

CN - CNi Technical Data



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VDI 2198

| | | | | | | | |
|------------------|------------------------------|---|---------------------------------|--------------------------|--------------------------|---------------------------|---------------------------|
| Specification | 1.1 | Manufacturer | | OM | OM | OM | OM |
| | 1.2 | Manufacturer type designation | | CN 14 | CN 20 | CNi 14 | CNi 20 |
| | 1.3 | Drive unit: electric (battery or mains), diesel, petrol, fuel gas | | Electric | Electric | Electric | Electric |
| | 1.4 | Operator type: hand, pedestrian, standing, seated, order-picker | | Pedestrian | Pedestrian | Pedestrian | Pedestrian |
| | 1.5 | Load capacity | Q (t) | 1,4 | 2 | 1,4 (2 ⁽¹⁾) | 2 (2 ⁽¹⁾) |
| | 1.6 | Load center | c (mm) | 600 | 600 | 600 | 600 |
| | 1.8 | Load distance, centre of drive axle to fork face | x (mm) | 711 (2) | 706 (2) | 637 (2) (3) | 637 (2) (3) |
| | 1.9 | Wheelbase | y (mm) | 1323 | 1323 | 1305 (3) (6) | 1359 (3) |
| | Weights | 2.1 | Truck weight (without battery) | kg | 880 (4) | 1010 (4) | 975(4) |
| 2.2 | | Axle loading, loaded (front/ rear) | kg | 888 / 1652 (4) | 1054 / 2251 (4) | 990 / 1597 (4) (14) | 1092 / 2235 (4) (14) |
| 2.3 | | Axle loading, unloaded (front/ rear) | kg | 770 / 369 (4) | 894 / 411 (4) | 830 / 357 (4) (14) | 904 / 423 (4) (14) |
| Wheels and Tyres | 3.1 | Tyres: solid rubber, superelastic, pneumatic, polyurethane | | Polyurethane | Polyurethane | Polyurethane | Polyurethane |
| | 3.2 | Tyre size (front) | mm | 230 / 120 | 230 / 120 | 230/120 | 230/120 |
| | 3.3 | Tyre size (rear) | mm | 85 x 90 | 85 x 70 | 85 x 70 | 85 x 70 |
| | 3.5 | Wheels number, front / rear (x= driven wheels) | | 1x-1 / 2 | 1x-1 / 4 | 1x-1 / 4 | 1x-1 / 4 |
| | 3.6 | Tread, front | b10 (mm) | 574 | 574 | 574 | 574 |
| | 3.7 | Tread, rear | b11 (mm) | 380 | 380 | 380 | 380 |
| | Dimensions and Overall Sizes | 4.2 | Height, mast lowered | h1 (mm) | 2327 | 2327 | 2332 |
| 4.3 | | Free lift | h2 (mm) | 140 | 90 | 140 | 90 |
| 4.4 | | Lift height | h3 (mm) | 3580 | 3580 | 3580 | 3580 |
| 4.5 | | Height, mast extended | h4 (mm) | 4066 (5) | 4088 (5) | 4070 (5) | 4092 (5) |
| 4.6 | | Initial lift | h5 (mm) | / | / | 135 | 135 |
| 4.9 | | Height of tiller in drive position min / max | h14 (mm) | 762 / 1232 | 762 / 1232 | 762 / 1232 | 762 / 1232 |
| 4.15 | | Forks height, lowered | h13 (mm) | 86 | 86 | 91 | 91 |
| 4.19 | | Overall length | l1 (mm) | 1951 | 1956 | 1999 | 2053 |
| 4.20 | | Length to face of forks | l2 (mm) | 789 | 794 | 844 (6) | 903 |
| 4.21 | | Overall width | b1 (mm) | 860 | 860 | 860 | 860 |
| 4.22 | | Fork dimensions | s/e/l (mm) | 66 / 190 / 1150 | 61 / 200 / 1150 | 66 / 190 / 1150 | 61 / 200 / 1150 |
| 4.24 | | Fork carriage width | b3 (mm) | 680 | 680 | 680 | 680 |
| 4.25 | | Maximum forks width | b5 (mm) | 570 | 570 | 570 | 570 |
| 4.31 | | Ground clearance, laden, below mast | m1 (mm) | / | / | / | / |
| 4.32 | | Ground clearance, centre of wheelbase | m2 (mm) | 30 | 30 | 25 / 160 (3) | 25 / 160 (3) |
| 4.33 | | Aisle width for pallets 1000x1200 crossways (1200 forking side) | Ast (mm) | 2485 (7) | 2487 (7) | 2505 (6) (7) | 2559 (7) |
| 4.34 | | Aisle width pallets 800x1200 lengthways (800 forking side) | Ast (mm) | 2451 (7) | 2455 (7) | 2493 (6) (7) | 2550 (7) |
| 4.35 | | Turning radius | Wa (mm) | 1619 (7) | 1619 (7) | 1602 (7) (3) | 1655 (7) (3) |
| Performance | | 5.1 | Travel speed: Loaded / unloaded | km/h | 5,5 / 6 | 5 / 6 | 5,5 / 6 |
| | 5.2 | Lift speed: Loaded / unloaded | m/s | 0,16 / 0,26 (8) | 0,10 / 0,17 | 0,16 / 0,26 | 0,10 / 0,17 |
| | 5.3 | Lowering speed: Loaded / unloaded | m/s | 0,40 / 0,36 | 0,40 / 0,36 | 0,40 / 0,36 | 0,30 / 0,23 |
| | 5.7 | Gradeability KB 15': Loaded / unloaded | % | 1,4% (4) / 6,7% (4) | 0,4% (4) / 5,5% (4) | 1,3% (4) / 6,3% (4) | 0,3% (4) / 5,3% (4) |
| | 5.8 | Max gradeability KB 5': Loaded / unloaded | % | 4,1% (4) / 9,1% (4) (13) | 2,4% (4) / 9,1% (4) (13) | 3,9% (4) / 12,2% (4) (12) | 2,4% (4) / 10,6% (4) (12) |
| | 5.10 | Service brake | | Electric | Electric | Electric | Electric |
| Engine | 6.1 | Drive motor rating S2 60min | kW | 1 | 1 | 1 | 1 |
| | 6.2 | Lift motor rating at S3 15% | kW | 2,2 (9) / 3 | 3 | 3 | 3 |
| | 6.3 | Battery according to British Standard / DIN 43531/35/36 A, B, C | | DIN | DIN | DIN 43535 B | DIN 43535 B |
| | 6.4 | Battery voltage / nominal capacity k5 | V / Ah | 24 / 240 (315 - 375) | 24 / 315 (375) | 24 / 220 (250-330-375) | 24 / 330 (375) |
| | 6.5 | Battery weight (± 5%) | kg | 260 (295 - 304) | 295 (304) | 212 (220-288-305) | 288 (305) |
| Others | 8.1 | Control unit type | | Electronic | Electronic | Electronic | Electronic |
| | 8.4 | Sound level at the driver's ear according to DIN 12 053 | dB (A) | < 70 | <70 | <70 | <70 |

The values presented are to be taken as indicative and not binding; they refer to the standard equipment

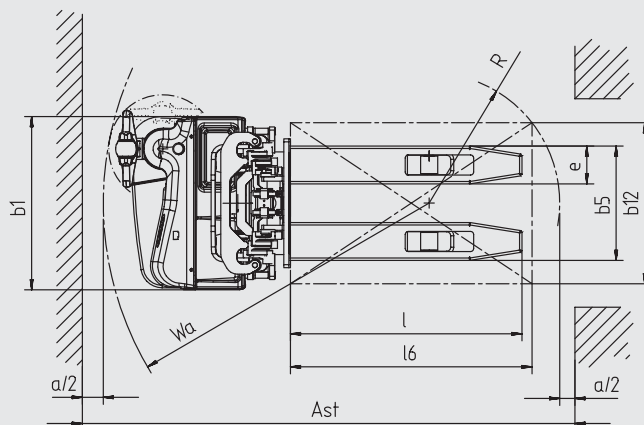
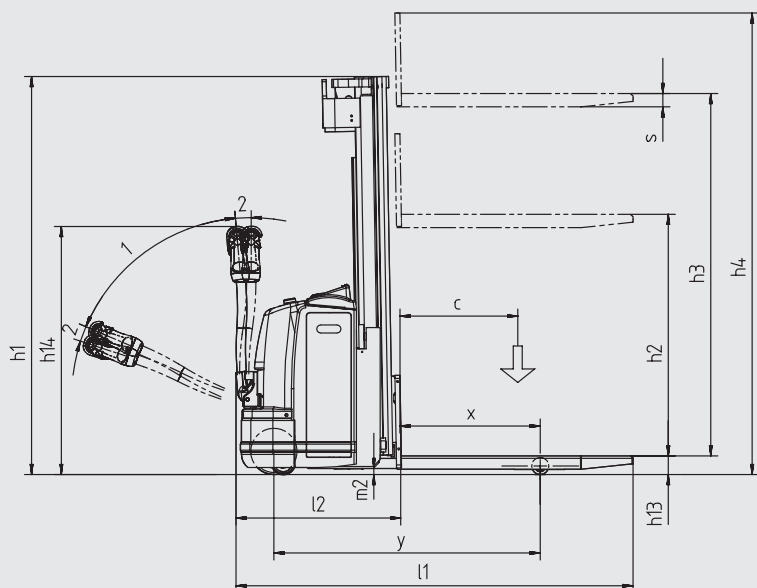
(1) Used like transpallet
 (2) -20 mm with TPX Full free lift mast
 (3) Value referred in condition with legs extended (h5=135 mm)
 (4) with DPX LFL mast h3= 3580 & min. nominal battery capacity (see weight, line 6.5)

(5) h4 + 490 mm with load back rest
 (6) + 52 mm with battery 330 - 375 Ah
 (7) With tiller active arm in vertical position -45mm
 (8) Performance obtained with lift motor 3 Kw
 (9) Value for masts with height till

h3=3580 mm included
 (10) Mast not available for model CNi
 (11)+ 5 mm for model CNi
 (12) Max gradeability due to overall dimension 18,3%
 (13) Max gradeability due to overall dimension 9,1%

(14) Value referred in condition with legs lowered (h5=0 mm)

1= Marcia
2= Frenatura



1.4 t MAST TYPE CN

| | | Mono | | | Simplex | | | | Duplex | | | | Triplex | | | | | | |
|-----------------------|----------|------|------|------|---------|------|------|------|--------|------|------|------|---------|------|------|------|------|------|------|
| Lift height | h_3 mm | 1510 | 1660 | 1810 | 2480 | 2900 | 3280 | 3580 | 3980 | 4480 | 2590 | 2990 | 3300 | 3600 | 3870 | 4170 | 4470 | 4940 | 5390 |
| Height, mast lowered | h_1 mm | 1977 | 2132 | 2282 | 1777 | 1977 | 2177 | 2327 | 2527 | 2777 | 1777 | 1977 | 2177 | 2327 | 1777 | 1877 | 1977 | 2177 | 2327 |
| Height, mast extended | h_4 mm | 1996 | 2146 | 2296 | 2966 | 3386 | 3766 | 4066 | 4466 | 4966 | 3076 | 3476 | 3786 | 4086 | 4356 | 4656 | 4956 | 5426 | 5876 |
| Free lift | h_2 mm | 1491 | 1646 | 1796 | 140 | 140 | 140 | 140 | 140 | 140 | 1291 | 1491 | 1660 | 1810 | 1291 | 1391 | 1491 | 1660 | 1810 |

2.0 t MAST TYPE CN

| | | Simplex | | | Duplex | | | | Triplex | | | | |
|-----------------------|----------|---------|------|------|--------|------|------|------|---------|------|--|--|--|
| Lift height | h_3 mm | 2900 | 3280 | 3580 | 2590 | 2930 | 3270 | 3570 | 4170 | 4380 | | | |
| Height, mast lowered | h_1 mm | 1977 | 2177 | 2327 | 1807 | 1977 | 2177 | 2327 | 1907 | 1977 | | | |
| Height, mast extended | h_4 mm | 3408 | 3786 | 4088 | 3098 | 3438 | 3778 | 4078 | 4678 | 4888 | | | |
| Free lift | h_2 mm | 90 | 90 | 90 | 1299 | 1469 | 1630 | 1780 | 1399 | 1469 | | | |

1.4 t MAST TYPE CNI

| | | Simplex | | | | Duplex | | | | Triplex | | | |
|-----------------------|----------|---------|------|------|------|--------|------|------|------|---------|------|------|------|
| Lift height | h_3 mm | 2900 | 3280 | 3580 | 3980 | 4480 | 2990 | 3300 | 3600 | 4170 | 4470 | 4940 | 5390 |
| Height, mast lowered | h_1 mm | 1982 | 2182 | 2332 | 2532 | 2782 | 1982 | 2182 | 2332 | 1882 | 1982 | 2182 | 2332 |
| Height, mast extended | h_4 mm | 3391 | 3771 | 4071 | 4471 | 4971 | 3481 | 3791 | 4091 | 4661 | 4961 | 5431 | 5881 |
| Free lift | h_2 mm | 140 | 140 | 140 | 140 | 140 | 1491 | 1660 | 1810 | 1391 | 1491 | 1660 | 1810 |

2.0 t MAST TYPE CNI

| | | Simplex | | | | Duplex | | | | Triplex | | | |
|-----------------------|----------|---------|------|------|------|--------|------|------|------|---------|------|--|--|
| Lift height | h_3 mm | 2900 | 3280 | 3580 | 3980 | 4480 | 2930 | 3270 | 3570 | 4170 | 4380 | | |
| Height, mast lowered | h_1 mm | 1982 | 2182 | 2332 | 2532 | 2782 | 1982 | 2182 | 2332 | 1982 | 1982 | | |
| Height, mast extended | h_4 mm | 3413 | 3793 | 4093 | 4493 | 4993 | 3443 | 3783 | 4083 | 4683 | 4893 | | |
| Free lift | h_2 mm | 90 | 90 | 90 | 90 | 90 | 1469 | 1630 | 1780 | 1399 | 1469 | | |

CN - CNi Pedestrian Stacker Truck



The product line: This line has been specifically designed for intensive stocking operations at medium height, and includes two models with a rated load capacity of 1400 kg and 2000 kg. The CNi version is equipped with initial lift.

The structure: ■ The 4-point support with side tiller configuration provides a high degree of stability as well as perfect visibility when loading and unloading at greater heights. ■ The traction unit and castor wheel are completely enclosed within the frame, providing better protection for the operator's feet. ■ The CN and CNi models are available with two types of mast and chassis with a rated load capacity of 1400 kg or 2000 kg ■ The different battery compartments in the two basic models can accommodate a DIN battery in the CNi model and a battery with DIN elements in the CN model. The batteries are completely enclosed within the frame (i.e. they are not visible) and are easily accessed by means of a polyethylene cover. The battery in the CN model can be removed from the side and from the top only in the CNi model. ■ The polyethylene battery covers - made from rotational technology- are very strong and flexible and have the ability to withstand damage without buckling.

Tiller: ■ The new one piece tiller made from a very resistant plastic material with an oval-shaped tubular arm that has been robotically welded. ■ The configuration and location of the tiller provides the best working position for operators of all sizes. ■ The lightness of the tiller and the easy controls greatly reduce operator fatigue even during long shifts. When released, the tiller accurately returns to the vertical position without bumping or bouncing and without compromising operator safety. Standard tiller-operated proportional control of the fork lift/lower functions.

Traction unit: ■ The separately excited traction motor has a rated power of 1 kW ■ The castor wheel can be easily adjusted to provide excellent grip and stability

Lift unit: ■ Masts with a rated load capacity of 1400 kg and 2000 kg ■ Simplex, Duplex and Triplex masts are available (the Simplex mast is not available on the CNi model) with ample visibility and lifting heights up to 5,000 mm ■ Masts with either low free lift (PAL) or high free lift (GAL) are available. ■ Two different lift motors are available (2.2 kW and 3 kW) to meet load capacity and lift height requirements

Braking: The truck features two separate braking systems: ■ Service brake ⇒ Inversion braking on the traction motor (regenerative braking) performed by the electronic control when the butterfly direction control is released. ■ Handbrake ⇒ Electromagnetic brake.

Electronic system: ■ 24 V DC power. ■ High frequency static electronic control of the traction motor and pump on all models. ■ The hour meter signals any abnormal operation. ■ The new electronic systems ensure low energy consumption and quiet operations. The control system protects the motor and the battery from early wear by preventing high power spikes. ■ The electrical systems and wiring are protected to IP 54 and are waterproof and dustproof, ensuring greater reliability over time. ■ The SAAB terminal connectors are protected to IP 67. ■ Speed reduction when the forks are raised from a predetermined range. ■ Automatic lowering of arms when the fork lift unit is operated (CNi). ■ Lock-out of arm lift function when the forks are raised from a predetermined range (CNi).

Technical data are given as an indication.
OM Carrelli Elevatori reserves the right to modify them without notice.



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