

CMA/ATEX Centrifugal medium-pressure fans made from cast aluminium with ATEX certification



Centrifugal single-inlet, medium-pressure fans with casing and impeller made from cast aluminium to work in explosive atmospheres.

Fan:

- Casing made from cast aluminium
- Impeller made from cast aluminium

Motor:

- Class F motors, with ball bearings, IP55 protection and ATEX certification, EEx"e" explosion-proof, EEx"d" flame-resistant
- Three-phase 230/400V.-50Hz. (up to 5.5CV.) and 400/690V.-50Hz. (power over 5.5CV.)
- Max. air temperature to transport: -20°C.+ 80°C.



EEx "e" mark: CE II 2 G. EEx e
 EEx "d" mark: CE II 2 G. EEx d
 DIP55 mark: CE II 3 D. IP55
 DIP65 mark: CE II 2 D. IP65
 Notified authority: L.O.M.
 ID:
 LOM3ATEX007

Finish:

- Rust retardant with ATEX paint, free of ferric components, in polyester resin, polymerised at 190°C, with prior alkaline degreasing and with phosphate-free pre-treatment

On request:

- Motors with built-in PTC
- Special windings for different voltages and frequencies
- ATEX construction for different categories

Order code

CMA/ATEX — 531 — 4T — 2 — EEx-e

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Impeller size

Number of motor poles
 2=2900 r/min. 50 Hz

T=Three-phase

Power motor (c.v)

EEx-e: Mark:
 CE II 2 G. EEx e IIBT3
 EEx "d" mark:
 CE II 2 G. EEx d IIBT5
 DIP55 mark:
 CE II 3 D. IP55
 DIP65 mark:
 CE II 2 D. IP65

EEx "e" mark: CE II 2 G. EEx e
 EEx "d" mark: CE II 2 G. EEx d
 DIP55 mark: CE II 3 D. IP55
 DIP65 mark: CE II 2 D. IP65
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Technical characteristics

| Model | Speed (r/min) | Installed power (kW) | Maximum airflow (m³/h) | Sound pressure level dB(A) | Approx. weight with motor (Kg) | |
|---------------------|------------------|-------------------------|---------------------------|----------------------------|--------------------------------|-------|
| | | | | | EEx-e | EEx-d |
| CMA-324-2T/ATEX | 2850 | 0.18 | 440 | 70 | 10 | 16 |
| CMA-325-2T/ATEX | 2780 | 0.25 | 600 | 73 | 12 | 19 |
| CMA-426-2T/ATEX | 2765 | 0.37 | 850 | 75 | 14 | 24 |
| CMA-527-2T/ATEX | 2800 | 0.55 | 1000 | 80 | 17 | 25 |
| CMA-528-2T-1/ATEX | 2780 | 0.75 | 1250 | 82 | 24 | 36 |
| CMA-528-2T-1,5/ATEX | 2850 | 1.10 | 1750 | 83 | 27 | 40 |
| CMA-531-2T-1,5/ATEX | 2880 | 1.10 | 1790 | 84 | 30 | 43 |
| CMA-531-2T-2/ATEX | 2850 | 1.50 | 2000 | 85 | 31 | 50 |
| CMA-540-2T/ATEX | 2890 | 1.50 | 2600 | 85 | 38 | 57 |
| CMA-545-2T-3/ATEX | 2840 | 2.20 | 2630 | 86 | 54 | 75 |
| CMA-545-2T-4/ATEX | 2880 | 3.00 | 3550 | 88 | 63 | 87 |

Acoustic features

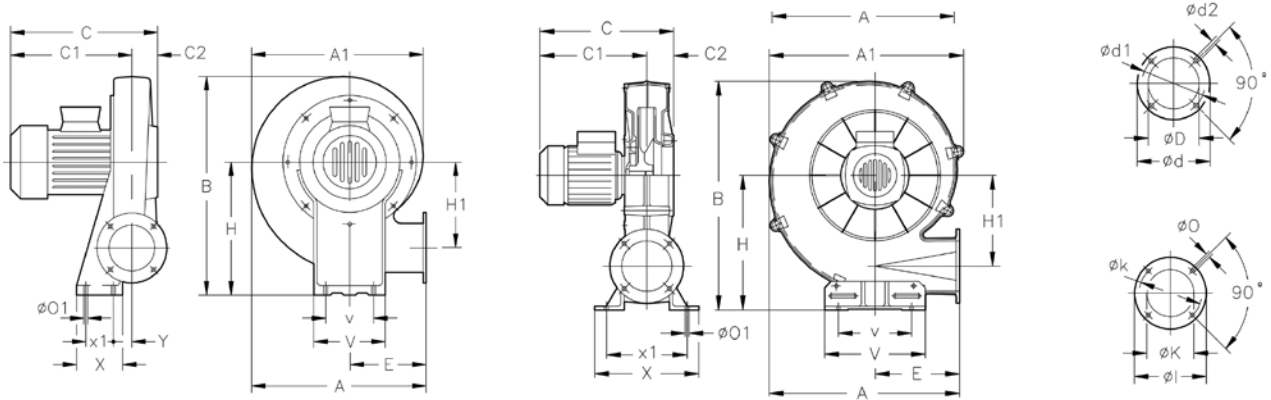
The specified values are determined according to free field measurements of pressure and sound levels in dB(A) at an equivalent distance of twice the fan's span plus the turbine's diameter, with a minimum of 1.5 m.

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

| Model | Lp dB(A) | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
|---------------------|----------|----|-----|-----|-----|------|------|------|------|
| CMA-324-2T/ATEX | 70 | 36 | 50 | 68 | 74 | 78 | 75 | 70 | 61 |
| CMA-325-2T/ATEX | 73 | 39 | 53 | 71 | 77 | 81 | 78 | 73 | 64 |
| CMA-426-2T/ATEX | 75 | 41 | 55 | 73 | 79 | 83 | 80 | 75 | 66 |
| CMA-527-2T/ATEX | 80 | 46 | 60 | 78 | 84 | 88 | 85 | 80 | 71 |
| CMA-528-2T-1/ATEX | 82 | 48 | 62 | 80 | 86 | 90 | 87 | 82 | 73 |
| CMA-528-2T-1,5/ATEX | 83 | 49 | 63 | 81 | 87 | 91 | 88 | 83 | 74 |

| Model | Lp dB(A) | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
|---------------------|----------|----|-----|-----|-----|------|------|------|------|
| CMA-531-2T-1,5/ATEX | 84 | 50 | 64 | 82 | 88 | 92 | 89 | 84 | 75 |
| CMA-531-2T-2/ATEX | 85 | 51 | 65 | 83 | 89 | 93 | 90 | 85 | 76 |
| CMA-540-2T/ATEX | 85 | 54 | 67 | 85 | 91 | 96 | 92 | 87 | 79 |
| CMA-545-2T-3/ATEX | 86 | 55 | 68 | 86 | 92 | 97 | 93 | 88 | 80 |
| CMA-545-2T-4/ATEX | 88 | 57 | 70 | 88 | 94 | 99 | 95 | 90 | 82 |

Dimensions in mm



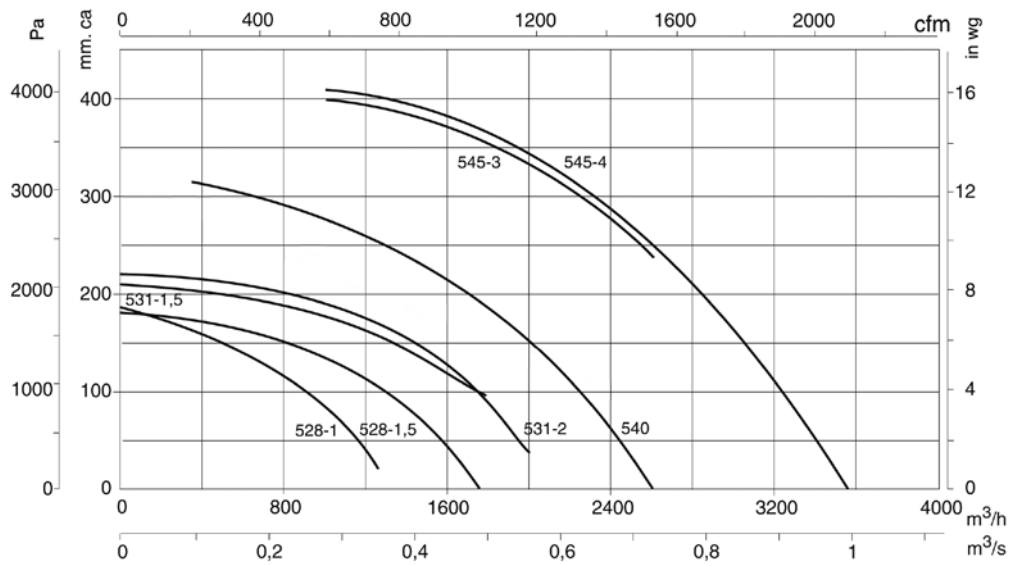
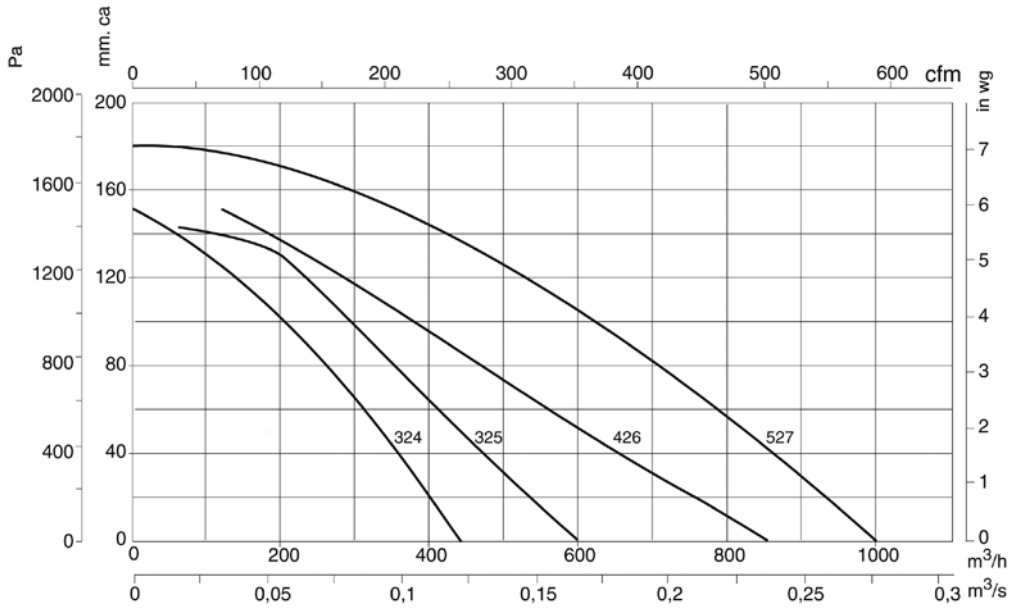
| Model | EEx-"e" | | | | EEx-"d" | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------|-----|-----|-----|---------|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|----|
| | A | A1 | B | C | C1 | C | C1 | C2 | øD | ød | ød1 | ød2 | E | H | H1 | øl | øK | øk | øO | øO1 | V | v | X | x1 | Y |
| CMA-324-2T/ATEX | 311 | 302 | 356 | 263 | 225 | 288 | 250 | 38 | 80 | 130 | 112 | M5 | 145 | 205 | 145 | 108 | 62 | 90 | 7 | 9 | 173 | 125 | 90 | 60 | 20 |
| CMA-325-2T/ATEX | 335 | 328 | 399 | 266 | 226 | 291 | 251 | 40 | 94 | 140 | 122 | M6 | 155 | 235 | 152 | 120 | 80 | 102 | 7 | 9 | 180 | 145 | 110 | 80 | 20 |
| CMA-426-2T/ATEX | 354 | 344 | 412 | 293 | 253 | 316 | 276 | 40 | 117 | 155 | 132 | M6 | 162 | 240 | 163 | 140 | 90 | 119 | 7 | 13 | 210 | 160 | 105 | 65 | 26 |
| CMA-527-2T/ATEX | 371 | 361 | 440 | 297 | 255 | 320 | 280 | 42 | 125 | 170 | 147 | M6 | 168 | 260 | 170 | 155 | 100 | 129 | 7 | 13 | 220 | 170 | 120 | 80 | 20 |
| CMA-528-2T-1/ATEX | 401 | 395 | 488 | 340 | 292 | 342 | 294 | 51 | 116 | 190 | 162 | M6 | 178 | 290 | 177 | 190 | 130 | 160 | 11 | 13 | 230 | 180 | 140 | 100 | 20 |
| CMA-528-2T-1'5/ATEX | 401 | 395 | 488 | 339 | 291 | 337 | 289 | 48 | 135 | 190 | 162 | M6 | 178 | 290 | 177 | 190 | 130 | 160 | 11 | 13 | 230 | 180 | 140 | 100 | 20 |
| CMA-531-2T-1'5/ATEX | 440 | 434 | 537 | 340 | 292 | 342 | 294 | 50 | 160 | 215 | 180 | M6 | 193 | 320 | 200 | 200 | 140 | 175 | 11 | 13 | 240 | 190 | 160 | 120 | 21 |
| CMA-531-2T-2/ATEX | 440 | 434 | 537 | 338 | 288 | 392 | 342 | 50 | 160 | 215 | 180 | M6 | 193 | 320 | 200 | 200 | 140 | 175 | 11 | 13 | 240 | 190 | 160 | 120 | 21 |

| Model | EEx-"e" | | | | EEx-"d" | | | | | | | | | | | | | | | | | | | | |
|-------------------|---------|-----|-----|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|---|
| | A | A1 | B | C | C1 | C | C1 | C2 | øD | ød | ød1 | ød2 | E | H | H1 | øl | øK | øk | øO | øO1 | V | v | X | x1 | Y |
| CMA-540-2T/ATEX | 567 | 580 | 695 | 365 | 285 | 419 | 339 | 80 | 170 | 240 | 205 | M10 | 252 | 415 | 270 | 220 | 150 | 190 | 13 | 11 | 336 | 218 | 374 | 240 | - |
| CMA-545-2T-3/ATEX | 651 | 646 | 776 | 438 | 323 | 467 | 352 | 115 | 180 | 255 | 220 | M10 | 290 | 450 | 309 | 250 | 175 | 220 | 13 | 13 | 336 | 238 | 392 | 292 | - |
| CMA-545-2T-4/ATEX | 651 | 646 | 776 | 461 | 346 | 511 | 396 | 115 | 180 | 255 | 220 | M10 | 290 | 450 | 309 | 250 | 175 | 220 | 13 | 13 | 336 | 238 | 392 | 292 | - |

Characteristic curves

Q = Airflow in m³/h, m³/s and cfm.

Pe= Static pressure in mm.w.c., Pa and inwg.



Accessories

See accessories section.

