

YGP Series Inverter and Vector Induction Motors for Roller Table



- Frame sizes: 112-400
- Rated output: 1.1-250Kw
- Voltage: 380V Frequency range: 5- 100Hz
- Duty Cycle: S5 FC: 60%
- Degree of protection: IP54 / IP55
- Insulation class: F, H Poles : 4,6,8

Applications: Widely used for the metallurgy equipment, especially the ones which are controlled by variable frequency system. The motor suits not only for live roll table of S1 duty mode but also for the work roll table of periodic operation, frequent start and stop, positive and reversal rotation.

Features: Good overload capacity and mechanic strength, wide range of speed regulation, smooth operation.

Performance Data

380V 50Hz

| Model | Output kW | FLA | FLT N.m | RPM | $\frac{LRT}{FLT}$ $\frac{Tst}{T_N}$ | $\frac{BDT}{FLT}$ $\frac{Tmax}{T_N}$ | Rotor inertia kg.m ² |
|-----------------------------|-----------|------|---------|------|--|---|---------------------------------|
| Synchronous speed 1500r/min | | | | | | | |
| YGP100L-4 | 0.75 | 1.8 | 5 | 1440 | 1.3~2.0 | 3.7 | 0.0092 |
| YGP112L1-4 | 1.1 | 2.4 | 7.3 | 1450 | 1.3~2.0 | 3.6 | 0.0124 |
| YGP112L2-4 | 1.5 | 3.0 | 10 | 1450 | 1.3~2.0 | 3.6 | 0.0173 |
| YGP132M1-4 | 2.2 | 4.6 | 14.5 | 1450 | 1.3~2.0 | 3.5 | 0.0254 |
| YGP132M2-4 | 3 | 6.1 | 20 | 1450 | 1.3~2.0 | 3.5 | 0.0382 |
| YGP160S1-4 | 4 | 8.0 | 26.2 | 1460 | 1.3~2.0 | 3.6 | 0.0785 |
| YGP160S2-4 | 5.5 | 11 | 36 | 1460 | 1.3~2.0 | 3.6 | 0.0826 |
| YGP160L1-4 | 6.3 | 12.3 | 41.2 | 1460 | 1.3~2.0 | 3.7 | 0.102 |
| YGP160L2-4 | 7.5 | 14.5 | 49.1 | 1460 | 1.3~2.0 | 3.7 | 0.125 |
| YGP180L1-4 | 9 | 17.0 | 58.7 | 1465 | 1.3~2.0 | 3.7 | 0.152 |
| YGP180L2-4 | 11 | 20.5 | 71.7 | 1465 | 1.3~2.0 | 3.7 | 0.178 |
| YGP200L1-4 | 15 | 28.0 | 97.8 | 1465 | 1.3~2.0 | 3.8 | 0.265 |
| YGP200L2-4 | 18.5 | 33.4 | 120.6 | 1465 | 1.3~2.0 | 3.8 | 0.356 |
| YGP225M1-4 | 22 | 39.6 | 142.5 | 1475 | 1.3~2.0 | 3.8 | 0.411 |
| YGP225M2-4 | 25 | 44.5 | 162 | 1475 | 1.3~2.0 | 3.7 | 0.483 |
| Synchronous speed 1000r/min | | | | | | | |
| YGP112L1-6 | 0.75 | 2.0 | 7.4 | 965 | 1.3~2.0 | 3.6 | 0.0112 |
| YGP112L2-6 | 1.1 | 2.7 | 11 | 965 | 1.3~2.0 | 3.6 | 0.0116 |
| YGP132M1-6 | 1.5 | 3.4 | 15 | 965 | 1.3~2.0 | 3.2 | 0.0264 |
| YGP132M2-6 | 2.2 | 4.8 | 22 | 965 | 1.3~2.0 | 3.2 | 0.0426 |
| YGP160S1-6 | 3 | 6.6 | 29.5 | 970 | 1.3~2.0 | 3.4 | 0.0857 |
| YGP160S2-6 | 4 | 8.7 | 39.4 | 970 | 1.3~2.0 | 3.4 | 0.0934 |
| YGP160L1-6 | 5.5 | 11.7 | 54 | 970 | 1.3~2.0 | 3.6 | 0.115 |
| YGP160L2-6 | 6.3 | 13.2 | 62 | 970 | 1.3~2.0 | 3.5 | 0.159 |

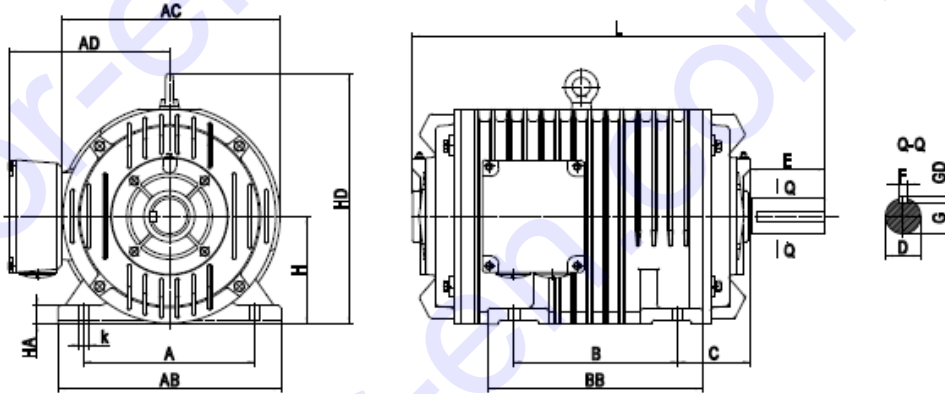
| Model | Output kW | FLA | FLT N.m | RPM | $\frac{LRT}{FLT}$ $\frac{T_{st}}{T_N}$ | $\frac{BDT}{FLT}$ $\frac{T_{max}}{T_N}$ | Rotor inertia kg.m ² |
|-----------------------------|-----------|------|---------|-----|---|--|---------------------------------|
| Synchronous speed 1000r/min | | | | | | | |
| YGP180L1-6 | 7.5 | 15.0 | 73.5 | 975 | 1.3~2.0 | 3.6 | 0.203 |
| YGP180L2-6 | 9 | 17.7 | 88.1 | 975 | 1.3~2.0 | 3.6 | 0.287 |
| YGP200L1-6 | 11 | 21.7 | 107.8 | 975 | 1.3~2.0 | 3.7 | 0.312 |
| YGP200L2-6 | 15 | 28.6 | 147 | 975 | 1.3~2.0 | 3.7 | 0.383 |
| YGP225M1-6 | 18.5 | 34.4 | 181 | 975 | 1.3~2.0 | 3.5 | 0.524 |
| YGP225M2-6 | 22 | 41.0 | 215 | 975 | 1.3~2.0 | 3.5 | 0.623 |
| Synchronous speed 750r/min | | | | | | | |
| YGP112L1-8 | 0.55 | 1.6 | 7.3 | 725 | 1.3~2.0 | 3.5 | 0.0112 |
| YGP112L2-8 | 0.75 | 2.0 | 10 | 725 | 1.3~2.0 | 3.5 | 0.0166 |
| YGP132M1-8 | 1.1 | 3.2 | 14.5 | 725 | 1.3~2.0 | 3.2 | 0.0264 |
| YGP132M2-8 | 1.5 | 4.3 | 20 | 725 | 1.3~2.0 | 3.2 | 0.0426 |
| YGP160S1-8 | 2.2 | 5.5 | 30 | 725 | 1.3~2.0 | 3.5 | 0.0857 |
| YGP160S2-8 | 3 | 7.3 | 39.5 | 725 | 1.3~2.0 | 3.5 | 0.0945 |
| YGP160L1-8 | 4 | 9.6 | 52.7 | 725 | 1.3~2.0 | 3.6 | 0.121 |
| YGP160L2-8 | 5.5 | 13.0 | 72.5 | 725 | 1.3~2.0 | 3.6 | 0.196 |
| YGP180L1-8 | 6.3 | 15.0 | 82.4 | 730 | 1.3~2.0 | 3.6 | 0.238 |
| YGP180L2-8 | 7.5 | 17.0 | 98 | 730 | 1.3~2.0 | 3.5 | 0.297 |
| YGP200L1-8 | 9 | 20.0 | 117.7 | 730 | 1.3~2.0 | 3.6 | 0.315 |
| YGP200L2-8 | 11 | 25.0 | 144 | 730 | 1.3~2.0 | 3.7 | 0.341 |
| YGP225M1-8 | 15 | 31.7 | 195 | 735 | 1.3~2.0 | 3.6 | 0.524 |
| YGP225M2-8 | 18.5 | 38.5 | 240 | 735 | 1.3~2.0 | 3.6 | 0.623 |

Note: The ratio value of the $\frac{LRT}{FLT}$ is calculated under the condition that the frequency is 3Hz, and the value is determined by the control mode of inverter. The ratio of the $\frac{BDT}{FLT}$ is calculated under the condition of 50Hz frequency.

Technical Characteristics

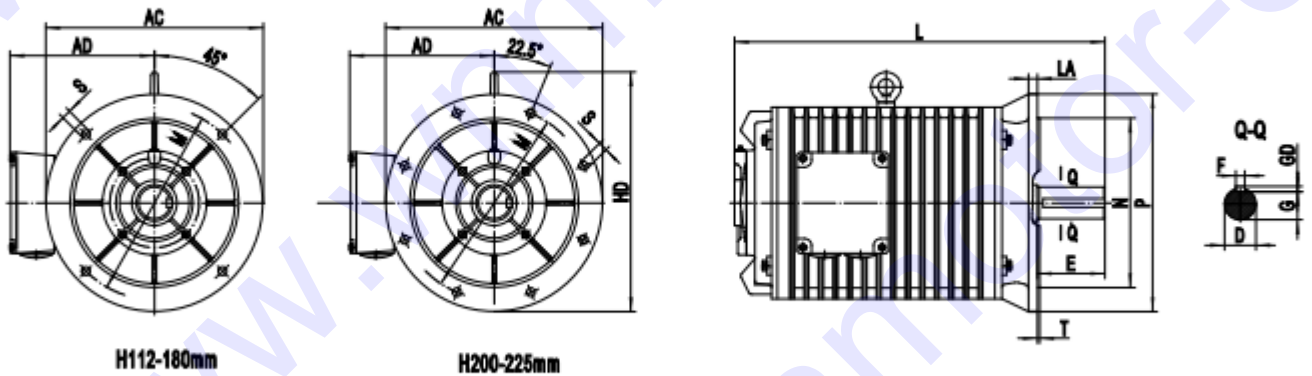
This series motor is of F or H insulation grade, IP54 protection (motor of IP55、IP56 can also be customized), IC410 cooling method. Wide frequency range 5~100Hz, of which 5~50Hz is for maintaining constant torque and 50~100Hz is for constant output. With good overload capability the motor can work with overload of 3.5~4.0 times of rated torque (general purpose motor can bear about 2 times). This series motors have good performance at low speed. The starting torque at 5Hz is 1.3~1.8 times of its rated value.

B3 (Horizontal Foot Mounted Only)



| Frame | Mounting Dimension | | | | | | | | | | Overall Dimension | | | | | |
|-------|--------------------|-----|-----|----|-----|----|------|----|-----|----|-------------------|-----|-----|----|-----|-----|
| | A | B | C | D | E | F | G | GD | H | K | AB | AC | BB | HA | HD | L |
| 112L | 190 | 159 | 70 | 32 | 80 | 10 | 27 | 8 | 112 | 12 | 235 | 240 | 200 | 20 | 330 | 460 |
| 132M | 216 | 178 | 89 | 38 | 80 | 10 | 33 | 8 | 132 | 12 | 265 | 265 | 236 | 23 | 355 | 520 |
| 160S | 254 | 178 | 108 | 48 | 110 | 14 | 42.5 | 9 | 160 | 15 | 315 | 315 | 236 | 25 | 410 | 650 |
| 160L | 254 | 254 | 108 | 48 | 110 | 14 | 42.5 | 9 | 160 | 15 | 315 | 315 | 310 | 25 | 410 | 700 |
| 180L | 279 | 279 | 121 | 55 | 110 | 16 | 49 | 10 | 180 | 15 | 360 | 360 | 350 | 30 | 500 | 750 |
| 200L | 318 | 305 | 133 | 65 | 140 | 18 | 58 | 11 | 200 | 19 | 415 | 415 | 400 | 35 | 570 | 860 |
| 225M | 356 | 311 | 149 | 75 | 140 | 20 | 67.5 | 12 | 225 | 19 | 470 | 470 | 415 | 35 | 620 | 950 |

B5 (Footless and B5 Flange Mounted)



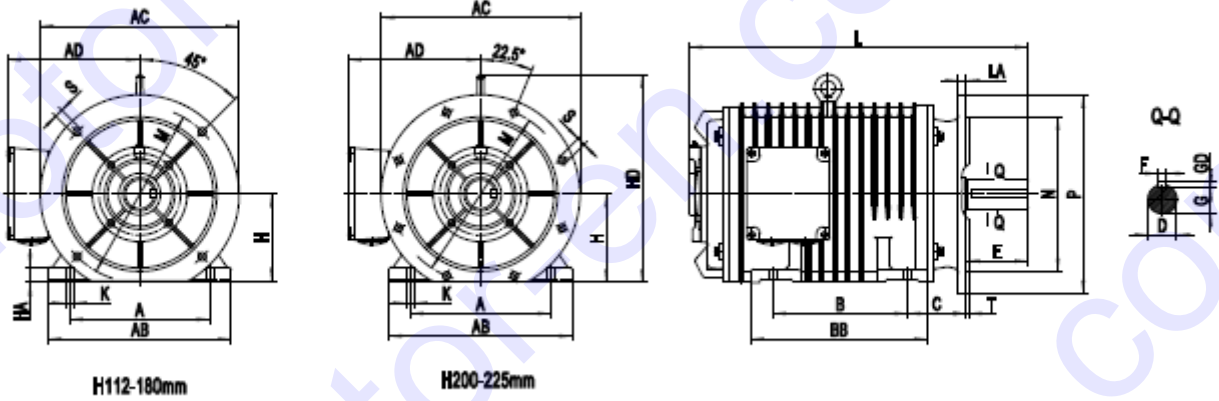
H112-180mm

H200-225mm

| Frame | Flange | Mounting Dimension | | | | | | | | | | | | Overall Dimension | | | |
|-------|--------|--------------------|-----|----|------|----|-----|-----|-----|---|----|---|-------|-------------------|-----|----|-----|
| | | D | E | F | G | GD | M | N | P | R | S | T | Holes | AC | HD | LA | L |
| 112L | FF215 | 32 | 80 | 10 | 27 | 8 | 215 | 180 | 250 | 0 | 15 | 4 | 4 | 250 | 330 | 12 | 460 |
| 132M | FF265 | 38 | 80 | 10 | 33 | 8 | 265 | 230 | 300 | 0 | 15 | 4 | 4 | 300 | 355 | 12 | 520 |
| 160S | FF300 | 48 | 110 | 14 | 42.5 | 9 | 300 | 250 | 350 | 0 | 19 | 5 | 4 | 350 | 410 | 14 | 650 |
| 160L | FF300 | 48 | 110 | 14 | 42.5 | 9 | 300 | 250 | 350 | 0 | 19 | 5 | 4 | 350 | 410 | 14 | 700 |

| | | | | | | | | | | | | | | | | | |
|------|-------|----|-----|----|------|----|-----|-----|-----|---|----|---|---|-----|-----|----|-----|
| 180L | FF300 | 55 | 110 | 16 | 49 | 10 | 300 | 250 | 350 | 0 | 19 | 5 | 4 | 360 | 500 | 16 | 750 |
| 200L | FF400 | 65 | 140 | 18 | 58 | 11 | 400 | 350 | 450 | 0 | 19 | 5 | 8 | 450 | 570 | 18 | 860 |
| 225M | FF400 | 75 | 140 | 20 | 67.5 | 12 | 400 | 350 | 450 | 0 | 19 | 5 | 8 | 470 | 620 | 18 | 950 |

B35 (Foot and B5 Flange Mounted)



| Frame | Flange | Mounting Dimension | | | | | | | | | | | | | | | Overall Dimension | | | | | | | |
|-------|--------|--------------------|-----|-----|----|-----|----|------|-----|----|-----|-----|-----|---|----|---|-------------------|-----|-----|-----|----|-----|----|-----|
| | | A | B | C | D | E | F | G | H | K | M | N | P | R | S | T | Hole s | AB | AC | BB | HA | HD | LA | L |
| 112L | FF215 | 190 | 159 | 70 | 32 | 80 | 10 | 27 | 112 | 12 | 215 | 180 | 250 | 0 | 15 | 4 | 4 | 235 | 250 | 200 | 20 | 330 | 12 | 460 |
| 132M | FF265 | 216 | 178 | 89 | 38 | 80 | 10 | 33 | 132 | 12 | 265 | 230 | 300 | 0 | 15 | 4 | 4 | 265 | 300 | 236 | 23 | 355 | 12 | 520 |
| 160S | FF300 | 254 | 178 | 108 | 48 | 110 | 14 | 42.5 | 160 | 15 | 300 | 250 | 350 | 0 | 19 | 5 | 4 | 315 | 350 | 236 | 25 | 410 | 14 | 650 |
| 160L | FF300 | 254 | 254 | 108 | 48 | 110 | 14 | 42.5 | 160 | 15 | 300 | 250 | 350 | 0 | 19 | 5 | 4 | 315 | 350 | 310 | 25 | 410 | 14 | 700 |
| 180L | FF300 | 279 | 279 | 121 | 55 | 110 | 16 | 49 | 180 | 15 | 300 | 250 | 350 | 0 | 19 | 5 | 4 | 360 | 360 | 350 | 30 | 500 | 16 | 750 |
| 200L | FF400 | 318 | 305 | 133 | 65 | 140 | 18 | 58 | 200 | 19 | 400 | 350 | 450 | 0 | 19 | 5 | 8 | 415 | 450 | 400 | 35 | 570 | 18 | 860 |
| 225M | FF400 | 356 | 311 | 149 | 75 | 140 | 20 | 67.5 | 225 | 19 | 400 | 350 | 450 | 0 | 19 | 5 | 8 | 470 | 470 | 415 | 35 | 620 | 18 | 950 |

Data above may be changed without prior notice.