**Axial duct fan DAR 90/8-3 Ex**

Features

Axial duct fan 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.

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: “d” – pressure-proof housing and “c” – constructional safety.

Powerful fan for large air volumes.

For easy and direct installation in a duct system.

Can be fitted in any position.

Housing made of sheet steel with epoxy coating.

Suitable for temperature ranges from -20 °C to +40 °C.

Axial impellers made of glass-fibre reinforced, antistatic polyamide.

Air flow direction

The air flow direction is marked.

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

Motor

Asynchronous three-phase AC motors.

Degree of protection IP55.

S1 operating mode (continuous operation).

Temperature class T4.

Speed controllable with frequency converter.

Permissible frequency range for speed control with frequency converter is 20 Hz to 50 Hz.

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.

Electrical connection

Connection in the terminal box on the motor.

Cable screw connection, in Ex d version, included in the scope of delivery.

Special versions

The following special versions are available on request, at an extra cost:

Version with motors for the medium: hydrogen.

Versions with different temperature ranges.

Versions with motors suitable for speed control.

Versions with double polarity motors.

Technical data

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| Article: | DAR 90/8-3 Ex |
| Model: | Motor variant 3 |
| Air flow volume: | 19.449 m³/h |
| Rotating speed: | 720 1/min |
| Impeller type: | axial |
| Speed controllable: | ✔ |
| Rated voltage: | 400 V |
| Frequency: | 50 Hz |
| Nominal output: | 1.100 W |
| Inom: | 3 A |
| Imax: | 3,6 A |
| Degree of protection: | IP 55 |
| Insulation class: | F |
| Pole-changeable: | - |
| Installation site: | Duct connection |
| Installation position: | vertical / horizontal |
| Housing material: | Sheet steel, galvanised |
| Colour: | grey |
| Weight: | 120 kg |
| Weight including packaging: | 195 kg |
| Nominal size: | 900 mm |
| Width: | 1.030 mm |
| Height: | 680 mm |
| Depth: | 1.030 mm |
| Width with packaging: | 1.040 mm |
| Height with packaging: | 830 mm |
| Depth with packaging: | 1.040 mm |
| EX designation in accordance with the ATEX Directive: | Ex II 2 G |
| EX designation in accordance with standard: | Ex db IIB+H2 T4 Gb X / Ex h IIB+H2 T4 Gb X |
| Ta ambient temperature: | -20 °C ≤ Ta ≤ +40 °C |
| Operating mode: | S1 |
| PTC DIN 44082: | M 100 |
| Temperature class: | T4 |
| Packing unit: | 1 piece |
| Range: | C |
| GTIN (EAN): | 4012799733713 |
| Article number: | 0073.0371 |

Manufacturer: MAICO

DAR 90/8-3 Ex Axial duct fan