

# TCR/R

400 °C/2h centrifugal extractor fans with backward curved impeller



Extremely robust, high performance backward-curved impeller

Extremely robust 400 °C/2h centrifugal, single inlet extractor fans for outdoor operation in fire risk zones and fitted with a backward curved impeller.

**Fan:**

- Sheet steel casing.
- Backward curved impeller in very robust sheet steel, with anti-heat paint.
- Approved in accordance with standard EN 12101-3, with certificate no.: 0370-CPR-0400.

**Motor:**

- Class F motors with ball bearings and IP55 protection.
- Motors with IE3 efficiency for powers equal to or greater than 0,75 kW, except single-phase, 2-speed and 8-pole.

- Three-phase 230/400 V 50 Hz (up to 4 kW) and 400/690 V 50 Hz (powers greater than 4 kW).
- Maximum temperature of air to be carried: S1 -20 °C+ 250 °C continuous service. S2 300 °C/2h and 400 °C/2h service.

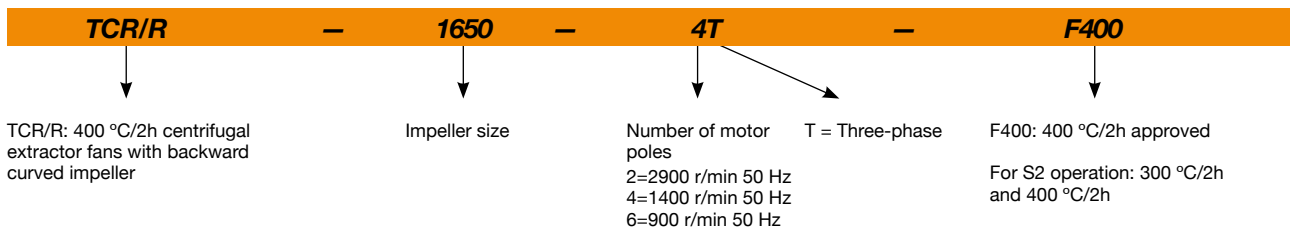
**Finishing:**

- Anti-corrosive finish in polyester resin, polymerised at 190 °C, after degreasing with phosphate-free nanotechnology treatment.

**On request:**

- Fans with 2 speed motor.
- Belt-driven extractor fans.

## Order code



## Technical characteristics

| Model             | Speed<br>(r/min) | Maximum admissible current<br>(A) |       |       | Installed power<br>(kW) | Maximum flow rate<br>(m³/h) | Sound pressure level<br>dB (A) | Approx. weight<br>(Kg) |
|-------------------|------------------|-----------------------------------|-------|-------|-------------------------|-----------------------------|--------------------------------|------------------------|
|                   |                  | 230V                              | 400V  | 690V  |                         |                             |                                |                        |
| TCR/R-1240-2T IE3 | 2900             | 13.00                             | 7.50  |       | 4.00                    | 11110                       | 82                             | 102                    |
| TCR/R-1240-4T IE3 | 1420             | 2.82                              | 1.62  |       | 0.75                    | 5830                        | 67                             | 72                     |
| TCR/R-1445-2T IE3 | 2930             |                                   | 14.10 | 8.17  | 7.50                    | 16560                       | 85                             | 122                    |
| TCR/R-1445-4T IE3 | 1455             | 4.07                              | 2.34  |       | 1.10                    | 8100                        | 70                             | 97                     |
| TCR/R-1650-4T IE3 | 1440             | 5.41                              | 3.11  |       | 1.50                    | 10600                       | 72                             | 122                    |
| TCR/R-1650-6T IE3 | 940              | 3.36                              | 1.93  |       | 0.75                    | 7450                        | 62                             | 114                    |
| TCR/R-1856-4T IE3 | 1440             | 10.70                             | 6.15  |       | 3.00                    | 15240                       | 78                             | 157                    |
| TCR/R-1856-6T IE3 | 945              | 4.68                              | 2.69  |       | 1.10                    | 10040                       | 70                             | 151                    |
| TCR/R-2063-4T IE3 | 1465             |                                   | 10.30 | 5.97  | 5.50                    | 24490                       | 80                             | 248                    |
| TCR/R-2063-6T IE3 | 950              | 6.43                              | 3.70  |       | 1.50                    | 16140                       | 70                             | 213                    |
| TCR/R-2271-4T IE3 | 1470             |                                   | 20.90 | 12.10 | 11.00                   | 34760                       | 82                             | 340                    |
| TCR/R-2271-6T IE3 | 970              | 12.00                             | 6.91  |       | 3.00                    | 23000                       | 77                             | 280                    |



**Erp. (Energy Related Products)**

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme.

**Acoustic characteristics**

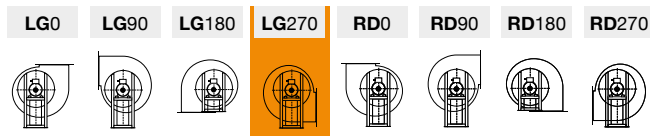
The indicated values are determined by measuring the sound pressure level and sound power in dB(A) obtained in a free field at a distance equivalent to twice the size of the fan plus the impeller diameter, with a minimum of 1.5 m.

Sound power spectrum Lw(A) in dB(A) per Hz frequency band

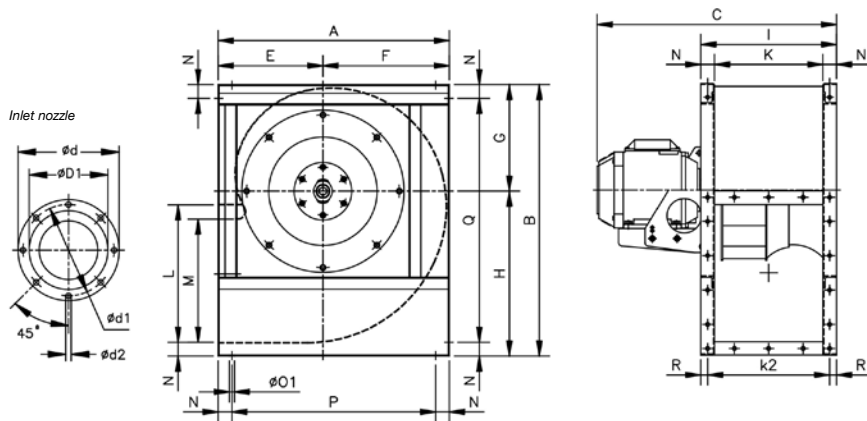
|               | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |               | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
|---------------|----|-----|-----|-----|------|------|------|------|---------------|----|-----|-----|-----|------|------|------|------|
| TCR/R-1240-2T | 68 | 83  | 81  | 93  | 90   | 94   | 96   | 83   | TCR/R-1856-4T | 69 | 78  | 91  | 87  | 90   | 91   | 85   | 71   |
| TCR/R-1240-4T | 56 | 40  | 76  | 79  | 79   | 80   | 70   | 59   | TCR/R-1856-6T | 61 | 69  | 81  | 83  | 80   | 81   | 71   | 60   |
| TCR/R-1445-2T | 73 | 85  | 83  | 95  | 93   | 97   | 99   | 89   | TCR/R-2063-4T | 80 | 85  | 91  | 93  | 91   | 88   | 81   | 73   |
| TCR/R-1445-4T | 59 | 72  | 78  | 83  | 80   | 83   | 78   | 64   | TCR/R-2063-6T | 69 | 70  | 82  | 82  | 81   | 83   | 73   | 63   |
| TCR/R-1650-4T | 64 | 74  | 82  | 84  | 83   | 85   | 76   | 66   | TCR/R-2271-4T | 79 | 80  | 89  | 92  | 94   | 95   | 91   | 78   |
| TCR/R-1650-6T | 53 | 65  | 72  | 77  | 73   | 69   | 62   | 54   | TCR/R-2271-6T | 73 | 73  | 87  | 86  | 90   | 90   | 79   | 68   |

**Orientations**

Standard supply LG 270



**Dimensions mm**

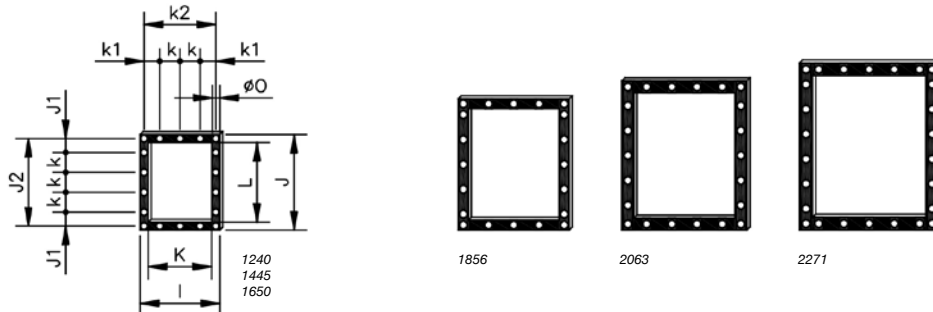


|               | A    | B    | C     | Ød  | Ød1 | ØD1* | Ød2 | E   | F   | G   | H   | M     | N  | Ø01 | P    | Q    | R    |
|---------------|------|------|-------|-----|-----|------|-----|-----|-----|-----|-----|-------|----|-----|------|------|------|
| TCR/R-1240-2T | 673  | 790  | 734   | 472 | 444 | 319  | M8  | 305 | 368 | 310 | 480 | 358.5 | 40 | 11  | 593  | 710  | 20   |
| TCR/R-1240-4T | 673  | 790  | 634   | 472 | 444 | 319  | M8  | 305 | 368 | 310 | 480 | 358.5 | 40 | 11  | 593  | 710  | 20   |
| TCR/R-1445-2T | 765  | 880  | 827   | 524 | 494 | 358  | M10 | 350 | 415 | 340 | 540 | 407   | 45 | 11  | 675  | 790  | 20   |
| TCR/R-1445-4T | 765  | 880  | 699   | 524 | 494 | 358  | M10 | 350 | 415 | 340 | 540 | 407   | 45 | 11  | 675  | 790  | 20   |
| TCR/R-1650-4T | 832  | 970  | 953   | 582 | 555 | 401  | M10 | 375 | 457 | 378 | 592 | 446   | 45 | 13  | 742  | 880  | 20   |
| TCR/R-1650-6T | 832  | 970  | 772.5 | 582 | 555 | 401  | M10 | 375 | 457 | 378 | 592 | 446   | 45 | 13  | 742  | 880  | 20   |
| TCR/R-1856-4T | 925  | 1084 | 880   | 645 | 615 | 457  | M10 | 415 | 510 | 426 | 658 | 493   | 50 | 13  | 825  | 984  | 25   |
| TCR/R-1856-6T | 925  | 1084 | 825   | 645 | 615 | 457  | M10 | 415 | 510 | 426 | 658 | 493   | 50 | 13  | 825  | 984  | 25   |
| TCR/R-2063-4T | 1037 | 1218 | 981   | 720 | 688 | 507  | M10 | 465 | 572 | 477 | 741 | 530   | 60 | 13  | 917  | 1098 | 30   |
| TCR/R-2063-6T | 1037 | 1218 | 932   | 720 | 688 | 507  | M10 | 465 | 572 | 477 | 741 | 530   | 60 | 13  | 917  | 1098 | 30   |
| TCR/R-2271-4T | 1173 | 1375 | 1197  | 800 | 768 | 575  | M10 | 525 | 648 | 538 | 837 | 603.5 | 65 | 13  | 1043 | 1245 | 32.5 |
| TCR/R-2271-6T | 1173 | 1375 | 1095  | 800 | 768 | 575  | M10 | 525 | 648 | 538 | 837 | 603.5 | 65 | 13  | 1043 | 1245 | 32.5 |

\* Recommended nominal tube diameter

## Dimensions mm

### Outlet nozzle



|               | I   | J   | J1   | J2  | K   | k   | k1    | k2  | L   | Ø0 |
|---------------|-----|-----|------|-----|-----|-----|-------|-----|-----|----|
| TCR/R-1240-2T | 395 | 480 | 70   | 440 | 315 | 100 | 77.5  | 355 | 400 | 13 |
| TCR/R-1240-4T | 395 | 480 | 70   | 440 | 315 | 100 | 77.5  | 355 | 400 | 13 |
| TCR/R-1445-2T | 445 | 540 | 99   | 498 | 355 | 100 | 102.5 | 405 | 450 | 11 |
| TCR/R-1445-4T | 445 | 540 | 99   | 498 | 355 | 100 | 102.5 | 405 | 450 | 11 |
| TCR/R-1650-4T | 490 | 590 | 87.5 | 550 | 400 | 125 | 100   | 450 | 500 | 13 |
| TCR/R-1650-6T | 490 | 590 | 87.5 | 550 | 400 | 125 | 100   | 450 | 500 | 13 |
| TCR/R-1856-4T | 550 | 660 | 55   | 610 | 450 | 125 | 125   | 500 | 560 | 13 |
| TCR/R-1856-6T | 550 | 660 | 55   | 610 | 450 | 125 | 125   | 500 | 560 | 13 |
| TCR/R-2063-4T | 620 | 750 | 95   | 690 | 500 | 125 | 92.5  | 560 | 630 | 13 |
| TCR/R-2063-6T | 620 | 750 | 95   | 690 | 500 | 125 | 92.5  | 560 | 630 | 13 |
| TCR/R-2271-4T | 690 | 840 | 75   | 778 | 560 | 125 | 62.5  | 625 | 710 | 13 |
| TCR/R-2271-6T | 690 | 840 | 75   | 778 | 560 | 125 | 62.5  | 625 | 710 | 13 |

## Accessories



INT



IAT



CABLE BOX



C2V



VSD3/A-RFT  
- VSD1/A-RFM



CENTRAL CO



AET



RPA



B



BD



BIC



VIS



ACE ACE/400



TEJ



S

### Characteristic curves

Q= Flow rate in m<sup>3</sup>/h, m<sup>3</sup>/s and cfm

Pe= Static pressure in mm H<sub>2</sub>O, Pa and in wg

