

the power of clean energy



The Carer forklifts range is meant to be a practical response to the demands of handling many application areas.

And 'the fruit of attention and listening to our customers who have reserved all these years.

We understand however that every activity and every company has its own characteristics that determine its competitive advantage.

So we are ready to share your ideas and transform them as quickly as possible in a new logistics solution.

Carer has a wide range of three and four wheels electric forklifts with capacity ranging from 0.8 to 25 t, chosen by careful, demanding and international customers.

Z16–18-20KN and Z20-25HD series trucks provide low running costs, extended autonomy, high performance and excellent visibility. In addition, the turning radius is one of the best in this category. These characteristics make Z16–18-20KN and Z20-25HD series ideal in any work situation; they can perform even the most difficult tasks with ease.



Z16KN Z18KN Z20KNF Z20HD Z25HD





CONFORT

Driving position is large and offers maximum visibility in every direction. The layout of controls and instruments on board follow the ergonomic dimensioning.

The best driving position is easily achieved by adjusting the tilt angle and depth of the steering wheel column and act on the levers which adjust the wide seat.

The large cushioned seat is adjustable in every direction and even under the weight of the operator.
The armrests are reclining.
A large handle with two wide steps provide access to the driver's seat.

INSTRUMENTATION

Forklift drivers should never be distracted! All details on the functionality of the truck are condensed into a single, comprehensive tool of control "EasyInfo" that consists of a set of warning lights

and a display showing the hours worked and the state of battery charge. When the battery reaches the download limit, the Easy Info locks the lifting function.





ELECTRONICS

All truck functions

are managed by sophisticated microprocessorcontrolled high frequency MOS electronics and regenerative braking.

The chopper is protected against rainwater infiltration and is cooled by apposite fans. Installation facilitates accessibility and maintenance.

LED-type self-diagnosis system.



MOTORS

CARER electric motors stand out for their high efficiency and torque. The electronically dosed power confers to Z series trucks unparalleled acceleration, speed and maneuverability.





BATTERY

To increase autonomy of work there are several different batteries of various amperage available.

The battery, which can be removed from the vehicle laterally, can be replaced using a hoist or using another forklift. Power rating 80V.



TYRES

Superelastic tyres are fitted as standard, but cushion type are also available if required.

DRIVE

The front differential gear is composed of a double reducer: the first one consists of a bevel gear set instead the second one is directed to the wheels through epicycloidal reducers.

STEERING AXLE

Z series utilize a tough rear axle that allows obtaining a very high steering angle. The hydraulic jack is installed in a protected position and the kinematic motions are equipped with spherical joints.

POWER STEERING

The hydro-drive "Load sensing" type optimizes energy consumption and enhances dynamic performances perfectly combining the lightness of the steering wheel with the precision of the guide.

BRAKING SYSTEM

The braking system is powerful and can be well modulated. The friction material used is asbestos free.

The electronic braking energy regeneration occurs by reversing the direction of travel, released and lightly

pressing the brake pedal.

Constant use of electronic braking also considerably reduces the maintenance costs of the hydraulic braking system.

MASTS

The lift units allow excellent visibility. The mast profiles are cold treated to provide optimum resistance to bending and twisting. The lift cylinders are external to the profiles. The integrated side shift does not reduce the rated capacity of the truck.



ELECTRIC FORKLIFTS

Z16KN Z18KN Z20KNF

Z20HD Z20HDR Z25HD Z25HDR

	1.1	Manufacturer						CADED		
	1,1				71 GVN	71 OI/N		CARER . Z20HDB	705UD - 705DUD	
S	1,2	Model			Z16KN Z18KN Z20KNF Z20HD; Z20HDR Z25HD; Z25DHR					
IOI.	1,3	Power unit: electric, diesel, L.P.G.			electric					
SPECIFICATIONS	1,4	Drive: hand operated, on foot, seated operator		(+)	seated driver				0.5	
	1,5	Capacity	Q	(t)	1.6	1.8	2.0	2.0	2.5	
	1,6	Load centre	C	(mm)		100 (1)		500	(4)	
	1,8	Load distance	X	(mm)	400 (1) 440 (1)					
	1,9	Wheelbase	Υ	(mm)	1240			1360		
WEIGHTS	2,1	Weight		(kg)	3970	4190	4380	4440	4700	
EIG	2,2	Axle weight with nominal load front/rear		(kg)	4770/800	5100/890	5435/945	5510/930	6315/885	
>	2,3	Axle dead weight front/rear		(kg)	2000/1970	1990/2200	1980/2400	2130/2310	2090/2610	
WHEELS AND TYRES		Tyres type: CU=cushion, SE=superelastic,	0.05							
	3,1	PN=pneumatic, SEG=twin superel. VLK=vulkollan	C - SE							
		PNG=twin pneumatic								
	3,2	Front wheels dimensions						1 - 21x8-9		
	3,3	Rear wheels dimensions			413x127x285.8 - 16x6-8			413x152x285.8 - 16x6-8		
	3,5	Wheels: front/rear number (x=drivewheels)			2X/2					
	3,6	Front tread	b10	(mm)	820/853			900/	900/958	
	3,7	Rear traed	b11	(mm)	826 826					
	4,1	Tilt lifting group, α=forward / β=backward	α/β	(°)	5/5					
	4,2	Minimum collapsed mast height	h1	(mm)	2205 2425					
	4,3	Free lift	h2	(mm)	50 50					
	4,4	Lifting height	h3	(mm)	3250			35	3550	
	4,5	Maximum collapsed mast height	h4	(mm)	3930 4175			75		
	4,7	Height of operator's overhead protection guard	h6	(mm)	2225			2445		
	4,8	Seat height	h7	(mm)	1240			1295		
	4,12	Towing hook height	h10	(mm)	500 520					
ONS	4,19	Overall length	L1	(mm)	3115 3130			30		
INSI	4,20	Length including fork thickness	L2	(mm)		2115			30	
DIMENSIONS	4,21	Maximum width	b1/b2	(mm)	1000			1100 - 1150		
	4,22	Fork dimensions	exsxL	(mm)	100x35x1000 130x35x1000			130x35x1000	130x40x1000	
	4,23	Fork carriage width iso 2328/30, FEM/A,B			2A					
	4,24	Fork carriage width	b3	(mm)	900 900			0		
	4,31	Mast height from ground (braking of load)	m1	(mm)	100			110		
	4,32	Centre from ground (braking of load)	m2	(mm)	65			90		
	4,33	Aisle width with pallet 1000x1200 and 1200 side loading	Ast	(mm)	3760			3910		
	4,34	Aisle width with pallet 800x1200 and 800 side loading	Ast	(mm)	3800			3960		
	4,35		Wa	(mm)	1720			1830		
PERFORMANCE	4,36	Minimum distance from the truck centre line rotation travel speed	b13	(mm)	565		590			
	5,1	Travel speed, loaded/unloaded		(km/h)	17/18		17/18			
	5,2	Lift speed, loaded/unloaded		(m/s)	0.28/0.40	0.26/0.39	0.24/0.39	0.24/0.39 ; 0.45/0.60 0.22/0.39 ; 0.42/0.6		
	5,3	Lift descent speed, loaded/unloaded		(m/s)	0.50/0.38		0.50/0.38			
				(N)	3100/3500	2850/3300	2600/3100	3100/3500	2550/3100	
OR	5,5	Drawbar pull, loaded/unloaded (S2 60')								
ERFOR	_	Drawbar pull, loaded/unloaded (S2 60') Max. drawbar pull, loaded/unloaded (S2 5')		<u> </u>	3390/3500	3295/3430	5800/6100	5600/6000	5500/5950	
PERFOR	5,5 5,6 5,7	Drawbar pull, loaded/unloaded (S2 60') Max. drawbar pull, loaded/unloaded (S2 5') Surmountable gradient loaded/unloaded (S2 30')		(N)	3390/3500 13/22	3295/3430 12/21	5800/6100 11/20	5600/6000 13/22	5500/5950 11/20	
PERFOR	5,6	Max. drawbar pull, loaded/unloaded (S2 5') Surmountable gradient loaded/unloaded (S2 30')		(N) (%)	13/22	12/21				
PERFOR	5,6 5,7 5,8	Max. drawbar pull, loaded/unloaded (S2 5')		(N) (%) (%)		12/21 18/31	11/20 17/30	13/22 19/32	11/20	
	5,6 5,7	Max. drawbar pull, loaded/unloaded (S2 5') Surmountable gradient loaded/unloaded (S2 30') Max. surmountable gradient, loaded/unloaded (S2 5') Acceleration time		(N) (%)	13/22 19/32	12/21	11/20 17/30 5.3/5.0	13/22	11/20 17/30	
	5,6 5,7 5,8 5,9	Max. drawbar pull, loaded/unloaded (S2 5') Surmountable gradient loaded/unloaded (S2 30') Max. surmountable gradient, loaded/unloaded (S2 5') Acceleration time Service brake: mech./hydr./electr.		(N) (%) (%)	13/22 19/32	12/21 18/31	11/20 17/30 5.3/5.0	13/22 19/32 4.9/4.6	11/20 17/30 5.0/4.9	
	5,6 5,7 5,8 5,9 5,10	Max. drawbar pull, loaded/unloaded (S2 5') Surmountable gradient loaded/unloaded (S2 30') Max. surmountable gradient, loaded/unloaded (S2 5') Acceleration time		(N) (%) (%)	13/22 19/32	12/21 18/31 5.0/4.9	11/20 17/30 5.3/5.0	13/22 19/32 4.9/4.6 ulic/electric	11/20 17/30 5.0/4.9	
	5,6 5,7 5,8 5,9 5,10 6,1	Max. drawbar pull, loaded/unloaded (S2 5') Surmountable gradient loaded/unloaded (S2 30') Max. surmountable gradient, loaded/unloaded (S2 5') Acceleration time Service brake: mech./hydr./electr. Drive motor, power (S2 60')	U	(N) (%) (%) (s) (kW) (kW)	13/22 19/32	12/21 18/31 5.0/4.9	11/20 17/30 5.3/5.0	13/22 19/32 4.9/4.6 ulic/electric	11/20 17/30 5.0/4.9	
ENGINE / BATT.	5,6 5,7 5,8 5,9 5,10 6,1 6,2	Max. drawbar pull, loaded/unloaded (S2 5') Surmountable gradient loaded/unloaded (S2 30') Max. surmountable gradient, loaded/unloaded (S2 5') Acceleration time Service brake: mech./hydr./electr. Drive motor, power (S2 60') Lift-motor, power (S3 20%)	U K5	(N) (%) (%) (s) (kW)	13/22 19/32 4.9/4.3	12/21 18/31 5.0/4.9 14 12	11/20 17/30 5.3/5.0	13/22 19/32 4.9/4.6 ulic/electric 12;	11/20 17/30 5.0/4.9	
ENGINE / BATT.	5,6 5,7 5,8 5,9 5,10 6,1 6,2 6,4	Max. drawbar pull, loaded/unloaded (S2 5') Surmountable gradient loaded/unloaded (S2 30') Max. surmountable gradient, loaded/unloaded (S2 5') Acceleration time Service brake: mech./hydr./electr. Drive motor, power (S2 60') Lift-motor, power (S3 20%) Battery voltage		(N) (%) (%) (s) (kW) (kW) (V)	13/22 19/32	12/21 18/31 5.0/4.9	11/20 17/30 5.3/5.0 hydra	13/22 19/32 4.9/4.6 ulic/electric 12;	11/20 17/30 5.0/4.9	
ENGINE / BATT.	5,6 5,7 5,8 5,9 5,10 6,1 6,2 6,4 6,4,1	Max. drawbar pull, loaded/unloaded (S2 5') Surmountable gradient loaded/unloaded (S2 30') Max. surmountable gradient, loaded/unloaded (S2 5') Acceleration time Service brake: mech./hydr./electr. Drive motor, power (S2 60') Lift-motor, power (S3 20%) Battery voltage Rated capacity		(N) (%) (%) (s) (kW) (kW) (V) (Ah)	13/22 19/32 4.9/4.3	12/21 18/31 5.0/4.9 14 12 360 (2)	11/20 17/30 5.3/5.0 hydra 420 (2) 1100/1300	13/22 19/32 4.9/4.6 ullic/electric 12; 80	11/20 17/30 5.0/4.9	
	5,6 5,7 5,8 5,9 5,10 6,1 6,2 6,4 6,4,1 6,5	Max. drawbar pull, loaded/unloaded (S2 5') Surmountable gradient loaded/unloaded (S2 30') Max. surmountable gradient, loaded/unloaded (S2 5') Acceleration time Service brake: mech./hydr./electr. Drive motor, power (S2 60') Lift-motor, power (S3 20%) Battery voltage Rated capacity Battery min/max weight		(N) (%) (%) (s) (kW) (kW) (V) (Ah)	13/22 19/32 4.9/4.3	12/21 18/31 5.0/4.9 14 12 360 (2)	11/20 17/30 5.3/5.0 hydra 420 (2) 1100/1300	13/22 19/32 4.9/4.6 ulic/electric 12; 80 450 1200/	11/20 17/30 5.0/4.9	

VDI 2198

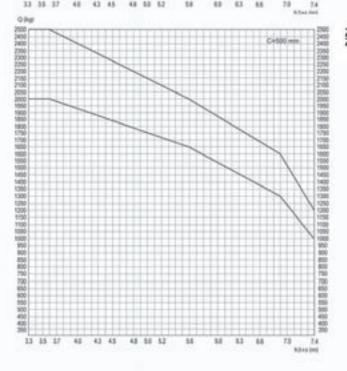
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The performance data refer to the forklift truck in perfect working order, with battery weighing no less than the minimum indicated, recharged, well preserved and a voltage (closed circuit) not less than the rated capacity.

⁽¹⁾ Integrated side shifter.

⁽²⁾ Other capabilities on demand.

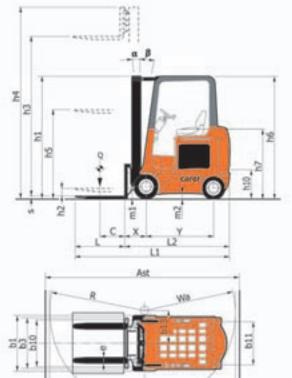




Z25 HD/HDR Z20 HD/HDR



Z16KN Z18KN Z20KNF Z20HD Z25HD



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CARER srl

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