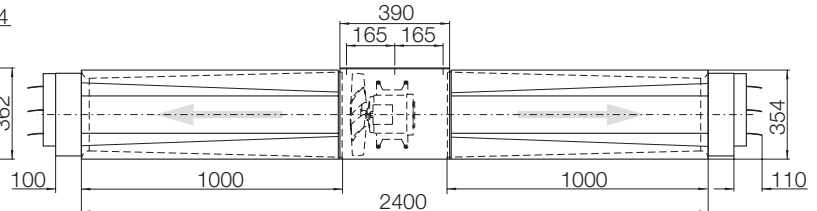
Air flow in direction of motor (pressure/suction) - reversible



AGM 02-0315-..
not reversible



AGM 12-0315-..
reversible



AGM 01-/11-0400, 300 °C – 120 min.

AGM 02-/12-0400, 300 °C – 120 min.

Technical Data

	Thrust	Discharge speed	Poles	Voltage/Connection	Frequency	Speed	Nominal power	Nominal current	Starting/Full load current	Motor size	Sound pressure level L _{pA} at 1m distance	Weight
⑤	N	m/s		V (3~)	Hz	1/min	kW	A			dB ⑩	kg
AGM 01-						not reversible						
0400-2D-11	52	21	2	230/400 Δ/Y	50	2845	1.10	4.70/2.70	6.1	80	65	114
0400-FD-11	52/13	21/10	2/4	400 YY/Y	50	2820/1385	0.95/0.25	2.35/0.63	4.2/3.8	80	65/48	114
AGM 11-						reversed operation - data indicating flow direction over motor						
0400-2D-11	45	20	2	230/400 Δ/Y	50	2845	1.10	4.70/2.70	6.1	80	68	115
0400-FD-11	45/11	20/10	2/4	400 YY/Y	50	2820/1385	0.95/0.25	2.35/0.63	4.2/3.8	80	68/51	115

Accessories (on request)

- Smoke detecting switch unit
- Optical smoke detector with mounting base
- Manual switch
- CO-measuring unit

Accessories / Index

- ⑤ Connection diagrams for fan and isolator to be found online at www.nicotra-gebhardt.com
- ⑩ Sound pressure measurement measured at the centre line below the fan

Technical Data

	Thrust	Discharge speed	Poles	Voltage/Connection	Frequency	Speed	Nominal power	Nominal current	Starting/Full load current	Motor size	Sound pressure level L _{pA} at 1m distance	Weight
⑤	N	m/s		V (3~)	Hz	1/min	kW	A			dB ⑩	kg
AGM 02-						not reversible						
0400-2D-11	52	21	2	230/400 Δ/Y	50	2845	1.10	4.70/2.70	6.1	80	65	114
0400-FD-11	52/13	21/10	2/4	400 YY/Y	50	2820/1385	0.95/0.25	2.35/0.63	4.2/3.8	80	65/48	114
AGM 12-						reversed operation - data indicating flow direction over motor						
0400-2D-11	45	20	2	230/400 Δ/Y	50	2845	1.10	4.70/2.70	6.1	80	68	115
0400-FD-11	45/11	20/10	2/4	400 YY/Y	50	2820/1385	0.95/0.25	2.35/0.63	4.2/3.8	80	68/51	115

Accessories (on request)

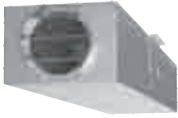
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- Manual switch
- CO-measuring unit

Accessories / Index

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- ⑩ Sound pressure measurement measured at the centre line below the fan

AGM 01-/11-0400, 300 °C – 120 min.
AGM 02-/12-0400, 300 °C – 120 min.

Dimensions in mm, Subject to change.



Fan and accessories tested to EN 12101-3

Certificate of EC conformity: 0036 CPD RG01 09

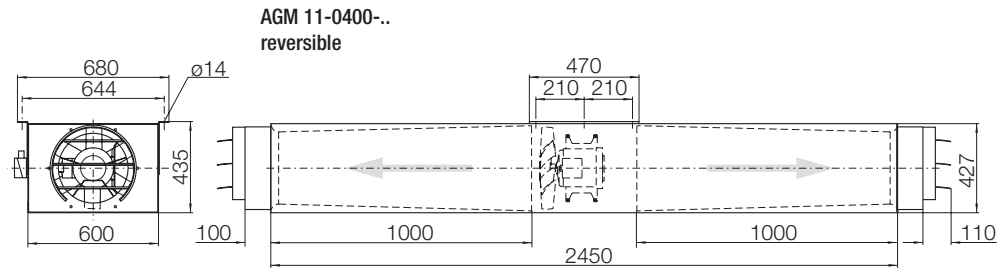
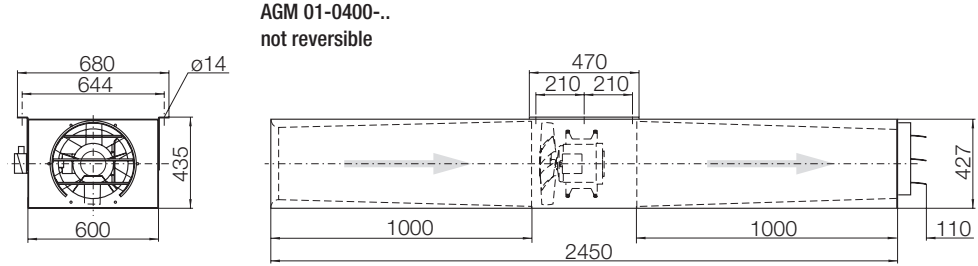
Impulse smoke extraction fan

AGM 01

Air flow in direction of motor (pressure) - not reversible

AGM 11

Air flow in direction of motor (pressure/suction) - reversible



Dimensions in mm, Subject to change.



Fan and accessories tested to EN 12101-3

Certificate of EC conformity: 0036 CPD RG01 10

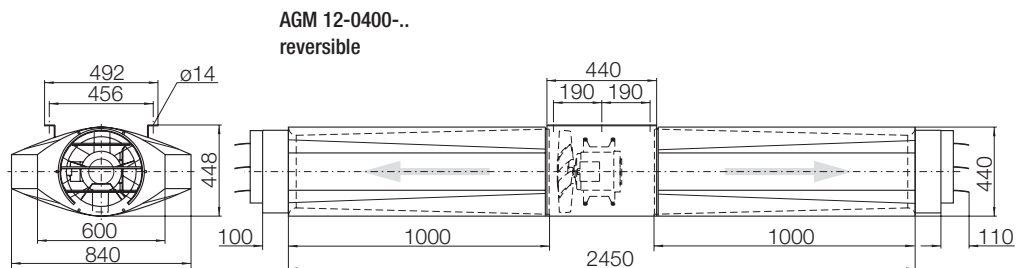
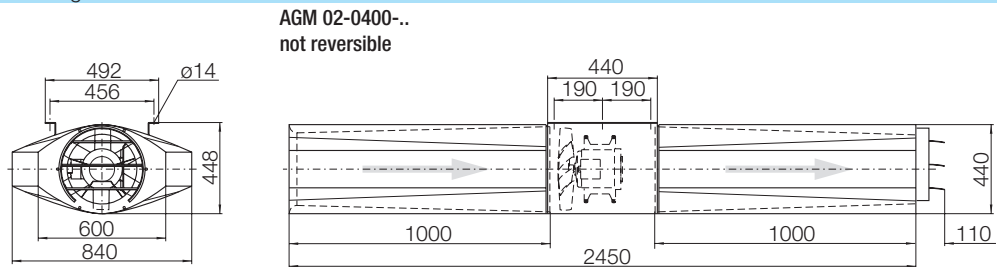
Impulse smoke extraction fan premium

AGM 02

Air flow in direction of motor (pressure) - not reversible

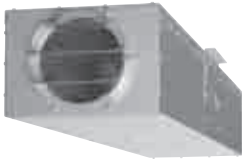
AGM 12

Air flow in direction of motor (pressure/suction) - reversible



AGM 01-0315/-0400, 300 °C – 120 min.

Specification



Fan and accessories tested to EN 12101-3

Certificate of EC conformity: 0036 CPD RG01 09

General technical approval; Approval number: Z-78.11-153

Smoke extract jetfan AGM 01

Suitable for smoke extraction in the case of fire up to 300 °C – 120 min,

tested to DIN EN 12101-3 and CE certified.

Certificate of EC conformity: 0036 CPD RG01 09

DIBt approval number: Z-78.11-153

Suitable as fan for continuous standard ventilation up to 40°C.

Certified for horizontal installation inside of a room where fire may occur.

Conveying direction blowing over motor (pressure).

Casing made of galvanised sheet steel and equipped with silencer at both ends.

Integrated air flow straightener for achieving a turbulence free air stream.

Adjustable guide vanes made of galvanised steel sheet at discharge, intake guard at suction side.

Axial fan impeller with aerofoil blades made of corrosion resistant cast aluminium, balanced to DIN ISO 1940 Class G 6,3.

Certified motor for smoke gases, protection IP 55, ISO H, maximum operation allowed to ISO F.

Protected, heat resistant electrical feed cable,

leading to metal connection box fixed on fan casing,

Tappings provided for high temperature resistance.

Options (at choice)

single speed (3~)

two speed (3~)

speed controlled by inverter during standard ventilation operation (max. working frequency admitted 50 Hz)

Fan type	AGM 01-
Thrust	F = N
Discharge velocity	v = m/s
Reference density	ρ_1 = kg/m ³
max. smoke extract temp.	t/T = °C/min
max. ventilation temperature	t = °C
Rated speed	n = 1/min
Nominal power	P _N = kW
Nominal current	I _N = A
Voltage/Frequency	U/f = V/Hz
A-Sound pressure level	L _{PA} = dB
Dimensions (L×W×H)	= mm
Weight	m = kg

Special fittings (at extra cost)

Special paint on request

Simulation on request

Accessories (on request)

Switch and control cabinet – with or w/o CO-warning system including all necessary equipment (CO-sensors, signal horn, blinking lamp, warning panels, etc.)

Optical smoke detector

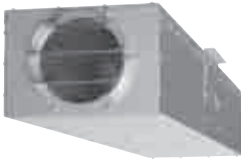
Manual trigger switch

Description see accessories

Wiring diagrams to be found online at www.nicotra-gebhardt.com

AGM 11-0315/-0400, 300 °C – 120 min.

Specification



Fan and accessories tested to EN 12101-3

Certificate of EC conformity: 0036 CPD RG01 09

General technical approval; Approval number: Z-78.11-153

Smoke extract jetfan AGM 11

Suitable for smoke extraction in the case of fire

up to 300°C – 120 min,

tested to DIN EN 12101-3 and CE certified.

Certificate of EC conformity: 0036 CPD RG01 09

DIBt approval number: Z-78.11-153

Suitable as fan for continuous standard ventilation up to 40°C.

Certified for horizontal installation inside of a room where fire may occur.

Reversible - Conveying direction blowing over motor or inverse (pressure or suction)

Casing made of galvanised sheet steel and equipped with silencer at both ends.

Two integrated air flow straighteners for achieving a turbulence free air stream. Adjustable guide vanes made of galvanised steel sheet at discharge and intake.

Axial fan impeller with aerofoil blades made of corrosion resistant cast aluminium, balanced to DIN ISO 1940 Class G 6,3.

Certified motor for smoke gases, protection IP 55, ISO H, maximum operation allowed to ISO F.

Protected, heat resistant electrical feed cable, leading to metal connection box fixed on fan casing, Tappings provided for high temperature resistance.

Options (at choice)

single speed (3~)

two speed (3~)

speed controlled by inverter during standard ventilation operation (max. working frequency admitted 50 Hz)

Fan type	AGM 11-
Thrust	F = N
Discharge velocity	v = m/s
Reference density	ρ_1 = kg/m ³
max. smoke extract temp.	t/T = °C/min
max. ventilation temperature	t = °C
Rated speed	n = 1/min
Nominal power	P _N = kW
Nominal current	I _N = A
Voltage/Frequency	U/f = V/Hz
A-Sound pressure level	L _{PA} = dB
Dimensions (L×W×H)	= mm
Weight	m = kg

Special fittings (at extra cost)

Special paint on request

Simulation on request

Accessories (on request)

Switch and control cabinet – with or w/o CO-warning system including all necessary equipment (CO-sensors, signal horn, blinking lamp, warning panels, etc.)

Optical smoke detector

Manual trigger switch

Description see accessories

Wiring diagrams to be found online at www.nicotra-gebhardt.com

AGM 02-0315/-0400, 300 °C – 120 min.

Specification



Fan and accessories tested to EN 12101-3

Certificate of EC conformity: 0036 CPD RG01 10

General technical approval; Approval number: Z-78.11-153

Smoke extract jetfan premium AGM 02

Suitable for smoke extraction in the case of fire up to 300°C – 120 min,

tested to DIN EN 12101-3 and CE certified.
Certificate of EC conformity: 0036 CPD RG01 10
DIBt approval number: Z-78.11-153

Suitable as fan for continuous standard ventilation up to 40°C.
Certified for horizontal installation inside of a room where fire may occur.
Conveying direction blowing over motor (pressure)

Stylish, elliptical design and equipped with silencer made of galvanised sheet steel at both ends. Centre part with fixing brackets coated black.

Integrated air flow straightener for achieving a turbulence free air stream.

Adjustable guide vanes made of galvanised steel sheet at discharge, intake guard at suction side.

Axial fan impeller with aerofoil blades made of corrosion resistant cast aluminium, balanced to DIN ISO 1940 Class G 6.3.

Certified motor for smoke gases, protection IP 55, ISO H, maximum operation allowed to ISO F.

Protected, heat resistant electrical feed cable, leading to metal connection box fixed on fan casing, Tappings provided for high temperature resistance.

Options (at choice)

- single speed (3~)
- two speed (3~)
- speed controlled by inverter during standard ventilation operation (max. working frequency admitted 50 Hz)

Fan type premium AGM 02-

Thrust	F =	.....	N
Discharge velocity	v =	.....	m/s
Reference density	ρ_1 =	.....	kg/m ³
max. smoke extract temp.	t/T =	.....	°C/min
max. ventilation temperature	t =	.....	°C
Rated speed	n =	.....	1/min
Nominal power	P _N =	.....	kW
Nominal current	I _N =	.....	A
Voltage/Frequency	U/f =	.....	V/Hz
A-Sound pressure level	L _{PA} =	.....	dB
Dimensions (L×W×H)	=	.....	mm
Weight	m =	.....	kg

Special fittings (at extra cost)

Special paint on request
Simulation on request

Accessories (on request)

Switch and control cabinet – with or w/o CO-warning system including all necessary equipment (CO-sensors, signal horn, blinking lamp, warning panels, etc.)

Optical smoke detector
Manual trigger switch

Description see accessories

Wiring diagrams to be found online at www.nicotra-gebhardt.com

AGM 12-0315/-0400, 300 °C – 120 min.

Specification



Fan and accessories tested to EN 12101-3

Certificate of EC conformity: 0036 CPD RG01 10

General technical approval; Approval number: Z-78.11-153

Smoke extract jetfan premium AGM 12

Suitable for smoke extraction in the case of fire

up to 300 °C – 120 min,

tested to DIN EN 12101-3 and CE certified.

Certificate of EC conformity: 0036 CPD RG01 10

DIBt approval number: Z-78.11-153

Suitable as fan for continuous standard ventilation up to 40°C.

Certified for horizontal installation inside of a room where fire may occur.

Reversible - Conveying direction blowing over motor or inverse (pressure or suction)

Stylish, elliptical design and equipped with silencer made of galvanised sheet steel at both ends. Centre part with fixing brackets coated black.

Two integrated air flow straighteners for achieving a turbulence free air stream.

Adjustable guide vanes made of galvanised steel sheet at discharge and intake.

Axial fan impeller with aerofoil blades made of corrosion resistant cast aluminium, balanced to DIN ISO 1940 Class G 6,3.

Certified motor for smoke gases, protection IP 55, ISO H, maximum operation allowed to ISO F.

Protected, heat resistant electrical feed cable,

leading to metal connection box fixed on fan casing,

Tappings provided for high temperature resistance.

Options (at choice)

single speed (3~)

two speed (3~)

speed controlled by inverter during standard ventilation operation (max. working frequency admitted 50 Hz)

Fan type premium AGM 12-

Thrust	F =	.....	N
Discharge velocity	v =	.....	m/s
Reference density	ρ_1 =	.....	kg/m ³
max. smoke extract temp.	t/T =	.....	°C/min
max. ventilation temperature	t =	.....	°C
Rated speed	n =	.....	1/min
Nominal power	P _N =	.....	kW
Nominal current	I _N =	.....	A
Voltage/Frequency	U/f =	.....	V/Hz
A-Sound pressure level	L _{PA} =	.....	dB
Dimensions (L×W×H)	=	.....	mm
Weight	m =	.....	kg

Special fittings (at extra cost)

Special paint on request

Simulation on request

Accessories (on request)

Switch and control cabinet – with or w/o CO-warning system including all necessary equipment (CO-sensors, signal horn, blinking lamp, warning panels, etc.)

Optical smoke detector

Manual trigger switch

Description see accessories

Wiring diagrams to be found online at www.nicotra-gebhardt.com

AGM 06-0315/-0400, 40 °C – CO

AGM 16-0315/-0400, 40 °C – CO

Technical Data

	Thrust	Discharge speed	Poles	Voltage/ Connection	Fre- quency	Speed	Nominal power	Nominal current	Starting/Full load current	Motor size	Sound pressure level L _{pA} at 1m distance	Weight
⑤	N	m/s		V (3~)	Hz	1/min	kW	A			dB ⑩	kg
AGM 06- not reversible												
0315-2D-10	30	21	2	230/400 Δ/Y	50	2855	0.75	3.00/1.73	5.6	80	64	92
0315-FD-11	30/7.5	21/10	2/4	400 YY/Y	50	2780/1385	0.95/0.25	2.40/0.61	4.2/3.8	80	64/46	92
0400-2D-11	52	21	2	230/400 Δ/Y	50	2845	1.10	4.20/2.40	6.1	80	65	114
0400-FD-11	52/13	21/10	2/4	400 YY/Y	50	2780/1385	0.95/0.25	2.40/0.61	4.2/3.8	80	65/48	114
⑤	N	m/s		V (3~)	Hz	1/min	kW	A			dB ⑩	kg
AGM 16- reversed operation - data indicating flow direction over motor												
0315-2D-10	18	16	2	230/400 Δ/Y	50	2855	0.75	3.00/1.73	5.6	80	62	93
0315-FD-11	18/4.5	16/8	2/4	400 YY/Y	50	2780/1385	0.95/0.25	2.40/0.61	4.2/3.8	80	62/46	93
0400-2D-11	45	20	2	230/400 Δ/Y	50	2845	1.10	4.20/2.40	6.1	80	68	115
0400-FD-11	45/11	20/10	2/4	400 YY/Y	50	2780/1385	0.95/0.25	2.40/0.61	4.2/3.8	80	68/51	115

Accessories (on request)

- CO-measuring unit

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⑤ Connection diagrams for fan and isolator to be found online at www.nicotra-gebhardt.com

⑩ Sound pressure measurement measured at the centre line below the fan

Dimensions in mm, Subject to change.



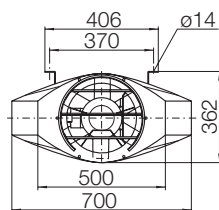
Impulse Jetfan premium

AGM 06

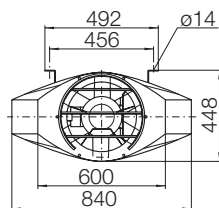
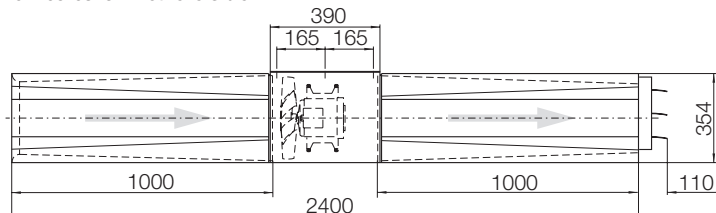
Air flow in direction of motor (pressure) - not reversible

AGM 16

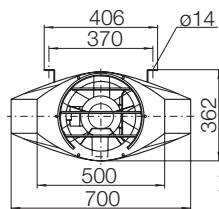
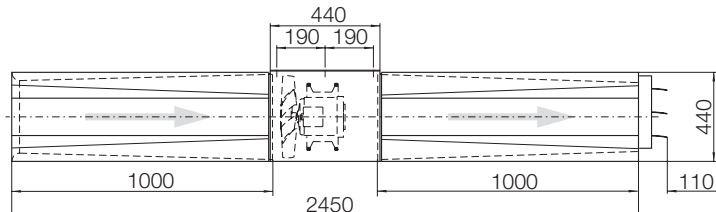
Air flow in direction of motor (pressure/suction) - reversible



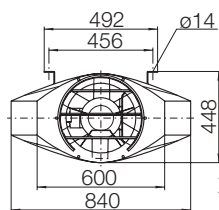
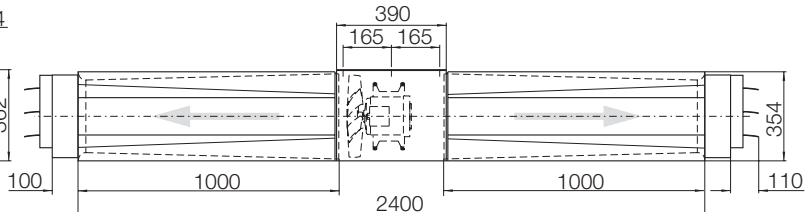
AGM 06-0315-.. not reversible



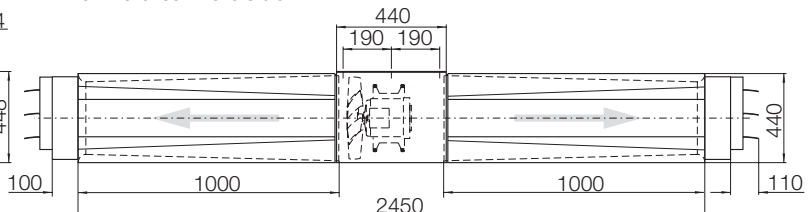
AGM 06-0400-.. not reversible



AGM 16-0315-.. reversible



AGM 16-0400-.. reversible



AGM 06-0315/-0400, 40 °C – CO

AGM 16-0315/-0400, 40 °C – CO

Specification



Jetfan premium AGM 06/16 for ventilation of CO-gases

Suitable for continuous standard ventilation up to 40°C.
 Certified for horizontal installation.

Conveying direction blowing over motor (pressure)

Stylish, elliptical design and equipped with silencer made of galvanised sheet steel at both ends. Centre part with fixing brackets coated black.

Integrated air flow straightener for achieving a turbulence free air stream.

Adjustable guide vanes made of galvanised steel sheet at discharge, intake guard at suction side.

Axial fan impeller with aerofoil blades made of corrosion resistant cast aluminium, balanced to DIN ISO 1940 Class G 6.3.

Electrical feed cable leading to connection box fixed on fan casing.

Options (at choice)

- single speed (3~)
- two speed (3~)
- speed controlled by external frequency inverter (max. working frequency admitted 50 Hz)

Fan type	AGM 06-/16-
Thrust	F = N
Discharge velocity	v = m/s
Reference density	ρ_1 = kg/m ³
max. ventilation temperature	t = °C
Rated speed	n = 1/min
Nominal power	P _N = kW
Nominal current	I _N = A
Voltage/Frequency	U/f = V/Hz
A-Sound pressure level	L _{PA} = dB
Dimensions (L×W×H)	= mm
Weight	m = kg

Special fittings (at extra cost)

- Special paint on request
- Simulation on request

Accessories (on request)

Switch and control cabinet – with CO-warning system including all necessary equipment (CO-sensors, signal horn, blinking lamp, warning panels, etc.)

Description see accessories

Wiring diagrams to be found online at www.nicotra-gebhardt.com

RGM 91-0600, 300 °C – 120 min. RGM 91-0610, 300 °C – 120 min.

Technical Data

	Thrust	Discharge speed	Poles	Voltage/Connection	Frequency	Speed	Nominal power	Nominal current	Starting/Full load current	Motor size	appr. weight
⑤	N	m/s		V (3~)	Hz	1/min	kW	A			kg
RGM 91-0600, 300 °C – 120 min.											
0600-4D-15	50	25.0	4	230/400 Δ/Y	50	1435	1.5	5.80/3.30	5.8	90 L	130
0600-ID-15	50/23	25.0/17.0	4/6	400 YY/Y	50	1425/955	1.5/0.55	3.60/1.80	7.4/3.9	90 L	130
0600-GD-15	50/13	25.0/13.0	4/8	400 YY/Y	50	1420/720	1.3/0.22	3.00/1.15	5.4/3.4	90 L	130
⑤	N	m/s		V (3~)	Hz	1/min	kW	A			kg
RGM 91-0610, 300 °C – 120 min.											
0610-4D-16	75	23.5	4	230/400 Δ/Y	50	1435	2.2	8.60/5.00	6.4	100 L	180
0610-ID-16	75/34	23.5/16.0	4/6	400 YY/Y	50	1425/955	2.2/0.75	5.00/2.60	7.1/4.0	100 L	180
0610-GD-16	75/19	23.5/12.0	4/8	400 YY/Y	50	1430/715	2.2/0.37	5.10/1.60	6.3/3.8	100 L	180

Attention! In the case of fire fans with 2-speed motors must only be operated at high speed.

Accessories (on request)

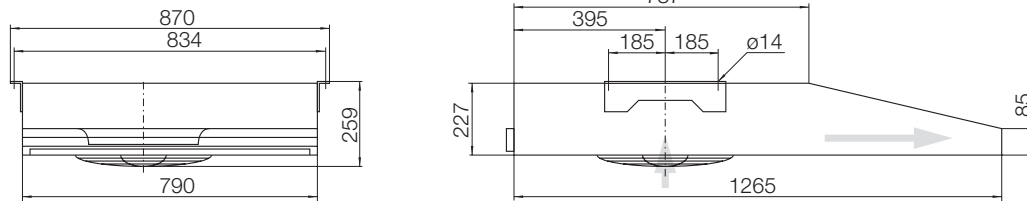
- Smoke detecting switch unit
- Optical smoke detector with mounting base
- Manual switch
- CO-measuring unit

Accessories / Index

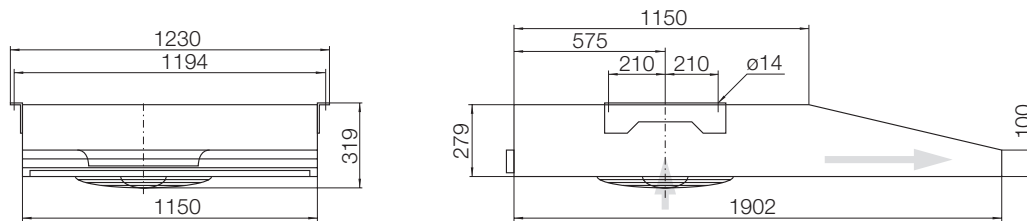
⑤ Connection diagrams for fan and isolator to be found online at www.gebhardt.de

Dimensions in mm, Subject to change.

RGM 91-0600, 300 °C – 120 min.



RGM 91-0610, 300 °C – 120 min.



Sounds

Fan type	Poles	L _{pA, 1m} dB	L _{p okt, 1m at f_m}								Hz
			63	125	250	500	1000	2000	4000	8000	
RGM 91-0600-..	4	77	64	79	75	75	71	69	66	60	dB
	6	66	66	70	65	64	61	57	54	48	dB
	8	59	68	62	58	57	54	49	46	39	dB
RGM 91-0610-..	4	83	74	87	81	80	77	75	68	63	dB
	6	71	72	79	71	68	66	62	55	50	dB
	8	63	74	68	61	61	58	52	45	40	dB

RGM 91-0600, 300 °C – 120 min. RGM 91-0610, 300 °C – 120 min.

Specification



Fan and accessories tested to EN 12101-3

Certificate of EC conformity: 0036 CPD RG01 11

General technical approval; Approval number: Z-78.11-163

Smoke extract jetfan RGM 91

Suitable for smoke extraction in the case of fire

up to 300°C – 120 min,

tested to DIN EN 12101-3 and CE certified.

Certificate of EC conformity: 0036 CPD RG01 11

DIBt approval number: Z-78.11-163

Suitable as fan for continuous standard ventilation up to 40°C.

Certified for horizontal installation inside of a room where fire may occur.

Especially slim casing construction made of galvanised sheet steel, equipped with mounting bracket at both ends.

Protection guard at inlet side and integrated guide vanes made of galvanised steel sheet at discharge.

Centrifugal impeller with backward curved blades made of sheet steel, welded and coated, balanced in according to ISO 1940.

Certified motor for smoke gases, protection IP 55 with protected, heat resistant electrical feed cable, leading to metal connection box fixed on fan casing, Tappings provided for high temperature resistance.

Options (at choice)

single speed (3~)

two speed (3~)

(High speed for smoke extraction, low speed for continuous standard ventilation)

Fan type	RGM 91-
Thrust	F = N
Discharge velocity	v = m/s
Reference density	ρ_1 = kg/m ³
max. smoke extract temp.	t/T = °C/min
max. ventilation temperature	t = °C
Rated speed	n = 1/min
Nominal power	P _N = kW
Nominal current	I _N = A
Voltage/Frequency	U/f = V/Hz
A-Sound pressure level	L _{PA} = dB
Dimensions (L×W×H)	= mm
Weight	m = kg

Special fittings (at extra cost)

Special paint on request

Simulation on request

Accessories (on request)

Switch and control cabinet – with or w/o CO-warning system including all necessary equipment (CO-sensors, signal horn, blinking lamp, warning panels, etc.)

Optical smoke detector

Manual trigger switch

Description see accessories

Wiring diagrams to be found online at www.gebhardt.de

RGM 96-0600, 40 °C – CO

RGM 96-0610, 40 °C – CO

Technical Data

	Thrust	Discharge speed	Poles	Voltage/Connection	Frequency	Speed	Nominal power	Nominal current	Starting/Full load current	Motor size	appr. Weight
⑤	N	m/s		V (3~)	Hz	1/min	kW	A			kg
RGM 96-0600, 40 °C – CO											
0600-4D-15	50	25.0	4	230/400 Δ/Y	50	1426	1.5	5.80/3.40	5.3	90 L	130
0600-ID-15	50/23	25.0/17.0	4/6	400 YY/Y	50	1425/940	1.5/0.55	3.60/2.20	6.1/3.3	90 L	130
0600-GD-15	50/13	25.0/13.0	4/8	400 YY/Y	50	1459/732	1.5/0.25	4.20/1.60	5.5/3.1	90 L	130
⑤	N	m/s		V (3~)	Hz	1/min	kW	A			kg
RGM 96-0610, 40 °C – CO											
0610-4D-16	75	23.5	4	230/400 Δ/Y	50	1436	2.2	8.30/4.80	5.9	100 L	180
0610-ID-16	75/34	23.5/16.0	4/6	400 YY/Y	50	1400/940	2.2/0.75	4.80/2.30	6.8/4.2	100 L	180
0610-GD-16	75/19	23.5/12.0	4/8	400 YY/Y	50	1446/726	2.2/0.37	5.50/2.00	5.2/3.2	100 L	180

Accessories (on request)

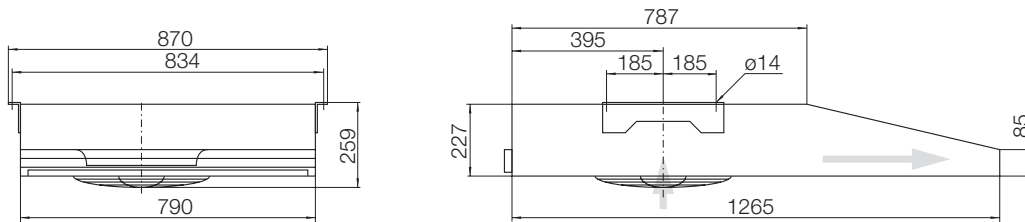
- CO-measuring unit

Accessories / Index

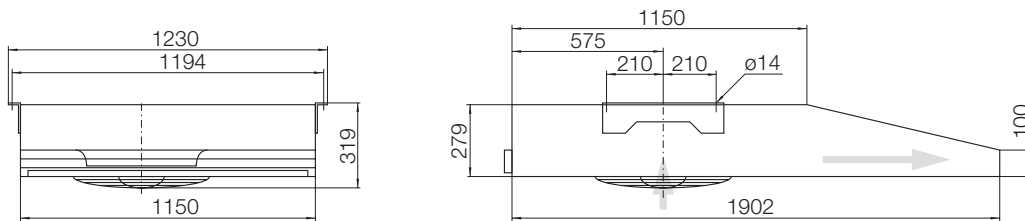
⑤ Connection diagrams for fan and isolator to be found online at www.gebhardt.de

Dimensions in mm, Subject to change.

RGM 96-0600, 40 °C – CO



RGM 96-0610, 40 °C – CO



Sounds

The sound pressure level was measured in a distance of 1 m in two positions. The average values are shown in the table.

Fan type	Poles	L _{pA, 1m} dB	L _{p okt, 1m at f_m}								Hz
			63	125	250	500	1000	2000	4000	8000	
RGM 91-0600-..	4	77	64	79	75	75	71	69	66	60	dB
	6	66	66	70	65	64	61	57	54	48	dB
	8	59	68	62	58	57	54	49	46	39	dB
RGM 91-0610-..	4	83	74	87	81	80	77	75	68	63	dB
	6	71	72	79	71	68	66	62	55	50	dB
	8	63	74	68	61	61	58	52	45	40	dB

RGM 96-0600, 40 °C – CO

RGM 96-0610, 40 °C – CO

Specification



Jetfan premium RGM 96 for ventilation of CO-gases

Suitable for continuous standard ventilation up to 40°C.

Certified for horizontal installation.

Especially slim casing construction made of galvanised sheet steel, equipped with mounting bracket at both ends.

Protection guard at inlet side and integrated guide vanes made of galvanised steel sheet at discharge.

Centrifugal impeller with backward curved blades made of sheet steel, welded and coated, balanced in according to ISO 1940.

Electrical feed cable leading to connection box fixed on fan casing.

Options (at choice)

- single speed (3~)
- two speed (3~)
- speed controlled by external frequency inverter (max. working frequency admitted 50 Hz)

Fan type premium RGM 96-

Thrust	F =	.....	N
Discharge velocity	v =	.....	m/s
Reference density	ρ_1 =	.....	kg/m ³
max. ventilation temperature	t =	.....	°C
Rated speed	n =	.....	1/min
Nominal power	P _N =	.....	kW
Nominal current	I _N =	.....	A
Voltage/Frequency	U/f =	.....	V/Hz
A-Sound pressure level	L _{PA} =	.....	dB
Dimensions (L×W×H)	=	.....	mm
Weight	m =	.....	kg

Special fittings (at extra cost)

Special paint on request

Simulation on request

Accessories (on request)

Switch and control cabinet – with CO-warning system including all necessary equipment (CO-sensors, signal horn, blinking lamp, warning panels, etc.)

Description see accessories

Wiring diagrams to be found online at www.gebhardt.de

