**Axial roof fan DZD 50/4 B Ex e**

Product model

For usage temperatures of -20°C ≤ Ta ≤ +60°C.

Special features

Axial roof fan, explosion-proof, medium: gas.

Explosion protection and approvals in accordance with ATEX and IECEx.

Ex II 2G Ex eb IIB+H2 T3/T4 Gb X / Ex II 2G Ex h IIB+H2 T3/T4 Gb X.

Qualified for all gases and vapours of Ex group IIA and IIB and also for hydrogen.

MAICO Ex fans fulfil the safety requirements of European Directive 2014/34/EU for units and protective systems in potentially explosive atmospheres.

For zone 1 and 2.

Types of ignition protection: “e”- increased safety and “c”- constructional safety.

IP 64 degree of protection.

Base plate, intake nozzle and rain protection cover made of galvanised sheet steel.

Horizontal air outlet direction.

Sturdy eyebolts enable transport by crane.

Can be switched to ventilation or air extraction.

Impeller

Axial impeller made of conductive plastic.

Balance quality of the motor/impeller combination G 6.3 according to category BV-3 in accordance with ISO 14694.

Air flow direction

The air flow direction is marked.

Standard exhaust air mode, air flow direction with air blown across motor.

Motor

Robust three-phase AC motor with ball bearings, maintenance-free.

Reversible.

Reversing mode: The volumetric flow is reduced by approx. 35 % with abnormal air flow direction.

S1 operating mode (continuous operation).

Speed control permitted with TR... transformer. Exception: DZD 35/2 B Ex...

The temperature in the fan motor is monitored by PTC thermistors. The PTC thermistors must be connected to a triggering system (safety device according to Directive 2014/34/EU), that separates the fan permanently from the power if the temperature gets too hot.

The MAICO PTC thermistor triggering device MVS 6 or TMS is recommended as the triggering system.

Electrical connection

Connecting cable, approx. 1.7 m long.

Separate terminal box, explosion proof, with cable screw-connections.

Required safety technology

A PTC thermistor triggering device is needed to fuse the DZD-Ex units.

Maico provides the MVS 6 PTC thermistor triggering device and TMS for this purpose.

MVS 6 PTC thermistor triggering device

Independent complete system.

For monitoring the maximum motor temperature.

Type-examination tested according to Directive 2014/34/EU (ATEX).

Installation exclusively in non-explosive areas.

TMS thermistor machine protection relay

For monitoring the maximum motor temperature.

Suitable for installation in control cabinets

Type-examination tested according to Directive 2014/34/EU (ATEX).

Installation exclusively in non-explosive areas.

Safety information

The fan may be operated only if the protection against accidental contact with the impeller is guaranteed to be in accordance with DIN EN ISO 13857 for fans with free inlet and outlet, e.g. with an SG protective grille.

Special versions

Special voltages are available as special versions on request and at extra cost.

Information on operation at temperatures occasionally below -20°C available upon request.

Feasibility must be checked in each case.

Technical data

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| Article: | DZD 50/4 B Ex e |
| Air flow volume: | 5.830 m³/h |
| Rotating speed: | 1.425 1/min |
| Impeller type: | axial |
| Air direction: | Ventilation and air extraction |
| Speed controllable: |  ✔  |
| Reversing capacity: |  ✔  |
| Type of voltage: | Three-phase AC |
| Rated voltage: | 400 V |
| Frequency: | 50 Hz |
| Nominal output: | 485 W |
| cosφ: | 0,76 |
| Inom: | 0,92 A |
| Imaxat UNominal: | 1,7 A |
| Degree of protection: | IP 64 |
| Insulation class: | F |
| Installation site: | Roof |
| Installation position: | vertical |
| Material: | Sheet steel, galvanised |
| Housing material: | Sheet steel, galvanised |
| Colour: | galvanised |
| Weight: | 39 kg |
| Weight including packaging: | 46 kg |
| Nominal size: | 500 mm |
| Width: | 940 mm |
| Height: | 420 mm |
| Depth: | 940 mm |
| Width with packaging: | 941 mm |
| Height with packaging: | 510 mm |
| Depth with packaging: | 941 mm |
| EX designation in accordance with the ATEX Directive: | Ex II 2 G |
| EX designation in accordance with standard: | Ex eb IIB + H<sub>2</sub> T3 Gb / Ex h IIB + H<sub>2</sub> T3 Gb |
| Ta ambient temperature: | -20 °C ≤ Ta ≤ +60 °C |
| IA/IN: | 4,1 |
| Time tA: | 240 sek |
| Operating mode: | S1 |
| PTC DIN 44082: | M 130 |
| EC type examination certificate: | TÜV-A 19 ATEX0104 X, IECEx EPS 19.0020X |
| Temperature class: | T3 |
| Temperature class of insulating materials Th. Cl.: | 155 (F) |
| Packing unit: | 1 piece |
| Range: | C |
| GTIN (EAN): | 4012799878070 |
| Article number: | 0087.0807 |

Manufacturer: MAICO

DZD 50/4 B Ex e Axial roof fan