

 Headquarter



### Zhejiang UN Forklift Co.,Ltd.

Address: No.1,Road One,Xindeng New District,Fuyang,  
Hangzhou, Zhejiang 311404, China  
Tel: +86-571-86888377/87565705/86888355/86888388  
Fax: +86-571-86888399  
E-mail: info@unforklift.com  
Parts Inquiry: parts@unforklift.com

www.unforklift.com



**3-WHEEL  
4-WHEEL**

**N SERIES ELECTRIC  
FORKLIFT**

www.unforklift.com  
**EFFICIENT / ECONOMIC**  
**THE UN FORKLIFT TRUCK**



**UN FORKLIFT**

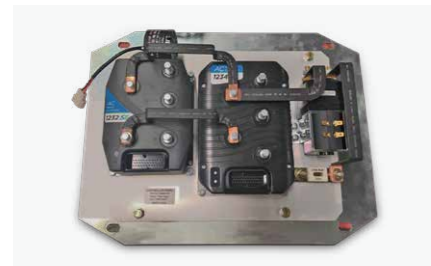
# 4-Wheel Electric Forklift

With capacities of 1.5 to 5.0 ton

UN 4-wheel electric forklifts are the most welcomed models due to the attractive appearance and excellent performance. With capacity from 1.5 ton to 5.0 ton, 4-wheel electric forklifts are well used for all kinds of applications especially warehouse.



ZAPI Controller



Curtis Controller

## Safety

The strong overhead guard offers great protection combined with excellent all-round visibility. It can protect operators and strengthen the truck's structure.



## High Performance

**Regeneration Function:** The battery will withdraw electricity automatically when decelerating or parking.

**Reliable AC Technology:** Either Italian ZAPI controller or American Curtis controller provides the infinite variable drive and lift control. The brushless AC motors offer improved efficiency and reduce maintenance cost.

CAN bus communications network provides superior dependability.

Full AC system deliveries quiet ride and zero emission, reduces maintenance costs and enhances productivity.



## Reliability

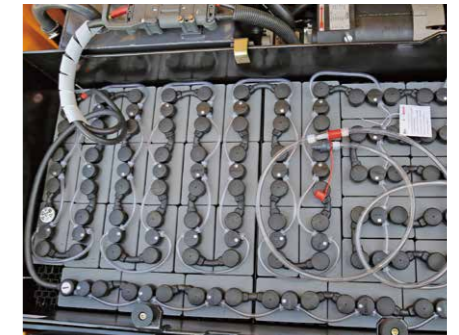
Adopts H-type axle design and low center of gravity by placing the battery deeper into the truck, which can enhance stability of the truck.

## Comfort

Comfortable seat with larger seat-back angle provides maximum operator comfort. UN also has full suspension seat for option.

## Easy Maintenance

**Maintenance Free AC Motor:** Make forklift release less heat and ensures higher efficiency. Simple structure and maintenance free components decrease maintenance cost. The removable maintenance cover helps to access to the controller easier and more convenient.



High capacity battery, easy to check and remove.



**Water-resistant and dust-proof motor and controller:** Provide excellent reliability even in wet weather.

## Product Features



Our small diameter steering wheel features a standard spinner knob to maximize maneuverability and operator confidence.



High strength mast and excellent visibility are desirable for safe operation. The panoramic mirror expands the driver's view when backing up.



**Optimized pedal position:** The position of accelerator has been optimized through human engineering.



**Multifunctional Panel:** Adopts streamline design with super wide LED screen which can display clear contents with abundant information, and can keep operator aware of truck conditions and enhance operator's safety.

### Available Options

- Two stage full free mast
- Three stage full free mast
- Widen backrest or Carriage
- Side shift
- Solid tires
- Cabin
- Forks positioner
- Forks extensions
- Suspension seat
- Heater & Air conditioner
- LED lights
- OPS system
- Camera & display
- Mast top limited system
- Cold storage type
- 3rd Valve & Pipe
- 4th Valve & Pipe
- Attachments
- Automatic water filling system



# 3-Wheel Electric Forklift

With capacities of 1.3 to 2.0 ton

High-efficiency and newly matched AC motors and ZAPI controllers minimize energy loss, reduce heat generation greatly and lower energy consumption. This increases the operation time by 20%.

The compact body design and Pivot turning by the dual AC motors offer superior maneuverability in narrow worksites. Full AC system with ZAPI controller, and ZF transmission ensure a reliable performance.

Well known, reliable key parts and scientific design provide a great performance for material handling in a wide range of applications.



Side battery extraction system, the battery with fork pockets can be taken out from the right side of the truck by using a pallet truck.



Outstanding tight-turn performance for effective warehouse operations.

Smooth entry and exit for containers or low-height entranceways.



Double rear tires achieve stability during traveling and turning. It can also control the turn speed automatically according to the turning angle.

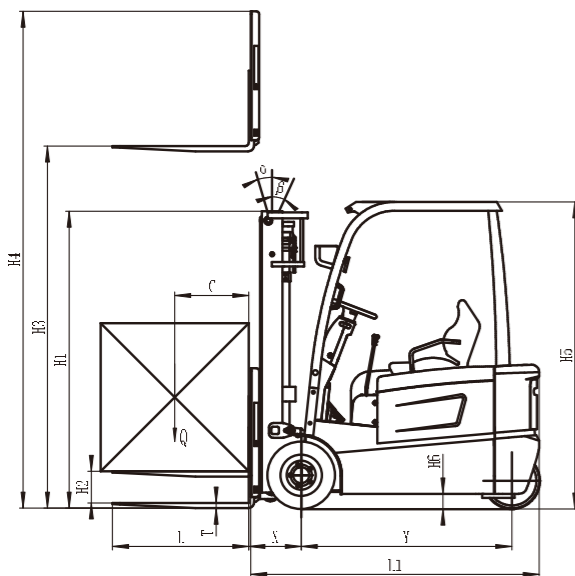
### 1.3-2.0 TON 3-WHEEL ELECTRIC FORKLIFT MAIN SPECIFICATIONS

Specification	1	Manufacturer	UN					
			2	3	4	5		
Model	2		FBT13	FBT16	FBT18	FBT20		
Rated Load Capacity	3	Q(kg)	1300	1600	1800	2000		
Load Centre	4	C(mm)	500	500	500	500		
Lift Height	5	H <sub>5</sub> (mm)	3000	3000	3000	3000		
Free Lift	6	H <sub>2</sub> (mm)	100	100	100	100		
Fork Size (LxWxT)	7	L/W/T(mm)	920x120x35	920x120x35	1070x120x40	1070x120x40		
F/B(α°/β°)	8	Deg	6°/6°	6°/6°	6°/6°	6°/6°		
Dimension	9	Length (To Fork Face)	L <sub>1</sub> (mm)	1855	1955	1955	2075	
	10	Width	B <sub>1</sub> (mm)	1082	1082	1082	1140	
	11	Mast Lowered Height	H <sub>1</sub> (mm)	2085	2085	2085	2085	
	12	Mast Extended Height (With Backrest)	H <sub>4</sub> (mm)	4070	4070	4070	4070	
	13	Overhead Guard Height	H <sub>5</sub> (mm)	2080	2080	2080	2080	
	14	Turning Radius	W <sub>a</sub> (mm)	1515	1615	1615	1725	
	15	Fork Overhang (Wheel Center to Fork Face)	X(mm)	412	412	412	412	
	16	Front Tread	B <sub>2</sub> (mm)	922	922	922	922	
	17	Rear Tread	B <sub>3</sub> (mm)	175	175	175	175	
	18	Ground Clearance	H <sub>3</sub> (mm)	90	90	90	90	
	19	Wheelbase	Y(mm)	1320	1420	1420	1538	
	20	Fork Spread (Min/Max)	mm	200/1000	200/1000	200/1000	200/1000	
	21	Working Aisle Width With Pallet (1000x1200,1200 Lengthways)	A <sub>s1</sub> (mm)	3190	3290	3290	3410	
	22	Working Aisle Width With Pallet (800x1200,800 Lengthways)	A <sub>s2</sub> (mm)	3310	3410	3410	3530	
	Performance	23	Travel Speed (Full Load)	km/h	13	13	13	13
		24	Travel Speed (No Load)	km/h	14	14	14	14
		25	Lifting Speed (Full Load)	mm/s	300	290	270	250
		26	Lifting Speed (No Load)	mm/s	450	440	430	400
		27	Max.Gradeability (Full Load)	%	18	18	18	18
28		Max.Gradeability (No Load)	%	20	20	20	20	
29		Total Weight (Contains the battery)	kg	2820	3100	3180	3345	
30		Tyre (Front x 2)		18X7-8	18X7-8	18X7-8	200/50-10	
31	Tyre (Rear x 2)		15X4.5-8	15X4.5-8	15X4.5-8	15X4.5-8		
Drive	32	Diver Motor	kw	4X2	4X2	4X2	4X2	
	33	Pump Motor	kw	11	11	11	11	
	34	Battery (Standard)	V/Ah	48/500	48/500	48/500	48/625	
	35	Controller Type		AC	AC	AC	AC	
	36	Controller Manufacturer		ZAPI	ZAPI	ZAPI	ZAPI	
	37	Operating Pressure	Mpa	14.5	14.5	14.5	14.5	

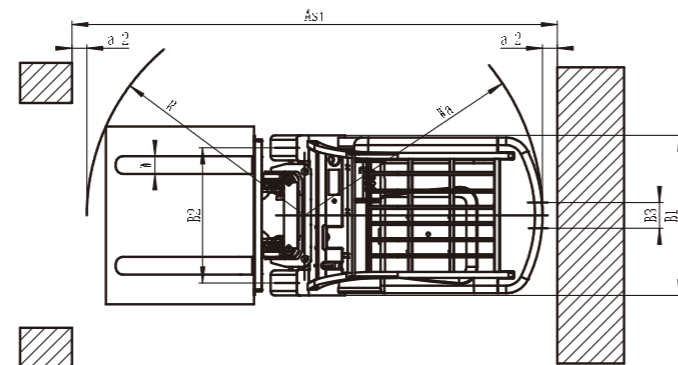
### 1.3-2.0 TON 3-WHEEL MAST SPECIFICATIONS & RATED CAPACITIES

Mast Type	Mast Name	Max. Fork Height (mm)	Load Capacity (kg)				Overall Height (mm)			Free Lift (mm)		Tilt Angle	Total Weight (kg)			
							Lowered	Extended		Without Backrest	With Backrest					
			Without Backrest	With Backrest	Without Backrest	With Backrest										
			FBT13	FBT16	FBT18	FBT20	1.3t/1.6t/1.8t/2.0t	1.3t/1.6t/1.8t/2.0t	1.3t/1.6t/1.8t/2.0t			FBT13	FBT16	FBT18	FBT20	
Wide View Mast	SM200	2000	1300	1600	1800	2000	1585	2645	3170	100	100	6-6	2745	3022	3105	3260
	SM250	2500	1300	1600	1800	2000	1835	3045	3570	100	100	6-6	2795	3072	3155	3310
	SM270	2700	1300	1600	1800	2000	1935	3245	3770	100	100	6-6	2805	3085	3165	3325
	SM300	3000	1300	1600	1800	2000	2085	3545	4070	100	100	6-6	2820	3100	3180	3345
	SM330	3300	1300	1600	1800	2000	2235	3845	4370	100	100	6-6	2835	3115	3195	3365
	SM350	3500	1300	1600	1800	2000	2335	4045	4570	100	100	6-6	2845	3125	3205	3380
	SM370	3700	1300	1600	1800	2000	2435	4245	4770	100	100	6-6	2855	3135	3215	3395
	SM400	4000	1300	1600	1800	2000	2635	4545	5070	100	100	3-5	2885	3165	3245	3420
	SM430	4300	1200	1500	1700	1900	2785	4845	5370	100	100	3-5	2895	3175	3255	3440
	SM450	4500	1100	1400	1600	1800	2885	5045	5570	100	100	3-5	2910	3190	3270	3455
	SM470	4700	1000	1250	1500	1700	2985	5245	5770	100	100	3-5	2930	3210	3350	3500
	2-Stage Full Free Wide View Mast	SM500	5000	900	1100	1300	1400	3185	5545	6070	100	100	3-5	2950	3240	3380
SM550		5500	700	950	1100	1200	3435	6045	6570	100	100	3-5	3000	3290	3430	3580
SM600		6000	500	750	900	1000	3685	6545	7070	100	100	3-5	3050	3340	3480	3630
SFM200		2000	1300	1600	1800	2000	1585	2540	3065	1000	525	6-6	2885	3165	3245	3435
SFM250		2500	1300	1600	1800	2000	1835	2990	3515	1200	775	6-6	2935	3215	3295	3485
SFM270		2700	1300	1600	1800	2000	1935	3190	3715	1300	875	6-6	2950	3230	3310	3500
SFM300		3000	1300	1600	1800	2000	2085	3540	4065	1500	1025	6-6	2965	3245	3325	3520
SFM330		3300	1300	1600	1800	2000	2235	3890	4415	1700	1175	6-6	2980	3260	3340	3540
SFM350	3500	1300	1600	1800	2000	2335	4040	4565	1750	1275	6-6	2990	3270	3350	3555	
SFM370	3700	1300	1600	1800	2000	2435	4190	4715	1800	1375	6-6	3000	3280	3360	3570	
SFM400	4000	1300	1600	1800	2000	2685	4540	5065	2000	1625	3-5	3010	3290	3380	3590	
3-Stage Full Free Wide View Mast	STFM370	3700	1300	1600	1800	2000	1835	4245	4770	1200	775	3-5	3075	3345	3425	3615
	STFM400	4000	1300	1600	1800	2000	1935	4545	5070	1300	875	3-5	3095	3365	3445	3635
	STFM430	4300	1200	1500	1700	1900	2035	4845	5370	1400	975	3-5	3105	3385	3465	3655
	STFM450	4500	1100	1400	1600	1800	2085	5045	5570	1500	1025	3-5	3115	3395	3475	3670
	STFM470	4700	1000	1300	1500	1550	2135	5245	5770	1600	1075	3-5	3130	3410	3490	3685
	STFM500	5000	950	1250	1450	1500	2235	5545	6070	1700	1175	3-5	3140	3420	3500	3705
	STFM550	5500	850	1150	1200	1300	2435	6045	6570	1800	1375	3-5	3165	3445	3525	3735
STFM600	6000	750	1050	1100	1200	2635	6545	7070	2000	1575	3-5	3215	3495	3575	3785	
STFM650	6500	650	950	1000	1100	2785	7045	7570	2200	1725	3-5	3245	3525	3600	3810	

Note: With Separated Side shifter, load capacity subtract 150Kg, With Integrated side shifter, load capacity subtract 50Kg.

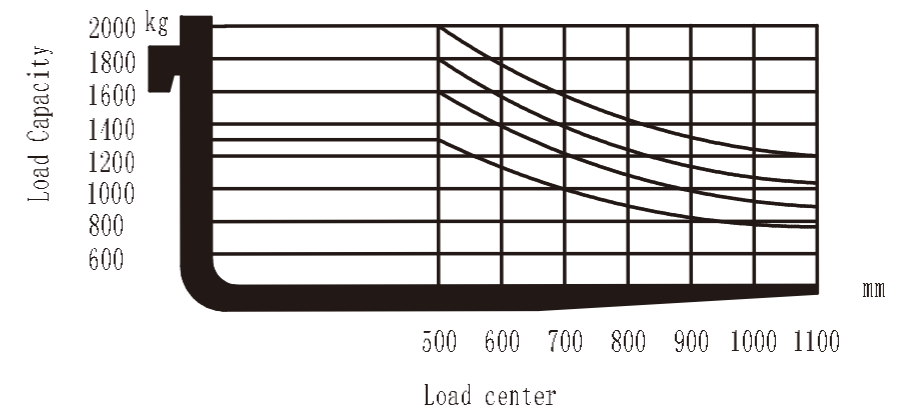


a=200mm Safety clearance  
A<sub>s1</sub>=B<sub>1</sub>-a-a



Load chart

Lift height ≤ 3000mm



## 1.5-3.5 TON 4-WHEEL ELECTRIC FORKLIFT MAIN SPECIFICATIONS

Specification	1	Manufacturer	UN					
			2	Model	FB15	FB20	FB25	FB30
3	Rated Load Capacity	Q(kg)	1500	2000	2500	3000	3500	
4	Load Centre	C(mm)	500	500	500	500	500	
5	Lift Height	H3(mm)	3000	3000	3000	3000	3000	
6	Free Lift	H2(mm)	100	100	100	100	100	
7	Fork Size (LxWxT)	L/W/T(mm)	920x120x35	1070x120x40	1070x120x40	1070x125x45	1070x125x45	
8	F/B(α°/β°)	Deg	6°/12°	6°/12°	6°/12°	6°/12°	6°/12°	
Dimension	9	Length (To Fork Face)	L1(mm)	2150	2380	2380	2475	2535
	10	Width	B1(mm)	1090	1150	1150	1225	1225
	11	Mast Lowered Height	H1(mm)	2025	2055	2055	2070	2070
	12	Mast Extended Height (With Backrest)	H4(mm)	4055	4070	4070	4070	4070
	13	Overhead Guard Height	H5(mm)	2125	2125	2125	2125	2125
	14	Turning Radius	Wa(mm)	1995	2080	2080	2215	2280
	15	Fork Overhang (Wheel Center to Fork Face)	X(mm)	409	478	478	485	485
	16	Front Tread	B2(mm)	890	970	970	1000	1000
	17	Rear Tread	B3(mm)	920	950	950	980	980
	18	Ground Clearance	H6(mm)	110	120	120	130	130
	19	Wheelbase	Y(mm)	1380	1500	1500	1600	1600
	20	Fork Spread (Min/Max)	mm	240/970	250/1040	250/1040	250/1100	250/1100
	21	Working Aisle Width With Pallet (1000x1200,1200 Lengthways)	As1(mm)	3605	3830	3830	3970	4035
	22	Working Aisle Width With Pallet (800x1200,800 Lengthways)	As1(mm)	3805	3960	3960	4100	4165
Performance	23	Travel Speed (Full Load)	km/h	12	12	12	12	12
	24	Travel Speed (No Load)	km/h	13	13	13	13	13
	25	Lifting Speed (Full Load)	mm/s	280	300	300	280	280
	26	Lifting Speed (No Load)	mm/s	380	420	420	440	440
	27	Max.Gradeability (Full Load)	%	16	18	18	16	12
	28	Max.Gradeability (No Load)	%	18	20	20	18	13
	29	Total Weight (Include Battery Box)	kg	3060	4160	4420	5160	5420
	30	Tyre (Front x 2)		6.50-10-10PR	7.00-12-12PR	7.00-12-12PR	28x9-15-12PR	28x9-15-12PR
	31	Tyre (Rear x 2)		5.00-8-8PR	18x7-8-14PR	18x7-8-14PR	18x7-8-14PR	18x7-8-14PR
	Drive	32	Diver Motor	kw	7.5	11	11	12
33		Pump Motor	kw	10	12	12	13.5	13.5
34		Battery (Standard)	V/Ah	48/450	48/620	48/620	80/500	80/500
		Li-ion battery	V/Ah	51.2/300	51.2/405	51.2/405	83.2/405	83.2/405
35		Controller Type		AC	AC	AC	AC	AC
36		Controller Manufacturer		ZAPI	ZAPI	ZAPI	ZAPI	ZAPI
37	Operating Pressure	Mpa	14.5	17.5	17.5	17.5	17.5	

## 4.0-5.0 TON 4-WHEEL ELECTRIC FORKLIFT MAIN SPECIFICATIONS

Specification	1	Manufacturer	UN	
			2	Model
3	Rated Load Capacity	Q(kg)	4000/4500	5000
4	Load Centre	C(mm)	500	500
5	Lift Height	H3(mm)	3000	3000
6	Free Lift	H2(mm)	84	84
7	Fork Size (LxWxT)	L/W/T(mm)	1070x150x50	1070x150x50
8	F/B(α°/β°)	Deg	6°/9°	6°/9°
Dimension	9	Length (To Fork Face)	L1(mm)	2940
	10	Width	B1(mm)	1612
	11	Mast Lowered Height	H1(mm)	2250
	12	Mast Extended Height (With Backrest)	H4(mm)	4260
	13	Overhead Guard Height	H5(mm)	2300
	14	Turning Radius	Wa(mm)	2705
	15	Fork Overhang (Wheel Center to Fork Face)	X(mm)	550
	16	Front Tread	B2(mm)	1300
	17	Rear Tread	B3(mm)	1200
	18	Ground Clearance	H6(mm)	125
	19	Wheelbase	Y(mm)	2000
	20	Fork Spread (Min/Max)	mm	250/1380
	21	Working Aisle Width With Pallet (1200x1200)	As1(mm)	4655
	Performance	22	Travel Speed (Full Load)	km/h
23		Travel Speed (No Load)	km/h	13.5
24		Lifting Speed (Full Load)	mm/s	290
25		Lifting Speed (No Load)	mm/s	400
26		Max.Gradeability (Full Load)	%	12
27		Max.Gradeability (No Load)	%	13
28		Total Weight (Include Battery Box)	kg	7020
29		Tyre (Front x 2)		28x12.5-15
30		Tyre (Rear x 2)		21x8-9
Drive		31	Diver Motor	kw
	32	Pump Motor	kw	25.4
	33	Battery (Standard)	V/Ah	80/840
		Li-ion battery	V/Ah	83.2/600
	34	Controller Type		AC
	35	Controller Manufacturer		ZAPI
36	Operating Pressure	Mpa	20	

