

**Engineering motordata (WIN 1382)**

|                                   |                              |
|-----------------------------------|------------------------------|
| DC bus voltage                    | 36 V DC                      |
| Nominal AC voltage                | 25 V AC (rms)                |
| Rated voltage                     | 21 V AC (rms)                |
| Rated power                       | 113 W                        |
| Rated speed                       | 4500 rpm                     |
| Rated torque                      | 0.24 Nm                      |
| Rated current                     | 5.2 A (rms)                  |
| Peak torque                       | 1 Nm                         |
| Peak current                      | 22.2 A (rms)                 |
| Stall torque                      | 0.26 Nm                      |
| Stall current                     | 5 A (rms)                    |
| No load speed                     | 7750 rpm                     |
| EMF constant ±10%                 | 3.13 V AC (rms)<br>/ 1000rpm |
| Theoretical torque constant ±10%  | 0.052 Nm / A (rms)           |
| Torque constant ±10% @ rated load | 0.046 Nm / A (rms)           |
| Number of poles                   | 6                            |
| Electrical time constant          | 1.05 ms                      |
| Winding terminal resistance       | 0.855 Ω                      |
| Rotary field terminal inductance  | 0.9 mH                       |

**Customs info**

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

**Mechanical motor data (setting 48)**

|                       |                        |
|-----------------------|------------------------|
| Max mechanical speed  | 12000 rpm              |
| Mech. time constant   | 2.76 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                 |

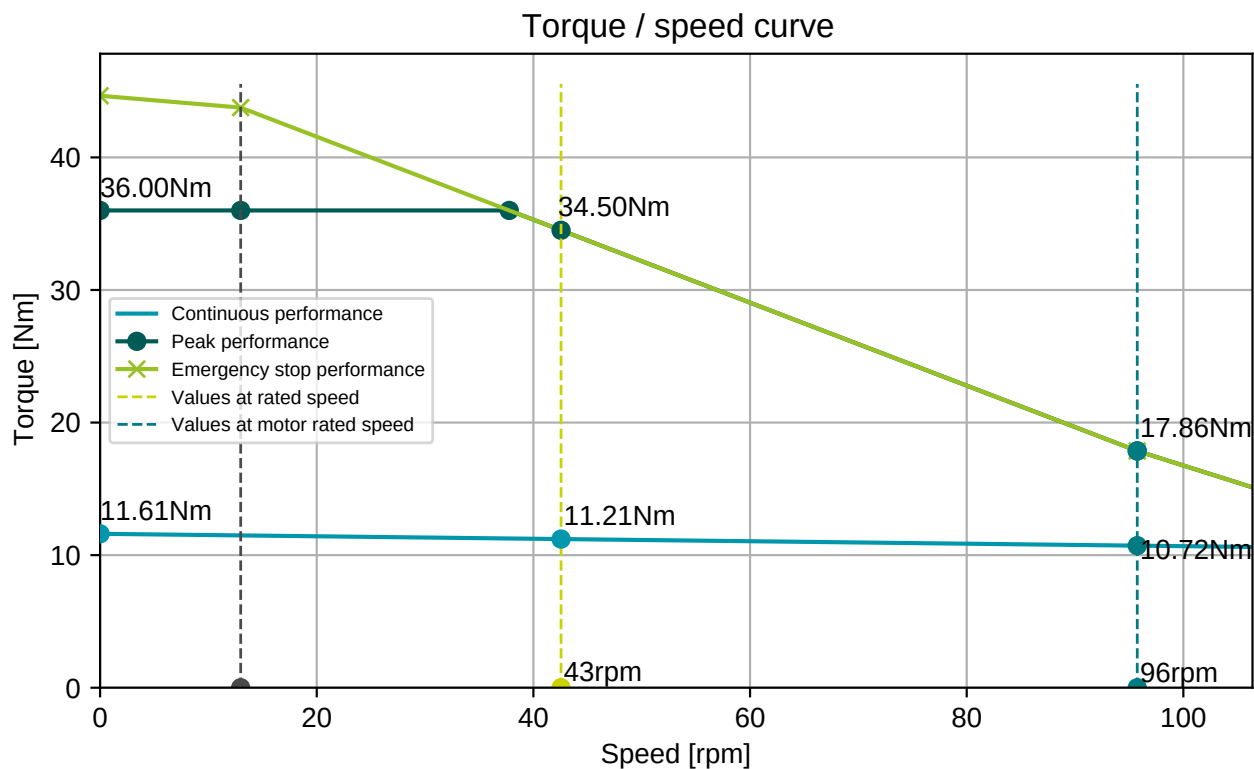
**Sensors**

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

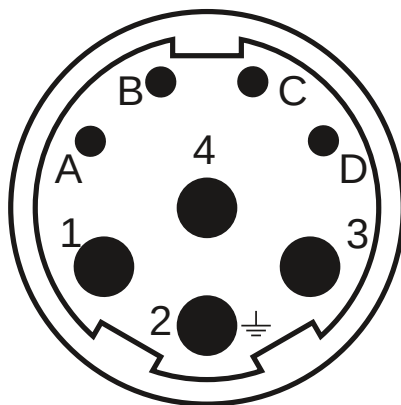
**Brake**

|                |                        |
|----------------|------------------------|
| 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                |

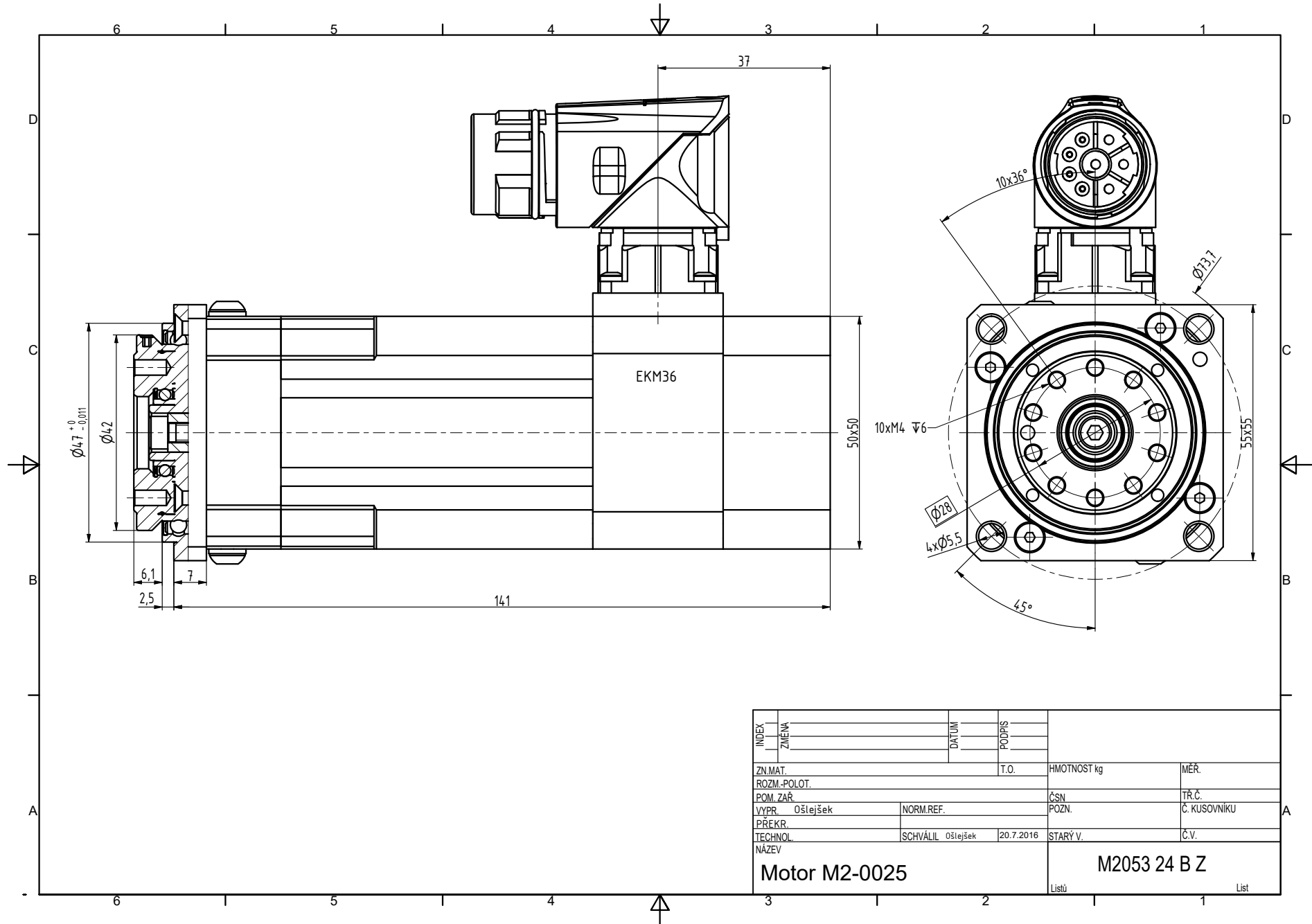
| Gearbox engineering data             |                   | Gearbox mechanical data              |                               |
|--------------------------------------|-------------------|--------------------------------------|-------------------------------|
| Gear ratio                           | 47                | 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                          | 43 rpm                        |
| Operating temperature                | <-25; 50> °C      | Rated torque                         | 11.21 Nm                      |
| Max. backlash                        | < 1.5 arcmin      | Peak torque                          | 36.00 Nm                      |
| Service life                         | 6000 h            | Emergency stop torque                | 47.00 Nm                      |
| <i>* at rated speed &amp; torque</i> |                   | EMF constant ±10%                    | 147.1 V AC (rms)<br>/ 1000rpm |
| Lubrication                          |                   | Torque constant ±10% @<br>rated load | 2.06 Nm / A<br>(rms)          |
| Type                                 | Standard          | Total mass                           | 1.17 kg                       |
| Lubricant                            | TRIBOL GR TT 1 PD | Output inertia                       | 125.9 kgcm <sup>2</sup>       |


**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+ |



|               |                   |            |          |              |              |
|---------------|-------------------|------------|----------|--------------|--------------|
| INDEX         | ZMĚNA             | DATUM      | PODPIS   |              |              |
| ZN.MAT.       |                   | T.O.       |          | HMOTNOST kg  | MĚR.         |
| ROZM.-POLOT.  |                   |            |          | ČSN          | TR.Č.        |
| POM. ZAŘ.     |                   |            |          | POZN.        | Č. KUSOVNIKU |
| VYPR.         | Ošlejšek          | NORM. REF. |          |              |              |
| PŘEKR.        |                   |            |          |              |              |
| TECHNOL.      | SCHVÁLIL Ošlejšek | 20.7.2016  | STARÝ V. |              |              |
| NÁZEV         |                   |            |          | M2053 24 B Z |              |
| Motor M2-0025 |                   |            |          | Listů        | List         |