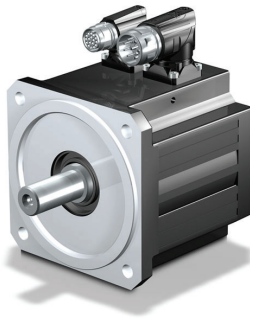
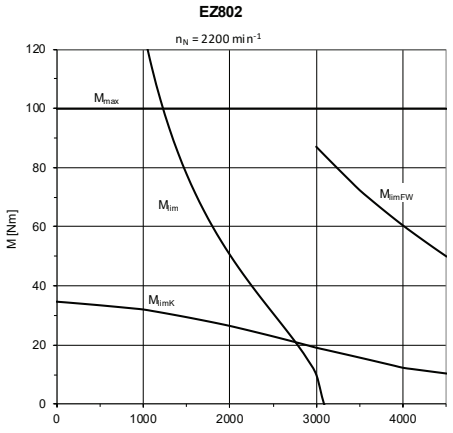
# EZ802 Servo Motor

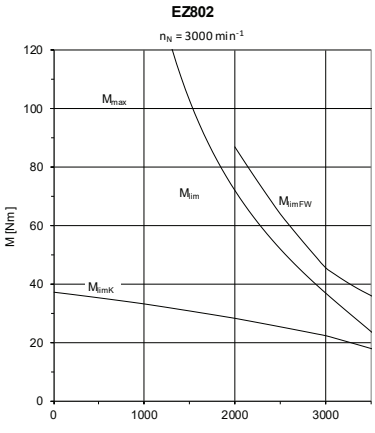
Technical Data Sheet



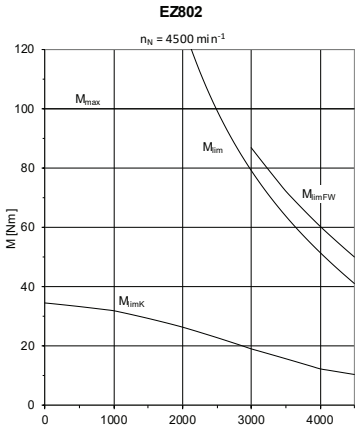
| | 3000 RPM | | 4500 RPM | | |
|---|---|---|---|---|---|
| | Convection | Fan | Convection | Fan | Units |
| **Model** | **EZ802U_136** | **EZ802B_136** | **EZ802U_090** | **EZ802B_090** | |
| **Max Bus Voltage** | 650 | 650 | 650 | 650 | VDC |
| **Number of Poles** | 16 | 16 | 16 | 16 | |
| **Back EMF** | 136 | 136 | 90 | 90 | V/rpm |
| **Nominal Torque** | 22.3 | 34.3 | 10.5 | 30.6 | Nm |
| **Nominal Current** | 13.9 | 26.5 | 11.2 | 30.5 | A |
| **Torque Factor** | 1.6 | 1.29 | 0.94 | 1.0 | Nm/A |
| **Rated Power** | 7 | 11 | 5 | 14 | kW |
| **Standstill Torque** | 37.1 | 47.9 | 34.5 | 47.4 | Nm |
| **Standstill Current** | 22.3 | 28.9 | 33.3 | 45.1 | A |
| **Torque Constant** | 1.68 | 1.67 | 1.05 | 1.06 | Nm |
| **Friction Torque** | 0.3 | 0.3 | 0.3 | 0.3 | Nm |
| **Max Torque** | 100 | 100 | 100 | 100 | Nm |
| **Max Current** | 84 | 84 | 135 | 135 | A |
| **Resistance** | 0.3 | 0.3 | 0.13 | 0.13 | ohms |
| **Inductance** | 5 | 5 | 1.9 | 1.9 | mH |
| **Electrical Time Constant** | 16.66 | 16.66 | 14.6 | 14.6 | ms |
| **Inertia** | 58 | 58 | 58 | 58 | $kgcm^2$ |
| **Weight** | 26.6 | 31.6 | 26.6 | 31.6 | kg |



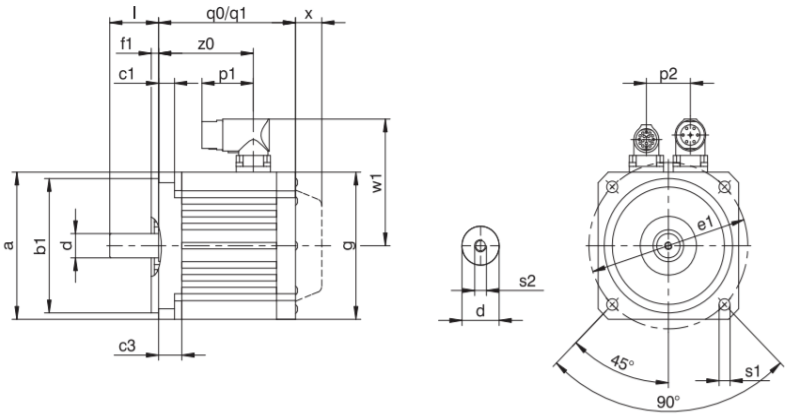

310 VDC




620 VDC



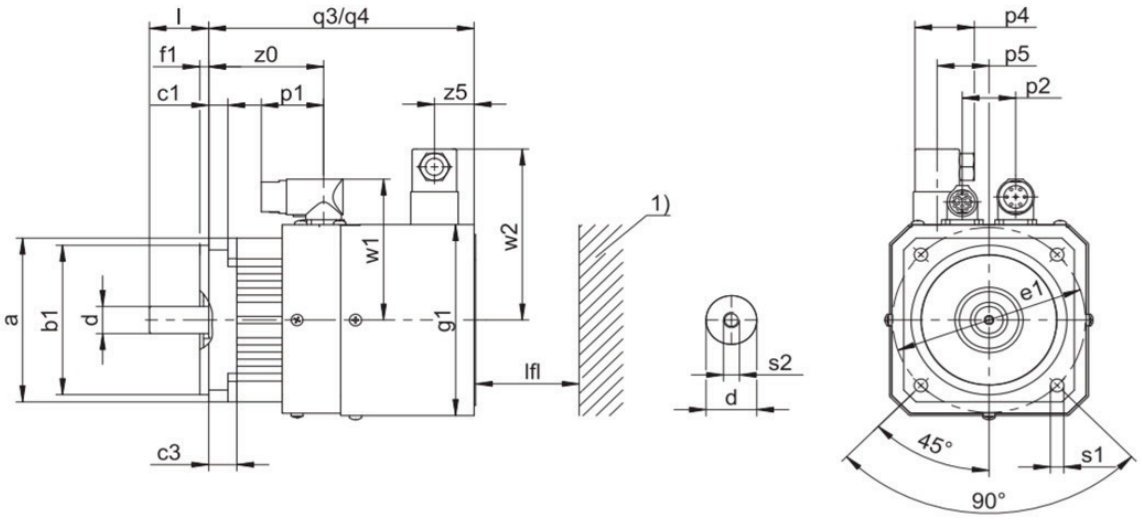

620 VDC




## Table 1 EZ802 With Convection Cooling Dimensions (mm)

| | a | b1 | c1 | c3 | d | e1 | f1 | g | l | p1 | p2 | q0[1)] | q1[2)] | s1 | s2 | w1 | x[3)] | z0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EZ802U | 190 | $180_{j6}$ | 15 | 25 | $32_{k6}$ | 215 | 3.5 | 190 | 58 | 71 | 60 | 222 | 299 | 13.5 | M12 | 156.5 | 22 | 168 |

*1) q0 applies to motors without holding brake.*
*2) q1 applies to motors with holding brake.*
*3) x applies to encoders based on an optical measuring principle.*




## Table 2 EZ802 With Forced Ventilation Dimensions (mm)

| | a | b1 | c1 | c3 | d | e1 | f1 | g1 | l | $lfl_{min}$ | p1 | p2 | p4 | p5 | q3[1)] | q4[2)] | s1 | s2 | w1 | w2 | z0 | z5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EZ802B | 190 | $180_{j6}$ | 15 | 25 | $32_{k6}$ | 215 | 3.5 | 215 | 58 | 30 | 71 | 60 | 37.5 | 62 | 322 | 399 | 13.5 | M12 | 156.5 | 160 | 168 | 40 |

*1) q3 applies to motors without holding brake.*
*2) q4 applies to motors with holding brake.*
*3) 1) applies to machine wall*