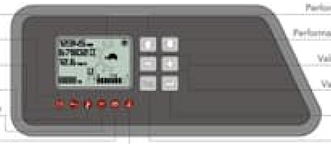
HELI

Reliable special designed instrument

ZAPI intelligent display provides vital information such as speed and battery discharge status, and is used to customize performance parameters



ZAPI intelligent display for GA2&GD2

Standard configuration	Optional device
Wide view standard mast	Wide view full free 3 stage mast
Integral sideshifter	LED Warning lights(rotating/buzzer)
Standard fork	Polyurethane tires
Class II standard carriage	Traceless tires
Load backrest	Rear work light
Three-spool proportion control valve	Blue safety light
Joystick	Long forks
80"Overhead guard	Lower type overhead guard
LCD combined display	Accessory hydraulic component
Solid tire	Tilt cylinder protection sleeve
Wide-angle rearview mirror	Customer color
LED front work lights	Battery loading and unloading car
LED warning light(flashing)	Intelligent security control system
Electric horn	Stop at the height specified position
USB charging output	Wireless monitoring
EPS (Electronic power steering)	Adjustable elbow support
Automatic steering slow down device	
Regenerative braking	
Electronic Parking brake	
OPS (Operator presence sensing)	
Battery side extraction	
Electronic tilt buffer	
Hydraulic drop buffer	
Driving speed decreases during high lift	

HELI AMERICA INC

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E-MAIL:heli@helliforkliftamerica.com

TEL: 404-242-3288

* Our products are subject to improvements and changes without notice.

Catalogue_GA2.5-3.5&4.5-5.5&6.5-7.5&8.5-9.5

HELI

3000-4000lbs (1.5-2.0 t)

36/48V Three Wheel Stand-up G Series AC Electric Forklift

CPDSR15-20



www.helliforkliftamerica.com

CPDSR15-20

FEATURES OF THE COMPLETED TRUCK

Operator comfort

- Rear padding and armrest help reduce fatigue.
- Multifunction control is ergonomically designed and easy to use.
- All controls are within easy reach to help reduce body strains.

Comfortable

- Side stance for operator to see well forward and backward.
- Automatic park brake applies when operator leaves the compartment or shuts forklift off.
- Programmable automatic deceleration in turns adds to safe operations.
- Optional intelligent security control system automatically adjusts tilt angle and drive speed according to mast height and load state.

Working efficiency

- Small turning radius makes steering flexible and easy .
- With ZAPI control and AC powered motors, drive and lift systems can be programmed for maximum efficiency .
- The large battery capacity for longer single shift work operation.
- With standard battery roller and side removal, battery change is quick and easy .

Serviceability

- Side door gives good access to drive motor and gearbox.
- Chassis components are well laid-out can be accessed with removable top and front covers .





Optional intelligent security control system adjusts tilt angle and speed for improved safety



Operator station provides comfort and efficient operation



Great visibility for improved operation and safety

Energy efficiency

- With optimized hydraulic system, truck is more energy efficient .
- All LED lights saves 80% of light energy.
- Regenerative motor braking recycles more energy during braking cycles .
- Programmable speed and acceleration settings can be set for maximum energy efficiency.

Improved operator' s view

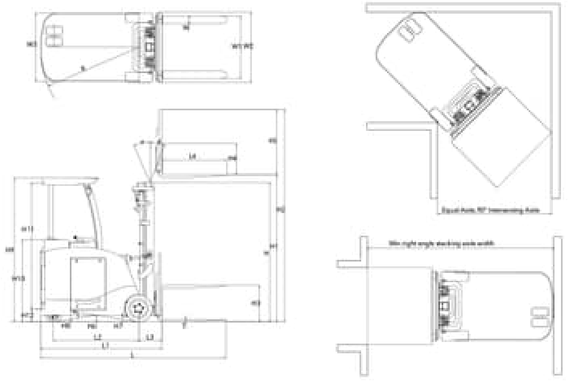
- Larger, rounded overhead guard is stylish and combined with strategically angled bars provides maximum visibility .
- Newly designed, wide view mast with special chain enlarges the operator' s view looking forward .

CPDSR15-20

Manufacturer's Date and Design Characteristics

							CPDSR15 GA2		CPDSR15 GB2		CPDSR18 GA2		CPDSR20 GA2	
	General						HELI							
1.01	Manufacturer													
1.02	Model													
1.03	Configuration number													
1.04	Load Capacity①			lb	kg		3000	1362	3000	1362	3500	1589	4000	1816
1.05	Load center			in	mm		24	610	24	610	24	610	24	610
1.06	Power	Electric					36V		36V		36V		36V	
1.07	Tire type③	Solid pneumatic					cushion		cushion		cushion		cushion	
1.08	Wheel(s)-driven)	Number front/rear					2×/2		2×/2		2×/2		2×/2	
1.09	Operator Type						Stand-up Rider Counterbalance		Stand-up Rider Counterbalance		Stand-up Rider Counterbalance		Stand-up Rider Counterbalance	
	Dimensions													
2.01	Max.lifting height		H1	in	mm		185	4700	185	4700	185	4700	185	4700
2.02	Max.lifting height	With backrest	H2	in	mm		227	5758	227	5758	227	5758	227	5758
2.03	Free lift height		H3	in	mm		45	1145	45	1145	45	1145	45	1145
2.04	Mast overall height		H	in	mm		85	2160	85	2160	85	2160	85	2160
2.05	Forks	Length×width×thickness	L4×W×T	in	mm		42×3.9×1.4	1070×100×35	42×3.9×1.4	1070×100×35	42×3.9×1.4	1070×100×35	42×4.8×1.6	1070×122×40
2.06	Optional lengths		L4	in	mm		33/36/48/54/60	850/920/1220/1370/1520	33/36/48/54/60	850/920/1220/1370/1520	33/36/48/54/60	850/920/1220/1370/1520	33/36/48/54/60	850/920/1220/1370/1520
2.07	Carriage height	Without load backrest	H4	in	mm		20.4	520	20.4	520	20.4	520	20.4	520
		With load backrest	H5	in	mm		41.7	1058	41.7	1058	41.7	1058	41.7	1058
2.08	Tilt	Forward/backward	α/β	deg			3/5		3/5		3/5		3/5	
2.09	Fork spacing	Out-to-out min/max	W1	in	mm		37.8/77.8	960/200	37.8/77.8	960/200	37.8/77.8	960/200	37.8/77.8	960/200
2.10	Overall length③	Without fork/with fork	L/L1	in	mm		109.8/67.7	2790/1720	111.8/69.7	2840/1770	111.8/69.7	2840/1770	114.4/72.2	2905/1835
2.11	Overall width	Wheel outside	W2	in	mm		42.3	1075	42.3	1075	42.3	1075	42.3	1075
2.12	Chassis width		W3	in	mm		41.7	1058	41.7	1058	41.7	1058	41.7	1058
2.13	turning radius		R	in	mm		55.7	1415	57.7	1465	57.7	1465	60	1525
2.14	Wheelbase		L2	in	mm		47.4	1205	49.4	1255	49.4	1255	52	1320
2.15	Load distance③	Axle to fork face	L3	in	mm		12.7	323	12.7	323	12.7	323	12.7	323
2.16	Equal Aisle④	90°intersecting aisle		in	mm		66.5	1688	67.2	1706	67.2	1706	68.1	1729
2.17	Aisle width④	Right angle stacking		in	mm		112.8	2865	114.8	2915	114.8	2915	117	2975
2.18	Head length⑤		H9	in	mm		88	2230	88	2230	88	2230	88	2230
2.19	Inside clearance overhead guard		H11	in	mm		78.2	1987	78.2	1987	78.2	1987	78.2	1987
2.20	Step height		H12	in	mm		7.4	188	7.4	188	7.4	188	7.4	188
2.21	Chassis height		H10	in	mm		50	1271	50	1271	50	1271	50	1271
	Performance													
3.01	Travel speed	Loaded/unloaded		mph	km/h		7.2	11.6	7.2	11.6	7.2	11.6	7.2	11.6
3.02	Lift speed	Loaded/unloaded		ft/min	m/s		65/110	0.33/0.56	65/110	0.33/0.56	65/110	0.33/0.56	61/105	0.31/0.53
3.03	Lowering speed	Loaded/unloaded		ft/min	m/s		98.2	0.45	98.2	0.45	98.2	0.45	98.2	0.45
3.04	gradeability 5 minute rating	Loaded/unloaded		%			15/15		15/15		15/15		15/15	
3.05	drawbar pull 5 minute rating	Loaded/unloaded		lbf	N		2925/2655	13000/11800	2925/2655	13000/11800	3442/3038	15300/13500	3442/3038	15300/13500
	Weight													
4.01	Truck weight⑥	With minimum weight battery		lb	kg		7364	3567	8208	3723	8510	3860	8854	4016
4.02	Front axle load⑤	Loaded/unloaded (with battery)		lb	kg		9687/4540	4394/2060	9843/4656	4510/2112	10580/4736	4799/2148	11226/4934	5092/2238
4.03	Rear axle load⑤	loaded/unloaded (with battery)		lb	kg		1043/3322	473/1507	1263/3550	573/1610	1237/3774	561/1712	1265/3920	574/1778
	Chassis													
5.01	Type size	Front					16.25×6-11.25 10×5-6.5		16.25×6-11.25 10×5-6.5		16.25×6-11.25 10×5-6.5		16.25×6-11.25 10×5-6.5	
5.02	Type size	Rear												
5.03	Tread width	Front		in	mm		36.3	922	36.3	922	36.3	922	36.3	922
5.04	Tread width	Rear		in	mm		6.7	170.5	6.7	170.5	6.7	170.5	6.7	170.5
5.05		At lowest point at mast		in	mm		3.8	95	3.8	95	3.8	95	3.8	95
5.06	Ground clearance	Center of wheelbase		in	mm		4	101.5	4	101.5	4	101.5	4	101.5
5.07		Lowest point		in	mm		3	76	3	76	3	76	3	76
5.08	Battery roller height			in	mm		7.1	180	7.1	180	7.1	180	7.1	180
5.09	Grade clearance	Loaded		%			36.2		34.7		34.7		32.9	
5.10	Brakes	Service/parking					Foot-motor/Auto-electric		Foot-motor/Auto-electric		Foot-motor/Auto-electric		Foot-motor/Auto-electric	
	Electrical													
6.01	Battery	Capacity at 6 hr Discharge rate		Ah	kwh		930	32.5	1085	37.9	1085	37.9	1240	43.3
		Min.Battery weight		lb	kg		2160	898	2300	1043	2300	1043	2500	1134
		Max.Battery weight		lb	kg		2300	1043	2700	1225	2700	1225	3050	1380
		Battery compartment size, maximum		in	mm		16.5×38.5×31	420×980×787	18.5×38.5×31	480×980×787	18.5×38.5×31	470×980×787	21×38.5×31	535×980×787
6.02	Motor	Drive motor capacity, 60min.Rating		hp	kw		6.1	4.5	6.1	4.5	6.1	4.5	6.1	4.5
		Pump motor capacity, 15%.Rating		hp	kw		14.75	11	14.75	11	14.75	11	14.75	11
		Steering motor capacity, 50%.Rating		hp	kw		0.54	0.4	0.54	0.4	0.54	0.4	0.54	0.4
		Controls,drive, hydraulic, steering					MOSFET/AC		MOSFET/AC		MOSFET/AC		MOSFET/AC	
		Number of speed		All motors			Infinitely variable		Infinitely variable		Infinitely variable		Infinitely variable	

NOTE: ① Optional masts,attachments,longer load dimensions and higher lifting heights may result in derating of the capacity,contact your local dealer. ② Tire type can change actualmeters. ③ If truck is equipped with an integral sideshifter,add 1.2 in. ④ With 42"long and 40"wide pallet load,wide view full free 3-stage mast, allowing zero clearance,right angle stacking.⑤ Turn Radius + Load Distance + Load Length + Clearance. ⑥ With wide view full free 3-stage mast, mast model 2394470



Load curve



CPDSR15-GA2 CPDSR15-GB2 CPDSR18-GA2 CPDSR20-GA2

Note: The vertical axis is the load capacity,and the horizontal axis is the load center which is calculated from the front face of the forks ① the forks to the load centre of gravity. Capacity curves shown are for a standard mast at zerodegree tilt with standard forks. Changing mast tilt, using non standard forks or loading large goods can affect load capacity. This chart can be used to estimate load capacity at various load centers for standard masts. Contact HELI for specific load ratings for your situation.

RENEWABLE ENERGY TECHNOLOGIES

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

15%

BATTERY COMPARTMENT SIZE

MODEL	Battery Specifications						Min weight	Max weight
	Size(Max.)			Electrial				
	Dim.	Dim#	Dim#	Volts	AH	Type	lbs	lbs
CPD15SQ-GA2R	38.5	16.5	31	36	750	E125	1980	2250
					930	E155		
					775	5PZS775		
				48	550	5PZB 550H		
CPD15SQ-GB2R		18.5		36	875	E125	2300	2600
					1085	E155		
					840	8PZB840		
				48	660	6PZB 660H		
CPD18SQ-GA2R				36	875	E125	2300	2600
					1085	E155		
					840	8PZB840		
				48	660	6PZB 660H		
CPD20SQ-GA2R		21		36	1000	E125	2590	3050
					1240	E155		
					945	9PZB945		
				48	770	7PZB 770H		

WIDE VIEW MAST

Mast model	Maximum Fork Height (in)	Capacity(Load center 24") CPDSR15-GA2	CPDSR15-GB2	CPDSR18-GA2	CPDSR20-GA2	Overall Height (in)	Mast Extended Height (in)	Freelift with Backrest (in)	Tilt Range (deg)	Service Weight(Estimated) CPDSR15-GA2	CPDSR15-GB2	CPDSR18-GA2	CPDSR20-GA2
	(in/mm)	lb/kg	lb/kg	lb/kg	lb/kg	in/mm	in/mm	in/mm	deg	lb/kg	lb/kg	lb/kg	lb/kg
WE50	118/3000	3000/1361	3000/1361	3500/1589	4000/1815	85/2159	118/3000	45/1143	3/5	7378/3346	7722/3502	8057/3654	8401/3810
WE60	118/3000	3000/1361	3000/1361	3500/1589	4000/1815	85/2159	118/3000	45/1143	3/5	7437/3373	7781/3529	8161/3704	8504/3860
WE80	118/3000	3000/1361	3000/1361	3500/1589	4000/1815	85/2159	118/3000	45/1143	3/5	7675/3481	8019/3636	8359/3792	8703/3947
WE90	118/3000	3000/1361	3000/1361	3500/1589	4000/1815	85/2159	118/3000	45/1143	3/5	7496/3400	7843/3557	8167/3704	8511/3860
WE70	144/3700	3000/1361	3000/1361	3500/1589	4000/1815	93/2373	137/3478	53/1346	3/5	7520/3412	7867/3568	8196/3717	8538/3872
WE100	157/4000	3000/1361	3000/1361	3500/1589	4000/1815	98/2489	157/4000	58/1473	3/5	7636/3462	7983/3621	8312/3771	8652/3927
WE120	181/4600	3000/1361	3000/1361	3500/1589	4000/1815	110/2794	181/4600	70/1778	3/5	7945/3604	8292/3761	8638/3917	8983/4075
WE130	196/4980	3000/1361	3000/1361	3500/1589	4000/1815	118/2997	196/4980	78/1981	3/5	8196/3717	8543/3873	8889/4031	9234/4189
WE140	211/5360	3000/1361	3000/1361	3500/1589	4000/1815	125/3175	211/5360	85/2159	3/5	8446/3830	8794/3988	9140/4145	9485/4302
WE150	226/5740	3000/1361	3000/1361	3500/1589	4000/1815	133/3378	226/5740	93/2362	3/5	8696/3943	9044/4101	9390/4259	9735/4416
WE160	241/6120	3000/1361	3000/1361	3500/1589	4000/1815	140/3556	241/6120	100/2540	3/5	8946/4057	9294/4215	9640/4372	9985/4529
WE170	256/6500	3000/1361	3000/1361	3500/1589	4000/1815	148/3759	256/6500	108/2743	3/5	9196/4170	9544/4328	9890/4486	10235/4643
WE180	271/6880	3000/1361	3000/1361	3500/1589	4000/1815	155/3937	271/6880	115/2921	3/5	9446/4284	9794/4442	10140/4599	10485/4756
WE190	286/7260	3000/1361	3000/1361	3500/1589	4000/1815	163/4140	286/7260	123/3124	3/5	9696/4397	10044/4555	10390/4712	10735/4869
WE200	301/7640	3000/1361	3000/1361	3500/1589	4000/1815	170/4318	301/7640	130/3302	3/5	9946/4511	10294/4668	10640/4825	10985/4982

WIDE VIEW FULL FREE 3-STAGE MAST

Mast model	Maximum Fork Height (in)	Capacity(Load center 24") CPDSR15-GA2	CPDSR15-GB2	CPDSR18-GA2	CPDSR20-GA2	Overall Height (in)	Mast Extended Height (in)	Freelift with Backrest (in)	Tilt Range (deg)	Service Weight(Estimated) CPDSR15-GA2	CPDSR15-GB2	CPDSR18-GA2	CPDSR20-GA2
	(in/mm)	lb/kg	lb/kg	lb/kg	lb/kg	in/mm	in/mm	in/mm	deg	lb/kg	lb/kg	lb/kg	lb/kg
2394414	142/3610	3000/1361	3000/1361	3500/1589	4000/1815	85/2159	118/3000	45/1143	3/5	7717/3500	8061/3656	8401/3810	8745/3967
2394416	157/4000	3000/1361	3000/1361	3500/1589	4000/1815	85/2159	118/3000	45/1143	3/5	7776/3527	8120/3683	8460/3837	8804/3994
2394418	171/4350	3000/1361	3000/1361	3500/1589	4000/1815	93/2373	137/3478	53/1346	3/5	7800/3538	8144/3694	8493/3851	8837/4007
2394419	177/4500	3000/1361	3000/1361	3500/1589	4000/1815	93/2373	137/3478	53/1346	3/5	7837/3554	8181/3710	8529/3868	8873/4024
2394420	181/4600	3000/1361	3000/1361	3500/1589	4000/1815	93/2373	137/3478	53/1346	3/5	7925/3594	8269/3750	8617/3908	8961/4064
2394421	196/4980	3000/1361	3000/1361	3500/1589	4000/1815	98/2489	157/4000	58/1473	3/5	8025/3640	8369/3795	8717/3954	9061/4109
2394422	211/5360	3000/1361	3000/1361	3500/1589	4000/1815	110/2794	181/4600	70/1778	3/5	8125/3685	8469/3841	8817/3999	9161/4155
2394423	226/5740	3000/1361	3000/1361	3500/1589	4000/1815	118/2997	196/4980	78/1981	3/5	8225/3730	8569/3886	8917/4045	9261/4200
2394424	241/6120	3000/1361	3000/1361	3500/1589	4000/1815	125/3175	211/5360	85/2159	3/5	8325/3776	8669/3932	9017/4090	9361/4246
2394425	256/6500	3000/1361	3000/1361	3500/1589	4000/1815	133/3378	226/5740	93/2362	3/5	8425/3821	8769/3977	9117/4135	9461/4291
2394426	271/6880	3000/1361	3000/1361	3500/1589	4000/1815	140/3556	241/6120	100/2540	3/5	8525/3866	8869/4023	9217/4181	9561/4336
2394427	286/7260	3000/1361	3000/1361	3500/1589	4000/1815	148/3759	256/6500	108/2743	3/5	8625/3912	8969/4068	9317/4226	9661/4382
2394428	301/7640	3000/1361	3000/1361	3500/1589	4000/1815	155/3937	271/6880	115/2921	3/5	8725/3957	9069/4113	9417/4271	9761/4427
2394429	316/8020	3000/1361	3000/1361	3500/1589	4000/1815	163/4140	286/7260	123/3124	3/5	8825/4002	9169/4158	9517/4316	9861/4473
2394430	331/8400	3000/1361	3000/1361	3500/1589	4000/1815	170/4318	301/7640	130/3302	3/5	8925/4047	9269/4203	9617/4361	9961/4518