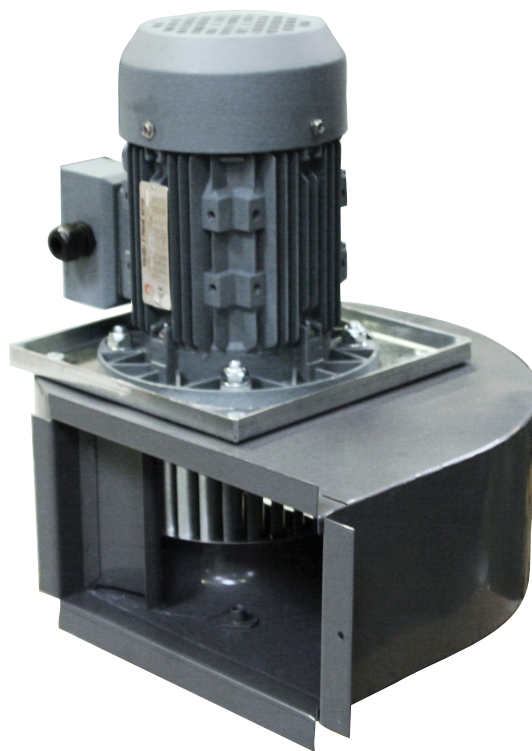




GEOVENT

INSTRUCTIONS MANUAL



F a n
MSQ 200

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1.0 General safety precautions

IMPORTANT - Please study all the instructions before mounting and commissioning.

Please keep these instructions in a safe place and instruct all users in the function and operation of the product.

Do not dismantle any factory-mounted parts, since it impedes the commissioning of the equipment.

All electrical installations must be carried out by an authorised electrician.

1.1 Danger

Mounting must be completed before connecting and using the fan.

Removing the protection net on the fan whilst in operation involves risk of mutilation.

Always switch off the current when mounting something on the fan or when servicing it.

1.2 Field of Application

The Fan MSQ is applied for process extraction within the industry for the extraction of welding smoke, exhaust gasses, grinding dust and vapours.

The Fan is not suitable for the extraction of aluminium dust, flour, textile dust nor for sawdust or other media, which are connected with danger of explosion, without specific approval from Geovent A/S.

1.3 Handling

Always use gloves when handling the fan.

The fan should be lifted by using one hand under the motor and one under the casing.

1.4 Technical data

Temperature

Temperature extracted air Max 80 °C
 Temperature ambient. Max 40 °C

For use at higher temperatures, use special motors. Please enquire at Geovent.

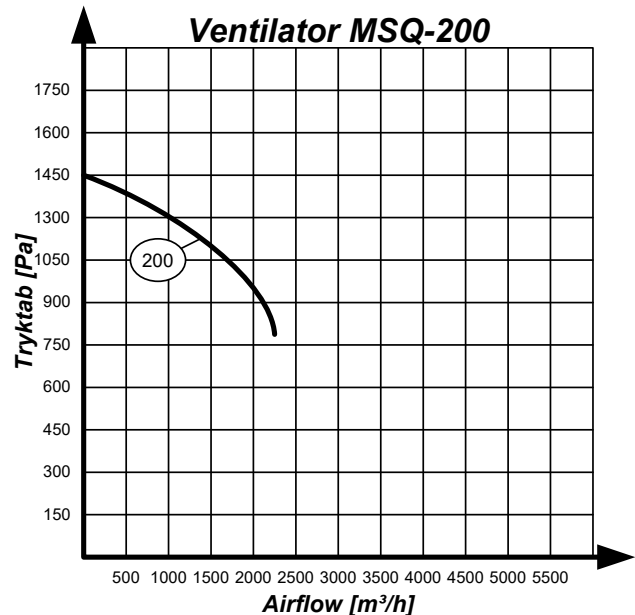
Noise

Type	Lp, dB(A)	Lp, 1m
MSQ-200	78	72

The sound level depends on various factors under various circumstances. For instance, where in the room the Fan has been installed, the size of the room, the temperature in the room, the acoustic profile of the room and also the connection (hose > pipe) of the fan influences the sound level of the fan.

The actual ampere consumption and the kW of the motor are shown on the metal sign on the Fan

Pressure drop

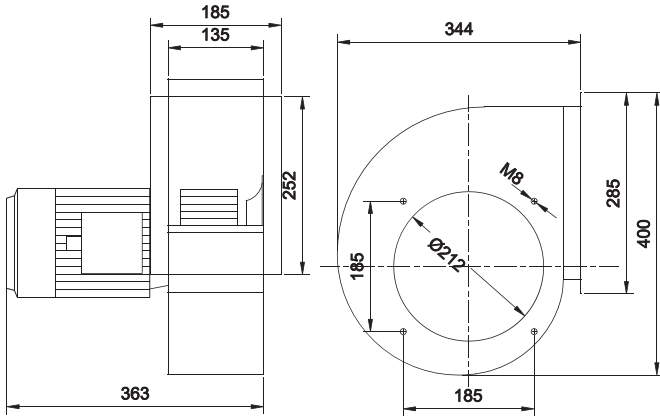


1.5 Construction

House: 100% welded steel, powder coated(RAL7015) for maximum corrosion resistance.
Fan wheel: forward curved scirocco-wheel (F-wheel)
Warm galvanized steel

Motor: B5 flange motor, Direct drive,
Protection class:IP 55.

Dimensions:



MSQ 200

2.0 Installation

The fan is supplied assembled and ready for piping and connection to power.

Before installation, please consider the following:

- Placement: Must be placed indoors
- Make room for mounting and servicing of the fan.
- Possible connections and automatics.

Important:

Avoid bends on hoses immediately prior to the intake and after the outlet as it will decrease the performance of the fan.

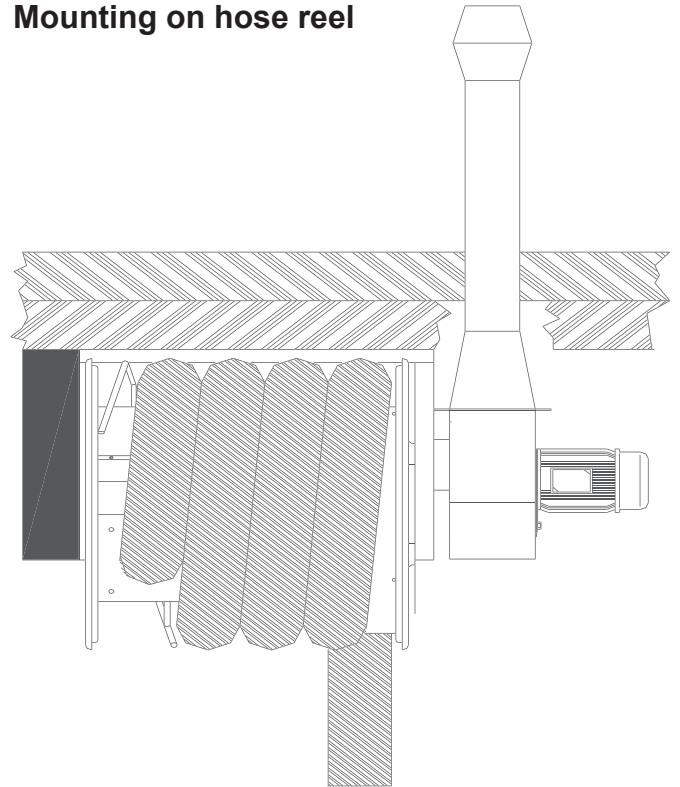


MSQ 200 mounted on a wall console for an extraction arm.



MSQ 200 with flange for extraction arm mounting.

Mounting on hose reel



MSQ mounted on a hose reel.



Mounting bracket for GTE/GTS Hose reel.

The following installation should only be carried out by a trained professional.

Connect fan to power grid:

1. Only a trained electrician should connect the fan to power.
Always use isolation switch der skal altid anvendes reparationsafbryder and motor protection.
2. 3-phased motors can be configured for both 3x230V and 3x400V.

The motor is not configured by default and the supplied jumper bars should be fitted in the skal monteres således i the terminal box according to voltage.

Note: The following connection diagrams are indicative

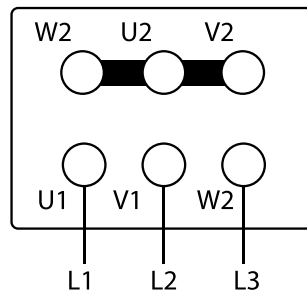
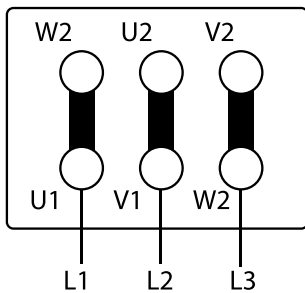
Connection Diagram MSQ

△ -Kobling

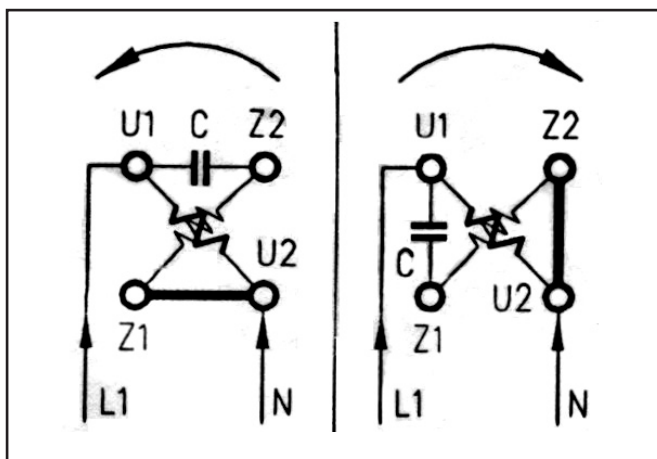
△ -Connection

Y-Kobling

Y-Connection



Connection diagram 3 fase



Connection diagram 1 fase

Correct direction.

After connecting to power, test that the wheel turns in the right direction.

Is this not the case, the air flow will be reduced by up to 70 - 80%

To correct the error, simply switch two phases and the fan will now turn in the right direction.

2.1 Fitting accessories

Fitting motor protection and pressure switch.

For installation of control device in connection with process ventilation, see separate documentation.

2.2 Test run and adjustment

After installation please check.

- Vibrations in the fan. See section 4.1 Trouble shooting.
- Air flow. The fan should deliver the amount of air for wich it is designed. Adjust to correct airflow using a cut damper.
- Power consumption (Ampere). If the fan has excess capacity (Airflow) the power consumption can exceed that of the motor and cause a complete motor failure.

3.0 Application - user instruction

The fan is activated by default by pressing the start button on the motor guard.

The fan will not work as intended if:

- Unoriginal parts have been fitted- E.g: unoriginal wheel.
- The wheel turns in the wrong direction.
The fan will stil function but capacity is reduced by 70-80 %
- If no motor protection is used.

4.0 Maintenance

Periodic maintenance.

- The wheel and house should be cleaned yearly or when needed. Wheel and house can be cleaned with a bruch, water and detergent.
Remember to disconect the power before washing and dry with a dry clean piece of cloth. This will ensure the lifespan of the fan.
- Maintenance of the motor should be carried out according to the manual of the motor. (enclosed)

Use only original spare parts.

4.1 Trouble shooting

Always use repair switch and motor protection.

Always use a cut damper!

In case of trouble with the fan check the following list:

Airflow or pressure is less than indicated:

- Wrong turning direction of the wheel.
Switch two phases.

- Leaky duct system.
- Poor inlet or outlet close to the fan will decrease performance.
- Damaged wheel.
- The rotation speed is set too low.
- If temperature is significantly different from that of the lab.
Measurements are carried out at 20°C and a pressure of 101,4 kPa.
- The dampers are not properly adjusted.
- The intake is blocked by rags or similar.

Vibrations and noise.:

- Foundation is not level or stable.
- External elements have entered the fan.
- damaged wheel or motor.
- The wheel has come loose.
- The wheel is unstable due to filth on the impellers.
- Wrong rotation direction.

- The fan delivers more air than it was designed for.
Use cut damper.
- Loose bolts or screws.

The motor is overloaded.

- The wiring of the motor is not correct.
- The axle is bent
- The fan has an overcapacity in relation to the resistance of the system. Use damper.
- Engine speed is too high.
- Defective motor - contact dealer!

5.0 Liability

Warranty

Geovent A/S grants a warranty for products which are defective, when proven that the defects are caused by poor manufacture or materials on the part of Geovent. The warranty comprises remedial action (repair or exchange) until one year after date of shipment. No claims can be made against Geovent A/S with regards to loss of earnings or consequential loss as a result of defects on products from Geovent. Wear parts like the wheel is not covered by this warranty.

Liability

In order for Geovent to be capable of granting the declared warranty, the user/fitter must follow this Instruction Manual in all respects. Under no circumstances may the products be altered in any way, without prior written consent from Geovent A/S.

Terms of sale and delivery apply.
Available here: www.geovent.com

5.1 Disposal.

Used electronic products may contain harmful materials.

If the products are disposed of with regular refuse it can be harmful to health and environment.

Discard of the fan by delivering it to the nearest recycling station in order for the parts to be recycled.

5.2 Environmental impact.

VFans consume energy to give people a healthy indoor climate. At Geovent we strive to minimize the impact on the environment caused by our products. This is the reason why we follow the latest developments in the energy saving technology. We also ask for the highest standards with our suppliers.

Our challenge: to supply the best possible indoor climate with the least environmental impact.

6.0 EU declaration of conformity.



GEOVENT

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Hereby declares that:

The product: MSQ Fan
have been manufactured in compliance with the directions of the Directive Council of 17th of May 2006 in common approximation to the legislation of the member states regarding machine safety 2006/42/EF amended by the directive 95/16/EF with special reference to appendix 1 in the Directive regarding basic health and safety requirements in connection with the construction and manufacturing of machinery.

EN ISO 14121-1:2007

EN ISO 12100-1:2005

EN ISO 12100-1:2009

EN ISO 12100-2:2005

EN ISO 12100-2:2009

Date: 16-03-17

Position: Director
Name: Thomas Molsen

Signature:



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