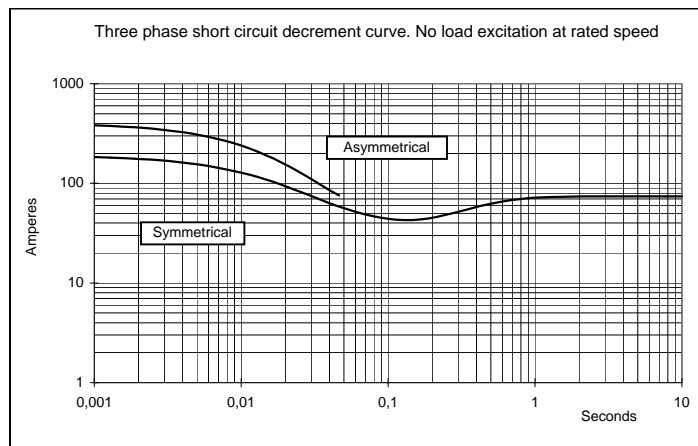
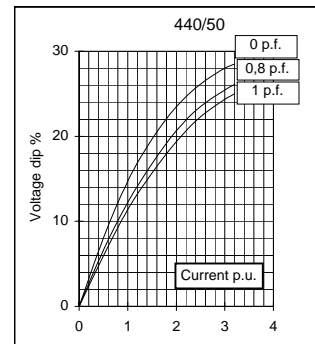
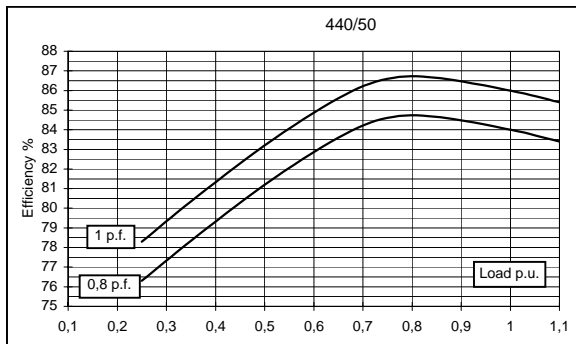
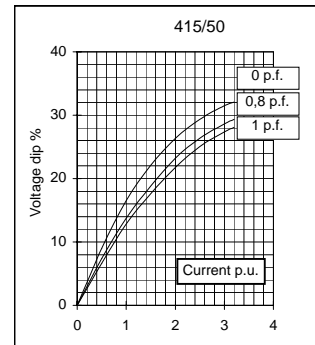
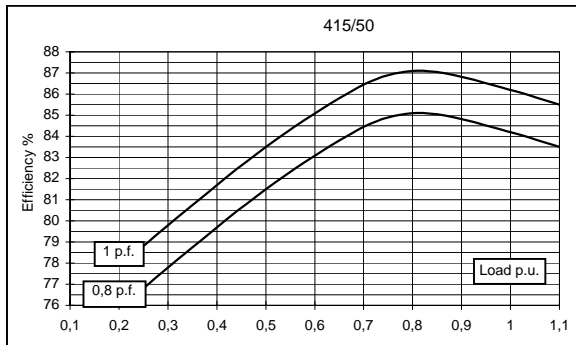
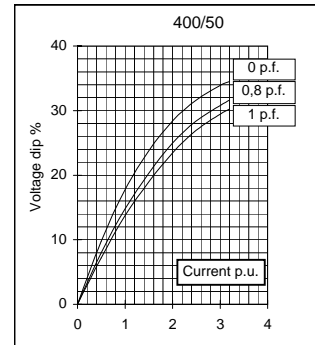
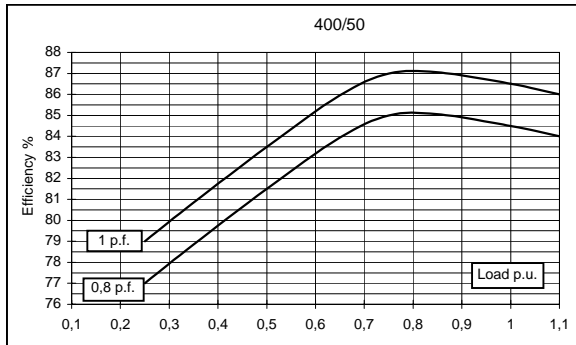
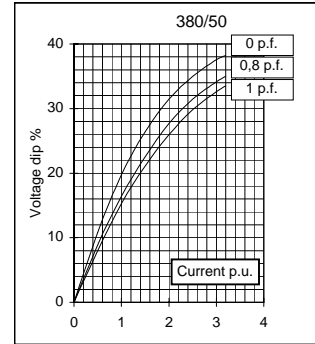
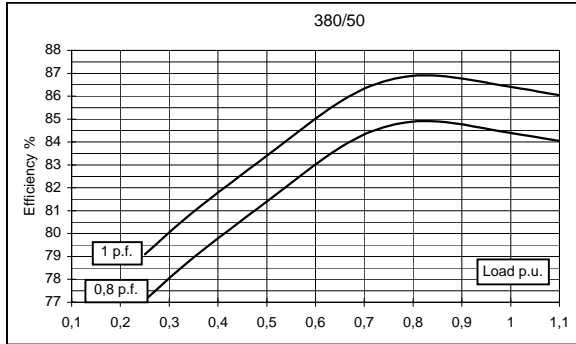


| Electrical Characteristics | | | | | | | | | | |
|--------------------------------------|---------------------|--|-------|------|-------|----------------|-------|-------|-------|------|
| Frequency | Hz | 50 | | | | 60 | | | | |
| Voltage (star) | V | 380 | 400 | 415 | 440 | 415 | 440 | 460 | 480 | |
| Rated power class H | kVA | 16 | 16 | 16 | 13 | 17 | 19,2 | 19,2 | 19,2 | |
| | kW | 12,8 | 12,8 | 12,8 | 10,4 | 13,6 | 15,4 | 15,4 | 15,4 | |
| Rated power class F | kVA | 14,5 | 14,5 | 14,5 | 11,5 | 14 | 16,2 | 17 | 17 | |
| | kW | 11,6 | 11,6 | 11,6 | 9,2 | 11,2 | 13 | 13,6 | 13,6 | |
| Regulation with | SR7/2 | ±1,5 % with any power factor and speed variations between -5% +30% | | | | | | | | |
| Insulation class | | H | | | | | | | | |
| Execution | | Brushless | | | | | | | | |
| Stator winding | | 6 ends | | | | | | | | |
| Rotor | | with damping cage | | | | | | | | |
| Efficiencies class H | 4/4 | % | 84,4 | 84,5 | 84,2 | 84 | 85,4 | 85,9 | 86 | 86,1 |
| (see graph. for details) | 3/4 | % | 84,7 | 85 | 84,9 | 84,6 | 86 | 86,2 | 86,4 | 86,6 |
| | 2/4 | % | 81,4 | 81,5 | 81,5 | 81,2 | 83,2 | 83,3 | 83,4 | 83,5 |
| | 1/4 | % | 77,1 | 77 | 76,8 | 76,3 | 77,8 | 77,6 | 77,7 | 78 |
| Reactances (f. l.cl. F) | Xd | % | 223,8 | 202 | 187,7 | 135,6 | 239,3 | 240,4 | 219,9 | 202 |
| | Xd' | % | 30,91 | 27,9 | 25,92 | 18,73 | 33,05 | 33,20 | 30,38 | 27,9 |
| | Xd'' | % | 16,73 | 15,1 | 14,03 | 10,14 | 17,89 | 17,97 | 16,44 | 15,1 |
| | Xq | % | 110,1 | 99,4 | 92,3 | 66,7 | 117,7 | 118,3 | 108,2 | 99,4 |
| | Xq' | % | 110,1 | 99,4 | 92,3 | 66,7 | 117,7 | 118,3 | 108,2 | 99,4 |
| | Xq'' | % | 42,3 | 38,2 | 35,5 | 25,7 | 45,2 | 45,5 | 41,6 | 38,2 |
| | X ₂ | % | 19,39 | 17,5 | 16,26 | 11,75 | 20,73 | 20,83 | 19,05 | 17,5 |
| | X ₀ | % | 6,65 | 6 | 5,57 | 4,03 | 7,11 | 7,14 | 6,53 | 6 |
| Short Circuit Ratio | Kcc | | 0,43 | 0,55 | 0,76 | 1,38 | 0,30 | 0,38 | 0,43 | 0,55 |
| Time Constants | Td' | sec. | 0,062 | | | | | | | |
| | Td'' | sec. | 0,014 | | | | | | | |
| | Tdo' | sec. | 0,67 | | | | | | | |
| | T _α | sec. | 0,012 | | | | | | | |
| Short Circuit Current Capacity | | % | >300 | | | | >320 | | | |
| Excitation at no load | Amp. | | 0,25 | 0,3 | 0,37 | 0,4 | 0,18 | 0,2 | 0,24 | 0,28 |
| Excitation at full load | Amp. | | 1,1 | 1,2 | 1,25 | 1,3 | 0,95 | 1 | 1,05 | 1,1 |
| Overload (long-term) | % | 1 hour in a 6 hours period 110% rated load | | | | | | | | |
| Overload per 20 sec. | % | 300 | | | | | | | | |
| Stator Winding Resistance (20°C) | Ω | 0,512 | | | | | | | | |
| Rotor Winding Resistance (20°C) | Ω | 9,487 | | | | | | | | |
| Exciter Resistance (20 °C) | Ω | Rotor : 1,453 | | | | Stator : 15,71 | | | | |
| Heat dissipation at f.l.cl.H | W | 2366 | 2348 | 2402 | 1981 | 2325 | 2521 | 2500 | 2480 | |
| Telephone Interference | | THF < 2% | | | | TIF < 45 | | | | |
| Radio interference | | EN60034-1, VDE0875K. For others standards apply to factory | | | | | | | | |
| Waveform Distors.(THD) at f. load | LL/LN % | 4,6/ 4,4 | | | | | | | | |
| Waveform Distors.(THD) at no load | LL/LN % | 3,8/ 3,7 | | | | | | | | |
| Mechanical characteristics | | | | | | | | | | |
| Protection | | IP 23 (other protection on request) | | | | | | | | |
| DE bearing | | 6308-2RS | | | | | | | | |
| NDE bearing | | 6305-2RS | | | | | | | | |
| Weight of wound stator assembly | kg | 24 | | | | | | | | |
| Weight of wound rotor assembly | kg | 13 | | | | | | | | |
| Weight of complete generator | kg | 78 | | | | | | | | |
| Maximun overspeed | rpm | 4500 | | | | | | | | |
| Unbalanced magnetic pull at f.l.cl.F | kN/mm | 2,9 | | | | | | | | |
| Cooling air requirement | m ³ /min | 6 | | | | 7,2 | | | | |
| Inertia Constant (H) | sec. | 0,157 | | | | 0,188 | | | | |
| Noise level at 1m/7m | dB(A) | 85 / 70 | | | | 89 / 73 | | | | |

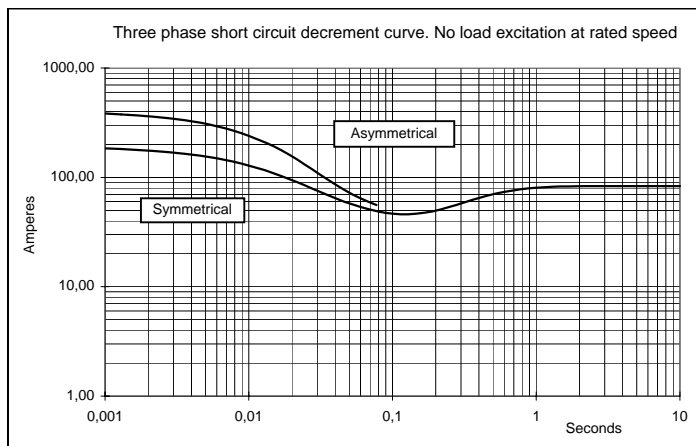
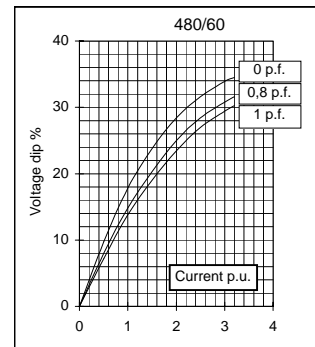
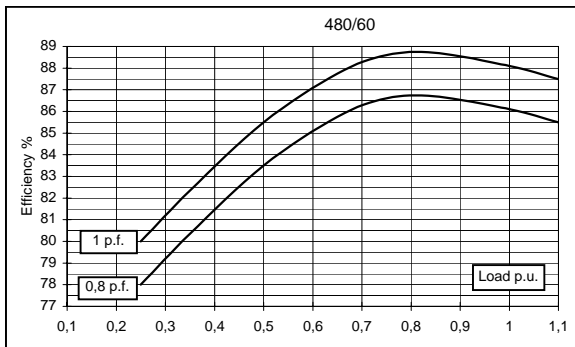
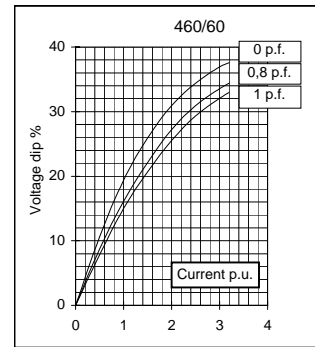
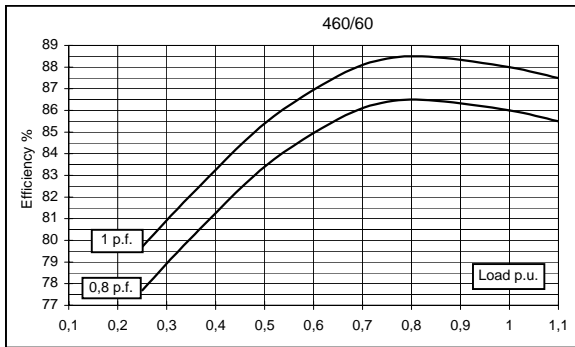
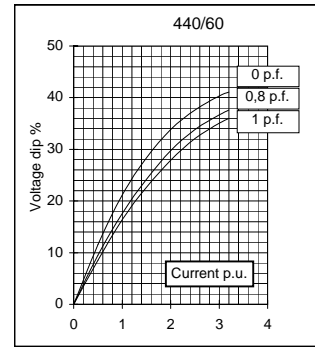
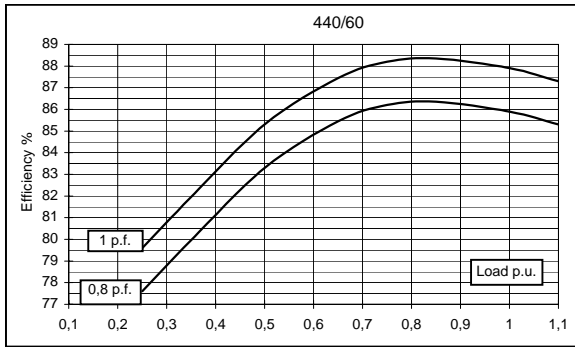
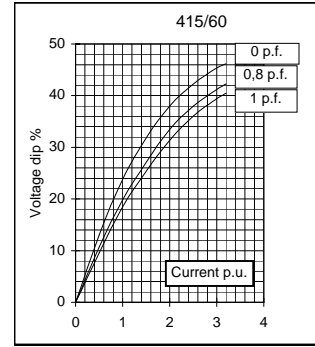
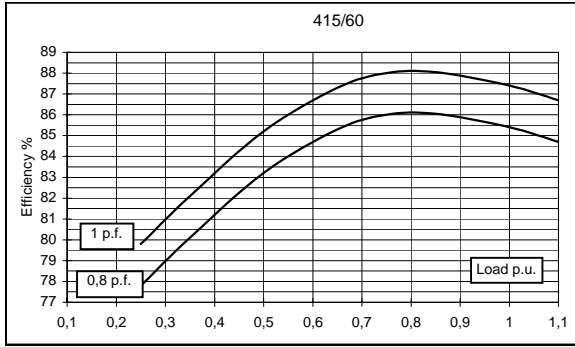
All technical data are to be considered as a reference and they can be modified without any notice.

This document is a propriety of Mecc Alte S.p.a..All rights reserved.

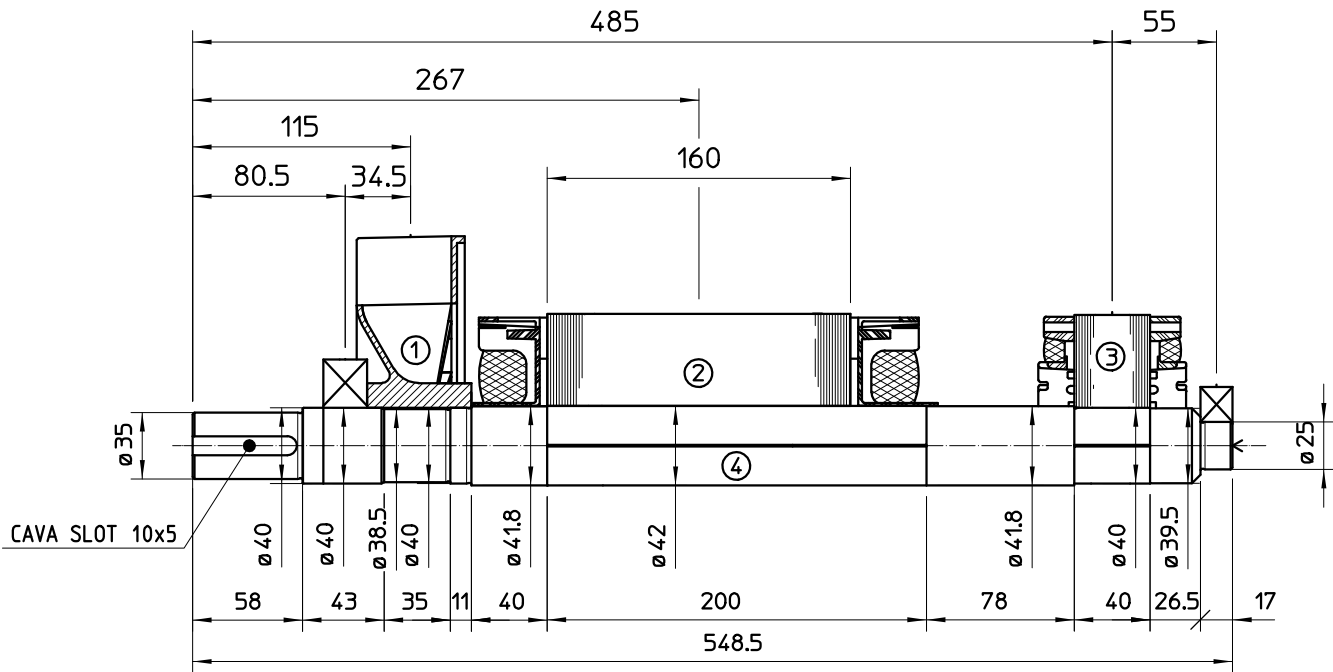
50 Hz



60 Hz

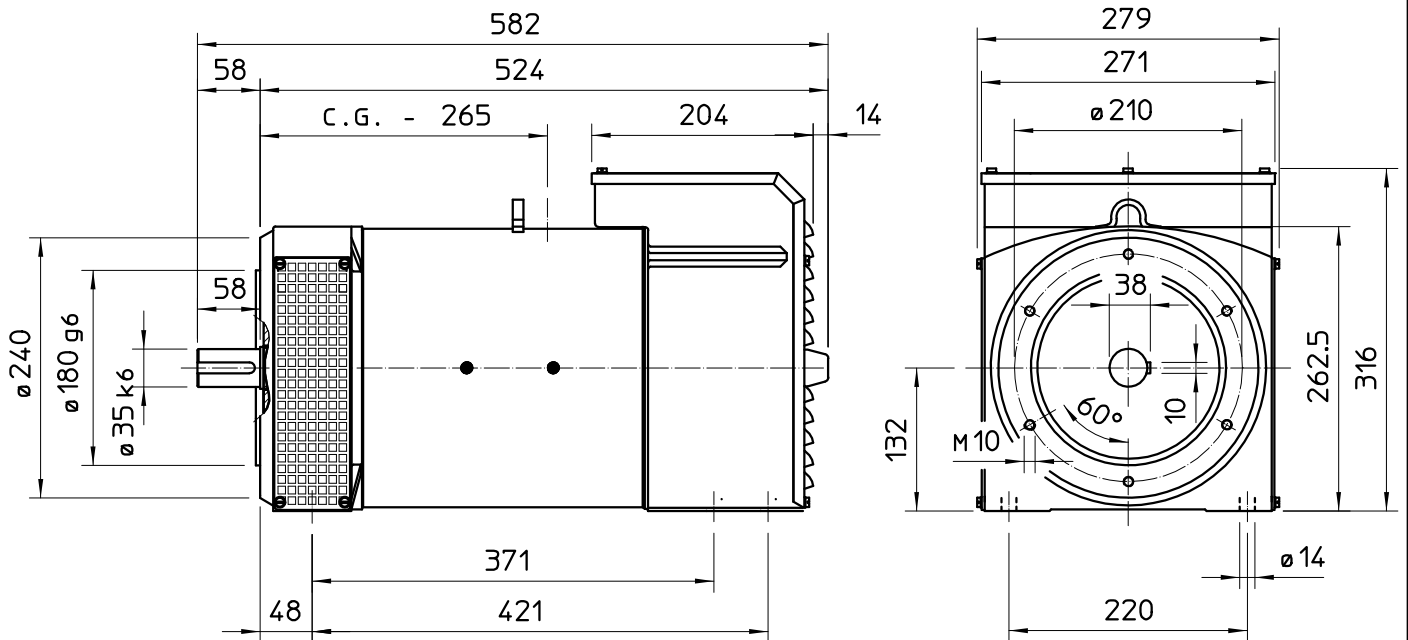


TWO BEARING MOMENTS OF INERTIA

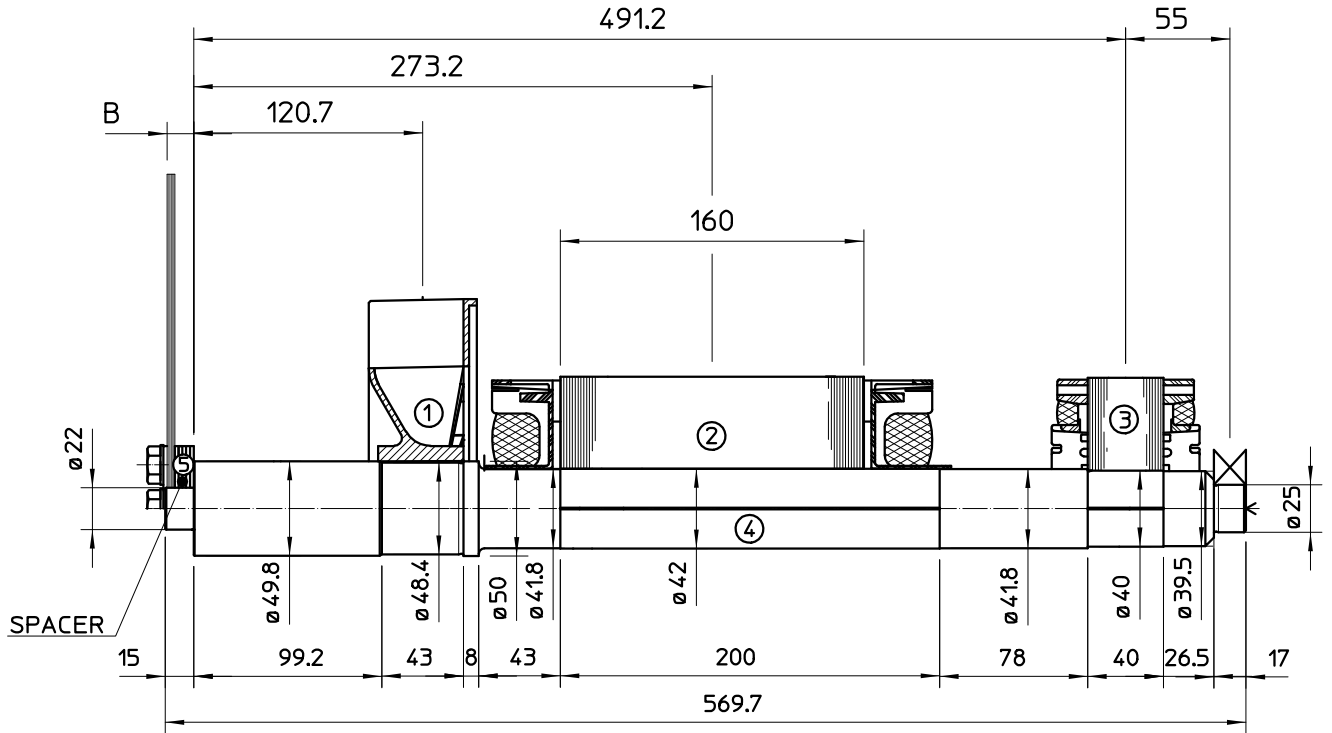


| COMPONENT | WEIGHT Kg | J Kg ^{m²} |
|--------------|-----------|-------------------------------|
| 1 FAN | 0.93 | 0.0036 |
| 2 MAIN ROTOR | 14.72 | 0.035 |
| 3 EX ROTOR | 4.12 | 0.011 |
| 4 SHAFT | 5.5 | 0.0011 |
| 6 TOTAL | 25.27 | 0.0507 |

TWO BEARING DIMENSIONS



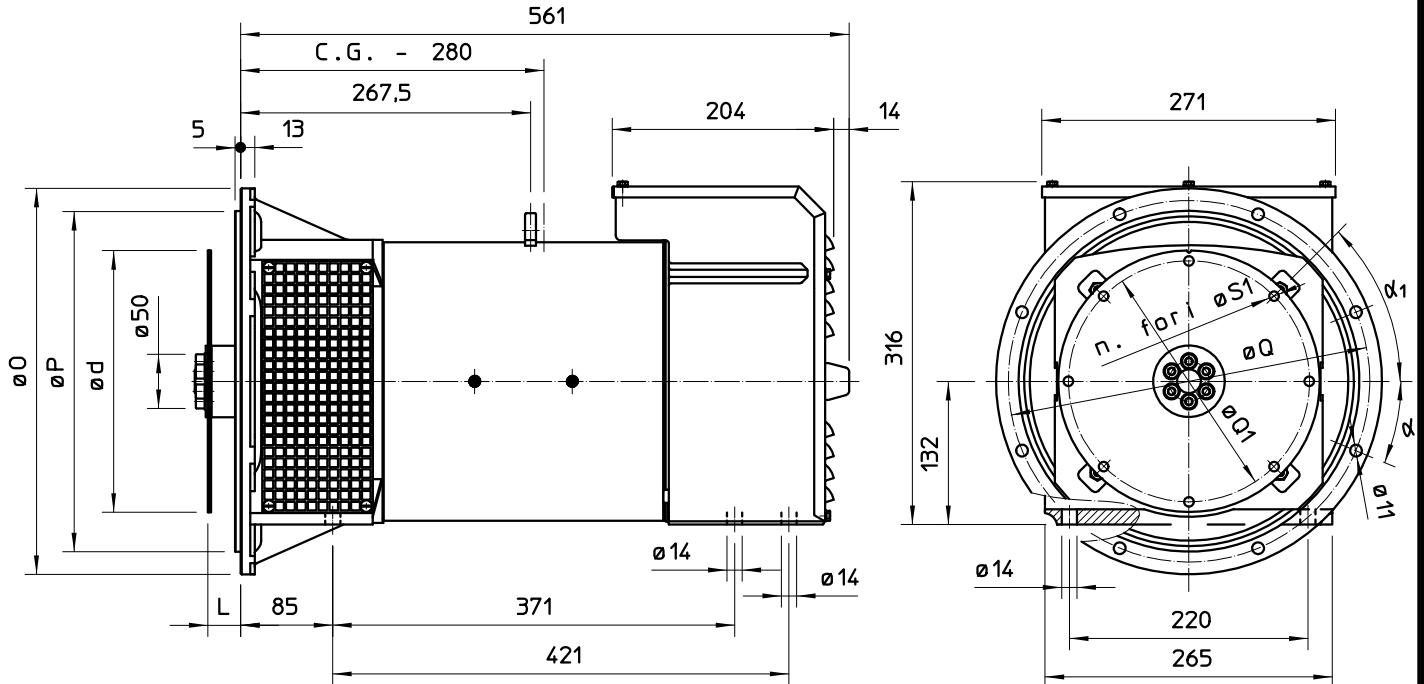
SINGLE BEARING MOMENTS OF INERTIA



| COMPONENT | WEIGHT Kg | J Kg ^m ² |
|--------------|-----------|--------------------------------|
| 1 FAN | 0.82 | 0.0032 |
| 2 MAIN ROTOR | 14.72 | 0.035 |
| 3 EX ROTOR | 4.12 | 0.011 |
| 4 SHAFT | 6.3 | 0.0013 |
| 6 TOTAL | 25.96 | 0.0505 |

| SAE N. | SHAFT COUPLING FLEX PLATE | | |
|--------|---------------------------|-----------|--------------------------------|
| | B(mm) | WEIGHT kg | J kg ^m ² |
| 6 1/2 | 4 | 1.14 | 0.0067 |
| 7 1/2 | 4 | 1.42 | 0.0103 |
| 8 | 35.6 | 1.97 | 0.0171 |
| 10 | 27.6 | 2.59 | 0.0319 |
| 11 1/2 | 14 | 3.1 | 0.0481 |

SINGLE BEARING DIMENSIONS



GIUNTI A DISCO COUPLING DISC PLATEX
DISQUE DE MONOPALIER SCHEIBENKUPPLUNG
JUNTAS A DISCOS

| FLANGIA FLANGE BRIDE FLANSCH BRIDAS | SAE N. | O | P | Q | n. for i | α |
|---|--------|-----|-------|--------|----------|--------|
| | 6 | 308 | 266.7 | 285.75 | 8 | 22°30' |
| | 5 | 356 | 314.3 | 333.4 | 8 | 22°30' |
| | 4 | 403 | 362 | 381 | 12 | 15° |
| | 3 | 451 | 409.6 | 428.6 | 12 | 15° |

| SAE N. | L | d | Q1 | n. for i | S1 | α1 |
|--------|------|--------|--------|----------|----|-----|
| 6 1/2 | 30.2 | 215.9 | 200 | 6 | 9 | 60° |
| 7 1/2 | 30.2 | 241.3 | 222.25 | 8 | 9 | 45° |
| 8 | 62 | 263.52 | 244.47 | 6 | 11 | 60° |
| 10 | 53.8 | 314.32 | 295.27 | 8 | 11 | 45° |
| 11 1/2 | 39.6 | 352.42 | 333.37 | 8 | 11 | 45° |

C.G. = GRAVITY CENTER