

**Engineering data (WIN 712)**

|                                   |                            |
|-----------------------------------|----------------------------|
| DC bus voltage                    | 320 V DC                   |
| Nominal AC voltage                | 220 V AC (rms)             |
| Rated voltage                     | 161 V AC (rms)             |
| Rated power                       | 2.4 kW                     |
| Rated speed                       | 3000 rpm                   |
| Rated torque                      | 7.70 Nm                    |
| Rated current                     | 10.84 A (rms)              |
| Peak torque                       | 28.8 Nm                    |
| Peak current                      | 49.2 A (rms)               |
| Stall torque                      | 9.6 Nm                     |
| Stall current                     | 10.7 A (rms)               |
| No load speed                     | 4060 rpm                   |
| EMF constant ±10%                 | 54 V AC (rms)<br>/ 1000rpm |
| Theoretical torque constant ±10%  | 0.89 Nm / A<br>(rms)       |
| Torque constant ±10% @ rated load | 0.71 Nm / A<br>(rms)       |
| Number of poles                   | 10                         |
| Electrical time constant          | 6.10 ms                    |
| Winding terminal resistance       | 0.59 Ω                     |
| Rotary field terminal inductance  | 3.6 mH                     |

**Customs info**

|         |          |
|---------|----------|
| HS Code | 85015220 |
|---------|----------|

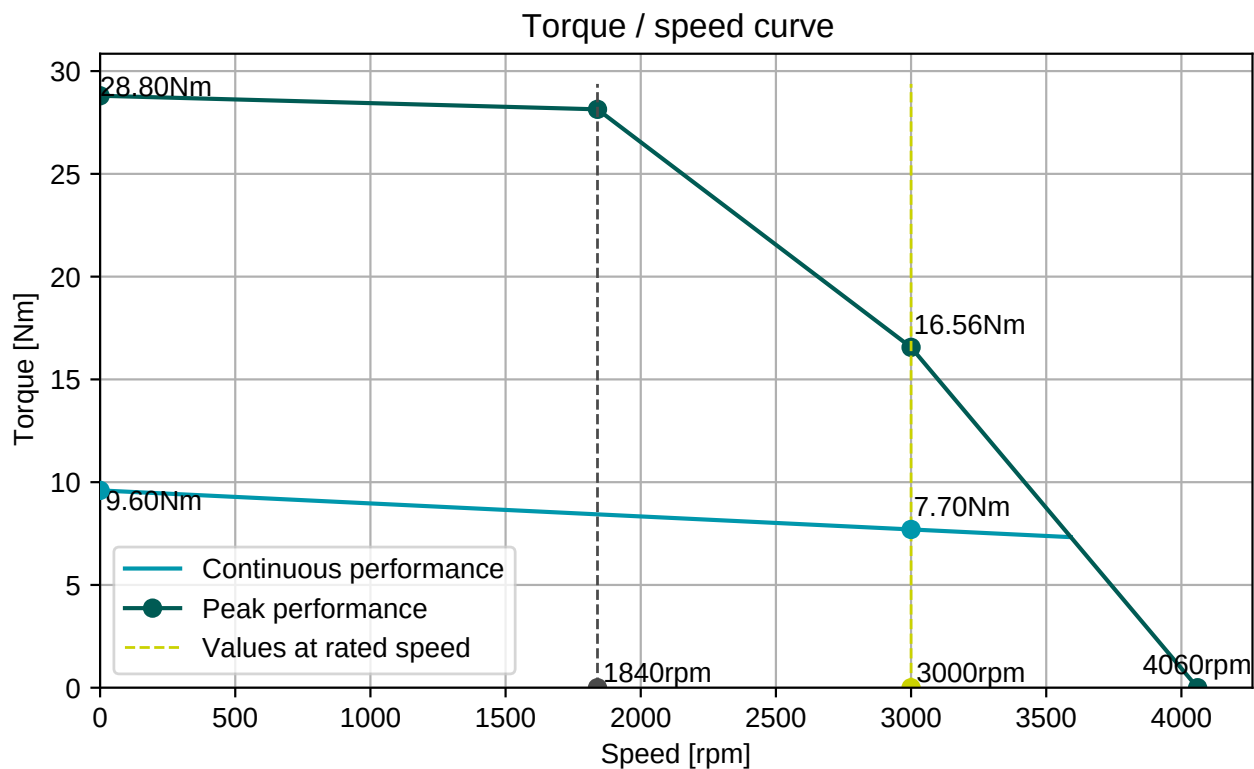
**Mechanical data (setting 46)**

|                         |                        |
|-------------------------|------------------------|
| Max mechanical speed    | 9000 rpm               |
| Mech. time constant     | 0.58 ms                |
| Thermal time constant   | 35 min                 |
| Rotor inertia           | 4.49 kgcm <sup>2</sup> |
| Protection              | IP64                   |
| Color                   | RAL 9005               |
| Cooling                 | Convection             |
| Motor-only mass         | 6.4 kg                 |
| Max. axial force 20kh   | 131 N                  |
| Max. radial force 20kh  | 689 N*                 |
| Max. axial force 100kh  | 77 N                   |
| Max. radial force 100kh | 403 N*                 |

\* Defined for point of action at ½ output shaft length

**Sensors**

|             |                                               |
|-------------|-----------------------------------------------|
| Temperature | PT1000 {PT1000}                               |
| Feedback    | SKS36 (Hiperface) single-turn,<br>128 sin/cos |


**BGC110N00001216000**

M23, 8 poles, rotary


**AGC113N00001215000**

M23, 17 poles, rotary


**Connector 1 (9)**

|   |        |
|---|--------|
| 1 | U      |
| 4 | V      |
| 3 | W      |
| 2 | PE     |
| A | Brake+ |
| B | Brake- |
| C |        |
| D |        |

**Connector 2 (130)**

|      |            |
|------|------------|
| 1/9  | SIN/REFSIN |
| 3/11 | COS/REFCOS |
| 5/13 | DATA/DATA- |
| 4/2  | Us/GND     |
| 14/7 | Therm      |

