

Centrifugal fans type KCF-N

Single inlet centrifugal fan with motor outside the air stream

Application

- Used for the extraction of industrial cooker hoods for duties up to 9000 m³/h

Composition

- Double skin housing with 40 mm mineral wool and wide-opening door for easy access for cleaning.
- Circular in-and outlet
- Grease and condensation drain
- Voltage: 230Vac 1ph (Type E) or 400Vac 3ph (Type D)
- Speed-adjustable motor with internal electronic thermal protection (only type E motors)
- Motor outside the air stream
- Turbine with blades bent backwards
- Insulation class F
- Motor protection class:
 - IP54 (type E)
 - IP55 (type D)

Accessories

- Motor protection cover, type **MPG KCF**
- Fitting clamp, type **BMK**
- Speed controller, type **TSCTK-1**
- Frequency converter 3x400V in / 3x400V out, type **FIS-44-B**

Order example

- **KCF-N 200 E2**

Explanation:

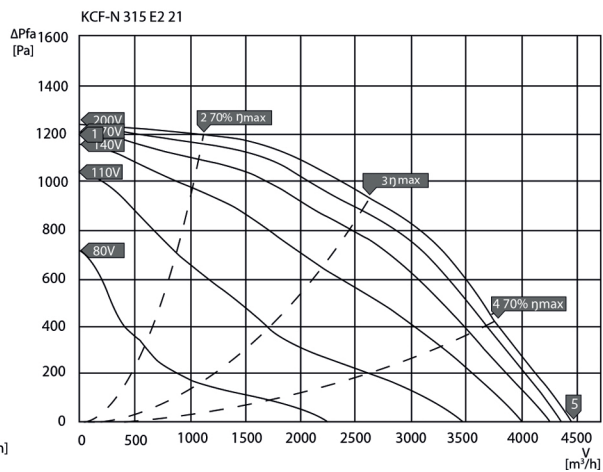
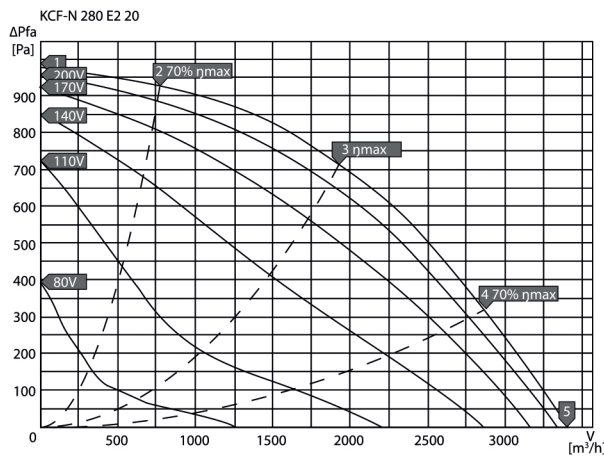
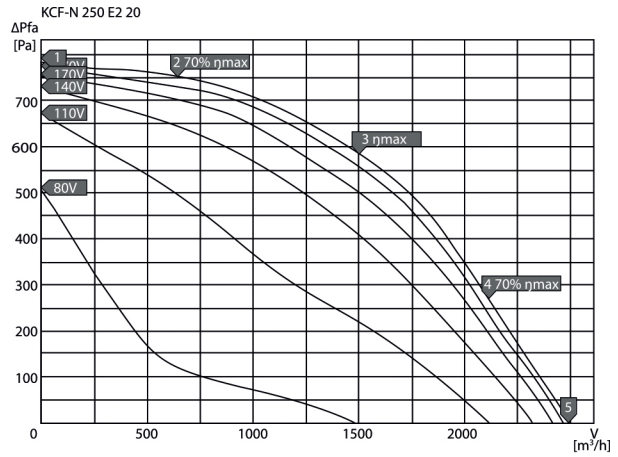
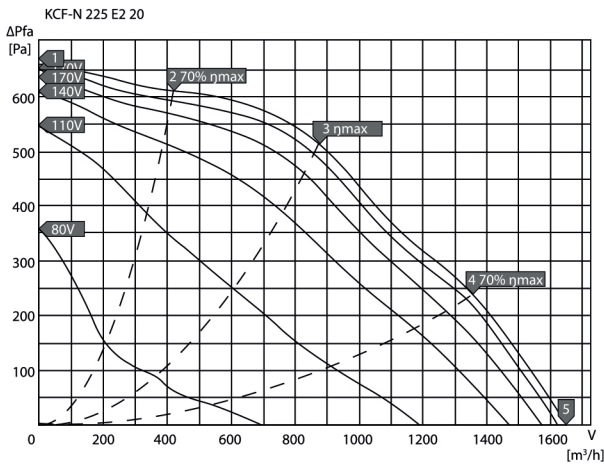
KCF = Type of fan

E = single phase, 230V

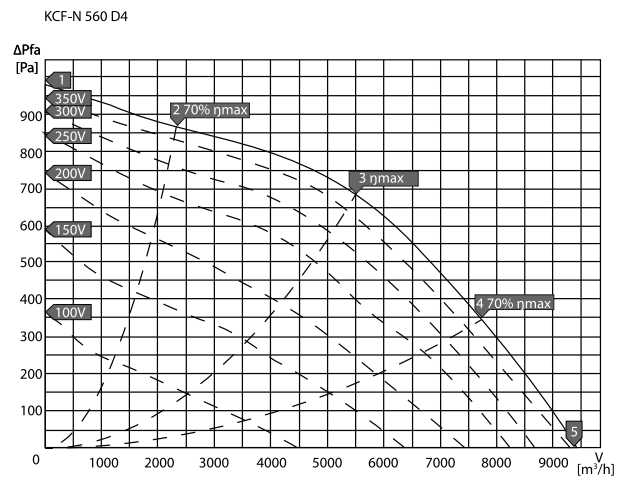
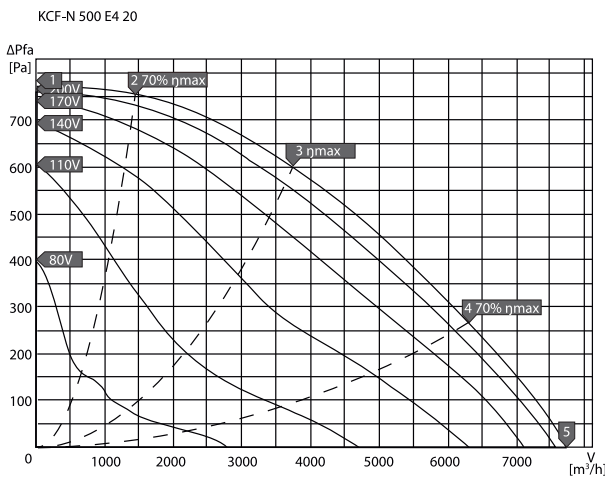
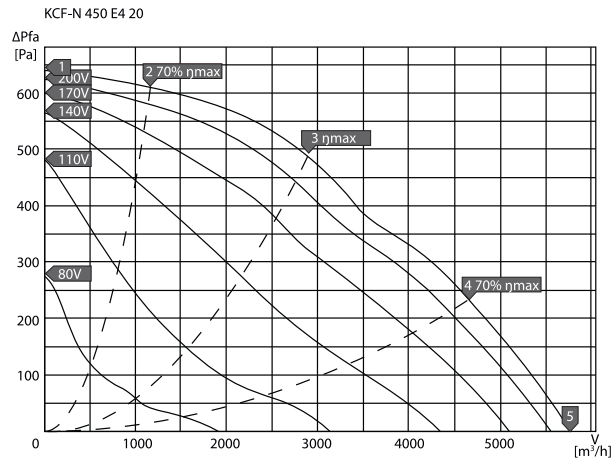
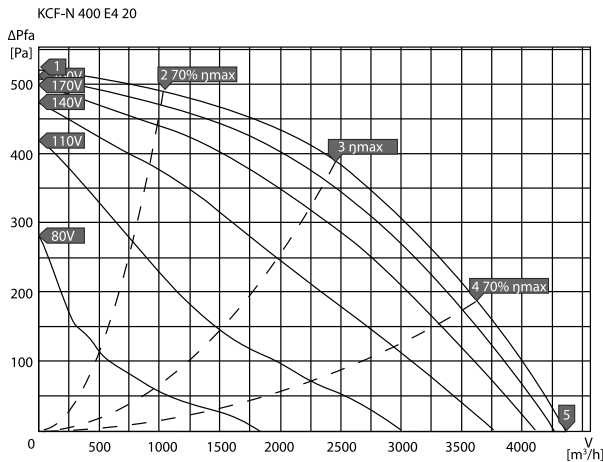
2 = 2 pole

| Air performance data | | | | | | | | |
|----------------------|----------|--------|--------|--------|--------|--------|--------|--------|
| | Q [m³/h] | | | | | | | |
| | 100 Pa | 200 Pa | 300 Pa | 400 Pa | 500 Pa | 600 Pa | 700 Pa | 800 Pa |
| KCF-N 225 E2 21 | 1370 | 1281 | 1170 | 1050 | 900 | 550 | - | - |
| KCF-N 250 E2 20 | 2358 | 2214 | 2076 | 1924 | 1748 | 1456 | 1057 | - |
| KCF-N 355 D4 40 | 2900 | 2550 | 2150 | 1350 | - | - | - | - |
| KCF-N 400 D4 40 | 4150 | 3800 | 3325 | 2775 | 1950 | - | - | - |
| KCF-N 450 D4 40 | 5750 | 5400 | 5000 | 4525 | 3950 | 3300 | - | - |
| KCF-N 500 D4 40 | 7524 | 7095 | 6680 | 6120 | 5500 | 4850 | 4050 | 2950 |
| KCF-N 560 D4 40 | 11350 | 10825 | 10325 | 9750 | 9050 | 8350 | 7600 | 6650 |

Selection curves

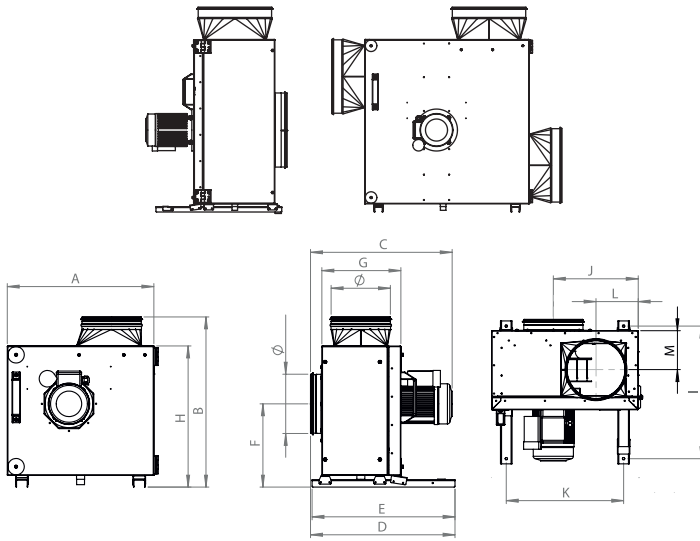


Selection curves



| | Technical data | | | | | | | | Lwa [db(A)] | | |
|-----------------|-----------------|---------|---------------|------------------|------------|------------|------------|-------|-------------|-------|----|
| | U [V] | P [W] | I_{max} [A] | SC | T_m [°C] | T_u [°C] | T_o [°C] | Lwa 5 | Lwa 6 | Lwa 2 | |
| | KCF-N 225 E2 21 | 1 x 230 | 287 | 2.3 | TSCTK-1-30 | 120 | 80 | -25 | 80 | 79 | 70 |
| KCF-N 250 E2 20 | 1 x 230 | 448 | 3.3 | TSCTK-1-40 | 120 | 80 | -25 | 83 | 82 | 72 | |
| KCF-N 355 D4 40 | 3 x 400 | 775 | 1.4 | FIS-4420E-1.5-B | 120 | 60 | -20 | 86 | 86 | 71 | |
| KCF-N 400 D4 40 | 3 x 400 | 564 | 1.1 | FIS-4420E-0.75-B | 120 | 60 | -20 | 80 | 79 | 72 | |
| KCF-N 450 D4 40 | 3 x 400 | 1278 | 2.5 | FIS-4420E-1.5-B | 120 | 60 | -20 | 86 | 87 | 80 | |
| KCF-N 500 D4 40 | 3 x 400 | 1504 | 2.98 | FIS-4420E-2.2-B | 120 | 60 | -20 | 86 | 86 | 77 | |
| KCF-N 560 D4 40 | 3 x 400 | 2577 | 5 | FIS-4420E-4.0-B | 120 | 60 | -20 | 90 | 91 | 80 | |

- SC = Speed controller
- η_t = Maximum total efficiency
- T_m = Maximum air temperature
- T_u = Maximum ambient temperature
- T_o = Minimum operating temperature
- Lwa 2 = Casing sound power level
- Lwa 5 = Sound power level @inlet
- Lwa 6 = Sound power level @outlet
- The sound power levels are measured according to DIN 45635 part 2 & 38

**Attention**

3 positions possible. Vertical discharge available on stock. The other two positions must be provided by the customer on site.

| | Dimensions | | | | | | | | | | | | | | |
|-----------|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|
| | A [mm] | B [mm] | C [mm] | D [mm] | E [mm] | F [mm] | G [mm] | H [mm] | I [mm] | J [mm] | K [mm] | L [mm] | M [mm] | Ø [mm] | [kg] |
| KCF-N 225 | 492 | 571 | 475 | 485 | 480 | 279 | 265 | 474 | 445 | 285 | 394 | 142 | 131 | 199 | 28.4 |
| KCF-N 250 | 592 | 689 | 548 | 567 | 540 | 329 | 315 | 561 | 505 | 344 | 494 | 167 | 156 | 249 | 47.5 |
| KCF-N 280 | 592 | 692 | 567 | 568 | 540 | 329 | 315 | 561 | 505 | 344 | 494 | 200 | 156 | 314 | 47.5 |
| KCF-N 315 | 700 | 790 | 657 | 612 | 590 | 382 | 365 | 663 | 555 | 405 | 602 | 220 | 181 | 354 | 54.5 |
| KCF-N 355 | 700 | 790 | 657 | 612 | 590 | 382 | 365 | 663 | 555 | 405 | 602 | 220 | 181 | 354 | 54.7 |
| KCF-N 400 | 832 | 916 | 592 | 611 | 590 | 448 | 365 | 789 | 555 | 477 | 734 | 220 | 181 | 354 | 72.1 |
| KCF-N 450 | 832 | 916 | 637 | 590 | 590 | 448 | 365 | 789 | 555 | 477 | 734 | 220 | 181 | 354 | 75 |
| KCF-N 500 | 1016 | 1092 | 825 | 876 | 834 | 539 | 510 | 954 | 799 | 584 | 918 | 242 | 253 | 399 | 113 |
| KCF-N 560 | 1016 | 1092 | 858 | 876 | 834 | 539 | 510 | 954 | 799 | 584 | 918 | 289 | 253 | 499 | 115 |