

N° :

Date : 13 juin 2024

SERVO MOTOR 089UDB306BAECA



Definition

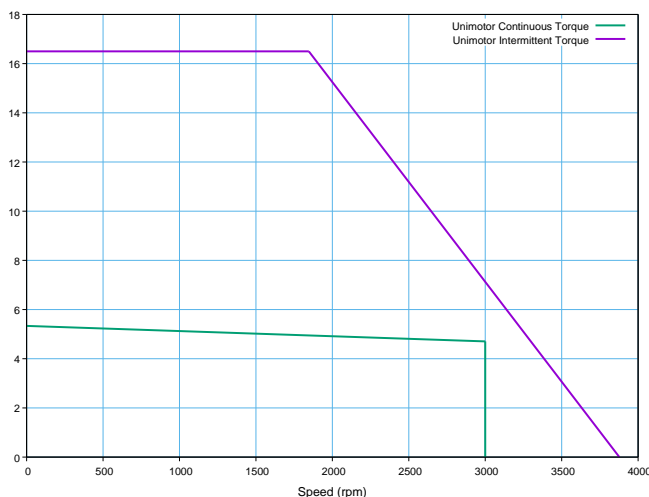
| | | |
|----------------------|-----------------------------|---|
| Type | Unimotor HD | |
| Frame Size (mm) | 089 | |
| Voltage | U | U - 400V |
| Magnet type | D | D - High dynamic |
| Frame Length | B | |
| Speed (min-1) | 30 | 3000 |
| Brake | 6 | Braked (6) |
| Connection type | B | B - Power and Signal 90° rotatable |
| Output shaft | A | Key |
| Feedback device code | EC | EC - Inductive EnDat SinCos Multi-Turn (EQI 1331) |
| Inertia & thermistor | A | A - Standard |
| PCD | 100 | 100 (FF 100 / 80) |
| Shaft Diameter | 190 | 19j6 x 40,0 . |
| Fan box | - | |
| Classe d'isolation | F | |
| UL Motor / UL Stator | UL Motor / UL Stator | |

Nominal characteristics

| | | | |
|-----------------------------------|-------|--------------------------------------|-------|
| Motor Ambient Temperature (°C) | 40 | Drive Fsw (kHz) | 12 |
| Motor Stall Torque (N.m) | 5,50 | Stall Current (A) | 3,40 |
| Rated Torque (N.m) | 4,85 | Rated Current (A) | 3,09 |
| Motor Peak Torque (N.m) | 16,50 | Peak Current for Drive Selection (A) | 10,31 |
| Rated Power (kW) | 1,52 | Kt (Nm/A) | 1,60 |
| Winding Thermal Time Constant (s) | 93 | Ke (V/kmin-1) | 98,00 |
| Number of Poles | 10 | R (ph-ph) (Ohm) | 5,18 |
| Maximum Cogging (N.m) | 0.08 | L (ph-ph) (mH) | 36,70 |
| Inertia (kg.cm ²) | 1,87 | Peso del producto | 6,13 |
| Ingress Protection Level (IP) | IP65 | | |

| | | | |
|--------------------------|-------------------|----------------------|------|
| Brake | Braked (6) | Static Torque (N.m) | 10,0 |
| Release Time (ms) | 73 | Backlash (°) | 0,45 |
| Brake Supply Voltage (V) | 24 | Brake Coil Power (W) | 18,5 |

Torque / speed graph



Configured characteristics

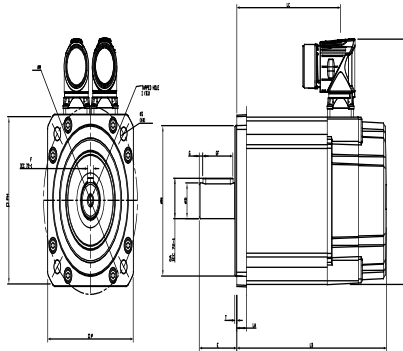
| | |
|---|-------|
| Motor Ambient Temperature (°C) | 40 |
| Drive Fsw (kHz) | 8 |
| Derating Factor | 0,97 |
| Stall Torque with Derating Factor (N.m) | 5,33 |
| Nominal Torque after Derating (N.m) | 4,70 |
| Peak Torque with Derating Factor (N.m) | 16,50 |

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Motor (° & mm)



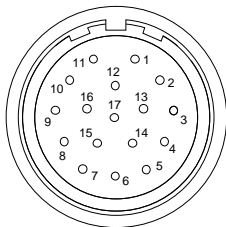
| | | |
|-----|--------------------------------|--------|
| LB | Total length | 217,90 |
| LB1 | | |
| LC | Power connector position | 180,60 |
| LJ | | |
| LA | Flange thickness | 10,3 |
| T | Register Length | 2,2 |
| N | Register Diameter | 80,0 |
| LD | Power connector overall height | 130,50 |
| LD1 | | |
| P | Flange Square | 91,0 |
| S | Fixing Hole Diameter | 7,0 |
| M | Fixing hole PCD | 100 |
| PH | Motor Housing Width | 89 |
| D | Shaft Diameter | 19j6 |
| E | Shaft Length | 40,0 |
| GA | Key Height | 21,5 |
| GF | Key Length | 32,0 |
| G | Key to Shaft End | 3,7 |
| F | Key Width | 6 |
| I | Tapped Hole Thread Size | M6x1 |
| J | Tapped Hole Depth | 17,0 |
| | Mounting Bolt | M6 |

Motor electrical interface

Feedback device code : EC - Inductive EnDat SinCos Multi-Turn (EQI 1331)

Connection type :
Section des fils :

B - Power and Signal 90° rotatable
4G1 + 2x 0.5



- | | |
|------------|-------------|
| 1 - CTP | 10 - COS |
| 2 - CTP | 11 - DATA |
| 3 - Screen | 12 - DATA / |
| - | 13 - COS / |
| - | 14 - SIN |
| - | 15 - SIN / |
| - | 16 - Power |
| 8 - CLK | 17 - 0V |
| 9 - CLK / | Screen |

- U - Phase U
V - Phase V
W - Phase W
Screen

- B+ Brake +
B- Brake -

