



## TORRETTE TR-ED-V RANGE

Centrifugal roof fans with vertical discharge for hot fumes extraction

Centrifugal roof fans with horizontal discharge, for installation in the proximity of apertures and/or air vents, certified for hot fume extraction (F400/120); available in different diameters in single and three-phase versions. They are designed to guarantee safety in civil and industrial premises such as condominiums, gyms, restaurants, offices, theatres, discos, hospitals and factories.

### Key features

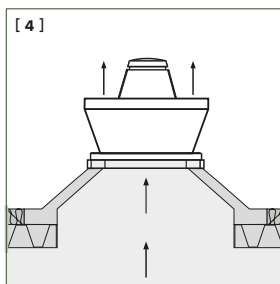
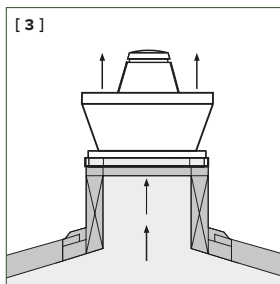
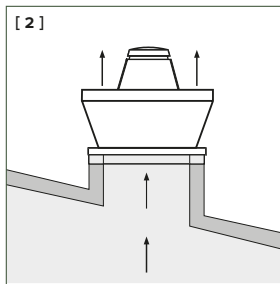
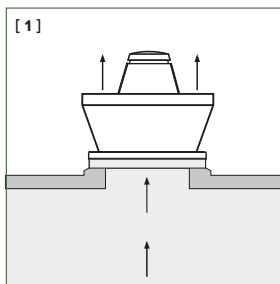
- Full compliance with the EN 12101-3 standard (APPLUS certification), class F400/120.
- Possibility of installation in the proximity of apertures or air vents.
- Robust and weatherproof construction.
- Easy installation on a wide range of roof types.

### Versions

20 models, in single and three-phase version, with 4, 6 and 8 poles.

### Technical features

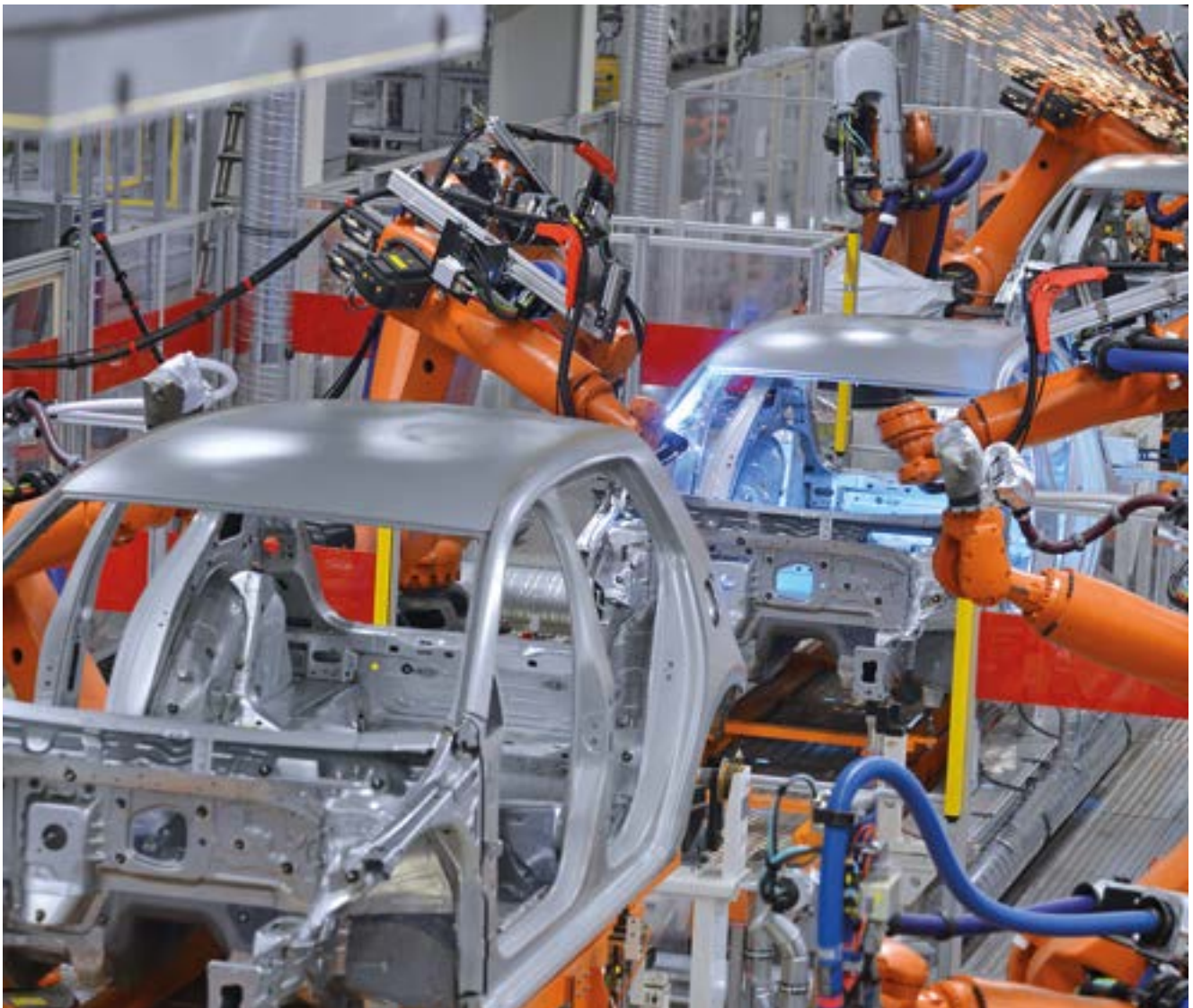
- Bases made of pickled and phosphated steel sheet, grey epoxy powder-coated with hammered finish.
- Motor cover made of pickled and phosphated steel sheet, polyester powder-coated and furnace-baked, guaranteeing higher long-term resistance to aggressive agents, in grey colour with hammered finish
- Lateral bulkheads for vertical discharge of the air handled made of galvanised steel sheet, grey polyester powder-coated and furnace-baked, guaranteeing higher long-term resistance to aggressive agents and with hammered finish.
- Pickled and phosphate steel sheet motor ventilation ducts, powered by cold air taken from outside the flow handled, grey polyester powder-coated and furnace-baked, guaranteeing higher long-term resistance to aggressive agents and with hammered finish.
- Ventilation ports, fashioned in one piece with the body, characterized by aerodynamic profiles, calibrated to optimize the extracted airflow.
- Safety and anti-bird protective grilles designed in accordance with the UNI ISO 13857 standard, made of electrically welded steel rings with epoxy black paint finish.
- Galvanised steel sheet motor cover plates, designed to divert the flow of air handled, preventing it from striking the drive unit directly and thus protecting it from excessive heat loads.
- Class H single or three-phase asynchronous motors, depending on the model, with shafts turning on ball bearings with double sealing screen, characterized by high (IP55) degree of protection against dust and water and with cooling fans for more effective heat dissipation.
- Starting capacitors of the single-phase models comply with the EN 60252-1 standard and are third-party certified.
- Centrifugal impeller with electrically galvanised sheet steel self-cleaning, backward-curved blades, dynamically balanced (UNI ISO 1940, Class 6.3), fitted on grooved hubs in die-cast aluminium.
- Metal cable gland for connection to the mains, guaranteeing adequate resistance to high temperatures.
- Steel eye-bolts for lifting and transport, protected from corrosion by galvanic treatment.
- Steel cables for secure anchoring of the product to the destination surfaces supplied as standard.



[1][2][3][4] These devices are easily installed on top of each roof. The air must not be dusty, acidic or corrosive. Not suitable for installation in ducts placed directly over chimneys or burners.

**Note**

- In European Community countries and in those that have implemented Reg. ErP No. 327/2011, the towers of the torrette TR ED-V range can only be used as safety equipment operating at maximum speed for the evacuation of hot fumes (class F400/120).
- In countries that are not part of the European Community or in those that have not implemented Reg. Erp No. 327/2011, the towers in the torrette TR ED-V range can be for uses other than the evacuation of hot fumes in the case of fire; as such, their speed is adjustable by Vortice controllers. For these uses, the continuous operating environmental temperature is between -25°C and + 90°C.
- The towers of the torrette TR ED-V range are not suitable for handling flows characterized by significant concentrations of abrasive dust or acid or corrosive substances.
- The towers of the torrette TR ED-V range are not suitable for installation at the end of ducts positioned directly above fireplaces or burners.





# INDUSTRIAL VENTILATION

## TORRETTE TR-ED-V RANGE

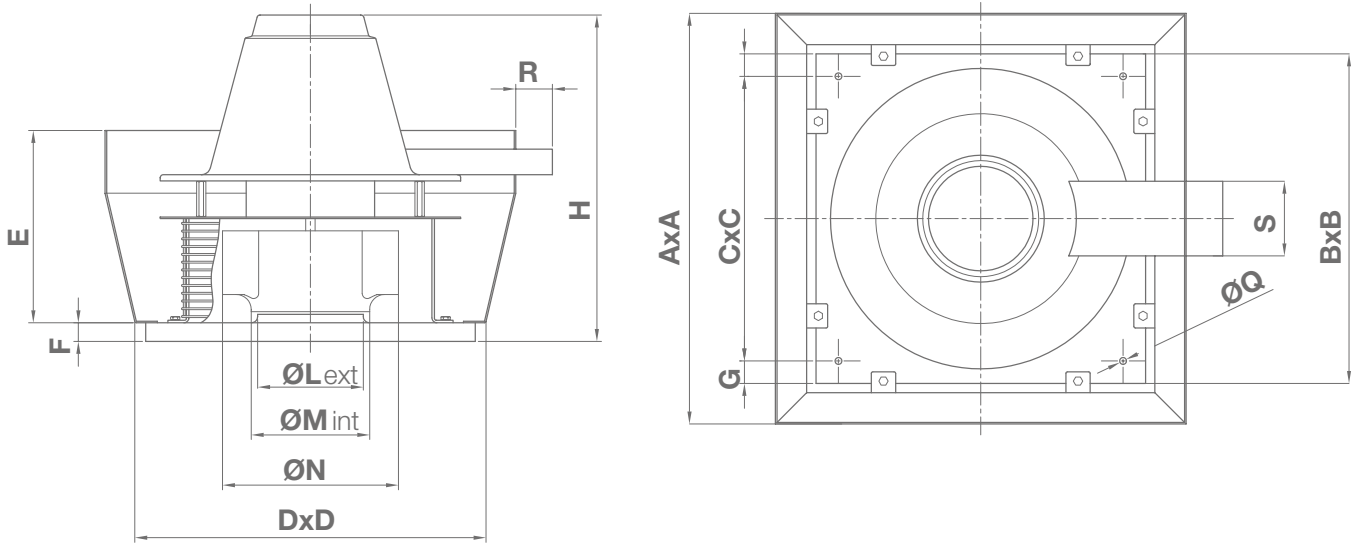
### TECHNICAL DATA

|                 | PRODUCTS       | CODE  | V~50HZ       | W            | A            | POLES        | RPM            | MAX AIR FLOW |              | MAX PRESSURE       |            | Lp dB(A)<br>3 m | MAX °C*   | KG  |
|-----------------|----------------|-------|--------------|--------------|--------------|--------------|----------------|--------------|--------------|--------------------|------------|-----------------|-----------|-----|
|                 |                |       |              |              |              |              |                | m³/h         | l/s          | mmH <sub>2</sub> O | Pa         |                 |           |     |
| SINGLE-PHASE    | TRM 10 ED-V 4P | 15160 | 230          | 100          | 0.45         | 4            | 1450           | 1000         | 278          | 20                 | 196        | 56              | 400 °C/2H | 32  |
|                 | TRM 15 ED-V 4P | 15162 | 230          | 130          | 0.57         | 4            | 1400           | 1400         | 389          | 24                 | 235        | 58.5            | 400 °C/2H | 33  |
|                 | TRM 20 ED-V 4P | 15164 | 230          | 250          | 1.20         | 4            | 1400           | 2200         | 611          | 34                 | 334        | 68              | 400 °C/2H | 61  |
|                 | TRM 30 ED-V 4P | 15166 | 230          | 410          | 1.75         | 4            | 1380           | 3100         | 861          | 40                 | 392        | 67              | 400 °C/2H | 63  |
|                 | TRM 50 ED-V 4P | 15168 | 230          | 720          | 3.30         | 4            | 1350           | 4500         | 1250         | 52                 | 510        | 72.5            | 400 °C/2H | 68  |
|                 | TRM 70 ED-V 4P | 15170 | 230          | 1000         | 4.35         | 4            | 1350           | 5800         | 1611         | 65                 | 638        | 77              | 400 °C/2H | 130 |
|                 | TRT 10 ED-V 4P | 15161 | 400          | 75<br>100    | 0.15<br>0.25 | 4            | 1250<br>1400   | 890<br>1100  | 247<br>306   | 17<br>21           | 167<br>206 | 56              | 400 °C/2H | 33  |
| TRT 15 ED-V 4P  | 15163          | 400   | 85<br>125    | 0.15<br>0.27 | 4            | 1100<br>1400 | 1100<br>1400   | 306<br>389   | 16<br>24     | 157<br>289         | 58.5       | 400 °C/2H       | 33        |     |
| TRT 20 ED-V 4P  | 15165          | 400   | 200<br>250   | 0.35<br>0.50 | 4            | 1100<br>1420 | 1800<br>2200   | 500<br>611   | 24<br>34     | 235<br>334         | 68         | 400 °C/2H       | 61        |     |
| TRT 30 ED-V 4P  | 15167          | 400   | 300<br>410   | 0.50<br>0.70 | 4            | 1100<br>1380 | 2555<br>3100   | 710<br>861   | 30<br>43     | 294<br>422         | 67         | 400 °C/2H       | 63        |     |
| TRT 50 ED-V 4P  | 15169          | 400   | 550<br>710   | 0.90<br>1.25 | 4            | 1100<br>1380 | 3800<br>4500   | 1056<br>1250 | 38<br>52     | 373<br>510         | 72.5       | 400 °C/2H       | 68        |     |
| TRT 70 ED-V 4P  | 15171          | 400   | 900<br>1100  | 1.50<br>2.00 | 4            | 1200<br>1400 | 5300<br>6000   | 1472<br>1667 | 52<br>67     | 510<br>657         | 77         | 400 °C/2H       | 128       |     |
| THREE-PHASE     | TRT 70 ED-V 6P | 15172 | 400          | 450<br>620   | 0.90<br>1.30 | 6            | 760<br>940     | 5300<br>6000 | 1472<br>1667 | 30<br>38           | 294<br>373 | 74              | 400 °C/2H | 131 |
| TRT 100 ED-V 4P | 15173          | 400   | 1400<br>1870 | 2.40<br>4.50 | 4            | 1180<br>1400 | 8300<br>9100   | 2306<br>2528 | 72<br>84     | 706<br>824         | 84         | 400 °C/2H       | 132       |     |
| TRT 100 ED-V 6P | 15174          | 400   | 800<br>1110  | 1.60<br>2.30 | 6            | 760<br>940   | 7550<br>8600   | 2097<br>2389 | 38<br>47     | 373<br>461         | 77         | 400 °C/2H       | 207       |     |
| TRT 100 ED-V 8P | 15175          | 400   | 700<br>810   | 1.30<br>2.00 | 8            | 610<br>720   | 8200<br>9200   | 2278<br>2556 | 28<br>34     | 275<br>334         | 71         | 400 °C/2H       | 217       |     |
| TRT 150 ED-V 6P | 15176          | 400   | 1470<br>1880 | 2.45<br>3.45 | 6            | 710<br>920   | 11000<br>12800 | 3056<br>3556 | 42<br>59     | 412<br>579         | 80         | 400 °C/2H       | 218       |     |
| TRT 150 ED-V 8P | 15177          | 400   | 1170<br>1450 | 2.15<br>2.95 | 8            | 540<br>720   | 11600<br>13500 | 3222<br>3750 | 34<br>42     | 334<br>412         | 74         | 400 °C/2H       | 222       |     |
| TRT 180 ED-V 6P | 15178          | 400   | 3200         | 6.11         | 6            | 950          | 16500          | 4583         | 79           | 775                | 83         | 400 °C/2H       | 220       |     |
| TRT 210 ED-V 6P | 15179          | 400   | 3460         | 6.42         | 6            | 950          | 18000          | 5000         | 80           | 785                | 80         | 400 °C/2H       | 222       |     |

\* Maximum continuous operating temperature of the product



DIMENSIONS



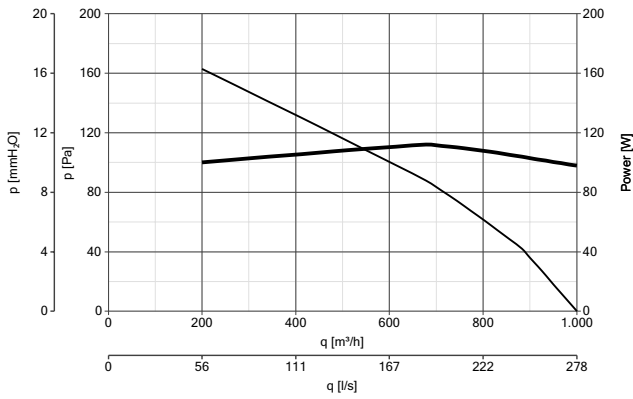
| PRODUCTS       | IMPELLER  | ØA   | ØB  | ØC  | ØD   | E   | F  | G    | H   | ØL  | ØM    | ØN  | ØQ | R  | S   |
|----------------|-----------|------|-----|-----|------|-----|----|------|-----|-----|-------|-----|----|----|-----|
| TR 10 ED-V 4P  | 280x101.5 | 652  | 410 | 357 | 440  | 328 | 38 | 26.5 | 538 | 183 | 187.5 | 284 | 11 | 40 | 134 |
| TR 15 ED-V 4P  | 315x101.5 | 652  | 410 | 357 | 440  | 328 | 38 | 25   | 538 | 206 | 211   | 319 | 11 | 40 | 134 |
| TR 20 ED-V 4P  | 355x125   | 907  | 550 | 500 | 580  | 432 | 38 | 25   | 653 | 231 | 236.5 | 359 | 11 | 40 | 158 |
| TR 30 ED-V 4P  | 400x140   | 907  | 550 | 500 | 580  | 432 | 38 | 25   | 653 | 260 | 265.5 | 404 | 11 | 40 | 158 |
| TR 50 ED-V 4P  | 450x160   | 907  | 550 | 500 | 580  | 432 | 38 | 40   | 669 | 292 | 298   | 454 | 11 | 40 | 158 |
| TR 70 ED-V 4P  | 500x160   | 1144 | 830 | 750 | 860  | 491 | 38 | 40   | 743 | 328 | 335   | 504 | 12 | 50 | 194 |
| TR 70 ED-V 6P  | 560x180   | 1144 | 830 | 750 | 860  | 491 | 38 | 40   | 743 | 365 | 375   | 564 | 12 | 50 | 194 |
| TR 100 ED-V 4P | 560x180   | 1144 | 830 | 750 | 860  | 491 | 38 | 40   | 743 | 365 | 375   | 564 | 12 | 50 | 194 |
| TR 100 ED-V 6P | 630x224   | 1462 | 980 | 900 | 1010 | 595 | 38 | 40   | 923 | 415 | 421   | 635 | 12 | 50 | 194 |
| TR 100 ED-V 8P | 710x224   | 1462 | 980 | 900 | 1010 | 595 | 38 | 40   | 923 | 465 | 472   | 715 | 12 | 50 | 194 |
| TR 150 ED-V 6P | 710x250   | 1462 | 980 | 900 | 1010 | 595 | 38 | 40   | 923 | 465 | 472   | 715 | 12 | 50 | 194 |
| TR 150 ED-V 8P | 800x250   | 1462 | 980 | 900 | 1010 | 595 | 38 | 40   | 923 | 520 | 529   | 805 | 12 | 50 | 194 |
| TR 180 ED-V 6P | 800x224   | 1462 | 980 | 900 | 1010 | 595 | 38 | 40   | 923 | 520 | 529   | 805 | 12 | 50 | 194 |
| TR 210 ED-V 6P | 800x250   | 1462 | 980 | 900 | 1010 | 595 | 38 | 40   | 923 | 520 | 529   | 805 | 12 | 50 | 194 |

Dimensions (mm)

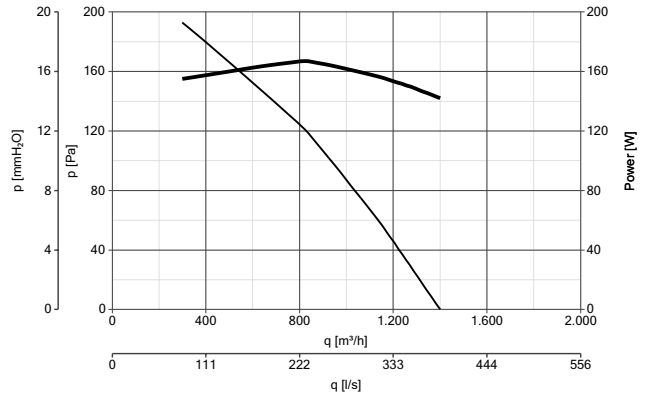


PERFORMANCE CURVES

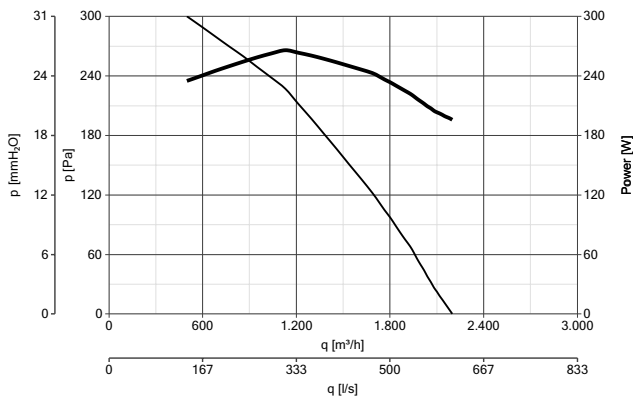
TRM 10 ED-V 4P



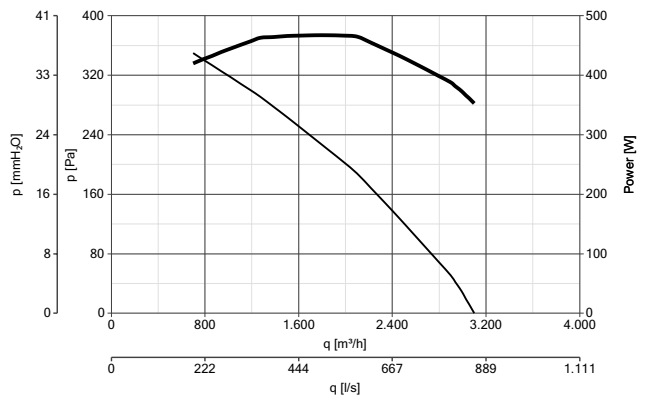
TRM 15 ED-V 4P



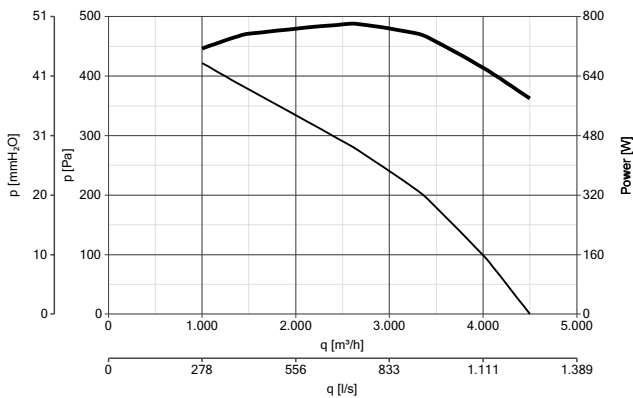
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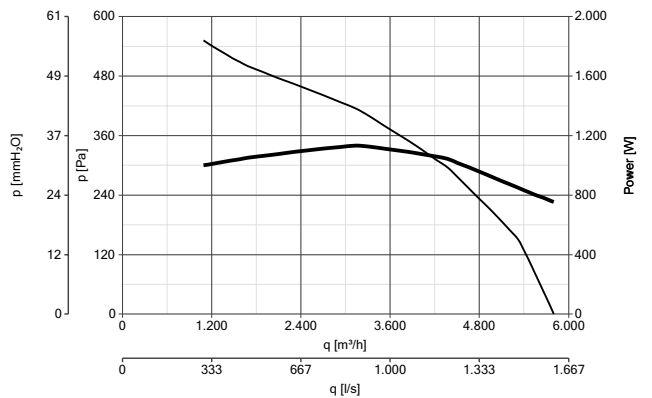
TRM 30 ED-V 4P



TRM 50 ED-V 4P



TRM 70 ED-V 4P

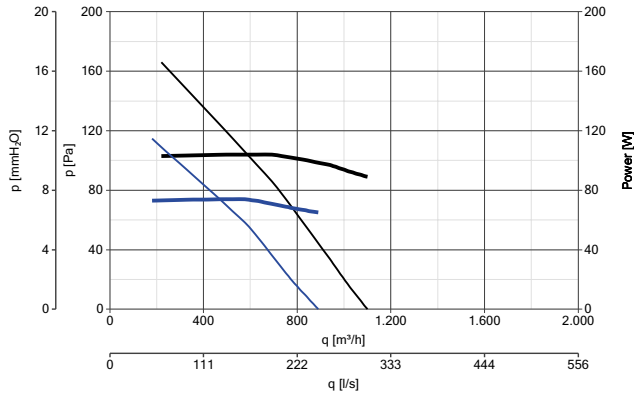


Power consumption  
 Delivery

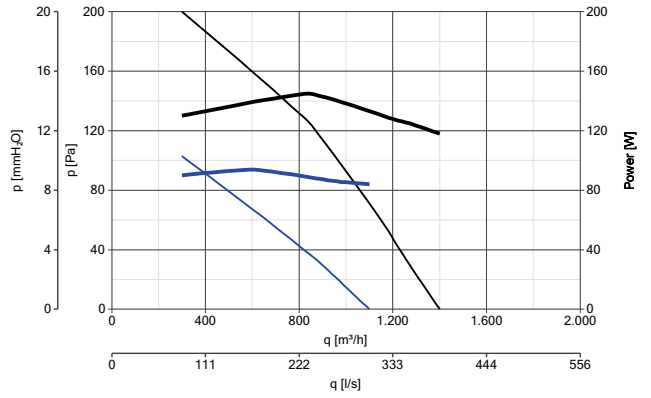


PERFORMANCE CURVES

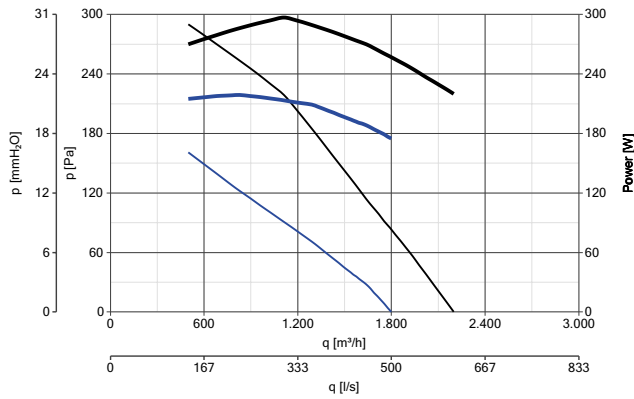
TRT 10 ED-V 4P



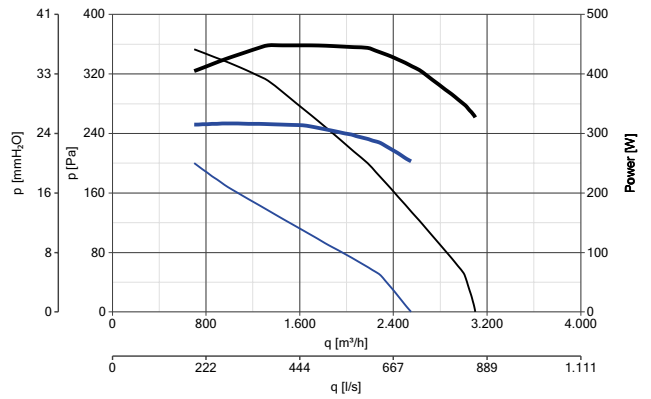
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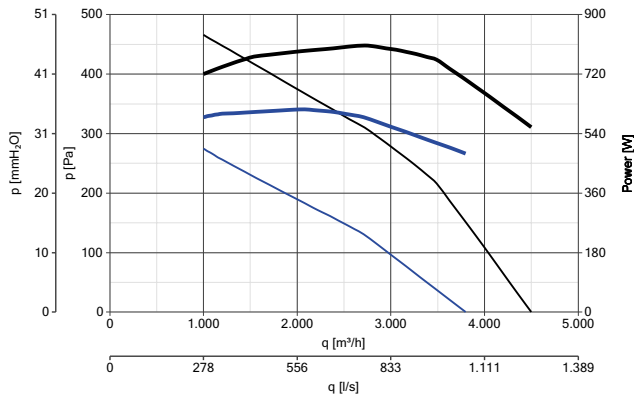
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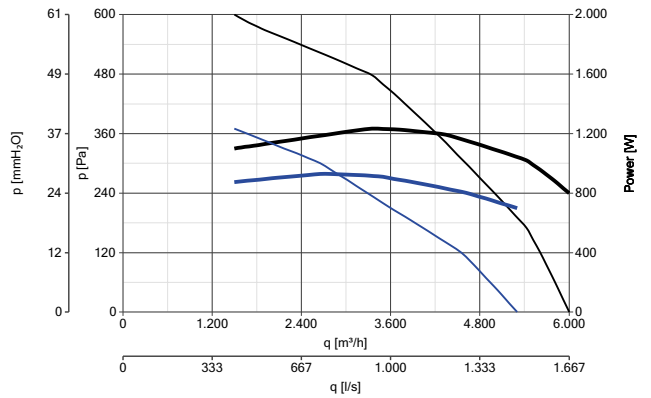
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TRT 50 ED-V 4P



TRT 70 ED-V 4P

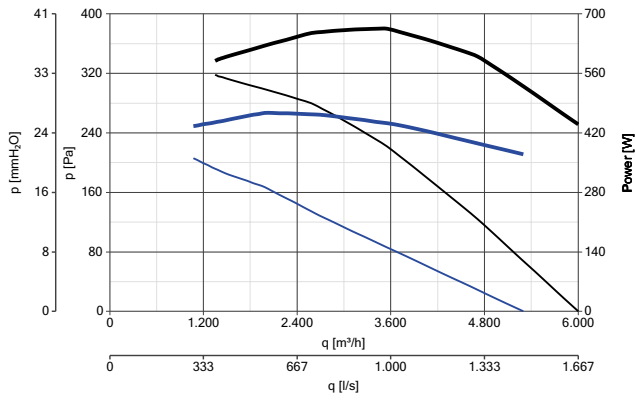


— Power consumption - max vel.      — Delivery - max vel.  
— Power consumption - min vel.      — Delivery - min vel.

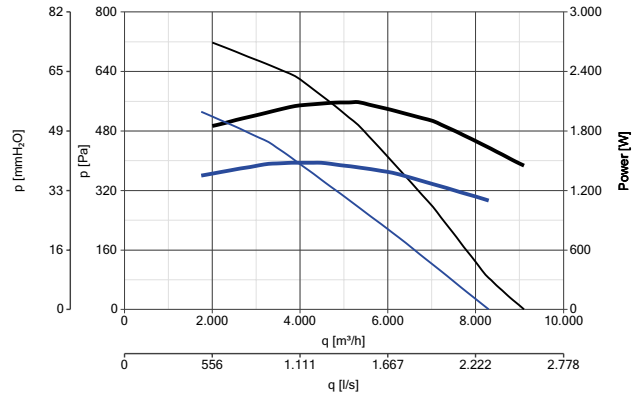


PERFORMANCE CURVES

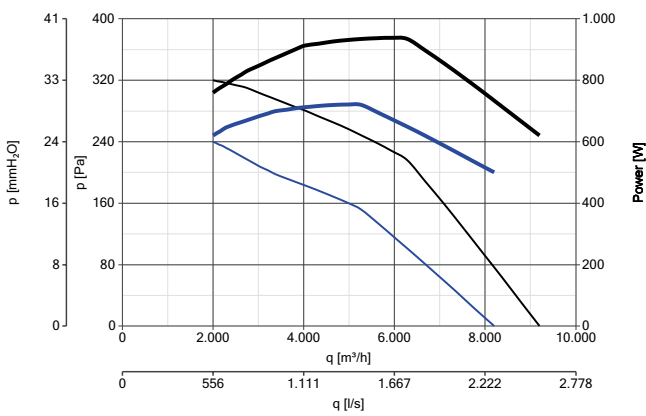
TRT 70 ED-V 6P



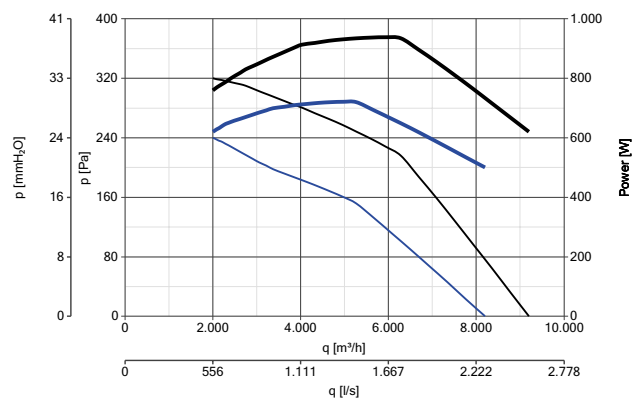
TRT 100 ED-V 4P



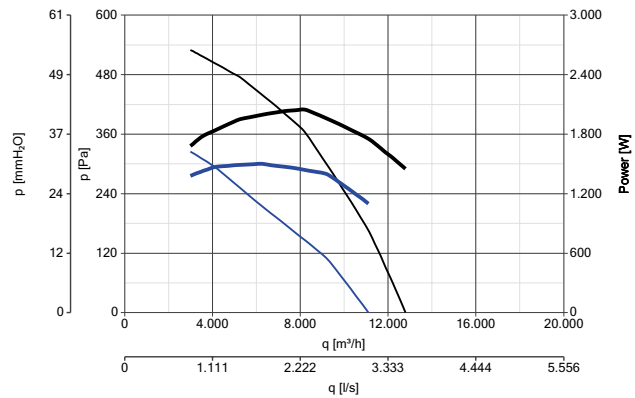
TRT 100 ED-V 6P



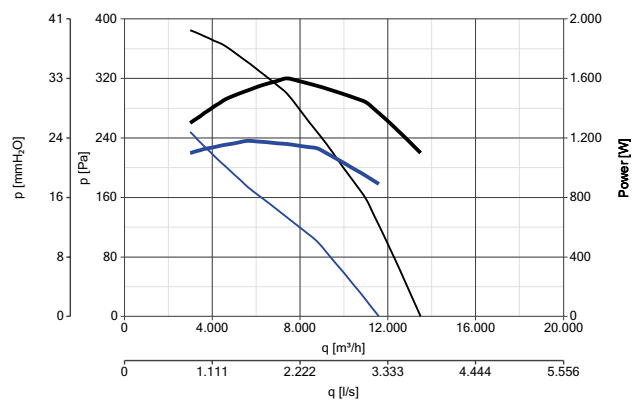
TRT 100 ED-V 8P



TRT 150 ED-V 6P



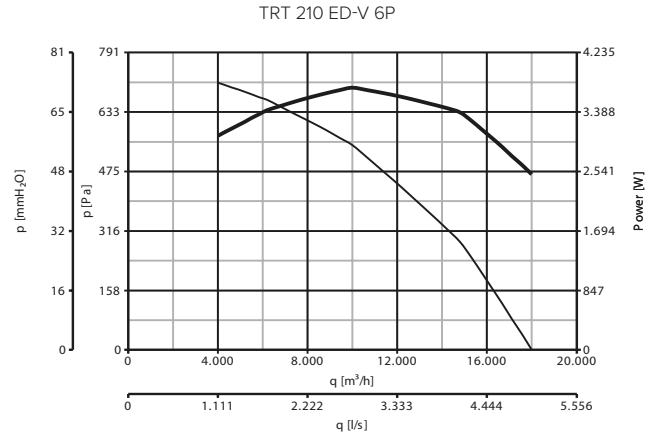
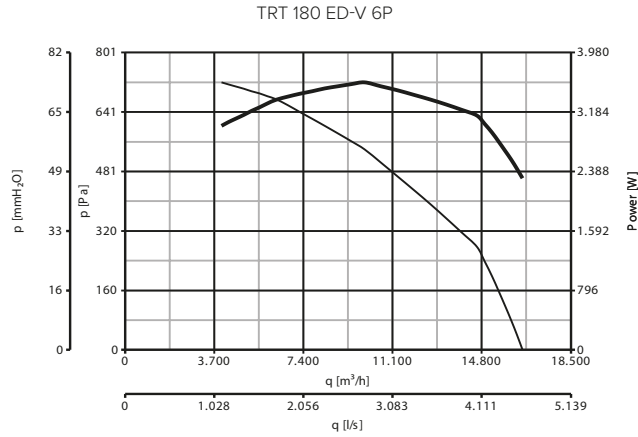
TRT 150 ED-V 8P



Power consumption - max vel.       Delivery - max vel.  
 Power consumption - min vel.       Delivery - min vel.





PERFORMANCE CURVES



— Power consumption - max vel.      — Delivery - max vel.  
— Power consumption - min vel.      — Delivery - min vel.

ACCESSORIES

| MODELS  | DESCRIPTION                            | CODE            | PRODUCTS |   |
|---|--|-----------------|----------|---|
|   |  | 10/15           | 22511    | 15160 - 15161 - 15162 - 15163                 |
|   |  | 20/30/50        | 22512    | 15164 - 15165 - 15166 - 15167 - 15168 - 15169 |
|  | <b>TR-CU</b> - Sub-frame               | 70/100          | 22539    | 15170 - 15171 - 15172 - 15173                 |
|   |  | 100/150/180/210 | 22540    | 15174 - 15175 - 15176 - 15177 - 15178 - 15179 |
|   |  | 10/15           | 22700    | 15160 - 15161 - 15162 - 15163                 |
|   |  | 20/30/50        | 22710    | 15164 - 15165 - 15166 - 15167 - 15168 - 15169 |
|  | <b>TR-G</b> - Intake protection grille | 70/100          | 22506    | 15170 - 15171 - 15172 - 15173                 |
|   |  | 100/150/180/210 | 22507    | 15174 - 15175 - 15176 - 15177 - 15178 - 15179 |










## INDUSTRIAL VENTILATION

### TORRETTE TR-ED-V RANGE

#### CONTROLLERS

| MODELS  | DESCRIPTION  | CODE  | PRODUCTS  |
|---|--|-------|---|
|    | <b>GV2 ME03</b> - Thermal-magnetic motor circuit breakers          | 21112 | 15163 - 15165   |
|   | <b>GV2 ME05</b> - Thermal-magnetic motor circuit breakers          | 21113 | 15160 - 15162 - 15165 - 15167   |
|   | <b>GV2 ME05</b> - Thermal-magnetic motor circuit breakers          | 21114 | 15167 - 15169 - 15172   |
|   | <b>GV2 ME06</b> - Thermal-magnetic motor circuit breakers          | 21115 | 15164 - 15169 - 15171 - 15172 - 15175   |
|   | <b>GV2 ME07</b> - Thermal-magnetic motor circuit breakers          | 21436 | 15166 - 15171 - 15173 - 15174 - 15175 - 15176 - 15177   |
|    | <b>IRM 30</b> - Three position single-phase speed controller       | 12921 | 15160 - 15162   |
|   | <b>IRM 40</b> - Three position single-phase speed controller       | 12922 | 15164 - 15166   |
|   | <b>IRM 50</b> - Three position single-phase speed controller       | 12928 | 15168   |
|   | <b>IRT 15</b> - Three position single-phase speed controller       | 12923 | 15161 - 15163 - 15165   |
|   | <b>IRT 35</b> - Three position single-phase speed controller       | 12924 | 15167 - 15169 - 15172 - 15175   |
|  | <b>IRT 40</b> - Three position single-phase speed controller       | 12927 | 15171 - 15174 - 15177   |
|   | <b>IREM 3</b> - Single-phase speed controller 3A                   | 12931 | 15160 - 15162 - 15164 - 15166   |
|   | <b>IREM 5</b> - Single-phase speed controller 5A*                  | 12932 | 15168   |
|   | <b>IREM 9</b> - Single-phase speed controller 9A**                 | 12933 | 15170   |
|   | <b>IRET 6</b> - Three-phase speed controller 6A                    | 12934 | 15171 - 15172 - 15173 - 15174 - 15175 - 15176 - 15177   |
|  | <b>IREM INVERTER 4 M</b> - Single-phase speed controller INVERTER  | 12815 | 15160 - 15162 - 15164 - 15166   |
|   | <b>IREM INVERTER 6 M</b> - Single-phase speed controller INVERTER  | 12818 | 15168 - 15170   |
|   | <b>IRET INVERTER 2.5 M</b> - Three-phase speed controller INVERTER | 12816 | 15161 - 15163 - 15165 - 15167 - 15169 - 15171 - 15172 - 15175   |
|   | <b>IRET INVERTER 5 M</b> - Three-phase speed controller INVERTER   | 12817 | 15173 - 15174 - 15176 - 15177   |
|   | <b>IRET INVERTER 8 M</b> - Three-phase speed controller INVERTER   | 12821 | 15178 - 15179   |
|  | <b>POT</b> - Potentiometer   | 12828 | 12815 - 12816 - 12817 - 12818   |
|   | <b>TR-CVT</b> - Potentiometer                                      | 22910 | 15161 - 15163 - 15165 - 15167 - 15169 - 15171 - 15172 - 15173 - 15174 - 15175 - 15176 - 15177 - 15178 - 15179 |

Use in conjunction with appliances having speed selectors or controllers is not permitted in countries implementing European regulation 327/2011/EU

\* Can control multiple fans up to a maximum 5A.

\*\* Used for simultaneous control of multiple appliances up to a maximum 9A.

\*\*\* To adjust a regulator with inverter, combine a 0-10V potentiometer as code 12828