

**Engineering motordata (WIN 1217)**

|                                   |                            |
|-----------------------------------|----------------------------|
| DC bus voltage                    | 560 V DC                   |
| Nominal AC voltage                | 380 V AC (rms)             |
| Rated voltage                     | 245 V AC (rms)             |
| Rated power                       | 358 W                      |
| Rated speed                       | 4500 rpm                   |
| Rated torque                      | 0.76 Nm                    |
| Rated current                     | 1.15 A (rms)               |
| Peak torque                       | 2.4 Nm                     |
| Peak current                      | 4.3 A (rms)                |
| Stall torque                      | 0.95 Nm                    |
| Stall current                     | 1.17 A (rms)               |
| No load speed                     | 7690 rpm                   |
| EMF constant ±10%                 | 49 V AC (rms)<br>/ 1000rpm |
| Theoretical torque constant ±10%  | 0.81 Nm / A<br>(rms)       |
| Torque constant ±10% @ rated load | 0.66 Nm / A<br>(rms)       |
| Number of poles                   | 10                         |
| Electrical time constant          | 1.97 ms                    |
| Winding terminal resistance       | 17.255 Ω                   |
| Rotary field terminal inductance  | 34 mH                      |

**Customs info**

|         |          |
|---------|----------|
| HS Code | 85015100 |
|---------|----------|

**Mechanical motor data (setting 48)**

|                       |                       |
|-----------------------|-----------------------|
| Max mechanical speed  | 12000 rpm             |
| Mech. time constant   | 2.27 ms               |
| Thermal time constant | 25 min                |
| Rotor inertia         | 0.5 kgcm <sup>2</sup> |
| Protection            | IP64                  |
| Color                 | RAL 9005              |
| Cooling               | Convection            |
| Motor-only mass       | 2.5 kg                |

**Sensors**

|             |                                        |
|-------------|----------------------------------------|
| Temperature | PT1000 {PT1000}                        |
| Feedback    | EDM35 (HDSL) multi-turn,<br>20+12 bits |

### Gearbox engineering data

|                       |              |
|-----------------------|--------------|
| Gear ratio            | 57           |
| Efficiency            | 70 %*        |
| Torsional stiffness   | 8 Nm/arcmin  |
| Rated output torque   | 50 Nm        |
| Max output torque     | 125 Nm       |
| Rated input speed     | 2000 rpm     |
| Max input speed       | 5000 rpm     |
| Operating temperature | <-25; 50> °C |
| Max. backlash         | < 0.5 arcmin |
| Service life          | 6000 h       |

\* at rated speed & torque

### Lubrication

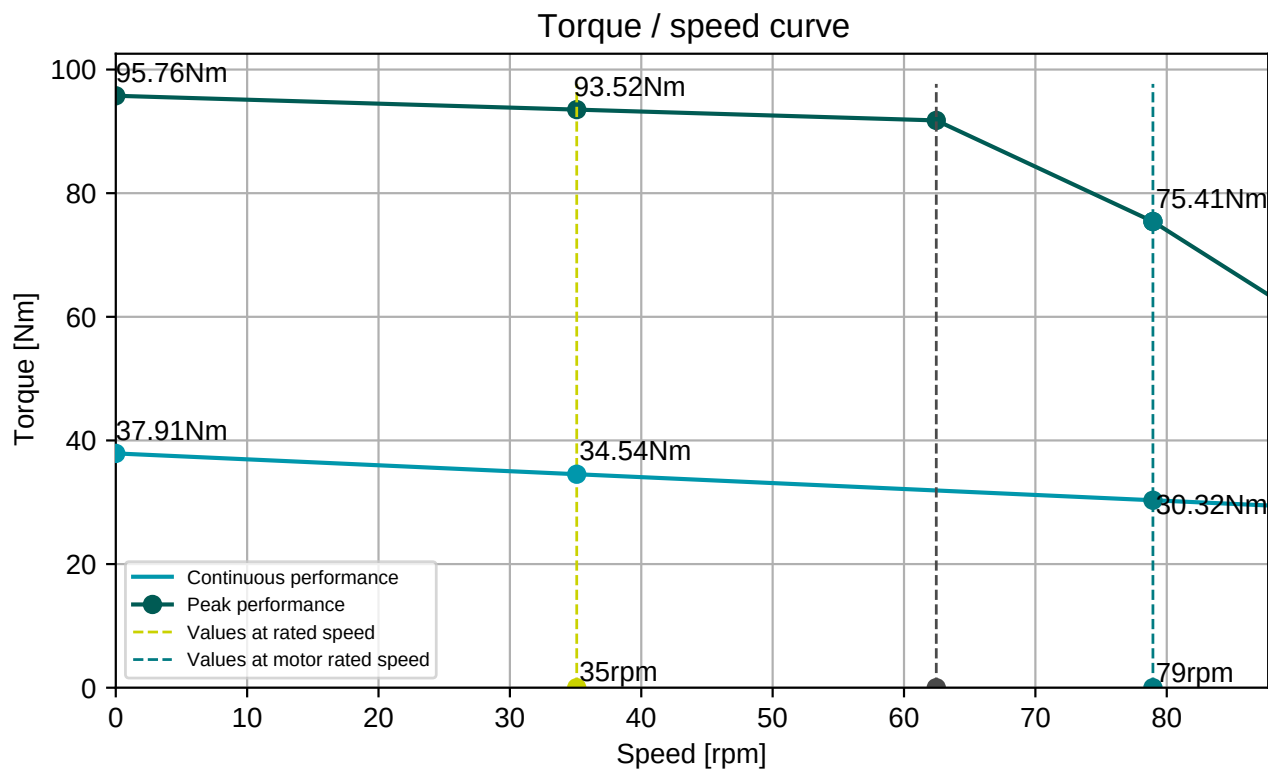
|           |              |
|-----------|--------------|
| Type      | Standard     |
| Lubricant | Mobil SHC150 |

### Gearbox mechanical data

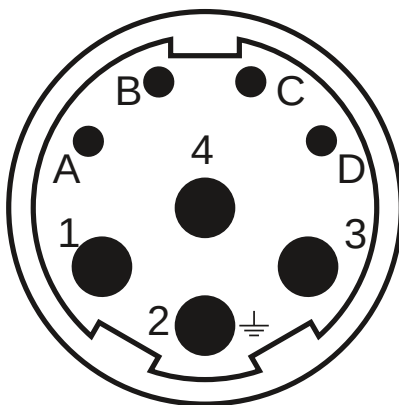
|                     |                         |
|---------------------|-------------------------|
| Max. radial force   | 2800 N                  |
| Max. axial force    | 4100 N                  |
| Output shaft design | Flange                  |
| Mass                | 1.35 kg                 |
| Input inertia       | 0.061 kgcm <sup>2</sup> |
| Protection          | IP64                    |

### Actuator data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Rated speed                          | 35 rpm                         |
| Rated torque                         | 34.54 Nm                       |
| Peak torque                          | 95.76 Nm                       |
| EMF constant ±10%                    | 2793.0 V AC (rms)<br>/ 1000rpm |
| Torque constant ±10% @<br>rated load | 26.37 Nm / A<br>(rms)          |
| Total mass                           | 3.85 kg                        |
| Output inertia                       | 1822.7 kgcm <sup>2</sup>       |


**BGC110N00001216000**

M23, 8 poles, rotary


**Connector 1 (283)**

|          |          |
|----------|----------|
| <b>1</b> | U        |
| <b>4</b> | V        |
| <b>3</b> | W        |
| <b>2</b> | PE       |
| <b>A</b> | Brake+   |
| <b>B</b> | Brake-   |
| <b>C</b> | GND/DSL- |
| <b>D</b> | +Us/DSL+ |

