



1.6-2.0 t

**G2 SERIES AC ELECTRIC
REACH TRUCK-
SIT-DOWN TYPE**

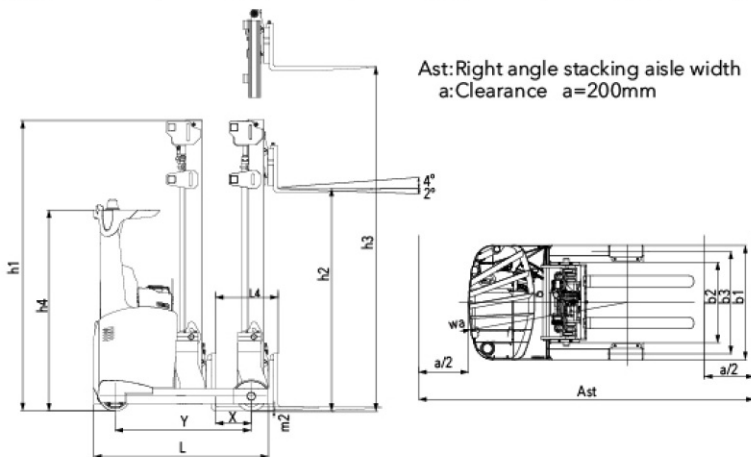
WIDE VIEW FULL FREE 3-STAGE MAST

Mast model	Max. lifting height (mm)	Load capacity (load center 600mm)(kg)				Mast overall height (mm)	Free lifting height (with backrest) (mm)	Service weight(kg)			Fork tilt angle (front/rear) α/β	
		CQD16-GB2SZ	CQD16-GB2S	CQD20-GB2S				CQD16-GB2SZ	CQD16-GB2S	CQD20-GB2S		
ZSM460	4600	1600	1600	2000	2000 ^a	2314	1280	3204	3395	3560	3740 ^a	2°/4°
ZSM480	4800	1600	1600	2000	2000 ^a	2381	1340	3223	3414	3579	3759 ^a	2°/4°
ZSM540	5400	1500	1600	2000	2000 ^a	2581	1540	3281	3472	3637	3817 ^a	2°/4°
ZSM570	5700	1350	1550	1900	1900 ^a	2681	1640	3309	3500	3665	3845 ^a	2°/4°
ZSM630	6300	1300	1500	1900	1900 ^a	2881	1840	3367	3558	3723	3903 ^a	2°/4°
ZSM675	6750	1250	1450	1800	1800 ^a	2982	1940	3400	3591	3756	3936 ^a	2°/4°
ZSM700	7000	1200	1400	1700	1700 ^a	3065	2030	3424	3615	3780	3960 ^a	2°/4°
ZSM715	7150	1200	1400	1700	1700 ^a	3115	2080	3438	3629	3794	3974 ^a	2°/4°
ZSM750	7500	1100	1300	1700	1700 ^a	3232	2190	3472	3663	3828	4008 ^a	2°/4°
ZSM800	8000	1000	1200	1500	1500 ^a	3398	2360	3520	3711	3876	4056 ^a	2°/4°
ZSM850	8500	900	1100	1300	1400 ^a	3564	2530	3568	3759	3924	4014 ^a	2°/4°
ZSM900	9000	-	900	1100	1330 ^a	3730	2690	-	3806	3971	4151 ^a	2°/4°
ZSM950	9500	-	800	1000	1270 ^a	3898	2860	-	3855	4020	4200 ^a	2°/4°
ZSM1000	10000	-	-	850	1200 ^a	4064	3030	-	-	4068	4248 ^a	2°/4°
ZSM1050	10500	-	-	800	1150 ^a	4230	3190	-	-	4115	4295 ^a	2°/4°
ZSM1080	10800	-	-	750	1050 ^a	4330	3290	-	-	4144	4324 ^a	2°/4°
ZSM1100	11000	-	-	700	1000 ^a	4398	3360	-	-	4164	4344 ^a	2°/4°
ZSM1150	11500	-	-	650	950 ^a	4564	3530	-	-	4211	4391 ^a	2°/4°
ZSM1200	12000	-	-	550	850 ^a	4730	3690	-	-	4259	4439 ^a	2°/4°
ZSM1250	12500	-	-	500	800 ^a	4898	3860	-	-	4308	4488 ^a	2°/4°

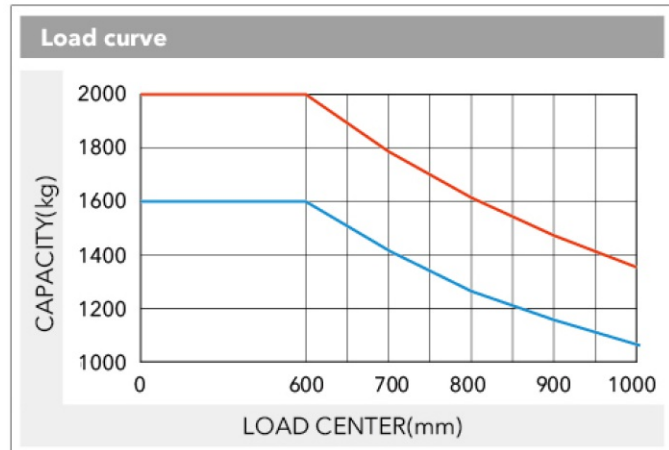
NOTE: Detailed information about battery, please contact our salesmen or engineer.

WIDE VIEW MAST

Mast model	Max. lifting height (mm)	Load capacity (load center 600mm)(kg)		Mast overall height (mm)	Service weight(kg)		Fork tilt angle (front/rear) α/β
		CQD16-GB2S	CQD20-GB2S		CQD16-GB2S	CQD20-GB2S	
M290	2900	1600	2000	2200	3166	3331	2°/4°
M320	3200	1600	2000	2350	3185	3350	2°/4°
M360	3600	1600	2000	2550	3214	3379	2°/4°
M380	3800	1600	2000	2650	3228	3393	2°/4°
M400	4000	1600	2000	2750	3243	3408	2°/4°
M420	4200	1600	2000	2850	3256	3421	2°/4°
M440	4400	1600	2000	2950	3269	3434	2°/4°
M460	4600	1600	2000	3050	3325	3490	2°/4°
M500	5000	1500	1900	3250	3353	3518	2°/4°



1.6 t 2.0 t



RENEWABLE ENERGY TECHNOLOGIES

With the use of the excellent load-sensing steering system and AC controlling renewable energy technologies, the forklift is more energy-saving and the working hour of the battery is extended by 15%.



15%

Note: The vertical axis denotes capacity and the horizontal axis denotes load center, which is calculated from front face of fork to centre of load. Standard load is one cubic metre hence 500mm load centre. When tilting forward or using non-standard forks, the capacity will be reduced as load center is increased.

Manufacturer's Data and Design Characteristics

Character						
1.01	Manufacturer			HELI		
1.02	Model			CQD16	CQD16	CQD20
1.03	Configuration number			GB2SZ	GB2S	GB2S
1.04	Load capacity	Q	kg	1600	1600	2000
1.05	load center distance	C	mm	600		
1.06	Power mode			Battery		
1.07	Driving mode			Seated		
1.08	Wheel base	Y	mm	1450	1450	1515
Tyre						
2.01	Tyre type			Polyurethane		
2.02	Wheels, number front/rear (x=driven wheels)			1x/2		
2.03	Track width, rear	b3	mm	1012	1157	1143
2.04	Wheel size, rear		mm	ø285x100	ø285x100	ø330x100
2.05	Wheel size, front		mm	ø343x114	ø343x114	ø343x114
Size						
3.01	Lift height	h3	mm	4600	4600	4600
3.02	Free lift	h2	mm	1280	1280	1280
3.03	Mast height, lowered	h1	mm	2314	2314	2314
3.04	Fork size:thickness×width×length	s/e/l	mm	40x122x1150	40x122x1150	40x122x1150
3.05	Fork adjusting width		mm	244-644	244~724	244~724
3.06	Fork tilt angle (front/rear)	α/β	°	2°/4°	2°/4°	2°/4°
3.07	Fork sideshifting		mm	±55	±75	±75
3.08	Truck body length (fork excluded)	L	mm	1847	1840	1942
3.09	Length(the distance from the fork face to rear frame)	L2	mm	1359	1316	1369
3.10	Truck body width	b1	mm	1120	1270	1270
3.11	Distance between support arms	b2	mm	780	900	900
3.12	Reach distance	L4	mm	539	606	620
3.13	Height of overhead guard (cab)	h4	mm	2215	2215	2215
3.14	Ground clearance, below mast	m2	mm	75	75	75
3.15	Turning radius	Wa	mm	1689	1689	1751
3.16	Load distance, centre of support arm wheel to face of forks	X	mm	322	369	383
3.17	Aisle width with pallet 1200Lx1200W across forks	Ast	mm	2952	2914	2965
3.18	Aisle width with pallet 1000Lx1200W across forks	Ast	mm	2794	2760	2810
Performance						
4.01	Travelling speed: with/without load		km/h	11/12	11/12	12/14
4.02	Lifting speed: with/without load		m/s	0.34/0.53	0.34/0.53	0.35/0.55
4.03	Lowering speed: with/without load		m/s	0.5/0.5	0.5/0.5	0.5/0.5
4.04	Reach speed, with/without load		m/s	0.11/0.11	0.11/0.11	0.11/0.11
4.05	Maximum climbing ability, with/without load		%	10/15	10/15	10/15
Weight						
5.01	Total weight (with battery)		kg	3204	3395	3560
5.02	Axle load, fork outreached, without load, front/rear		kg	1368/1836	1500/1895	1590/1970
5.03	Axle load, fork retracted, without load, front/rear		kg	1772/1432	2013/1383	2230/1330
5.04	Axle load, fork outreached, with load, front/rear		kg	402/4402	578/4415	550/5010
5.05	Axle load, fork retracted, with load, front/rear		kg	1372/3432	1759/3234	1960/3600
Battery						
6.01	Battery voltage/capacity Ks		V/Ah	48/420	48/450	48/560
6.02	Battery weight		kg	710	750	967
6.03	Battery box dimension		mm	1035x352x784	1220x283x784	1220x352x784
Motor and controller						
7.01	Drive motor power (60 min)		kW	6	6	8
7.02	Lifting motor power (15%)		kW	11	11	12.5
7.03	Steering motor power (50%)		kW	0.4	0.4	0.4
7.04	Type of driving control			MOSFET/AC		
7.05	Type of Lifting control			MOSFET/AC		
7.06	Type of Steering control			MOSFET/AC		
7.07	Service brake			-	Electromagnetic brake	
7.08	Hydraulic system working pressure		Mpa	17.5	17.5	20

NOTE: *Detailed information about battery, please contact our salesmen or engineer.

G2 SERIES 1.6-2.0t



Three phase AC type motor technology

- Three phase AC type motor control on travelling, lifting and steering
- Good acceleration
- Fast and sensitive respond on travel direction shifting Free from maintenance motor without carbon brush having long service life and low maintenance cost
- Energy regenerating during deceleration extending operation hours
- Max. travelling speed without load 20% increased
- Max. travelling speed with load 27% increased

Newly designed hydraulic system

- Newly designed hydraulic system with high working efficiency
- High power lifting motor
- MOSFET lifting speed governing electric controller
- New type low noisy gear pump
- Max. lifting speed without load 15% increased
- Max. lifting speed with load 25% increased

Optimized intelligent design

- ZAPI travelling motor controller
- ZAPI lifting motor controller
- ZAPI steering motor controller
- CAN bus technology
- Emergency power off of both main circuit and control circuit
- Parking brake on slope
- Operation sequence protection
- Travelling speed control
- Electric controller self protection
- Lifting height pre-selector (optional)

Advanced EPS electric powered steering

- EPS electric powered steering offering easy, flexible, high efficient and mute operation
- Steering motor controller
- Automatic centering function
- Real-time shifting between 180°steering mode and 360° steering mode
- Automatic limit on speed and accelerated speed when steering

Easy operated thumb switch

- To control hydraulic functions
- Clear operating units
- Proportional solenoid offering a stable and comfort lowering action



Overhead guard

- Fence on top of the overhead guard offering driver wide view
- Beveled view angle design with front ring beam meeting humanized requirements

Comfort cab

- Comfort cab offering driver good working environment and easy operation
- Easy reach to important operation
- Adjustable seat (seat position /backrest angle)

Wide view mast

- Good view when loaded
- Integral sideshifter
- Mast vertical, fork tilt
- High residual load capacity at high lift height
- Lift height range:4600-12500mm
- Buffering during lifting and lowering
- Buffering on lifting and lowering limit
- Buffering when cylinder moving forward

Displayer

- High quality meter displaying important operating data
- Display of traveling direction and drive wheel angle
- Display of 180°/360° steering mode
- Display of battery quantity and fault code
- Travelling mode selection
- Lifting lock indication
- Hour meter
- Fork height display (optional)

HELI smart fleet management system (optional)

- Vehicle positioning
- Remote diagnosis
- Remote monitoring
- Maintenance reminder
- Battery management
- Statistical form
- Vehicle management
- Identification recognition (optional)
- Weight management (optional)
- Collision management (optional)

