



G series

**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
- Flashing light

OPTIONS

- Boom
- Cab
- Load hook
- String bar
- Hinged fork
- Back view mirror
- Side shifter
- Paper roll clamp
- warning light (rotating or buzzing)
- 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

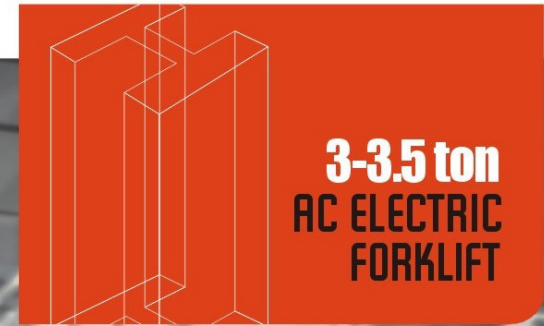
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AUTHORIZED DEALER

* Details of specifications and equipment are based on information available at the time of printing and may change without notice.

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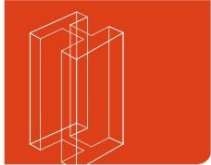
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**3-3.5 ton
AC ELECTRIC
FORKLIFT**



G series / INTELLIGENT
ENVIRONMENT-FRIENDLY



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



AC ELECTRIC FORKLIFT

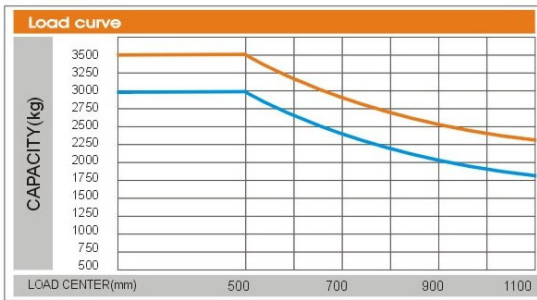
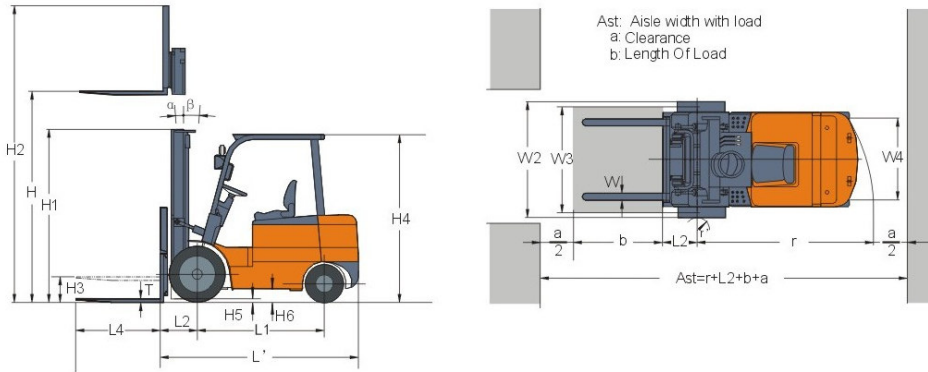
3-3.5 ton



Manufacturers Data and Design Characteristics

| Characteristics | | | | | |
|--------------------|--|------------------|-------|----------------------|----------------------|
| 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 | 3500 |
| 1.05 | Load Center | c | mm | 500 | 500 |
| 1.06 | Power Type | | | Battery | Battery |
| 1.07 | Operator Type | | | Seated | Seated |
| 1.08 | Wheelbase | L1 | mm | 1680 | 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 | W3 | mm | 1000 | 1000 |
| 2.04 | Tread(centre of tyre),rear | W4 | mm | 980 | 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 | L2 | mm | 485 | 490 |
| 3.02 | Mast Tilt Angle F/R | α / β | ° | 6/10 | 6/10 |
| 3.03 | Height with Mast Lowered | H1 | mm | 2075 | 2180 |
| 3.04 | Free Lift | H3 | mm | 145 | 150 |
| 3.05 | Standard Lift Height | H | mm | 3000 | 3000 |
| 3.06 | Height with Mast Extended | H2 | mm | 4182 | 4177 |
| 3.07 | Overhead Guard Height | H4 | mm | 2215 | 2215 |
| 3.08 | Fork Size T×W×L | T×W×L4 | mm | 45× 125× 1070 | 50× 125× 1070 |
| 3.09 | Fork Carriage to DIN 15173 A/B | | | 3A | 3A |
| 3.10 | Length to fork face | L' | mm | 2485 | 2550 |
| 3.11 | Overall Width | W2 | mm | 1225 | 1225 |
| 3.12 | Outside Turning Radius | r | mm | 2210 | 2270 |
| 3.13 | Ground Clearance at mast ,Loaded | H5 | mm | 135 | 135 |
| 3.14 | Ground Clearance at centre of wheelbase ,Loaded | H6 | mm | 150 | 150 |
| 3.15 | Right Stack Aisle width (Pallet size 1000×1000mm, clearance:200mm) | Ast | mm | 3965 | 4030 |
| 3.16 | Right Stack Aisle width (Pallet size 1200×1200mm, clearance:200mm) | Ast | mm | 4095 | 4160 |
| Performances | | | | | |
| 4.01 | Travel Speed,with/without load | | km/h | 15.0/15.5 | 14.5/15.0 |
| 4.02 | Lifting Speed,with/without load | | mm/s | 280/450 | 250/440 |
| *4.02 | Lifting Speed,with/without load | | mm/s | 340/460 | 325/450 |
| 4.03 | Lowering Speed | | mm/s | 500 | 500 |
| 4.04 | Gradient performance with load | | % | 15 | 12 |
| 4.05 | Max. draw bar pull with load | | N | 15600 | 17500 |
| 4.06 | Acceleration time (10 metres) W/O load | | s | 5.0/4.7 | 5.2/4.9 |
| Weight | | | | | |
| 5.01 | Total Approximate Weight(W/O battery) | | kg | 4810/3230 | 5500/3920 |
| 5.02 | Axle Loading*: Unloaded,Front/Rear | | kg | 2320/2490 | 2640/2680 |
| 5.03 | Axle Loading*: Loaded,Front/Rear | | kg | 7055/755 | 8145/855 |
| Battery | | | | | |
| 6.01 | Battery Voltage/rated capacity(5h) | | V/Ah | 80/480 | 80/480 |
| 6.02 | battery weight | | kg | 1580 | 1580 |
| 6.03 | Battery to DIN 43531/35/36A/B/C | | | 43536A | 43536A |
| Motor & Controller | | | | | |
| 7.01 | Drive Motor - 60 Min. Rating | | kW | 16.6(AC) | 16.6(AC) |
| 7.02 | Pump Motor - 15 Min. Rating | | kW | 13(DC) | 13(DC) |
| *7.02 | Pump Motor - 15 Min. Rating | | kW | 13.5(AC) | 13.5(AC) |
| 7.03 | Drive Motor Control Method | | | MOSFET/AC | MOSFET/AC |
| *7.04 | Pump Motor Control Method | | | MOSFET/DC | MOSFET/DC |
| 7.04 | Pump Motor Control Method | | | MOSFET/AC | MOSFET/AC |
| 7.05 | Service Brake/Parking Brake | | | Hydraulic/Mechanical | Hydraulic/Mechanical |
| 7.06 | Relief Pressure | | Mpa | 21 | 21 |

* stands for the parameters and configurations when choosing the AC type lifting system.



3.0t 3.5t

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.

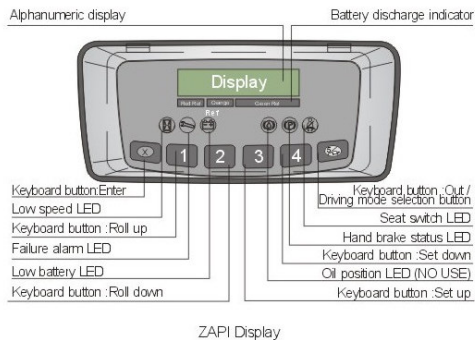


Renewable energy technologies

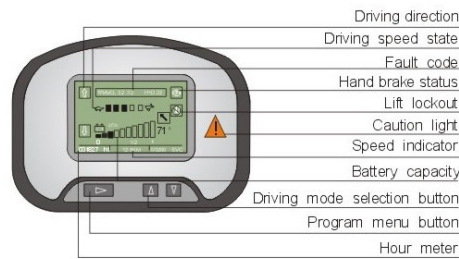
With the use of the excellent load-sensing steering system and AC controlling renewable energy technologies, the forklift is more energy-saving and the working hour of the battery is extended by 15%.

↑ 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 center 500mm) (kg) | | Overall Height (mm) | | Tilt Angle (α / β) |
| | | 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 3/6 |
| M600 | 6000 | 1500 +2200 | 1550 +2400 | 3665 | 3780 | 3/6 3/6 |

| WIDE VIEW FULL FREE 2-STAGE MAST | | | | | | | | |
|----------------------------------|-----------------------|--|---------------|---------------------|-------|------------------------------------|-------|--------------------|
| Mast model | Max. fork height (mm) | Load Capacity (Load center 500mm) (kg) | | Overall Height (mm) | | Free lift (With STD backrest) (mm) | | Tilt Angle (α / β) |
| | | 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 3/6 |
| ZM600 | 6000 | 1500 +2200 | 1550 +2400 | 3670 | 3780 | 2444 | 2600 | 3/6 3/6 |

| WIDE VIEW FULL FREE 3-STAGE MAST | | | | | | | | |
|----------------------------------|-----------------------|--|---------------|---------------------|-------|------------------------------------|-------|--------------------|
| Mast model | Max. Fork height (mm) | Load Capacity (Load center 500mm) (kg) | | Overall Height (mm) | | Free lift (With STD backrest) (mm) | | Tilt Angle (α / β) |
| | | 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 |
| ZSM470 | 4700 | 2650 | 2850 | 2240 | 2240 | 970 | 970 | 6/6 |
| ZSM480 | 4800 | 2600 | 2800 | 2340 | 2340 | 1070 | 1070 | 6/6 |
| ZSM500 | 5000 | 2400 +2500 | 2650 +2800 | 2440 | 2440 | 1170 | 1170 | 6/6 |
| ZSM540 | 5400 | 2250 +2450 | 2500 +2600 | 2565 | 2565 | 1295 | 1295 | 3/6 3/6 |
| ZSM600 | 6000 | 1550 +2150 | 1550 +2300 | 2790 | 2790 | 1520 | 1520 | 3/6 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.