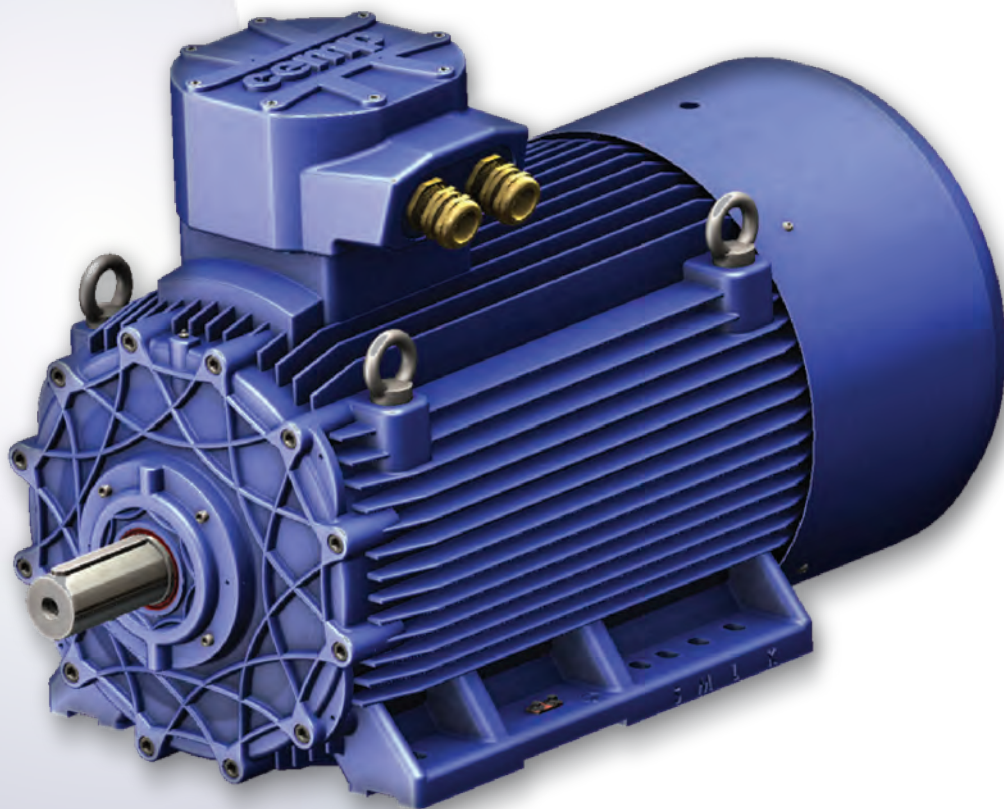


cemp

Flameproof
Motors

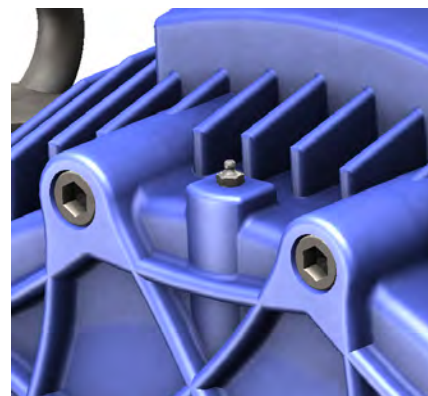
Motor size 355 - IE3

Atex - IECEx



KOLMER ELEKTROMOTOREN

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355 IE3 Motors - Atex

Series AB-AC, Cast iron

To norms IEC 60079-0, 1, 7, 31,
IEC 60034-1, 5, 6, 7, 8, 9, 12, 14,
IEC 60072

Ex d, Ex de, Ex t

ATEX category 2G, 2GD

IECEx certificated

Group IIB, IIC, IIIB, IIIC

Temperature Class T3, T4, T150°C,
T135°C

Protection IP55, IP56, IP65, IP66

Frame size 355 (IEC)

Power from 160 to 375 kW

Three phase 1 or 2 speed

400V, 50 Hz

Pole 2, 4, 6

Ventilated & with forced ventilation

TECHNICAL FEATURES

- Three-phase squirrel cage asynchronous motors.
- Totally enclosed, fan cooled, frame IP55 with terminal box IP65.
- Motor dimensions compliant with IEC 60072 standard.
- Power supply: 400V/50Hz
- Class F insulation.
- PTC thermistors.
- Anti-condensing heater.
- Terminal box designed to be rotated by 90° in 4 different positions.
- High corrosion protection:
 - internal anti-rust coating and
 - external epoxy paint coating (minimum thickness 120 µm);
 - stainless steel nameplate;
 - anticorrosion plated fasteners.
- High impact protection:
 - frame, terminal box and cast iron endshields;
 - fan cover in sheet steel.
- Standard motors equipped with radial deep groove open ball bearings.
- Low friction dust seals.
- Bearings with greasing nipples.
- Roller bearings for heavy loads.
- Low maintenance requirements.
- Certificate: TÜV IT 15 ATEX 023 X



MAIN OPTIONS

Mechanical variants

- Motors protection IP55, IP56, IP65, IP66
- Low temperature
- Special flanges and shafts
- Locked bearings, roller bearings or special bearings
- Terminal box on side
- SPM probe (vibrations measurement)
- Double ended shafts
- Cable gland fitted to terminal box
- Condensation drain valve
- Grade A or B balancing

- Rain cap or sun shield water shredding disk
- Low noise
- Auxiliary terminal box

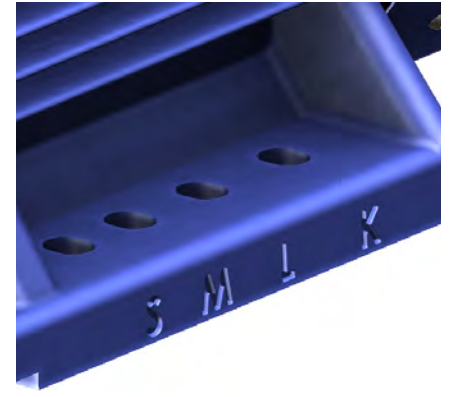
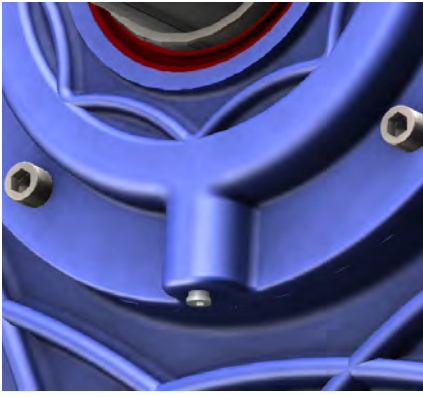
Electrical

- Special voltage and frequency
- Heaters
- Bimetallic thermal protection (NC, NO), thermistors (PTC), platinum resistor(PT100)
- Three phase 2 speeds
- Other polarity
- Motors for tropical climates

- Low (-55°C) temperature motors
- Electrical special designs
- Class H insulation

Accessories

- Suitable for frequency converter drives
- Forced ventilation (IC416)
- Encoders (100 - 10000 ppr)
- Bearing sensors
- Suitable for AC drives

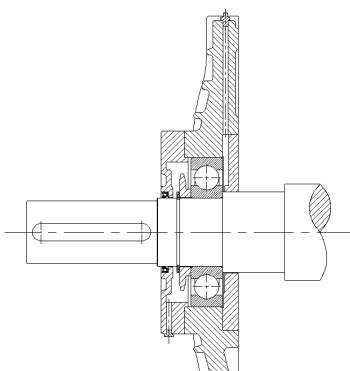


and IECEx compliant

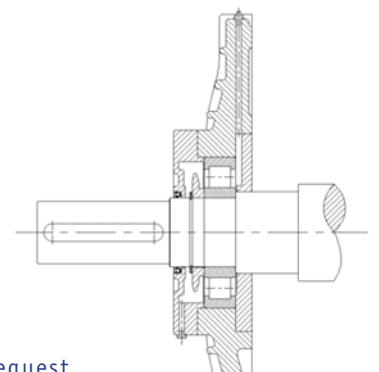
Rated data for 1 speed motors (3000, 1500, 1000 1/min)

| Series | | TYPE | POLE | Rated output Pn [kW] | Speed n [1/min] | Current In [A] | Efficiency η [%] | Power factor cos ϕ | Torque Mn [Nm] | Starting Current Ia/In | Starting Torque Ma/Mn | Maximum Torque Mm/Mn | Moment of Inertia J [kgm ²] | Mass m [kg] |
|----------------------|----------------------|--------|------|-------------------------|--------------------|-------------------|--------------------------|----------------------------|-------------------|---------------------------|--------------------------|-------------------------|--|----------------|
| IIB Ex-d Ex-de | IIC Ex-d Ex-de | | | | | | | | | | | | | |
| AB30 AB35 | AC30 AC35 | 355 M | 2 | 250 | 2983 | 420 | 95,8 | 0,90 | 800 | 6,8 | 1,7 | 2,8 | 3,8130 | 1980 |
| | | 355 ML | | 315 | 2983 | 526 | 95,8 | 0,90 | 1014 | 6,9 | 1,8 | 2,8 | 4,5200 | 2230 |
| | | 355 LC | | 355 | 2986 | 595 | 95,8 | 0,90 | 1133 | 7,9 | 2,2 | 3,2 | 5,5809 | 2440 |
| | | 355 LD | | 375 | 2986 | 626 | 95,8 | 0,90 | 1200 | 7,8 | 2,2 | 3,1 | 5,5809 | 2440 |
| AB30 AB35 | AC30 AC35 | 355 M | 4 | 250 | 1491 | 424 | 96,0 | 0,89 | 1600 | 7,1 | 1,9 | 2,5 | 9,3060 | 2120 |
| | | 355 LB | | 315 | 1491 | 529 | 96,0 | 0,90 | 2030 | 7,1 | 1,9 | 2,4 | 10,8070 | 2410 |
| | | 355 LC | | 355 | 1491 | 598 | 96,0 | 0,89 | 2268 | 7,2 | 2,0 | 2,3 | 11,9000 | 2490 |
| | | 355 LD | | 375 | 1491 | 630 | 96,0 | 0,90 | 2403 | 6,8 | 1,9 | 2,2 | 11,9000 | 2490 |
| AB30 AB35 | AC30 AC35 | 355 MA | 6 | 160 | 992 | 287 | 95,8 | 0,84 | 1543 | 6,6 | 2,0 | 2,7 | 9,5950 | 2015 |
| | | 355 MB | | 200 | 992 | 359 | 95,8 | 0,84 | 1938 | 6,8 | 2,1 | 2,7 | 11,2140 | 2155 |
| | | 355 LB | | 250 | 992 | 446 | 95,8 | 0,84 | 2404 | 6,9 | 2,2 | 2,7 | 13,2630 | 2440 |
| | | 355 LC | | 280 | 992 | 500 | 95,8 | 0,84 | 2695 | 6,8 | 2,1 | 2,7 | 14,6350 | 2570 |
| | | 355 LD | | 315 | 992 | 562 | 95,8 | 0,84 | 3032 | 6,8 | 2,1 | 2,7 | 16,0071 | 2690 |

Bearings

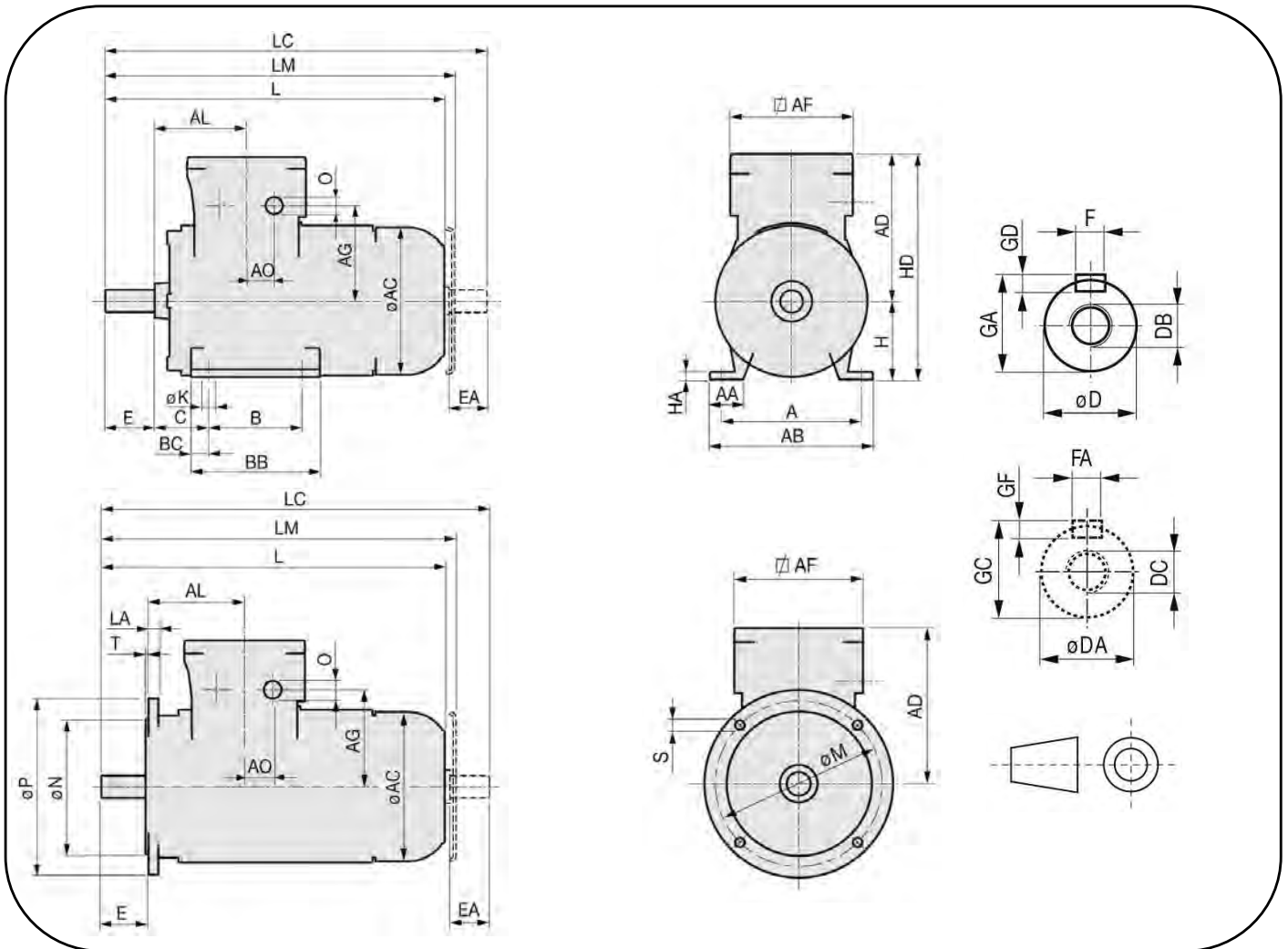


| Frame size | Pole | Drive end | Non drive end | Lubrication Time [h] | Grease amount [g] |
|------------|------|-----------|---------------|----------------------|-------------------|
| 355 | 2 | 6317 C3 | 6316 C3 | 3400 | 40 |
| | 4 | 6322 C3 | 6316 C3 | 6900 | 60 |
| | 6 | 6322 C3 | 6316 C3 | 11200 | 60 |



Standard ball bearing

Roller bearing on request



To others frame size (63 + 315) please see catalogue 14 Flameproof motors.

| Type | A | AA | AB | øAC | AD | AF | AL | B* | BC | BB | C | H _{-0.5} ⁰ | HA | HD | øK | L | LC |
|------------|------|-----|--------------------|-----|-----|---------|---------|----------|----------|----------|-----|--------------------------------|-----|------|----|------|------|
| 355M 2 | 610 | 150 | 760 | 735 | 693 | 410 | 429 | 560* | 80 | 739 | 254 | 355 | 50 | 1048 | 28 | 1544 | 1704 |
| 355M 4-6-8 | 610 | 150 | 760 | 735 | 693 | 410 | 429 | 560* | 80 | 739 | 254 | 355 | 50 | 1048 | 28 | 1624 | 1844 |
| 355L 2 | 610 | 150 | 760 | 735 | 693 | 410 | 429 | 630^ | 80 | 889 | 254 | 355 | 50 | 1048 | 28 | 1704 | 1854 |
| 355L 4-6-8 | 610 | 150 | 760 | 735 | 693 | 410 | 429 | 630^ | 80 | 889 | 254 | 355 | 50 | 1048 | 28 | 1774 | 1994 |
| Type | LM | AO | IEC60423 n. x O | AG | øDA | E EA | F FA | GA GC | GD GF | DB DC | LA | øM | øN | øP | S | T | |
| 355M 2 | 1654 | 65 | 2 x M63 | 538 | 70 | 140 | 20 | 74.5 | 12 | M20 | 25 | 740 | 680 | 800 | 24 | 6 | |
| 355M 4-6-8 | 1724 | 65 | 2 x M63 | 538 | 100 | 210 | 28 | 106 | 16 | M24 | 25 | 740 | 680 | 800 | 24 | 6 | |
| 355L 2 | 1804 | 65 | 2 x M63 | 538 | 70 | 140 | 20 | 74.5 | 12 | M20 | 25 | 740 | 680 | 800 | 24 | 6 | |
| 355L 4-6-8 | 1874 | 65 | 2 x M63 | 538 | 100 | 210 | 28 | 106 | 16 | M24 | 25 | 740 | 680 | 800 | 24 | 6 | |

B*
*500
^500; 560; 710



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