

# HELI

## 1.5-1.8 t

**G2 SERIES AC ELECTRIC  
REACH TRUCK**  
(STAND-ON TYPE)

Fork tilt





## Comfort cab

- The driver's body is fully protected within the truck contours
- Padded waist, head and arm supports
- Easy reach to important operation

## Displayer

- High quality meter displaying important operating data
- 180° steering angle position display
- Display of battery power and fault code
- Travelling mode selection
- Lifting lock indication
- Hour meter
- Labor hour display

## Overhead guard

- Overhead guard support for improved operator protection and enhanced visibility to the load
- Fence on top of the overhead guard offering driver wide view
- Beveled view angle design with front ring beam meeting humanized requirements

### Standard configuration

AC travelling motor  
 AC Lifting motor  
 AC steering motor  
 Electrical brake  
 DC/DC converter  
 Low noisy gear pump  
 Control valve(four throw)  
 3200mm two-stage mast  
 Integral sideshifter  
 Standard fork  
 Backrest  
 Polyurethane tyre  
 LED meter  
 Front working light  
 Vertical battery change  
 Warning light  
 Rearview mirror  
 Blue spotlight  
 Mechanical lever operation  
 Thumb switch operation  
 Fork tilting

### Optional device

Three-stage full free lift mast  
 Two-stage mast(other lifting height)  
 Fork with other length  
 Fork extension  
 Monitoring system  
 Other battery  
 Battery charger  
 Alternative colour schemes  
 Battery on rollers for rapid side battery change  
 Lifting height pre-selector\*  
 Electronic control handle\*

\* Only to the reach truck that configuration number is GD2R



## Wide view mast

- Good view when loaded
- Integral sideshifter
- High residual load capacity at high lift height
- Buffering during lifting and lowering
- Buffering on lifting and lowering limit
- Buffering on mast moving forward and backward limit

## 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)





# **G2** SERIES **1.5-1.8 t**

## ***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
- 

## ***Newly designed hydraulic system***

- Newly designed hydraulic system with high working efficiency
- High power lifting motor
- MOSTET lifting speed governing electric controller
- New type low noisy gear pump, high efficiency and long life



## ***Optimized intelligent design***

- CAN bus technology
  - Parking brake on slope
  - Operation sequence protection
  - Travelling speed control
  - Lifting speed control
  - Electric controller self protection
  - Dead-man footswitch traction interlock
- 

## ***Advanced EPS electric powered steering***

- EPS electric powerd steering offering easy, flexible, high efficient and mute operation
  - Steering motor controller
  - Automatic centering function
  - Automatic limit on speed and accelerated speed when steering
- 

## ***Easy operated thumb switch***

- To control travelling functions
  - Clear operating units
- 

## ***Five independent braking systems***

- Automatic braking when accelerator lever is released
- Emergency brake activated by releasing foot switch
- Parking brake activated by pressing button on the panel
- Automatic hold-on brake
- Emergency isolator

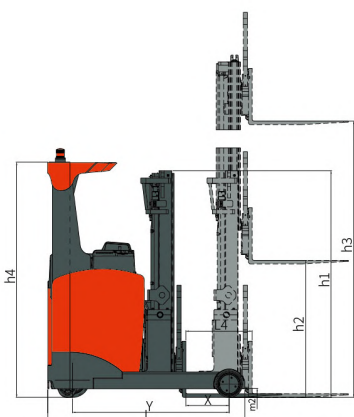


## Manufacturer's Data and Design Characteristics

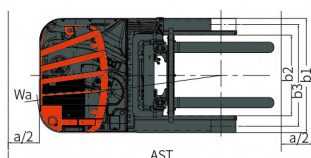
Character				<b>HELI</b>	
1.01	Manufacturer			<b>HELI</b>	
1.02	Model			CQD15	CQD18
1.03	Configuration number			GD2R	GE2R
1.04	Load capacity	Q	kg	1500	1800
1.05	Load center distance	C	mm	500	
1.06	Power mode			Battery	
1.07	Driving mode			Stand-on	
1.08	Wheel base	Y	mm	1335	1500
Tyre					
2.01	Tyre type			Polyurethane	
2.02	Wheel number, drive/caster/load(X=drive wheel)			1x/2/2	
2.03	Track Width,load	b3	mm	976	
2.04	Wheel size, load		mm	ø254x114	
2.05	Wheel size, drive		mm	ø330x114	
2.06	Wheel size, caster		mm	ø178x76	
Size					
3.01	Lift height	h3	mm	3200	3200
3.02	Free lift	h2	mm	115	115
3.03	Mast height, lowered	h1	mm	2355	2355
3.04	Fork size, thickness/width/length	s/e/l	mm	35x100x920	35x100x920
3.05	Fork adjusting width		mm	200~628	200~628
3.06	Fork sideshifting		mm	±55	±55
3.07	Truck body length(fork excluded)	L	mm	1721	1886
3.08	Truck body width	b1	mm	1090	1090
3.09	Distance between support arms	b2	mm	772	772
3.10	Reach distance	l4	mm	550	635
3.11	Height of overhead guard	h4	mm	2250	2250
3.12	Ground clearance,below mast	m2	mm	80	80
3.13	Turning radius	Wa	mm	1615	1775
3.14	Distance from fork front tip to center of load wheel	X	mm	329	414
3.15	Aisle width with pallet 1100Lx1100W,clearance 200	Ast	mm	2760	2855
3.16	Aisle width with pallet 1000Lx1100W,clearance 200	Ast	mm	2680	2775
Performance					
4.01	Travelling speed,with/without load		km/h	10/10.5	10/10.5
4.02	Lifting speed,with/without load		m/s	0.31/0.5	0.3/0.5
4.03	Lowering speed,with/without load		m/s	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
4.05	Maximum climbing ability,with/without load		%	10/15	10/15
Weight					
5.01	Total weight(with battery)		kg	2595	2645
Battery					
6.01	Battery voltage/capacity k5		V/Ah	48/345	48/360
6.02	Battery weight		kg	630	675
6.03	Battery box dimension		mm	1020x359x629	1020x439x629
Motor and controller					
7.01	Drive motor power		kw	5	5
7.02	Lifting motor power		kw	10	10
7.03	Steering motor power		kw	0.6	0.6
7.04	Type of driving control			MOSTET/AC	
7.05	Type of lifting control			MOSTET/AC	
7.06	Type of steering control			MOSTET/AC	
7.07	Transmission box			HELI special transmission box	
7.08	Service brake			Electrical	
7.09	Hydraulic system working pressure		Mpa	16.5	18.5

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





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

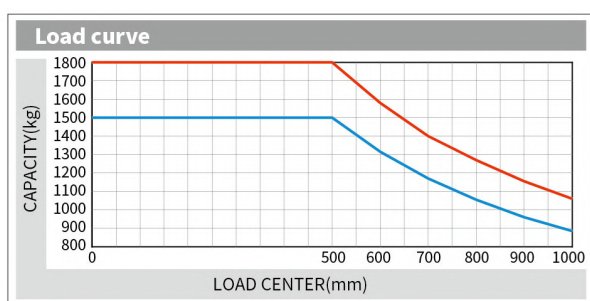


## RENEWABLE ENERGY TECHNOLOGIES

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



**15%**



1.5 t    1.8 t

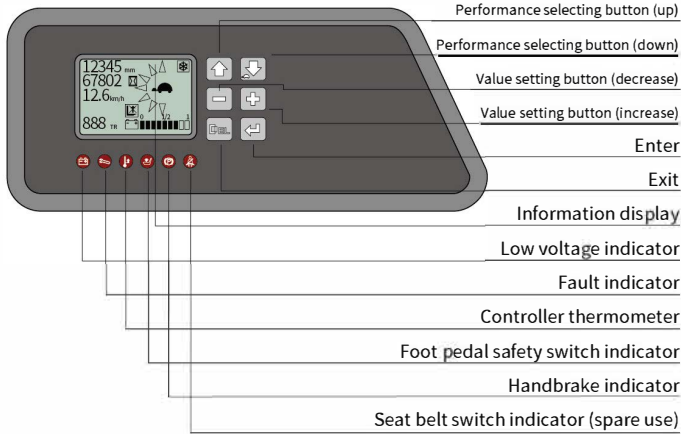
Note: The vertical axis stands for load capacity and the horizontal axis stands for load center which is calculated from the front surface of the forks to the gravity of the standard load. The standard load means a cubic with 1000mm edge length. When mast is tilted forward, using non-standard forks or 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.

### WIDE VIEW FULL FREE 3-STAGE MAST

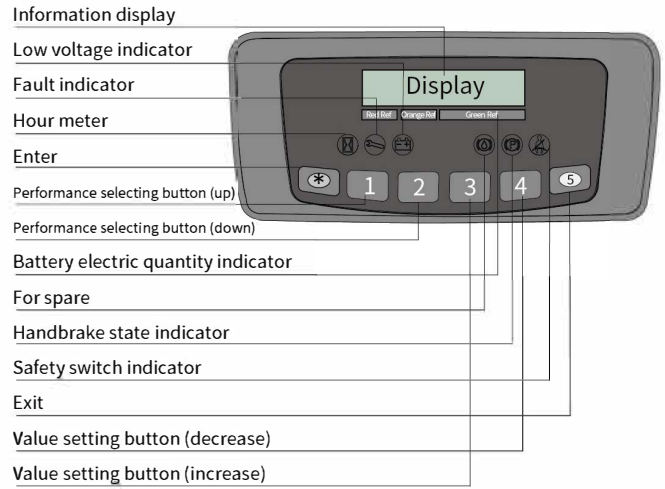
Mast model	h3 Lifting height (mm)		h2 Free lifting height(mm)		h1 Mast height, lowerd(mm)		Load capacity(kg)		Fork tilt angle (front/rear) $\alpha/\beta$
	CQD15	CQD18	CQD15	CQD18	CQD15	CQD18	CQD15	CQD18	
ZSM460	4600	4600	1280	1280	2319	2319	1400	1700	2°/4°
ZSM480	4800	4800	1340	1340	2386	2386	1400	1700	2°/4°
ZSM540	5400	5400	1540	1540	2586	2586	1250	1450	2°/4°
ZSM570	5700	5700	1640	1640	2686	2686	1150	1350	2°/4°
ZSM600	6000	6000	1740	1740	2786	2786	1050	1250	2°/4°
ZSM630	6300	6300	1840	1840	2886	2886	950	1150	2°/4°
ZSM650	6500	6500	1905	1905	2953	2953	850	1050	2°/4°
ZSM675	6750	6750	1940	1940	2987	2987	750	950	2°/4°

### WIDE VIEW MAST

Mast model	h3 Lifting height (mm)		h2 Free lifting height(mm)		h1 Mast height, lowerd(mm)		Load capacity(kg)		Fork tilt angle (front/rear) $\alpha/\beta$
	CQD15	CQD18	CQD15	CQD18	CQD15	CQD18	CQD15	CQD18	
M290	2900	2900	100	100	2205	2205	1500	1800	2°/4°
M320	3200	3200	100	100	2355	2355	1500	1800	2°/4°
M360	3600	3600	100	100	2555	2555	1500	1800	2°/4°
M380	3800	3800	100	100	2655	2655	1500	1800	2°/4°
M400	4000	4000	100	100	2755	2755	1500	1800	2°/4°
M420	4200	4200	100	100	2855	2855	1450	1750	2°/4°
M440	4400	4400	100	100	2955	2955	1400	1700	2°/4°
M460	4600	4600	100	100	3055	3055	1400	1700	2°/4°
M500	5000	5000	100	100	3255	3255	1350	1550	2°/4°



**ZAPI high level meter (for GD2R truck model)**



**ZAPI standard type meter (for GE2R model)**

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.

Configuration number	Configuration
GD2R	Solenoid valve
	Thumb switch control hydraulic functions
	ZAPI travelling motor controller
	ZAPI lifting motor controller
	ZAPI steering motor controller
GE2R	Fork tilting
	Manually operated valve
	Mechanical handle control hydraulic functions
	ZAPI travelling motor controller
	ZAPI lifting motor controller
ZAPI steering motor controller	
	Fork tilting