

# ORDER PICKER N20 C L

# CAPACITY 1200 KG | SERIES 4590

### Safety

The design of the order picker ensures that the operator remains within the truck contours at all time and the standard load backrest ensures protection from falling objects on the lifted forks. Lowering of the forks is not possible without operator's detection in the platform and mast commands are integrated on the backrest to ensure that the operator has eyes on the load.

### Performance

The N20 C L has a total capacity of 1200 kg and is able to reach a top speed of 12 km/h unloaded thanks to its powerful 3 kW AC motor. It is highly manoeuvrable even in the narrowest aisle thanks to its compact dimensions. The mast commands are located on both sides of the backrest for easy operation. The raising platform option enables efficient picking at the first level thanks to 2.8 m picking height.

### Comfort

The pneumatically damped workstation provides relief and comfort to operators from shocks due to rough flooring. Combined with the height adjustable Linde Steering Wheel and foldable seating support, operator's experience utmost comfort whilst driving. Picking operations are also made easier with the working bench provided by the lifted forks.

### Reliability

The trucks are designed, built and tested for consistent reliability in demanding applications. The motor, sub-components and electronics are all protected within the robust chassis structure, which can be further reinforced by different front chassis options. These features guarantee a longer operating life, whilst delivering safe, efficient, and productive load handling.

#### Service

Efficiency at work and when servicing with cost effective maintenance routines are important. With service intervals of up to 1000 hours and a computerized diagnostic system via CAN-bus, maintenance interventions are minimal and operating costs are reduced. Easy accessibility to all components thanks to the front panel and the maintenance free AC technology play an additional part in maximizing uptime.

Google Play

# **TECHNICAL DATA**

ACCORDING TO VDI 2198

	1.1	Manufacturer		LINDE
	1.2	Manufacturer's type designation		N20 C L
tics	1.3	Drive		Electric
Characteristics	1.4	Operator type		Stand-on
lcte	1.5	Rated capacity/rated load	Q (t)	1.2
ara	1.6	Load centre distance	c (mm)	600
£	1.8	Load distance, centre of drive axle to fork	x (mm)	670
	1.9	Wheelbase	y (mm)	1823 4) 5)
	2.1	Service weight (including battery)	(kg)	1308
igh	2.2	Axle loading, laden front/rear	(kg)	920/1588
Weight	2.2	Axle loading, inden front/rear	(kg)	875/433
	3.1	Tyres	(×9)	Polyurethane
S	3.2	Tyre size, front		254 x 102
Wheels and tyres	3.3	Tyre size, rear		85 x 60
pue	3.4	Additional wheels (dimensions)		150 x 50
S S	3.5	Wheels, number front/rear (x=driven wheels)		
hee	3.6	Tread, front	b (mm)	1x - 1/4 474
N			<u>b<sub>10</sub> (mm)</u>	
	3.7	Tread, rear	b <sub>11</sub> (mm)	(348) 388
	4.2	Height, mast lowered	h <sub>1</sub> (mm)	1375 6)
	4.3	Free lift	$h_2(mm)$	-
	4.4	Lift	h <sub>3</sub> (mm)	700
	4.5	Height, mast extended	h <sub>4</sub> (mm)	2075 6)
	4.6	Initial lift	h <sub>s</sub> (mm)	-
	4.8	Stand height // Seat height (min/max)	h <sub>7</sub> (mm)	130 7)
	4.9	Height drawbar in driving position min./max.	h <sub>14</sub> (mm)	1258 8)
	4.10	Height of wheel arms	h <sub>8</sub> (mm)	-
	4.14	Stand height, elevated (with lifting platform)	h <sub>12</sub> (mm)	1182/1197 9)
S	4.15	Forks height, lowered	h <sub>13</sub> (mm)	86
sion	4.17	Overhang	l <sub>s</sub> (mm)	-
Dimensions	4.19	Overall length	l <sub>1</sub> (mm)	2532 4) 5)
E	4.20	Length to face of forks	l <sub>2</sub> (mm)	1342 4) 5)
-	4.21	Overall width	b, (mm)	800
	4.22	Fork dimensions	s/e/l	55/172/1190
	4.24	Fork-carriage width	b <sub>3</sub> (mm)	796 6)
	4.25	Distance between fork-arms	b <sub>s</sub> (mm)	(520) 560
	4.31	Ground clearance, laden, below mast		-
	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	30
	4.34	Aisle width for for pallets 800 x I6 lengthways (forks raised)	A <sub>st</sub> (mm)	2871 4) 5)
	4.34.1	Aisle width for pallets 1000 x 1200 crossways (forks raised)	A <sub>st</sub> (mm)	-
	4.34.2	Aisle width for pallets 800 x 1200 crossways (forks raised)	A <sub>st</sub> (mm)	-
	4.35	Turning radius	W <sub>a</sub> (mm)	2007 4) 5)
9	5.1	Travel speed laden/unladen	(km/h)	9/12
	5.1.1	Travel speed laden/unladen,backwards	(km/h)	8/10
an(	5.2	Lift speed laden/unladen	(m / s)	0.135/0.218
Performance	5.3	Lowering speed laden/unladen	(m/s)	0.130/0.122
erfc	5.8	Max. gradeability laden/unladen	(%)	7.8 %/15 % (6.2 %) 15)
Pe	5.9	Acceleration time, laden/unladen	(s)	5.8/4.9
	5.10	Service brake		Electromagnetic
	6.1	Drive motor, rating S2 = 60 min	(kW)	3
	6.2	Lift motor, rating at S3	(kW)	2.2/5 %
	6.3	Battery according to DIN 43531/35/36; A, B, C, no		no
ve	6.4	Battery voltage / nominal capacity K5	(V)/(Ah)	24/345 - 465
Drive	6.5	Battery weight ± 5 %	(kg)	402
	6.6	Energy consumption according to VDI cycle	(kWh)	0.54
	6.7	Turnover output	(t / h)	-
	6.8	Energy consumption at turnover output	(kWh/h)	-
Others		Drive control	·····/ ··/	AC control
SIS	8.1			

<sup>4)</sup> with lifting platform + 50 mm

<sup>5)</sup> with tray 4 PzS or Li-ION + 114 mm

 $^{\rm 6)}$  with mandatory load backrest (1290 mm from the forks to the top for and N20C L)

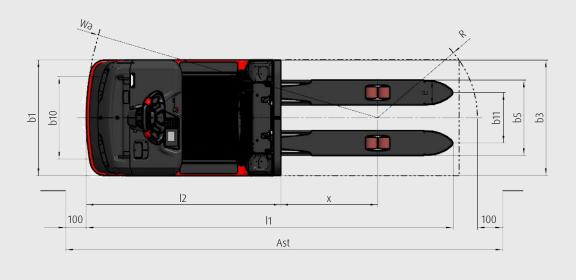
 $^{7)}$  with lifting platform option standard version + 15 mm; with lifting platform option damped version + 30 mm

<sup>8)</sup> with lifting platform option standard version + 72 mm; with lifting platform option damped version + 87 mm; with tiller adjustment option, h14 setting range = + 89 mm/- 19 mm

<sup>9)</sup> with lifting platform option standard/damped version

<sup>15)</sup> in bracket: minimum ground clearance under the chassis with mandatory foot guard = 24 mm
<sup>15)</sup> in bracket: minimum geometric limit on unrounded edge slope without or with foot guard (if different); due to manufacturing and assembly tolerances, it is recommended to foresee a decrease in the nominal values of not less than 1 %





# **MAST TABLES**

	700E
h <sub>3</sub>	700
$h_3 + h_{13}$	786
h,	1375
h <sub>4</sub>	2075
h <sub>2</sub>	700

# **STANDARD EQUIPMENT / OPTIONAL EQUIPMENT**

# **STANDARD EQUIPMENT**

# **OPTIONAL EQUIPMENT**

Chassis width 800 mm	Drive wheels: cushion rubber, synthetic cushion rubber non marking, wet grip	
Rubber platform mat	Castor wheels: tandem polyurethane and tandem polyurethane greaseable	
Anti-slip stripes	Raising platform	
Fixed cushioned and roundly shaped backrest equipped with handle	Pneumatic damping of foot platform	
Power assisted steering, adjustable steering resistance	Cushioned knee protection and foldable leg rest step	
Polyurethane drive wheel	Height adjustable Linde Steering Wheel	
Tandem polyurethane load wheels greaseable	Height adjustable cushioned backrest with foldable seating support	
Single polyurethane castor wheel	Dashboard with incorporated storage compartments	
Workstation with A4 clip integrated	Inching control (forward only or forward/backward)	
Key switch or PIN code access	Accessory supports	
Multifunction colored display incl. hour meter, maintenance indication, battery	Support Clipboard DIN A4 and panoramic mirror	
discharge indicator and internal fault code indication	Support data terminal and power supply cable 24 V	
Mast controls integrated on backrest	Support for scanner and shrink wrap holder	
Load Backrest 1290 mm	Electric socket 12 V or USB plug	
3 kW AC drive motor (maintenance free)	Other options available on request	
2.2 kW (5 % rating output) lift motor	Masts / Forks:	
CAN-bus technology	Width over fork carriage 520 mm or 560 mm with fork length 1190 mm	
Automatic speed reduction in curves	Simplex mast with lift height of 700 mm	
Mast lift pressure stop sensor	· · · · · · · · · · · · · · · · · · ·	
Speed reduction depending on mast lift height and load	Soft landing on forks	
Automatic breaking on releasing butterfly switch	Safety:	
Electromagnetic emergency brake acting proportionally to the load weight	Front chassis protections	
Electric horn	Linde BlueSpot™, Front LED-stripes, Flashing Beacon	
Vertical battery change in 3 PzS and 4 PzS	Enviroment:	
Protection -10° C	Cold store protection - 35° C	
	Linde Connected Solutions:	
	ac: access control (PIN or RFID Dual), an: usage analysis,	

# Battery:

Bluetooth USB Stick

Lateral battery change 3 PzS/4 PzS low available with an ergonomic battery un / locking with lever and rollers

Lateral battery change 3 PzS/4 PzS high available with a simple battery un / locking system

Lateral battery change 3 PzS/4 PzS for competitor batteries

dt: crash detection, tr: trouble code and hr: operating hours

Data transfer online and data transfer WiFi

Built-in charger for lead acid batteries

#### Li-ION technology:

4 PzS compartment with 4.5 kWh - 9 kWh (205 Ah - 410 Ah)

#### Li-ION charger:

24 V-Charger v255: 4.5 kWh (full charging time 1 h 30 min) - 9.0 kWh (2 h 40 min)







# FEATURES

## **Optimal load handling**

- $\rightarrow$  1200 kg total load capacity to handle one EUR pallet at 786 mm
- $\rightarrow$  High performance 2.2 kW lift motor
- → Mast controls located on both sides of backrest
- → Four points contact configuration for maximum stability on ground
- $\rightarrow$  Traction speed of 9 km/h loaded and 12 km/h unloaded
- → Electromagnetic braking initiated by the emergency stop button acts on the drive motor, proportional



## Easy manoeuvering

- → Intuitive Linde Steering Wheel, with all functions (horn, traction butterflies) easily accessible ensures one-hand operation
- $\rightarrow$  Ergonomic and safe driving position
- $\rightarrow$  Self centering steering for faster picking cycles

## Workstation

- $\rightarrow$  Wide, easy access, from either side
- → Numerous storage compartments, maximized with optional dashboard for increased storage
- → Various optional accessories designed to streamline picking
- ightarrow Pedestrian command available

# Productivity at the second level

- → Raising platform option to optimize occasional first and second level picking
- → Optional pneumatic damper for optimum comfort
- $\rightarrow$  Wide access of 418 mm
- → OptiLift<sup>®</sup> system ensures proportional lift and lowering of platform and quiet operation
- → Platform lifting command intuitively placed on Linde Steering Wheel for single-hand operation
- ightarrow Platform lowering with foot switch

## Work in comfort

- → Wide platform access of 418 mm and low step in height of 130 mm
- → Damped mat or pneumatic damper for reduced vibration levels
- $\rightarrow$  Height adjustable Linde Steering Wheel
- → Cushioned, rounded-shape backrest, also available with height adjustment with foldable seating support



# Service Efficiency

- → Integrated CAN-bus diagnostic system for faster analysis and shorter service intervals
- → All truck parameters are configurable by service technician to suit each individual application
- → Rapid and convenient access to main components via front service panel
- → Electronic management of all components permitting quick and easy diagnosis



# Efficient drive system

- → Powerful, high-torque and 3 kW AC drive motor
- → Moisture and dust-proof maintenance-free motor with up to 7.8 % gradeability performance fully loaded
- → Safe starting on gradients without rollback
- → Effortless proportional electric power steering with positive feedback
- $\rightarrow$  Automatic speed reduction when cornering

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.



# Energy for your activity

- → Vertical change as standard, optional side change
- $\rightarrow$  Wide range of batteries (low and high) from 345 Ah (3 PzS) to 620 Ah (4 PzS)
- → Battery compartments dedicated for competitor batteries
- $\rightarrow$  Ergonomic lever on low batteries
- $\rightarrow$  Li-ION batteries available

Presented by:



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Printed in Germany 798.e.0,3.0419.IndA.Ki