

# Accessories Catalog for Standard Products

Edition 02/2017





## Contents

|                                                                    |         |
|--------------------------------------------------------------------|---------|
| Electric Fans 12 and 24 Volt DC .....                              | pag. 5  |
| Electric Fans AC Single and Three phases with Combined Grids ..... | pag. 11 |
| Electric Fans AC CSA - UL Three phases with Combined Grids .....   | pag. 25 |
| Hydraulic Fans with Grids .....                                    | pag. 29 |
| Hydraulic Motors and Supports .....                                | pag. 35 |
| Thermostat .....                                                   | pag. 37 |
| Accessories .....                                                  | pag. 39 |
| Wiring Diagrams .....                                              | pag. 41 |



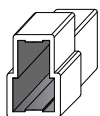
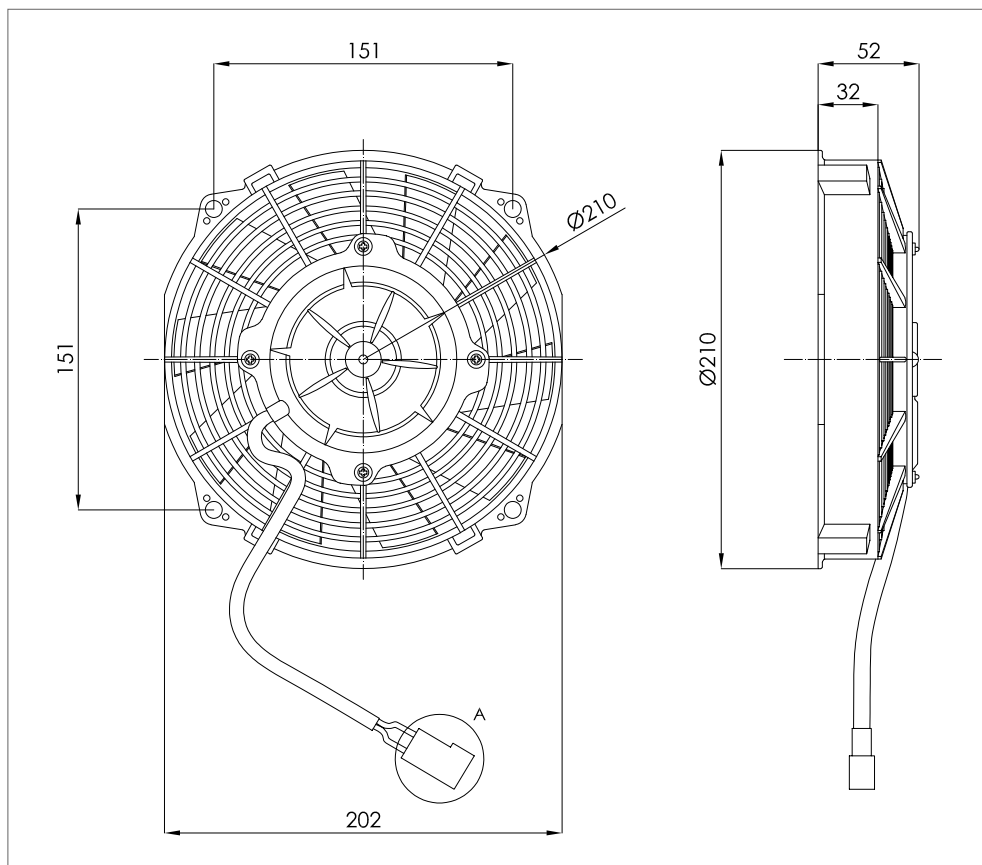
## Electrical Fans 12 and 24 Volt DC



# Electrical Fans - Ø190 [mm]

12 and 24 Volt DC

**Italia RAAL**  
complete cooling solutions



Standard Connector

Particular A

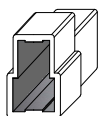
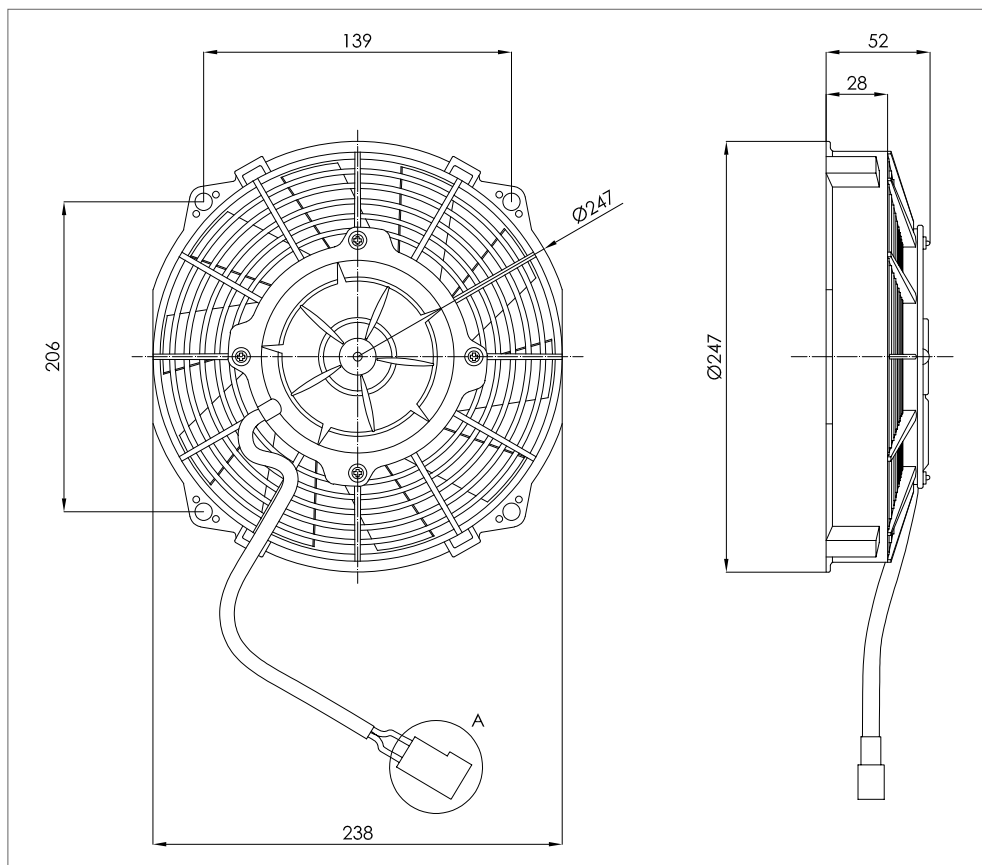
| 12 V<br>DC          | Cod. <b>VEN100610011</b> |       | Cod. <b>VEN100610012</b> |       |
|---------------------|--------------------------|-------|--------------------------|-------|
|                     | SUCTION                  |       | BLOWING                  |       |
|                     | Air Flow                 | Power | Fan Power                | Power |
| mm H <sub>2</sub> O | [m <sup>3</sup> /h]      | [Amp] | [m <sup>3</sup> /h]      | [Amp] |
| 0.0                 | 722                      | 7.2   | 656                      | 6.5   |
| 2.5                 | 678                      | 7.0   | 610                      | 6.4   |
| 5.0                 | 605                      | 7.0   | 571                      | 6.4   |
| 7.5                 | 511                      | 6.5   | 528                      | 6.4   |
| 10.0                | 446                      | 6.4   | 497                      | 6.4   |
| 12.5                | 405                      | 6.6   | 443                      | 6.4   |
| 15.0                | 364                      | 6.8   | 346                      | 6.3   |
| 17.5                | 332                      | 6.9   | 278                      | 6.3   |
| 20.0                | 282                      | 7.1   | 198                      | 6.5   |
| 22.5                | 237                      | 7.4   | 129                      | 6.9   |

| 24 V<br>DC          | Cod. <b>VEN100610021</b> |       | Cod. <b>VEN100610022</b> |       |
|---------------------|--------------------------|-------|--------------------------|-------|
|                     | SUCTION                  |       | BLOWING                  |       |
|                     | Air Flow                 | Power | Fan Power                | Power |
| mm H <sub>2</sub> O | [m <sup>3</sup> /h]      | [Amp] | [m <sup>3</sup> /h]      | [Amp] |
| 0.0                 | 714                      | 3.1   | 642                      | 3.2   |
| 2.5                 | 654                      | 3.1   | 605                      | 3.3   |
| 5.0                 | 594                      | 3.0   | 565                      | 3.3   |
| 7.5                 | 521                      | 3.0   | 529                      | 3.3   |
| 10.0                | 419                      | 2.8   | 506                      | 3.3   |
| 12.5                | 370                      | 2.9   | 449                      | 3.3   |
| 15.0                |                          |       | 368                      | 3.2   |
| 17.5                |                          |       | 313                      | 3.3   |
| 20.0                |                          |       | 259                      | 3.4   |

Data must be considered in **FREE AIR**

# Electrical Fans - Ø225 [mm]

12 and 24 Volt DC



**Standard Connector**

Particular **A**

**Recommended fuse 20A**

| 12 V<br>DC          | Cod. <b>VEN189430011</b> |       | Cod. <b>VEN18943012</b> |       |
|---------------------|--------------------------|-------|-------------------------|-------|
|                     | SUCTION                  |       | BLOWING                 |       |
|                     | Air Flow                 | Power | Fan Power               | Power |
| mm H <sub>2</sub> O | [m <sup>3</sup> /h]      | [Amp] | [m <sup>3</sup> /h]     | [Amp] |
| 0.0                 | 999                      | 7.2   | 947                     | 7.2   |
| 2.5                 | 910                      | 7.2   | 887                     | 7.3   |
| 5.0                 | 840                      | 7.3   | 831                     | 7.3   |
| 7.5                 | 764                      | 7.2   | 769                     | 7.3   |
| 10.0                | 689                      | 7.2   | 704                     | 7.4   |
| 12.5                | 605                      | 7.3   | 632                     | 7.5   |
| 15.0                | 519                      | 7.5   | 516                     | 7.5   |
| 17.5                | 444                      | 7.8   | 382                     | 7.9   |
| 20.0                | 354                      | 8.1   | 251                     | 8.0   |
| 22.5                | 256                      | 8.2   | 128                     | 8.0   |

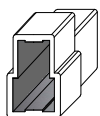
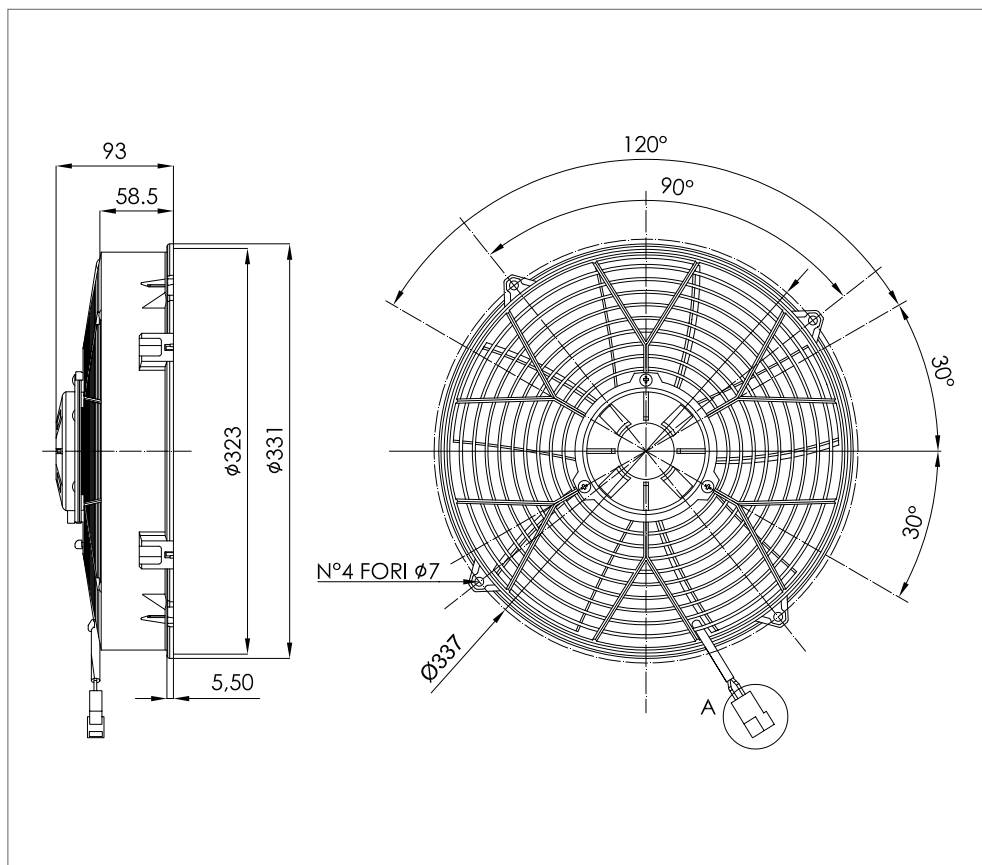
| 24 V<br>DC          | Cod. <b>VEN189430021</b> |       | Cod. <b>VEN189430022</b> |       |
|---------------------|--------------------------|-------|--------------------------|-------|
|                     | SUCTION                  |       | BLOWING                  |       |
|                     | Air Flow                 | Power | Fan Power                | Power |
| mm H <sub>2</sub> O | [m <sup>3</sup> /h]      | [Amp] | [m <sup>3</sup> /h]      | [Amp] |
| 0.0                 | 995                      | 3.5   | 977                      | 3.6   |
| 2.5                 | 918                      | 3.6   | 923                      | 3.7   |
| 5.0                 | 835                      | 3.6   | 858                      | 3.7   |
| 7.5                 | 763                      | 3.6   | 803                      | 3.7   |
| 10.0                | 683                      | 3.6   | 736                      | 3.7   |
| 12.5                | 608                      | 3.6   | 667                      | 3.7   |
| 15.0                | 527                      | 3.7   | 595                      | 3.8   |
| 17.5                | 449                      | 3.9   | 471                      | 4.0   |
| 20.0                | 361                      | 4.0   | 338                      | 4.1   |
| 22.5                |                          |       | 219                      | 4.1   |

Data must be considered in **FREE AIR**

# Electrical Fans - Ø305 [mm]

12 and 24 Volt DC

**Italia RAAL**  
complete cooling solutions



Standard Connector

Particular A

Recommended fuse 30A

| 12 V<br>DC          | Cod. VEN100630011   |       | Cod. VEN100630012   |       |
|---------------------|---------------------|-------|---------------------|-------|
|                     | SUCTION             |       | BLOWING             |       |
|                     | Air Flow            | Power | Fan Power           | Power |
| mm H <sub>2</sub> O | [m <sup>3</sup> /h] | [Amp] | [m <sup>3</sup> /h] | [Amp] |
| 0.0                 | 2418                | 15.5  | 2272                | 13.0  |
| 5.0                 | 2139                | 15.7  | 2016                | 14.0  |
| 10.0                | 1839                | 16.5  | 1736                | 14.9  |
| 12.5                | 1672                | 16.6  | 1583                | 15.2  |
| 15.0                | 1504                | 16.8  | 1430                | 15.6  |
| 17.5                | 1300                | 17.1  | 1262                | 16.2  |
| 20.0                | 1096                | 17.3  | 1094                | 16.8  |
| 22.5                | 957                 | 18.0  | 941                 | 17.4  |
| 25.0                | 818                 | 18.7  | 788                 | 18.1  |
| 27.5                | 667                 | 19.4  | 571                 | 18.9  |

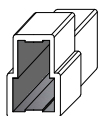
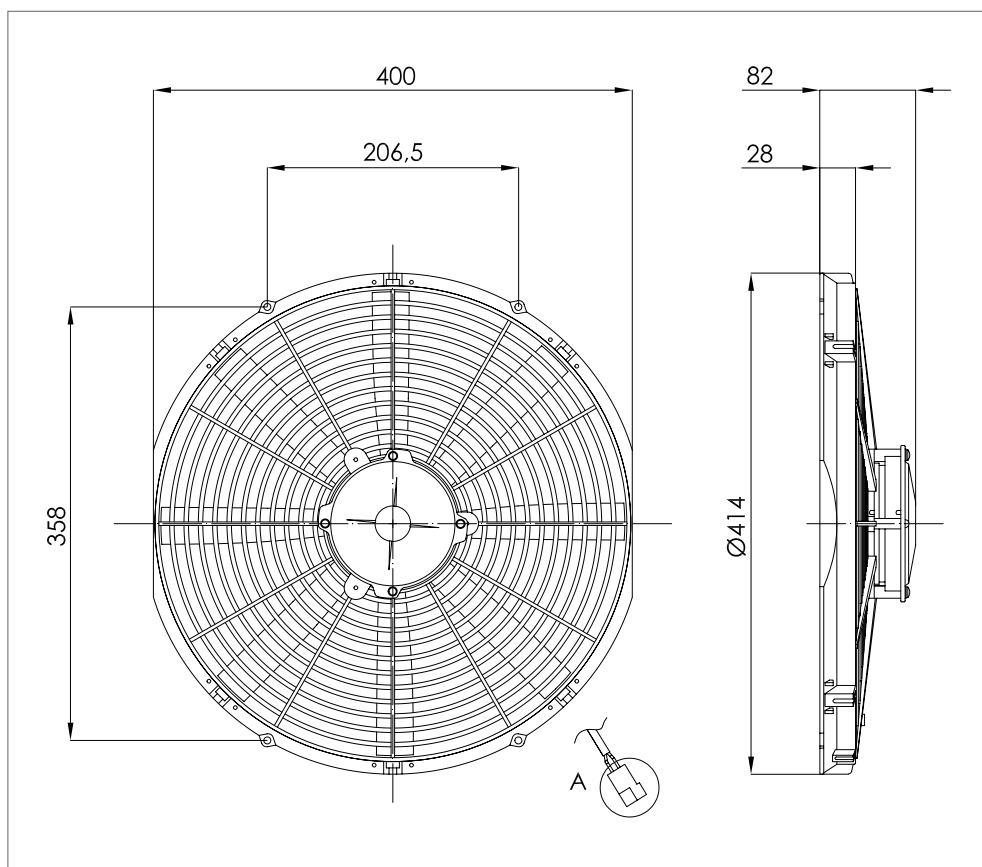
| 24 V<br>DC          | Cod. VEN100630021   |       | Cod. VEN100630022   |       |
|---------------------|---------------------|-------|---------------------|-------|
|                     | SUCTION             |       | BLOWING             |       |
|                     | Air Flow            | Power | Fan Power           | Power |
| mm H <sub>2</sub> O | [m <sup>3</sup> /h] | [Amp] | [m <sup>3</sup> /h] | [Amp] |
| 0.0                 | 2647                | 8.8   | 2529                | 8.1   |
| 5.0                 | 2406                | 9.6   | 2291                | 8.7   |
| 10.0                | 2161                | 10.3  | 2050                | 9.1   |
| 12.5                | 2019                | 10.5  | 1924                | 9.3   |
| 15.0                | 1877                | 10.6  | 1798                | 9.4   |
| 17.5                | 1711                | 10.7  | 1643                | 9.7   |
| 20.0                | 1544                | 10.7  | 1488                | 9.9   |
| 22.5                | 1377                | 11.0  | 1344                | 10.2  |
| 25.0                | 1210                | 11.2  | 1200                | 10.6  |
| 27.5                | 1094                | 11.6  | 1077                | 11.0  |

Data must be considered in **FREE AIR**

# Electrical Fans - Ø385 [mm]

12 and 24 Volt DC

**Italia RAAL**  
complete cooling solutions



**Standard Connector**

Particular **A**

| 12 V<br>DC          | Cod. <b>VEN100690011</b> |                | Cod. <b>VEN100690012</b> |                |
|---------------------|--------------------------|----------------|--------------------------|----------------|
|                     | SUCTION                  |                | BLOWING                  |                |
|                     | Air Flow<br>[m³/h]       | Power<br>[Amp] | Fan Power<br>[m³/h]      | Power<br>[Amp] |
| mm H <sub>2</sub> O |                          |                |                          |                |
| 0.0                 | 3210                     | 15.0           | 3260                     | 14.8           |
| 2.5                 | 3012                     | 15.9           | 3080                     | 15.2           |
| 5.0                 | 2744                     | 16.0           | 2879                     | 15.7           |
| 7.5                 | 2494                     | 16.2           | 2651                     | 16.1           |
| 10.0                | 2212                     | 16.0           | 2413                     | 16.2           |
| 12.5                | 1886                     | 15.8           | 2057                     | 16.0           |
| 15.0                | 1197                     | 14.0           | 1429                     | 15.4           |
| 17.5                | 731                      | 14.1           | 792                      | 15.1           |
| 20.0                | 308                      | 14.0           |                          |                |

| 24 V<br>DC          | Cod. <b>VEN100690021</b> |                | Cod. <b>VEN100690022</b> |                |
|---------------------|--------------------------|----------------|--------------------------|----------------|
|                     | SUCTION                  |                | BLOWING                  |                |
|                     | Air Flow<br>[m³/h]       | Power<br>[Amp] | Fan Power<br>[m³/h]      | Power<br>[Amp] |
| mm H <sub>2</sub> O |                          |                |                          |                |
| 0.0                 | 3552                     | 8.8            | 3445                     | 8.3            |
| 2.5                 | 3322                     | 9.0            | 3266                     | 8.6            |
| 5.0                 | 3107                     | 9.2            | 3066                     | 8.8            |
| 7.5                 | 2842                     | 9.2            | 2842                     | 8.9            |
| 10.0                | 2577                     | 9.3            | 2609                     | 9.0            |
| 12.5                | 2295                     | 9.3            | 2337                     | 8.9            |
| 15.0                | 1900                     | 9.0            | 1853                     | 8.7            |
| 17.5                | 1289                     | 8.2            | 1131                     | 8.5            |

Data must be considered in **FREE AIR**



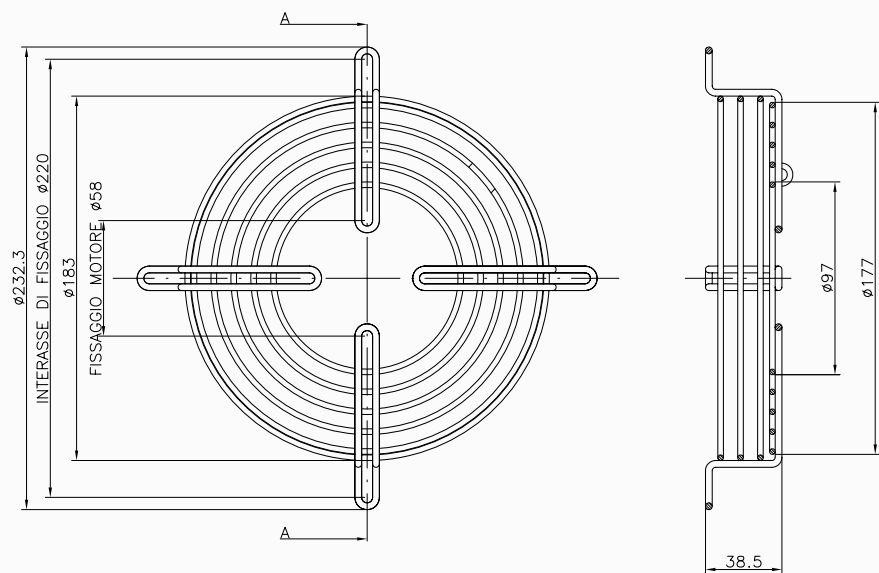
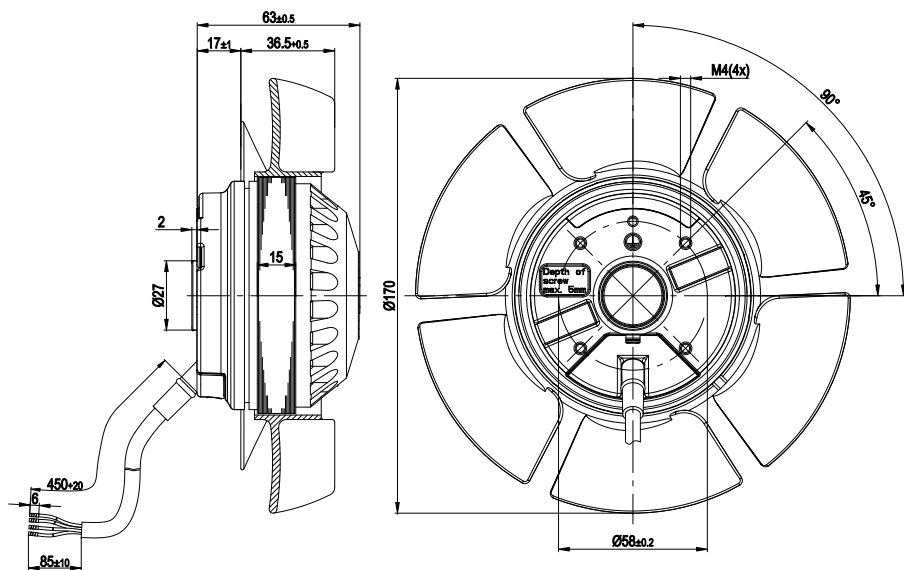
## Electrical Fans AC

Single Phase and Three Phases  
and Combined Grids



# Electrical Fans AC - Ø170 [mm] Single Phase and Combined Grids

**Italia RAAL**  
complete cooling solutions



Cod. **VEN189380031** - Cod. **GRI189380031**

## Nominal Data

|                             |                   |      |      |
|-----------------------------|-------------------|------|------|
| Phase                       |                   | 1~   | 1~   |
| Nominal voltage             | VAC               | 230  | 230  |
| Frequency                   | Hz                | 50   | 60   |
| Connection                  |                   | Δ    | Δ    |
| Valid for approval/standard |                   | CE   | CE   |
| Speed                       | min <sup>-1</sup> | 2700 | 3150 |
| Power input                 | W                 | 47   | 53   |
| Current draw                | A                 | 0.23 | 0.23 |
| Max. ambient temperature    | °C                | 45   | 60   |
| Starting current            | A                 | 0.38 | 0.38 |
| Air flow                    | m <sup>3</sup> /h | 480  | 565  |

## Technical Features

|                                                        |         |
|--------------------------------------------------------|---------|
| Size                                                   | 170 mm  |
| Max. permissible ambient motor temp. (transp./storage) | + 80 °C |
| Min. permissible ambient motor temp. (transp./storage) | - 40 °C |

Data must be considered in **FREE AIR**



ELECTRICAL CAPACITOR ON REQUEST

Cod. 1,5 µF - CON100610031

# Electrical Fans AC - Ø170 [mm] Three Phases and Combined Grids



Cod. VEN189380041

- Cod. GRI189380031

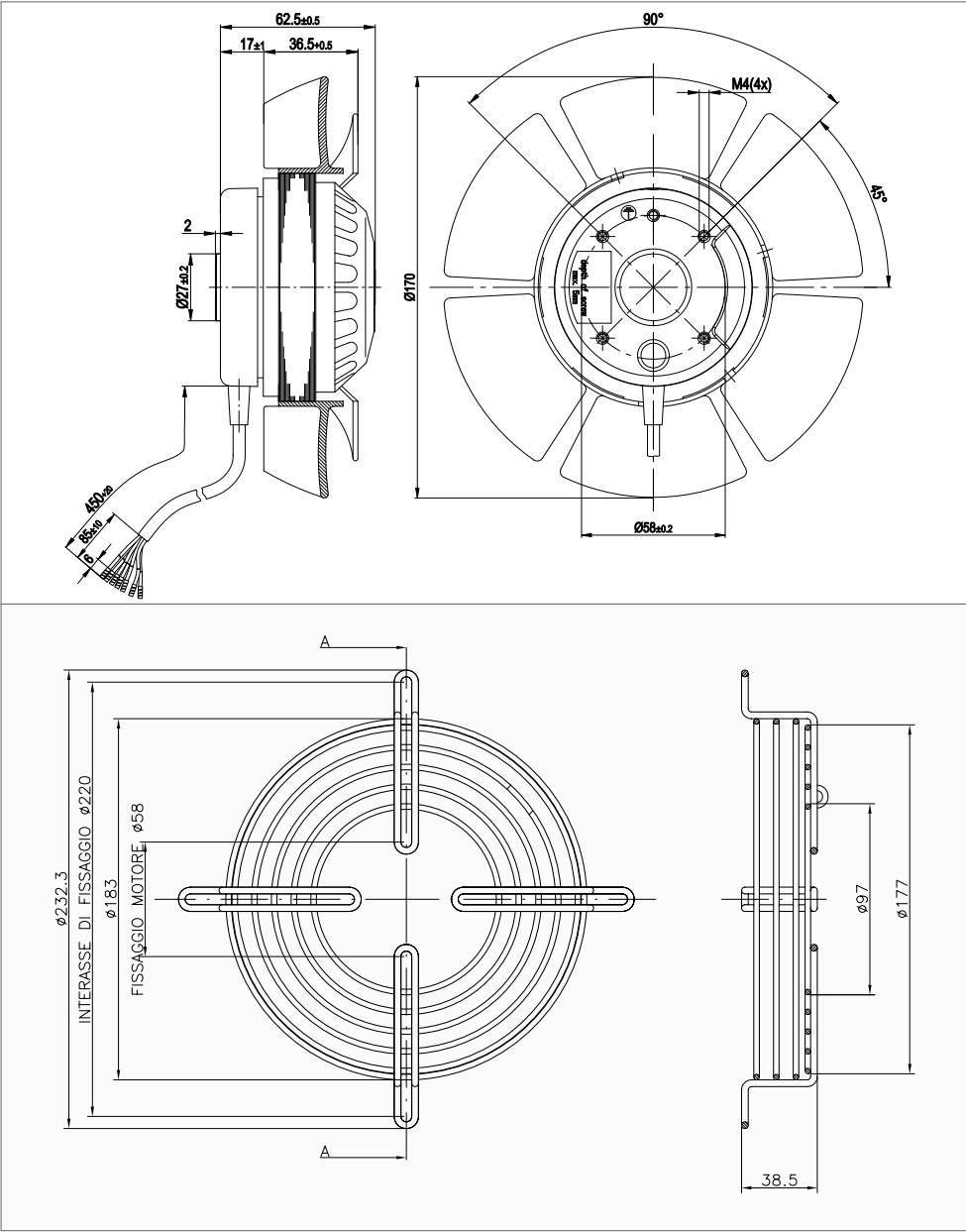
## Nominal Data

| Phase                       |                   | 3~   | 3~   | 3~   | 3~   |
|-----------------------------|-------------------|------|------|------|------|
| Nominal voltage             | V                 | 230  | 230  | 400  | 400  |
| Connection                  |                   | Δ    | Δ    | Y    | Y    |
| Frequency                   | Hz                | 50   | 60   | 50   | 60   |
| Valid for approval/standard |                   | CE   | CE   | CE   | CE   |
| Speed                       | min <sup>-1</sup> | 2750 | 3100 | 2750 | 3100 |
| Power input                 | W                 | 45   | 43   | 45   | 43   |
| Current draw                | A                 | 0.23 | 0.16 | 0.13 | 0.09 |
| Max. ambient temperature    | °C                | -    | -    | -    | -    |
| Starting current            | A                 | 0.4  | 0.38 | 0.23 | 0.22 |
| Air flow                    | m³/h              | 481  | 535  | 481  | 535  |

## Technical Features

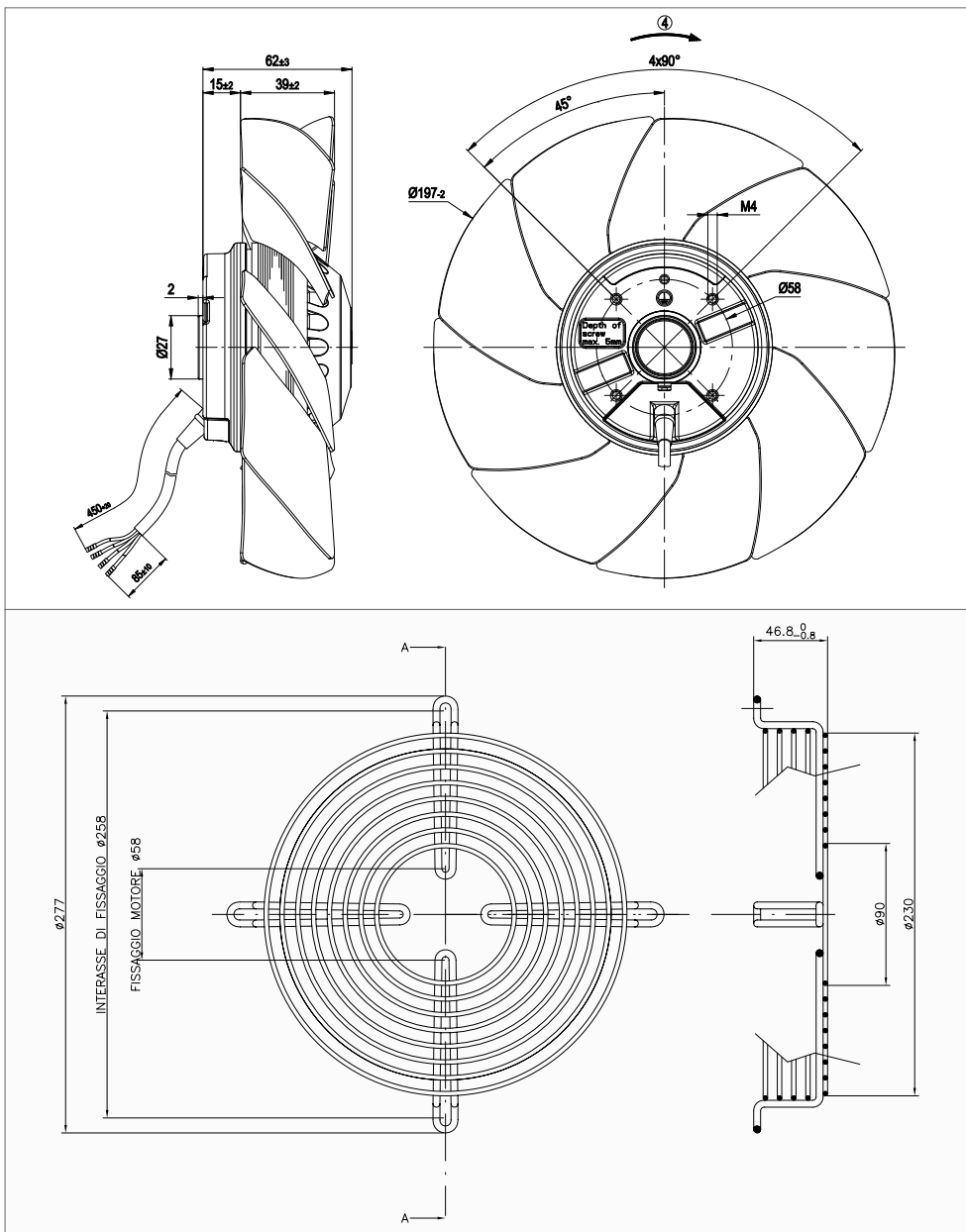
|                                                        |         |
|--------------------------------------------------------|---------|
| Size                                                   | 170 mm  |
| Max. permissible ambient motor temp. (transp./storage) | + 80 °C |
| Min. permissible ambient motor temp. (transp./storage) | - 40 °C |

Data must be considered in **FREE AIR**



# Electrical Fans AC - Ø200 [mm] Single Phase and Combined Grids

**Italia RAAL**  
complete cooling solutions



Cod. **VEN100610031** - Cod. **GRI100610031**

## Nominal Data

|                             |                   |      |      |
|-----------------------------|-------------------|------|------|
| Phase                       |                   | 1~   | 1~   |
| Nominal voltage             | VAC               | 230  | 230  |
| Frequency                   | Hz                | 50   | 60   |
| Connection                  |                   | -    | -    |
| Valid for approval/standard |                   | CE   | CE   |
| Speed                       | min <sup>-1</sup> | 2600 | 2900 |
| Power input                 | W                 | 64   | 78   |
| Current draw                | A                 | 0.3  | 0.34 |
| Max. ambient temperature    | °C                | 65   | 65   |
| Starting current            | A                 | 0.55 | 0.54 |
| Air flow                    | m <sup>3</sup> /h | 890  | 990  |

## Technical Features

|                                                        |         |
|--------------------------------------------------------|---------|
| Size                                                   | 200 mm  |
| Max. permissible ambient motor temp. (transp./storage) | + 80 °C |
| Min. permissible ambient motor temp. (transp./storage) | - 40 °C |

Data must be considered in **FREE AIR**



ELECTRICAL CAPACITOR ON REQUEST

Cod. 1,5 µF - CON100610031

# Electrical Fans AC - Ø200 [mm] Three Phases and Combined Grids



Cod. **VEN100610041** - Cod. **GRI100610031**

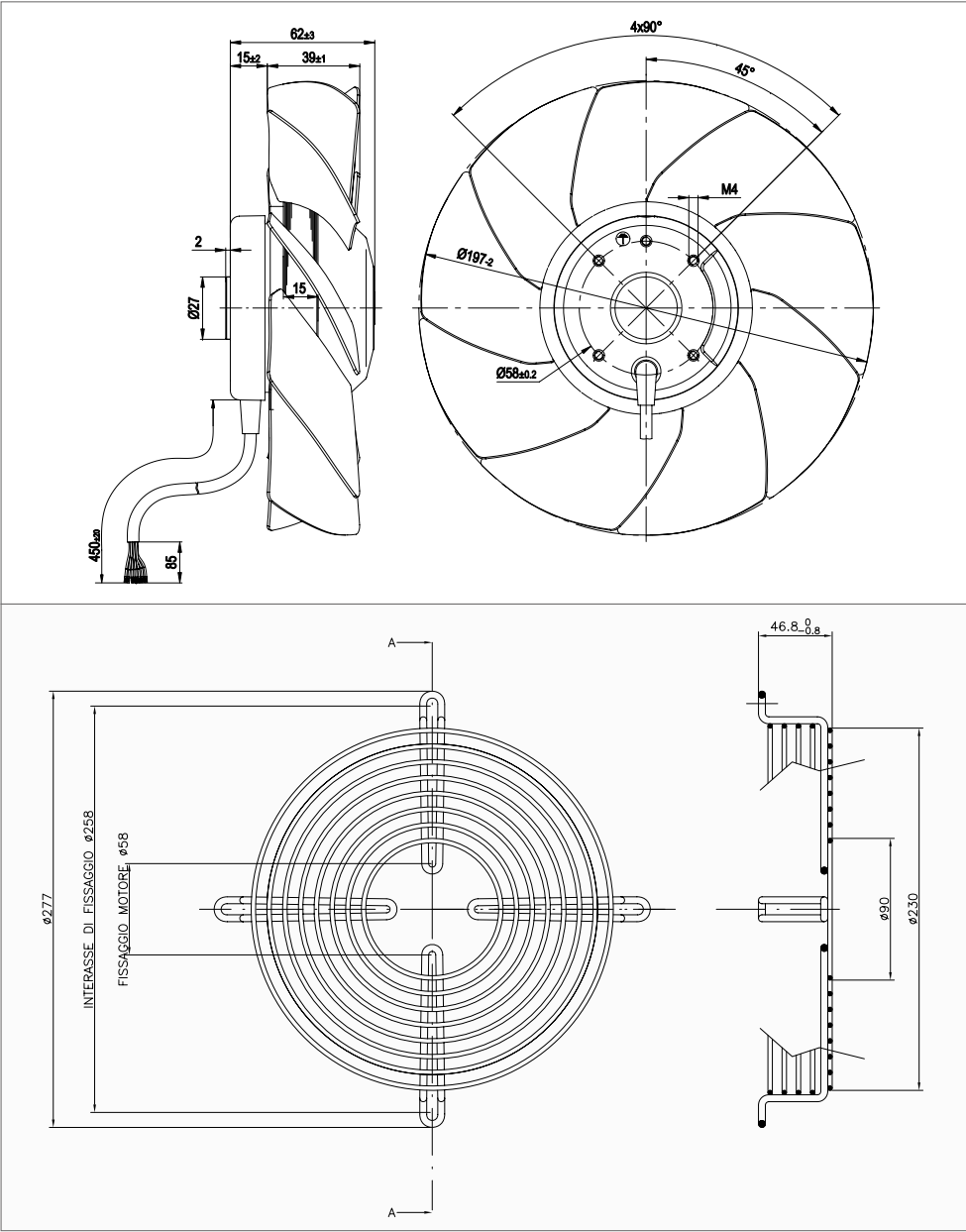
### Nominal Data

|                             |                   |      |      |
|-----------------------------|-------------------|------|------|
| Phase                       |                   | 3~   | 3~   |
| Nominal voltage             | VAC               | 400  | 400  |
| Connection                  |                   | Y    | Y    |
| Frequency                   | Hz                | 50   | 60   |
| Valid for approval/standard |                   | CE   | CE   |
| Speed                       | min <sup>-1</sup> | 2600 | 2900 |
| Power input                 | W                 | 68   | 70   |
| Current draw                | A                 | 0.17 | 0.13 |
| Max. ambient temperature    | °C                | 45   | 70   |
| Starting current            | A                 | 0.36 | 0.32 |
| Air flow                    | m <sup>3</sup> /h | 940  | 1020 |

### Technical Features

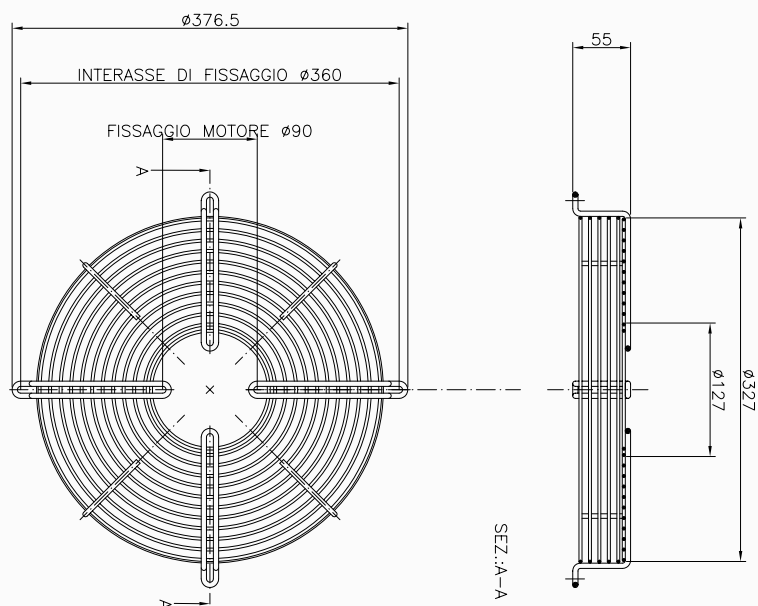
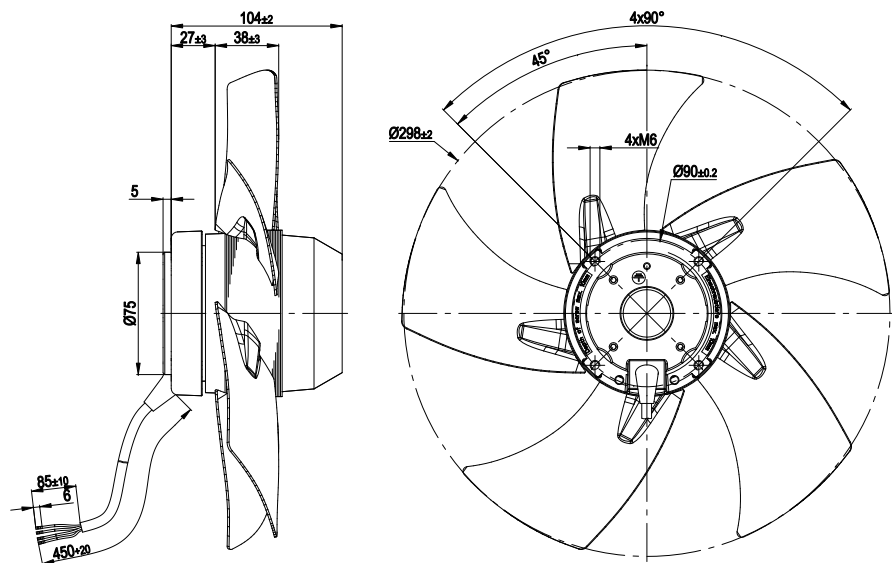
|                                                        |         |
|--------------------------------------------------------|---------|
| Size                                                   | 200 mm  |
| Max. permissible ambient motor temp. (transp./storage) | + 80 °C |
| Min. permissible ambient motor temp. (transp./storage) | - 40 °C |

Data must be considered in **FREE AIR**



# Electrical Fans AC - Ø300 [mm] Single Phase and Combined Grids

**Italia RAAL**  
complete cooling solutions



Cod. **VEN100630031** - Cod. **GRI100630031**

## Nominal Data

|                             |                   |      |      |
|-----------------------------|-------------------|------|------|
| Phase                       |                   | 1~   | 1~   |
| Nominal voltage             | VAC               | 230  | 230  |
| Frequency                   | Hz                | 50   | 60   |
| Connection                  |                   | -    | -    |
| Valid for approval/standard |                   | CE   | CE   |
| Speed                       | min <sup>-1</sup> | 2700 | 3000 |
| Power input                 | W                 | 230  | 350  |
| Current draw                | A                 | 1.10 | 1.55 |
| Max. ambient temperature    | °C                | 50   | 40   |
| Starting current            | A                 | 11.0 | 9.5  |
| Air flow                    | m <sup>3</sup> /h | 3410 | 3745 |

## Technical Features

|                                                        |         |
|--------------------------------------------------------|---------|
| Size                                                   | 300 mm  |
| Max. permissible ambient motor temp. (transp./storage) | + 80 °C |
| Min. permissible ambient motor temp. (transp./storage) | - 40 °C |

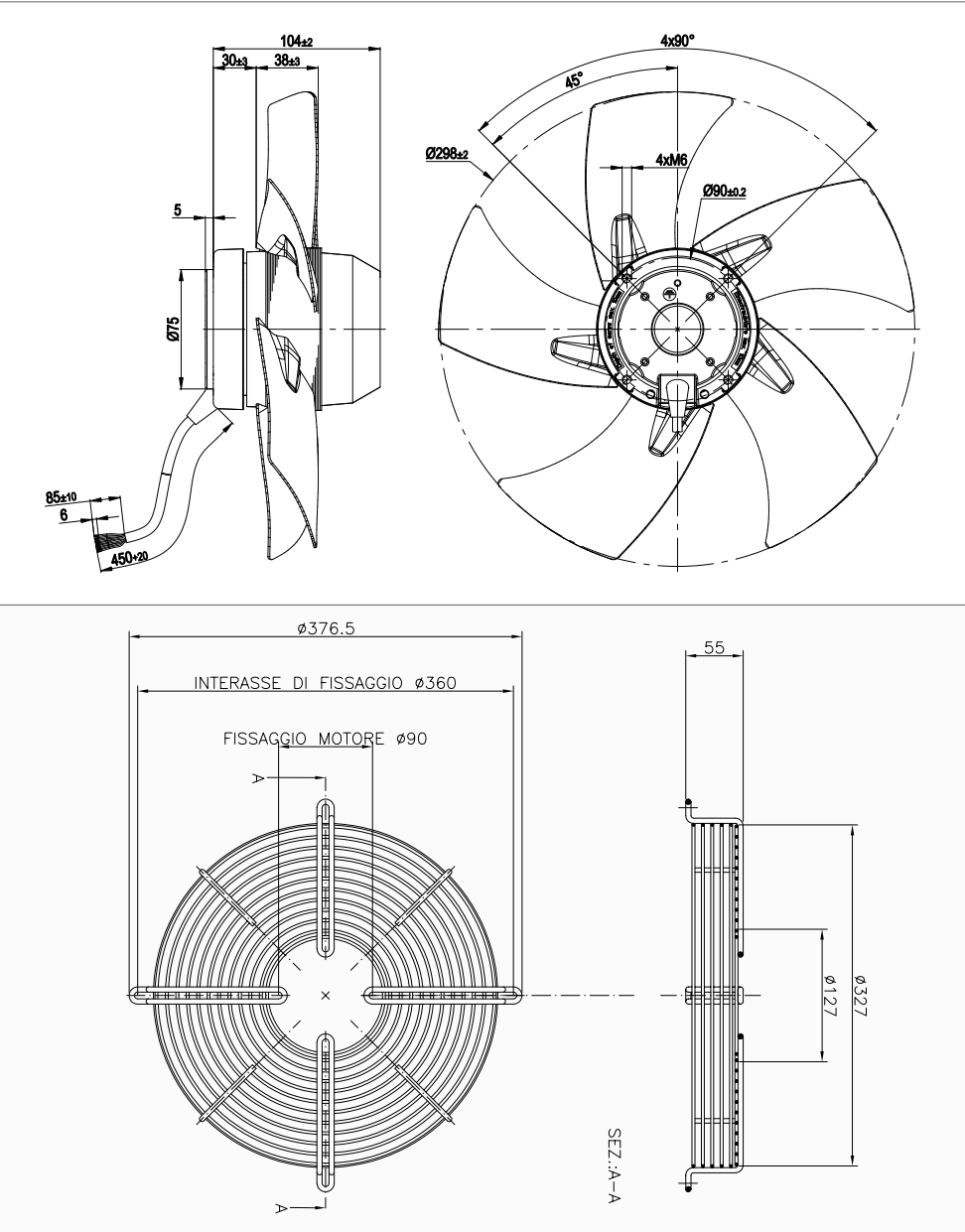
Data must be considered in **FREE AIR**



ELECTRICAL CAPACITOR ON REQUEST

Cod. 8 µF - CONORU630051

# Electrical Fans AC - Ø300 [mm] Three Phases and Combined Grids



Cod. **VEN100630041** - Cod. **GRI100630031**

### Nominal Data

| Phase                       |                   | 3~   | 3~   | 3~   | 3~   |
|-----------------------------|-------------------|------|------|------|------|
| Nominal voltage             | VAC               | 230  | 230  | 400  | 400  |
| Frequency                   |                   | Δ    | Δ    | Y    | Y    |
| Connection                  | Hz                | 50   | 60   | 50   | 60   |
| Valid for approval/standard |                   | CE   | CE   | CE   | CE   |
| Speed                       | min <sup>-1</sup> | 2580 | 2750 | 2580 | 2750 |
| Power input                 | W                 | 210  | 300  | 210  | 300  |
| Current draw                | A                 | 0.62 | 0.84 | 0.36 | 0.48 |
| Max. ambient temperature    | °C                | 75   | 40   | 75   | 40   |
| Starting current            | A                 | -    | -    | -    | -    |
| Air flow                    | m³/h              | 3135 | 3350 | 3135 | 3350 |

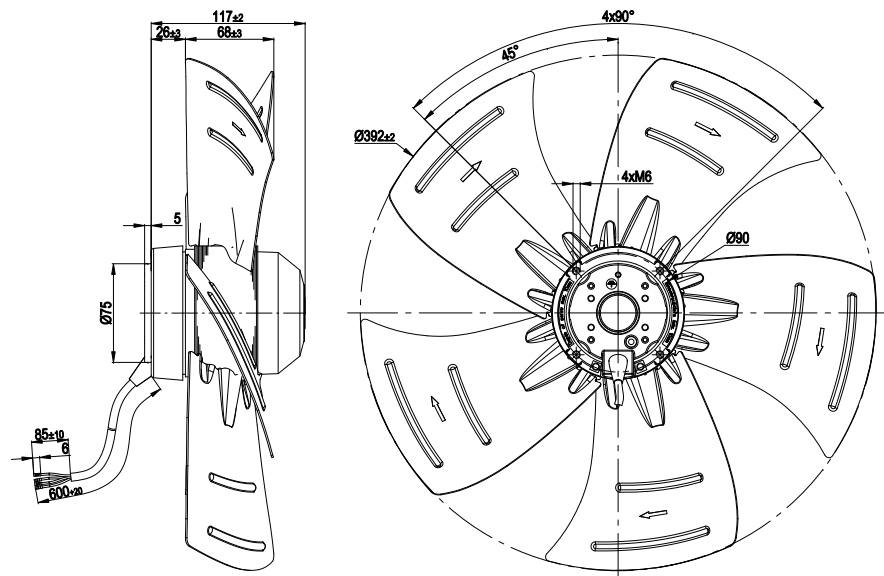
### Technical Features

|                                                        |         |
|--------------------------------------------------------|---------|
| Size                                                   | 300 mm  |
| Max. permissible ambient motor temp. (transp./storage) | + 80 °C |
| Min. permissible ambient motor temp. (transp./storage) | - 40 °C |

Data must be considered in **FREE AIR**

# Electrical Fans AC - Ø400 [mm] Single Phase and Combined Grids

**Italia RAAL**  
complete cooling solutions



Cod. **VEN100690031** - Cod. **GRI100690041**

## Nominal Data

|                             |                   |      |      |
|-----------------------------|-------------------|------|------|
| Phase                       |                   | 1~   | 1~   |
| Nominal voltage             | VAC               | 230  | 230  |
| Frequency                   | Hz                | 50   | 60   |
| Connection                  |                   | -    | -    |
| Valid for approval/standard |                   | CE   | CE   |
| Speed                       | min <sup>-1</sup> | 1430 | 1700 |
| Power input                 | W                 | 160  | 240  |
| Current draw                | A                 | 0.73 | 1.06 |
| Max. ambient temperature    | °C                | 40   | 40   |
| Starting current            | A                 | -    | -    |
| Air flow                    | m <sup>3</sup> /h | 4235 | 4950 |

## Technical Features

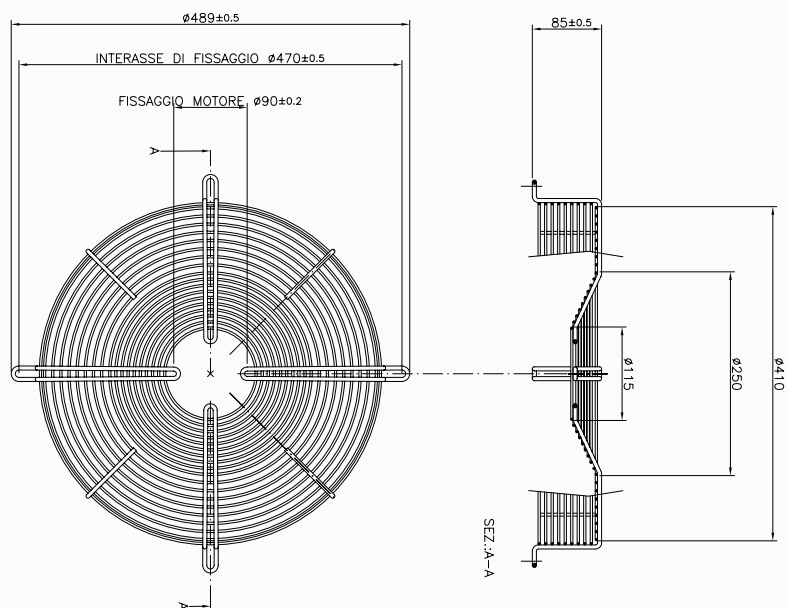
|                                                        |         |
|--------------------------------------------------------|---------|
| Size                                                   | 400 mm  |
| Max. permissible ambient motor temp. (transp./storage) | + 80 °C |
| Min. permissible ambient motor temp. (transp./storage) | - 40 °C |

Data must be considered in **FREE AIR**

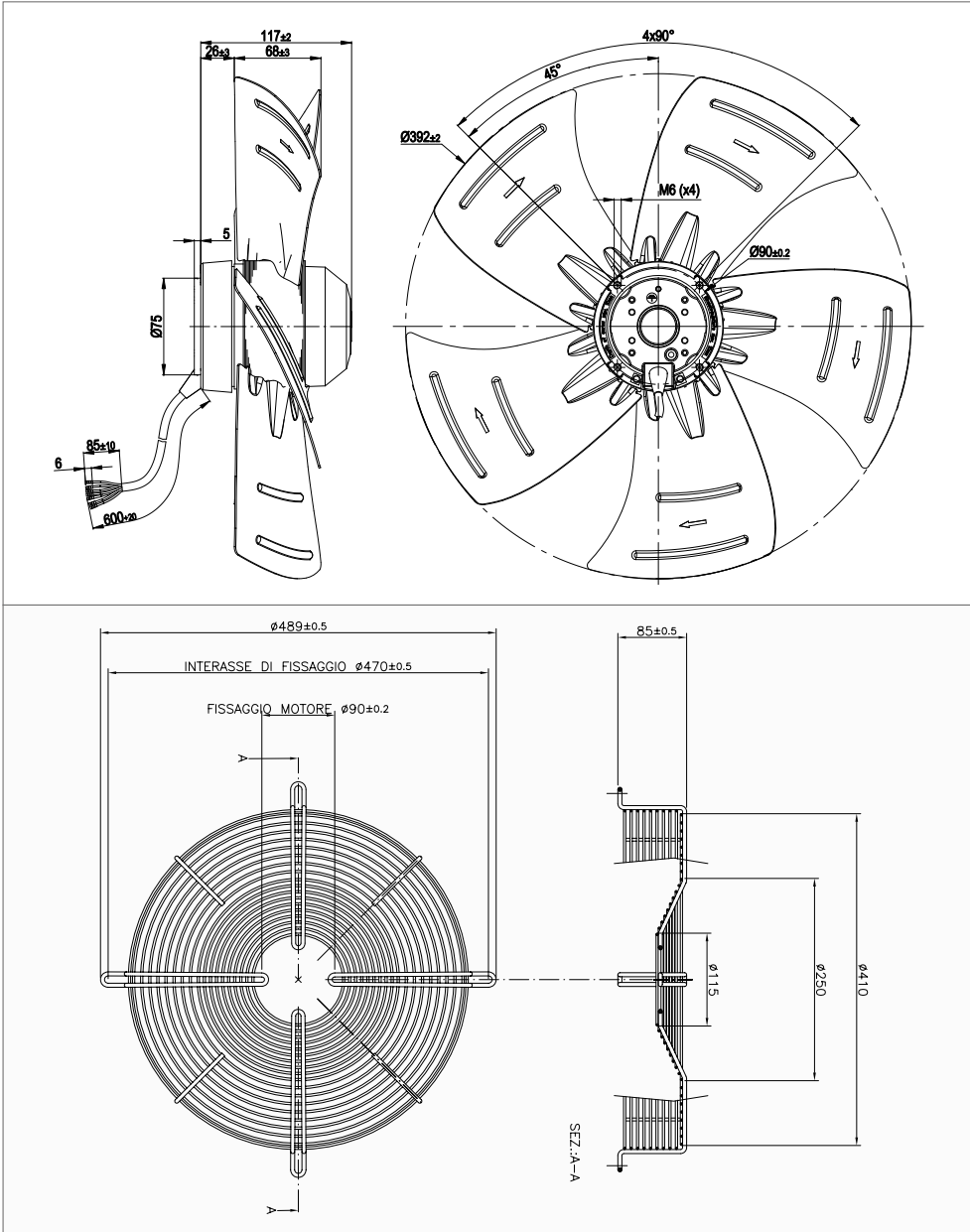


ELECTRICAL CAPACITOR ON REQUEST

Cod. 6 µF - CONORU690051



# Electrical Fans AC - Ø400 [mm] Three Phases and Combined Grids



Cod. **VEN100690041** - Cod. **GRI100690041**

## Nominal Data

| Phase                       |                   | 3~   | 3~   | 3~   | 3~   |
|-----------------------------|-------------------|------|------|------|------|
| Nominal voltage             | VAC               | 230  | 230  | 400  | 400  |
| Connection                  |                   | Δ    | Δ    | Y    | Y    |
| Frequency                   | Hz                | 50   | 60   | 50   | 60   |
| Valid for approval/standard |                   | CE   | CE   | CE   | CE   |
| Speed                       | min <sup>-1</sup> | 1450 | 1690 | 1450 | 1690 |
| Power input                 | W                 | 135  | 185  | 135  | 185  |
| Current draw                | A                 | 0.76 | 0.68 | 0.44 | 0.39 |
| Max. ambient temperature    | °C                | 40   | 40   | 40   | 40   |
| Starting current            | A                 | 3.0  | 3.0  | 1.7  | 1.7  |
| Air flow                    | m <sup>3</sup> /h | 4000 | 4615 | 4000 | 4615 |

## Technical Features

|                                                        |         |
|--------------------------------------------------------|---------|
| Size                                                   | 400 mm  |
| Max. permissible ambient motor temp. (transp./storage) | + 80 °C |
| Min. permissible ambient motor temp. (transp./storage) | - 40 °C |

Data must be considered in **FREE AIR**

# Electrical Fans AC - Ø500 [mm] Single Phase and Combined Grids



Cod. **VEN105710031** - Cod. **GRI105710041**

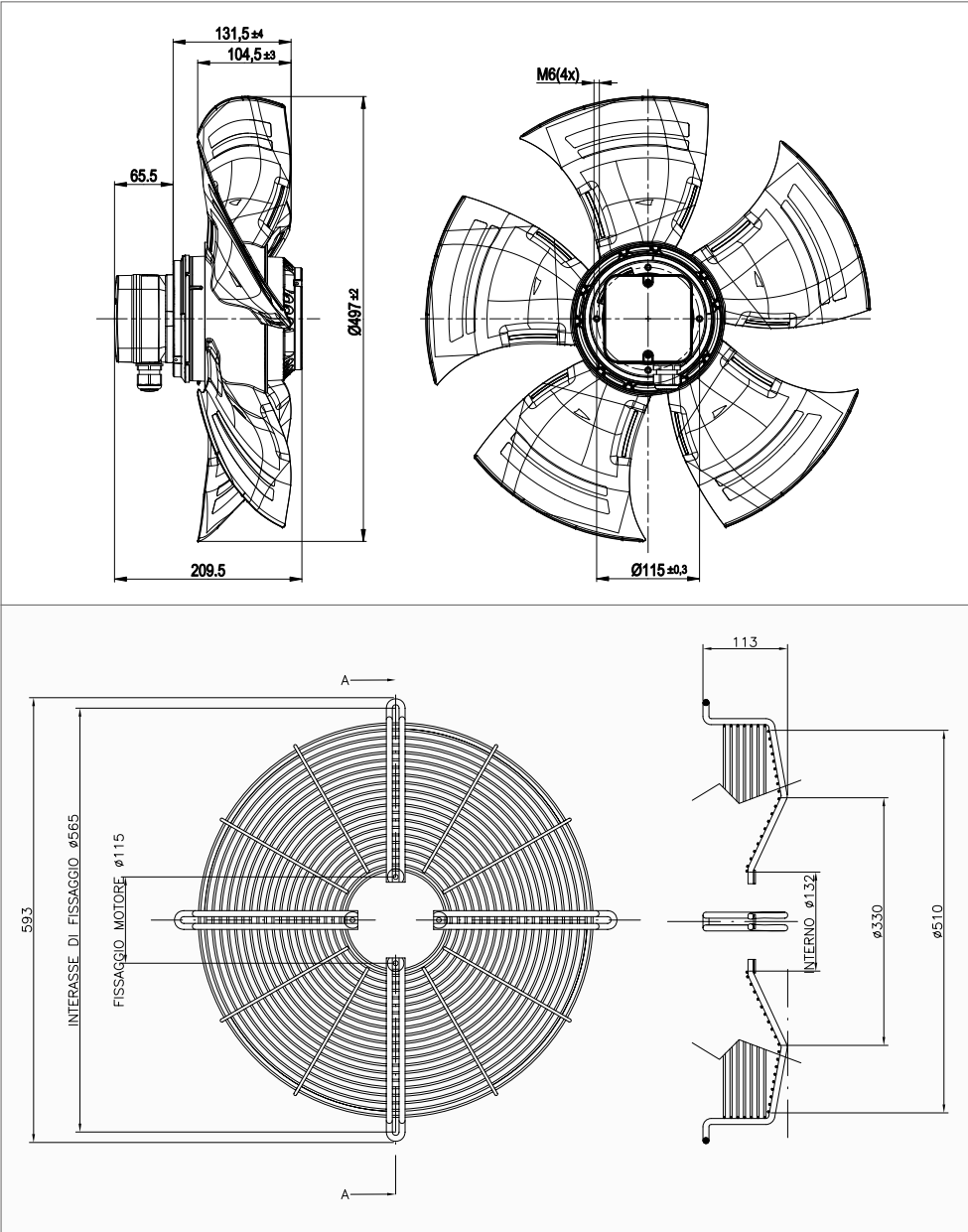
## Nominal Data

|                             |                   |      |      |
|-----------------------------|-------------------|------|------|
| Phase                       |                   | 1~   | 1~   |
| Nominal voltage             | VAC               | 230  | 230  |
| Connection                  |                   | -    | -    |
| Frequency                   | Hz                | 50   | 60   |
| Valid for approval/standard |                   | CE   | CE   |
| Speed                       | min <sup>-1</sup> | 1300 | 1400 |
| Power input                 | W                 | 680  | 880  |
| Current draw                | A                 | 3.0  | 3.88 |
| Max. ambient temperature    | °C                | 65   | 40   |
| Starting current            | A                 | 11.0 | 9.5  |
| Air flow                    | m <sup>3</sup> /h | 8905 | 9850 |

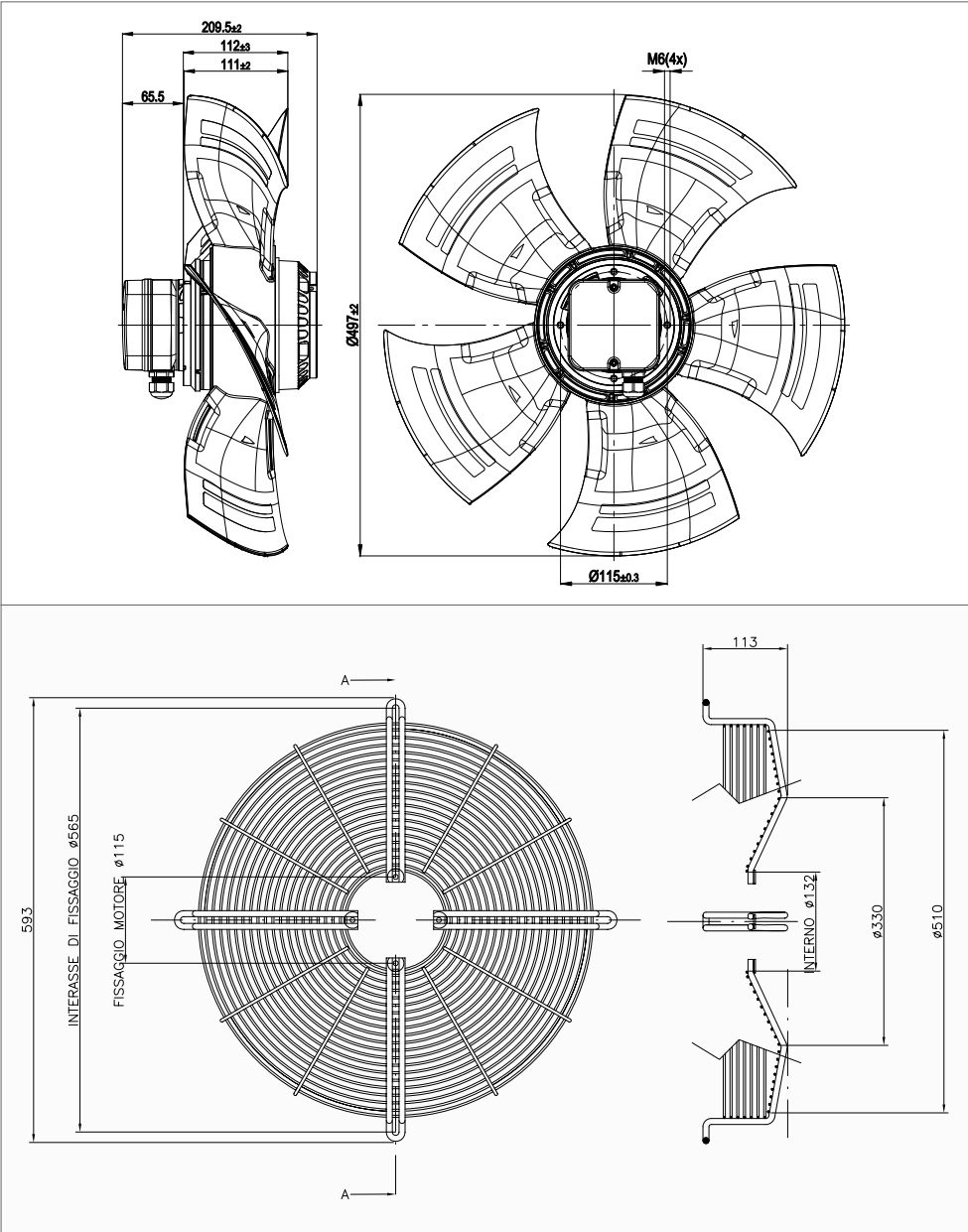
## Technical Features

|                                                        |         |
|--------------------------------------------------------|---------|
| Size                                                   | 500 mm  |
| Max. permissible ambient motor temp. (transp./storage) | + 80 °C |
| Min. permissible ambient motor temp. (transp./storage) | - 40 °C |

Data must be considered in **FREE AIR**



# Electrical Fans AC - Ø500 [mm] Three Phases and Combined Grids



Cod. **VEN105710041** - Cod. **GRI105710041**

### Nominal Data

|                             |                   |      |      |
|-----------------------------|-------------------|------|------|
| Phase                       |                   | 3~   | 3~   |
| Nominal voltage             | V                 | 400  | 400  |
| Connection                  |                   | Δ    | Y    |
| Frequency                   | Hz                | 50   | 50   |
| Valid for approval/standard |                   | CE   | CE   |
| Speed                       | min <sup>-1</sup> | 1390 | 1180 |
| Power input                 | W                 | 720  | 550  |
| Current draw                | A                 | 1.41 | 0.95 |
| Max. ambient temperature    | °C                | 65   | 65   |
| Starting current            | A                 | -    | -    |
| Air flow                    | m <sup>3</sup> /h | 9195 | 8255 |

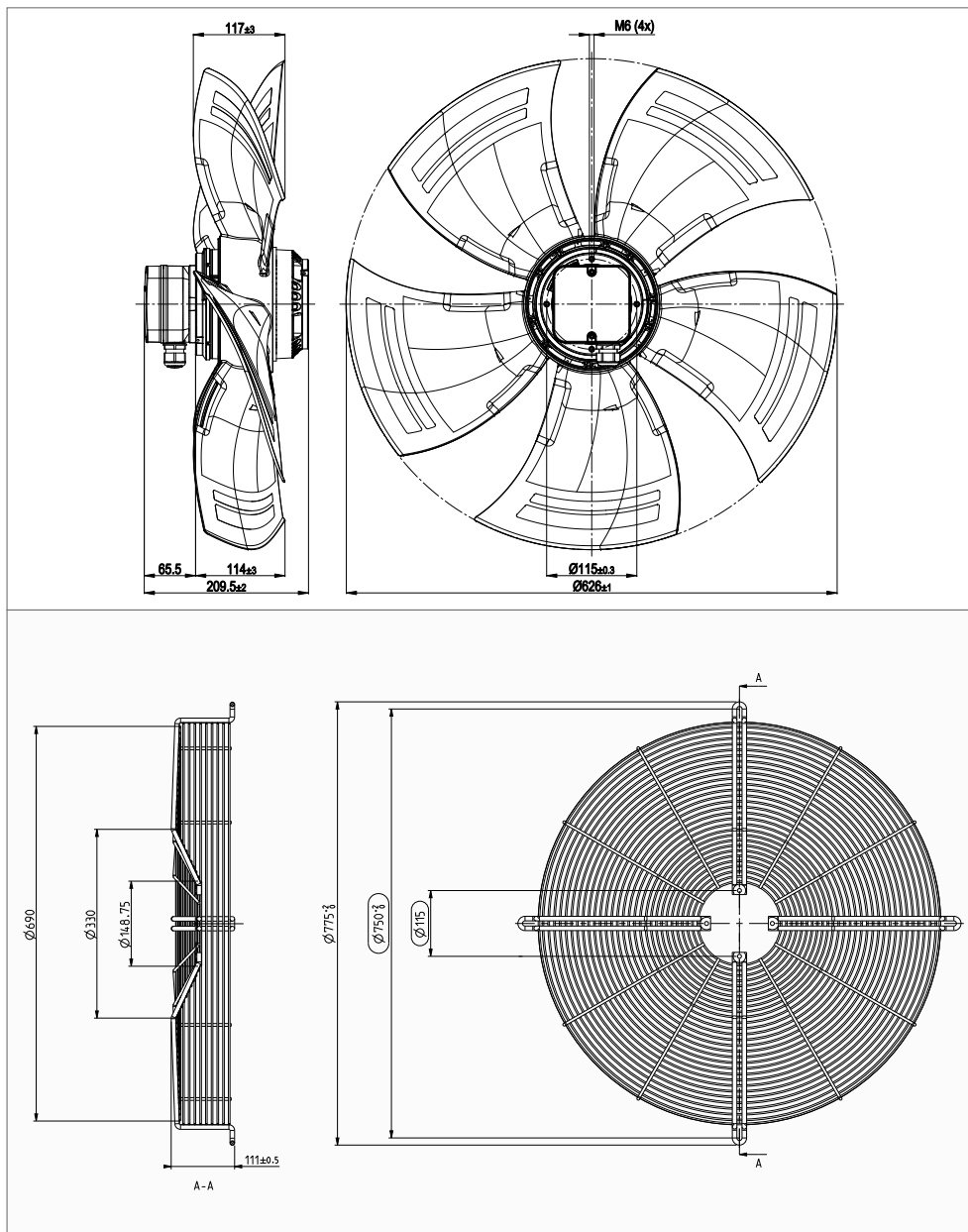
### Technical Features

|                                                        |         |
|--------------------------------------------------------|---------|
| Size                                                   | 500 mm  |
| Max. permissible ambient motor temp. (transp./storage) | + 80 °C |
| Min. permissible ambient motor temp. (transp./storage) | - 40 °C |

Data must be considered in **FREE AIR**

# Electrical Fans AC - Ø630 [mm] Single Phase and Combined Grids

**Italia RAAL**  
complete cooling solutions



Cod. **VEN105740031** - Cod. **GRI105740041**

## Nominal Data

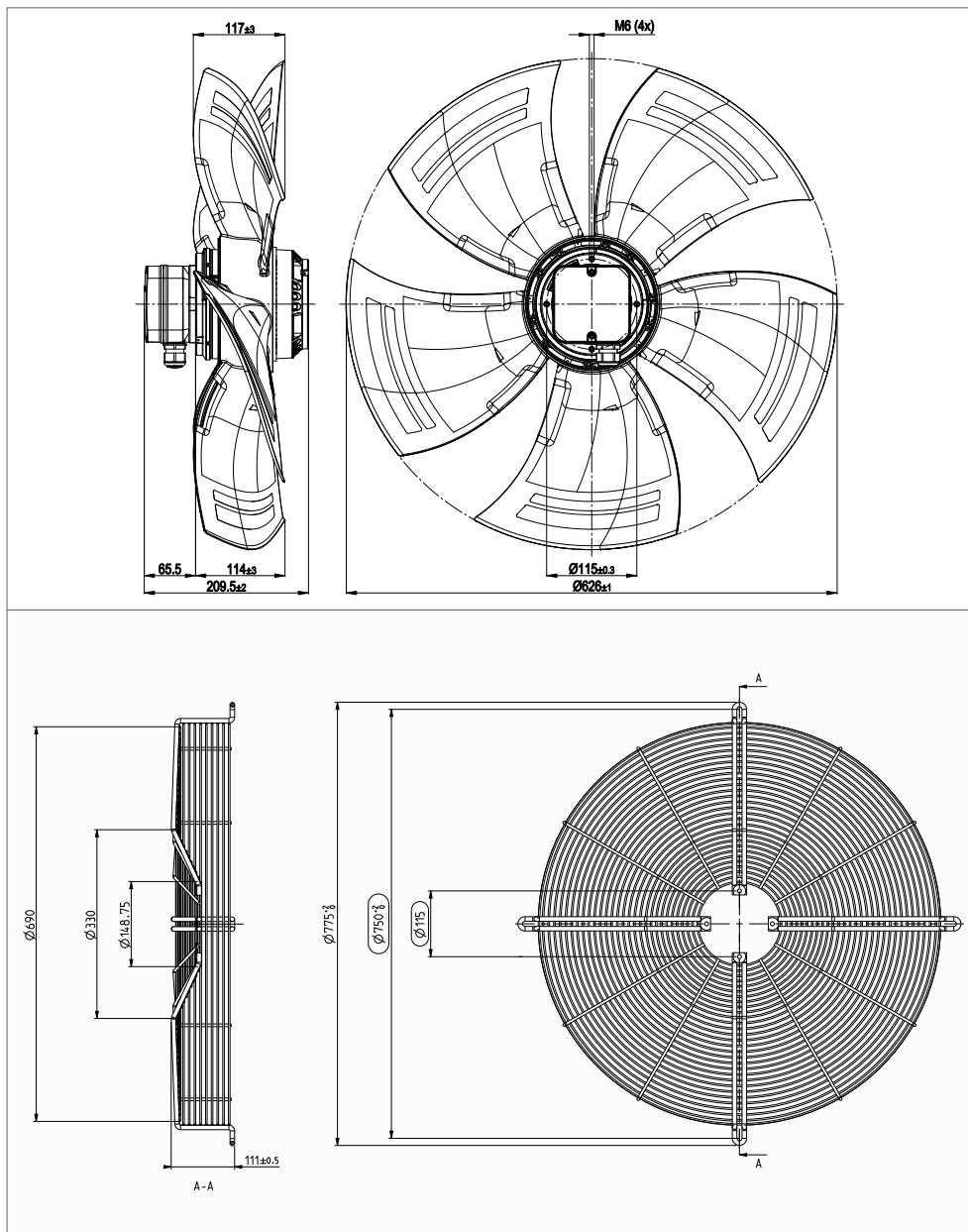
|                             |                   |       |
|-----------------------------|-------------------|-------|
| Phase                       |                   | 1~    |
| Nominal voltage             | VAC               | 230   |
| Connection                  |                   | -     |
| Frequency                   | Hz                | 50    |
| Valid for approval/standard |                   | CE    |
| Speed                       | min <sup>-1</sup> | 860   |
| Power input                 | W                 | 600   |
| Current draw                | A                 | 2.62  |
| Max. ambient temperature    | °C                | 55    |
| Starting current            | A                 | -     |
| Air flow                    | m <sup>3</sup> /h | 11025 |

## Technical Features

|                                                        |         |
|--------------------------------------------------------|---------|
| Size                                                   | 630 mm  |
| Max. permissible ambient motor temp. (transp./storage) | + 80 °C |
| Min. permissible ambient motor temp. (transp./storage) | - 40 °C |

Data must be considered in **FREE AIR**

# Electrical Fans AC - Ø630 [mm] Three Phases and Combined Grids



Cod. **VEN105740041** - Cod. **GRI105740041**

## Nominal Data

| Phase                       |                   | 3~    | 3~   | 3~   | 3~   | 3~    | 3~    |
|-----------------------------|-------------------|-------|------|------|------|-------|-------|
| Nominal voltage             | VAC               | 400   | 400  | 400  | 400  | 480   | 480   |
| Connection                  |                   | Δ     | Y    | Δ    | Y    | Δ     | Y     |
| Frequency                   | Hz                | 50    | 50   | 60   | 60   | 60    | 60    |
| Valid for approval/standard |                   | CE    | CE   | CE   | CE   | CE    | CE    |
| Speed                       | min <sup>-1</sup> | 890   | 690  | 1010 | 700  | 1070  | 820   |
| Power input                 | W                 | 600   | 400  | 730  | 430  | 810   | 550   |
| Current draw                | A                 | 1.2   | 0.68 | 1.29 | 0.8  | 1.35  | 0.8   |
| Max. ambient temperature    | °C                | 65    | 65   | 60   | 60   | 55    | 55    |
| Starting current            | A                 | 4     | 1.33 | 3.5  | 1.17 | -     | -     |
| Air flow                    | m <sup>3</sup> /h | 11270 | 9620 | -    | -    | 13105 | 10765 |

## Technical Features

|                                                        |         |
|--------------------------------------------------------|---------|
| Size                                                   | 630 mm  |
| Max. permissible ambient motor temp. (transp./storage) | + 80 °C |
| Min. permissible ambient motor temp. (transp./storage) | - 40 °C |

Data must be considered in **FREE AIR**



**Electrical Fans AC CSA - UL**  
Three Phases  
**and Combined Grids**



# Electrical Fans AC CSA - UL - Ø208 [mm] Three Phases and Combined Grids



Cod. **VEN100610141** - Cod. **GRI100610141**

### Nominal Data

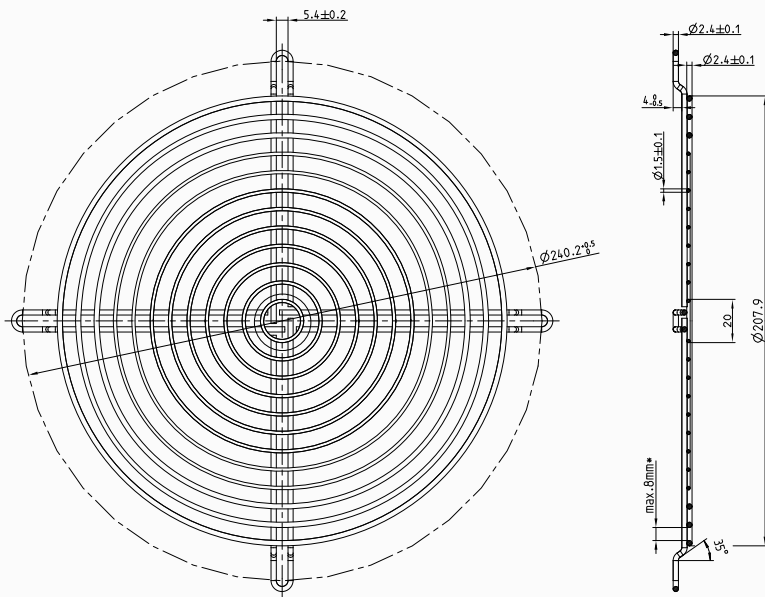
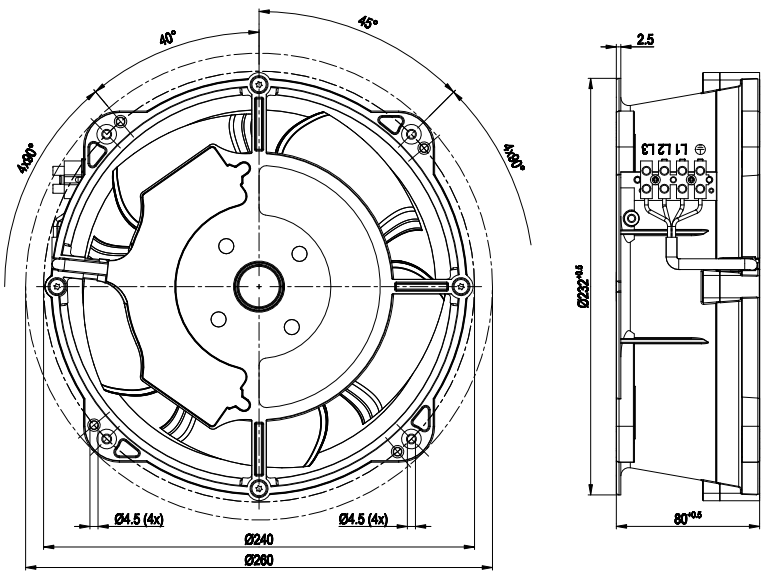
|                             |                   |      |      |      |
|-----------------------------|-------------------|------|------|------|
| Phase                       |                   | 3~   | 3~   | 3~   |
| Nominal voltage             | VAC               | 400  | 400  | 460  |
| Frequency                   | Hz                | Y    | Y    | Y    |
| Connection                  |                   | 50   | 60   | 60   |
| Valid for approval/standard |                   | UL   | UL   | UL   |
| Speed                       | min <sup>-1</sup> | 2750 | 3100 | 3200 |
| Power input                 | W                 | 59   | 80   | 88   |
| Current draw                | A                 | 0.15 | 0.14 | 0.15 |
| Max. ambient temperature    | °C                | 70   | 70   | 70   |
| Starting current            | A                 | 0.47 | 0.48 | 0.53 |
| Air flow                    | m <sup>3</sup> /h | 830  | -    | -    |

### Technical Features

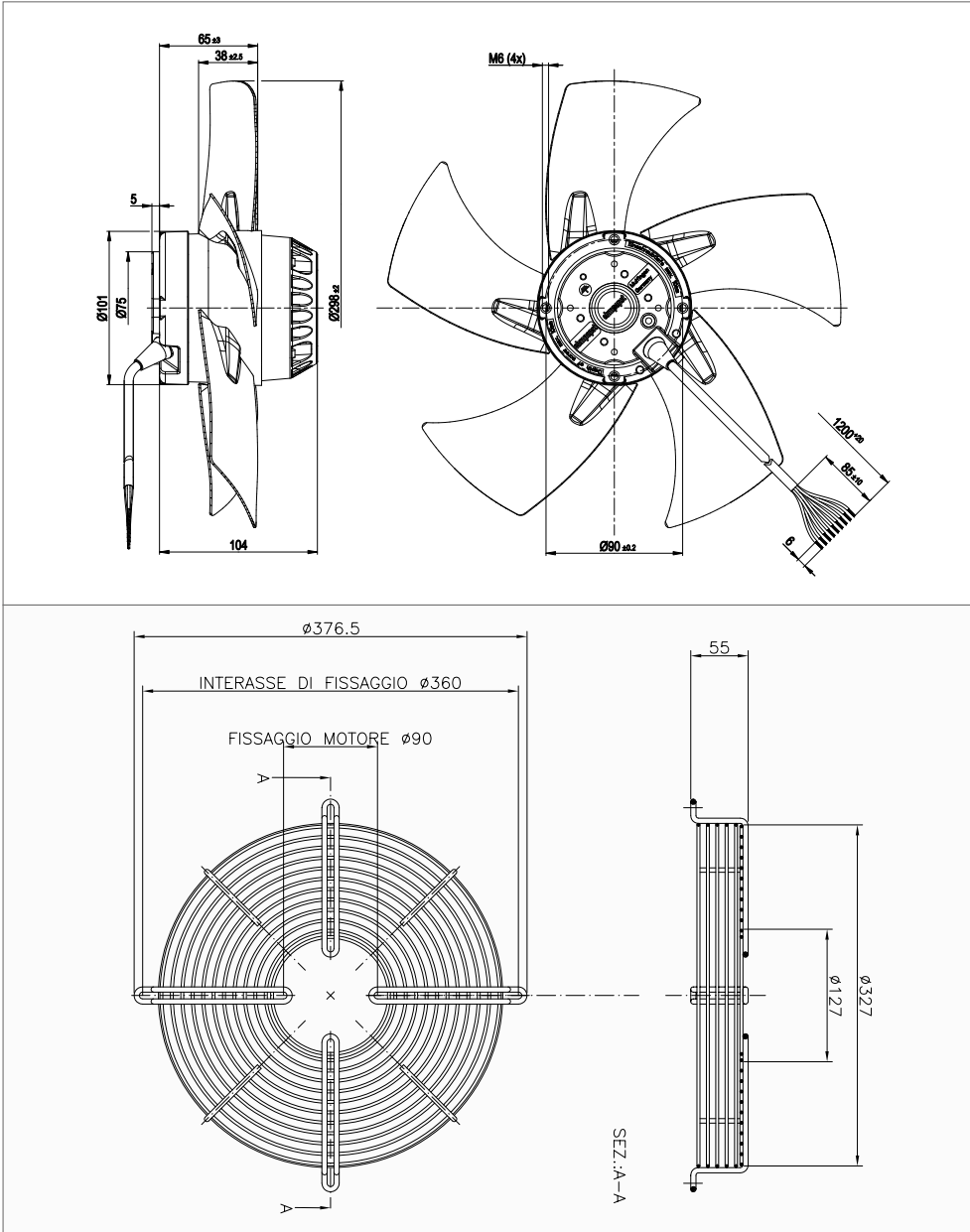
|                                                        |         |
|--------------------------------------------------------|---------|
| Size                                                   | 208 mm  |
| Max. permissible ambient motor temp. (transp./storage) | + 80 °C |
| Min. permissible ambient motor temp. (transp./storage) | - 40 °C |

Data must be considered in **FREE AIR**

PRODUCT NOT COMPLYING WITH ErP DIRECTIVE (EU 327 / 2011)



# Electrical Fans AC CSA - UL - Ø300 [mm] Three Phases and Combined Grids



Cod. **VEN10063C041** - Cod. **GRI100630031**

## Nominal Data

| Phase                       |                   | 3~   | 3~   | 3~   | 3~   | 3~   | 3~   |
|-----------------------------|-------------------|------|------|------|------|------|------|
| Nominal voltage             | VAC               | 230  | 230  | 230  | 400  | 400  | 400  |
| Frequency                   | Hz                | 50   | 60   | 60   | 50   | 60   | 60   |
| Connection                  |                   | Δ    | Δ    | Δ    | Y    | Y    | Y    |
| Valid for approval/standard |                   | -    | -    | UL   | -    | -    | UL   |
| Speed                       | min <sup>-1</sup> | 2500 | 2650 | 2650 | 2500 | 2650 | 2650 |
| Power input                 | W                 | 225  | 325  | 325  | 225  | 325  | 325  |
| Current draw                | A                 | 0.64 | 0.88 | -    | 0.37 | 0.51 | -    |
| Max. ambient temperature    | °C                | 85   | 55   | 55   | 85   | 55   | 55   |
| Starting current            | A                 | -    | -    | -    | -    | -    | -    |
| Air flow                    | m <sup>3</sup> /h | 3115 | -    | -    | -    | -    | -    |

## Technical Features

|                                                        |         |
|--------------------------------------------------------|---------|
| Size                                                   | 300 mm  |
| Max. permissible ambient motor temp. (transp./storage) | + 80 °C |
| Min. permissible ambient motor temp. (transp./storage) | - 40 °C |

Data must be considered in **FREE AIR**

**PRODUCT NOT COMPLYING WITH ErP DIRECTIVE (EU 327 / 2011)**

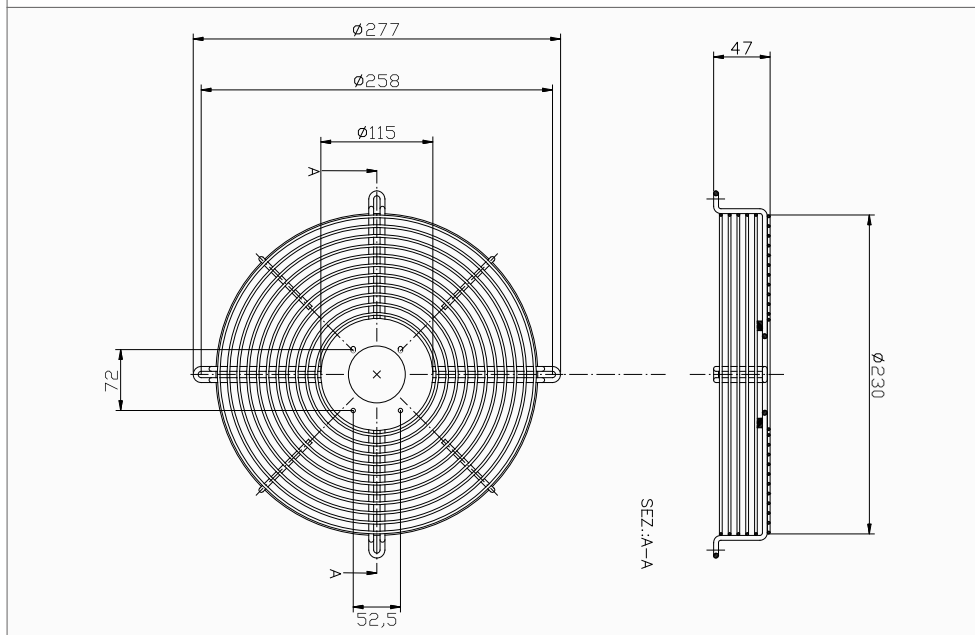
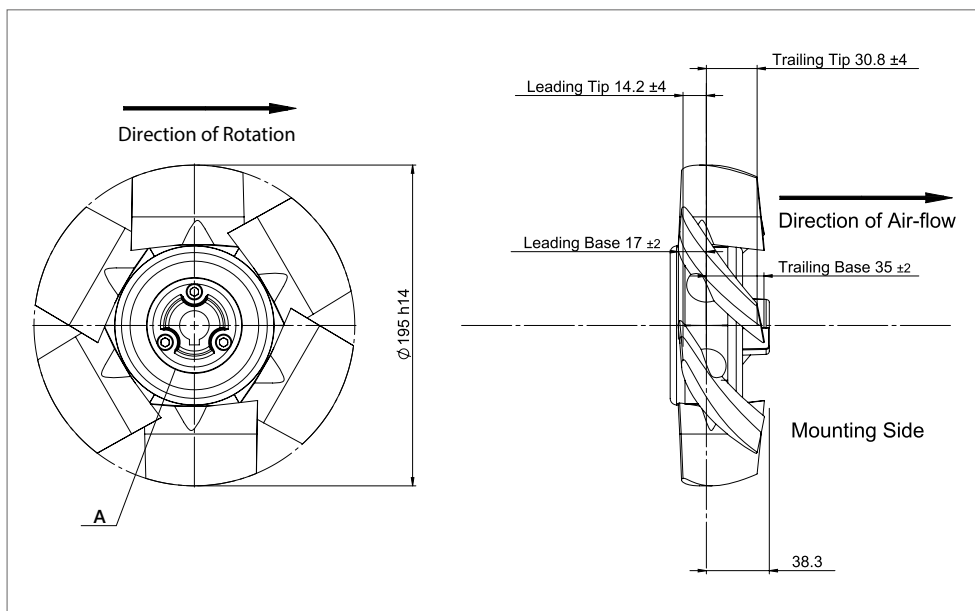


## Hydraulic Fans and Grids with Flange



# Hydraulic Fans - Ø195 [mm] and Grids with Flange

**Italia RAAL**  
complete cooling solutions



Cod. **VEN100610051** - Cod. **GRI10061FLG1**

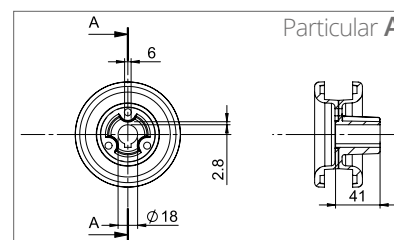
## Rotor Information

|                   |    |     |
|-------------------|----|-----|
| Rotor diameter    | mm | 195 |
| Number of blades  |    | 6   |
| Inclination       | °  | 35  |
| Material of blade |    | PPG |
| Rotation          |    | Dx  |

## Rotor Information

|                                                        |     |      |
|--------------------------------------------------------|-----|------|
| Speed                                                  | RPM | 3000 |
| Max. permissible ambient motor temp. (transp./storage) | °C  | +90  |
| Min. permissible ambient motor temp. (transp./storage) | °C  | -10  |

Data must be considered in **FREE AIR**



# Hydraulic Fans - Ø295 [mm] and Grids with Flange



Cod. **VEN100630051** - Cod. **GRI100630051**

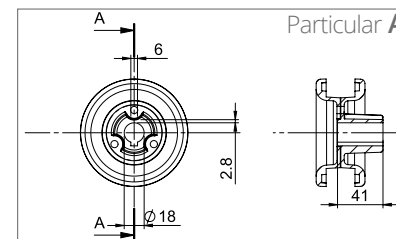
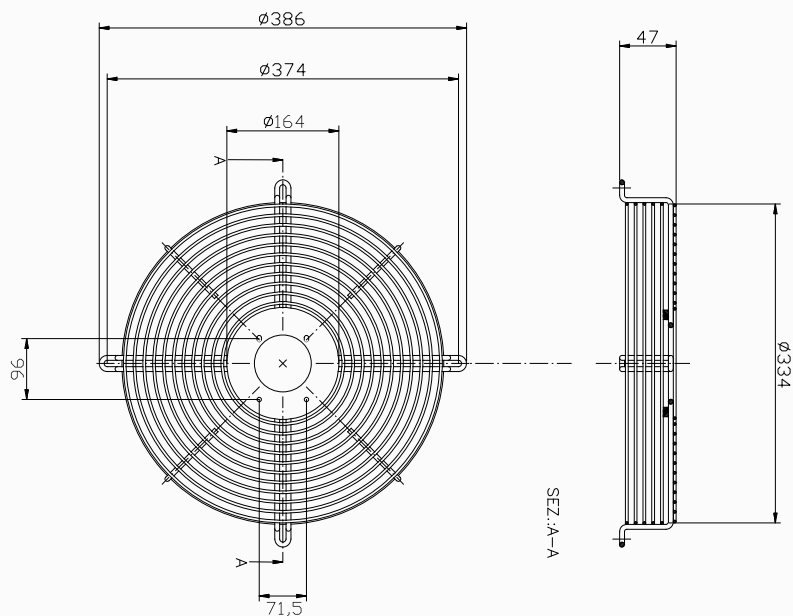
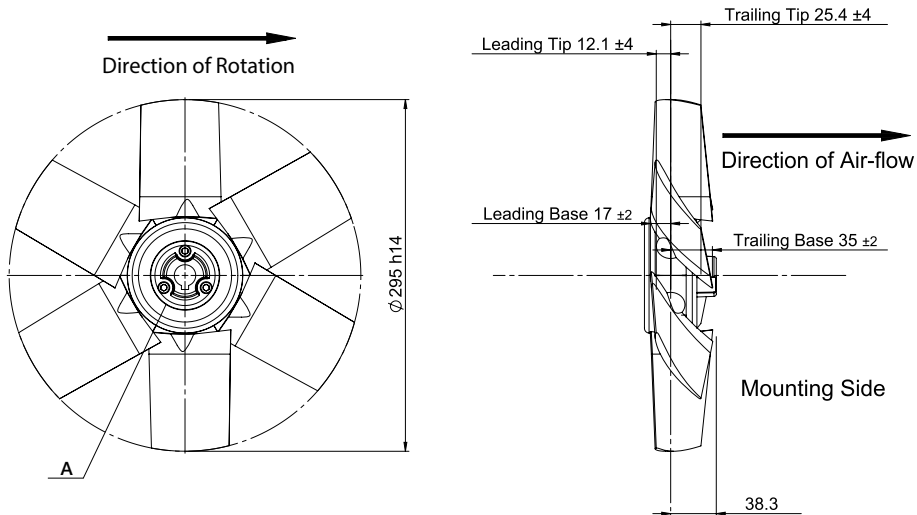
## Rotor Information

|                   |    |     |
|-------------------|----|-----|
| Rotor diameter    | mm | 295 |
| Number of blades  |    | 6   |
| Inclination       | °  | 35  |
| Material of blade |    | PPG |
| Rotation          |    | Dx  |

## Rotor Information

|                                                        |     |      |
|--------------------------------------------------------|-----|------|
| Speed                                                  | RPM | 3000 |
| Max. permissible ambient motor temp. (transp./storage) | °C  | +90  |
| Min. permissible ambient motor temp. (transp./storage) | °C  | -10  |

Data must be considered in **FREE AIR**



# Hydraulic Fans - Ø395 [mm] and Grids with Flange

**Italia RAAL**  
complete cooling solutions



Cod. **VEN100690051** - Cod. **GRI100690052**

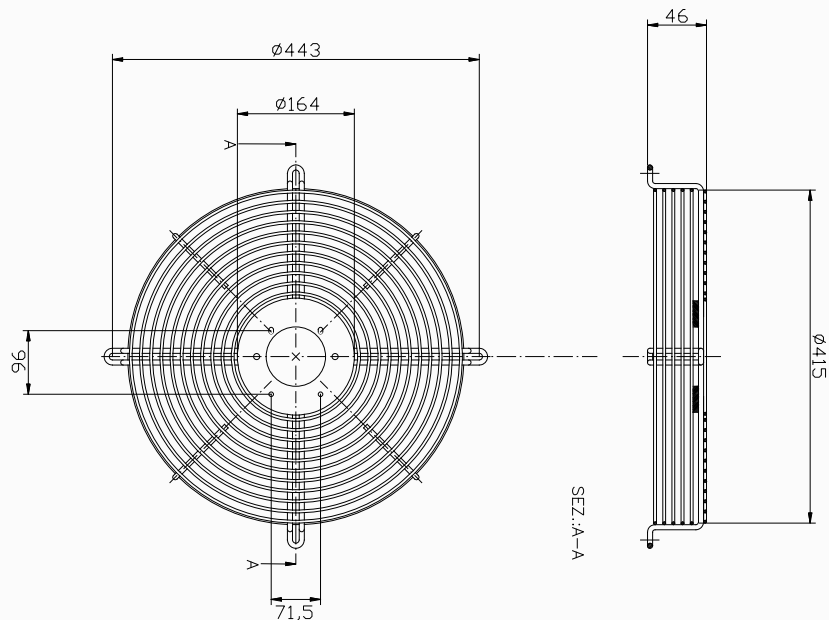
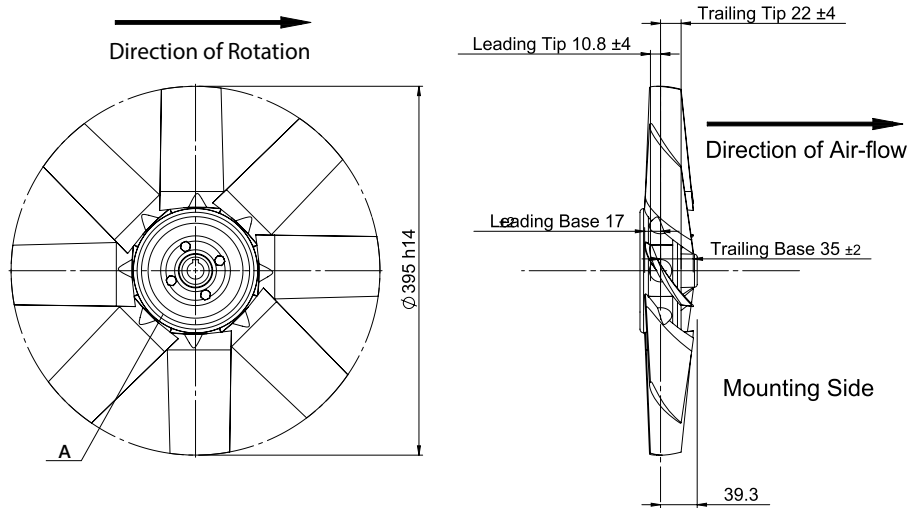
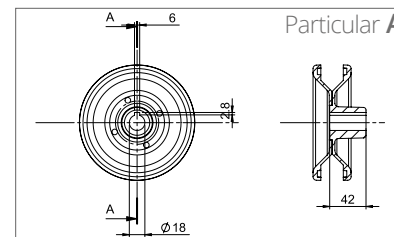
## Rotor Information

|                   |    |     |
|-------------------|----|-----|
| Rotor diameter    | mm | 395 |
| Number of blades  |    | 8   |
| Inclination       | °  | 35  |
| Material of blade |    | PPG |
| Rotation          |    | Dx  |

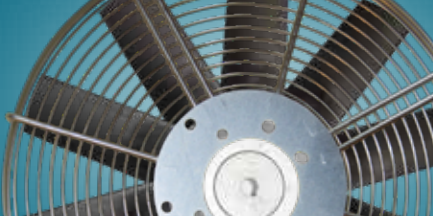
## Rotor Information

|                                                        |     |      |
|--------------------------------------------------------|-----|------|
| Speed                                                  | RPM | 3000 |
| Max. permissible ambient motor temp. (transp./storage) | °C  | +90  |
| Min. permissible ambient motor temp. (transp./storage) | °C  | -10  |

Data must be considered in **FREE AIR**



# Hydraulic Fans - Ø500 [mm] and Grids with Flange



Cod. **VEN105710051** - Cod. **GRI105710051**

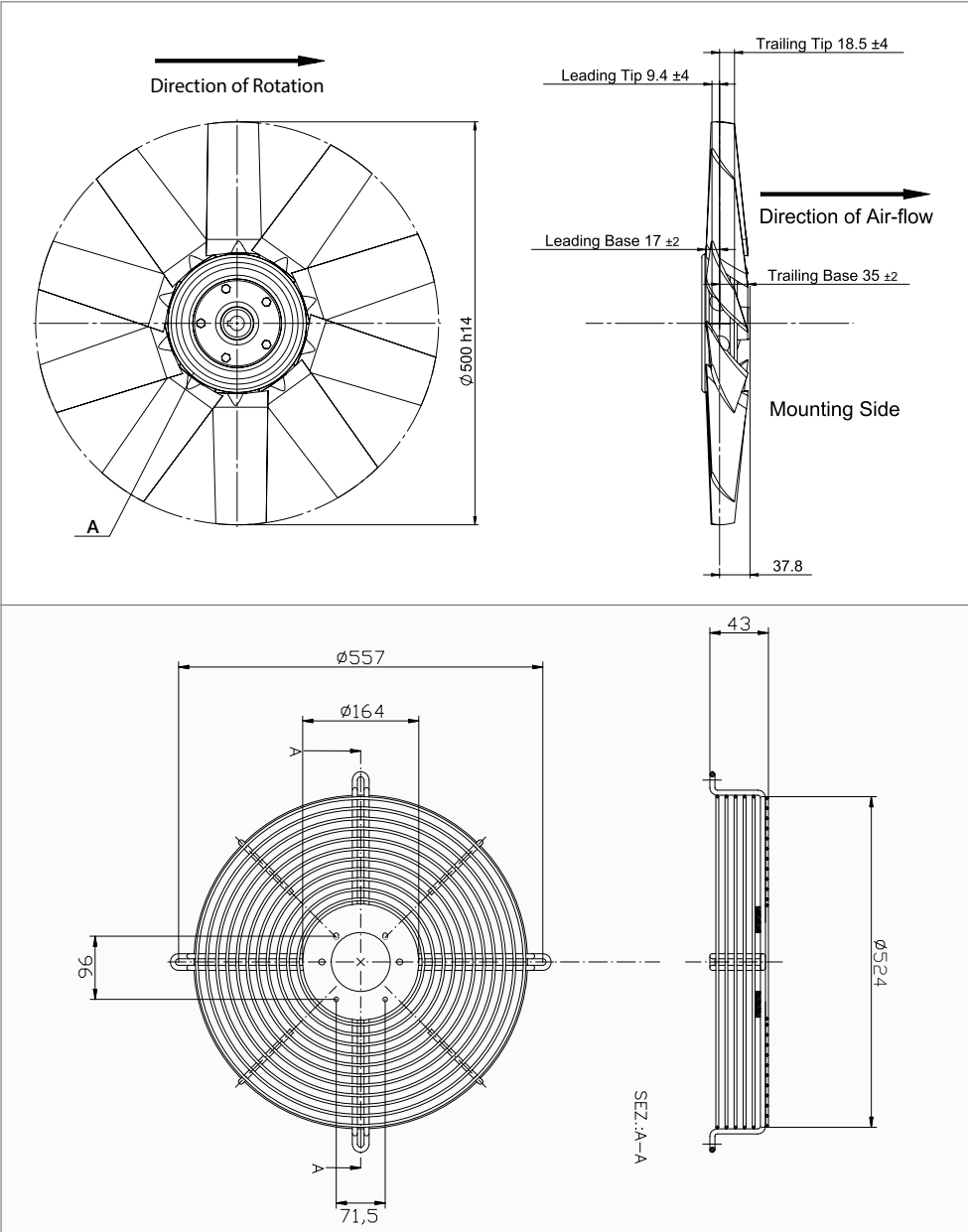
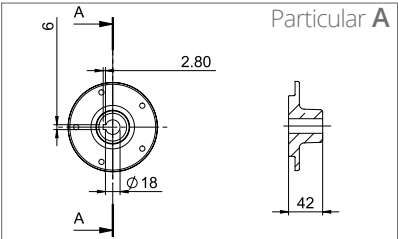
## Rotor Information

|                   |    |     |
|-------------------|----|-----|
| Rotor diameter    | mm | 500 |
| Number of blades  |    | 10  |
| Inclination       | °  | 35  |
| Material of blade |    | PPG |
| Rotation          |    | Dx  |

## Rotor Information

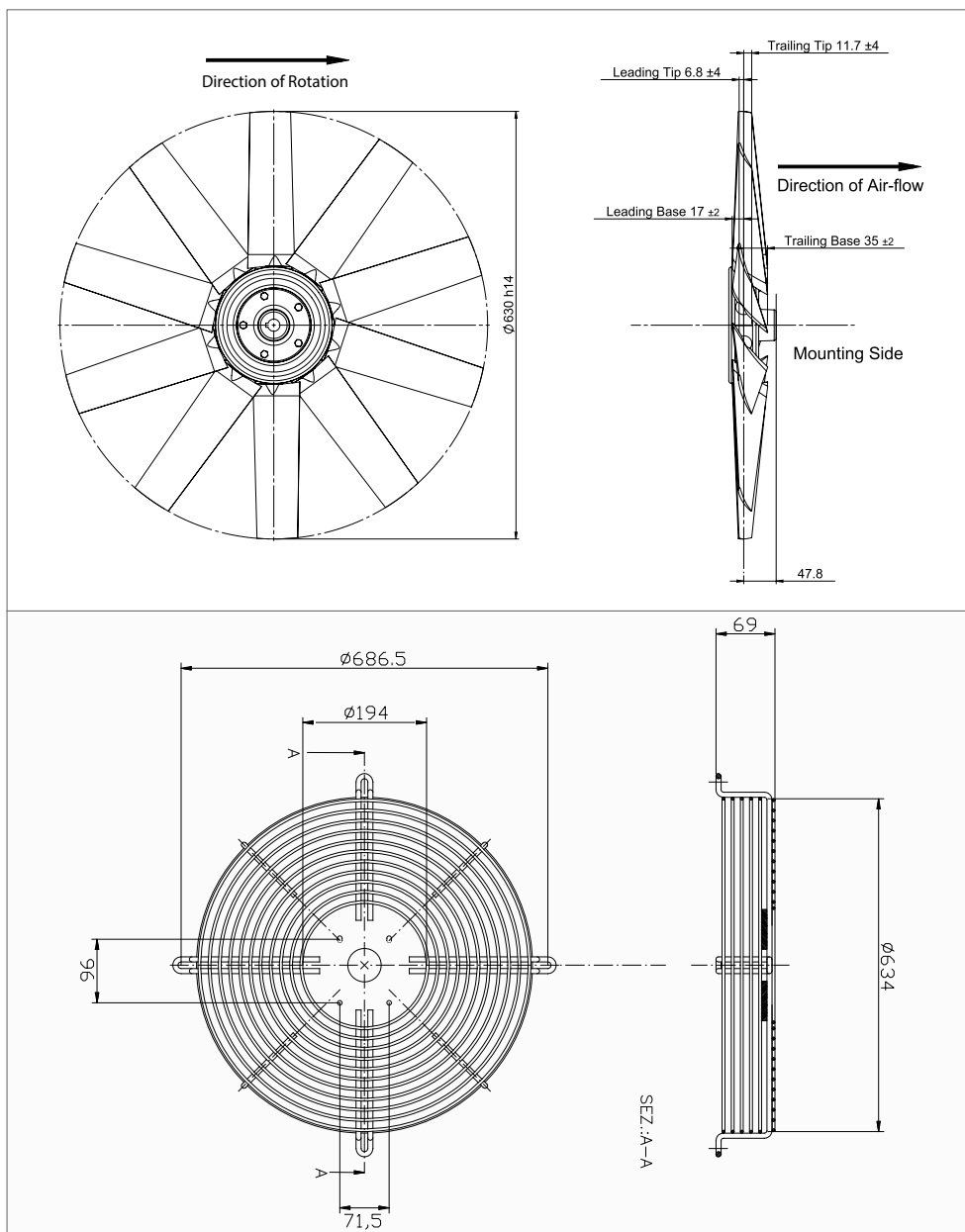
|                                                        |     |      |
|--------------------------------------------------------|-----|------|
| Speed                                                  | RPM | 3000 |
| Max. permissible ambient motor temp. (transp./storage) | °C  | +73  |
| Min. permissible ambient motor temp. (transp./storage) | °C  | -10  |

Data must be considered in **FREE AIR**



# Hydraulic Fans - Ø630 [mm] and Grids with Flange

**Italia RAAL**<sup>®</sup>  
complete cooling solutions



Cod. **VEN105730051** - Cod. **GRI105730052**

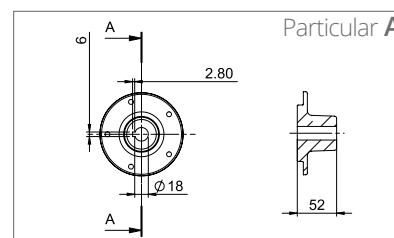
## Rotor Information

|                   |    |     |
|-------------------|----|-----|
| Rotor diameter    | mm | 630 |
| Number of blades  |    | 10  |
| Inclination       | °  | 35  |
| Material of blade |    | PAG |
| Rotation          |    | Dx  |

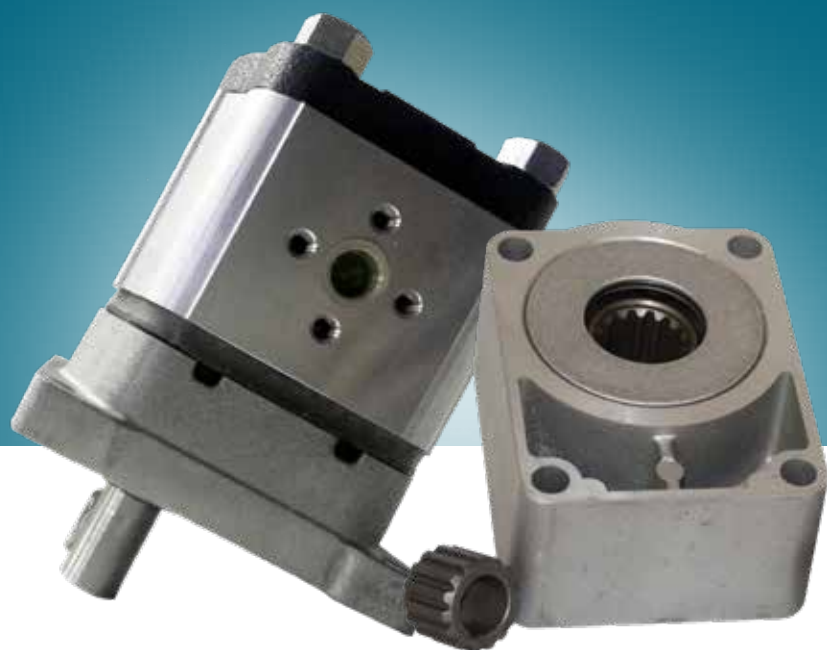
## Rotor Information

|                                                        |     |      |
|--------------------------------------------------------|-----|------|
| Speed                                                  | RPM | 3000 |
| Max. permissible ambient motor temp. (transp./storage) | °C  | +48  |
| Min. permissible ambient motor temp. (transp./storage) | °C  | -10  |

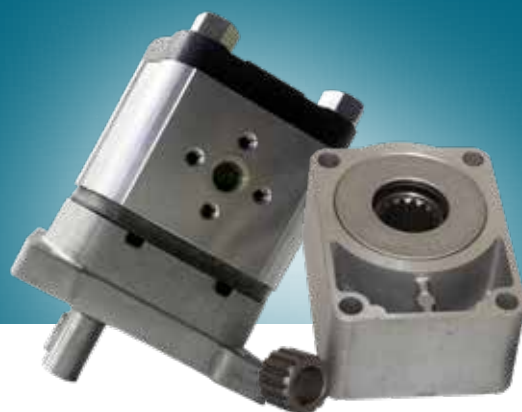
Data must be considered in **FREE AIR**



## Hydraulic Motors and Supports



## Hydraulic Motors and Supports



### GR1 and GR2 HYDRAULIC MOTORS



### HYDRAULIC MOTORS

#### GR1 HYDRAULIC MOTOR (BIDIRECTIONAL)

MOTGR1059000 - Motor GR1 5,9cc. BIDIRECTIONAL

#### GR2 HYDRAULIC MOTOR (UNIDIRECTIONAL/BIDIRECTIONAL)

MOTGR2083000 - Motor GR2 8,3cc. BIDIRECTIONAL

MOTGR20830SX - Motor GR2 8,3cc. UNIDIR.ROTSX

MOTGR2113000 - Motor GR2 11,3cc. BIDIRECTIONAL

MOTGR21130DX - Motor GR2 11cc. UNIDIR.ROTDX

MOTGR21130SX - Motor GR2 11cc. UNIDIR.ROTSX

### GR2 HYDR. MOTOR with INTEGRATED SUPP.



### GR2 HYDRAULIC MOTOR with INTEGRATED SUPPORT

MOTGR2110 SUP -Motor GR2 11,3cc.BIDIRECTIONAL + Support

### SUPPORTS and COUPLINGS for HYDRAULIC PREDISPOSITION



### SUPPORTS and COUPLINGS

#### SUPPORT and COUPLING for HYDRAULIC PREDISPOSITION GR1

SUP100610051 G1

SEM100610051 G1

#### SUPPORT and COUPLING for HYDRAULIC PREDISPOSITION GR2

SUP100690051 G2

SEM100690051 G2

These products can be used on all STANDARD models

## Thermostats



## Thermostats

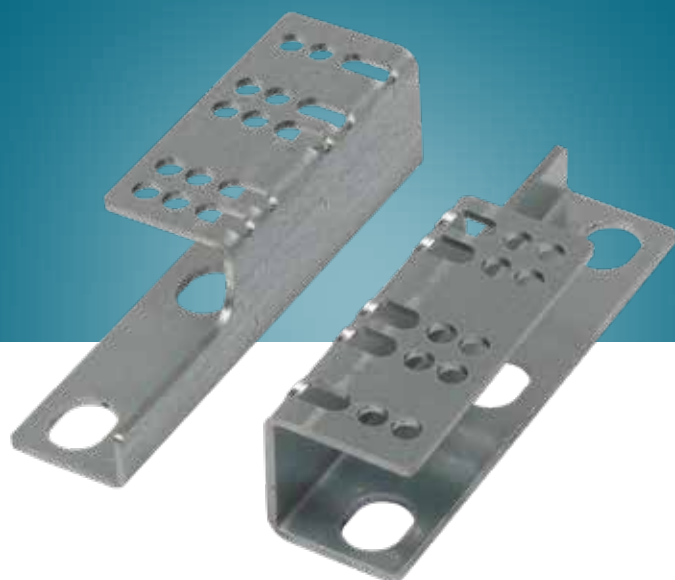


| DIN Type THERMOSTAT                                                                 | MODEL "A" DIN Type - M22x1,5                                                                |          |               |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------|---------------|
|   | TER00DIN7080                                                                                | 70/80 °C | 12V and 24V * |
|                                                                                     | TER00DIN6070                                                                                | 60/70 °C |               |
|                                                                                     | TER00DIN5060                                                                                | 50/60 °C |               |
|                                                                                     | TER00DIN4050                                                                                | 40/50 °C |               |
|                                                                                     | TER00DIN3040                                                                                | 30/40 °C |               |
| FAST-ON Type THERMOSTAT                                                             | MODEL "B" FAST-ON Type UNCUFFED IP65 - M22x1,5                                              |          |               |
|  | TER453251T60                                                                                | 60 °C    | 12V and 24V * |
|                                                                                     | TER032503T50                                                                                | 50 °C    |               |
|                                                                                     | TER032503T40                                                                                | 40 °C    |               |
|                                                                                     |                                                                                             |          |               |
| FAST-ON Type THERMOSTAT                                                             | MODEL "C" FAST-ON Type - M22x1,5                                                            |          |               |
|  | TER012503T60                                                                                | 50/58 °C | 12V and 24V * |
|                                                                                     | TER012503T48                                                                                | 40/48 °C |               |
|                                                                                     | TER012503T40                                                                                | 30/38 °C |               |
|                                                                                     |                                                                                             |          |               |
| ADJUSTABLE THERMOSTAT                                                               | ADJUSTABLE THERMOSTAT with GRADUATED KNOB 0-90 C°<br>for single phase models 220V GR series |          |               |
|  |                                                                                             |          |               |
|                                                                                     | TERVAR000900                                                                                |          |               |

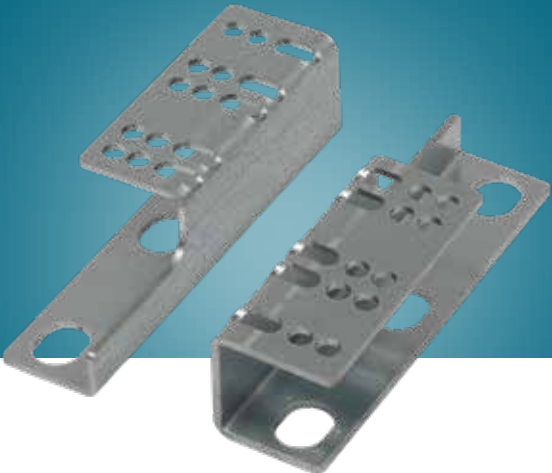
All the thermostats above are configured with **N.A. circuit** (Normal Open). The N.C. (Normal Close) configurations are provided only on request.

\* In order to preserve the integrity of the thermostat, we recommend using always a RELAY. Otherwise, for connections above 12 and 24 Volt, it's OBBLIGATORY to proceed installing a proper RELAY.

## Accessories



# Accessories



| * KIT BRACKETS                                                                    |              |
|-----------------------------------------------------------------------------------|--------------|
|  | STU000002000 |
|                                                                                   |              |

| * VIBRATION DAMPER KIT for MOUNTING BRACKETS                                       |              |
|------------------------------------------------------------------------------------|--------------|
|  | ANT000002000 |
|                                                                                    |              |

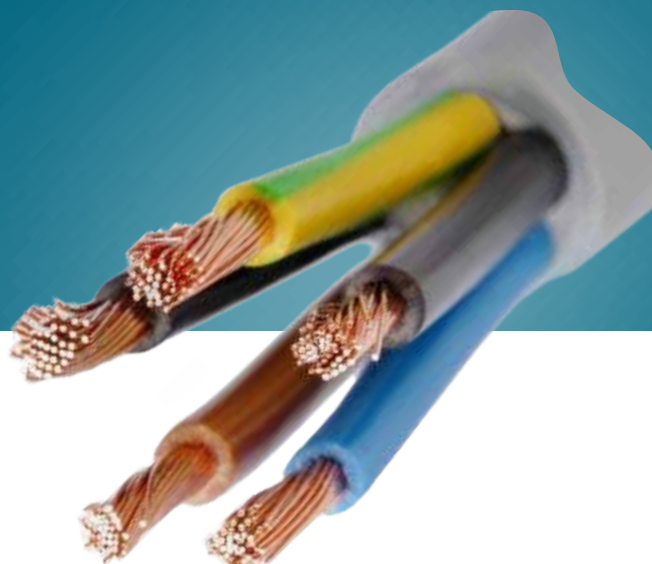
| BY-PASS VALVES                                                                      |                                  |
|-------------------------------------------------------------------------------------|----------------------------------|
|  | VAL0000CUR01 - 1,5 bar/3,5 bar   |
|                                                                                     | VAL0000CUR26 - 1,5 bar / 3,5 bar |
|                                                                                     | VAL0000CUR55 - 1,5 bar / 3,5 bar |

| CAPS                                                                                 |              |
|--------------------------------------------------------------------------------------|--------------|
|  | TAP0000CUR26 |
|                                                                                      | TAP0000CUR55 |

| * ELECTRICAL CAPACITORS                                                             |                       |
|-------------------------------------------------------------------------------------|-----------------------|
|  | 1,5 µF - CON100610031 |
|                                                                                     | 3 µF - CONORU863600   |
|                                                                                     | 5 µF - CON100690031   |
|                                                                                     | 6 µF - CONORU690051   |
|                                                                                     | 8 µF - CONORU630051   |

\*These products can be used on all STANDARD models

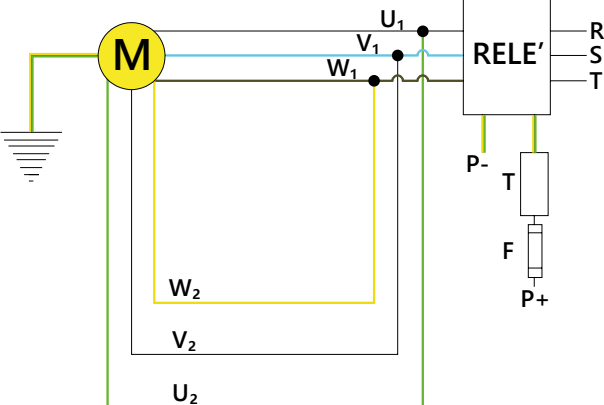
## Wiring Diagrams



# Wiring Diagrams

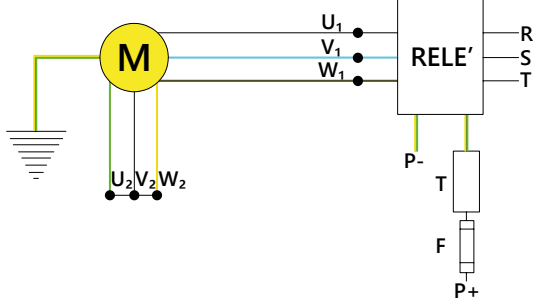


Connection 230V AC DELTA



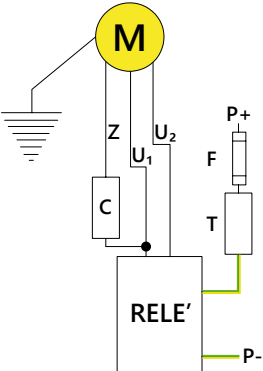
230V 3 PHASES

Connection 400V AC STAR



400V 3 PHASES

Connection 230V AC



Legend

|       |                    |
|-------|--------------------|
| U1    | BLACK              |
| U2    | GREEN              |
| V1    | LIGHT BLUE         |
| V2    | WHITE              |
| W1 -Z | BROWN              |
| W2    | YELLOW             |
| G     | GROUND             |
| P     | RELAY POWER        |
| R-S-T | THREE PHASES POWER |
| T     | THERMOSTAT         |
| F     | FUSE               |



