

# CL<sup>ac</sup> Technical Data



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VDI 2198

Specification	1.1	Manufacturer		OM	OM		
	1.2	Model		CL 10.5 <sup>ac</sup>	CL 12 <sup>ac</sup>	CL 10.5 <sup>ac</sup> FMA*	CL 12 <sup>ac</sup> FMA*
	1.3	Drive unit		Electric		Electric	
	1.4	Drive control type		Tiller		Tiller	
	1.5	Loading capacity	Q (t)	1,05	1,2	1,05	1,2
	1.6	Load center	c (mm)	600		600	
	1.8	Distance between fork face to load wheel axle	x (mm)	756 <sup>(5)</sup>		711 <sup>(5)</sup>	
	1.9	Distance between wheels centres	y (mm)	1298		1298	
Weights	2.1	Truck weight (without battery)	Kg	743		779	
	2.2	Axle loadings laden (front/rear)	Kg	782 / 1163	832 / 1302	765 / 1216	809 / 1361
	2.3	Axle loading unladen	Kg	656 / 239	688 / 246	675 / 255	707 / 263
Wheels and Tyres	3.1	Tyre type		Polyurethane		Polyurethane	
	3.2	Front tyre dimensions	(mm)	230 / 120		230 / 120	
	3.3	Rear tyre dimensions	(mm)	85 ⇔ 90		85 ⇔ 90	
	3.5	Wheels quantity front/rear (x= traction)		1x - 1 / 2		1x - 1 / 2	
	3.6	Distance between traction and pivoting wheel's axles	b10 (mm)	505		505	
	3.7	Distance between load wheels centres	b11 (mm)	397		397	
Dimensions and Overall Sizes	4.2	Closed height	h1 (mm)	2350		2350	
	4.3	Full free lift	h2 (mm)	120		120	
	4.4	Lift height	h3 (mm)	3600		3600	
	4.5	Extended height	h4 (mm)	4110 <sup>(1)</sup>		4220 <sup>(1)</sup>	
	4.6	Partial free lift	h5 (mm)	/		/	
	4.9	Travel position tiller height (min/max)	h14 (mm)	762 / 1232		762 / 1232	
	4.15	Forks clearance from the ground	h13 (mm)	85		90	
	4.19	Total length	l1 (mm)	1869 <sup>(6)</sup>		1914 <sup>(6)</sup>	
	4.20	Length to fork face	l2 (mm)	719 <sup>(6)</sup>		764 <sup>(6)</sup>	
	4.21	Total width	b1 (mm)	790		790	
	4.22	Fork dimensions	s/e/l (mm)	56/ 175 / 1150		80 / 105 / 1150	
	4.24	Mast width	b3 (mm)	660		700	
	4.25	Maximum forks width	b5 (mm)	570		582 min - 658 max <sup>(8)</sup>	
	4.31	Ground clearance under the mast loaded	m1 (mm)	/		/	
	4.32	Ground clearance center of wheelbase		29		29	
	4.33	Aisle width for 1000x1200 pallet 1200 forking side	Ast3 (mm)	2438 <sup>(3) (6)</sup>		2456 <sup>(3) (6)</sup>	
	4.34	Aisle width for 800x1200 pallet 800 forking side	Ast3 (mm)	2388 <sup>(3) (6)</sup>		2422 <sup>(3) (6)</sup>	
	4.35	Turning radius	Wa (mm)	1590 <sup>(3)</sup>		1590 <sup>(3)</sup>	
	Performance	5.1	Traction speed (laden/unladen)	km/h	5,5 / 5,5		5,5 / 5,5
5.2		Lifting speed (laden/unladen)	m/s	0,13 / 0,21	0,17 / 0,3	0,13 / 0,21	0,17 / 0,3
5.3		Lowering speed (laden/unladen)	m/s	0,31 / 0,31	0,32 / 0,31	0,31 / 0,31	0,32 / 0,31
5.7		Gradeability KB30' (laden/unladen)	%				
5.8		Maximum gradeability KB5' (laden/unladen)	%	8 / 9 <sup>(4)</sup>	7 / 9 <sup>(4)</sup>	8 / 9 <sup>(4)</sup>	7 / 9 <sup>(4)</sup>
5.10		Service brake		Electric at butterfly release		Electric at butterfly release	
Engine	6.1	Traction motor, performance KB 60'	kW	1		1	
	6.2	Lift Motor, performance 15% ED	kW	2,2 <sup>(2) (7)</sup>		2,2 <sup>(2) (7)</sup>	
	6.3	Battery to British Standard / DIN 43531/35/36 A, B, C		British Standard		British Standard	
	6.4	Volts/ampere	V / Ah	24 / 140 (200-300)	24 / 200 (300)	24 / 140 (200-300)	24 / 200 (300)
	6.5	Battery weight (+-5%)	Kg	152 (191-250)	191 (250)	152 (191-250)	191 (250)
Others	8.1	Control unit type		Electronic		Electronic	
	8.4	Noise level at operator position	dB (A)	< 70		< 70	

\*MAF: Mobile Angular forks

*I valori riportati si intendono forniti a titolo indicativo e non impegnativo e si riferiscono agli allestimenti standard*

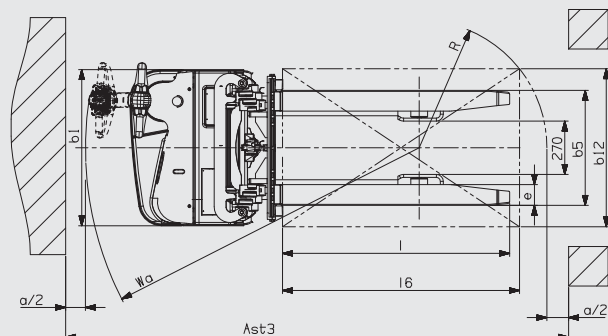
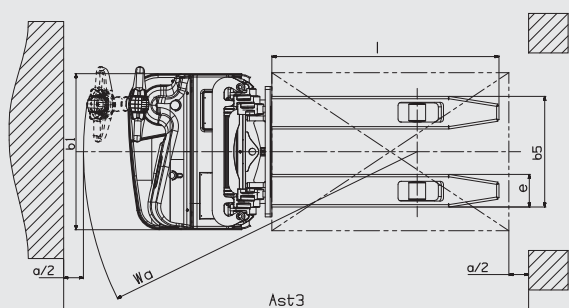
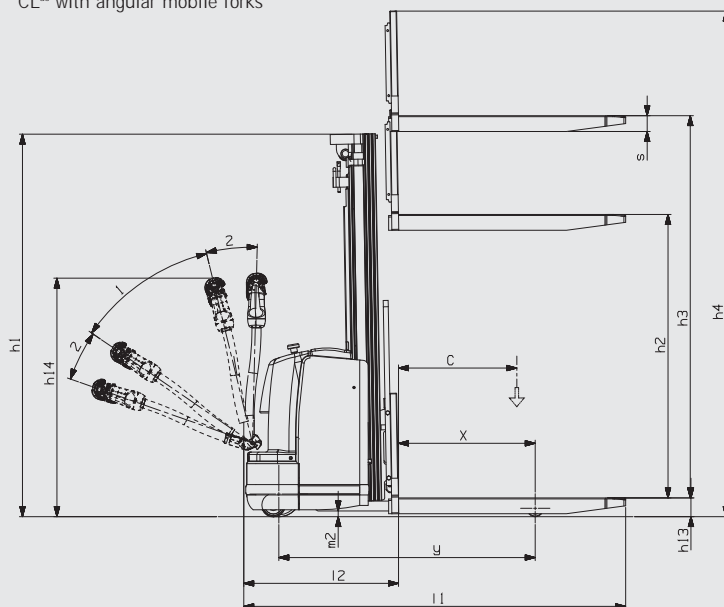
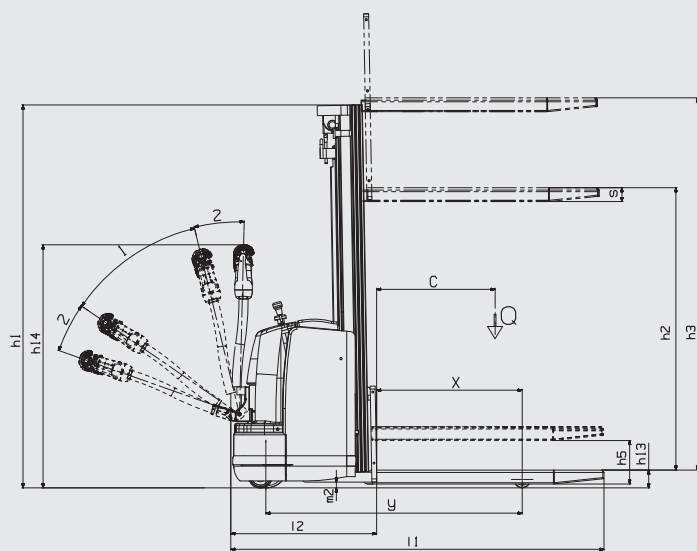
(1) With guards for big loads, + 502 mm  
 (2) 1.5 kW for Mono mast  
 (3) With tiller active in vertical position, - 45 mm  
 (4) Max gradeability calculated basing on truck's geometry  
 (5) With Mono mast, + 21 mm: with Tpx mast, - 21 mm

(6) With Mono mast, - 21 mm: with Tpx mast, + 21 mm  
 (7) 3 kW as option, for Dpx - Tpx masts  
 (8) With forks outside the arms (arms internal distance = 270 mm): with forks inside the arms: forks internal distance = 210 max - 134 min (arms external distance = 524 mm)

1 = Travel  
2 = Bracking

CL<sup>ac</sup>

CL<sup>ac</sup> with angular mobile forks



$$Ast = Wa + \sqrt{(16-x)^2 + \left(\frac{b_{12}}{2}\right)^2} + a$$

$$Ast = Wa + R + a$$

Safety clearance a = 200mm

## RESIDUAL CAPACITIES

Lifts		Mono	Simplex	Duplex	Triplex	
Lifting height	h3 (mm)	1800	2900	3600	2900 3600	4100 4305
Closed height	h1 (mm)	2299	1999	2349	1953 2303	1870 1938
Full free lift	h2 (mm)	1789	120	120	1443 1793	1360 1428
Extended height	h4 (mm)	2310	3410	4110	3410 4110	4610 4815
Residual capacity CL <sup>ac</sup> 10.5 (*)	Q (kg)	1050	1050	950	1050 950	850 800
Residual capacity CL <sup>ac</sup> 12 (**)	Q (kg)	1200	1200	1050	1200 1050	900 850

(\*) Residual capacity at the max height, with battery 140 Ah (minimum weight 154 kg)

(\*\*) Residual capacity at the max height, with battery 200 Ah (minimum weight 192 kg)

# CL<sup>ac</sup>

## Pedestrian high-lift stacker



The new pedestrian high-lift stacker CL<sup>ac</sup> is becoming an essential work tool for pallets, cases and container cages' handling, in small/medium size warehouses as well as in all that logistic applications where not-high rotation levels are requested. Furthermore, following the increasing variety of applications within warehouses logistics, the application range of these trucks is rapidly growing, too: more and more often they can be also found in production areas or in loading/unloading bays. Available also the "adjustable angular forks" version to allow the handling of not standard size pallet load units, too.

**Design:** The likely modern design keeps the existing, well tested and very appreciated, four points configuration with side placed tiller. Compactness is an added-value for these trucks, able to work in narrow spaces, too. Light and smooth shapes make their use more comfortable and safe. The motor compartment and the battery covers are made of high resistance polyethylene, able to absorb the shocks, perfectly integrated in the design.

**Chassis:** The chassis consists of a main frame made up of die-casted steel panels welded to a widely tested 4 points supporting structure. A great choice of mast configurations ensures a perfect visibility during loading and unloading operations. Nominal capacities of 1050 kg and 1200 kg are available. The traction group and the pivoting wheel are completely enclosed within the chassis dimensions, avoiding safety risks for the operator feet.



**Traction group:** The brand-new traction motor introduces the innovative 1 kW power AC 3-phase technology. The electronic traction control allows energy recovery when releasing the butterfly, minimizing energy consumption requested to the battery, motor and brake heating and the necessary stopping distance. The pivoting wheel is easily adjustable in order to maintain perfect contact with the floor and maximum stability.

**Lift group:** Simplex, duplex and triplex high visibility masts with partial or full free lift are fitted on both capacity trucks. Several lift motors are available, from 1.5 to 3.0 kW, according to capacity and lift height. Lift control takes place standard by the lever and optionally by an additional butterfly on the tiller with proportional functioning.

**Tiller:** The new tiller head allows control of all the lift functions through ergonomically placed buttons to give maximum comfort levels to the operator. Mechanical micro-switches have been replaced by pressure-sensitive buttons.

**Electronic control:** The stacker is equipped with a unique electronic control by Curtis (with proof-degree IP53), adopting MOSFET technology (with high-frequency commutation transistors), and complete with integral little inverter. To adjust performances to every using condition, speed, acceleration and deceleration parameters can be easily set by console. The use of digital transmission of electrical signals allows to strongly reduce the cables volume. The choice of automotive-type connectors and proximity switches instead of mechanical micro switches and the reduction of contactors have consistently increased the truck reliability.

**Optional equipments:** ■ Cold store equipment, down to -30 degrees C° ■ Tandem load wheels ■ Rubber traction wheel ■ Proportional electro-valve control for hydraulic functions ■ On-board charger ■ Tempered glass mast shield ■ Load backrest ■ Paper sheets holder ■ Vertical tiller active function ■ Braking cylinders

Technical data are given as an indication.

OM Carrelli Elevatori reserves the right to modify them without notice.



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