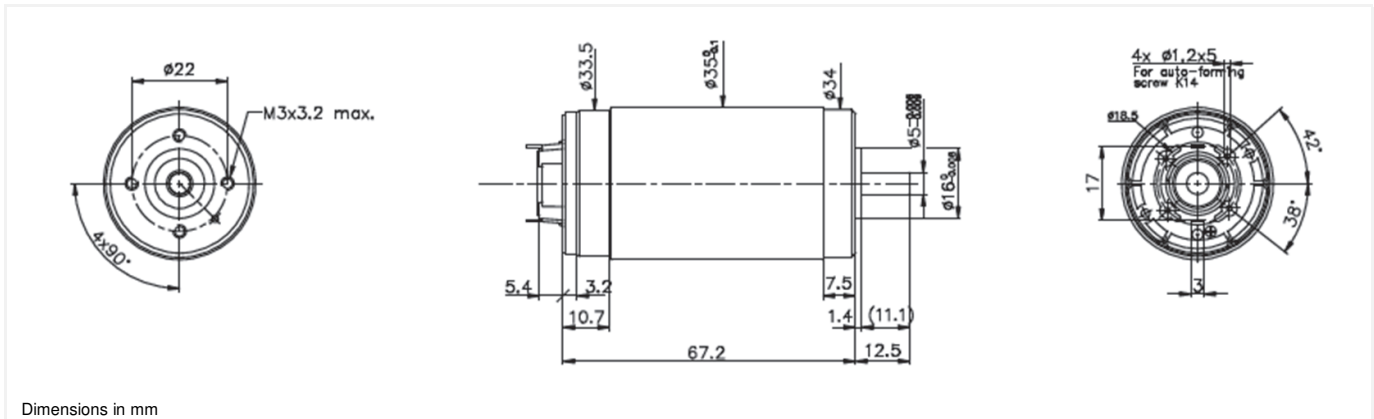


**35GLT2R82**

Graphite-Copper commutation

Ø35mm

160 mNm

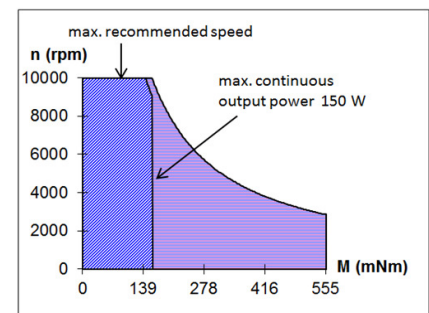


Dimensions in mm

**35GLT2R82 \*\*\*\* .1**

| Electrical Data                         | ****                | 426P          | 326P          | 234E               | 426SP   | 426E                      |                |
|---|---------------------|---------------|---------------|--------------------|---|---------------------------|----------------|
| 1 Nominal Voltage                       | V                   | 24            | 24            | 48                 | 48  | 90                        | Volt           |
| 2 No-Load Speed                         | $n_0$               | 6,260         | 5,835         | 7,490              | 6,175   | 5,439                     | rpm            |
| 3 No-Load Current                       | $I_0$               | 120.0         | 120.0         | 70.0               | 60.0  | 60.0                      | mA             |
| 4 Terminal Resistance                   | R                   | 0.7           | 0.9           | 2.3                | 2.5   | 9.5                       | $\Omega$       |
| 5 Output Power                          | $P_{2max}$          | 136.0         | 124.0         | 122.0              | 142.0   | 150.0                     | W              |
| 6 Stall Torque                          | mNm                 | 1327 (187.92) | 1043 (147.71) | 1300 (184.1)       | 1409 (199.54)   | 1487 (210.58)             | mNm (oz-in)    |
| 7 Efficiency                            | $\eta_{max}$        | 89            | 87            | 89                 | 89  | 85                        | %              |
| 8 Max Continuous Speed                  | $n_{e max}$         | 10,000        | 10,000        | 10,000             | 10,000  | 10,000                    | rpm            |
| 9 Max Continuous Torque                 | $M_{e max}$         | 142 (18.7)    | 132 (18.7)    | 130 (18.41)        | 150 (21.25)   | 160 (22.66)               | mNm (oz-in)    |
| 10 Max Continuous Current               | $I_{e max}$         | 4.20          | 3.50          | 2.20               | 2.10  | 1.05                      | A              |
| 11 Back-EMF Constant                    | $k_E$               | 3.82          | 4.09          | 6.39               | 7.75  | 16.44                     | mV/rpm         |
| 12 Torque Constant                      | $k_M$               | 36.50         | 39.10         | 61.00              | 74.00   | 157.00                    | mNm/A          |
| 13 Motor Regulation                     | $R/k^2$             | 0.5           | 0.6           | 0.6                | 0.46  | 0.39                      | $10^3/Nms$     |
| 14 Friction Torque                      | $T_F$               | 4.38 (0.63)   | 4.69 (0.67)   | 4.27 (0.61)        | 4.44 (0.63)   | 9.42 (1.34)               | mNm (oz-in)    |
| 15 Rotor Inductance                     | L                   | 0.10          | 0.15          | 0.25               | 0.40  | 1.70                      | mH             |
| 16 Mechanical Time Constant             | $t_m$               | 3.9           | 4.4           | 4.0                | 4.0   | 2.7                       | ms             |
| 17 Rotor Inertia                        | J                   | 83.00         | 75.00         | 65.00              | 85.00   | 70.00                     | $g \cdot cm^2$ |
| <b>General Data</b>                     |                     |               |               |                    |   |                           |                |
| 18 Thermal Resistance (rotor/body)      | $R_{th1} / R_{th2}$ |               |               |                    | 4/8   | $^\circ C/W$              |                |
| 19 Thermal Time Constant (rotor/stator) | $t_{w1} / t_{w2}$   |               |               |                    | 75/950  | S                         |                |
| 20 Operating Temperature Range:         | motor               |               |               |                    | -30 $^\circ C$ to 85 $^\circ C$ (-22 $^\circ F$ to 185 $^\circ F$ ) | $^\circ C$ ( $^\circ F$ ) |                |
|   | rotor               |               |               |                    | 100 $^\circ C$ (212 $^\circ F$ )                                    | $^\circ C$ ( $^\circ F$ ) |                |
| 21 Shaft Load Max.:                     |                     |               |               | With ball bearings |   |                           |                |
| (5mm from bearing)                      | -radial             |               |               |                    | 35.0 (125.9)  | N (oz)                    |                |
|   | -axial              |               |               |                    | 100 (359.6)   | N (oz)                    |                |
| 22 Shaft Play:                          | -radial             |               |               |                    | negligible  | mm (inch)                 |                |
|   | -axial              |               |               |                    | negligible  | mm (inch)                 |                |
| 23 Weight                               | g                   |               |               |                    | 360 (12.7)  | g (oz)                    |                |

| Execution Table |              |    |              |
|-----------------|--------------|----|--------------|
| Gearbox         | Single Shaft | E9 | HEDS         |
| R32             | 1            | 50 | Upon Request |
| R40             | 1            | 50 | Upon Request |



— Continuous working range  
— Temporary working range