



the power of clean energy



**Z85KN**  
**Z100 N**

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.

The new Z series has been conceived keeping in mind all the principles of CARER's design philosophy, from costs reduction to Flexible Power Design: all trucks are flexible to a wide variety of applications, and designed to be customized. All categories of high capacity are designed to be compact and space-saving. These features make Z85 and Z100 ideal in any work situation; they can perform easily even the most difficult tasks.

**carer**

**Z85KN**  
**Z100 N**



### COMFORT

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 access to the driver's seat.



### 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 (optional) does not reduce the rated capacity of the truck.

### TYRES

Super-elastic tyres are used as standard, but on demand it can also use cushion type tyres.

### BATTERY

To increase autonomy of work there are several different batteries of various amperage available. The two batteries, laterally removable from the vehicle, can be replaced using a hoist or using another forklift. Z85 trucks are powered at 96V, while Z100N trucks are powered at 120V. This allows very high performances.

### 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 microprocessor-controlled high frequency MOS electronics and regenerative braking. The chopper is protected against rainwater infiltration and is cooled by apposite fans. Installation behind the driver's seat 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 unparalleled acceleration, speed and maneuverability. They feature field weakening and H-class isolation. The complete sparks absence on the collector provides maximum duration.

### DRIVE

The front axle is made up of a differential unit that also includes an "oil bath" type braking unit. Drive reduction occurs inside the wheel hub by way of an epicycloidal mechanism.



### 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 optimizes energy consumption and performances perfectly combining the lightness of the steering wheel with the precision of the guide. A special engine operate the hydro-drive.

### BRAKING SYSTEM

The "oil-bath" braking system is extremely effective and long lasting. Routine maintenance required for the brake assembly is reduced to a regular oil change. The electronic braking energy regeneration occurs by reversing the direction of travel, released and lightly pressing the brake pedal.



ELECTRIC FORKLIFTS

**Z85KN Z100N**

SPECIFICATION				CARER	
				Z85KN	Z100N
1,1		Manufacturer			
1,2		Model			
1,3		Power unit: electric, diesel, L.P.G.		electric	
1,4		Drive: hand operated, on foot, seated operator		seated driver	
1,5		Capacity	Q (t)	8.5	10.0
1,6		Load centre	C (mm)	750	600
1,8		Load distance	X (mm)	805 (1)	750 (1)
1,9		Wheelbase	Y (mm)	2500	2550
WEIGHTS					
2,1		Weight	(kg)	15560	17300
2,2		Axle weight with nominal load front/rear	(kg)	21160/2900	24300/3000
2,3		Axle dead weight front/rear	(kg)	7420/8140	9100/8200
WHEELS AND TYRES				C - SEG	
3,1		Tyres type: CU=cushion, SE=superelastic, PN=pneumatic, SEG=twin superel. VLK=vulkollan PNG=twin pneumatic			
3,2		Front wheels dimensions		780x(200+200) - 8.25-15	711x(254+254) - 300-15
3,3		Rear wheels dimensions		711x254 - 250-15	711x254 - 250-15
3,5		Wheels: front/rear number (x=drivewheels)		2X/2 (SEG: 4X/2)	
3,6		Front tread	b10 (mm)	1347 - 1393	1692 - 1645
3,7		Rear tread	b11 (mm)	1160	1450
4,1		Tilt lifting group, α=forward / β=backward	α/β (°)	4/8 (2)	7/10 (2)
4,2		Minimum collapsed mast height	h1 (mm)	3050	
4,3		Free lift	h2 (mm)	130	
4,4		Lifting height	h3 (mm)	3600	
4,5		Maximum collapsed mast height	h4 (mm)	4825	
4,7		Height of operator's overhead protection guard	h6 (mm)	2900	2870
4,8		Seat height	h7 (mm)	1810	
4,12		Towing hook height	h10 (mm)	710	725
4,19		Overall length	L1 (mm)	4955	4915
4,20		Length including fork thickness	L2 (mm)	3755	3715
4,21		Maximum width	b1/b2 (mm)	1747 - 1838	2200
4,22		Fork dimensions	exsL (mm)	200x80x1200	
4,23		Fork carriage width iso 2328/30, FEM/A,B		5A	
4,24		Fork carriage width	b3 (mm)	1500	
4,31		Mast height from ground (braking of load)	m1 (mm)	170	
4,32		Centre from ground (braking of load)	m2 (mm)	180	140
4,33		Aisle width with pallet 1000x1200 and 1200 side loading	Ast (mm)	5890	6300
4,34		Aisle width with pallet 800x1200 and 800 side loading	Ast (mm)	5910	6300
4,35		Turning radius	Wa (mm)	3235	3480
4,36		Minimum distance from the truck centre line rotation travel speed	b13 (mm)	1050	1340
PERFORMANCE					
5,1		Travel speed, loaded/unloaded	(km/h)	10/11	12.5/14
5,2		Lift speed, loaded/unloaded	(m/s)	0.17/0.30	0.20/0.28
5,3		Lift descent speed, loaded/unloaded	(m/s)	0.50/0.40	0.50/0.40
5,5		Drawbar pull, loaded/unloaded (S2 60')	(N)	8500/10350	12500/14500
5,6		Max. drawbar pull, loaded/unloaded (S2 5')	(N)	26700/28500	30000/32000
5,7		Surmountable gradient loaded/unloaded (S2 30')	(%)	5.5/11	7.0/14
5,8		Max. surmountable gradient, loaded/unloaded (S2 5')	(%)	13/23	12/22
5,9		Acceleration time	(s)	6.5/6.0	6.5/5.9
ENGINE / BATT.				hydraulic/electric	
6,1		Drive motor, power (S2 60')	(kW)	22	27.5
6,2		Lift-motor, power (S3 20%)	(kW)	25.2	42
6,4		Battery voltage	U (V)	96	120
6,4,1		Rated capacity	K5 (Ah)	1150 (3)	1260 (3)
6,5		Battery min/max weight	(kg)	3500/4400	4800/5650
OTHERS				mosfet	
8,1		Command type		160	
8,2		Equipment work pressure	(bar)	-	
8,4		Noise level at driver's ear	(dBA)	-	

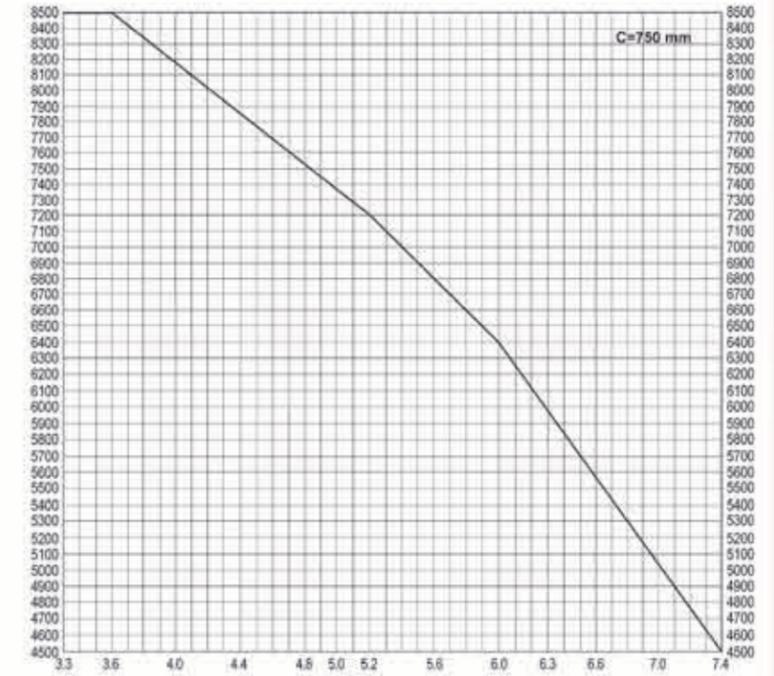
VDI 2198

Rev2 28/03/2011

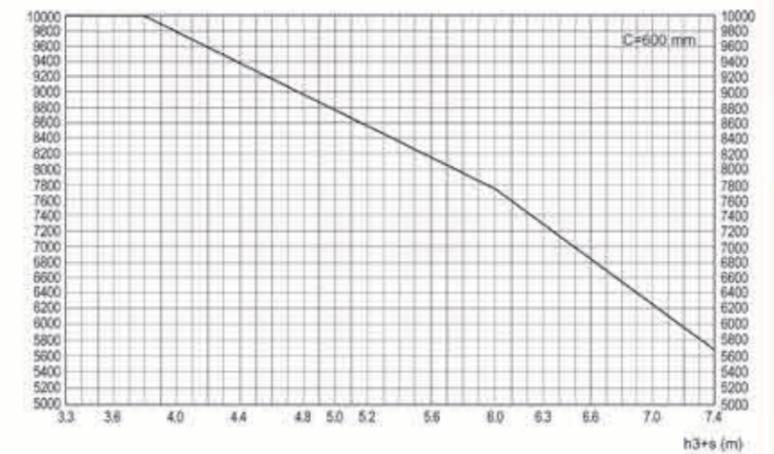
- (1) Integrated side shifter.
- (2) Lifting height > 4.5 m, 3° / 7°.
- (3) Other capabilities on demand

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 normal one.

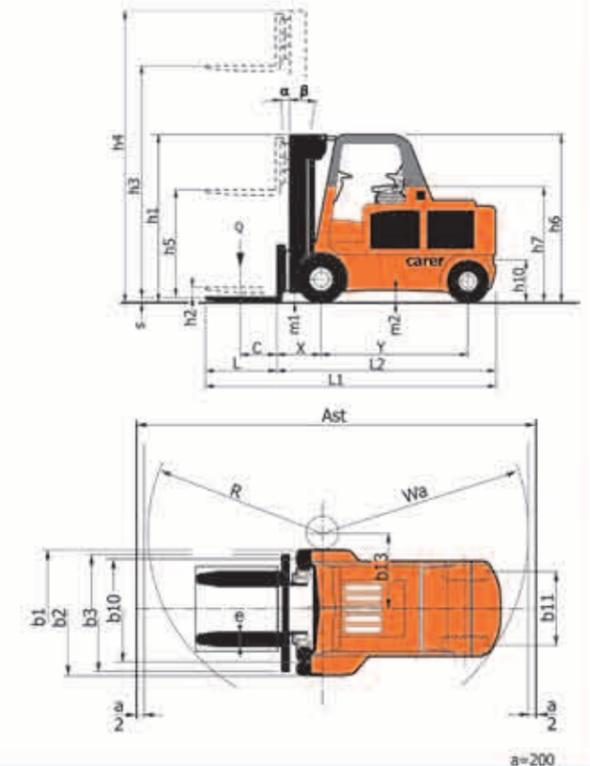
**Z85 KN**  
Q (kg)



**Z100 N**  
Q (kg)



**Z85KN  
Z100 N**





**CARER srl**

CARRELLI ELEVATORI ELETTRONICI  
ELECTRONIC FORK LIFT TRUCKS

**Italy**

48010 Cotignola Ravenna I  
Via Copernico 13  
Tel: +39 0545 908611  
Fax: +39 0545 41615  
[www.carer.it](http://www.carer.it) [info@carer.it](mailto:info@carer.it)

**Carer Deutschland GmbH**

Enschedestraße 14  
48529 Nordhorn  
Tel: +49 (0)5921 879 198  
Fax: +49 (0)5921 879 150  
email: [info@carerdeutschland.de](mailto:info@carerdeutschland.de)

**Carer Nederland**

Fleminglaan 5  
2289CP Rijswijk  
Tel: +31 (0)70 413 55 99  
Fax: +31 (0)70 413 55 90  
email: [info@carernederland.nl](mailto:info@carernederland.nl)