

### 创新点 Innovations

- 1.自主研发基于变转速的正流量控制系统，全局功率匹配，按需供油、减少节流和溢流损失。
- 2.行走系统采用自主研发电机-泵马达-减速器，转速转矩复合控制，负载扭矩主动预测及扭矩直接控制，动力强劲，能耗低。
- 3.多电机协调控制，电机负载合理匹配，优化能量管理，高效运行；分时工作，自动怠速停机，减少电机、泵空转能耗。
- 4.540V高压解决方案，降低电流；高效永磁同步电机，智能变转速控制，发热量极低，比异步电机节电20%。
- 5.对各种负值负载进行再生发电，基于动力锂电池能量回收，提高整机能源利用率。



- 1.Independently developed special load positive flow control system with variable speed, global power matching, on-demand oil supply, reducing throttling and overflow loss.
- 2.The travelling system adopts independently developed motor – pump/motor – reducer, compound control of speed and torque, active prediction of load torque and direct control of torque, with strong power and low energy consumption.
- 3.Multi-motor coordinated control, reasonable matching of motor load, optimized energy management, efficient operation; time-sharing, automatic idle stop, reducing energy consumption of the motor and pump at idle.
- 4.540V high voltage solution, reducing electric current; high efficiency permanent magnet synchronous motor, intelligent door drive variable speed control, low heat generation, 20% energy saved than asynchronous motor.
- 5.Renewable power generation for various negative loads, energy recovery based on power lithium batteries, improving energy efficiency of the whole machine.

### 产品特色 Features

● 零排放、零污染、低噪声。

● Zero emission, zero pollution, low noise.

● 电池安全性高，解决自燃/爆燃风险。

● High battery safety, no risk of spontaneous combustion / deflagration.

● 使用成本低。纯电动工程机械用电成本大约为传统工程机械油耗费用的30%。

● Low use cost. The electricity consumption cost of pure electric construction machinery is about 30% of the fuel cost of traditional construction machinery.

● 电池达到8年以上使用寿命，所用磷酸铁锂电池1C循环寿命在4000次以上。

● The lifespan of the battery is more than 8-year. The recycle lifespan of lithium iron phosphate battery under 1C is more than 4000 times.

● 维护成本低。不需要对柴油机进行定期保养，如更换机油、三滤等。

● Low maintenance cost. No need for regular maintenance for the diesel engine, such as replacing the engine oil and three filters, etc.

● 优化能量管理，出色的能量利用效率和续航力，配合大容量锂电池，充满电连续作业7-9小时。

● Optimized energy management, excellent energy utilization efficiency and endurance, together with high-volume lithium iron phosphate battery, 7 to 9 working hours after full-charging can be guaranteed with large capacity lithium battery.



性能参数 Performance parameter

性能 Performance		参数 Parameter
基本参数 Basic parameter	耗电量 Electric Consumption Rate	10-15度/小时 (依工况 variance with working condition)
	额定载重量 Loading Rate	1600kg
	铲斗容量 Bucket Capacity	0.9m3
	掘起力 Up digging Force	47KN
	整机操作重量 Operating Weight	5200kg
	卸载高度 (卸载角度为45°) Max. Dumping Height	2450mm
	卸载距离 (卸载角度为45°) Dumping Distance 45° Angle	850mm
传动系统 Transmission System	传动方式T Transmission	机械传动 Mechanical Transmission
	变速箱档位 Transmission Gear	前进2/后退1 Front 2 /Rear 1
	前进I档车速 Max. Speed of Forward I	10km/h
	前进II档车速 Max. Speed of Forward II	32km/h
	后退I档车速 Max. Speed of Rear I	10km/h
	爬坡能力 Grade ability	57%
	牵引力 Traction	55kN
行走电机参数 Parameter of Travel Motor	电机类型 Motor Type	永磁同步电机Permanent Magnet Synchronous Motor
	电机额定功率 Motor Rated	45kW
	电机运行效率区间 Motor operating efficiency range	86%-98%
主泵电机参数 Parameter of Main Pump Motor	电机类型 Motor Type	永磁同步电机Permanent Magnet Synchronous Motor
	电机额定功率 Motor Rated	30kW
电池参数 Battery	电机运行效率区间 Motor operating efficiency range	86%-98%
	电池类型 Type	磷酸铁锂LiFePO
	电池额定存储能量 Battery rated storage capacity	109.3Kwh
	电池额定容量 Rated Capacity of Battery	202AH
	标称电压 Rated Voltage	541V
	完全充放电循环次数 Rounds of full charge and discharge cycles	4000次以上 More than 4000 times
	理论使用寿命 Theoretical Service Life	>8年 over 8 years
	充电时长 Charge time	0.6-1.5h (根据充电桩而定 Variance with the Charger)
液压系统 Hydraulic System	压力 Pressure	25 MPa
	流量 Flow Rate	150 L/min
	提升时间 Raising Time	5 s
	三项和时间 Total cycle time	10 s
转向系统 Steering System	转向器型式 Steering gear Model	BZZ5-E315C
	压力 Pressure	16 MPa
	转向方式 Steering Type	铰接式车架转向Articulated frame steering
	转向角 Steering Angle	35°
制动方式 Brake Mode	行车制动 Travel brake	钳盘式制动Clamp disc brake
	制动气压 brake air pressure	0.5-0.7 MPa
	停车制动 Parking Brake	气推油盘式制动Air push oil disc brake
主要尺寸	整机高度 Overall Height	2800mm
	整机宽度 Overall Width	1920mm
	整机长度 Overall Length	6000mm
	轴距 Wheel base	2240mm
	轮距 Wheel Tread	1482mm
	斗宽 Bucket with	2000mm
	离地间隙 Ground Clearance	290mm
	转弯半径 (外侧) Turning Radius( External)	≥4970mm
驾驶方位 Driver position	中心区 Central	
座位方式Driver seat	座驾式 Sited	
标准轮胎 (可充气) Standard Tires (Pneumatically)	车轮数 Nos. of Wheels	前2/后2 F2/R2
	驱动轮数 Driving Wheel	四轮驱动 4 wheels Driving
	轮胎尺寸 Size of Tire	16/70-20PR

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