

POWERFUL
EFFICIENT
RELIABLE



HANGCHA GROUP CO., LTD.

Factory site: 666 Xiangfu Road,
Hangzhou, Zhejiang, China (311305)

Tel: +86-571-88926735 88926755
Fax: +86-571-88926789 88132890

sales@hcforklift.com
www.hcforklift.com



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XH SERIES HEAVY-DUTY HIGH-VOLTAGE LITHIUM BATTERY FORKLIFT

with capacity of 4,000 to 5,000kg



The World of Hangcha

XH SERIES HEAVY-DUTY HIGH-VOLTAGE LITHIUM BATTERY FORKLIFT

The XH series heavy-duty high-voltage lithium battery special forklift inherits the advantages of the XH heavy-duty series and adopts the CATL standard box. This tonnage industry is the one that uses a dual-water cooling system for the motor and battery. It has super heat dissipation performance and can meet 24h non-stop operation. It is very suitable for various high-temperature environments such as ship cabins and other airtight and high-temperature environments (even the operating environment temperature can reach 50°C), heavy attachments such as paper roll clamps, and operations in front of smelting furnaces.

VOLTAGE

348 V

SPEED MODELS

3

WATER RESISTANCE

IPX4

PROTECTION RATE

IP67

Stylish appearance

/ With the inherited classic exterior design of the dedicated XC lithium battery forklift and a smooth and sturdy profile, the whole vehicle is compact, elegant, stylish and sturdy.

THE *Plus*
FOR YOUR
BUSINESS



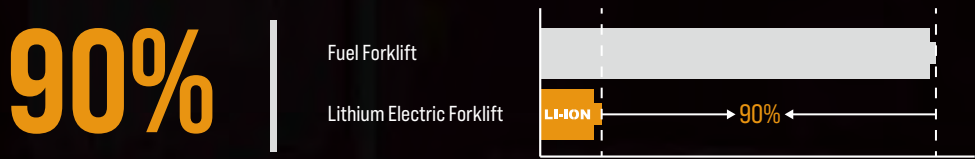


FASTER & MORE EFFICIENCY.

Compared with low-voltage lithium battery forklifts, high-voltage lithium battery technology can save about 40% of the overall cost during the service cycle.



Compared with fuel forklifts, high-voltage lithium battery technology can save about 90% of the overall cost during the service cycle.



LI-ION

TECHNOLOGY

6 YEARS

WARRANTY

HANGCHA provides Li-ion battery (LiFeP04) with 6 years or 12000 hours warranty.

Through disruptive battery and fast charging technology, the charging time is greatly shortened.

HIGH

VOLTAGE

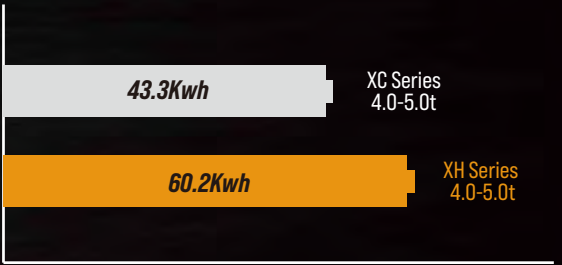
LITHIUM ION

POWER PERFORMANCE COMPARISON

	High Voltage Lithium Electric Forklift	Fuel Forklift
Travel speed, laden/unladen	24/25km/h	23/25km/h
Lift speed, laden/unladen	460/520mm/s	380/410mm/s
Max. gradeability, S2=5min, laden/unladen	25/23%	15%-25%

Fast charging makes it possible for the whole vehicle to work continuously, shortening the waiting time and greatly improving efficiency.

Battery capacity



STRONG ADAPTABILITY



Both the drive and operating systems are vehicle-grade permanent magnet synchronization systems. Equipped with a high speed ratio gearbox, the driving speed, lifting speed, upslope degree and acceleration performance surpass that of internal combustion vehicles.



The drive axle, steering axle and tires of internal combustion forklifts can meet the demand of high-intensity operating conditions of internal combustion forklifts.



It meets all-weather operating conditions and is usable under severe operating conditions such as cold storage, heavy rains and waterlogged roads.



EFFICIENT AND DURABLE

Ultra-long battery life

- / With a 348V high-voltage platform and vehicle-grade permanent magnet synchronization system, the vehicle boasts of a smaller current, very low heat loss and more energy-efficient;
- / The vehicle uses an overall controller to control the traction motor controller assembly to form a highly independent, user-friendly and intelligent drive system.
- / Standard large-capacity lithium battery, 40% larger than that of ordinary low-voltage 80V/542Ah lithium battery, meets long battery life requirements;

Super charging



The standard IC super-fast charging technology allows the water cooling system to work during charging and high current charging, thus only 1h is required for fully charging;



Optional 0.5C charger (fully charged in 2h), economical and convenient.

SAFE AND RELIABLE

The cover of the vehicle is designed to be sealed to the water resistance level of IPX4 for the body. All the motor, electronic controls and high-voltage components reach the dust and water resistance level of IP67, a high protection level adequate to withstand harsh operating environments and ensure safety and reliability.



The electrical system is equipped with high-voltage interlocks, insulation detection, offering vehicle-grade safety measures. The MSD maintenance switch enables one-click power-down and safer maintenance;



All CATL lithium batteries are equipped with standard automatic battery fire extinguishing devices, allowing higher safety in use.

The steering axle with standard configuration of turning and deceleration functions reduces the overturning risk effectively.

The standard configuration provides a fork descending buffering function. In addition, an optional control function for buffering the fork's ascending is provided to protect the goods and guarantee safety when working;



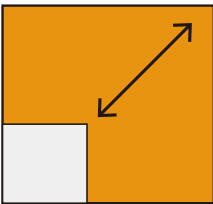
DUAL WATER COOLING SYSTEMS



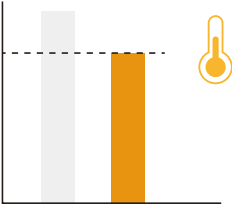
It is the first time that the motor-battery dual water cooling systems and full suspension damping system are used on new energy forklifts, which can be fully applicable to various severe operating conditions such as high temperature and strong load.

The mast integrated large volume hydraulic oil tank boasts of good hydraulic heat dissipation and low oil temperature, further ensuring long-term and reliable operation of hydraulic parts and prolonging service life.

The volume of the hydraulic oil tank and the heat dissipation area are 2.5 times that of ordinary high-voltage electric truck. The hydraulic oil temperature is lowered by more than 20% compared with ordinary high-voltage electric truck.



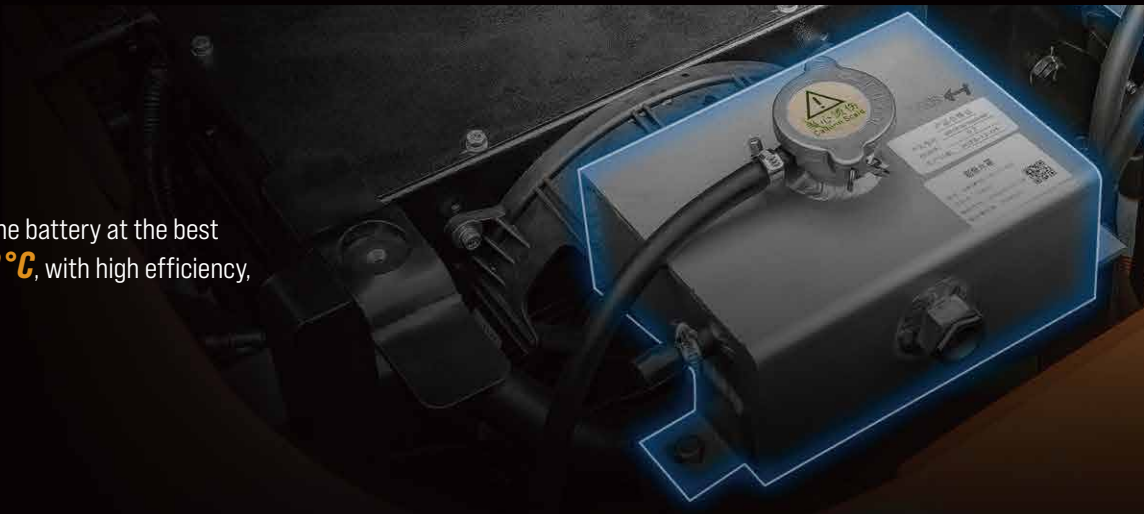
2.5x
INCREASE



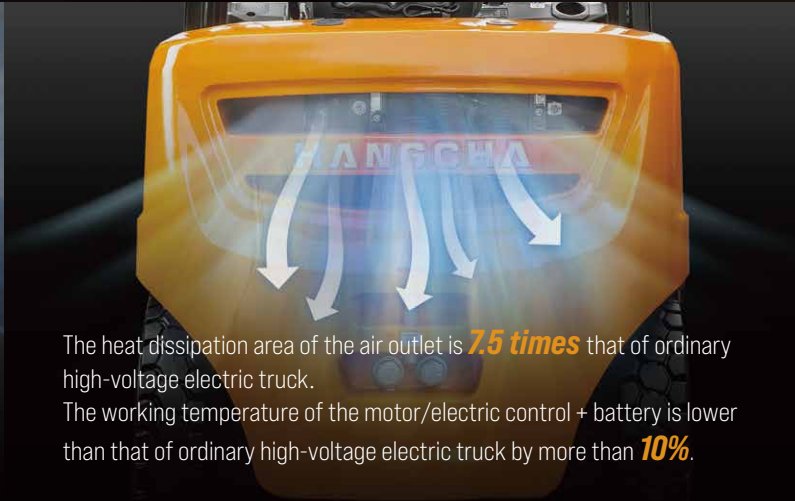
20%
REDUCE



The water cooling system keeps the battery at the best working temperature of about **30°C**, with high efficiency, slow decay and long life.



The **large ventilation opening** designed for internal combustion forklifts allows better heat dissipation of the battery and the motor.



The heat dissipation area of the air outlet is **7.5 times** that of ordinary high-voltage electric truck. The working temperature of the motor/electric control + battery is lower than that of ordinary high-voltage electric truck by more than **10%**.

CONVENIENT MAINTENANCE

- / The vehicle with ergonomic design, a wide view and a large operating space makes it easier for drivers to operate;
- / The multi-functional color screen instrument is designed to have graphic interfaces; three SPE speed gears are selectable to adapt to different operating conditions; interfaces can be switched between English and Chinese to meet the demands of customers at home and abroad;
- / Reasonable arrangement of battery and motor radiator allows more convenient liquid replenishment and maintenance;
- / The water tank cover and the left and right side plates of the hood can be dismantled without a tool, so that the operable surface is large during cleaning and maintenance, convenient and fast.



Large-capacity lithium battery, long battery life on one charge



Multi-functional color screen instrument

Standard Specification

- / Multi-function color-screen combination instrument
- / Standard duplex mast, fork, fork carriage and load backrest
- / Stamped iron hood, stamped iron side plates
- / Stamped stainless steel boarding step
- / The gas spring of the hood with a touch-proof mechanism
- / Handbrake with a touch-proof mechanism
- / Integrated fuse box
- / Charging muzzle meeting national standards
- / Reverse buzzer
- / Maintenance-free 12V lead acid battery
- / Two-in-one permanent magnet AC traction motor controller
- / Two-in-one permanent magnet AC oil pump motor controller
- / Power DC-DC two-in-one
- / VCU controller
- / MSD maintenance switch
- / Emergency power off switch
- / Mileage display, operating time display
- / Load sensing steering system
- / Turning deceleration function
- / Fork descending buffering
- / SPE power selection
- / Electronic water pump
- / Electronic fan
- / Heat dissipater
- / Expansion tank
- / Load-sensitive multiway valve
- / Silent gear pump
- / Traction pin
- / Hangcha cloud intelligent management system
- / Standard box of lithium battery
- / Standard box of lithium battery with low temperature electric heating systems
- / Standard box of lithium battery with battery heat management systems
- / LED combination headlights, LED rear combination three-color taillights



Options

- / Coloring solid environmentally friendly seamless tire
- / Solid tire
- / Left and right rear view mirrors
- / Reversing video
- / Front/Rear blue light
- / Rear LED operation light
- / Dedicated lithium battery charger
- / Cold storage vehicle
- / Right rear armrest with horn button
- / OPS seat sensing function
- / Triple multi-way valve
- / Quadruple multi-way valve
- / Quintuple multi-way valve
- / Heightened load backrest
- / Widened fork carriage
- / Forks of other lengths
- / Free duplex mast
- / Free triplex mast
- / Built-in side mast
- / Accessories for other specifications
- / Fully-suspended seat
- / Seat heating function
- / Start with a PIN code or by swiping a card
- / Double front wheels
- / Cab
- / Lockable hood
- / Fire extinguisher
- / High and low overhead guards
- / Alarm light
- / Integrated multifunctional fingertip control system including ergonomic armrests
- / Toolbox, folder

4.0-4.5t Mast Specification

Type	Model	Max. Fork Height	Lowered	Overall height		Free lift		Tilt range		Capacity			
				Without backrest	With backrest	Without backrest	With backrest	F	R	load capacity at 500mm			
				4.0/4.5t	4.0/4.5t	4.0/4.5t	4.0/4.5t			Single tire		Double tire	
				mm	mm	mm	mm			4.0t	4.5t	4.0t	4.5t
STD Duplex	XHP45M250	2500	1995	3330	3670	160	160	6	12	4000	4500	4000	4500
	XHP45M270	2700	2095	3530	3870	160	160	6	12	4000	4500	4000	4500
	XHP45M300	3000	2245	3830	4170	160	160	6	12	4000	4500	4000	4500
	XHP45M330	3300	2395	4130	4470	160	160	6	12	4000	4500	4000	4500
	XHP45M350	3500	2495	4330	4670	160	160	6	12	4000	4500	4000	4500
	XHP45M360	3600	2545	4430	4770	160	160	6	12	4000	4500	4000	4500
	XHP45M370	3700	2595	4530	4870	160	160	6	12	4000	4500	4000	4500
	XHP45M380	3800	2645	4645	4970	160	160	6	12	4000	4500	4000	4500
	XHP45M400	4000	2795	4945	5170	160	160	6	12	4000	4500	4000	4500
	XHP45M430	4300	2960	5210	5470	160	160	6	6	4000	4500	4000	4500
	XHP45M450	4500	3070	5420	5670	160	160	6	6	4000	4500	4000	4500
	XHP45M480	4800	3235	5635	5970	160	160	6	6	4000	4450	4000	4500
	XHP45M500	5000	3345	5845	6170	160	160	6	6	4000	4450	4000	4400
	XHP45M550	5500	3620	6370	6670	160	160	3	6	3700	4000	4000	4200
	XHP45M600	6000	3895	6895	7170	160	160	3	6	3600	3600	3700	3800
Full Free Lift	XHP45U250	2500	1976	3330	3670	1146	806	6	12	4000	4500	4000	4500
	XHP45U275	2750	2100	3580	3920	1270	930	6	12	4000	4500	4000	4500
	XHP45U300	3000	2226	3830	4170	1396	1056	6	12	4000	4500	4000	4500
	XHP45U330	3300	2376	4130	4470	1546	1206	6	12	4000	4500	4000	4500
	XHP45U350	3500	2476	4330	4670	1646	1306	6	12	4000	4500	4000	4500
	XHP45U360	3600	2526	4430	4770	1696	1356	6	12	4000	4500	4000	4500
	XHP45U370	3700	2576	4530	4870	1746	1406	6	12	4000	4500	4000	4500
	XHP45N400	4000	2080	4850	5170	1229	912	6	6	4000	4500	4000	4500
Triplex	XHP45N430	4300	2180	5150	5470	1329	1012	6	6	4000	4500	4000	4500
	XHP45N450	4500	2248	5350	5670	1395	1080	6	6	4000	4400	4000	4500
	XHP45N470	4700	2310	5550	5870	1459	1142	6	6	4000	4300	4000	4400
	XHP45N480	4800	2340	5650	5970	1489	1172	6	6	4000	4300	4000	4400
	XHP45N500	5000	2410	5850	6170	1559	1242	6	6	3800	4250	4000	4300
	XHP45N550	5500	2575	6360	6670	1724	1408	3	6	3700	4200	4000	4250
	XHP45N600	6000	2790	6850	7180	1939	1622	3	6	3600	3800	3700	4000
	XHP45N650	6500	2980	7350	7670	2129	1812	3	6	3400	3600	3600	3800
	XHP45N700	7000	3155	7850	8170	2304	1988	3	6	3000	3200	3400	3400

With sideshifter minus 200kg, with integrated sideshifter minus 100kg.

mini5.0-5.0t Mast Specification

Type	Model	Max. Fork Height	Lowered	Overall height						Free lift				Tilt range		Capacity			
				Without backrest		With backrest		Without backrest		With backrest		F	R	load capacity at 500mm		load capacity at 600mm			
				mini5.0t	5.0t	mini5.0t	5.0t	mini5.0t	5.0t	mini5.0t	5.0t			Single tire	Double tire	Single tire	Double tire		
																		mm	mm
STD Duplex	XHPX50M250	2500	1995	2245	3325	3600	3865	3895	160	170	160	170	6	12	5000	5000	5000	5000	
	XHPX50M270	2700	2095	2345	3525	3800	4065	4095	160	170	160	170	6	12	5000	5000	5000	5000	
	XHPX50M300	3000	2245	2495	3825	4100	4365	4395	160	170	160	170	6	12	5000	5000	5000	5000	
	XHPX50M330	3300	2395	2645	4125	4400	4665	4695	160	170	160	170	6	12	5000	5000	5000	5000	
	XHPX50M350	3500	2495	2745	4325	4600	4865	4895	160	170	160	170	6	12	5000	5000	5000	5000	
	XHPX50M360	3600	2545	2795	4425	4700	4965	4995	160	170	160	170	6	12	5000	5000	5000	5000	
	XHPX50M370	3700	2595	2845	4525	4800	5065	5095	160	170	160	170	6	12	5000	5000	5000	5000	
	XHPX50M380	3800	2645	2895	4645	4900	5165	5195	160	170	160	170	6	12	5000	5000	5000	5000	
	XHPX50M400	4000	2795	2995	4945	5145	5365	5395	160	170	160	170	6	12	5000	5000	5000	5000	
	XHPX50M430	4300	2960	3145	5210	5400	5665	5695	160	170	160	170	6	6	5000	5000	5000	5000	
	XHPX50M450	4500	3070	3245	5420	5600	5865	5895	160	170	160	170	6	6	5000	5000	5000	5000	
	XHPX50M480	4800	3235	3445	5635	5900	6165	6195	160	170	160	170	6	6	5000	5000	5000	5000	
	XHPX50M500	5000	3345	3560	5845	6100	6365	6395	160	170	160	170	6	6	4700	5000	4700	5000	
	XHPX50M550	5500	3620	3820	6370	6600	6865	6895	160	170	160	170	3	6	4400	4700	4400	4700	
	XHPX50M600	6000	3895	4085	6895	7100	7365	7395	160	170	160	170	3	6	4000	4200	4000	4200	
Full Free Lift	XHPX50U250	2500	1976	2226	3360	3865	3600	3895	1114	1126	610	831	6	12	5000	5000	5000	5000	
	XHPX50U275	2750	2100	2350	3610	4115	3850	4145	1238	1250	735	955	6	12	5000	5000	5000	5000	
	XHPX50U300	3000	2226	2476	3860	4365	4100	4395	1364	1376	860	1081	6	12	5000	5000	5000	5000	
	XHPX50U330	3300	2376	2626	4160	4665	4400	4695	1514	1526	1010	1231	6	12	5000	5000	5000	5000	
	XHPX50U350	3500	2476	2726	4360	4865	4600	4895	1614	1626	1110	1331	6	12	5000	5000	5000	5000	
	XHPX50U360	3600	2526	2776	4460	4965	4700	4995	1664	1676	1160	1381	6	12	5000	5000	5000	5000	
	XHPX50U370	3700	2576	2826	4560	5065	4800	5095	1714	1726	1210	1431	6	12	5000	5000	5000	5000	
	XHPX50N400	4000	2080	2305	4855	4975	5365	5395	1222	1330	715	910	6	6	5000	5000	5000	5000	
	XHPX50N430	4300	2180	2405	5155	5275	5665	5695	1325	1430	815	1010	6	6	5000	5000	5000	5000	
	XHPX50N450	4500	2248	2470	5355	5475	5865	5895	1393	1495	883	1075	6	6	4800	5000	4800	5000	
Triplex	XHPX50N470	4700	2310	2535	5555	5675	6065	6095	1455	1560	945	1140	6	6	4700	4800	4700	4800	
	XHPX50N480	4800	2340	2570	5655	5775	6165	6195	1485	1595	975	1175	6	6	4700	4800	4700	4800	
	XHPX50N500	5000	2410	2635	5855	5975	6365	6395	1555	1660	1045	1240	6	6	4500	4700	4500	4700	
	XHPX50N550	5500	2575	2805	6355	6475	6865	6895	1720	1830	1210	1410	3	6	4400	4500	4400	4500	
	XHPX50N600	6000	2790	3020	6855	7020	7365	7395	1935	2045	1425	1625	3	6	4100	4400	4100	4400	
	XHPX50N650	6500	2980	3200	7355	7530	7865	7895	2125	2225	1615	1805	3	6	3900	4100	3900	4100	
	XHPX50N700	7000	3155	3375	7855	8035	8365	8395	2300	2400	1790	1980	3	6	3500	3800	3500	3800	

With sideshifter minus 200kg, with integrated sideshifter minus 100kg.

XH Series Heavy-duty High-voltage Lithium Battery Forklift Specification

Distinguishing mark	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.			
	1.2	Manufacturer's type designation		CPD40-XHY26-W	CPD45-XHY26-W	CPD60-XHY26-W	CPD65-XHY26-W
	1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas		Electric	Electric	Electric	Electric
	1.4	Operator type: hand, pedestrian, standing, seated, order-picker		Seated	Seated	Seated	Seated
Weight	1.5	Rated capacity/rated load	kg	4000	4500	5000	5000
	1.6	Load centre distance	c(mm)	500	500	500	600
	1.8	Load distance, centre of drive axle to fork	x(mm)	550	550	555	585
	1.9	Wheelbase	y(mm)	2100	2100	2100	2100
Tyres, chassis	2.1	Service Weight	kg	6050	6250	6650	7000
	2.2	Axle loading, laden front/rear	kg	8720/1330	9480/1270	10400/1250	10750/1250
	2.3	Axle loading, unladen front/rear	kg	2750/3300	2750/3500	2900/3750	3000/4000
	3.1	Tyres: solid rubber, superelastic, pneumatic, polyurethane		Pneumatic	Pneumatic	Pneumatic	Pneumatic
Dimensions	3.2	Tyre size, front		8.25-15-14PR	300-15-18PR	300-15-18PR	300-15-18PR
	3.3	Tyre size, rear		7.00-12-12PR	7.00-12-12PR	7.00-12-12PR	7.00-12-12PR
	3.5	Wheels, number front / rear (x = driven wheels)		2x/2	2x/2	2x/2	2x/2
	3.6	Tread, front	br(mm)	1160	1190	1190	
	3.7	Tread, rear		1130	1130	1130	1130
	4.1	Tilt of mast/fork carriage forward/backward	α/β(°)	6/12	6/12	6/12	6/12
	4.2	Height, mast lowered	h1(mm)	2245	2245	2245	2495
	4.3	Free lift	h2(mm)	160	160	160	170
	4.4	Lift	h3(mm)	3000	3000	3000	3000
	4.5	Height, mast extended	h4(mm)	4170	4170	4370	4400
	4.7	Height of overhead guard	h5(mm)	2300	2300	2300	2300
	4.8	Seat height/stand height	h7(mm)	1390	1390	1390	1390
	4.12	Coupling height	h9(mm)	660	660	660	660
	Performance data	4.19	Overall length	l1(mm)	4135	4135	4175
4.21		Length to face of forks	l2(mm)	3065	3065	3105	3135
4.22		Overall width	b1/b2(mm)	1420/1925	1490/1925	1490/1925	1490/1925
4.23		Fork dimensions	s / e / l (mm)	50/150/1070	50/150/1070	55/150/1070	60/150/1200
4.24		Fork carriage ISO 2328, class/type A,B		III A	III A	IV A	IV A
4.31		Fork-carriage width	b3(mm)	1250	1250	1250	1250
4.31		Ground clearance, laden, below mast	m1(mm)	170	170	170	170
4.32		Ground clearance, centre of wheelbase	m2(mm)	200	200	200	200
4.34.1		Aisle width for pallets 1000 x 1200 crossways	Aa1(mm)	4480	4480	4525	4555
4.34.2		Aisle width for pallets 800 x 1200 lengthways		4680	4680	4725	4755
4.35		Turning radius	Wa(mm)	2730	2730	2770	2770
4.36		Internal turning radius	b5(mm)	749	749	749	749
5.1		Travel speed, laden/unladen	km/h	24/25	24/25	24/25	24/25
Electric-engine		5.2	Lift speed, laden/unladen	m/s	480/560	480/560	460/520
	5.3	Lowering speed, laden/unladen	m/s	410/420	410/420	410/420	410/420
	5.6	Max. Drawbar pull, laden/unladen	N	30000/	31000/	33000/	35000/
	5.8	Max. gradeability, laden/unladen	%	30/25	28/25	26/24	25/23
Addition data	5.9	Acceleration time, laden/unladen (0-10m)	s	4.5/4.4	4.5/4.4	4.5/4.4	4.5/4.4
	5.1	Service brake		Hydraulic	Hydraulic	Hydraulic	Hydraulic
		Parking brake		Mechanical	Mechanical	Mechanical	Mechanical
	6.1	Drive motor rating S2 60 min	kW	30AC	30AC	30AC	30AC
	6.2	Lift motor rating at S3 15%	kW	35AC	35AC	35AC	35AC
	6.4	Battery voltage, nominal capacity K5	(V)/r(Ah)	348/173	348/173	348/173	348/173
	6.5	Battery weight	kg	540	540	540	540
	10.1	Operating pressure for attachments	MPa	18.5	18.5	18.5	18.5
	10.2	Oil volume for attachments	l/min	60	60	60	60