



Technology and expertise for professional ventilation

## **TAILORED VENTILATION SOLUTIONS**

The quality of the air we breathe and the safety of our working and living environments are the inspiration behind the study and production of our fans.

Our business organisation is characterised by strong coordination and cohesion in throughout every one of its stages. Every department operates in a productive system that works as a large, efficiency-oriented organisation at your service.





#### DESIGN

The design process is entrusted to highly-qualified technicians and designers who are ready to satisfy your real needs with state-of-the-art products and solutions, designed in compliance with existing regulations.



## TECHNICAL & COMMERCIAL SUPPORT

An extensive commercial network and a team of 20 commercial experts and back-office assistants at your service to listen and provide you with pre- and aftersales support.



#### LOGISTICS

Strategic partnerships with suppliers, extensive warehouses, meticulous quality control of incoming goods and punctual shipping form the perfect cogs of a logistical process that guarantees efficiency and rapid delivery.



#### **PRODUCTION**

100% made in Italy, our products comply with the strictest international regulations in terms of safety and efficiency. We guarantee the production of customised ventilation units with quality standards tested in every stage of the process.



#### R&D

Continuous technical innovation, research into new functions and tests of conformity with existing regulations: our research and development department is the beating heart of our business.

## DYNAIR® overview

**DYNAIR®** fans are the results of a detailed and **constant R&D activity** which is vital for the purpose of both promoting continuous **technological innovation** and guaranteeing the efficiency and compliance with current regulations. The complete range is designed and produced in conformity with the latest norms, especially focusing on **Safety**.

All our production is 100% Made in Italy.

The **application fields** of DYNAIR® fans cover a wide range of sectors: from chemistry and jewellery laboratories to galvanic and metal treatment systems, from petrochemical industry to environment purification systems, from corrosive and dangerous fumes to ATEX ventilation. We have a **wide reference list of projects at the international level:** 

- Electrical power stations
- Oil rafineries
- Off-shore oil platforms
- Natural gas treatment stations
- High speed railways
- Underground metro stations
- Chemical industries
- Waste and sewage treatment

- Recycling plants
- Smoke evacuation in case of fire
- Underground car parks
- Ship building and maintenance
  - Telecommunication
  - Public buildings
  - Shopping malls

#### DYNAIR® is working in accordance with the following standards:

#### Quality

ISO 9001:2015 Quality management system
ISO 45001:2018 Health and safety management system
Both certifications are monitored by CSQ. Certificates are available on www.dynair.it

### **CE** marking

The **CC** marking is a mandatory conformity mark within the European Economic Area. The whole Dynair production is CE marked, which means that as a producer, Maico Italia asserts that the fans meet all the essential requirements of the relevant European Directives.

#### **Testing**

- ISO 5801: "Industrial fans, performance testing"
- AMCA 210-07: Laboratory methods of testing fans for aerodynamic performance rating"
- EN 12101-3: "Smoke and heat control systems powered smoke and heat exhaust"
- EN 12101-6: 2005: "Smoke and heat control systems specification for pressure differential systems "Kits".
- Machinery Directive 2006/42/EC
- Low voltage Directive 2014/35/UE
- EMC Directive 2014/30/UE
- Rohs-2 Directive 2011/65/UE
- ATEX Directive 2014/34/UE
- ErP Directive 2009/125/CE, Regulations 327/2011, 1253/2014, 1254/2014



## TA Ventilation system High performance duct axial fans

#### Application and duties

TA series are duct axial fans with aerofoil impellers and adjustable pitch angle for maximum efficiency. They are particularly indicated in those applications that request an absolute conformity to high specifications in terms of pressure and air volume. They are available in sizes from diameter 400 mm to 1600 mm (bigger sizes upon request) for performances ranking up to 210.000 m³/h and 1.500 Pa. Higher pressures can be reached with two fans installed in series. Fan performance and sound emission are in accordance with Amca 210 and 301, category D (see Installation type at page 10).

#### Construction

**Casing** - Long cased execution as standard, manufactured in steel sheet epoxy painted, with fixing flanges manufactured according to UNI ISO 6580-EUROVENT standard. An inspection door is fitted on the casing.

**Impellers** - The high performance axial impeller with aerofoil blades are totally made in die-cast aluminium and balanced according to ISO 1940 Norm. Their aerodynamic profile guarantees high aeraulic performance and low noise level.

For each diameter a wide range of pitch angles can be set during assembly thanks to the design of the hub. This allows to accurately meet the optimum reachable working point of each ventilation project.

**Motors** - TA fans are equipped with built-in asynchronous three-phase motors according to international standards IEC 60034, IEC 60072,EMC 2014/30/UE, LVD 2014/35/UE, CE marked, IP55, class H or F. They are suitable for S1 service at constant load. Execution 4 (with impeller directly coupled to motor with feet) and airflow from impeller to motor as standard.

#### Upon request

- Bigger sizes.
- Casing protected against the atmospheric agents by hot dip galvanizing.
- High temperature external terminal box.
- IE3 motor.
- 2 speed version.

#### Accessories

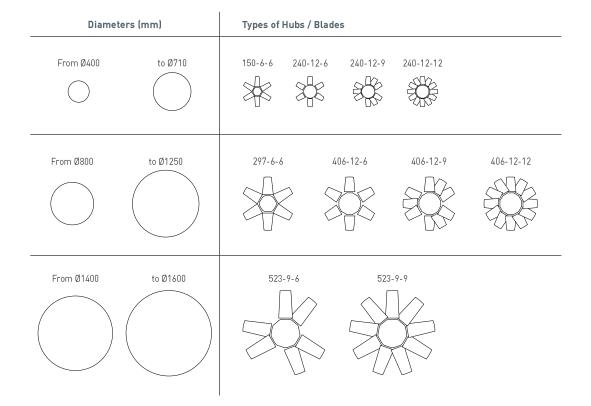
- Inlet/outlet cone (CCbo)
- Damper (CCda)
- Outlet terminal (CCot)
- High temperature flexible joint (CCga-HT)
- Flat protection grid (CCr)
- Support feet (CCst)
- Counter-flange (CCf)
- Counter-flange with collar (CCfc)
- Cylindrical silencers with or without pod (CCsa/CCsb)
- Anti-vibration mounts

## TA Ventilation system Available TA ranges

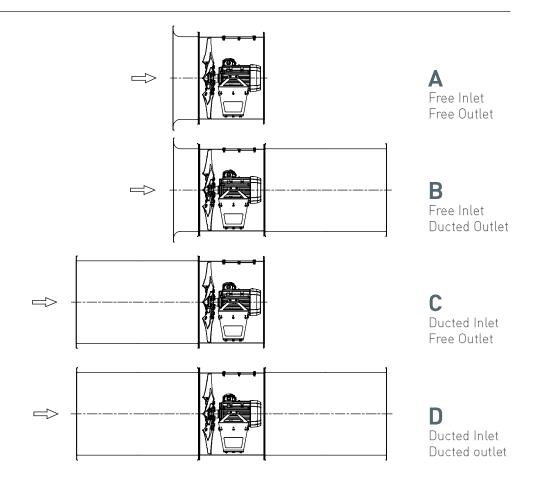
| TA Series      | Application    | Impeller<br>diameter<br>mm | Temperatures       |                |                | Frequencies |      | AMCA<br>Sound      |
|----------------|----------------|----------------------------|--------------------|----------------|----------------|-------------|------|--------------------|
|                |                |                            | -20°C to<br>+ 70°C | 300°C<br>2 hrs | 400°C<br>2 hrs | 50Hz        | 60Hz | performance<br>FEG |
| TA HP          | Exhaust/Supply | 400 - 1600                 | •                  |                |                | •           | •    | •                  |
| TA HT F300/120 | Exhaust        | 400 - 1600                 | •                  | •              |                | •           | •    |                    |
| TA HT F400     | Exhaust        | 400 - 1600                 | •                  |                | •              | •           |      | •                  |

| TA-HT     | 1250    | 406 | 12-9  | 33          |
|-----------|---------|-----|-------|-------------|
| Fan model | Ø in mm | Hub | Blade | Pitch angle |

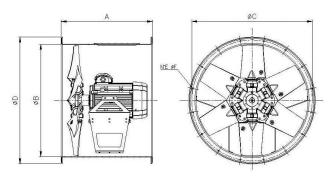
### Item description legend



# TA Ventilation system Installation types



## Dimensions (mm)



| TYPE    | Α    | В    | ØC   | ØD   | Ε  | ØF | kg   |
|---------|------|------|------|------|----|----|------|
| TA 400  | 450  | 400  | 450  | 503  | 8  | 12 | 54   |
| TA 450  | 450  | 450  | 500  | 553  | 8  | 12 | 82   |
| TA 500  | 575  | 500  | 560  | 603  | 12 | 12 | 131  |
| TA 560  | 575  | 560  | 620  | 623  | 12 | 12 | 150  |
| TA 630  | 725  | 630  | 690  | 733  | 12 | 12 | 167  |
| TA 710  | 600  | 710  | 770  | 813  | 16 | 12 | 173  |
| TA 800  | 650  | 800  | 860  | 903  | 16 | 12 | 202  |
| TA 900  | 770  | 900  | 970  | 1013 | 16 | 16 | 268  |
| TA 1000 | 840  | 1000 | 1070 | 1113 | 16 | 16 | 318  |
| TA 1120 | 840  | 1120 | 1190 | 1233 | 20 | 16 | 491  |
| TA 1250 | 1090 | 1250 | 1320 | 1367 | 20 | 16 | 653  |
| TA 1400 | 1400 | 1400 | 1470 | 1517 | 20 | 16 | 1235 |
| TA 1600 | 1400 | 1600 | 1680 | 1717 | 24 | 16 | 1182 |

## **TA Ventilation system**

