

# Unimotor **hd**

high dynamic



## Compact servo motor for demanding applications

Unimotor hd is Control Techniques' new high dynamic servo motor range, designed for maximum torque density. This brushless AC servo motor range provides an exceptionally 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 a dedicated team 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 performance enhancing design features with several patents pending. Unimotor hd "raises the bar" in terms of both performance and quality.

## The ultimate motor and drive combinations

Control Techniques drive and motor combinations provide an optimised system in terms of ratings, performance, cost and ease of use. Unimotor hd motors fitted with high resolution SinCos or Absolute encoders are pre-loaded with the motor "electronic nameplate" data during the manufacturing process. This data can be read by Control Techniques' servo drives and used to automatically optimise the drive settings. This feature simplifies commissioning and maintenance, ensures consistent performance and saves time.



FM 30610



**RoHS  
Compliant**



**Unimotor hd**  
The perfect partner for Digitax ST.



A combination designed for high torque output for dynamic applications.

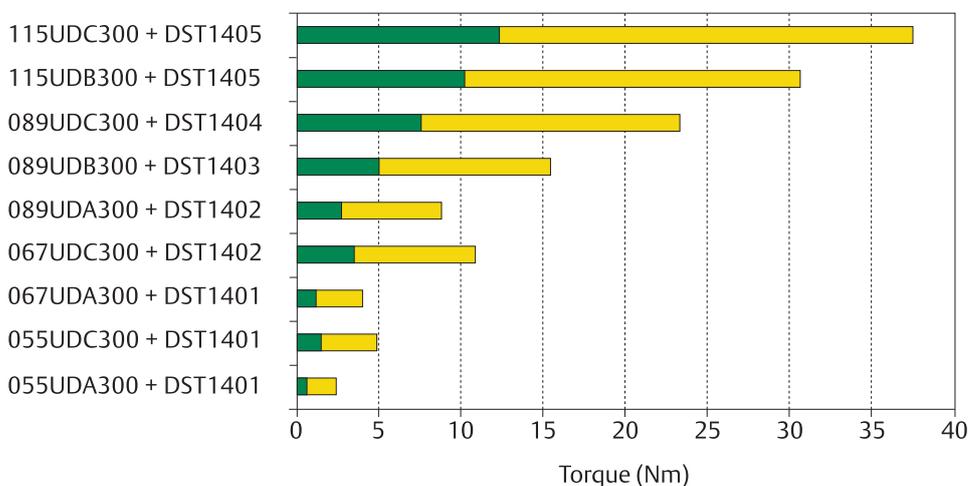
## Key features

Unimotor hd is suitable for a wide range of industrial applications, due to its extensive features.

- Torque range: 0.72Nm to 18.8Nm
- High torque to inertia ratio for high dynamic performance
- Compact but powerful
- High energy dissipation brakes
- IP65 conformance: sealed against water spray and dust when mounted and connected
- Segmented stator design
- World class performance
- Supported by rigorous testing for performance and reliability
- Winding to suit 400V and 200V
- Rated speeds include 2000rpm, 3000rpm, 4000rpm and 6000rpm
- Larger shafts to increase torsional rigidity

## Torque performance

■ Stall torque ■ Peak torque (3000 rpm)



For more information visit [www.controltechniques.com](http://www.controltechniques.com)

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## 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 feedback 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
- Hiperface (SICK) and EnDAT (Heidenhain) protocols supported