

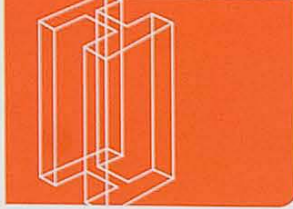


**3-3.5 ton
AC ELECTRIC
FORKLIFT**

9 SERIES

HELI

Heli UK • Unit 10 • Hewitts Ind Est • Elmbridge Road
Cranleigh • Surrey • GU6 8LW • United Kingdom
www.heliuk.com



AC ELECTRIC FORKLIFT 3-3.5 ton

HELI

Newly designed wide-view mast



The newly designed wide-view mast enlarges operators' view effectively and lessens the blind area to provide a clearer vision.

↑ 7%
THE MAST VIEW INCREASES

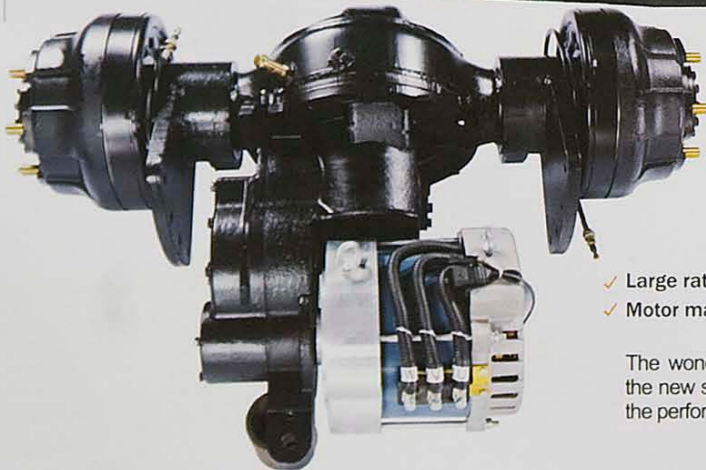
Excellent steering system



The Steering system with new technologies not only provides a smoother swerve and faster positioning & steering, but also effectively lowers down the noise.

- ✓ New integrated load-sensing steering
- ✓ Power Steering
- ✓ New low-noise gear pump with differential tooth technology

AC drive motor



- ✓ Large ratio gearbox
- ✓ Motor maintenance
- ✓ Maintain more efficient
- ✓ Renewable energy technologies

The wonderful combination of high-power AC motor and the new style gearbox by independent R&D fully enhance the performance of acceleration, driving and grade ability.

↑ 50%
GRADIENT PERFORMANCE INCREASES

↑ 25%
THE MAXIMUM TRAVEL SPEED INCREASES

High efficiency loading/unloading performance

The innovative design and configuration of hydraulic system improve the working efficiency largely and provide a very efficient loading/unloading.

↑ 20%
THE MAXIMUM UNLOADED LIFTING SPEED INCREASES

↑ 12%
THE MAXIMUM LOADED LIFTING SPEED INCREASES

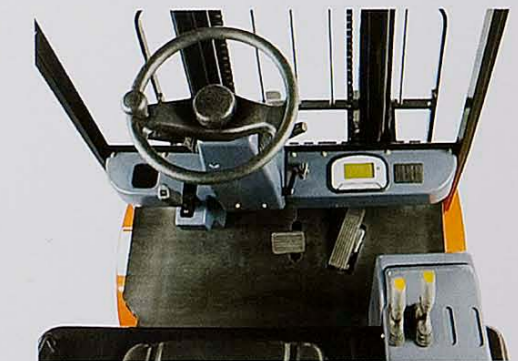


- ✓ New low-speed & high-torque lifting motor
- ✓ MOSFET lifting controller
- ✓ New dynamic load sensing technology in hydraulic system
- ✓ Optional AC lifting system greatly enhances the loading/unloading performance.

Enough operation space

The new optimization layout widens the operator space for ensuring more comfortable and convenient operation.

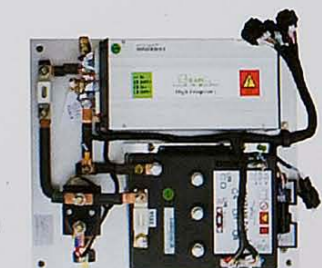
↑ 12%
THE OPERATING SPACE INCREASES



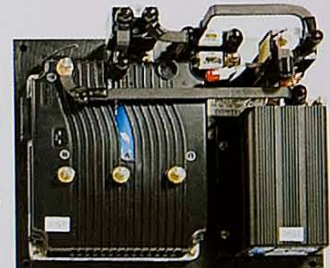
More intelligent performance

The truck equipped with more intelligence functions not only ensures the safety performance, but also improves the efficiency and reduces energy consumption.

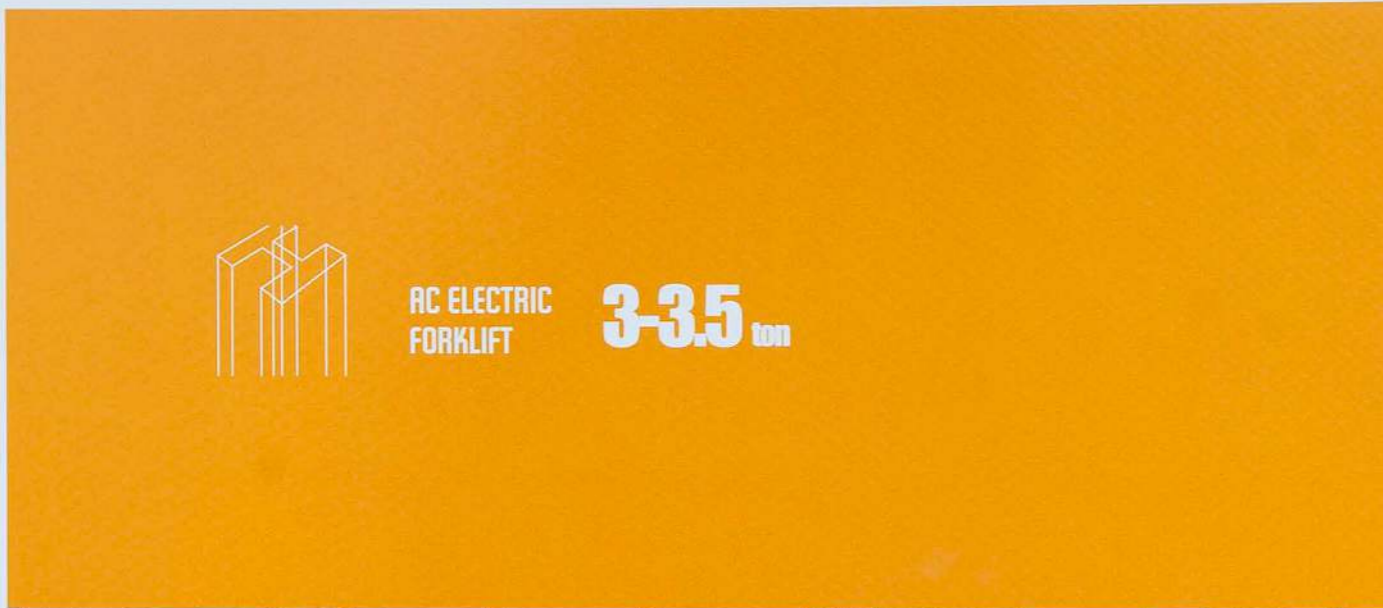
- ✓ Standard CAN BUS
- ✓ Self-braking on ramp
- ✓ Preventing abnormality operating
- ✓ AC traction controller
- ✓ Emergency power shut-down
- ✓ Electric controller self-protecting
- ✓ Presence of driver sensing system
- ✓ Speed selection function (normal/cutback)



ZAPI CONTROLLER

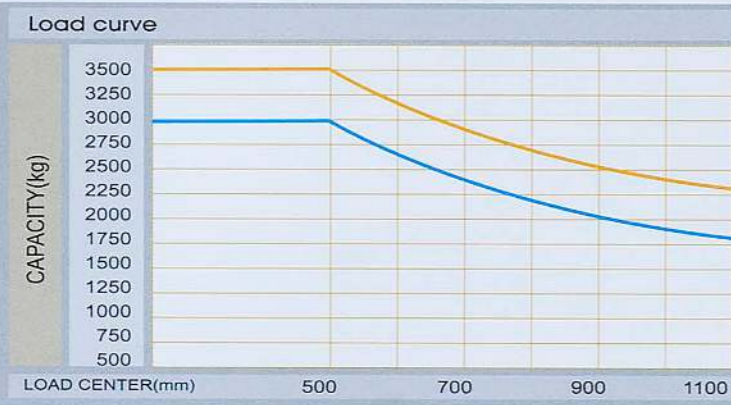
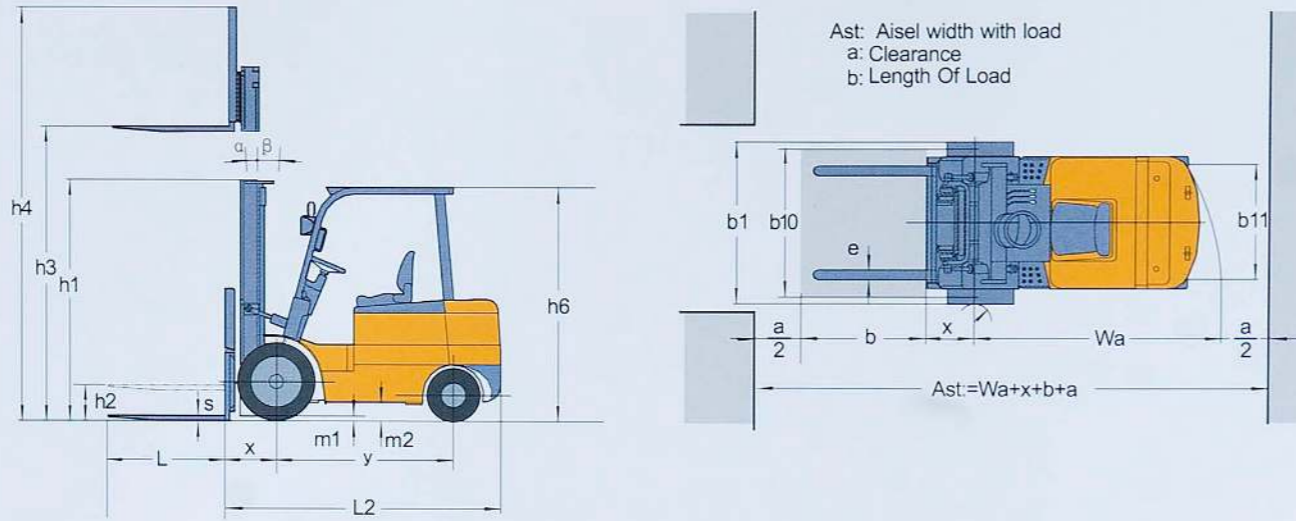


CURTIS CONTROLLER



Manufacturers Data and Design Characteristics

Characteristics		HELI	
1.01	Manufacture's Name	HELI	
1.02	Model Designation	CPD30	CPD35
1.03	Configuration Number	G1/G2	G1/G2
1.04	Load Capacity	Q (kg)	3000
1.05	Load Center	c (mm)	500
1.06	Power Type	Battery	Battery
1.07	Operator Type	Seated	Seated
1.08	Wheelbase	y (mm)	1680
Wheels & Tyres			
2.01	Tyre Type	Pneumatic	Superelastic
2.02	Tyres Number (Front/Rear)	2/2	2/2
2.03	Tread(centre of tyre),front	b10 (mm)	1055
2.04	Tread(centre of tyre),rear	b11 (mm)	980
2.05	Tyre Size, Front	28×9-15-12PR	28×9-15
2.06	Tyre Size, Rear	18×7-8-14PR	18×7-8
Dimensions			
3.01	Load Distance	x (mm)	485
3.02	Mast Tilt Angle,F/R	α / β (°)	6/10
3.03	Height with Mast Lowered	h1(mm)	2075
3.04	Free Lift	h2(mm)	145
3.05	Standard Lift Height	h3(mm)	3000
3.06	Height with Mast Extended	h4(mm)	4182
3.07	Overhead Guard Height	h6(mm)	2215
3.08	Fork Size T×W×L	s/e/L(mm)	45×125×1070
3.09	Fork Carriage to DIN 15173 A/B		2A
3.10	Length to fork face	L2(mm)	2485
3.11	Overall Width	b1(mm)	1225
3.12	Outside Turning Radius	Wa(mm)	2210
3.13	Ground Clearance at mast ,Loaded	m1(mm)	135
3.14	Ground Clearance at centre of wheelbase ,Loaded	m2(mm)	150
3.15	Right Stack Aisle width (Pallet size 1000x1000mm, clearance:200mm)	Ast(mm)	3895
3.16	Right Stack Aisle width (Pallet size 1200x1200mm, clearance:200mm)	Ast(mm)	4095
Performances			
4.01	Travel Speed,with/without load	km/h	15.0/15.5
4.02	Lifting Speed,with/without load	m/s	0.28/0.45
4.03	Lowering Speed	m/s	0.5
4.04	Gradient performance with load	%	15
4.05	Max. draw bar pull with load	N	15600
4.06	Acceleration time (10 metres) W/O load	s	5.0/4.7
Weight			
5.01	Total Approximate Weight(W/O battery)	kg	4810/3230
5.02	Axle Loading*: Unloaded,Front/Rear	kg	2320/2490
5.03	Axle Loading*: Loaded,Front/Rear	kg	7055/755
Battery			
6.01	Battery Voltage/rated capacity(5h)	V/Ah	80/480
6.02	battery weight	kg	1580
6.03	Battery to DIN 43531/35/36/A/B/C		43536A
Motor & Controller			
7.01	Drive Motor - 60 Min. Rating	kW	16.6
7.02	Pump Motor - 15 Min. Rating	kW	13
7.03	Drive Motor Control Method		MOSFET/AC
7.04	Pump Motor Control Method		MOSFET/DC
7.05	Service Brake/Parking Brake		Hydraulic/Mechanical
7.06	Relief Pressure	Mpa	21



Note:
Vertical axle stands for load capacity while horizontal axle stands for load center. Load center is the distance counted from the front of the fork. The base point of the standard load is the center point of the cubic with the same 1000mm dimension in length, width and height. The load capacity should be down, if mast tilts forward, using non-standard forks or loading goods with extra width. Please notice the different load capacity between different load centers according to load chart.

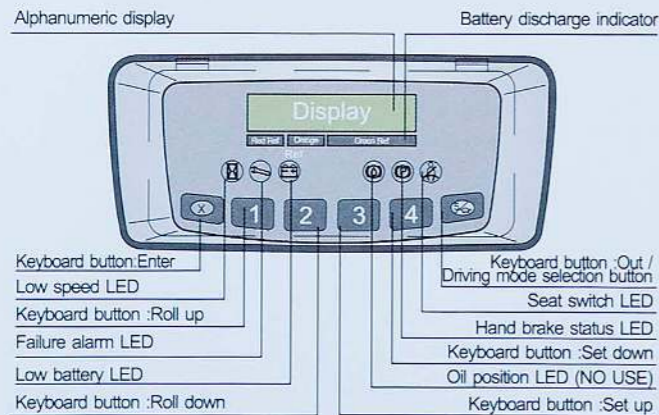


Renewable energy technologies

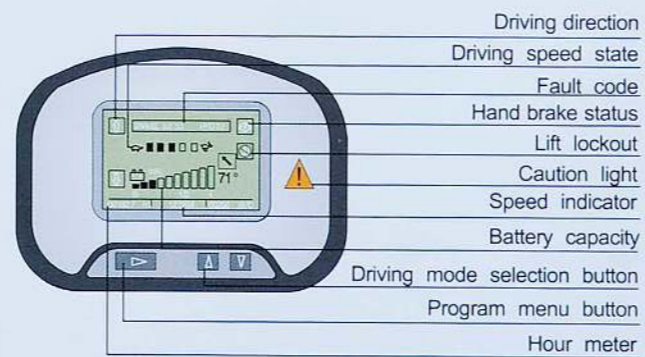
With the use of the excellent load-sensing steering system and AC controlling renewable energy technologies, the forklift is more energy-saving and the working hour of the battery is extended by 15%.

↑ 15%
THE PERFORMANCE OF BATTERY INCREASES

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.



ZAPI Display



CURTIS Display

WIDE VIEW MAST

Mast model	Max. Fork height (mm)	Load Capacity (Load centre 500mm) (kg)		Overall Height (mm)		Tilt Angle (F-B)
		CPD30	CPD35	CPD30	CPD35	
M200	2000	3000	3500	1565	1680	6/10
M250	2500	3000	3500	1815	1930	6/10
M300	3000	3000	3500	2075	2180	6/10
M330	3300	3000	3500	2215	2330	6/10
M350	3500	3000	3500	2315	2430	6/10
M370	3700	3000	3400	2415	2530	6-6 6-10
M400	4000	2950	3350	2615	2730	6-6 6-10
M425	4250	2850	3250	2740	2855	6-6 6-10
M450	4500	2750	3100	2865	2980	6-6 6-10
M500	5000	2400 *2550	2650 *2800	3115	3230	6-6 6-6
M550	5500	2250 *2450	2500 *2600	3415	3530	*3-6
M600	6000	1500 *2200	1550 *2400	3665	3780	*3-6

WIDE VIEW FULL FREE 2-STAGE MAST

Mast model	Max. fork height (mm)	Load Capacity (Load centre 500mm) (kg)		Overall Height (mm)		Free lift (With STD backrest) (mm)		Tilt Angle (F-B)
		CPD30	CPD35	CPD30	CPD35	CPD30	CPD35	
ZM200	2000	3000	3500	1570	1680	344	500	6/10
ZM250	2500	3000	3500	1820	1930	594	750	6/10
ZM300	3000	3000	3500	2070	2180	844	1000	6/10
ZM330	3300	3000	3500	2220	2330	994	1150	6/10
Zm350	3500	3000	3500	2320	2430	1094	1250	6/10
ZM370	3700	3000	3400	2420	2530	1194	1350	6-6 6-10
ZM400	4000	2950	3350	2620	2730	1394	1550	6-6 6-10
ZM425	4250	2850	3250	2745	2855	1519	1675	6-6 6-10
ZM450	4500	2750	3100	2870	2980	1644	1800	6-6 6-10
ZM500	5000	2400 *2550	2650 *2800	3120	3230	1894	2050	6-6 6-6
ZM550	5500	2250 *2450	2500 *2600	3420	3530	2194	2350	*3-6
ZM600	6000	1500 *2200	1550 *2400	3670	3780	2444	2600	*3-6

WIDE VIEW FULL FREE 3-STAGE MAST

Mast model	Max. Fork height (mm)	Load Capacity (Load centre 500mm) (kg)		Overall Height (mm)		Free lift (With STD backrest) (mm)		Tilt Angle (F-B)
		CPD30	CPD35	CPD30	CPD35	CPD30	CPD35	
ZSM360	3600	3000	3400	1946	1946	670	670	6/6
ZSM400	4000	2900	3250	2065	2065	795	795	6/6
ZSM435	4350	2750	3150	2190	2190	920	920	6/6
ZSM450	4500	2700	3000	2240	2240	970	970	6/6
ZSM480	4800	2600	2800	2340	2340	1070	1070	6/6
ZSM500	5000	2400 *2500	2650	2440	2440	1170	1170	6/6
ZSM540	5400	2250 *2450	2500	2565	2565	1295	1295	3/6
ZSM600	6000	1550 *2150	1550 *2300	2790	2790	1520	1520	3/6

NOTE : (1)* Rated capacity with front dual tires ;
(2)CPD30:The free height of full free 2-stage mast without backrest increase 490mm ;
(3)CPD35:The free height of full free 2-stage mast without backrest increase 412mm ;
(4)The free lift height of full free 3-stage mast without backrest increase 520mm.



3-3.5 ton

AC ELECTRIC FORKLIFT

STANDARD EQUIPMENT

Wide view mast
 Standard fork
 II (III) fork carriage
 Backrest
 Two-spool control valve
 Battery group
 Standard seat
 Overhead guard
 Overhead guard raincoat
 LCD combined display
 Pneumatic tyres
 Traction bar
 Attached tools

OPTIONS

Boom
 Cab
 Load hook
 String bar
 Hinged fork
 Back view mirror
 Side shifter
 Paper roll clamp
 Alarm lamp
 Solid tyre
 Rear work lights
 Protective fences
 Multi function barrel clamp
 Load stabilizer
 Widened fork carriage
 Lengthened fork
 Load pusher
 Fork sleeve
 Rotating flat clamp
 Dual-tyres protector
 Accessory hydraulic component
 Tilt/Steering cylinder protection sleeve
 Colored tyre(white/green)
 Wide view double/triplex full free mast
 User-specified color