

John Deere Power Electronics

Summary

Well suited for the on and off-highway industry, John Deere power inverters offer advanced motor control with flexible application software to optimize system performance. Inverter packaging options can help eliminate the need for multiple interfaces to enable an effective system design approach. For more information contact us at JohnDeere.com/Electronics.

Features

- Achieve peak power
- Designed with complete monitoring compatibility
- Supports a wide variety of motor types
- Maximum protection for your vehicle
- Designed and tested to extreme environments
- Performance when you need it



Performance	PD280 Single	PD280 Dual	PD400 Single	PD400 Dual
Burst Current ¹	600 Arms	600 Arms per half	600 Arms	600 Arms per half
Continuous Current	280 Arms	280 Arms per half	400 Arms	400 Arms per half
kVA @ 350 VDC	114 kVA	114 kVA	163 kVA	163 kVA
kVA @ 700 VDC	228 kVA	228 kVA	326 kVA	326 kVA
Mechanical				
Dimensions ²	L = 390 mm W = 325 mm H = 125 mm	L = 410 mm W = 345 mm H = 185 mm	L = 390 mm W = 325 mm H = 125 mm	L = 410 mm W = 325 mm H = 185 mm
Weight ²	17.5 kg	26.8 kg	17.3 kg	26.5 kg
Footprint ²	1,270 cm ²	1,415 cm ²	1,270 cm ²	1,335 cm ²
Volume ²	15.8 L	26.2 L	15.8 L	24.7 L
DC Link Junction Box	Standard	Standard, High Power	Standard	Standard, High Power
Environmental				
Ambient Temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
Liquid Cooling (WEG)	-35°C to +70°C	-35°C to +70°C	-35°C to +70°C	-35°C to +70°C
Sealing	IP67	IP67	IP67, 6K9K	IP67, 6K9K
Vibration tested to	Strict off road standards			
Electrical				
Supply Voltage	9-32 VDC	9-32 VDC	9-32 VDC	9-32 VDC
EMC tested to	Strict off road standards			
Maximum Operational Voltage	725 VDC	725 VDC	750 VDC	750 VDC
Bus Capacitor	1.0 mF	1.5 mF	1.0 mF	1.5 mF

¹ Duration dependent on current operating conditions and managed by software.

² Weight, dimensions, and volume does not include connectors and DC Link junction box.



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