

**Engineering motordata (WIN 1435)**

|                                      |                              |
|--------------------------------------|------------------------------|
| DC bus voltage                       | 560 V DC                     |
| Nominal AC voltage                   | 380 V AC (rms)               |
| Rated voltage                        | 115 V AC (rms)               |
| Rated power                          | 113 W                        |
| Rated speed                          | 4500 rpm                     |
| Rated torque                         | 0.24 Nm                      |
| Rated current                        | 0.93 A (rms)                 |
| Peak torque                          | 1 Nm                         |
| Peak current                         | 4 A (rms)                    |
| Stall torque                         | 0.26 Nm                      |
| Stall current                        | 0.9 A (rms)                  |
| No load speed                        | 21190 rpm                    |
| EMF constant ±10%                    | 17.5 V AC (rms)<br>/ 1000rpm |
| Theoretical torque<br>constant ±10%  | 0.289 Nm / A<br>(rms)        |
| Torque constant ±10%<br>@ rated load | 0.258 Nm / A<br>(rms)        |
| Number of poles                      | 6                            |
| Electrical time constant             | 1.05 ms                      |
| Winding terminal<br>resistance       | 27.092 Ω                     |
| Rotary field terminal<br>inductance  | 28.4 mH                      |

**Customs info**

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

**Mechanical motor data (setting 48)**

|                       |                        |
|-----------------------|------------------------|
| Max mechanical speed  | 12000 rpm              |
| Mech. time constant   | 2.80 ms                |
| Thermal time constant | 12 min                 |
| Rotor inertia         | 0.05 kgcm <sup>2</sup> |
| Protection            | IP64                   |
| Color                 | RAL 9005               |
| Cooling               | Convection             |
| Motor-only mass       | 0.6 kg                 |

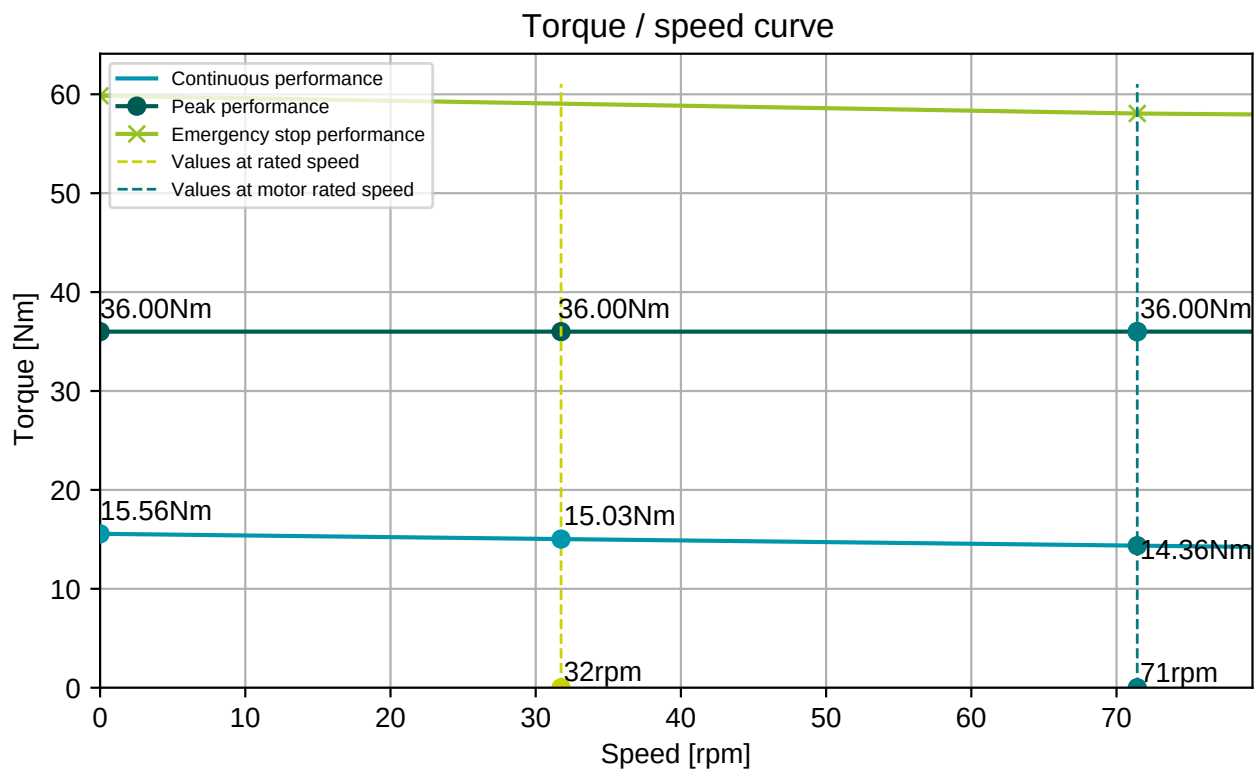
**Sensors**

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

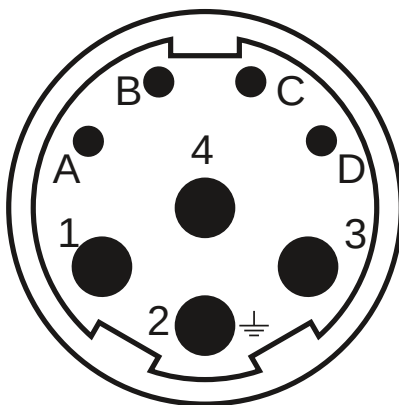
**Brake**

|                |                        |
|----------------|------------------------|
| Braking torque | 0.40 Nm                |
| Voltage        | 24 V DC                |
| Power @20°C    | 8.0 W                  |
| Current @20°C  | 0.33 A                 |
| Inertia        | 0.02 kgcm <sup>2</sup> |
| Mass           | 0.10 kg                |

| Gearbox engineering data  |                   | Gearbox mechanical data              |                                |
|---------------------------|-------------------|--------------------------------------|--------------------------------|
| Gear ratio                | 63                | Max. radial force                    | 1440 N                         |
| Efficiency                | 95 %*             | Max. axial force                     | 1900 N                         |
| Torsional stiffness       | 2.5 Nm/arcmin     | Output shaft design                  | Flange                         |
| Rated output torque       | 18 Nm             | Mass                                 | 0.47 kg                        |
| Max output torque         | 36 Nm             | Input inertia                        | 0.007 kgcm <sup>2</sup>        |
| Emergency output torque   | 90 Nm             | Protection                           | IP64                           |
| Rated input speed         | 2000 rpm          | Actuator data                        |                                |
| Max input speed           | 5000 rpm          | Rated speed                          | 32 rpm                         |
| Operating temperature     | <-25; 50> °C      | Rated torque                         | 15.03 Nm                       |
| Max. backlash             | < 1.5 arcmin      | Peak torque                          | 36.00 Nm                       |
| Service life              | 6000 h            | Emergency stop torque                | 63.00 Nm                       |
| * at rated speed & torque |                   | EMF constant ±10%                    | 1102.5 V AC (rms)<br>/ 1000rpm |
|                           |                   | Torque constant ±10% @<br>rated load | 15.45 Nm / A<br>(rms)          |
| Lubrication               |                   | Total mass                           | 1.17 kg                        |
| Type                      | Standard          | Output inertia                       | 226.2 kgcm <sup>2</sup>        |
| Lubricant                 | TRIBOL GR TT 1 PD |                                      |                                |


**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+ |

