

BCI motor.

BCI-63.XX

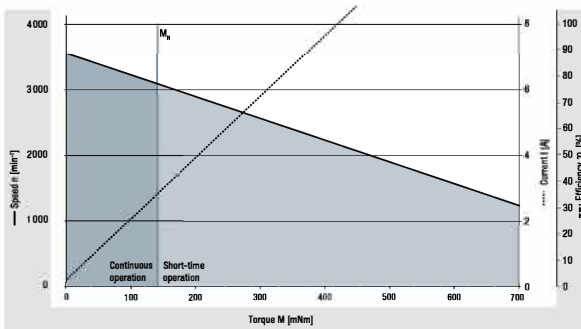


- Direct current motor with permanent magnets made of ceramic bound ferrite
- Mechanical commutation through 12-piece collector
- Closed steel motor housing with die-cast zinc bearing flanges
- Operation in both directions of rotation
- Service life 3 000 h for continuous operation (S1)
- Insulation class B
- Protection class IP 40, optionally higher

| Nominal data | | | | | |
|---|-------------------------------------|---|---------------|---------------|---------------|
| Type | | BCI-63.25-A00 | BCI-63.25-B00 | BCI-63.55-A00 | BCI-63.55-B00 |
| Nominal voltage (U_{BN}) | V DC | 12 | 24 | 12 | 24 |
| Nominal speed (n_N)* | rpm | 3 150 | 3 150 | 3 000 | 3 300 |
| Nominal torque (M_N)* | mNm | 140 | 140 | 270 | 270 |
| Nominal current (I_{BN})* | A | 5.40 | 2.70 | 8.60 | 4.90 |
| Nominal output power (P_N)* | W | 46 | 46 | 85 | 93 |
| Rated efficiency, approx. (η_N) | % | 71 | 71 | 79 | 79 |
| Free-running speed (n_0) | min ⁻¹ | 3 600 | | | |
| Free-running current (I_{BL}) | A | 0.80 | 0.40 | 1.00 | 0.50 |
| Starting torque (M_A) | mNm | 840 | 1 100 | 1 900 | 2 550 |
| Starting current (I_A) | A | 28.0 | 17.5 | 63.0 | 40.0 |
| Induced voltage (U_{imax}) | V/1 000 rpm | 3.20 | 6.60 | 3.30 | 6.70 |
| Connection resistance (R_v) | Ohm | 0.44 | 1.40 | 0.19 | 0.65 |
| Connection inductance (L_v) | mH | 0.70 | 2.90 | 0.40 | 1.50 |
| Rotor moment of inertia (J_R) | kgm ² x 10 ⁻⁶ | 40 | 40 | 75 | 75 |
| Heat resistance (R_{th}) | K/W | 2.75 | 2.75 | 2.45 | 2.45 |
| Protection class** | | IP 40 | | | |
| Permissible ambient temperature range (T_U) | °C | 0 ... +40 | | | |
| Weight | kg | 1.20 | 1.20 | 1.70 | 1.70 |
| Order no. | | on request | 931 6325 001 | on request | 931 6355 140 |
| Subject to alterations | | * at T_U max. 40°C ** Classification of protection class refers to installed state with sealing on the flange side | | | |

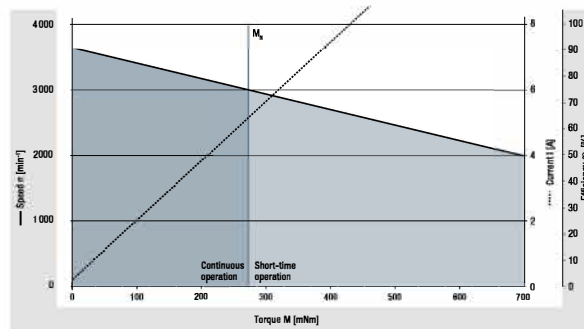
Characteristic curve

BCI-63.25, 24 V (at 25°C)



¹⁾ Nominal data, see table

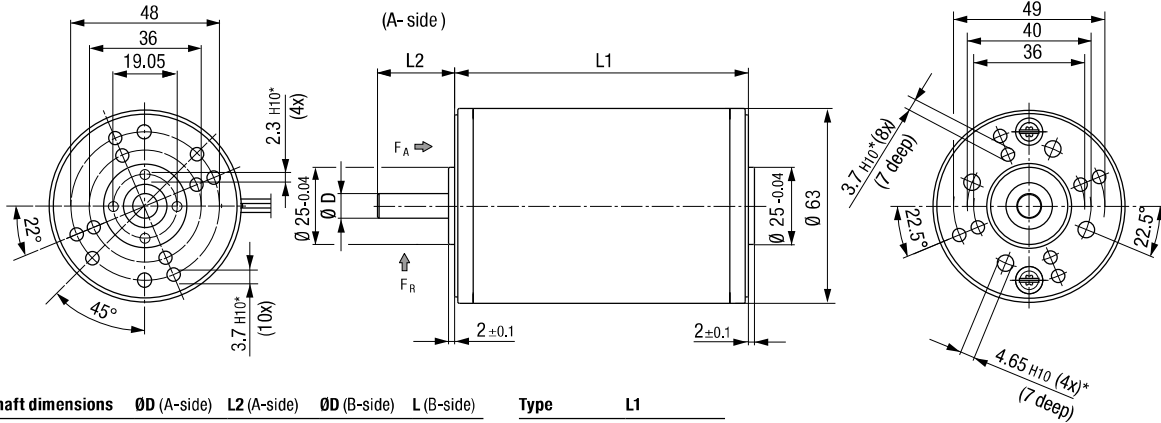
BCI-63.55, 24 V (at 25°C)



¹⁾ Nominal data, see table

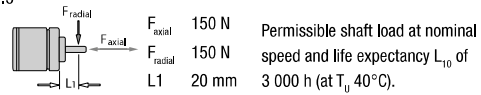
Technical drawing

Image standard type / All dimensions in mm



| Shaft dimensions | ØD (A-side) | L2 (A-side) | ØD (B-side) | L (B-side) | Type | L1 |
|------------------|-----------------|-------------|-----------------|------------|-----------|-----------|
| Standard type | 8 _{g5} | 25.0 mm | -- | -- | BCI-63.25 | 95 ± 0.5 |
| Preferred type | 8 _{g5} | 20.2 mm | 8 _{g5} | 15 mm | BCI-63.55 | 125 ± 0.5 |

* Blind holes for thread-forming screws according to DIN 7500



Electrical connection

Connection cable

| Color | Function | |
|-------|------------------|---|
| red | Power supply (+) | Cable length 300 ± 30 from motor Cable end 7 ± 2 stripped and tin-coated |
| black | GND (-) | |

Change of the rotating direction is possible by polarity reversal of the wires

Modular construction kit

| | | |
|--|--|--|
| Brake system Spring-applied braking BFK 457-03 (page 48) | | Planetary gearhead Performax® 63 (page 26) |
| Encoder system Magnetic encoder system PMG 2-X (page 50) Optical incremental encoder HEDS 5500 / PWB AE30 (page 52) | | Crown gearhead EtaCrown® 75 (page 30) EtaCrown® Plus 63 (page 34) |
| | | Spur gearheads Compactline 90 (page 36) Compactline 91 (page 38) Flatline 85 (page 44) |

For motor-gearbox combinations, depending on the choice of the single components, the maximum allowable torque (gearbox) can be exceeded or respectively not reached.