

**Engineering motordata (WIN 1309)**

|                                      |                            |
|--------------------------------------|----------------------------|
| DC bus voltage                       | 560 V DC                   |
| Nominal AC voltage                   | 380 V AC (rms)             |
| Rated voltage                        | 269 V AC (rms)             |
| Rated power                          | 1.3 kW                     |
| Rated speed                          | 3000 rpm                   |
| Rated torque                         | 4.00 Nm                    |
| Rated current                        | 3.16 A (rms)               |
| Peak torque                          | 15 Nm                      |
| Peak current                         | 15.8 A (rms)               |
| Stall torque                         | 4.4 Nm                     |
| Stall current                        | 3.28 A (rms)               |
| No load speed                        | 4680 rpm                   |
| EMF constant ±10%                    | 81 V AC (rms)<br>/ 1000rpm |
| Theoretical torque<br>constant ±10%  | 1.34 Nm / A<br>(rms)       |
| Torque constant ±10%<br>@ rated load | 1.27 Nm / A<br>(rms)       |
| Number of poles                      | 10                         |
| Electrical time constant             | 6.33 ms                    |
| Winding terminal<br>resistance       | 2.75 Ω                     |
| Rotary field terminal<br>inductance  | 17.4 mH                    |

**Customs info**

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

**Mechanical motor data (setting 5)**

|                       |                       |
|-----------------------|-----------------------|
| Max mechanical speed  | 9000 rpm              |
| Mech. time constant   | 1.25 ms               |
| Thermal time constant | 30 min                |
| Rotor inertia         | 4.7 kgcm <sup>2</sup> |
| Protection            | IP64                  |
| Color                 | RAL 9005              |
| Cooling               | Convection            |

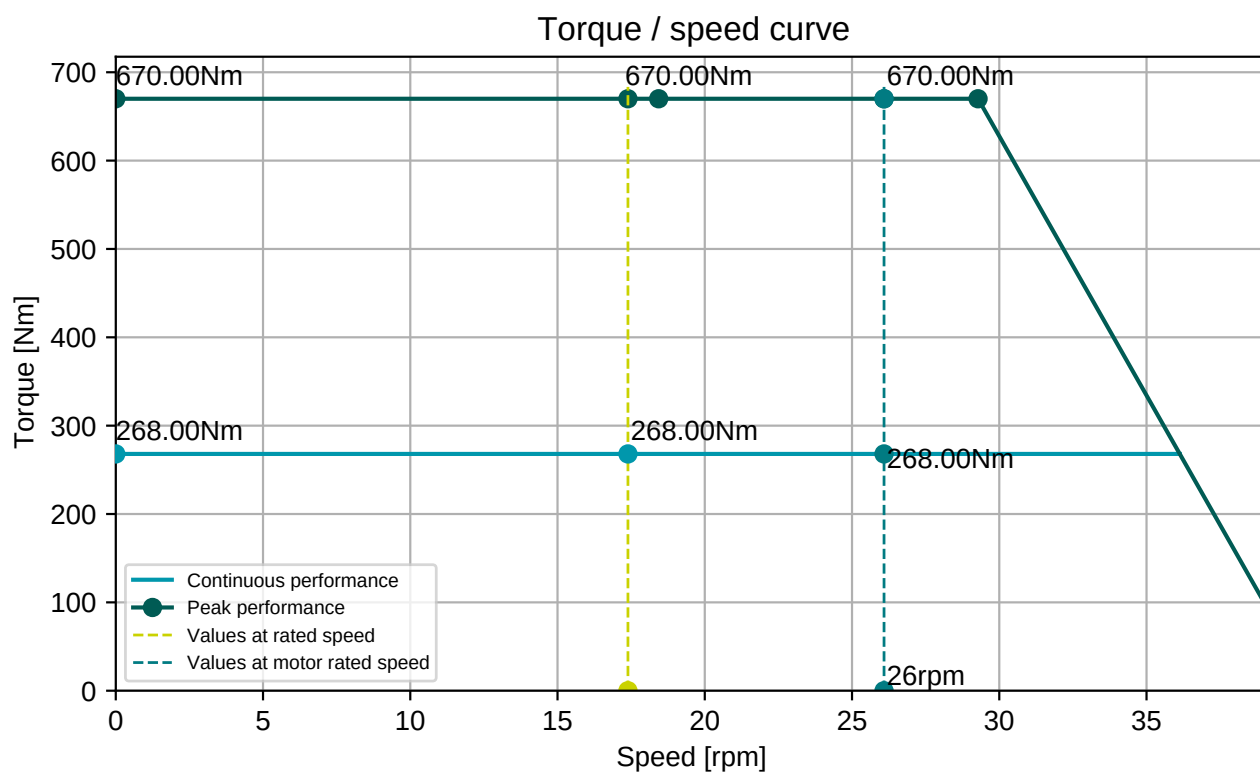
**Sensors**

|             |                                                           |
|-------------|-----------------------------------------------------------|
| Temperature | PT1000 {PT1000}                                           |
| Feedback    | 2-pole resolver ( ER5Kd411,<br>TS2620N21E11, RE-15-1-A15) |

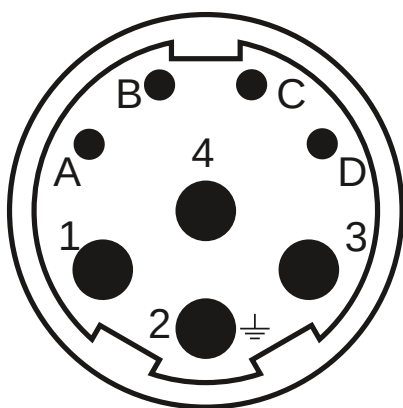
**Brake**

|                |                        |
|----------------|------------------------|
| Braking torque | 18.00 Nm               |
| Voltage        | 24 V DC                |
| Power @20°C    | 24.0 W                 |
| Current @20°C  | 1.00 A                 |
| Inertia        | 2.00 kgcm <sup>2</sup> |
| Mass           | 1.80 kg                |

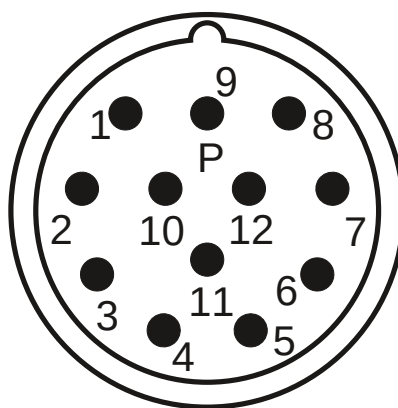
| Gearbox engineering data  |                                     | Gearbox mechanical data              |                                |
|---------------------------|-------------------------------------|--------------------------------------|--------------------------------|
| Gear ratio                | 115                                 | Max. radial force                    | 11500 N                        |
| Efficiency                | 70 %*                               | Max. axial force                     | 17000 N                        |
| Torsional stiffness       | 22 Nm/arcmin                        | Output shaft design                  | Flange                         |
| Rated output torque       | 268 Nm                              | Mass                                 | 7.6 kg                         |
| Max output torque         | 670 Nm                              | Input inertia                        | 5.5 kgcm <sup>2</sup>          |
| Rated input speed         | 2000 rpm                            | Protection                           | IP64                           |
| Max input speed           | 4500 rpm                            | <b>Actuator data</b>                 |                                |
| Operating temperature     | <-25; 50> °C                        | Rated speed                          | 17 rpm                         |
| Max. backlash             | < 1 arcmin                          | Rated torque                         | 268.00 Nm                      |
| Service life              | 6000 h                              | Peak torque                          | 670.00 Nm                      |
| * at rated speed & torque |                                     | EMF constant ±10%                    | 9315.0 V AC (rms)<br>/ 1000rpm |
| Lubrication               |                                     | Torque constant ±10% @<br>rated load | 101.90 Nm / A<br>(rms)         |
| Type                      | Standard                            | Output inertia                       | 134895.0 kgcm <sup>2</sup>     |
| Lubricant                 | Grease Castrol TRIBOL GR TT 1<br>PD |                                      |                                |


**BEA120N00000200000**

M23, 8 poles, straight


**AEA052N00000201000**

M23, 12 poles, straight


**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     |

