

LI-ION
ZERO EMISSION



AX SERIES ELECTRIC FORKLIFT
FBAX80/FBAX100

Load capacity: 8,000KG/10,000KG



High-Voltage Lithium Series 8-10ton

Built on a high-voltage platform, engineered with system-level safety architecture and heavy-duty structural design, our lithium-electric 8-10ton forklift delivers the performance, reliability, and durability to truly replace internal combustion trucks in demanding jobsites.

347V
High voltage

IPX4
Water resistance

4-5Hrs
Running time

1.2-1.5Hrs
Charging time

30%
Max. Gradeability

20km/h
Travel Speed



Efficiency & Performance

■ 347V High-Voltage Platform

- Utilizes a **high-safety-grade high-voltage electrical system (347V+)** offering lower current, minimal heat loss, and superior energy efficiency compared to traditional 80V platforms.

■ Dual Permanent Magnet Synchronous Motors (PMSM)

- High-efficiency driving and lifting motors allow travel speed up to 20km/h and lifting speed of 0.33m/s, outperforming IC forklifts.

■ Integrated Rapid Charging

- Supports CCS 2.0 standard DC fast charging. **A full charge in 1.2–1.5 hours** make heavy-duty multiple shifts become possible.

■ High-Ratio Gearbox

- Optimized for superior gradeability and acceleration under load.

Reliability & Thermal Management

■ Advanced Liquid Cooling (TMS)

- A sophisticated Thermal Management System for the battery, motors, and electronic controls. Ensures stable operation in extreme heat or high-intensity cycles.



■ All-Weather Protection (IP67/IP56)



- The battery is rated IP67 (dust/waterproof), with electrical components at IP56 and the full chassis at IPX4. Built for rain and dusty environments.

■ Heavy-Duty Chassis

- Cast-iron drive axle, and a reinforced welded steering axle with a "sandwich" structure to protect steering cylinders.



Safety & Intelligence

■ High-Voltage Safety Suite

- Includes Real-time Insulation Monitoring, Equipotential Bonding (to prevent interference/arcs), High-Voltage Interlock (HVIL), and a Manual Service Disconnect (MSD).

■ Operational Security

- Equipped with an Electronic Parking Brake, Hill-Start Assist (preventing roll-back), and an Operator Presence System (OPS) that disables functions if the seat is vacated

■ Intelligent Battery Management

- Integrated heating for cold climates, automatic power-off when fully charged, and smart sensors for fire prevention.



Ergonomics & Serviceability

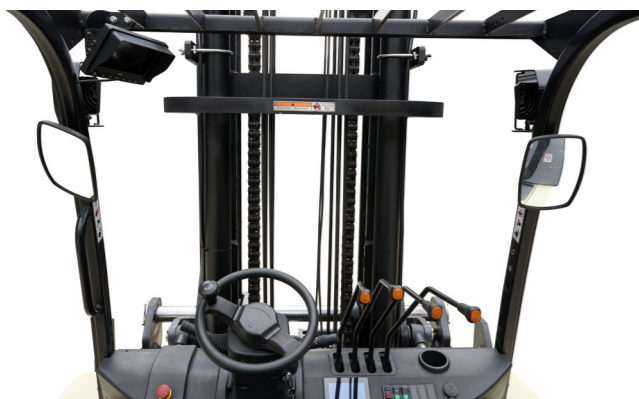
Spacious and smart Cabin

- Features a 5" color LCD, spacious leg room, an adjustable steering column, and a USB charging port for convenience.



Superior Visibility

- Wide-view mast and profiled overhead guard steel ensure a clear view of the load and surroundings.



Easy Maintenance Access

- A wide-angle battery cover and side-opening design allow for quick inspection. All fluids (hydraulic, coolant) are accessible via convenient service windows.



CAN-bus Diagnosis

- Simplifies wiring and provides real-time error codes on the display for rapid troubleshooting.

FBAX80-100 Premium CATL High-Voltage LFP Battery

Technical Specification

347V
High-Voltage System



Higher efficiency, less heat generation, superior stability

93.2kWh
High-Capacity Battery



less frequent charging and downtime

Fast Charging
(1.2-1.5 hrs)



Perfect for 3-shift operations

CATL LFP
Cells



Trusted brand, high safety

Liquid Cooling + TMS



No thermal throttling, consistent performance

IP67
Protection Rating



Waterproof and dustproof

High-Voltage Safety Design



High voltage doesn't mean high risks

5 yrs/10000hrs
Extended Warranty



Peace of mind and worry-free ownership



Battery specifications:

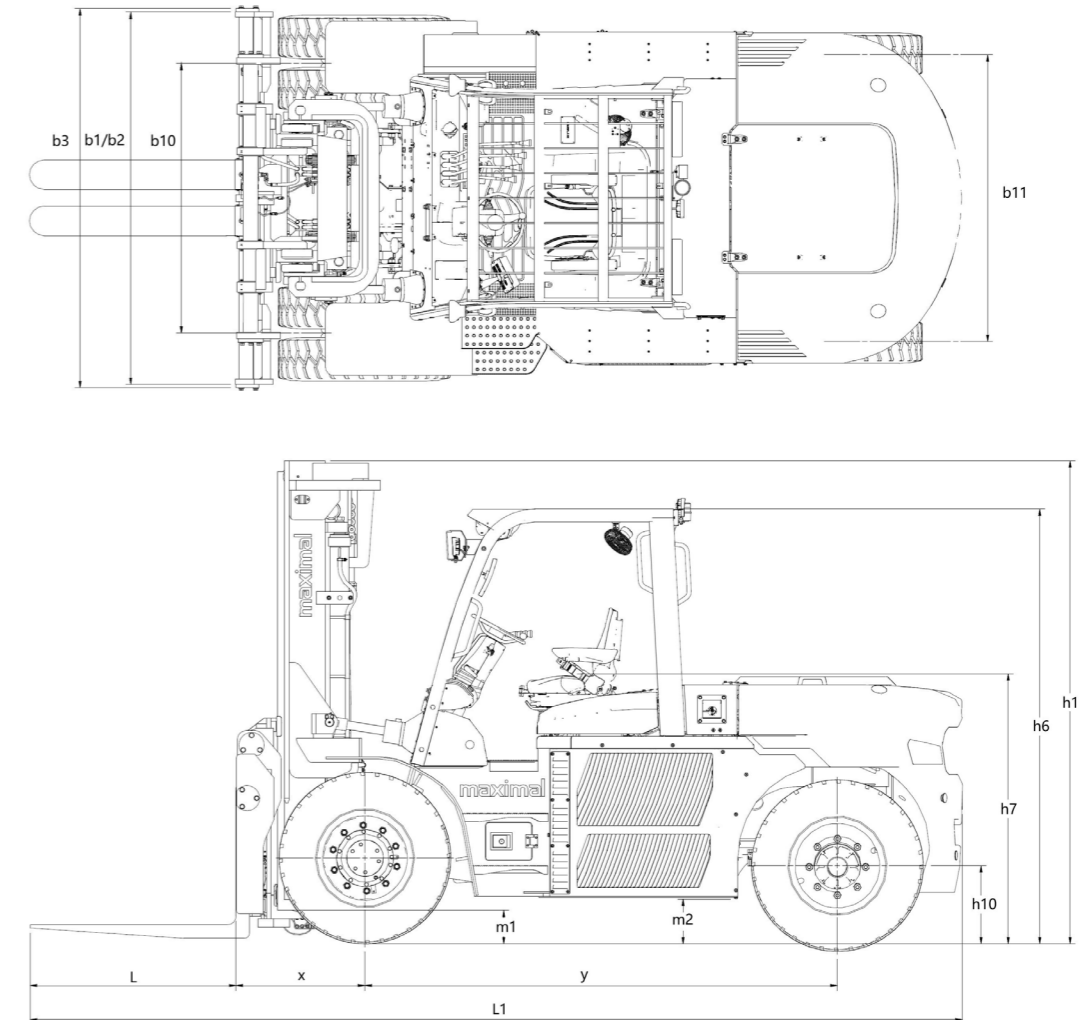
Truck Model	Battery cell brand	Battery Capacity		Energy Consumption			Charger Specification (A)	Charging Time (hrs)
		Voltage(V)	Capacity(Ah)	Energy consumption according to VDI cycle (Loading = 100%Q)		Running Time (hrs)		
Standard								
FBAX80-YP2	CATL	347.7	268	93.2	18.8	5.0	150	1.8
FBAX100-YP2	CATL	347.7	268	93.2	19.8	4.7	150	1.8
Option								
FBAX80-YP2	CATL	347.7	200	69.5	18.8	3.7	150	1.3
FBAX100-YP2	CATL	347.7	200	69.5	19.8	3.5	150	1.3

FBAX80-100 Specifications

		Distinguishing mark		
		8T	10T	
1.1	Manufacturer	HYM	HYM	
1.2	Model designation	8T	10T	
1.3	Drive	electric	electric	
1.4	Operator type	seated	seated	
1.5	Rated capacity/rated load	Q (kg)	8000	10000
1.6	Load centre distance	c (mm)	600	600
1.8	Load distance, centre of drive axle to fork	x (mm)	720	720
1.9	Wheelbase (with mast vertical)	y (mm)	2800	2800
Weight				
2.1	Service weight	kg	13430	14270
2.2	Axle loading, laden front/rear	kg	19201/2229	22040/2230
2.3	Axle loading, unladen front/rear	kg	7436/5994	6980/7290
Tyres / chassis				
3.1	Tyres		pneumatic	pneumatic
3.2	Tyre size, front		9.00-20 14PR	9.00-20 14PR
3.3	Tyre size, rear		9.00-20 14PR	9.00-20 14PR
3.5	wheels, number front/rear		4/2	4/2
3.6	Tread, front	b10 (mm)	1600	1600
3.7	Tread, rear	b11 (mm)	1720	1720
Dimensions				
4.1	Tilt of mast/fork carriage, forward /backward	α / β (°)	6/12	6/12
4.2	Height, mast lowered	h1 (mm)	2850	2850
4.3	Free lift	h2 (mm)	210	210
4.4	Lift	h3 (mm)	3000	3000
4.5	Height, mast extended	h4 (mm)	4285	4285
4.7	Height of overhead guard(cabin)	h6 (mm)	2585	2585
4.8	Seat height/stand height	h7 (mm)	1350	1350
4.12	Towing coupling height	h10 (mm)	680	680
4.19	Overall length	l1 (mm)	5480	5480
4.2	Length to face of forks	l2 (mm)	4260	4260
4.21	Overall width	b1/b2 (mm)	2180	2180
4.22	Fork dimensions ISO2331	s/e/l (mm)	80 / 175 / 1220	80 / 175 / 1220
4.23	Fork carriage ISO 2328. Class/type, A/B		\	\
4.24	Fork carriage width	b3 (mm)	2250	2250
4.31	Ground clearance, laden, below mast	m1 (mm)	220	220
4.32	Ground clearance, centre of wheelbase	m2 (mm)	270	270
4.34	Aisle width with predetermined load dimensions	Ast (mm)	6200	6200
4.35	Turning radius	Wa (mm)	4050	4050
4.36	Inner turning radius	b13 (mm)	1573	1573
Performance data				
5.1	Travel speed, laden/unladen	km/h	20.2/20.3	20/20.2
5.1.1	Travel speed, laden / unladen, backwards	km/h	20.2/20.3	20/20.2
5.2	Lifting speed, laden/unladen	mm/s	330/333	330/333
5.3	Lowering speed laden/unladen	mm/s	410/390	430/390
5.5	Drawbar pull laden/unladen	KN	65/63	68.5/65
5.7	Gradeability, laden/unladen	%	20/20	20/20
5.8	Maximum gradeability, laden/unladen	%	32/54	30/52
5.1	Service brake		Hydraulic	Hydraulic
Electric-engine				
6.1	Drive motor rating S2 60 min	Kw	60	60
6.2	Lift motor rating at S3 15 %	Kw	27.8*2	27.8*2
6.4	Battery voltage/nominal capacity K5	(V)/(Ah)	347.7V/ 268Ah 93.2KWH	347.7V/ 268Ah 93.2KWH
6.5	Battery weight	kg	940	940
6.6	Energy consumption according to VDI cycle	kWh/h	18.8	19.8
6.8	Energy consumption at turnover output	kWh in 1 h	21.8	22.6
Additional data				
10.1	Operating pressure for attachments	MPa	15	15
10.2	Oil volume for attachments	l/min	160	160
10.7	Sound pressure level at the driver's seat	dB (A)	72	72

DIMENSION DIAGRAM - FBAX80/FBAX100

TRUCK DIMENSION DIAGRAM



MAST DATA SHEET

Mast Type	Lift (h3)	Height, mast lowered (h1)	Height, mast extended Without LBR (h4)	Free lift Without LBR (h2)	Load Distance (x)	Mast Tilt		Capacity 600mm load centre Dual front tyre		Mast weight	
						Forward	Back	8.0T	10.0T	8.0T	10.0T
						Deg	Deg	kg	kg	kg	kg
2-Stage LFL	3000	2850	4285	210	720	6	12	8000	10000	3128	3128
	3300	3000	4585	210	720	6	12	8000	10000	3212	3212
	3500	3100	4785	210	720	6	12	8000	10000	3257	3257
	3750	3225	5035	210	720	6	12	8000	10000	3307	3307
	4000	3400	5335	210	720	6	12	8000	10000	3447	3447
	4500	3650	5835	210	720	6	12	8000	10000	3552	3552
	5000	3900	6335	210	720	6	6	7800	10000	3664	3664
	5500	4200	6885	210	720	3	6	7400	9000	3905	3905
	6000	4450	7385	210	720	3	6	7000	8000	4015	4015

Maximal FBAX80/100 CONFIGURATION

PERFORMANCE	STD	OPT
60Kw Permanent Magnet Synchronous Drive Motor	●	
2 x 27.8Kw Permanent Magnet Synchronous Pump Motor	●	
Lithium Battery 347.7V/ 268Ah 93.2KWH	●	
Lithium Battery 347.7V/ 200Ah 69.5KWH		●
Globe 4G for Lithium Battery	●	
Charging port with CCS2.0	●	
High Voltage Lithium Battery Controller	●	
Drive axle with drum brakes	●	
Drive axle with wet brakes		●
Fleet management system		●
DRIVE	STD	OPT
09.00-20-14PR pneumatic tires	●	
09.00-20 Solid (PPS)		●
Multiple speed modes: High, Standard. Economic	●	
Speed limiter		●
Speed Limit when Mast is raised		●
Travelling deceleration when turning	●	
LIFT	STD	OPT
2 stage limited freelif mast	●	
6° forward /12° back tilt	●	
6° forward /6° back tilt		●
3° forward /6° back tilt		●
HANDLING	STD	OPT
2250mm (89") wide individual fork positioner		●
2250mm (88") wide sideshift, simultaneous fork positioner	●	
2450mm (96") wide sideshift, simultaneous fork positioner		●
2650mm (104") wide sideshift, simultaneous fork positioner		●
1220 x 175 x 80mm PIN type standard tapered fork	●	
Selection of alternative fork lengths		●
Fork landing buffer	●	
ERGONOMICS	STD	OPT
Overhead guard	●	
Top screen		●
Front screen with Wiper & Washer		●
Full enclosed cabin include front & rear wiper, with front washer		●
Semi Cabin(cabin without doors) Front, Top and Rear Panels, with Front wiper and washer		●
USB charger	●	

ERGONOMICS	STD	OPT
Air conditioner(Heating and Cooling)		●
Operator fan		●
Park brake Alarm	●	
Seat Switch	●	
Standard seat (vinyl) (w/ flip-up armrests, seat belt-black ,W seat switch sensor)	●	
Full-suspension seat (vinyl) (w/ folding backrest ,seat belt-black, W seat and seat belt switch sensor)		●
Multifunction color display panel	●	
Steering wheel with spinner knob	●	
Directional control lever on steering column	●	
Electric button control parking brake	●	
Tilting steering column	●	
VISIBILITY	STD	OPT
Rear view mirrors	●	
LED work lights (2 front LED working light & 1 Rear LED working light)	●	
Turn signals & marker lights (LED)	●	
Rear strobe light	●	
Reversing buzzer	●	
Blue spot lights on rear side		●
Red three-side light (left, right, rear)		●
Rear view camera system (1*camera 1*display)		●
Mast camera with display screen		●
Radar object detection system (1*camera 1*display 4*radar)		●
Weighing Device & Overload Warning		●
OPERATION	STD	OPT
Password entry		●
Horn	●	
Right rear armrest with horn button (On hood)	●	
Visible alarm – amber strobe light, keyswitch activated	●	
Audible alarm – reverse direction activated 82–102 dB(A)	●	
Seatbelt interlock for truck start and truck operation		●
APPEARANCE	STD	OPT
Maximal parchment paint base truck	●	
SUPPLEMENTAL	STD	OPT
CE Requirement		●
Literature package	●	
Operator's manual	●	
Warranty: 14 Months/2,000 hours parts manufacturer's warranty; battery: 5 years/10,000hours	●	



CE



ISO 14001




ISO 9001

No.1 Jinxin Road, Fuyang, Hangzhou, China

Sales Hotline: 86-571-28037691

E-mail: info@maxforklift.com

Specifications published in this catalogue are subject to changes without notice. Standard equipment may differ from this list, please contact your local dealer for information.

© 2024 Maximal, all rights reserved. MAXIMAL and  are trademarks of Hyster-Yale Maximal Forklift (Zhejiang) Co., Ltd..



Scan to know more