



| MOTOR SPECIFICATION            |                                       |
|--------------------------------|---------------------------------------|
| No. of Poles                   | 6                                     |
| Rated Voltage                  | V DC 24                               |
| Current - Rated / Peak         | A 8 / 24                              |
| Resistance Line to Line        | $\pm 10\%$ $\Omega$ 0.24              |
| Inductance Line to Line (1kHz) | $\pm 20\%$ mH 0.29                    |
| Torque - Rated / Peak          | Nm 0.37 / 1.11                        |
| Torque Constant                | Nm/A 0.046                            |
| Back-EMF Constant              | $V_{rms}/krpm$ 3.8                    |
| Rated Power                    | W 135                                 |
| Speed - No Load / Rated        | $\pm 10\%$ rpm $\sqrt{2}$ 4500 / 3500 |
| Rotor Inertia                  | $kg\ m^2$ $10.5 \times 10^{-6}$       |

| WIRING DIAGRAM |        |          |                 |
|----------------|--------|----------|-----------------|
|                | Colour | Function | Lead Gauge      |
| Motor          | Ye     | U        | UL1332<br>AWG18 |
|                | Rd     | V        |                 |
|                | Bk     | W        |                 |
|                |        |          |                 |

| A-Shaft                                 | Preload Spring  | B-Shaft |
|---|-----------------|---------|
| Max. Axial Force $F_a$                  | N               | 15      |
| Max. Radial Force $F_r$ ( $a_1 = 5$ mm) | N               | 130     |
| Axial Play                              | $F_a = 10$ N mm | -0.03   |
| Radial Play                             | $F_r = 5$ N mm  | 0.02    |

| GENERAL MOTOR SPECIFICATION                    |                        |
|--|------------------------|
| Ambient Temperature                            | $^{\circ}C$ -10 ... 50 |
| Max. Temperature Rise (at standstill)          | $^{\circ}C$ 80         |
| Max. Ambient Humidity (non condensing)         | % 85                   |
| Insulation Class                               | B                      |
| Insulation Resistance                          | M $\Omega$ 100         |
| Dielectric Strength (for 1 min - coil to case) | V AC 500               |

| ISO 8015 | ISO 1302                 | ISO 2768 cK | ISO 13715  |
|----------|--------------------------|-------------|------------|
|          |                          | Date        | Name       |
|          |                          | Drawn       | 04.12.2017 |
|          |                          | Import      |            |
| 04       | change speed, no load    | Schneid_A   | Checked    |
| 03       | change depth thread M2.5 | 05.12.2018  | Approved   |
| 02       | change speed, no load    | 13.09.2018  | Approved   |
| REV      | Rev. Text                | Name        | Rel. Date  |

|                  |                      |
|------------------|----------------------|
| Weight: ~0.65 kg |                      |
| DB59M024035-B    |                      |
| 03000110         | A4                   |
| State: Released  | Rev: 04 CONFIDENTIAL |

