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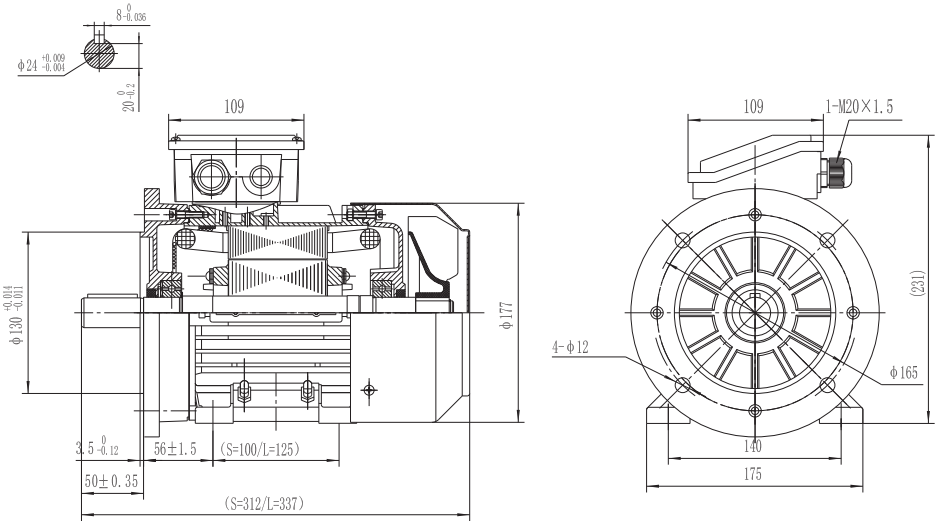
# Data sheet for three-phase squirrel-cage motor

**Type** T2A 90L2-2 | **Cod.** I090L203,0AA5A00000T | **Mounting position**

| IM | B35 |
|---|---|
| IM | 2001 |




| Electrical data | | | |
|---|---|---|---|
| Rated motor power | 3 | | Kw |
| Rated motor speed | 2880 | | $min^{-1}$ 50Hz |
| | 3460 | | $min^{-1}$ 60Hz |
| Rated motor frequency | 50 | | Hz |
| Rated motor voltage(+/-10%) | 230 | | VΔ/50Hz |
| | 400 | | VY/50Hz |
| | 280 | | VΔ/60Hz |
| | 480 | | VY/60Hz |
| Rated motor torque | 9.95 | | Nm (Mn) |
| Rated motor current | 10.48 | VΔ/50Hz | A (In) |
| | 6.06 | VY/50Hz | A (In) |
| Starting motor current | 7.9 | | xIn |
| Starting motor torque | 3.4 | | xMn |
| Breakdown motor torque | 3.3 | | xMn |
| Starting | | | D.O.L. |
| Efficiency class | IE2 | | |
| Efficiency | 50Hz | 60Hz | |
| | 84.6 | - | 100% load |
| | 85.8 | - | 75% load |
| | 85.2 | - | 50% load |
| Power factor cosφ | 0.85 | - | 100% load |

| General data | | |
|---|---|---|
| Frame size | 90 | |
| Mounting | B35 | |
| Weight | - | Kg |
| Casing material | Aluminum | |
| Protection | IP | 55 |
| Insulation class | H | |
| Tropicalization | Yes | |
| Vibration class | A | |
| Duty | S1 | |
| Direction of rotation | Bidirectional | |
| Method of cooling | IC | 411 |
| Cable entry | 1-M20x1,5 | |
| Standards | IEC/DIN/ISO/VDE/EN | |
| Execute at Standard | IEC 60034-1 | |
| Feet removable | Yes | |
| Paintwork | 7024 | C2 standard |
| Thermal protections | n/a | |

| Site conditions | |
|---|---|
| Ambient temperature | from -20°C to +40°C |
| Altitude above sea level | 1000 m |

| Mechanical data | | | | | | |
|---|---|---|---|---|---|---|
| Noise level | LpA | 75 | dB(A) | Bearing DE side | 6205-2RS-C3 | |
| | LwA | 85 | dB(A) | Bearing NDE side | 6205-2RS-C3 | |
| Moment of inertia | 0.00297 | | Kgm² | Average bearing lifetime | 40000 | h |
| Bearings type | | | NSK | Relubrication interval L1 DE bearing | - | h |
| Lubricants for bearings | See installation and maintenance manual | | | Relubrication interval L1 NDE bearing | - | h |
| | | | | Compensation ring | NDE SIDE | standard |

There may be differences between rating plate and calculated values.

# Type Test Report

Type：T2A90L2-2 Voltage：400/230 V
Output：3 kW Connection：Y/Δ
Frequency：50 Hz Duty：S1

| Test Item | | Result | | | |
|---|---|---|---|---|---|
| 1. | Efficiency % | 85.1 | | | |
| 2. | Power Factor | 0.850 | | | |
| 3. | Tem. Rise of Stator Winding K | 75 | | | |
| 4. | Vibration mm/s | | | | |
| 5. | Noise Lp dB（A）（Lw） | | | | |
| 6. | Breakdown Torque/Rated Torque | 3.42 | | | |
| 7. | Pullup Torque/Rated Torque | 2.34 | | | |
| 8. | Locked Rotor Tor./Rated Tor. | 3.51 | | | |
| 9. | Locked Rotor Cur./Rated Cur. | 7.91 | | | |
| 10. | High Voltage Test V | 1800 | | | |
| 11. | Hot Insulation Res. of Stator Winding MΩ | 300. | | | |
| 12. | Temperature of Bearing℃ | 59 | | | |
| 13. | Unbalance of Current % | 2.97 | | | |
| 14. | Full Load line Current A | 5.986 | | | |
| 15. | Full Load input W | 3526 | | | |
| 16. | Full Load torque Nm | 9.848 | | | |
| 17. | Max.temp.of enclosure surface ℃ | 56.5 | | | |
| 18. | No Load Current A | 3.217 | | | |
| 19. | Slip % | 3.807 | | | |
| 20. | Stator Winding phase resistance Ω（95℃） | 2.1675 | | | |
| 21. | Stray Load Loss W | 53.77 | | | |
| 22. | No Load Stator Power W | 170.8 | | | |
| 23. | Core Loss W | 90.31 | | | |
| 24. | Friction & Windage Loss W | 21.14 | | | |
| 25. | Locked Rotor Power W | 26122 | | | |
| 26. | Stator I ii R Loss W | 238.7 | | | |
| 27. | Rotor I ii R Loss W | 121.7 | | | |
| 28 | Locked Rotor Voltage 100.0V | Current A | 8.524 | Power W | 978.4 |
| Remark： 75%eff：86.25 50%eff：85.60 | | | | | |

Check: Operator:

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# Torque - Speed Curve

Type:T2A90L2-2

Output:3 kW  Voltage:400/230 V

Frequency:50 Hz  Connection:Y/Δ