

# G2 SERIES 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

## 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

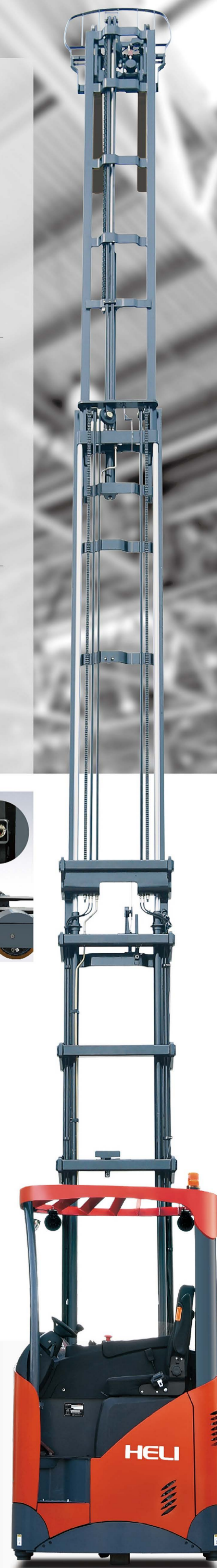
- Good view when loaded
- Integral sideshifter
- Mast vertical, fork tilt
- High residual load capacity at high lift height
- Lift height range:4600-12500mm
- Buffering during lifting and lowering
- Buffering on lifting and lowering limit
- Buffering when cylinder moving forward

## 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

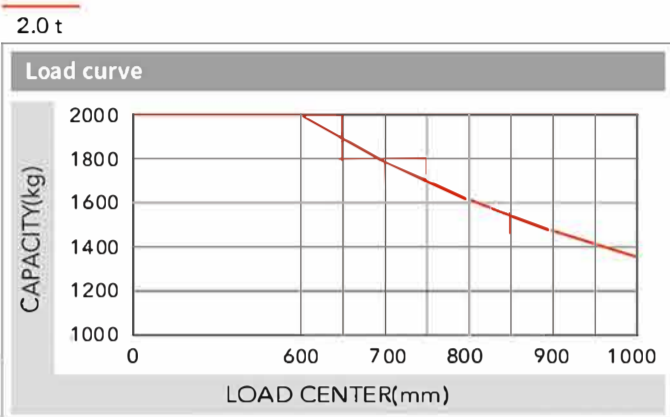
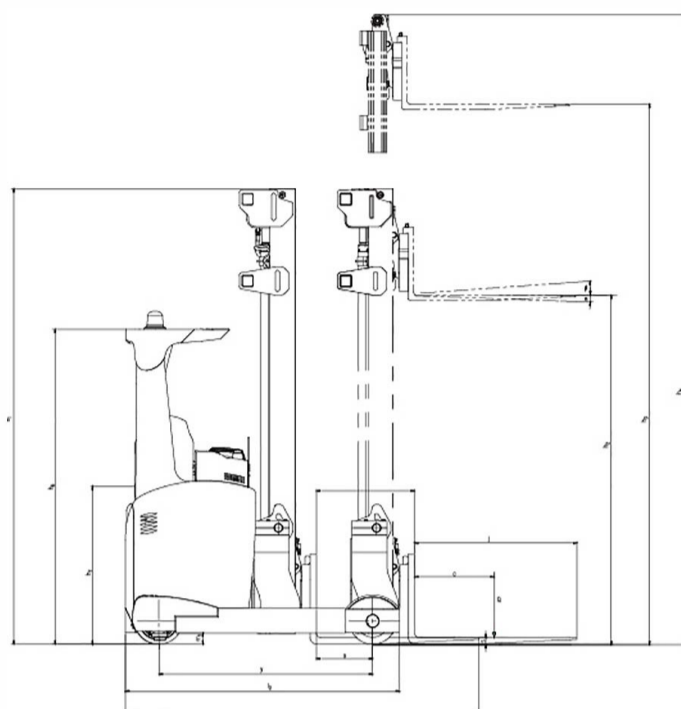
## HELI smart fleet management system (optional)

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

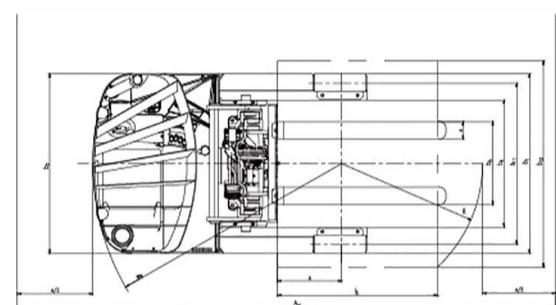


WIDE VIEW FULL FREE 3-STAGE MAST

Mast model	Max.lifting height (mm)	Load capacity (load center 600mm)(kg)		Height (mast lowered)(mm)	Free lift (with backrest) (mm)		Service weight (kg)	Fork tilt angle α/β (°)
		CQD20-GB2SHD	CQD20-GB2SHD		CQD20-GB2SHD	CQD20-GB2SHD		
ZSM460	4600	2000	2334	2334	1311	4455	274*	
ZSM480	4800	2000	2401	2401	1378	4475	274*	
ZSM540	5400	2000	2601	2601	1578	4530	274*	
ZSM570	5700	2000	2701	2701	1378	4580	274*	
ZSM630	6300	2000	2901	2901	1878	4640	274*	
ZSM675	6750	2000	3051	3051	2028	4675	274*	
ZSM700	7000	2000	3134	3134	2111	4690	274*	
ZSM715	7150	2000	3184	3184	2161	4710	274*	
ZSM750	7500	2000	3301	3301	2278	4745	274*	
ZSM800	8000	2000	3467	3467	2444	4795	274*	
ZSM850	8500	2000	3634	3634	2611	4845	274*	
ZSM900	9000	1900	3801	3801	2778	4895	274*	
ZSM950	9500	1800	3967	3967	2944	4945	274*	
ZSM1000	10000	1700	4134	4134	3111	4995	274*	
ZSM1050	10500	1550	4301	4301	3278	5045	274*	
ZSM1080	10800	1450	4401	4401	3378	5075	274*	
ZSM1100	11000	1350	4467	4467	3444	5100	274*	
ZSM1150	11500	1250	4634	4634	3611	5150	274*	
ZSM1200	12000	1100	4801	4801	3778	5200	274*	
ZSM1250	12500	900	4967	4967	3944	5250	274*	



Note: The vertical axis stands for load capacity and the horizontal axis stands for load center which is calculated from the front surface of the forks to the gravity of the standard load. The standard load means a cubic with 1000mm edge length. When mast is tilted forward, using non-standard forks or loading large goods, the load capacity will be reduced. The load capacity of standard mast at different load center can be known from this load chart.



As: Right angle stacking aisle width  
a: Clearance a=200mm

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%.



Manufacturer's Data and Design Characteristics

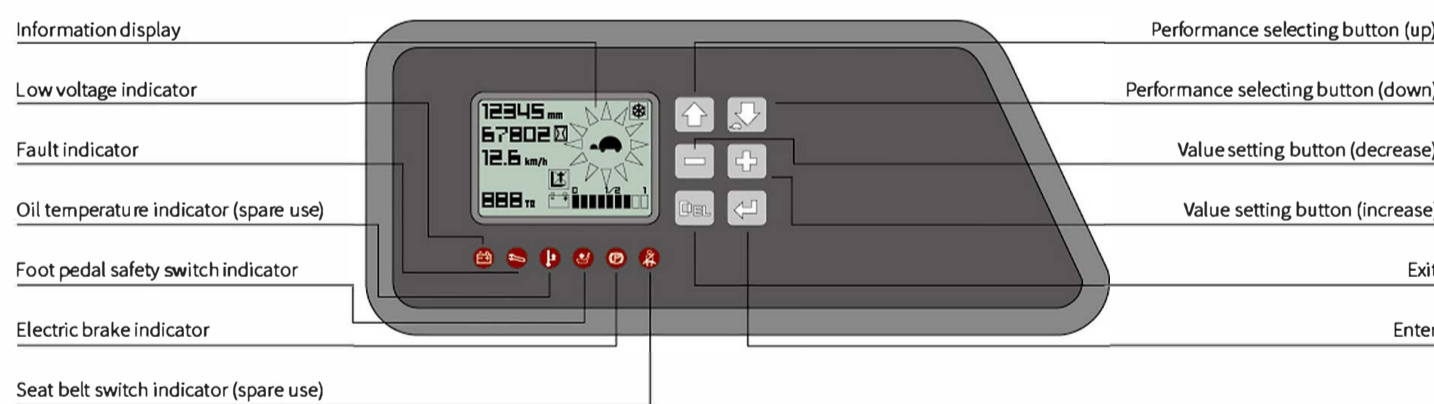
Characteristics				HELI	
1.01	Manufacturer				CQD20
1.02	Model				GB2SHD
1.03	Configuration number				2000
1.04	Rated capacity	Q	kg		600
1.05	Load center distance	C	mm		Battery
1.06	Power mode				Seated
1.07	Driving mode				431
1.08	Front overhang	X	mm		1670
1.09	Wheelbase	y	mm		
Weight					
2.01	Total weight (with/without battery)		kg		4455/3220
2.02	Axle load ,unladen,front/rear (fork advanced)		kg		1915/2540
2.03	Axle load ,unladen,front/rear (fork retracted)		kg		2670/1785
2.04	Axle load ,laden,front/rear (fork advanced)		kg		1350/5105
2.05	Axle load ,laden,front/rear (fork retracted)		kg		2845/3610
Tyres					
3.01	Tyre type				Polyurethane
3.02	Tyre size, front				φ343x135
3.03	Tyre size, rear				φ330x135
3.04	Wheels, number front/rear (x=driven wheels)				1x/2
3.05	Tread, rear	b <sub>11</sub>	mm		1178
Dimensions					
4.01	Fork tilt angle (forward/backward)	α/β	°		2/4*
4.02	Height (mast lowered)	h <sub>1</sub>	mm		2334
4.03	Free lifting height	h <sub>2</sub>	mm		1311
4.04	Lifting height (standard)	h <sub>3</sub>	mm		4600
4.05	Max. height, extended (with backrest)	h <sub>4</sub>	mm		5623
4.06	Height of overhead guard	h <sub>5</sub>	mm		2215
4.07	Seat height relating to SIP (to ground)	h <sub>7</sub>	mm		1180
4.08	Overall length (with fork)	l <sub>1</sub>	mm		2624
4.09	Overall length (without fork)	l <sub>2</sub>	mm		2096
4.10	Overall width	b <sub>1</sub>	mm		1270/1348
4.11	Fork size: thickness x width x length	s/e/l	mm		40x122x1150
4.12	Fork carriage, according to ISO2328				2A
4.13	Distance between fork-arms, Max./Min.	b <sub>5</sub>	mm		244~724
4.14	Fork sideshifting		mm		±75
4.15	Distance between support arms	b <sub>4</sub>	mm		900
4.16	Reach distance	l <sub>4</sub>	mm		670
4.17	Ground clearance (laden, between mast)	m <sub>3</sub>	mm		75
4.18	Right angle stacking aisle width for pallet 1050 x 1200mm crossways	A <sub>2</sub>	mm		2926
4.19	Right angle stacking aisle width for pallet 800 x 1200mm lengthways	A <sub>1</sub>	mm		2966
4.20	Min. outside turning radius	W <sub>0</sub>	mm		1901
Performance Data					
5.01	Travel speed (laden/unladen)		km/h		12/14
5.02	Lift speed (laden/unladen)		m/s		0.35/0.55
5.03	Lowering speed (laden/unladen)		m/s		0.5/0.5
5.04	Reach speed (laden/unladen)		m/s		0.1/0.1
5.05	Max. gradeability (laden/unladen)		%		10/15
Battery					
6.01	Battery voltage/Capacity	V/Ah			48/775
6.02	Battery weight (Min./Max.)	kg			1235
6.03	Battery box dimension	mm			1220×427×784
Motor and controller					
7.01	Driving motor powering	kw			8
7.02	Lifting motor powering	kw			12.5
7.03	Steering motor powering	kw			0.4
7.04	Driving motor controlling mode				MOSFET/AC
7.05	Lifting motor controlling mode				MOSFET/AC
7.06	Steering motor controlling mode				MOSFET/AC
Addition data					
8.01	Transmission box				HELI special transmission box
8.02	Service brake/Parking brake				Electromagnetic

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

HELI

Reliable special designed instrument

The reliable special instrument gives a complete display of the vital information, like operation status, fault detection, etc. It ensures the operator predominate the vehicle status more intuitive and convenient.



Standard configuration

Optional

- AC travelling motor
- AC lifting motor
- AC steering motor
- ZAPI travelling motor controller
- ZAPI lifting motor controller
- ZAPI steering motor controller
- Electromagnetic brake
- Lifting height pre-selector
- Monitoring system
- DC/DC converter
- Low noisy gear pump
- Control valve (four throw)
- 4600mm three stage full free lift mast
- Integral sideshifter
- Standard fork
- Backrest
- Polyurethane tyre
- LED meter
- Front working light
- Rearview mirror with wide view angle
- Safety belt
- Blue warning light

- fork with other length
- Fork extension
- Reversing buzzer
- Other battery
- Germany hoppecker battery
- Italy FAAM battery
- Battery charger
- Customer made color
- Battery side pulling
- HELI smart fleet management system

HELI

2.0t  
G2 SERIES  
AC ELECTRIC REACH  
TRUCK-SIT-DOWN TYPE  
(HEAVY DUTY TYPE)

