

**Engineering data (WIN 745)**

|                                      |                              |
|--------------------------------------|------------------------------|
| DC bus voltage                       | 320 V DC                     |
| Nominal AC voltage                   | 220 V AC (rms)               |
| Rated voltage                        | 172 V AC (rms)               |
| Rated power                          | 401 W                        |
| Rated speed                          | 4500 rpm                     |
| Rated torque                         | 0.85 Nm                      |
| Rated current                        | 1.7 A (rms)                  |
| Peak torque                          | 3.8 Nm                       |
| Peak current                         | 8.4 A (rms)                  |
| Stall torque                         | 0.95 Nm                      |
| Stall current                        | 1.82 A (rms)                 |
| No load speed                        | 6950 rpm                     |
| EMF constant ±10%                    | 31.5 V AC (rms)<br>/ 1000rpm |
| Theoretical torque<br>constant ±10%  | 0.52 Nm / A<br>(rms)         |
| Torque constant ±10%<br>@ rated load | 0.50 Nm / A<br>(rms)         |
| Number of poles                      | 6                            |
| Electrical time constant             | 1.46 ms                      |
| Winding terminal<br>resistance       | 13.05 Ω                      |
| Rotary field terminal<br>inductance  | 19 mH                        |

**Customs info**

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

**Mechanical data (setting 49)**

|                         |                        |
|-------------------------|------------------------|
| Max mechanical speed    | 12000 rpm              |
| Mech. time constant     | 0.92 ms                |
| Thermal time constant   | 18 min                 |
| Rotor inertia           | 0.11 kgcm <sup>2</sup> |
| Protection              | IP64                   |
| Color                   | RAL 9005               |
| Cooling                 | Convection             |
| Max. axial force 20kh   | 44 N                   |
| Max. radial force 20kh  | 230 N*                 |
| Max. axial force 100kh  | 26 N                   |
| Max. radial force 100kh | 135 N*                 |

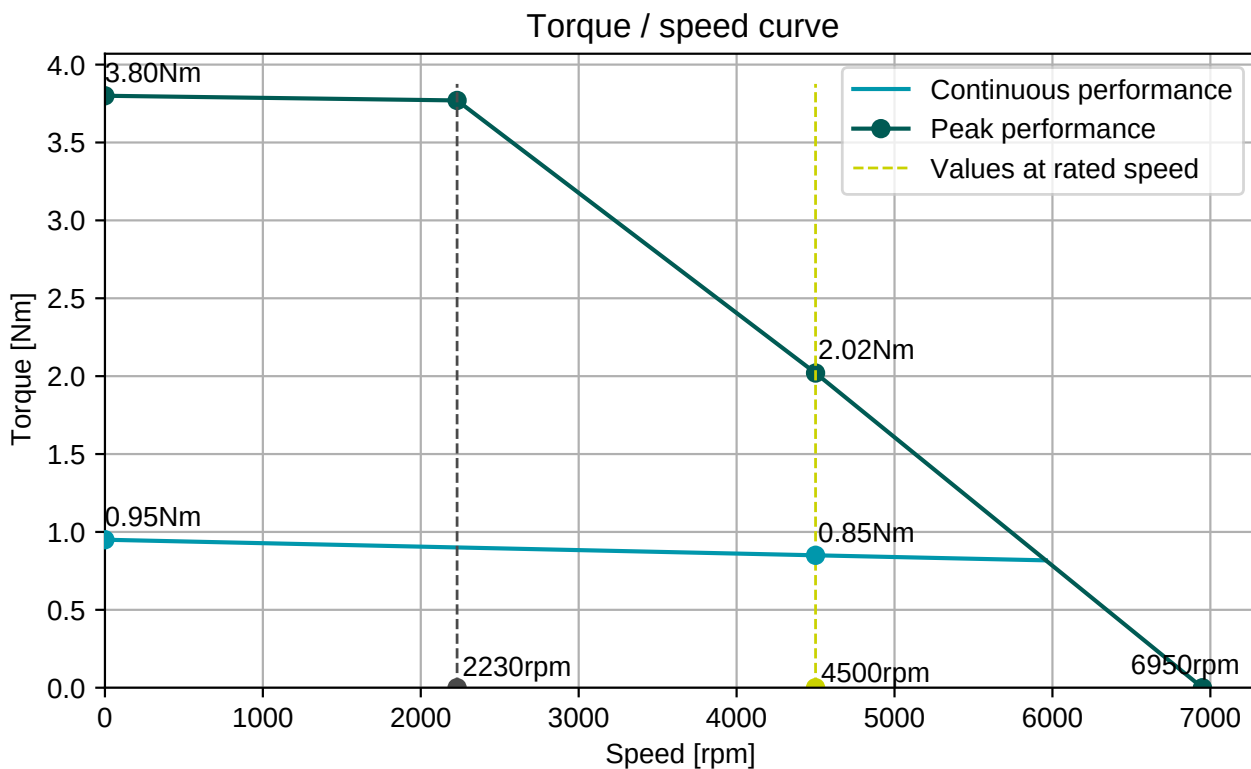
\* Defined for point of action at ½ output shaft length

**Sensors**

|             |                                                     |
|-------------|-----------------------------------------------------|
| Temperature | PTC 111-K13 {PTC 111-K13<br>Reissmann}              |
| Feedback    | SKM36 (Hiperface) multi-turn,<br>128 sin/cos+12bits |

**Brake**

|                |                        |
|----------------|------------------------|
| Braking torque | 2.00 Nm                |
| Voltage        | 24 V DC                |
| Power @20°C    | 11.0 W                 |
| Current @20°C  | 0.46 A                 |
| Inertia        | 0.08 kgcm <sup>2</sup> |
| Mass           | 0.20 kg                |


**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      |

