EFL252X3

LI-ION COUNTERBALANCE FORKLIFT 2.5T





The EFL X3 Series is designed for small and medium logistics centers, manufacturing facilities, and rental operations that require a durable electric forklift capable of replacing diesel models. Its solid tires, high ground clearance, and IP-protected structure make it suitable for outdoor conditions, while its tight turning radius (2250 mm) and compact chassis provide exceptional maneuverability in narrow aisles. This all-round versatility makes it a reliable partner for warehouses, loading bays, and production environments.

SPECIFICATION	REF	UNIT	VALUE
Battery nominal capacity		Ah	150
Battery voltage		V	80
Load capacity	Q	kg	2500
Load centre distance	С	mm	500
Service weight		kg	4255
Retracted mast height	h ₁	mm	2090
Lift height	h ₃	mm	3000
Height, mast extended	h ₄	mm	4025
Overall length		mm	3620
Overall width	b ₁ /b ₂	mm	1154
Length to face of forks	12	mm	2550
Fork dimensions	s/e/l	mm	40×122×1070
Turning radius		Wa	2250
Operator type			Seated
Load distance, centre of drive axle to fork		mm	495
Wheelbase		mm	1650

Features

PMSM motor for higher efficiency and performance

The EFL X3 Series adopts advanced Permanent Magnet Synchronous Motor (PMSM) technology, improving power output and extending battery life by up to 10%. The high-efficiency drive delivers smoother acceleration and superior energy management across demanding tasks.





Removable Li-ion battery for flexible operation

Equipped with an 80V/150Ah removable Li-ion battery (optional 280Ah), the truck allows fast side-pull replacement, ideal for continuous operations or areas lacking fixed charging points. Maintenance-free design and opportunity charging ensure maximum uptime and reliability.

Versatile for indoor and outdoor use

Thanks to its solid tires, water-protected chassis, and high ground clearance, the EFL X3 easily handles uneven outdoor terrain while maintaining excellent control indoors. Its 2250 mm turning radius ensures agile maneuvering in compact spaces.







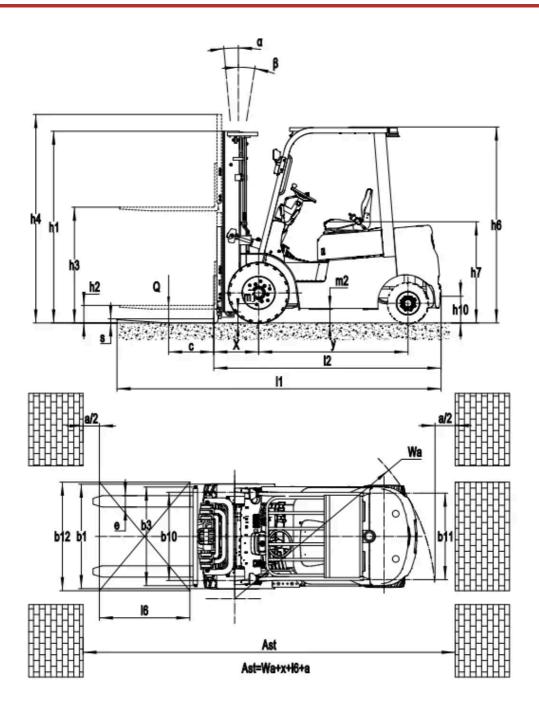
Ergonomic and operator-friendly design

The operator zone includes a simplified dashboard, adjustable steering wheel, and comfortable seating, designed for all-day productivity. Optimized visibility and intuitive controls support precise load handling, reducing fatigue and enhancing safety.

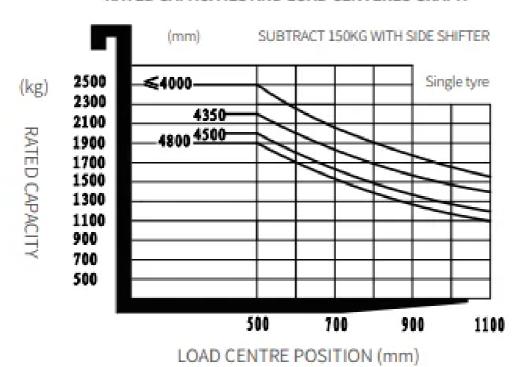
VDI Chart

	SPECIFICATION	REF	UNIT	VALUE
1.4	Operator type			Seated
1.5	Load capacity	Q	kg	2500
1.6	Load centre distance	С	mm	500
1.8	Load distance, centre of drive axle to fork		mm	495
1.9	Wheelbase		mm	1650
2.1	Service weight		kg	4255
2.2	Axle loading, laden front/rear		kg	5815/940
2.3	Axle loading, unladen front/rear		kg	1805/2450
3.1	Tyre type			Solidrubber
3.2	Tyre size, front			7.00-12
3.3	Tyre size, rear			18X7-8
3.5	Wheels, number front/rear (x=drive wheels)			2x/2
3.6	Tread width, front	b ₁₀	mm	975
3.7	Tread width, rear	b ₁₁	mm	955
4.1	Tilt of mast/fork carriage forward/backward		0	6/10
4.12	Tow coupling height		mm	295
4.19	Overall length		mm	3620
4.2	Retracted mast height	h ₁	mm	2090
4.20	Length to face of forks	12	mm	2550
4.21	Overall width	b ₁ /b ₂	mm	1154
4.22	Fork dimensions	s/e/l	mm	40×122×1070
4.23	A,B Fork carriage class/type A, B			2A
4.24	Fork carriage width		mm	1040

4.3 Free lift mm 135 4.31 Ground clearance, laden, below mast mm 110 4.32 Ground clearance, centre of wheelbase mm 150 4.34.1 Asile width for pallets 1000×1200 crossways Ast 3945 4.34.2 Asile width for pallets 800×1200 lengthways Ast 4146 4.35 Turning radius Wa 2250 4.4.1 Idinght hg mm 3000 4.4.1 Height, feelight mm 4800 4.5 Height, mast extended hg mm 2170 4.8 Seat height/Standing height mm 1110 5.1 Travel speed, laden/unladen mm 1172 5.1 Travel speed, laden/unladen mm 1172 5.1 Paking prake m/k 0.29/0.36 5.2 Lifting speed, laden/unladen m/s 0.40/43 5.3 Lowering speed, laden/unladen m/s 0.40/43 6.1 Divity motor rating s2 60 min m/s 15/15 6.1 Battery vonting at S3 15% kg		SPECIFICATION	REF	UNIT	VALUE
4.32 Ground clearance, centre of wheelbase mm 150 4.34.1 Aisle width for pallets 1000×1200 crossways Ast 3945 4.34.2 Aisle width for pallets 800×1200 lengthways Ast 4145 4.35. Turning radius Wa 2250 4.4.1 Lift height mm 3000 4.4.1 Max lift height mm 4800 4.5. Height mast extended h ₄ mm 4025 4.7 Height of overhead guard (cabin) mm 2170 4.8 Seat height/standing height mm 1111 5.1 Travel speed, laden/unladen km/h 11/12 5.1 Parking brake Mechanical 5.2 Lifting speed, laden/unladen m/s 0.29/0.36 5.3 Lowering speed, laden/unladen m/s 0.4/0.43 5.8 Max. gradeabilty, laden/unladen kW 8 6.1 Drive motor rating S2 60 min kW 16 6.2 Lift motor rating s2 s3 15% kW 150 <td>4.3</td> <td>Free lift</td> <td></td> <td>mm</td> <td>135</td>	4.3	Free lift		mm	135
4.34.1 Aisle width for pallets 1000×1200 crossways Ast 3945 4.34.2 Aisle width for pallets 800×1200 lengthways Ast 4145 4.35 Turning radius Wa 2250 4.4 Lift height mm 3000 4.4.1 Max lift height mm 4800 4.5 Height, mast extended Ma 025 4.7 Height of overhead guard (cabin) mm 1110 4.8 Seat height/standing height km/h 11/12 5.1 Travel speed, laden/unladen km/h 11/12 5.10 Service brake Hydraulic Hydraulic 5.1 Parking brake Mechanical 5.2 Lifting speed, laden/unladen m/s 0.29/0.36 5.3 Lowering speed, laden/unladen m/s 0.4/0.43 5.8 Max. gradeability, laden/unladen kW 8 6.1 Drive motor rating S2 60 min kW 8 6.2 Lift motor rating S2 60 min kW 150 6.4 Battery woltage kW 150 6.5	4.31	Ground clearance, laden, below mast		mm	110
4.34.2 Alsile width for pallets 800×1200 lengthways Ast 4145 4.35 Turning radius Wa 2250 4.4 Lift height ma 3000 4.4.1 Max lift height mm 4800 4.5 Height, mast extended h ₄ mm 4025 4.7 Height of overhead guard (cabin) mm 1110 5.1 Travel speed, laden/unladen km/h 11/12 5.10 Service brake Hydraulic 5.11 Parking brake Mchanical 5.2 Lifting speed, laden/unladen m/s 0.29/0.36 5.3 Lowering speed, laden/unladen m/s 0.4/0.43 5.8 Max. gradeability, laden/unladen m/s 0.4/0.43 6.1 Drive motor rating S2 60 min kW 8 6.2 Lift motor rating at S3 15% kW 8 6.4 Battery nominal capacity kW 150 6.4 Battery woltage V 80 6.5 Battery woltage kg 4255 6.5 Charger output current	4.32	Ground clearance, centre of wheelbase		mm	150
4.35 Turning radius Wa 2250 4.4 Lift height h3 mm 3000 4.4.1 Max lift height mm 4800 4.5 Height, mast extended h4 mm 4025 4.7 Height of overhead guard (cabin) mm 2170 4.8 Seat height/standing height mm 1110 5.1 Travel speed, laden/unladen km/h 11/12 5.10 Service brake Hydraulic 5.11 Parking brake Mechanical 5.2 Lifting speed, laden/unladen m/s 0.29/0.36 5.3 Lowering speed, laden/unladen m/s 0.4/0.43 5.4 Max. gradeability, laden/unladen % 15/15 6.1 Drive motor rating st 260 min kW 8 6.2 Lift motor rating st S3 15% kW 8 6.4 Battery nominal capacity kW 16 6.4 Battery weight kg 4255 6.5 Charger output current </td <td>4.34.1</td> <td>Aisle width for pallets 1000×1200 crossways</td> <td></td> <td>Ast</td> <td>3945</td>	4.34.1	Aisle width for pallets 1000×1200 crossways		Ast	3945
4.4 Lift height h3 mm 3000 4.4.1 Max lift height mm 4800 4.5 Height, mast extended h4 mm 4025 4.7 Height of overhead guard (cabin) mm 2170 4.8 Seat height/standing height mm 1110 5.1 Travel speed, laden/unladen wm/h 11/12 5.10 Service brake Hydraulic 5.11 Parking brake Mechanical 5.2 Lifting speed, laden/unladen m/s 0.29/0.36 5.3 Lowering speed, laden/unladen m/s 0.40/0.43 5.8 Max. gradeability, laden/unladen m/s 0.40/0.43 6.1 Drive motor rating S2 60 min kW 8 6.2 Lift motor rating at S3 15% kW 16 6.4 Battery nominal capacity kW 150 6.5 Battery weight kg 4255 6.5 Charger output current kWh/h N/A 6.6 Energy	4.34.2	Aisle width for pallets 800×1200 lengthways		Ast	4145
4.4.1 Max lift height mm 4800 4.5 Height, mast extended h ₄ mm 4025 4.7 Height of overhead guard (cabin) mm 2170 4.8 Seat height/standing height mm 1110 5.1 Travel speed, laden/unladen km/h 11/12 5.10 Service brake Hydraulic 5.11 Parking brake Mechanical 5.2 Lifting speed, laden/unladen m/s 0.29/0.36 5.3 Lowering speed, laden/unladen m/s 0.40.43 5.8 Max. gradeability, laden/unladen % 15/15 6.1 Drive motor rating S2 60 min kW 8 6.2 Lift motor rating at S3 15% kW 16 6.4 Battery nominal capacity kW 150 6.4 Battery weight kg 4255 6.5 Battery weight kg 4255 6.5 Charger output current kMh/h N/A 6.6 Energy consumption according t	4.35	Turning radius		Wa	2250
4.5 Height, mast extended h ₄ mm 4025 4.7 Height of overhead guard (cabin) mm 2170 4.8 Seat height/standing height mm 1110 5.1 Travel speed, laden/unladen km/h 11/12 5.10 Service brake Hydraulic 5.11 Parking brake Mechanical 5.2 Lifting speed, laden/unladen m/s 0.29/0.36 5.3 Lowering speed, laden/unladen m/s 0.4/0.43 5.8 Max. gradeability, laden/unladen % 15/15 6.1 Drive motor rating S2 60 min kW 8 6.2 Lift motor rating at S3 15% kW 16 6.4 Battery nominal capacity Ah 150 6.4 Battery weight kg 4255 6.5 Charger output current A N/A 6.6 Energy consumption according to VDI 2198 kWh/h N/A 6.7 Turnover output according to VDI 2198 N/A N/A 6.8 <td>4.4</td> <td>Lift height</td> <td>h₃</td> <td>mm</td> <td>3000</td>	4.4	Lift height	h ₃	mm	3000
4.7 Height of overhead guard (cabin) mm 2170 4.8 Seat height/standing height mm 1110 5.1 Travel speed, laden/unladen km/h 11/12 5.10 Service brake Hydraulic 5.11 Parking brake Mechanical 5.2 Lifting speed, laden/unladen m/s 0.29/0.36 5.3 Lowering speed, laden/unladen m/s 0.4/0.43 5.8 Max. gradeability, laden/unladen % 15/15 6.1 Drive motor rating \$2.60 min kW 8 6.2 Lift motor rating at \$3.15% kW 16 6.4 Battery nominal capacity Ah 150 6.4 Battery weight kg 4255 6.5 Charger output current A N/A 6.6 Energy consumption according to DIN EN 16796 kWh/h N/A 6.7 Turnover output according to VDI 2198 KWh/h N/A 6.8 Turnover efficiency according to VDI 2198 N/A N/A 6.8 Turnover efficiency according to VDI 2198 N/A N/A	4.4.1	Max lift height		mm	4800
4.8 Seat height/standing height mm 1110 5.1 Travel speed, laden/unladen km/h 11/12 5.10 Service brake Hydraulic 5.11 Parking brake Mechanical 5.2 Lifting speed, laden/unladen m/s 0.29/0.36 5.3 Lowering speed, laden/unladen m/s 0.4/0.43 5.8 Max. gradeability, laden/unladen % 15/15 6.1 Drive motor rating \$2.60 min kW 8 6.2 Lift motor rating at \$3.15% kW 16 6.4 Battery nominal capacity Ah 150 6.4 Battery voltage V 80 6.5 Battery weight kg 4255 6.5 Charger output current A N/A 6.6 Energy consumption according to DIN EN 16796 kWh/h N/A 6.7 Turnover output according to VDI 2198 N/A 6.8 Turnover efficiency according to VDI 2198 N/A 6.8 Turnover output control Hydr	4.5	Height, mast extended	h_4	mm	4025
5.1 Travel speed, laden/unladen km/h 11/12 5.10 Service brake Hydraulic 5.11 Parking brake Mechanical 5.2 Lifting speed, laden/unladen m/s 0.29/0.36 5.3 Lowering speed, laden/unladen m/s 0.4/0.43 5.8 Max. gradeability, laden/unladen % 15/15 6.1 Drive motor rating \$2.60 min kW 8 6.2 Lift motor rating at \$3.15% kW 16 6.4 Battery nominal capacity Ah 150 6.4 Battery voltage V 80 6.5 Battery weight kg 4255 6.5 Charger output current A N/A 6.6 Energy consumption according to DIN EN 16796 kWh/h N/A 6.7 Turnover output according to VDI 2198 N/A 6.8 Turnover efficiency according to VDI 2198 N/A 6.8 Turnover of drive control PMSM 7 PMSM	4.7	Height of overhead guard (cabin)		mm	2170
5.10 Service brake Hydraulic 5.11 Parking brake Mechanical 5.2 Lifting speed, laden/unladen m/s 0.29/0.36 5.3 Lowering speed, laden/unladen m/s 0.4/0.43 5.8 Max. gradeability, laden/unladen % 15/15 6.1 Drive motor rating S2 60 min kW 8 6.2 Lift motor rating at S3 15% kW 16 6.4 Battery nominal capacity Ah 150 6.4 Battery voltage V 80 6.5 Battery weight kg 4255 6.5 Charger output current A N/A 6.6 Energy consumption according to DIN EN 16796 kWh/h N/A 6.7 Turnover output according to VDI 2198 N/A 6.8 Turnover efficiency according to VDI 2198 N/A 8.1 Type of drive control PMSM 9MSM Hydraulic	4.8	Seat height/standing height		mm	1110
5.11 Parking brake Mechanical 5.2 Lifting speed, laden/unladen m/s 0.29/0.36 5.3 Lowering speed, laden/unladen m/s 0.4/0.43 5.8 Max. gradeability, laden/unladen % 15/15 6.1 Drive motor rating S2 60 min kW 8 6.2 Lift motor rating at S3 15% kW 16 6.4 Battery nominal capacity Ah 150 6.4 Battery voltage V 80 6.5 Battery weight kg 4255 6.5 Charger output current A N/A 6.6 Energy consumption according to DIN EN 16796 kWh/h N/A 6.7 Turnover output according to VDI 2198 N/A 6.8 Turnover efficiency according to VDI 2198 N/A 8.1 Type of drive control PMSM 10.5 Steering design Hydraulic	5.1	Travel speed, laden/unladen		km/h	11/12
5.2 Lifting speed, laden/unladen m/s 0.29/0.36 5.3 Lowering speed, laden/unladen m/s 0.4/0.43 5.8 Max. gradeability, laden/unladen % 15/15 6.1 Drive motor rating \$2.60 min kW 8 6.2 Lift motor rating at \$3.15% kW 16 6.4 Battery nominal capacity Ah 150 6.4 Battery weight kg 4255 6.5 Battery weight A N/A 6.6 Energy consumption according to DIN EN 16796 kWh/h N/A 6.7 Turnover output according to VDI 2198 N/A 6.8 Turnover efficiency according to VDI 2198 N/A 8.1 Type of drive control PMSM 10.5 Steering design Hydraulic	5.10	Service brake			Hydraulic
5.3 Lowering speed, laden/unladen m/s 0.4/0.43 5.8 Max. gradeability, laden/unladen % 15/15 6.1 Drive motor rating S2 60 min kW 8 6.2 Lift motor rating at S3 15% kW 16 6.4 Battery nominal capacity Ah 150 6.4 Battery voltage V 80 6.5 Battery weight kg 4255 6.5 Charger output current A N/A 6.6 Energy consumption according to DIN EN 16796 kWh/h N/A 6.7 Turnover output according to VDI 2198 N/A N/A 6.8 Turnover efficiency according to VDI 2198 N/A N/A 8.1 Type of drive control PMSM Hydraulic	5.11	Parking brake			Mechanical
Max. gradeability, laden/unladen % 15/15 6.1 Drive motor rating S2 60 min kW 8 6.2 Lift motor rating at S3 15% kW 16 6.4 Battery nominal capacity Ah 150 6.4 Battery voltage V 80 6.5 Battery weight kg 4255 6.5 Charger output current A N/A 6.6 Energy consumption according to DIN EN 16796 kWh/h N/A 6.7 Turnover output according to VDI 2198 N/A 6.8 Turnover efficiency according to VDI 2198 N/A 8.1 Type of drive control PMSM 10.5 Steering design Hydraulic	5.2	Lifting speed, laden/unladen		m/s	0.29/0.36
6.1 Drive motor rating S2 60 min kW 8 6.2 Lift motor rating at S3 15% kW 16 6.4 Battery nominal capacity Ah 150 6.4 Battery voltage V 80 6.5 Battery weight kg 4255 6.5 Charger output current A N/A 6.6 Energy consumption according to DIN EN 16796 kWh/h N/A 6.7 Turnover output according to VDI 2198 N/A 6.8 Turnover efficiency according to VDI 2198 N/A 8.1 Type of drive control PMSM 10.5 Steering design Hydraulic	5.3	Lowering speed, laden/unladen		m/s	0.4/0.43
Lift motor rating at S3 15% kW 16 6.4 Battery nominal capacity Ah 150 6.4 Battery voltage V 80 6.5 Battery weight kg 4255 6.5 Charger output current A N/A 6.6 Energy consumption according to DIN EN 16796 kWh/h N/A 6.7 Turnover output according to VDI 2198 N/A 6.8 Turnover efficiency according to VDI 2198 N/A 8.1 Type of drive control PMSM 10.5 Steering design Hydraulic	5.8	Max. gradeability, laden/unladen		%	15/15
6.4 Battery nominal capacity 6.4 Battery voltage V 80 6.5 Battery weight 6.5 Charger output current A N/A 6.6 Energy consumption according to DIN EN 16796 kWh/h N/A 6.7 Turnover output according to VDI 2198 N/A 6.8 Turnover efficiency according to VDI 2198 N/A 8.1 Type of drive control PMSM 10.5 Steering design Hydraulic	6.1	Drive motor rating S2 60 min		kW	8
6.4Battery voltageV806.5Battery weightkg42556.5Charger output currentAN/A6.6Energy consumption according to DIN EN 16796kWh/hN/A6.7Turnover output according to VDI 2198N/A6.8Turnover efficiency according to VDI 2198N/A8.1Type of drive controlPMSM10.5Steering designHydraulic	6.2	Lift motor rating at S3 15%		kW	16
6.5 Battery weight kg 4255 6.5 Charger output current A N/A 6.6 Energy consumption according to DIN EN 16796 kWh/h N/A 6.7 Turnover output according to VDI 2198 N/A 6.8 Turnover efficiency according to VDI 2198 N/A 8.1 Type of drive control PMSM 10.5 Steering design Hydraulic	6.4	Battery nominal capacity		Ah	150
6.5 Charger output current A N/A 6.6 Energy consumption according to DIN EN 16796 kWh/h N/A 6.7 Turnover output according to VDI 2198 N/A 6.8 Turnover efficiency according to VDI 2198 N/A 8.1 Type of drive control PMSM 10.5 Steering design Hydraulic	6.4	Battery voltage		V	80
6.6 Energy consumption according to DIN EN 16796 kWh/h N/A 6.7 Turnover output according to VDI 2198 N/A 6.8 Turnover efficiency according to VDI 2198 N/A 8.1 Type of drive control PMSM 10.5 Steering design Hydraulic	6.5	Battery weight		kg	4255
6.7 Turnover output according to VDI 2198 N/A 6.8 Turnover efficiency according to VDI 2198 N/A 8.1 Type of drive control PMSM 10.5 Steering design Hydraulic	6.5	Charger output current		A	N/A
6.8 Turnover efficiency according to VDI 2198 N/A 8.1 Type of drive control PMSM 10.5 Steering design Hydraulic	6.6	Energy consumption according to DIN EN 16796		kWh/h	N/A
8.1 Type of drive control PMSM 10.5 Steering design Hydraulic	6.7	Turnover output according to VDI 2198			N/A
10.5 Steering design Hydraulic	6.8	Turnover efficiency according to VDI 2198			N/A
	8.1	Type of drive control			PMSM
10.7 Sound pressure level at the drivers ear dB(A) <74	10.5	Steering design			Hydraulic
	10.7	Sound pressure level at the drivers ear		dB(A)	<74



RATED CAPACITIES AND LOAD CENTERES GRAPH



Mast Options

MAST TYPE	LIFT HEIGHT (H3, MM)	MAST LOWERED HEIGHT (H1, MM)	HEIGHT, MAST EXTENDED, NO SHELVING (H4, MM)	HEIGHT, MAST EXTENDED, WITH SHELVING (H4, MM)	HEIGHT, FREE LIFT, NO SHELVING (H2, MM)	HEIGHT, FREE LIFT, WITH SHELVING (H2, MM)
2-Standard Mast	3000	2090	3565	4025	135	135
2-Standard Mast	3300	2240	3865	4325	135	135
3-Free Mast	4500	2115	5065	5525	1550	1090
3-Free Mast	4800	2220	5365	5825	1655	1195

Options

ITEM	OPTIONS (optional items marked in yellow)
Fork dimension	122*40*920 122*40*1070 122*40*1150 122*40*1220 122*40*1370 122*40*1500 122*40*1600 122*40*1700 122*40*1820 122*40*1900 122*40*2000 122*40*2200
Fork carriage width option	1040mm Yes and can be customized
Fork carriage height option	1095mm Yes and can be customized

ITEM	OPTIONS (optional items marked in yellow)			
Seat type	Normal Suspension Comfortable + safety belt logic switch Suspension + safety belt			
	logic switch Suspension + armrests + safety belt logic switch			
Attachments	No Built-in sideshifter External shifter Fork positioner with sideshift			
Traction pin	Yes			
Electrostatic chain	Yes			
Front wheel material	Normal solid Traceless solid			
Rear wheel material	Normal solid Traceless solid			
Battery capacity	80V150AH 80V100AH 80V230AH 80V280AH			
Charger	80V35A (Internal) 80V65A 80V60A (Internal)			
Battery display indicator (BDI)	With hourtime			
Area warning lamp	None Red, both sides			
Rearview mirror	One in front Two on sides			
Buzzer	Yes			
OPS system	No Yes and not customized			
Telematics	Yes and not customized No			
Front lamp	LED			
Rear lamp	No LED			
Warning lamp	Yes			
Steering lamp	Yes			
Blue lamp	None Two in the front One in the rear Two in the front+ One in the rear			
Battery side pull function	Yes and not customized			
Cabin	No Basic half cabin Upgrade half cabin Full cabin With tempered glass OHG			
Battery side pull attachment	No Yes and not customized			