Electric Drivetrain Components

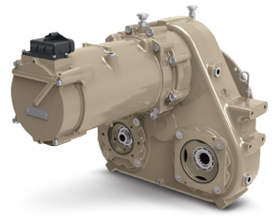
Off-highway electric powertrain experience

John Deere offers modular vehicle electrification solutions that integrate electrical generators and/or motors, power electronics, and mechanical drivetrain interfaces. With millions of operating hours of proven performance in the field, John Deere electric drivetrain components are available in multiple configurations to help OEMs implement electric and hybrid drive systems in their off-highway applications.

- Seamless integration with John Deere engines, inverters, and drivetrain components
- Rugged components designed for high durability and reliability in harsh environments
- Modular configurations to fit a variety of applications
- Inverters highly integrated with eDrives to deliver advanced controls

Generator Pump Drive

Power generation rating	100 – 200 kW (135 – 270 hp)
Hydraulic pump pad outputs	Up to 3



Electric Pump Drive

Power rating	100 – 200 kW (135 – 270 hp)
Hydraulic pump pad outputs	Up to 3

Electric Motor Drive – Single Speed

Power rating	100 kW (135 hp)
Max output torque *Gear-ratio dependent*	4000 Nm (2950 lb-ft)
Max output speed *Gear-ratio dependent*	2400 rpm

PD280 Power Inverters – Single or Dual Output

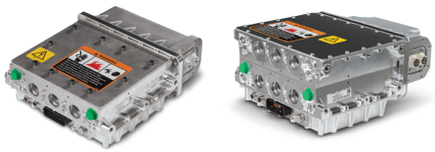
Continuous power rating	228 kVA for single†
Continuous current rating	280 Arms for single, 280 Arms per half for dual
Peak current rating	600 Arms (duration managed by overload software feature)
High-voltage bus	180 – 750 VDC

†Power rating for dual inverters dependent on drive cycle. Consult your John Deere representative for more information.

PD400 Power Inverters – Single or Dual Output

Continuous power rating	326 kVA for single†
Continuous current rating	400 Arms for single, 400 Arms per half for dual
Peak current rating	600 Arms (duration managed by overload software feature)
High-voltage bus	180 – 750 VDC

†Power rating for dual inverters dependent on drive cycle. Consult your John Deere representative for more information.



Electric drivetrain components family

	Electric motor drives (single speed)	Electric pump drives	Generator/hydraulic pump drives
Matching inverters			
Power level 100 kW	**PD280** **Single or dual** (matches EMD 100-1)	**PD280** **Single or dual** (matches EPD 100-2)	**PD280** **Single or dual** (matches GPD 100-2)
Power level 150 kW	**N/A**	**PD280** **Single or dual** (matches EPD 150-2)	**PD280** **Single or dual** (matches GPD 150-2)
Power level 200 kW	**N/A**	**PD400** **Single or dual** (matches EPD 200-2)	**PD400** **Single or dual** (matches GPD 200-2)

Your equipment deserves nothing less

When you choose John Deere power, you know you are getting the best combination of performance, reliability, and durability.

Our application engineers are ready to assist you in selecting the options that best fit your needs.
We also offer dedicated OEM service and long-term aftermarket support.

To see the value we can add to your equipment, call us today at 800-533-6446.

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JOHN DEERE

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