



# CQD16/20L

## Electric Reach Truck 1.6/2.0T

- Optimal visibility
- High stability
- Enjoyable lifting operation
- Easy and precise operation



**EP EQUIPMENT CO.,LTD**  
[www.ep-ep.com](http://www.ep-ep.com)

## FEATURE



### Optimal visibility

A much more compact li-ion battery comes with better visibility for CQD16L/20L. Along with the offset layout of the oil tubes, CQD16L/20L stacking visibility and operation flexibility are greatly improved.



360Ah  
Li-Ion Battery



200A  
Charger



550mm/s  
Lifting Speed



9.3km/h  
Driving Speed



### Lithium-ion technology

CQD16L/20L is powered by a maintenance-free 48V/360Ah Li-Ion battery. Along with the opportunity charging capability, li-Ion batteries have much faster charging times than lead-acid batteries. EP's BMS, based on CANBUS system, allows battery cells communicate among each other to deliver powerful performance at all times.



### Enjoyable lifting operations

CQD16L and CQD20L offers powerful performance and quiet operations through the upgraded hydraulic pumps and powerful lifting motors. (11.75 kw for CQD16L and 20 kw for CQD20L.) The upgraded technology greatly boosts stacking efficiency by 50%, reduces operational noise by 10 dB and the energy consumption by 30%.



### Easy and precise operations

CQD20L is equipped with an mechanic height indicator, that tells operators the correct height of the fork at various rack levels for precise operations to improve the stacking efficiency.

## FEATURE



### ■ High stability

The low center of gravity and the newly I-beam mast design enhance the truck stability. The maximum lifting height of CQD16L is 8000 mm while the one of CQD20L is 12000 mm.



### ■ Electric Power Steering

CQD16L and CQD20L come with full AC motors and electric power steering system that consumes less power compared to hydraulic power steering while keeps operation habits of trucks with mechanical steering through the additional damping force. So CQD16L and CQD20L give more working hours than ones with hydraulic power steering.



### ■ Full-color Display

CQD16L and CQD20L are designed with a color display to help operators easily monitor battery charge level, driving speed, and check error codes.



### ■ 6000K Led Light

CQD16L and CQD20L are equipped with 6000K led lights to cope with the dark environment for optimal visibility.

# Electric Reach Truck 1.6T

## CQD16L

Distinguishing mark	1.1	Manufacturer			EP
	1.2	Model designation			CQD16L
	1.3	Drive unit			Electric
	1.4	Operator type			Seated
	1.5	Rated capacity	Q	kg	1600
	1.6	Load center distance	c	mm	600
	1.8	Load distance, centre of drive axle to fork	x	mm	390③
	1.9	Wheelbase	y	mm	1474
	Service weight	2.1	Service weight		kg
2.3.1		Axle loading, unladen front/rear		kg	1840/1060
2.4.1		Axle loading, fork advanced, laden front/rear		kg	470/4060
2.5.1		Axle loading, fork retracted, laden front/rear		kg	1500/3040
Tyres/chassis	3.1	Tyre type			Polyurethane
	3.2.1	Tyre size, front		mm	Φ260×105
	3.3.1	Tyre size, rear		mm	Φ254×114
	3.4	Additional wheels		mm	Φ102×51
	3.5.1	Wheels, number front/rear (x=drive wheels)		mm	1x/2
	3.6	Tread, front	b10	mm	—
	3.7	Tread, rear	b11	mm	974
	4.1	Tilt of mast/fork carriage forward/backward	α/β	°	2/4
Dimensions	4.2	Height, mast lowered	h1	mm	2780②
	4.3	Free lift	h2	mm	1522②
	4.4	Lift height	h3	mm	6500②
	4.5	Height, mast extended	h4	mm	7535②
	4.7	Height of overhead/ guard cabin	h6	mm	2153
	4.8	Seat height/standing height	h7	mm	1050
	4.10	Height of wheel arms	h8	mm	277
	4.19	Overall length	l1	mm	2434③
	4.20	Length to face of forks	l2	mm	1330③
	4.21	Overall width	b1/b2	mm	1080/1090
	4.22	Fork dimensions	s/e/l	mm	40/100/1070
	4.23	A,B Fork carriage class/type A, B			2A
	4.24	Fork carriage width	b3	mm	872③
	4.25	Distance between fork-arms	b5	mm	200-655③
	4.26	Distance between wheel arms/loading surfaces	b4	mm	750
	4.28	Reach distance	l4	mm	590③
	4.31	Ground clearance, laden, below mast	m1	mm	80
	4.32	Ground clearance, center of wheelbase	m2	mm	70
	4.34.1	Aisle width for pallets 1000×1200 crossways	Ast	mm	2789③
	4.34.2	Aisle width for pallets 800×1200 crossways	Ast	mm	2840③
4.35	Turning radius	Wa	mm	1720	
4.37	Length across wheel arms	l7	mm	1870	
Performance data	5.1	Travel speed, laden/unladen		km/h	9/9.3
	5.2	Lifting speed, laden/unladen		m/s	0.35/0.55
	5.3	Lowering speed, laden/unladen		m/s	0.55/0.5
	5.4	Reaching speed, laden /unladen		m/s	0.15/0.15
	5.8	Max. gradeability, laden/unladen		%	8/10
	5.10	Service brake			Electromagnetic
5.11	Parking brake			Electromagnetic	
Electric-engine	6.1	Drive motor rating S2 60 min		kW	4
	6.2	Lift motor rating at S3 15%		kW	11.75
	6.4	Battery voltage/nominal capacity		V/Ah	48/360④
	6.5	Battery weight		kg	450④
Addition data	8.1	Type of drive unit			AC
	10.5	Steering design			Electronic
	10.7	Sound pressure level at the driver's ear		dB(A)	75

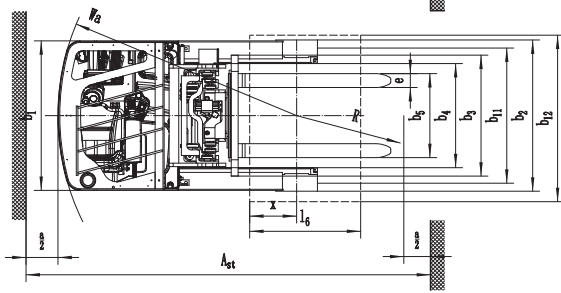
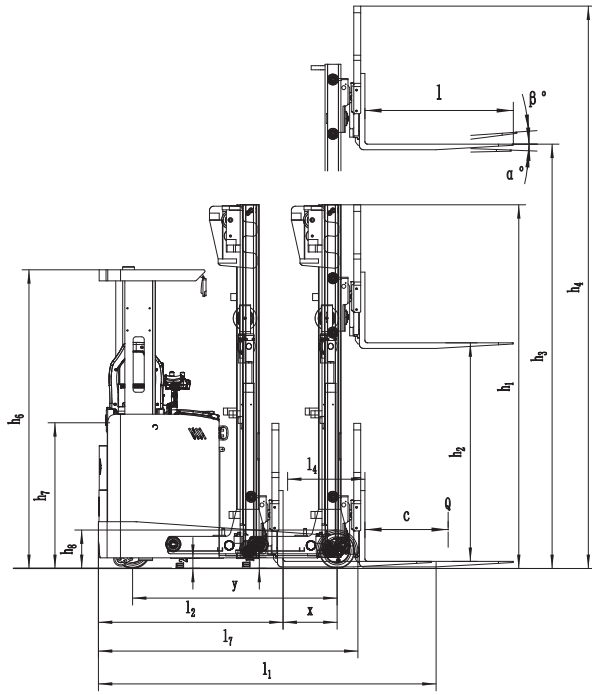
If there are improvements of technical parameters or configurations, no further notice will be given.  
The diagram shown may contain non-standard configurations.

# Electric Reach Truck 2.0T

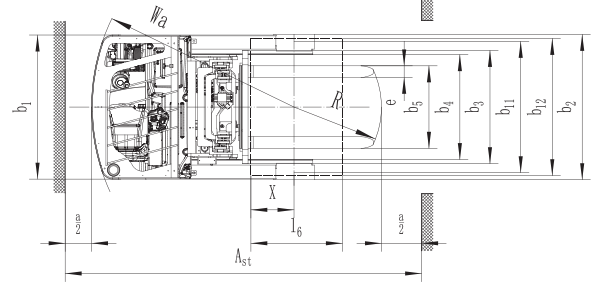
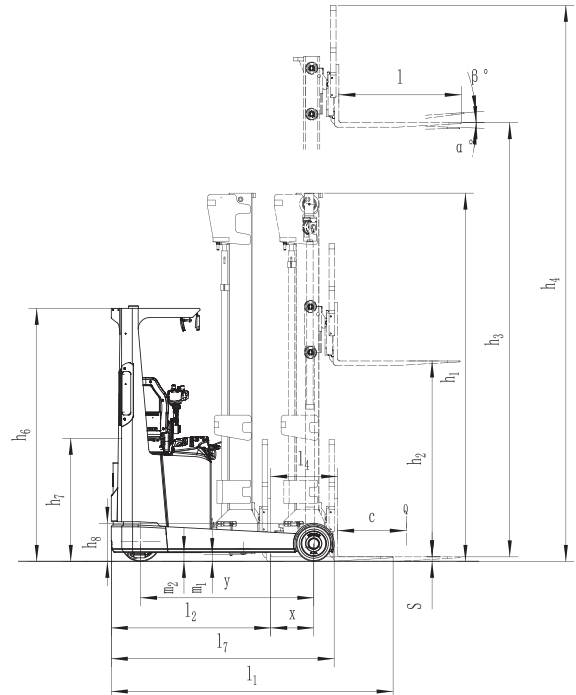
## CQD20L

Distinguishing mark	1.1	Manufacturer			EP
	1.2	Model designation			CQD20L
	1.3	Drive unit			Electric
	1.4	Operator type			Seated
	1.5	Rated capacity	Q	kg	2000
	1.6	Load center distance	c	mm	600
	1.8	Load distance, centre of drive axle to fork	x	mm	377
	1.9	Wheelbase	y	mm	1515
	Service weight	2.1	Service weight		kg
2.3.1		Axle loading, unladen front/rear		kg	2210/1320
2.4.1		Axle loading, fork advanced, laden front/rear		kg	470/5060
2.5.1		Axle loading, fork retracted, laden front/rear		kg	1870/3620
Tyres/chassis	3.1	Tyre type			Polyurethane
	3.2.1	Tyre size, front		mm	Φ343×140
	3.3.1	Tyre size, rear		mm	Φ310×118
	3.4	Additional wheels		mm	Φ102×51
	3.5.1	Wheels, number front/rear (x=drive wheels)		mm	1x/2
	3.6	Tread, front	b10	mm	—
	3.7	Tread, rear	b11	mm	1148
Dimensions	4.1	Tilt of mast/fork carriage forward/backward	α/β	°	2/4
	4.2	Height, mast lowered	h1	mm	3219 <sup>②</sup>
	4.3	Free lift	h2	mm	1712 <sup>②</sup>
	4.4	Lift height	h3	mm	7500 <sup>②</sup>
	4.5	Height, mast extended	h4	mm	8565 <sup>②</sup>
	4.7	Height of overhead/ guard cabin	h6	mm	2213
	4.8	Seat height/standing height	h7	mm	1076
	4.10	Height of wheel arms	h8	mm	333
	4.19	Overall length	l1	mm	2463
	4.20	Length to face of forks	l2	mm	1393
	4.21	Overall width	b1/b2	mm	1260/1270
	4.22	Fork dimensions	s/e/l	mm	40/120/1070
	4.23	A,B Fork carriage class/type A, B			2A
	4.24	Fork carriage width	b3	mm	990
	4.25	Distance between fork-arms	b5	mm	240-770
	4.26	Distance between wheel arms/loading surfaces	b4	mm	915
	4.28	Reach distance	l4	mm	585
	4.31	Ground clearance, laden, below mast	m1	mm	60
	4.32	Ground clearance, center of wheelbase	m2	mm	75
	4.34.1	Aisle width for pallets 1000×1200 crossways	Ast	mm	2835
4.34.2	Aisle width for pallets 800×1200 crossways	Ast	mm	2885	
4.35	Turning radius	Wa	mm	1770	
4.37	Length across wheel arms	l7	mm	1948	
Performance data	5.1	Travel speed, laden/unladen		km/h	10/11
	5.2	Lifting speed, laden/unladen		m/s	0.38/0.55
	5.3	Lowering speed, laden/unladen		m/s	0.41/0.38
	5.4	Reaching speed, laden /unladen		m/s	0.18/0.18
	5.8	Max. gradeability, laden/unladen		%	10/15
	5.10	Service brake			Electromagnetic
5.11	Parking brake			Electromagnetic	
Electric-engine	6.1	Drive motor rating S2 60 min		kW	7
	6.2	Lift motor rating at S3 15%		kW	20
	6.4	Battery voltage/nominal capacity		V/Ah	48/360 <sup>④</sup>
	6.5	Battery weight		kg	350 <sup>④</sup>
Addition data	8.1	Type of drive unit			AC
	10.5	Steering design			Electronic
	10.7	Sound pressure level at the driver's ear		dB(A)	75

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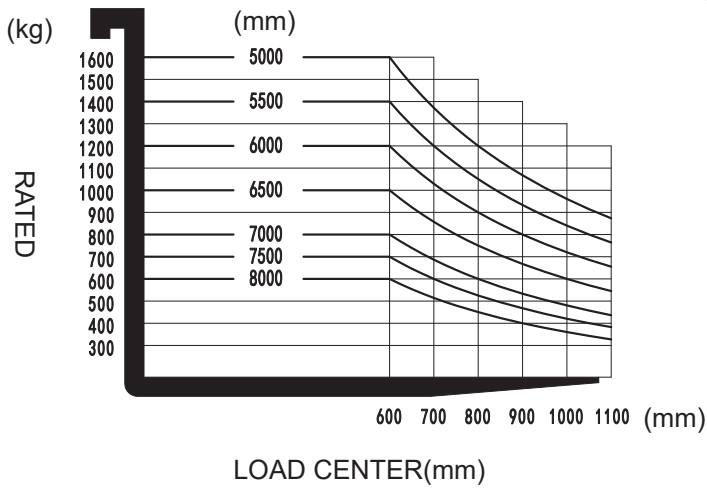


CQD16L

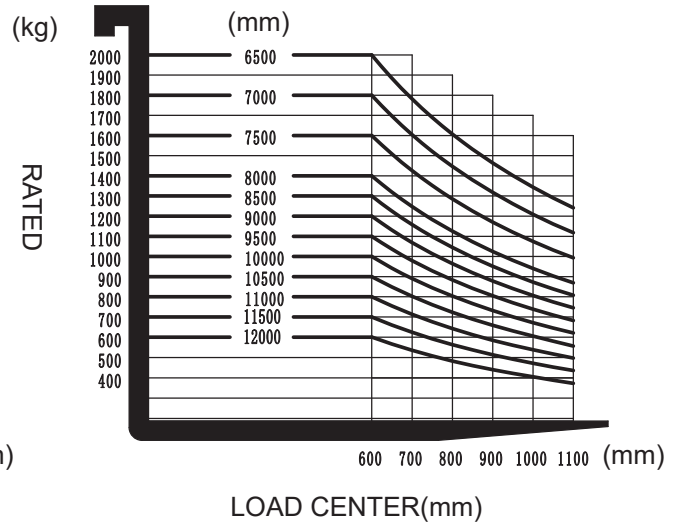


CQD20L

RATED CAPACITIES GRAPH



RATED CAPACITIES GRAPH



# Mast Option(CQD16L)

## ①Service weight (include battery)

Mast height(mm)	Service weight(kg)	Mast height(mm)	Service weight(kg)
2-stage mast		3-stage mast	
2700	2497	4000	2662
3000	2522	4500	2697
3300	2547	5000	2733
3640	2572	5500	2769
4000	2597	6000	2805
4300	2622	6500	2840
—	—	7000	2876
—	—	7500	2912
—	—	8000	2956

## ②Mast

Mast types	Lift height ( h3 )	Height, Mast			Height, Free lift(h2)	
		Height, mast lowered(h1)	Height, mast extended(h4)		No backrest	With backrest
	No backrest		With backrest	mm		
2-Standard Mast	2700	1900	3266	3560	0	0
	3000	2050	3566	3860	0	0
	3300	2200	3866	4160	0	0
	3640	2370	4206	4500	0	0
	4000	2550	4566	4860	0	0
	4300	2700	4866	5160	0	0
3-Free Mast	4000	1930	4899	4899	662	662
	4500	2100	5399	5399	842	842
	5000	2270	5899	5899	1002	1002
	5500	2440	6399	6399	1182	1182
	6000	2610	6899	6899	1342	1342
	6500	2780	7399	7399	1522	1522
	7000	2950	7899	7899	1682	1682
	7500	3120	8399	8399	1842	1842
8000	3330	8899	8899	2102	2102	

## ③Dimensions(mm)

		without side shift		with side shift	
		2-stage mast	3-stage mast	2-stage mast	3-stage mast
Overall length (minimum)	l1	2377	2399	2412	2434
Length to face of forks	l2	1273	1295	1308	1330
Fork carriage width	b3	837		872	
Outside width of the forks	b5	200-620		200-655	
Reach distance	l4	625		590	
Aisle width for pallets 1000×1200 crossways	Ast	2749	2764	2774	2789
Aisle width for pallets 800×1200 lenthways	Ast	2789	2809	2821	2840
Aisle width for pallets 1000×1200 lenthways	Ast	2840	2858	2869	2888
Aisle width for pallets 800×1200 crossways	Ast	2626	2638	2645	2666

④Battery

Capacity(Ah)	Battery weight (kg)
280	450
360	465

## Mast Option(CQD20L)

①Service weight (include battery)

Mast height(mm)	Service weight(kg)	Mast height(mm)	Service weight(kg)
2-stage mast		3-stage mast	
2700	2847	4050	3138
3000	2872	4500	3180
3300	2896	5000	3223
3640	2924	5500	3271
4000	2953	6000	3320
4300	2977	6500	3363
4520	3005	7000	3479
5000	3044	7500	3510
5480	3086	8000	3569
6000	3143	8500	3629
—	—	9000	3688
—	—	9500	3736
—	—	10000	3850
—	—	10500	3898
—	—	11000	3944
—	—	11500	3991
—	—	12000	4037

②Mast

Mast types	Lift height (h3)	Height, Mast			Height, Free lift(h2)	
		Height, mast lowered(h1)	Height, mast extended(h4)		No backrest	With backrest
			No backrest	With backrest		
			mm	mm		
2-Standard Mast	2700	1980	3280	3765	120	120
	3000	2130	3580	4065	120	120
	3300	2280	3880	4365	120	120
	3640	2450	4220	4705	120	120
	4000	2630	4580	5065	120	120
	4300	2780	4880	5365	120	120
3-Free Mast	4050	1999	5113	5115	522	522
	4500	2149	5563	5565	672	672
	5000	2299	6063	6065	772	772
	5500	2469	6563	6565	952	952
	6000	2649	7063	7065	1172	1172
	6500	2799	7563	7565	1272	1272
	7000	3049	8063	8065	1532	1532
	7500	3219	8563	8565	1712	1712
	8000	3389	9063	9065	1852	1852
	8500	3609	9563	9565	2072	2072
	9000	3769	10063	10065	2212	2212
	9500	3939	10563	10565	2392	2392
	10000	4159	11063	11065	2612	2612
	10500	4329	11563	11565	2792	2792
11000	4489	12063	12065	2932	2932	
11500	4659	12563	12565	3112	3112	
12000	4819	13063	13065	3252	3252	



④Battery

Model	CQD20L	
Li-Ion Battery Capacity	360Ah	560Ah
Li-Ion Battery Weight	350kg	350kg

## Option(CQD16L)

No.	Optional items	CQD16L
1.1	Fork dimension	○900*600、2A、100*40*920●900*600、2A、100*40*1070 ○900*600、2A、100*40*1150○900*600、2A、100*40*1220 ○900*600、2A、100*40*1370
1.2	Leg width	●751
1.4	Fork carriage width	●620mm(Without sidershifter)○655mm(With sidershifter)
1.5	backrest height	●820mm(Without sidershifter)○995mm(With sidershifter)
2.1	Load wheel type	●Single
2.2	Load wheel material	●Polyurethane
2.3	Drive wheel material	●Polyurethane
2.7	Battery capacity	●280Ah-Li ○360Ah-Li
2.8	Charger	●48V-150A-Li External○48V-200A-Li External
2.10	Seat type	●Suspansion
2.11	Attachments	●No○Sidershifter
3.3	Castor wheels	●Yes and not customized
3.4	Water auto-filling system	●No○Yes and not customized
3.5	Front lamp	●LED
3.6	Rear lamp	●No○LED
3.7	Warning lamp	●Yes and not customized
3.9	Blue lamp	●No○Yes and not customized
3.10	Area warning lamp	●No○Yes and not customized
3.11	Rearview mirror	●Yes and not customized
3.12	Buzzer	●No○Yes and not customized
3.13	Height display	●No○Yes and not customized
3.14	Camera	●No○Yes and not customized
3.15	Fire extinguisher	●No○Yes and not customized
3.17	OPS system	●Yes and not customized
3.23	Telematics	●No○Yes and not customized
3.24	Side supports	●No○Yes and not customized
3.25	Fan heater	●No○Yes and not customized
4.1	Battery side pull function	●No○Yes and not customized
4.2	Cold storage	●No○Yes and not customized
4.5	Proportional lift system	●Yes and not customized
4.6	Forks tilt forward and backward	●Yes and not customized
4.7	Overhead guard	●Yes and not customized

Note: ●Standard ○ Optional - Inconformity

# Option(CQD20L)

No.	Optional items	CQD20L
1.1	Fork dimension	○1000*600、2A、122*40*920●1000*600、2A、122*40*1070 ○1000*600、2A、122*40*1150○1000*600、2A、122*40*1220 ○1000*600、2A、122*40*1370○1000*600、2A、122*40*1500 ○1000*600、2A、122*40*1600
1.2	Leg width	●917
1.4	Fork carriage width	●770mm
1.5	backrest height	●1025mm
2.1	Load wheel type	●Single
2.2	Load wheel material	●Polyurethane
2.3	Drive wheel material	●Polyurethane
2.7	Battery capacity	○400Ah●500Ah○560Ah○600Ah○620Ah○360Ah-Li
2.8	Charger	●48V-60A External○48V-50A External○48V-200A-Li External
2.10	Seat type	●Suspension
2.11	Attachments	●Built-in sidershifter
3.3	Castor wheels	●Yes and not customized
3.4	Water auto-filling system	●No○Yes and not customized
3.5	Front lamp	●LED
3.6	Rear lamp	●No○LED
3.7	Warning lamp	●Yes and not customized
3.9	Blue lamp	●No○Yes and not customized
3.10	Area warning lamp	●No○Yes and not customized
3.11	Rearview mirror	●Yes and not customized
3.12	Buzzer	●No○Yes and not customized
3.13	Height display	●Yes and not customized(Only for 3-stage mast)
3.14	Camera	●No○Yes and not customized
3.15	Fire extinguisher	●No○Yes and not customized
3.17	OPS system	●Yes and not customized
3.23	Telematics	●No○Yes and not customized
4.2	Cold storage	●No○Yes and not customized
4.5	Proportional lift system	●Yes and not customized
4.6	Forks tilt forward and backward	●Yes and not customized
4.7	Overhead guard	●Yes and not customized
4.8	Drive assembly	●ZK25○GK25
Note: ●Standard ○ Optional - Inconformity		