



# Corporate Capabilities

Comprehensive Drives, Motors, and Services



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**CONTROL TECHNIQUES**™

**Nidec**  
All for dreams

# NIDEC

## is powering the industrial world

### About Nidec Corporation

The Nidec Corporation is a global manufacturer of electric motors and drives. Founded in 1973, Nidec has worldwide operations and a workforce of more than 110,000 who develop, manufacture and install motors, drives and control systems in industrial plants, automobiles, home appliances, office equipment and information technology. Nidec is focused on developing next-generation solutions that improve efficiency to reduce energy consumption and enable Total Customer Success.



**110,000**  
EMPLOYEES



**\$13.7**  
BILLION IN SALES



**230+**  
Companies

### About Control Techniques

In 2017, the Nidec corporation acquired Control Techniques to enhance their industrial product offering. Today they help form one of the broadest portfolios of products for industrial customers covering electric motor and drive solutions.



## Standard and customized drive and motor solutions with local support and services

Control Techniques has operated globally for many years, providing unparalleled specialist drives and motors technology, expertise and customer care for a wide range of industries. Our in-depth knowledge of automation systems combined with highly reliable, quality products and a world class technical support network make us a preferred choice.

Now, as part of Nidec, our ability to support and deliver to our customers is even stronger.



**Matched drives and motors technology** – enhancing performance and optimizing energy efficiency, offering industry-specific solutions for all customer requirements with best-in-class reliability.



**Local customized services** – from audit & consultation, commissioning & start-up to maintenance and training, ensuring total support throughout the lifetime of your application to guarantee peak performance.



# Global facilities and resources



*Note: Many countries have more than one of the facilities represented by the icons.*

## A global presence that benefits all our customers

Control Techniques has an extensive global presence that provides comprehensive local support and services, including:



### 40+ Automation Centers (Sales offices)

Providing local customer support for products, automation, control needs and service support



### 23 Manufacturing sites

Producing a comprehensive range of high quality products, optimized for industry-specific customer requirements



### 8 Engineering and Design facilities

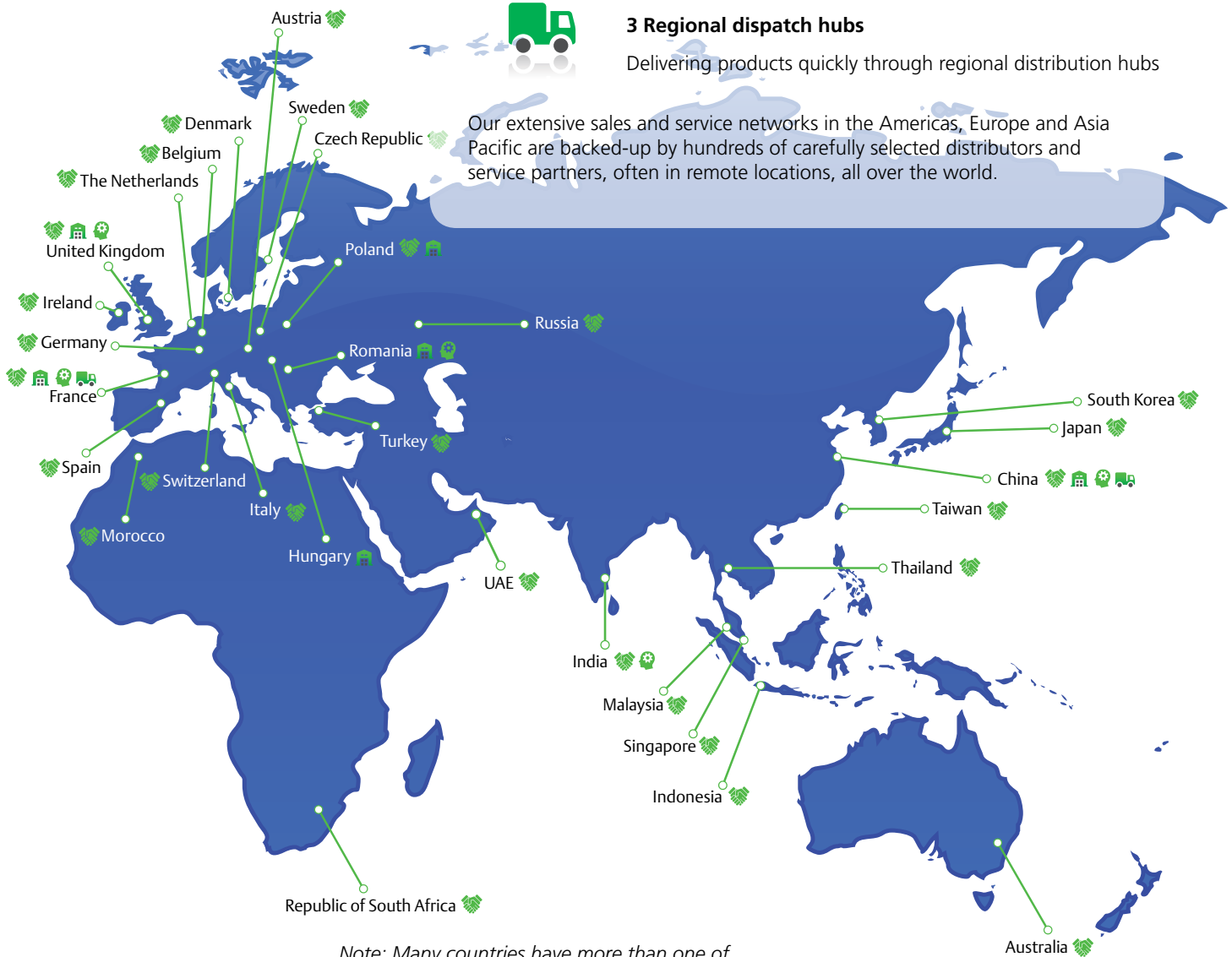
Developing market leading products and feature-sets using the latest design technology



### 3 Regional dispatch hubs

Delivering products quickly through regional distribution hubs







Our extensive sales and service networks in the Americas, Europe and Asia Pacific are backed-up by hundreds of carefully selected distributors and service partners, often in remote locations, all over the world.



*Note: Many countries have more than one of the facilities represented by the icons.*



# Drives and motors technology

Drives	General Purpose drives		High Performance AC drives	
	KB Electronics	Commander C200-C300	Unidrive M400	Unidrive M600-M700
	<p>KB Series is a line of easy-to-use adjustable AC &amp; DC motor control solutions</p> <p>0.25 - 5 HP (0.19 - 3.7 kW)</p> <p>115 V, 230 V, 460 V</p> 	<p>The sixth generation of our simple, reliable general purpose AC motor controls</p> <p>0.33 - 200 HP (0.25 - 132 kW)</p> <p>115 V, 230 V, 460 V</p> 	<p>Open-loop drive solutions with multi-language real text LED keypad for ease-of-use</p> <p>0.33 - 200 HP (0.25 - 132 kW)</p> <p>115 V, 230 V, 460 V, 575 V, 690 V</p> 	<p>Closed-loop high performance drive solutions</p> <p>1.0 - 4,200 HP (0.75 kW - 2.8 MW)</p> <p>230 V, 460 V, 575 V, 690 V</p> 
Motors	Induction motors		Permanent Magnet motors	
	ACCUTorq®		Dyneo®	
	<p>For applications requiring accurate positioning or precise speed control</p> <p>5000:1 constant torque</p> <p>TENV, TEFC and TEBC</p> <p>0.25 – 350 HP (0.2 – 250 kW)</p> <p>1,200 – 1,800 rpm</p> 		<p>Super Premium efficiency permanent magnet (PM) variable speed synchronous motors</p> <p>IP55 &amp; IP23</p> <p>7.5 - 550 HP (5.5 - 430 kW)</p> <p>1,500 - 6,000 rpm</p> 	

# Meeting all your needs with a comprehensive range

Servo drives		DC drives	
Epsilon EP	Digitax HD	Mentor MP	Quantum MP
<p>Compact 1.5-axis "Motion Made Easy"® servo drive systems</p> <p>2.2, 4, 6.5, 9, 16 A</p> <p>1.4 - 193 lb.in (0.16 - 21.8 Nm)</p> <p>115 V, 230 V</p>	<p>Minimum size, maximum performance. Servo solutions for continuous and pulse duty applications</p> <p>1.5 A – 16 A</p> <p>6.2 lb-in – 451 lb-in (0.7 Nm – 51 Nm)</p> <p>230 V, 460 V</p>	<p>High performance digital DC drives with field control and integration flexibility</p> <p>25 - 7,400 A</p> <p>230 V, 460 V, 575 V, 690 V</p> <p>2 or 4 quadrant operation</p>	<p>High performance packaged DC drives</p> <p>25 - 700 A</p> <p>230 V, 460 V</p> <p>2 or 4 quadrant operation</p>
			

Servo motors		
NT series	Unimotor hd	Unimotor fm
<p>Compact NEMA or metric flange servo motors</p> <p>Frame sizes in English (NEMA 23 or 34) or Metric (IEC-72-1)</p> <p>Continuous torque ranges from 7.5 lb.in to 56 lb.in (0.84 – 6.33 Nm)</p> <p>230 V</p> <p>IP65 rating, UL compliant</p>	<p>Compact low inertia servo motors for high dynamic applications</p> <p>Frame sizes 55, 67, 89, 115, 142, &amp; 190 mm (IEC mounting)</p> <p>6.4 lb.in – 752 lb.ft (0.72 – 85 Nm)</p> <p>230 V, 460 V</p> <p>3x peak torque</p> <p>IP65 rating, UL, CE compliant</p>	<p>Flexible high performance brushless servo motors</p> <p>Frame sizes 75, 95, 115, 142, 190 and 250 mm (IEC mounting)</p> <p>10.6 lb-in to 1,203 lb-in (1.2 – 136 Nm)</p> <p>230 V, 460 V</p> <p>3x peak torque</p> <p>IP65 rating, UL and CE compliant</p>
		

We have included only our core products for simplicity. Additional solutions we manufacture include:

- HVAC drives
- Elevator drives
- Packaged AC drives
- Higher power Induction motors
- Custom Servo motors

# Reliable drive and motor technologies that maximize energy savings & performance

Our highly reliable drive and motor solutions are developed together to maximize energy savings and performance:

- Dyneo® Permanent Magnet (>NEMA Premium/IE4 equivalent) induction variable speed solutions offer industry-leading levels of energy saving
- Unidrive M industrial drive family has defined feature-sets to optimize productivity and safety across general purpose and high performance applications
- Our matched high performance servo drives, motors and gears, provide a high peak torque, low inertia solution for complex applications

We can calculate payback periods, provide a high yield installation and schedule maintenance for optimal performance throughout the lifetime of your equipment.

## **OPEN DESIGN ARCHITECTURE**

Our drives communicate with all common protocols providing:

- Total freedom to design your system without limitations
- A simple way to integrate with virtually any machine
- An opportunity to offer customization without additional development costs
- No being held hostage by your supplier

## **WORLD-CLASS PERFORMANCE**

We have a history of class leading innovation. Our drives are used in the most demanding applications where flexibility, accuracy and reliability are essential. From printing to stage scenery, industrial automation and beyond.

## **EMBEDDED INTELLIGENCE**

From simple PLC logic of our general purpose drives, to three axis decentralized control capable of operating 4 times faster than a typical standalone PLC machine controller.

## **TECHNOLOGY YOU CAN RELY ON**

We design our drives for optimum performance, even in harsh conditions.

Environment: Conformal coating, patented air flow system, Ingress protection

Electrical: Wide supply voltage tolerance. Protects against load shedding & brownouts

Temperature: Automatic trip avoidance, Intelligent multi-speed fans





## Be ready for the Industrial Internet of Things (IoT) and Industry 4.0

At the heart of the IoT and Industry 4.0 is the ability to acquire and process data from sensors and intelligent devices embedded within machines or processes. Our intelligent equipment plays a key role in aggregating and converting this into useful information by:

- Supporting all key industrial Ethernet protocols for easy and open factory communications
- Communicating across a global network for remote monitoring and diagnostics
- Connecting to process-critical external sensors such as flow, temperature and position
- Generating critical process information such as speed, torque, current and temperature
- Providing data using digital encoders for automatic drive configuration and measuring motor speed, position, vibration and temperature
- Allowing efficient and expansive data aggregation through SD memory card support
- Using industry standard programming via onboard control for fast localized control
- Enabling smarter energy use by measuring and optimizing consumption

This can be applied to predictive diagnostics, process optimization and machine-to-machine (M2M) integration.



# Partnerships for success

## Local services and solutions support



Our global Automation Center sales network provides a local point of contact, bringing together our extensive range of products, solutions and expertise. We react quickly to any customer requirements, working in partnership to provide innovative solutions and add value to your business, including:

- Unparalleled sales support
- Advice on our complete range of market-leading products to best-fit your application requirements
- Industry-leading applications engineering experience
- In-house system design and management
- Software development and engineering support
- Panel-building, installation and project commissioning
- Customized services and solutions to ensure trouble-free operation and back-up.

Together we can meet expanding productivity, performance and process safety needs, while guaranteeing an exceptional response to emergency situations with around-the-clock support.

### Local services and support

All our services are geared to identify opportunities for improving performance, energy efficiency and increase the lifetime of equipment. These include:

- Auditing services to analyze your existing products, applications and processes
- Return on investment (ROI) evaluation to help build a business case to justify initial investment
- Existing hardware is retrofitted quickly reducing downtime and cost
- Onsite commissioning that ensures reliability and safety
- Compliance with local regulations and safety standards through accredited personnel
- Extended Warranties
- Comprehensive training available through scheduled classes or tailored onsite training for your specific application
- Emergency services including 24/7 telephone and web support, on-site technical assistance, express around-the-clock delivery of spares and urgent repairs
- Maintenance contracts are available to support optimum running of your equipment

Services are available on a country-by-country basis. Please contact your local sales contact for full details.



## OEM partnerships for joint success

Through close working partnerships with OEMs we jointly develop customized products and solutions using variable speed technologies to deliver unique customer-specific value. This helps to differentiate market offers, resulting in joint profitable growth. This is done by:

- Accelerating our customers' growth & profitability strategy by utilizing our drive & motor technologies
- Aligning with our customers' global expansion strategies
- Working and growing in focused industries where we excel
- Incorporating our global resources to develop customized designs rapidly
- Providing operational support
- Enhancing user experiences



## Innovative packaged drive solutions tailored to your needs

We have the facilities and engineering resources to support the design and implementation of industrial control and automation systems. Dedicated local project teams ensure each stage of the project is perfectly executed and supported.

Benefits of working with Control Techniques include:

- Highly skilled, dedicated Engineering and Project Management teams
- Local language interaction and order administration
- Localized documentation and support
- Qualified local supply chains in adherence to regional standards and regulations
- On-time delivery within budget

Our engineering team works in close collaboration with our engineering centers to customize software using standard components and hardware as well as conducting in-depth testing of all software to reduce start-up and commissioning time.

**CONTROL TECHNIQUES™**

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[Theautomationengineer.com](https://Theautomationengineer.com) (blog)



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