

Unimotor

high dynamic

Servo
Solution



Compact servo motor for demanding applications

Unimotor hd is a high dynamic servo motor range, designed for maximum torque density. This brushless AC servo motor range provides a compact, low inertia solution for applications where very high torque is required during rapid acceleration and deceleration profiles.

→ Engineering excellence, innovation and reliability

Unimotor hd has been developed by our engineers using our design process that prioritises product innovation, performance and reliability. This enables new ideas to be quickly evaluated, prototyped and tested using a suite of in-house development and modelling software tools. As a result **Unimotor hd** incorporates a number of unique functionality enhancing design features with several patents pending. **Unimotor hd** “raises the bar” in terms of both performance and quality.

→ The ultimate Unimotor hd and Digitax ST association

Digitax ST and **Unimotor hd** combination provide an optimised system in terms of ratings, performance, cost and ease of use. **Unimotor hd** motors fitted with high resolution SinCos and/or Absolute encoders are pre-loaded with the motor “electronic nameplate” data during the manufacturing process. This data can be read by Digitax ST and used to automatically optimise the settings. This feature simplifies commissioning and maintenance, ensures performance and saves time.



FM 30610



RoHS
Compliant





An association designed for high torque output for dynamic applications.

Key features

Due to its extensive features, **Unimotor hd** is suitable for a wide range of industrial applications including packaging, printing and material handling.

- Motor frame size: 055, 067, 089, 115, 142 or 190
- Torque range: 0.72 N.m to 85.0 N.m
- High torque to inertia ratio for high dynamic performance
- High Power Density
- IP65 conformance: sealed against water spray and dust when mounted and connected
- Segmented stator design
- Supported by rigorous testing for performance and reliability
- Winding to suit 400V and 220V
- Rated speed: 3000 rpm (1500 rpm for size 190)
- High torsional rigidity shaft design

Accuracy and resolution to suit your application requirements

Choosing the right feedback device for your application is critical in getting optimum performance. **Unimotor hd** has a range of options that offer different levels of accuracy and resolution to suit most applications :

- Resolver: robust for extreme applications and conditions low accuracy, medium resolution
- Incremental encoder: high accuracy, medium resolution
- Inductive Absolute: medium accuracy, medium resolution, single turn and multi turn
- Optical SinCos/Absolute : high accuracy, high resolution, single turn and multi turn
- Encoder supported by Hiperface (SICK) and EnDAT (Heidenhain) communication protocols

Torque performance

(Unimotor hd data at 3000 rpm, 1500 rpm for size 190)

