



AUTOMATED GUIDED CART C-MATIC

SERIES 8902

Safety

Automated, internal load transfer system, supplying components to assembly lines. In shared working environments the forward mounted safety sensors automatically decelerate and safely stop the Linde C-MATIC load carrier when necessary. With the clutch pedal depressed, the C-MATIC can easily be maneuvered manually if required.

Performance

The advanced Linde C-MATIC load carrier provides a safe, efficient and very cost effective automatically guided, load transfer system. The magnetic guidance provides a clearly visible travel route to ensure all personnel in the vicinity are fully alert and aware of the automated carrier at all times.

Comfort

The Linde C-MATIC provides an excellent man-machine interface; enabling intuitive, effective communication with authorised

personnel, who can activate the Linde C-MATICs programmed component supply chain cycles to achieve impressive and cost effective productivity ratios.

Reliability

Durability and reliability are key elements in delivering consistently efficient and long term, component supply solutions for manufacturing applications. The Linde C-MATIC benefits from the Linde quality standards, and proven magnetic navigation technology.

Productivity

Efficiency at work, efficiency in servicing. The Linde C-MATIC is also fully integrated into the Linde product portfolio, including the Linde service standards. Minimum downtime and maximum uptime is ensured by RFID Re-Configurator units.

TECHNICAL DATA

ACCORDING TO VDI 2198

Characteristics	1.1	Manufacturer			LINDE
	1.2	Model designation			C-MATIC
	1.3	Power unit			Electric
	1.4	Operation			Robotic
	1.5	Load capacity		Q (kg)	650
	1.7	Rated tractive force		F (N)	350
	1.9	Wheelbase (standard)	(± 5 mm)	y (mm)	600
Weight	2.1	Service weight (incl. battery item 6.5)	(± 10 %)	kg	200
Wheels and types	3.1	Tyres rubber, SE, pneumatic, polyurethane			Rubber
	3.3	Tyre size, rear		Ø x 1 mm	2 x Ø 100 x 60
	3.4	Auxiliary wheels (dimensions)		Ø x 1 mm	Ø 125 x 60
	3.5	Wheels, number front / rear (x = driven)			2x + 2 / 2
	3.6	Track width, front	(± 5 mm)	b10 (mm)	600
	3.7	Track width, rear	(± 5 mm)	b11 (mm)	400
	Dimensions	4.2	Total height (pin hook lowered)		h1 (mm)
4.12		Towing coupling height		h10 (mm)	420 ²⁾
4.17		Rear overhang		l5 (mm)	1 200
4.19		Overall length	(± 5 mm)	l1 (mm)	1 671
4.21		Overall width	(± 5 mm)	b1 (mm)	520 ⁴⁾
4.8		Ground clearance, centre of wheelbase		m2 (mm)	197
4.35		Turning radius (front safety zone not included)	(mini)	Wa (mm)	1 200 ³⁾
Performance	5.1	Maximum travel speed (automatic)	(± 5 mm)	m / s	0,83
	5.8	Maximum climbing ability, with / without load		%	0
	5.10	Travel brake			Electrical
Drive	6.1	Drive motor, rating S2 60 min		kW	3
	6.4	Battery voltage / nominal capacity K5		V/Ah	2 x 12 / 140
	6.5	Battery weight		kg	90
	6.6	Power consumption		kWh / h	0,16 ³⁾
		¹⁾ When truck unclunched (manual mode) = + 5 mm,		³⁾ Considering 2 Shiftapplication (16h) by towing 450kg within 50 % of the time	
		²⁾ Mechanical interface between 410mm and 435mm, diametre width of 30mm		⁴⁾ The sweeping of power unit is 600mm	

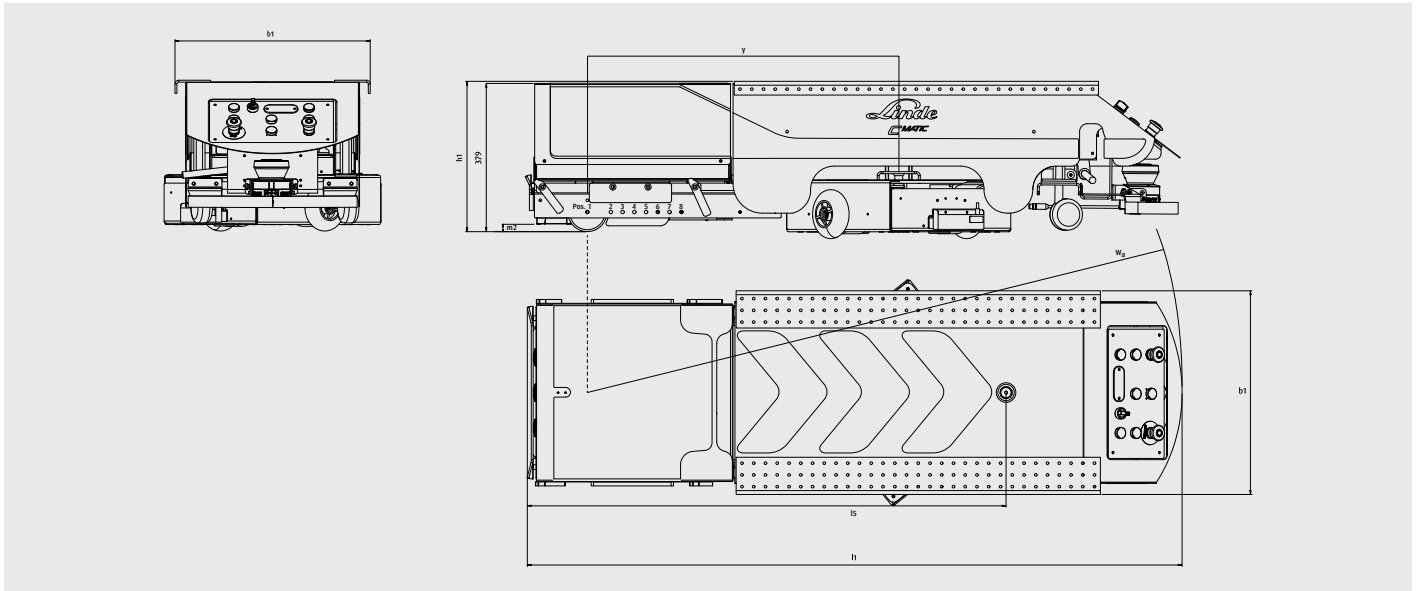
STANDARD EQUIPMENT / OPTIONAL EQUIPMENT

STANDARD EQUIPMENT

Lifting hook
Control RFID antenna
Drive unit
De-clutch pedal (for manual maneuvering of the Linde C-MATIC)
Man-machine interface
Rollers for battery exchange
Magnetic guidance system
Safety laser scanner
Radio-frequency device
On-board-charger
140 Ah lead acid battery pack (2x12V / 140 Ah)

OPTIONAL EQUIPMENT

Rear hook
External battery charger
Additional battery pack
Battery exchange trolley
Communication Modules:
Remote box (2 Input / 2 Output)
Traffic management box
Navigation:
Surface magnetic tape
Protector tape
RFID tags
24h Uptime:
RFID configurator unit



POSITIONING OF WHEELS

IMPACT ON TOWING CAPACITY, PIN HOOK AND TURNING RADIUS

Position ¹⁾	Max. towing capacity (in N)	Variation on the height of the pin hook vs position 1 (in mm)	Turning radius (theoretical) for a 360° curve (in mm)
1	350	0	1 200
2	350	-1	1 100
3	320	-1	1 050
4	310	-3	1 000
5	300	-3	950
6	280	-3	900
7	250	-6	850
8	180	-7	800

¹⁾ position 1 is the rearmost position of wheels

FEATURES

Configuration

- Driving speed up to 0,83m/s
- 1 mm /s increments are programmable
- Different turning radius and towing capacity depending on fixed rear wheel position

Solution uptime

- 24 / 7 uptime possible
- Easy to replace magnetic tape
- Easy to replace RFID tags – RFID configuration unit available



Safety system

- Emergency button
- Acoustic warning system when required
- Safety laser scanner (PLC)
- Up to 3m radius (270°)
- Programmable depending on the zones of the circuit

Battery and charger

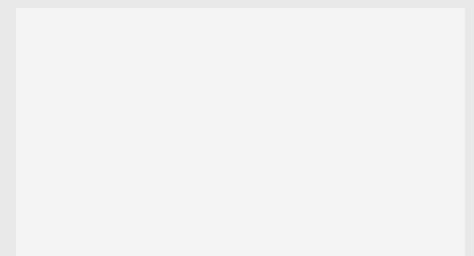
- 2 shift application available with 2 x 12V / 140Ah batteries
- Overnight charging with on-board charger
- For 3 shift operation: optional battery exchange system with external charger

Navigation technology

- Linde C-MATIC uses magnetic guidance
- Location information via RFID tags
- Simple branch connection possible
- Traffic management unit allows interaction with other vehicles
- Communication with infrastructure on customer side possible

Subject to modification in the interest of progress. Illustrations and technical details could include options and not binding for actual constructions. All dimensions subject to usual tolerances.

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