

HELI

Reliable special designed instrument



1. Colorful LCD display screen with high resolution; adjustable backlight brightness;
2. CAN bus meter to read the fault code directly;
3. Front and rear protection degree: IP 66;
4. Working temperature: -30°C~+75°C; temperature for storage: -40°C~+85°C;
5. Multi-level programmable menu;
6. More than 20 alarm indicators and 6 simulation indicators can monitor engine and trucks at the same time to protect operator and truck safety;
7. Alarm according to different grade: there are two alarm grade: the indicator will flicker for the first grade alarm and the buzzer will sound up for the second grade alarm;
8. Chinese and English are optional;
9. Point check;
10. Identity recognition;
11. GPS (optional) .

engine coolant temperature	charging indication	left turning	oil and water separator
fuel level	block of air cleaner	right turning	high temperature of exhaust
temperature of torque converter oil	hand brake	start waiting	DPF cleaning
Pressure of torque converter oil	seat switch	engine stop	forcible no generation of DPF
LPG pressure	neutral indicator	alarm of low fuel	low level of DEF
	safety belt switch	alarm of engine oil pressure	fault of fingertip control
	low brake pressure	preheating indication	
	engine alarm	hourmeter	
	engine warning		

Optional

warning light
cab
dual tyre of front wheel
solid tyre (optional)
thread
synchronized steering system
coarse filter
rear lamp
protection sleeve

full suspension seat
heater
travelling OPS
fire extinguisher
over speed alarm
automatic weight system, overload alarm
rear view system
truck networking
start with card
start with password

HELI AMERICA INC

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

HELI

8000-10000 lbs (4-5 t)

G3 series Internal Combustion
Counterbalanced Forklift Truck



NEW GENERATION SUPERIOR QUALITY

www.heliforkliftamerica.com

8000-10000 lbs(4-5 t)

A design model of perfect combination of aesthetics and functional design

new generation of products with intelligent, safe, high efficient and energy saving and environmental friendly characteristics



More reliable

- > The truck is assembled with dual guide-wheel transmission box which offers large ratio (more than 5) and thus truck acceleration and gradeability are improved largely.
- > Donaldson air cleaner ensures enough clean air for engine and the total efficiency reaches to 99.8%.
- > Operation safety is largely improved with maintenance-free wet type drive axle and normally closed parking brake.
- > Smart instrument monitors truck status overally and thus the truck is safe and reliable.
- > Enlarged aluminum fin-type radiator improves cooling performance.

Safer

- > The counter weight without tail structure reduces truck center of gravity and improves lateral stability.
- > Integral type welded overhead guard with high strength improves operation safety.
- > Auxiliary control system of parking improves the safety and service life of parking brake.
- > OPS system improves operation safety.
- > Safe starting on neutral and anti restarting of engine improves operation safety.
- > Automatic alarm when over speed (optional)



G3 Intelligent · Safe · High efficient
Energy saving and environmental friendly

More energy saving

- > Variable pump with load sensing system makes the truck more energy saving. (optional)
- > Optimized design of hydraulic system effectively reduces truck fuel consumption.
- > LED lights make truck more energy saving.

More comfortable

- > Synchronized steering of steering wheel and tyres reduces operation fatigue.
- > With thumb switch, driving fatigue is reduced.(optional)
- > Switch type electronic parking brake is easy for operation.
- > Lowering of tilting cylinder enlarges leg space.
- > Suspension seat, backward handle with horn and wide view mast improve driving experience.
- > Buffering structure of drive axle improves driving comfort.
- > Optimized design of counter weight improves backward view.

Easier maintenance

- > 80° opening angle of hood makes maintenance easier.
- > Removable wind gathering cover and filter screen make maintenance easy.

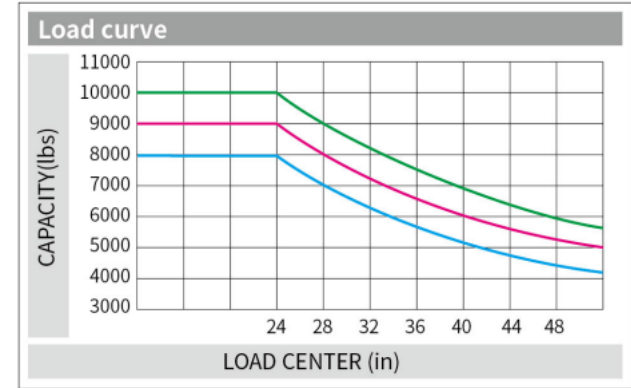
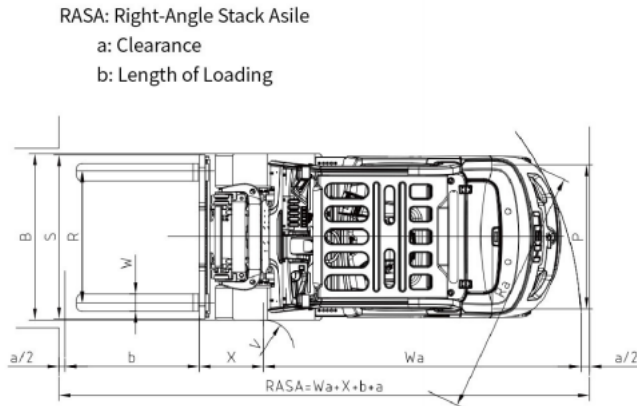
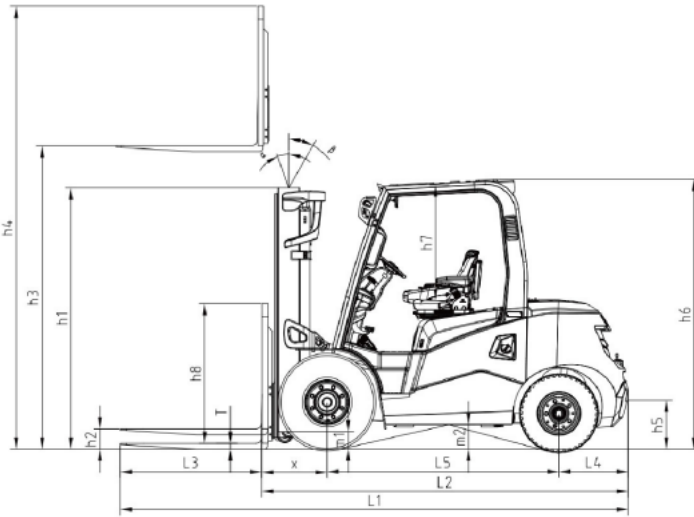
8000-10000 lbs(4-5 t)

Intelligent · Safe · High efficient
Energy saving and environmental friendly

Manufacturer and technical parameters						
Characteristics						
1.01	Manufacturer			HELI		
1.02	Model			CP(Q)YD40/CPCD40	CP(Q)YD45/CPCD45	CP(Q)YD50/CPCD50
1.03	Load center		in.	24	24	24
1.04	Rated capacity		lbs	8000	9000	10000
1.05	Power type			Gas/LPG/Diesel		
1.06	Driving mode			Sit-on type		
Dimensions						
2.01	Max.fork lifting height(With backrest)	h4	in.	166.7	166.7	173
2.02	Max.lifting height	h3	in.	118	118	118
2.03	Mast overall height (Fork to the ground and mast be vertical)	h1	in.	88.6	88.6	88.6
2.04	Backrest height (Calculated from the surface of the fork)	h8	in.	47.6	47.6	54.9
2.05	Free lift height	h2	in.	5.9	5.9	5.9
2.06	Fork thickness	T	in.	2	2	2.2
2.07	Fork length	L3	in.	48	48	48
2.08	Fork width	W	in.	5.9	5.9	5.9
2.09	Min.ground clearance(At the mast)	m1	in.	5.9	5.9	5.9
2.10	Overall length(With fork)	L1	in.	171	173	175
2.11	Overall length(Without fork)	L2	in.	123	125	127
2.12	Front overhang	X	in.	22.2	22.2	22.4
2.13	Wheel base	L5	in.	78.7	78.7	78.7
2.14	Rear overhang	L4	in.	21.8	23.6	26
2.15	Traction pin height	h5	in.	16.5	16.5	16.5
2.16	Distance from the surface of the seat to the overhead guard	h7	in.	40	40	40
2.17	Overall height(Overhead guard)	h6	in.	91.3	91.3	91.3
2.18	Overall width	B	in.	57	57	57
2.19	Fork adjustable range (the external of the fork)	S	in.	11.8~54	11.8~54	11.8~54
2.20	Front tread	R	in.	45.3	45.3	45.3
2.21	Rear tread	P	in.	46.8	46.8	46.8
2.22	Turning radius(Interior)	V	in.	9.8	9.8	9.8
2.23	Min.turning radius	Wa	in.	111.6	113.4	115.7
2.24	Min.right angle aisle width	Ra	in.	106.9	108.7	111
2.25	Mast tilting angle	α/β		6°~12°	6 ~ 12°	6 ~12°
Weight						
3.01	Total weight	lbs		14224	14951	16296
Wheel and tyre						
4.01	Wheel number x = drive wheel (Front/Rear)			2X/2		
4.02	Tyre type(Front/Rear)			Pneumatic tyre		
4.03	Tyre size(Front/Rear)			2-300-15-18PR / 2-7.00-12-14PR		
4.04	Wheels load (loaded)front/rear			20128/3042	21650/3351	23942/3505
4.05	Wheels load (unloaded) front/rear			6173/8180	5952/9128	6481/9943
4.06	Service brake			Hydraulic assisted-pedal type-wet type brake		
4.07	Parking brake			Electronic rocker switch-wet type brake		

Engine Model and Main Specification for Option 1								
Performance								
Model			CPCD40-CU9G3		CPCD45-CU9G3		CPCD50-CU9G3	
Lifting speed (loaded/unloaded)	fpm	mm/s	104/110	530/560	98/102	500/520	98/102	500/520
Lowering speed (loaded/unloaded)	fpm	mm/s	98/102	500/520	98/102	500/520	98/102	500/520
Max. Operation speed (loaded/unloaded)	mph	km/h	14.3/15.5	23/25	14.3/15.5	23/25	14.3/15.5	23/25
Max. Gradeability (loaded/unloaded)		%	46/28		41/28		36/28	
Max. Drawbar(loaded)		N	43000					
Drive and transmission devices								
Battery voltage/capacity	V/kWh	V/Ah	2×12/1.92	2×12/80	2×12/1.92	2×12/80	2×12/1.92	2×12/80
Engine model			Cummins QSF3.8 diesel engine					
Engine rated power	HP/rpm	kW/rpm	74/2200	55.4/2200	74/2200	55.4/2200	74/2200	55.4/2200
Engine rated torque	(lb-ft)/rpm	Nm/rpm	295/1300	400/1300	295/1300	400/1300	295/1300	400/1300
Engine cylinder number			4					
Engine displacement	cu.in.	L	229	3.8	229	3.8	229	3.8
Capacity of engine fuel tank	gal	L	26.4	100	26.4	100	26.4	100
Transmission gears (front/rear)			1-1Power Shift					

Engine Model and Main Specification for Option 2																				
Performance																				
Model			CPQYD40-KUTG3		CPQYD45-KUTG3		CPQYD50-KUTG3		CPYD40-KUTG3		CPYD45-KUTG3		CPYD50-KUTG3		CPCD40-DE1G3		CPCD45-DE1G3		CPCD50-DE1G3	
Lifting speed (loaded/unloaded)	fpm	mm/s	107.4/114	545/575	107.4/114	545/575	107.4/114	545/575	107.4/114	545/575	107.4/114	545/575	1107.4/114	545/575	104/110	530/560	98/102	500/520	98/102	500/520
Lowering speed (loaded/unloaded)	fpm	mm/s	94.2/75.6	480/383	94.2/75.6	480/383	94.2/75.6	480/383	94.2/75.6	480/383	94.2/75.6	480/383	94.2/75.6	480/383	108/102	550/520	108/102	550/520	108/102	550/520
Max. Operation speed (loaded/unloaded)	mph	km/h	15.9/16.5	25.6/26.5	15.9/16.5	25.6/26.5	15.9/16.5	25.6/26.5	15.9/16.5	25.6/26.5	15.9/16.5	25.6/26.5	15.9/16.5	25.6/26.5	14.3/15.5	23/25	14.3/15.5	23/25	14.3/15.5	23/25
Max. Gradeability (loaded/unloaded)		%	46/28		38/28		38/28		38/28		38/28		38/28		46/28		41/28		36/28	
Max. Drawbar(loaded)		N	8880/5171	39.5/23	8880/5171	39.5/23	8880/5171	39.5/23	8880/5171	39.5/23	8880/5171	39.5/23	8880/5171	39.5/23	43000					
Drive and transmission devices																				
Battery voltage/capacity	V/kWh	V/Ah	12/1.92	12/80	12/1.92	12/80	12/1.92	12/80	12/1.92	12/80	12/1.92	12/80	12/1.92	12/80	2x12/1.92	2x12/80	2x12/1.92	2x12/80	2x12/1.92	2x12/80
Engine model			Kubota WG3800 Certificated engine												Deutz TCD 3.6 diesel engine					
Engine rated power	HP/rpm	kW/rpm	GAS:73.2/2400 LPG:73.2/2400	GAS:54.6/2400 LPG:54.6/2400	GAS:73.2/2400 LPG:73.2/2400	GAS:54.6/2400 LPG:54.6/2400	GAS:73.2/2400 LPG:73.2/2400	GAS:54.6/2400 LPG:54.6/2400	LPG:84.8/2400	LPG:63.2/2400	LPG:84.8/2400	LPG:63.2/2400	LPG:84.8/2400	LPG:63.2/2400	74/2200	55.4/2200	74/2200	55.4/2200	74/2200	55.4/2200
Engine rated torque	(lb-ft)/rpm	Nm/rpm	GAS:182/1400 LPG:200.1/1400	GAS:246.8/1400 LPG:271.4/1400	GAS:182/1400 LPG:200.1/1400	GAS:246.8/1400 LPG:271.4/1400	GAS:182/1400 LPG:200.1/1400	GAS:246.8/1400 LPG:271.4/1400	LPG:208.3/1200	LPG:282.4/1200	LPG:208.3/1200	LPG:282.4/1200	LPG:208.3/1200	LPG:282.4/1200	288/1300	390/1300	288/1300	390/1300	288/1300	390/1300
Engine cylinder number			4												4					
Engine displacement	cu.in.	L	230	3.769	230	3.769	230	3.769	230	3.769	230	3.769	230	3.769	219.7	3.6	219.7	3.6	219.7	3.6
Capacity of engine fuel tank	gal	L	26.4	100	26.4	100	26.4	100	26.4	100	26.4	100	26.4	100	26.4	100	26.4	100	26.4	100
Transmission gears (front/rear)			1-1Power Shift												1/1- POWER SHIFT					



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 48" dimension in length width and height. The load capacity should be down, if mask 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

WIDE VIEW MAST										
Mast model	Max. lifting height (in)	Load capacity@24" (lbs)			Lowered mast height (in)	Free lift height (in)	Service weight (lbs)			Mast tilting angle (α/β)(deg.)
		CPCD40	CPCD45	CPCD50			CPCD40	CPCD45	CPCD50	
M250	98	8000	9000	10000	79	6	13669	14242	15146	6°/12°
M300	118	8000	9000	10000	89	6	13779	14352	15256	6°/12°
M330	130	8000	9000	10000	95	6	13845	14418	15322	6°/12°
M350	138	8000	9000	10000	99	6	13889	14462	15366	6°/12°
M370	146	8000	9000	10000	103	6	13922	14495	15399	6°/12°
M400	157	8000	9000	10000	111	6	14088	14661	15565	6°/12°
M425	167	8000	9000	10000	116	6	14143	14716	15620	6 / 6°
M450	177	7600 8000 8400	8600 9000 9400	9400 10000 10600	121	6	14187	14760	15664	6°/6°
M475	187	7400 8000 8400	8400 9000 9400	9000 9600 10000	126	6	14242	14815	15719	6 / 6°
M500	197	7000 7400 8000	8000 8200 8600	8500 9200 9800	131	6	14297	14870	15774	6°/6°
M550	217	6400 6800 7200	7200 8000 8400	8000 8400 8800	142	6	14495	15069	15972	6°/6°
M600	236	6400*	7200*	7600*	152	6	14606	15179	16083	6 / 6°

WIDE VIEW FULL FREE 2-STAGE MAST										
Mast model	Max. lifting height (in)	Load capacity@24" (lbs)			Lowered mast height (in)	Free lift height (in)	Service weight (lbs)			Mast tilting angle (α/β)(deg.)
		CPCD40	CPCD45	CPCD50			CPCD40	CPCD45	CPCD50	
ZM250	98	8000	9000	10000	79	31	13569	14143	15047	6°/12°
ZM300	118	8000	9000	10000	89	41	13702	14275	15179	6°/12°
ZM330	130	8000	9000	10000	95	47	13790	14363	15267	6°/12°
ZM350	138	8000	9000	10000	99	51	13834	14407	15311	6°/12°
ZM370	146	8000	9000	10000	103	55	13889	14462	15366	6°/12°
ZM400	157	8000	9000	10000	111	63	14088	14661	15565	6°/12°
ZM425	167	8000	9000	10000	116	68	14176	14749	15653	6°/6°
ZM450	177	7600 8000*	8600 9000*	9400 10000*	121	72	14264	14837	15741	6°/6°
ZM475	187	7400 8000*	8400 9000*	9000 10000*	126	77	14352	14925	15829	6°/6°
ZM500	197	7000 7400*	8000 8200*	8500 9200*	131	82	14440	15013	15917	6°/6°
ZM550	217	6400 6800*	7200 8000*	8000 8400*	142	94	14683	15256	16160	6°/6°
ZM600	236	6400*	7200*	7600*	152	104	14804	15377	16281	6°/6°