

## Mini Excavator Drive and Motion Systems



# Full-System Solutions for **Mini Excavators**

Dana's solutions improve the worksite performance of electric-driven mini excavators through numerous advanced technologies. Improved rotational efficiency and controllability enable smooth, precise positioning, while electronic load-sensing capabilities improve system efficiency and safety. Dana electric systems covers all the functions that allow the best balance between cost and performance. This system includes an e-pump motor, e-slew drive, and inverters working in synergy to create the best conditions for sustainable work.

### **Brevini Electrified<sup>™</sup> e-Slew Drive**

- Compact and efficient
- Allows the drive to fit into the existing machine frame
- Delivers the best efficiency for longer battery life

Parameters	eSD0062	eSD0102	eSD0132	
Excavator Operational Weights	1.5 + 2.0 t	2.1 + 2.7 t	2.8 +3.5 t	
Peak Torque	600 Nm	1,000 Nm	1,300 Nm	
Output Mechanical Interface	High degree of interchangeability with extending hydraulic slew			
Voltage	24 - 120 VDC			
Environmental Compliance	Automotive standards (ISO 16750)			

### TM4 Electrodynamics<sup>™</sup> Next-generation Series LVI400 Low-Voltage Inverter

- Best-in-class design in terms of compactness and reliability
- Outstanding power density
- New gen software providing flexibility, stability, power and safety (including Cyber Security)

LVI400 Series Models						
Logic Supply	Voltage	Current (S2-2')	Size			
Main Battery		75 A	Small			
	24 V	150 A	Small			
		300 A	Small			
	36-48 V	100 A	Small			
		200 A	Small			
		400 A	Medium			
	24-48 V	500 A	Medium			
	24-40 V	600 A	Large			
		800 A	Large			
	48-80 V	300 A	Medium			
		400 A	Medium			
		600 A	Large			
		800 A	Large			
Auxiliary 12/24 V	80-100 V	250 A	Medium			
		375 A	Medium			
		500 A	Large			
		750 A	Large			
	100-120 V	250 A	Medium			
		500 A	Large			



### TM4 Electrodynamics<sup>™</sup> e-Pump Motor

- Effective performance and operation with a compact design
- SYR and IPM technology for high-efficiency

Modular approach

Parameters	IPM 200-33	IPM 200-50	IPM 200-66	
Voltage	24-96 V	24-96 V	24-96 V	
Peak Power	5-15 kW	7-20 kW	10-35 kW	
Continuous Power	3-8 kW	3-10 kW	7-18 kW	
Operating Speed	0-6,750 RPM	0-6,750 RPM	0-6,750 RPM	
Peak Torque	45 Nm	45-75 Nm	95 Nm	







#### **SYR / SRI 200**

24-96 V 12-50 kW 6-20 kW 0-6,000 RPM 70-220 Nm



### Market-Driven Innovation

### **Off-Highway Performance Expectations**

### Safety

Productivity

Maneuverability

Durability

Serviceability

### Total Cost of Ownership

### About Dana Incorporated

Dana is a leader in the design and manufacture of highly efficient propulsion and energy-management solutions for all mobility markets across the globe.

The company's conventional and clean-energy solutions support nearly every vehicle manufacturer with drive and motion systems, electrodynamic technologies, thermal, sealing, and digital solutions.

#### About Dana Off-Highway Drive and Motion Systems

Dana delivers fully optimized solutions to customers in the construction, agriculture, material handling, mining, forestry, and industrial markets.



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#### Application Policy

Capacity ratings, features, and specifications vary depending upon the model and type of service. Application approvals must be obtained from Dana; contact your representative for application approval. We reserve the right to change or modify our product specifications, configurations, or dimensions at any time without notice.