

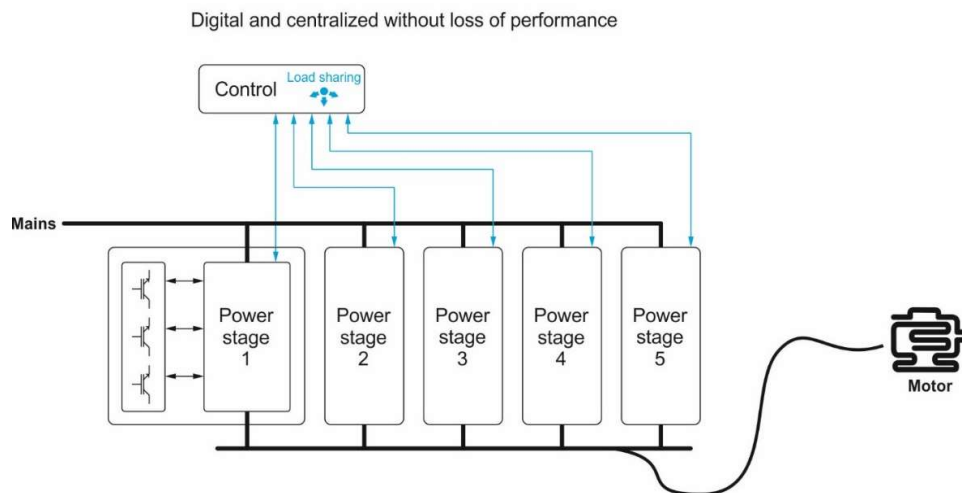
Commitment to innovation simplifies high power drives

Schneider Electric is leading the Digital Transformation of Energy Management and Automation in Homes, Buildings, Data Centers, Infrastructure and Industries. Innovation is a key part of our strategy and we continually invest in our products to meet our customer

The Altivar Process range of variable speed drives is the next generation of variable speed drives, designed to deliver IIoT benefits. A **smart, connected device** with built-in intelligence to gather data and share information into the enterprise level, **the Altivar Process can reduce your total cost of ownership, improve efficiency and energy management.**

A demonstration of this innovation within our drives range is the **patent awarded for innovation around simplifying drive installations in the high-power range**, based on parallel connections of modular power stages in a smart way.

Patented Paralleling with High speed link



Current solutions:

Current solutions on the market are connecting full drives in parallel which involves derating of the capability of the power stages. Other solutions result in loss of control performance and require big chokes for paralleling which considerably increases the size of the drives. Some approaches try to remove these large chokes but then cables for each power stage to the motor are required resulting in large and complex cabling.

Meeting the challenge:

Above solutions result in a loss of control performance, the derating of capabilities of the power stages

and a higher amount of cabling effort. **With Schneider Electric's patented control of paralleled power stages**, the same performance is achieved as a single stage with **considerable reduced cabling effort**.

Each power stage requires power wiring (a connection to the mains) and additionally a control line to each power stage is required. A typical paralleling also requires a control line from one power stage to the other.

Thanks to digitization **the internal circuit is simplified using a high-speed serial link per stage**. With this digital approach, communicating with more than 800 Megabits per second, a sophisticated control can be implemented which allows paralleling **without loss in performance**. Schneider Electric engineers invented a sophisticated communication protocol to ensure **safe and secure transmission** of the sensitive signals.

Benefits

The power range is extended without loss of performance due to the smart concept of paralleling and the considerable reduced cabling effort thanks to the patented high speed communication protocol. Only a small high speed cable is connected to each power stage next to the power connections.

The sophisticated high speed communication protocol allows **secure and fast transmission of the sensitive control signals**.

As a result an outstanding small footprint is achieved for the drives, in addition the modular design allows easy logistics of spare parts as the number of required parts has been significantly reduced.

Want to learn more about our high-power Drives?

Visit: www.schneider-electric.com/drives
Altivar Process variable speed drives catalog
[ATV600](#)
[ATV900](#)