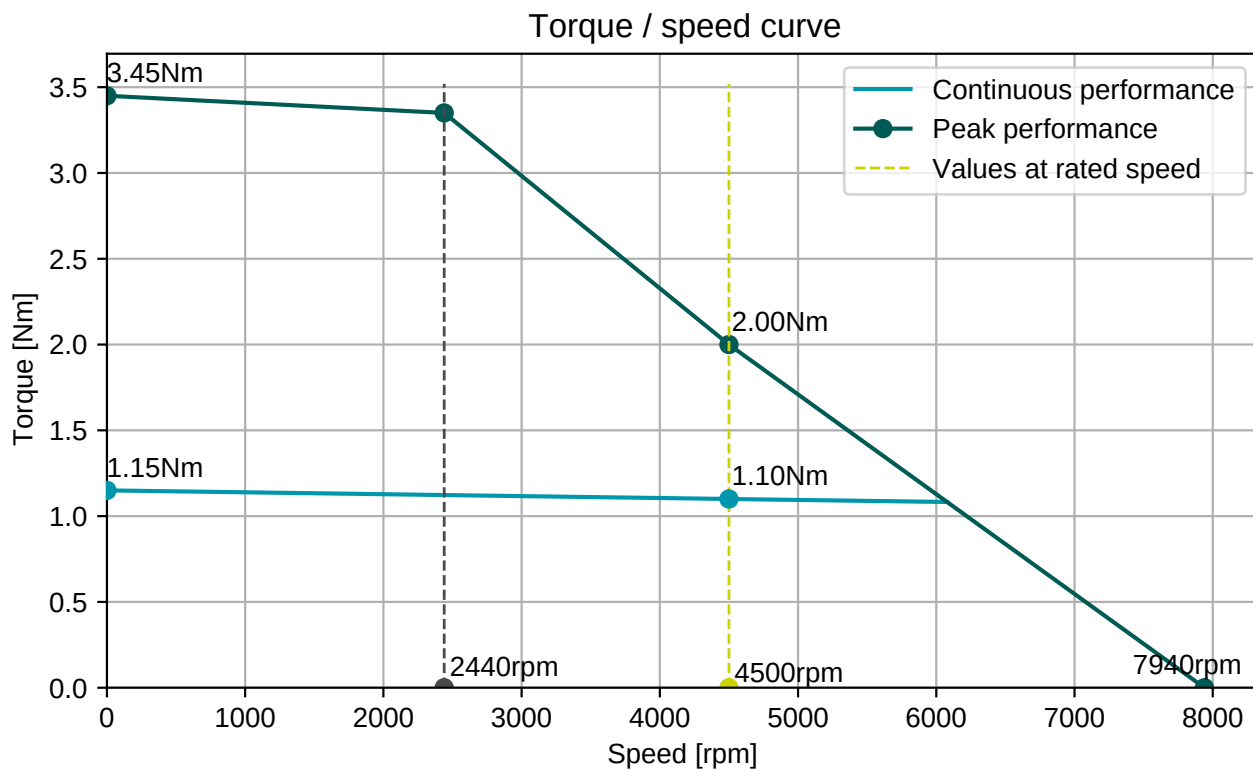


| Engineering data (WIN 960)        |                              | Mechanical data (setting 5)                            |                                                        |
|-----------------------------------|------------------------------|--------------------------------------------------------|--------------------------------------------------------|
| DC bus voltage                    | 320 V DC                     | Max mechanical speed                                   | 12000 rpm                                              |
| Nominal AC voltage                | 220 V AC (rms)               | Mech. time constant                                    | 1.39 ms                                                |
| Rated voltage                     | 154 V AC (rms)               | Thermal time constant                                  | 21 min                                                 |
| Rated power                       | 518 W                        | Rotor inertia                                          | 0.31 kgcm <sup>2</sup>                                 |
| Rated speed                       | 4500 rpm                     | Protection                                             | IP64                                                   |
| Rated torque                      | 1.10 Nm                      | Color                                                  | RAL 9005                                               |
| Rated current                     | 2.94 A (rms)                 | Cooling                                                | Convection                                             |
| Peak torque                       | 3.45 Nm                      | Motor-only mass                                        | 1.5 kg                                                 |
| Peak current                      | 11.1 A (rms)                 | Max. axial force 20kh                                  | 50 N                                                   |
| Stall torque                      | 1.15 Nm                      | Max. radial force 20kh                                 | 261 N*                                                 |
| Stall current                     | 2.53 A (rms)                 | Max. axial force 100kh                                 | 29 N                                                   |
| No load speed                     | 7940 rpm                     | Max. radial force 100kh                                | 153 N*                                                 |
| EMF constant ±10%                 | 27.5 V AC (rms)<br>/ 1000rpm | * Defined for point of action at ½ output shaft length |                                                        |
| Theoretical torque constant ±10%  | 0.45 Nm / A (rms)            | Sensors                                                |                                                        |
| Torque constant ±10% @ rated load | 0.37 Nm / A (rms)            | Temperature                                            | PT1000 {PT1000}                                        |
| Number of poles                   | 10                           | Feedback                                               | 2-pole resolver ( ER5Kd411, TS2620N21E11, RE-15-1-A15) |
| Electrical time constant          | 2.23 ms                      | Brake                                                  |                                                        |
| Winding terminal resistance       | 5.37 Ω                       | Braking torque                                         | 4.50 Nm                                                |
| Rotary field terminal inductance  | 12 mH                        | Voltage                                                | 24 V DC                                                |
| <b>Customs info</b>               |                              | Power @20°C                                            | 12.0 W                                                 |
| HS Code                           | 85015100                     | Current @20°C                                          | 0.50 A                                                 |
|                                   |                              | Inertia                                                | 0.20 kgcm <sup>2</sup>                                 |
|                                   |                              | Mass                                                   | 0.47 kg                                                |


**BGC110N00001216000**

M23, 8 poles, rotary


**AGC052N00001215000**

M23, 12 poles, rotary


**Connector 1 (9)**

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

**Connector 2 (10)**

|   |        |
|---|--------|
| 2 | Therm+ |
| 3 | S4     |
| 4 | S3     |
| 5 | R2     |
| 6 | Therm- |
| 7 | S2     |
| 8 | S1     |
| 9 | R1     |

