



## Unidrive SP Modular 45kW – 1.9MW

### Modular high power performance AC drive

The Unidrive SP Modular Drives Range offers the same advanced feature set as the panel mount drives but with additional power system flexibility. Drive modules may be arranged to provide a common DC bus system with or without an active input (regenerative, 4 quadrant operation). Very high current motors may be controlled using a multi-drive modular arrangement.

### Applications

The Unidrive SPM drives are suitable for applications in both commercial and industrial applications where power scheme flexibility and regenerative energy saving provides an operational advantage. Typical applications include:

- Automotive testing such as car, engine and gearbox dynamometers
- Web control and winding
- Conveying and processing of bulk materials
- Pulp and paper processing
- Marine applications
- Energy saving with high power fans and pumps
- Metal production and processing
- Large cranes
- Renewable energy systems such as photovoltaics

### Benefits

Unidrive SP Modular drives enjoy the same advantages as the Panel Mounting drives but with the additional benefits of power system flexibility:

- Higher power motors are controlled using Unidrive SPM modules connected in parallel. This is an economic and compact solution that simplifies installation and improves serviceability

- Reduce running costs using a DC bus system to recycle energy between simultaneously braking and motoring drives such as in a winder / unwinder configuration
- Eliminate harmonics using an active front end
- Minimise harmonics with 12, 18 and 24 pulse operation to allow you to meet and exceed stringent supply regulations
- Modular approach can provide system redundancy, for example if a drive module was non operational in a multi-module installation it may still be possible to operate the application with the remaining modules
- Ultra compact modules allow high power systems to be constructed in non standard enclosures e.g. it is possible to implement a drive system of between 45kW to 1900kW in an enclosure no taller than 1m
- Operation with global power supplies 200V, 400V, 575V and 690V

### Modular building blocks

The Unidrive SPM range comprises key modules that can be combined elegantly to achieve your design criteria with maximum economy.

<b>SPMA</b>	AC IN / AC OUT Drive Module
<b>SPMD</b>	DC IN / AC OUT Drive Module
<b>SPMC</b>	AC IN / DC OUT Rectifier
<b>SM Control Master</b>	Master control module for use with SPMA/D
<b>SM Control Slave</b>	Slave control module for use with SPMA/D

For more information and more configuration examples please refer to the Unidrive SPM brochure, **order code 0175-0345**. Also available for download from [www.controltechniques.com](http://www.controltechniques.com)

