

CA/ATEX

High pressure single inlet centrifugal fans made of cast aluminium, with ATEX 2G or 2D certification and Ex db, Ex eb or Ex tb motor



Notified authority: LOM
 Identification no.: LOM 04ATEX0007
 Motor marking:
 Ⓜ II 2G Ex db IIB T4 Gb
 Ⓜ II 2G Ex eb IIB T3 Gb
 Ⓜ II 2D Ex tb IIIC T135 °C Db



High pressure centrifugal fans with casing and impeller made of cast aluminium. ATEX 2G or 2D certification with flameproof Ex db, increased safety Ex eb or dust ignition proof Ex tb motor to work in explosive gas or dust atmospheres.

Fan:

- Cast aluminium casing.
- Cast aluminium impeller.
- Maximum temperature of air to be carried: -25 °C +88 °C (T4) or +120 °C (T3).
- Standard marking with flameproof motor (Ex db): II 2G Ex h IIB T4 Gb.
- Standard marking with increased safety motor (Ex eb): II 2G Ex h IIB T3 Gb.
- Standard marking with motor for dust ignition proof (Ex tb): II 2D Ex h IIIC T135 °C Db.

Motor:

- Class F motors with ball bearings and ATEX certification flameproof Ex db,

increased safety Ex eb or dust ignition proof Ex tb.

- Three-phase 230/400 V 50 Hz (up to 4 kW) and 400/690 V 50 Hz (powers greater than 4 kW).
- Working temperature: -20 °C +40 °C.

Finish:

- Anti-corrosive with ATEX paint, free of iron components, in polyester resin polymerized at 190 °C, after degreasing with phosphate-free nanotechnological treatment.

On request:

- Motors with built-in PTC.
- Special windings for different voltages and frequencies.
- ATEX construction for flammable dust.
- ATEX fan with greater protection than the standard marking.
- Fans with 2 speed motor.

Order code

| | | | | | | | | |
|---|----------|---------------|----------|---|-----------------|------------------|----------|---|
| CA/ATEX | - | 148 | - | 2T | - | 0.75 | / | 2G Ex eb |
| ↓ | | ↓ | | ↓ | | ↓ | | ↓ |
| CA/ATEX: High pressure single inlet centrifugal fans made of cast aluminium, with ATEX 2G or 2D certification and Ex db, Ex eb or Ex tb motor | | Impeller size | | Number of motor poles 2=3000 r/min 50 Hz | T = Three-phase | Motor power (HP) | | 2G Ex eb: for zones 1 and 2 2G Ex db: for zones 1 and 2 2D Ex tb: for zones 21 and 22 |

Technical characteristics

| Model | Speed (r/min) | Maximum admissible current (A) | | | Installed power (kW) | Maximum flow rate (m³/h) | Sound pressure level ¹ dB (A) | | Approx. weight (Kg) |
|---------------------|------------------|--------------------------------|-------|------|----------------------|--------------------------|--|-----|---------------------|
| | | 230V | 400V | 690V | | | Inlet | | |
| CA/ATEX-234-2T | 2870 | 1.62 | 0.93 | | 0.37 | 220 | 62 | 10 | |
| CA/ATEX-142-2T-0.33 | 2735 | 1.73 | 1.00 | | 0.25 | 275 | 63 | 23 | |
| CA/ATEX-142-2T-0.5 | 2810 | 1.62 | 0.93 | | 0.37 | 350 | 63 | 23 | |
| CA/ATEX-148-2T-0.75 | 2830 | 2.21 | 1.27 | | 0.55 | 400 | 67 | 28 | |
| CA/ATEX-148-2T-1 | 2840 | 3.03 | 1.74 | | 0.75 | 490 | 68 | 30 | |
| CA/ATEX-148-2T-1.5 | 2850 | 3.93 | 2.26 | | 1.10 | 610 | 69 | 32 | |
| CA/ATEX-154-2T-2 | 2860 | 5.67 | 3.26 | | 1.50 | 800 | 72 | 49 | |
| CA/ATEX-154-2T-3 | 2875 | 8.73 | 5.02 | | 2.20 | 1280 | 73 | 51 | |
| CA/ATEX-160-2T-3 | 2860 | 8.73 | 5.02 | | 2.20 | 900 | 79 | 58 | |
| CA/ATEX-166-2T-4 | 2870 | 10.59 | 6.09 | | 3.00 | 950 | 80 | 73 | |
| CA/ATEX-166-2T-5.5 | 2860 | 13.15 | 7.56 | | 4.00 | 1600 | 81 | 76 | |
| CA/ATEX-172-2T-7.5 | 2880 | | 10.50 | 6.09 | 5.50 | 1710 | 84 | 112 | |
| CA/ATEX-172-2T-10 | 2930 | | 15.70 | 9.06 | 7.50 | 2300 | 85 | 124 | |

1. The noise level values are pressures in dB(A) measured at a distance of 3 metres in a free field.

Acoustic characteristics

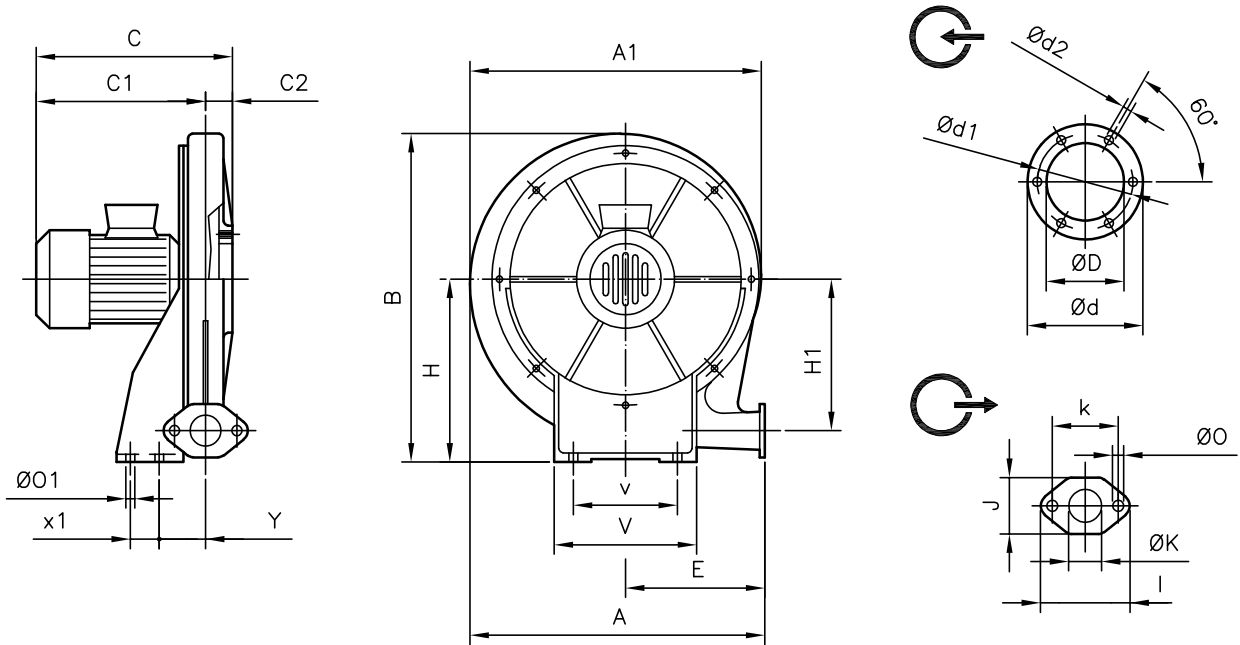
The values given are obtained under laboratory conditions according to ISO 3744.

Sound power spectrum $L_w(A)$ in dB(A) per Hz frequency band
Values measured at inlet with maximum flow rate

| | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
|---------------------|----|-----|-----|-----|------|------|------|------|--------------------|----|-----|-----|-----|------|------|------|------|
| CA/ATEX-234-2T | 38 | 51 | 65 | 72 | 80 | 79 | 73 | 64 | CA/ATEX-154-2T-3 | 49 | 62 | 76 | 83 | 91 | 89 | 83 | 75 |
| CA/ATEX-142-2T-0.33 | 39 | 52 | 66 | 73 | 81 | 80 | 74 | 65 | CA/ATEX-160-2T-3 | 55 | 68 | 82 | 89 | 97 | 95 | 89 | 81 |
| CA/ATEX-142-2T-0.5 | 39 | 52 | 66 | 73 | 81 | 80 | 74 | 65 | CA/ATEX-166-2T-4 | 56 | 69 | 83 | 90 | 98 | 96 | 90 | 82 |
| CA/ATEX-148-2T-0.75 | 43 | 56 | 70 | 77 | 85 | 83 | 77 | 69 | CA/ATEX-166-2T-5.5 | 57 | 70 | 84 | 91 | 99 | 97 | 91 | 83 |
| CA/ATEX-148-2T-1 | 44 | 57 | 71 | 78 | 86 | 84 | 78 | 70 | CA/ATEX-172-2T-7.5 | 60 | 73 | 87 | 94 | 102 | 101 | 95 | 86 |
| CA/ATEX-148-2T-1.5 | 45 | 58 | 72 | 79 | 87 | 85 | 79 | 71 | CA/ATEX-172-2T-10 | 61 | 74 | 88 | 95 | 103 | 102 | 96 | 87 |
| CA/ATEX-154-2T-2 | 48 | 61 | 75 | 82 | 90 | 88 | 82 | 74 | | | | | | | | | |

Dimensions mm

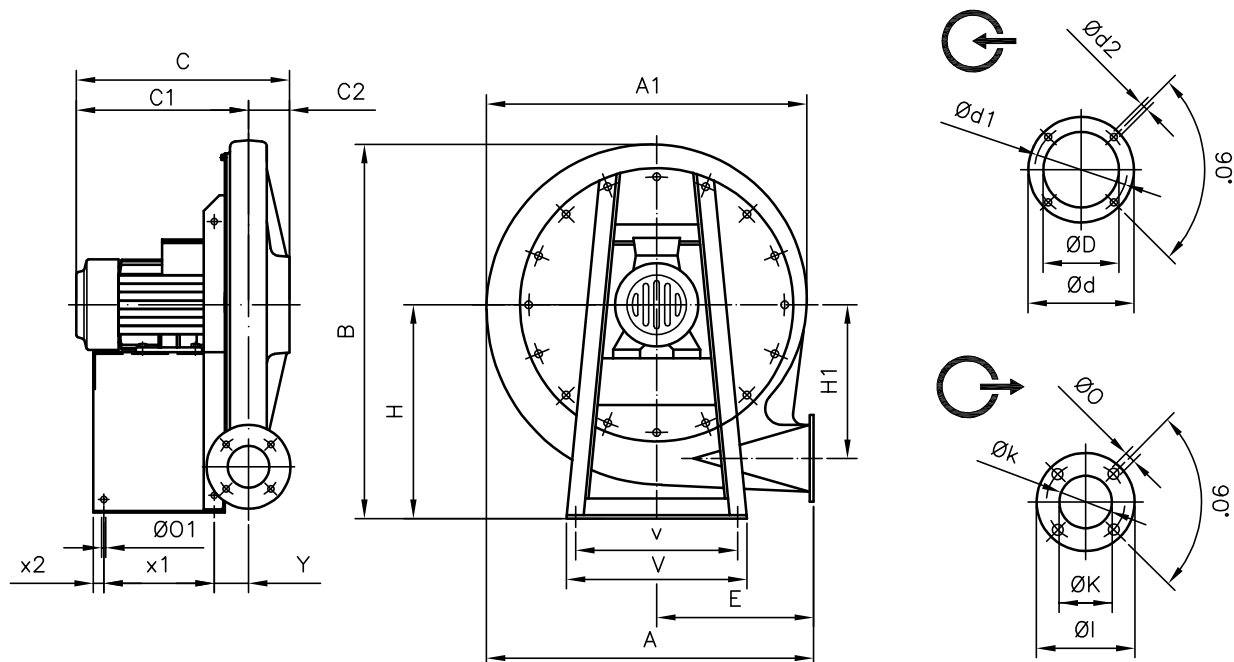
CA/ATEX-234



| | A | A1 | B | C | C1 | C2 | ØD | Ød | Ød1 | Ød2 | E | H | H1 | I | J | ØK | k | ØO | ØO1 | V | v | x1 | Y |
|----------------|-----|-----|-----|-----|-------|------|----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|-----|-----|-----|----|----|
| CA/ATEX-234-2T | 376 | 381 | 415 | 261 | 236.5 | 24.5 | 98 | 130 | 115 | M4 | 175 | 225 | 187 | 98 | 63 | 40 | 78 | 9 | 9 | 180 | 120 | 40 | 94 |

Dimensions mm

CA/ATEX-142...148

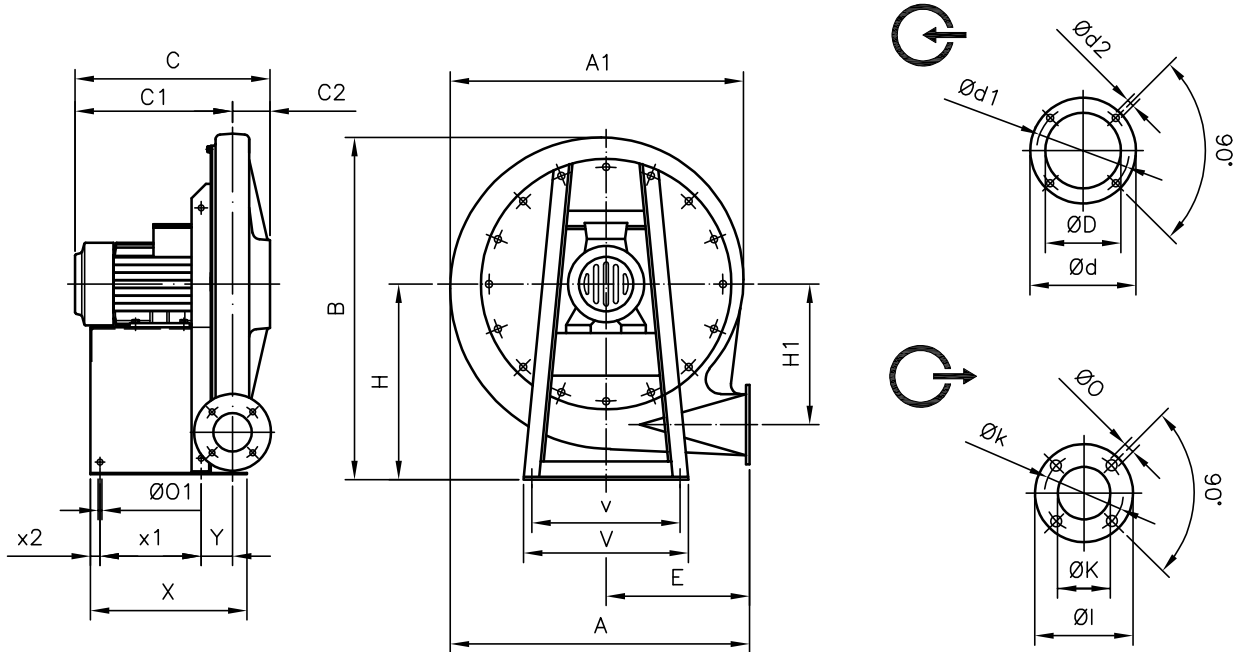


| | A | A1 | B | C | C1 | C2 | ØD | Ød | Ød1 | Ød2 | E | H | H1 | ØI |
|---------------------|-----|-------|-----|-------|-------|----|-----|-----|-----|-----|-----|-----|-------|-----|
| CA/ATEX-142-2T-0.33 | 494 | 488 | 540 | 261 | 215 | 46 | 90 | 160 | 130 | M8 | 240 | 301 | 235 | 120 |
| CA/ATEX-142-2T-0.5 | 494 | 488 | 540 | 291 | 245 | 46 | 90 | 160 | 130 | M8 | 240 | 301 | 235 | 120 |
| CA/ATEX-148-2T-0.75 | 563 | 557.5 | 639 | 308.5 | 251.5 | 57 | 100 | 170 | 140 | M8 | 270 | 360 | 269.5 | 150 |
| CA/ATEX-148-2T-1 | 563 | 557.5 | 639 | 331 | 274 | 57 | 100 | 170 | 140 | M8 | 270 | 360 | 269.5 | 150 |
| CA/ATEX-148-2T-1.5 | 563 | 557.5 | 639 | 331 | 274 | 57 | 100 | 170 | 140 | M8 | 270 | 360 | 269.5 | 150 |

| | ØK | Øk | ØO | ØO1 | V | v | x1 | x2 | Y |
|---------------------|----|-----|----|-----|-----|-----|-----|----|------|
| CA/ATEX-142-2T-0.33 | 60 | 90 | 11 | 12 | 300 | 270 | 130 | 13 | 47.5 |
| CA/ATEX-142-2T-0.5 | 60 | 90 | 11 | 12 | 300 | 270 | 130 | 13 | 47.5 |
| CA/ATEX-148-2T-0.75 | 73 | 110 | 11 | 12 | 330 | 290 | 140 | 20 | 60 |
| CA/ATEX-148-2T-1 | 73 | 110 | 11 | 12 | 330 | 290 | 140 | 20 | 60 |
| CA/ATEX-148-2T-1.5 | 73 | 110 | 11 | 12 | 330 | 290 | 140 | 20 | 60 |

Dimensions mm

CA/ATEX-154...172



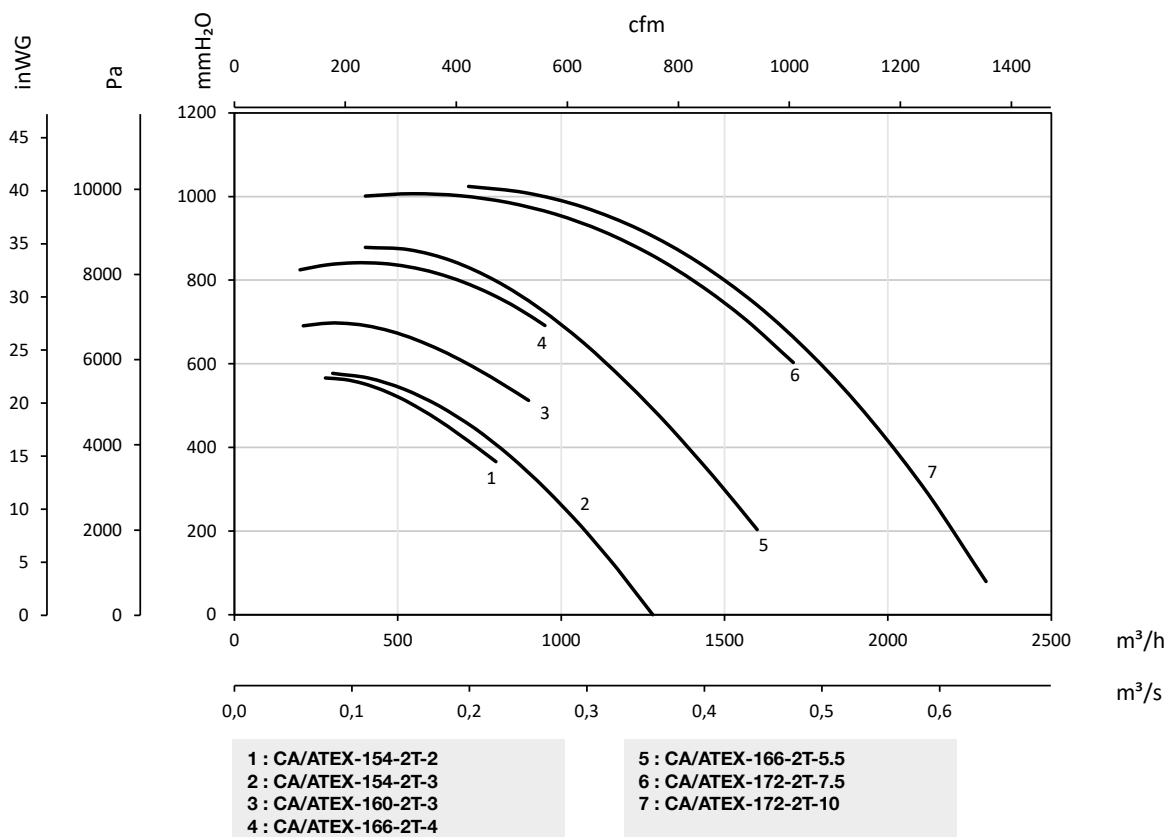
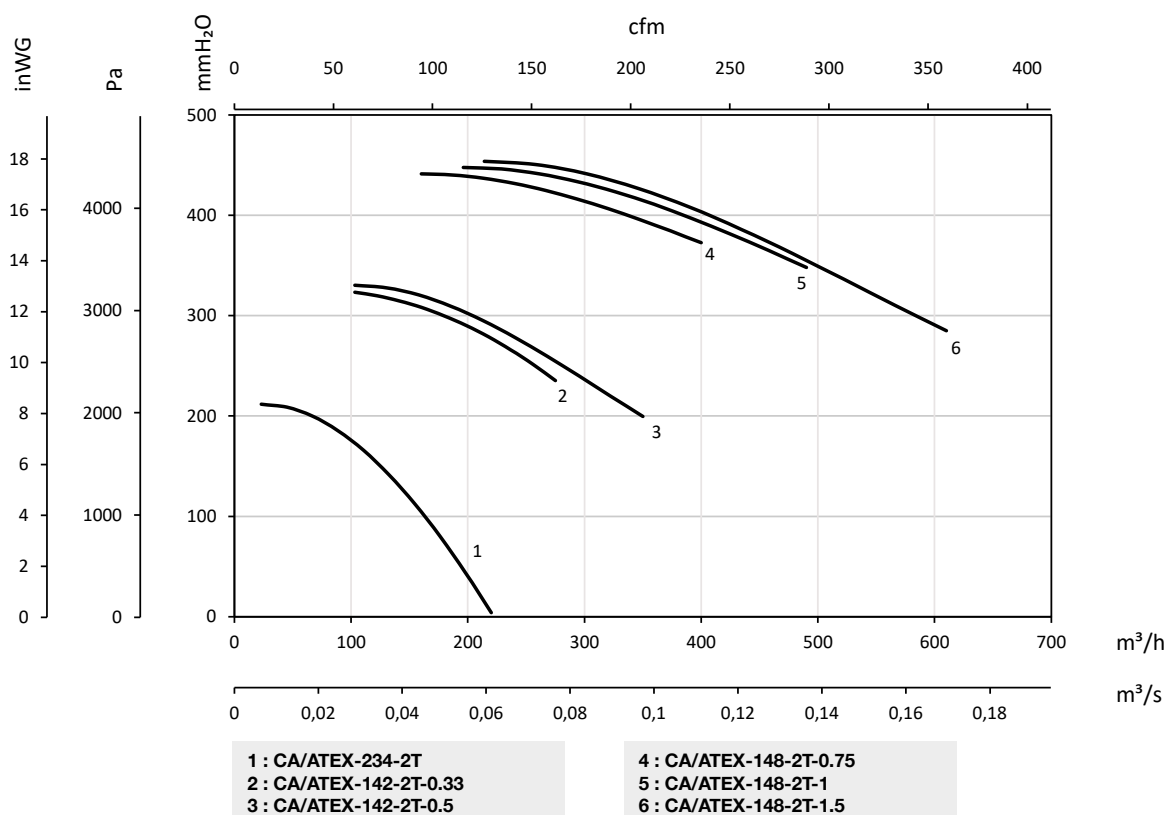
| | A | A1 | B | C | C1 | C2 | ØD | Ød | Ød1 | Ød2 | E | H | H1 | ØI |
|--------------------|-----|-----|-----|-----|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| CA/ATEX-154-2T-2 | 630 | 625 | 708 | 407 | 327 | 80 | 115 | 182 | 155 | M10 | 300 | 395 | 308 | 160 |
| CA/ATEX-154-2T-3 | 630 | 625 | 708 | 397 | 317 | 80 | 115 | 182 | 155 | M10 | 300 | 395 | 308 | 160 |
| CA/ATEX-160-2T-3 | 708 | 699 | 785 | 406 | 316 | 90 | 130 | 230 | 192 | M10 | 336 | 440 | 338 | 160 |
| CA/ATEX-166-2T-4 | 759 | 752 | 866 | 435 | 357.5 | 77.5 | 140 | 230 | 200 | M10 | 364 | 490 | 372 | 160 |
| CA/ATEX-166-2T-5.5 | 759 | 752 | 866 | 458 | 380 | 77.5 | 140 | 230 | 200 | M10 | 364 | 490 | 372 | 160 |
| CA/ATEX-172-2T-7.5 | 818 | 813 | 923 | 507 | 426 | 80 | 148 | 230 | 200 | M10 | 390 | 516 | 404 | 175 |
| CA/ATEX-172-2T-10 | 818 | 813 | 923 | 507 | 426 | 80 | 148 | 230 | 200 | M10 | 390 | 516 | 404 | 175 |

| | ØK | Øk | ØO | ØO1 | V | v | X | x1 | x2 | Y |
|--------------------|----|-----|----|-----|-----|-----|-----|-----|----|------|
| CA/ATEX-154-2T-2 | 80 | 120 | 13 | 12 | 356 | 320 | 325 | 210 | 20 | 65 |
| CA/ATEX-154-2T-3 | 80 | 120 | 13 | 12 | 356 | 320 | 325 | 210 | 20 | 65 |
| CA/ATEX-160-2T-3 | 85 | 120 | 13 | 12 | 373 | 322 | 344 | 220 | 23 | 68.5 |
| CA/ATEX-166-2T-4 | 85 | 120 | 13 | 12 | 450 | 400 | 370 | 245 | 23 | 67.5 |
| CA/ATEX-166-2T-5.5 | 85 | 120 | 13 | 12 | 450 | 400 | 390 | 265 | 23 | 70.5 |
| CA/ATEX-172-2T-7.5 | 90 | 140 | 13 | 12 | 450 | 400 | 435 | 300 | 25 | 78 |
| CA/ATEX-172-2T-10 | 90 | 140 | 13 | 12 | 450 | 400 | 435 | 300 | 25 | 78 |

Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm

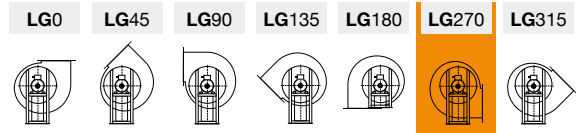
Pe= Static pressure in mm H₂O, Pa and inWG



Orientations

LG 270 standard supply, other positions on request.

LG 180 positions on request and with special anchoring measurements.



Accessories



INT/ATEX



RPA



B



BIC



ACE/ATEX



REG



CJACUS



S