

# Technical specifications

Stand-In Stackers 24V,  
1.2 - 2.0 Tons



**4**  
models

**AC**  
tech

**ASR125**  
**ASR160**  
**ASR160I**  
**ASR200**

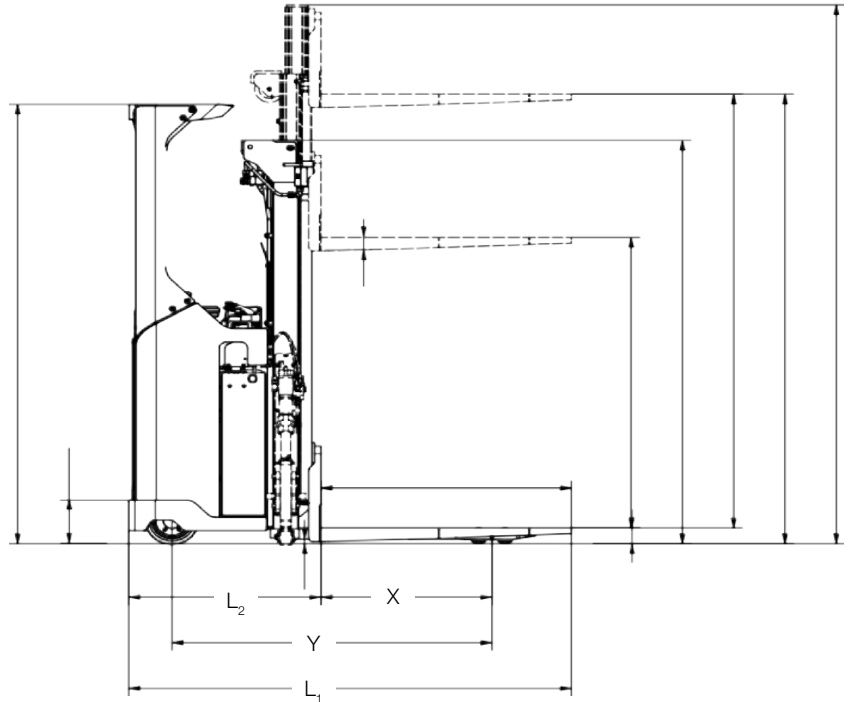
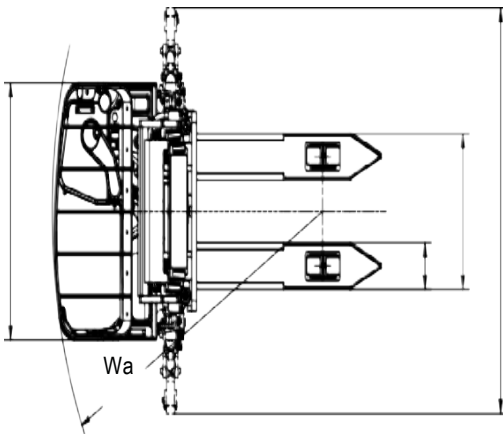
**Stand-in**  
stackers

  
world wide network

**24/7**  
support

|                     |  | Counterbalance trucks Designation according VDI 3586  | Data sheet for materials handling equipment         |                               |                               |                               |                               |
|---------------------|--|---|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
|                     |  | Manufacturers Data and Design Characteristics   |   |                               |                               |                               |                               |
| CHARACTERISTICS     | 1.1  | Manufacturer (abbreviation)   |   | MLE                           |                               |                               |                               |
|                     | 1.2  | Manufacturer's model designation  |   | ASR125                        | ASR160                        | ASR160I                       | ASR200                        |
|                     | 1.3  | Power source: Battery, Diesel, LPG, Petrol  |   | Battery                       |                               |                               |                               |
|                     | 1.4  | Operator type: pedestrian, (operator)-standing, -seated   |   | Stand-in                      | Stand-in                      | Stand-in                      | Stand-in                      |
|                     | 1.5  | Load capacity   | Q (kg/lbs.)   | 1250 (2756)                   | 1600 (3527)                   | 1600 (3527)                   | 2000 (4409)                   |
|                     | 1.6  | Load center distance  | c (mm / in.)  | 600 (23.6)                    | 600 (23.6)                    | 600 (23.6)                    | 600 (23.6)                    |
|                     | 1.8  | Load wheel axle to fork face (forks lowered)  | x (mm in.)  | 800 (31.5)                    | 800 (31.5)                    | 800 (31.5)                    | 800 (31.5)                    |
|                     | 1.9  | Wheel base  | y (mm / in.)  | 1422* (56.0*)                 | 1496* (59.0*)                 | 1541* (60.7*)                 | 1545* (60.8*)                 |
|                     | WEIGHTS  | WEIG  | Truck weight with load, with maximum battery weight | kg (lbs.)                     | 2682 (5913)                   | 3356 (7400)                   | 3506 (7729.4)                 |
| 2.1b                |  | Truck weight without load, with maximum battery weight  | kg (lbs.)   | 1432 (3157)                   | 1756 (3871.3)                 | 1906 (4202)                   | 2018 (4450)                   |
| 2.2                 |  | Axle loadings with nominal load & maximum battery weight, drive/load side                                       | kg (lbs.)   | 1127/1555                     | 1389/1967                     | 1494/2012                     | 1613/2405                     |
| 2.3                 |  | Axle loadings without load & with maximum battery weight, drive/load side                                       | kg (lbs.)   | 1002/430<br>(2209/948)        | 1229/527<br>(2710/1162)       | 1334/572<br>(2941/1261)       | 1413/605<br>(3115/1334)       |
| WHEELS, DRIVE TRAIN | 3.1  | Tires: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber                               |   | Vul/Vul                       | Vul/Vul                       | Vul/Vul                       | Vul/Vul                       |
|                     | 3.2  | Tire dimensions, drive side   | (mm / in.)  | 250 x 105 (9.8 x 4.1)         | 250 x 105 (9.8 x 4.1)         | 250 x 105 (9.8 x 4.1)         | 250 x 105 (9.8 x 4.1)         |
|                     | 3.3  | Tire dimensions, load side  | (mm / in.)  | 85 x 70 (3.3 x 2.8)           | 85 x 70 (3.3 x 2.8)           | 85 x 70 (3.3 x 2.8)           | 85 x 70 (3.3 x 2.8)           |
|                     | 3.4  | Caster wheel dimensions (diameter x width)  | (mm / in.)  | 150 x 55 (5.9 x 2.2)          | 150 x 55 (5.9 x 2.2)          | 150 x 55 (5.9 x 2.2)          | 150 x 55 (5.9 x 2.2)          |
|                     | 3.5  | Number of wheels, load/drive side (x = driven)  |   | 1x + 2/4                      | 1x + 2/4                      | 1x + 2/4                      | 1x + 2/4                      |
|                     | 3.6  | Truck width (center of tires), drive side   | b10 (mm/in.)  | 662 (26)                      | 662 (26)                      | 662 (26)                      | 662 (26)                      |
|                     | 3.7  | Truck width (center of tires), load side  | b11 (mm/in.)  | 402 (15.8)                    | 402 (15.8)                    | 390 (15.3)                    | 392 (14.4)                    |
| DIMENSIONS          | 4.2a   | Height with mast lowered  | h1 (mm/in.)   | see tables                    | see tables                    | see tables                    | see tables                    |
|                     | 4.2b   | Height  | h1 (mm/in.)   | see tables                    | see tables                    | see tables                    | see tables                    |
|                     | 4.3  | Free lift   | h2 (mm/in.)   | see tables                    | see tables                    | see tables                    | see tables                    |
|                     | 4.4  | Lift height   | h3 (mm/in.)   | see tables                    | see tables                    | see tables                    | see tables                    |
|                     | 4.5  | Height with mast extended   | h4 (mm/in.)   | see tables                    | see tables                    | see tables                    | see tables                    |
|                     | 4.6  | Initial lift  | h5 (mm/in.)   | -                             | -                             | 110 (4.3)                     | -                             |
|                     | 4.7  | Height to top of overhead guard   | h6 (mm/in.)   | 2310 (91)                     | 2310 (91)                     | 2310 (91)                     | 2310 (91)                     |
|                     | 4.8  | Seat- or stand height   | h7 (mm/in.)   | 230 (9.1)                     | 230 (9.1)                     | 230 (9.1)                     | 230 (9.1)                     |
|                     | 4.10   | Height of support legs  | h8 (mm/in.)   | 82 (3.2)                      | 80 (3.1)                      | 87 (3.4)                      | 83 (2.7)                      |
|                     | 4.15   | Fork height, fully lowered  | h13 (mm/in.)  | 89 (3.5)                      | 87 (3.4)                      | 93 (3.7)                      | 90 (3.5)                      |
|                     | 4.19   | Overall length  | l1 (mm/in.)   | 1995* (78.5*)                 | 2069* (81.5*)                 | 2113* (83.2)                  | 2118* (83.4)                  |
|                     | 4.20   | Length to fork face (includes fork thickness)   | l2 (mm/in.)   | 825* (32.5*)                  | 899* (35.4*)                  | 943* (37.1*)                  | 948* (37.3*)                  |
|                     | 4.21   | Overall width   | b1/b2 (mm/in.)                                      | 940 (47)                      | 940 (47)                      | 940 (47)                      | 940 (47)                      |
|                     | 4.22   | Fork dimensions (thickness, width, length)  | s/e/l (mm/in.)                                      | 70x180x1170<br>(2.8x7.1x46.1) | 70x180x1170<br>(2.8x7.1x46.1) | 70x180x1170<br>(2.8x7.1x46.1) | 70x195x1170<br>(2.8x7.7x46.1) |
|                     | 4.25   | Outside width over forks (minimum/maximum)  | b5 (mm/in.)   | 570 (22.4)                    | 570 (22.4)                    | 570 (22.4)                    | 570 (22.4)                    |
| 4.32                | Ground clearance at centre of wheelbase (forks lowered)                | m2 (mm/in.)   | 32 (1.3)  | 25 (1.0)                      | 20 (0.8)                      | 23 (0.9)                      |                               |
| 4.33a               | Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise  | Ast (mm/in.)  | 2475** (97.4**)                                     | 2548** (100.3**)              | 2591** (102.0**)              | 2593** (102.1**)              |                               |
| 4.33b               | Working aisle width (Ast3) with 1000 x 1200 mm pallets, load crosswise | Ast3 (mm/in.)   | 2043** (80.4**)                                     | 2116** (83.3**)               | 2159** (85.0**)               | 2161** (85.1**)               |                               |
| 4.34a               | Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise  | Ast (mm/in.)  | 2409** (95.0**)                                     | 2481** (98.0**)               | 2525** (99.4**)               | 2527** (99.4)                 |                               |
| 4.34b               | Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise | Ast3 (mm/in.)   | 2243** (88.3**)                                     | 2316** (91.1**)               | 2359** (93.0**)               | 2361** (93.0**)               |                               |
| 4.35                | Turning radius   | Wa (mm/in.)   | 1643** (65.0**)                                     | 1716** (67.6**)               | 1759** (69.3**)               | 1761** (69.3**)               |                               |
| PERFORMANCE         | 5.1  | Travel speed, with/without load   | km/h (mph)  | 10.0/10.0<br>(6.2/6.2)        | 10.0/10.0<br>(6.2/6.2)        | 9.0/9.0 (5.6/5.6)             | 9.0/9.0 (5.6/5.6)             |
|                     | 5.2  | Lifting speed, with /without load   | m/s   | 0.21/0.37                     | 0.15/0.32                     | 0.15/0.32                     | 0.12/0.22                     |
|                     | 5.3  | Lowering speed, with/without load   | m/s   | 0.55/0.41                     | 0.45/0.42                     | 0.45/0.42                     | 0.33/0.30                     |
|                     | 5.8  | Maximum gradeability with / without load  | %   | 9.0/9.0                       | 6.7/6.7                       | 10.0/16.0                     | 5.9/5.9                       |
|                     | 5.10   | Service brakes (mechanical/hydraulic/electric/pneumatic)  |   | Electric                      |                               |                               |                               |
| ELECTRIC            | 6.1  | Drive motor capacity (60 min. short duty)   | kW  | 2.7                           | 2.7                           | 2.7                           | 2.7                           |
|                     | 6.2  | Lift motor output at 15% duty factor  | kW  | 4.0                           | 4.0                           | 4.0                           | 4.0                           |
|                     | 6.4  | Battery voltage/capacity at 5-hour discharge  | V/Ah  | 24/375-775                    | 24/375-775                    | 24/375-775                    | 24/375-775                    |
|                     | 6.5  | Battery weight  | kg (lbs.)   | 330-610 (728-1345)            | 330-610 (728-1345)            | 330-610 (728-1345)            | 330-610 (728-1345)            |
|                     | 6.6a   | Energy consumption (VDI EN16796)  | rpm   |                               |                               | 0.878                         |                               |
| MISC.               | 8.1  | Type of drive control   |   | AC                            | AC                            | AC                            | AC                            |
|                     | 10.7   | Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871 in work LpAZ          | dB(A)   |                               | 67.3                          | 67.3                          |                               |
|                     | 10.71  | Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ | dB(A)   |                               | "71.5/68.9/<br>53.3"          | "71.5/68.9/<br>53.3"          |                               |

\*\* When SN/BC775 then add 104 mm (4.1 in.)      \*\* Dimensions vary depending on battery carriage and mast type"



**MAST SPECIFICATIONS**

| Mast type    | ASR125         |              |              |                            |
|--------------|----------------|--------------|--------------|----------------------------|
|              | h3+h13 mm (in) | h1 mm (in)   | h4 mm (in)   | h2+h13 mm (in)             |
| NARROW<br>TV | 3290 (130.0)   | 2157 (85.0)  | 3720 (146.5) | 159 (h2=70) / 6.3 (h2=2.8) |
|              | 3590 (141.3)   | 2307 (91.0)  | 4020 (158.3) | 159 (h2=70) / 6.3 (h2=2.8) |
|              | 4190 (165.0)   | 2607 (102.6) | 4620 (182.0) | 159 (h2=70) / 6.3 (h2=2.8) |
| TFV          | 3290 (130.0)   | 2157 (85.0)  | 3720 (146.5) | 1726 (68.0)                |
|              | 3590 (141.3)   | 2307 (91.0)  | 4020 (158.3) | 1876 (74.0)                |
|              | 4190 (165.0)   | 2607 (102.6) | 4620 (182.0) | 2176 (85.6)                |

$Ast = Wa + R + a$      $Ast3 = Wa + l6 - x + a$   
 $Ast =$  Working aisle width     $Wa =$  Turning radius  
 $a =$  Safety clearance = 2 x 100 mm  
 $R = \sqrt{(l6 - x)^2 + (b12 / 2)^2}$

TV = DS = Duplex with clear view mast  
 TFV = DEV = Duplex with full free lift  
 DTFV = TREV = Triplex with full free lift  
 $h_3 + h_{13} =$  Lifting height  
 $h_1 =$  Lowered mast height  
 $h_4 =$  Raised mast height  
 $h_2 + h_{13} =$  Free lift

| Mast type    | ASR160 - ASR200 |              |              |                |
|--------------|-----------------|--------------|--------------|----------------|
|              | h3+h13 mm (in)  | h1 mm (in)   | h4 mm (in)   | h2+h13 mm (in) |
| NARROW<br>TV | 3600 (141.7)    | 2350 (92.5)  | 4105 (161.6) | 1847 (72.7)    |
|              | 4200 (165.4)    | 2650 (104.3) | 4705 (185.2) | 2147 (84.5)    |
|              | 4500 (177.2)    | 2800 (110.2) | 5005 (197.0) | 2297 (90.4)    |
| DTFV         | 4800 (189.0)    | 2150 (84.6)  | 5332 (210.0) | 1667 (65.6)    |
|              | 5400 (212.6)    | 2350 (92.5)  | 5932 (233.5) | 1867 (73.5)    |
|              | 5700 (224.4)    | 2450 (96.5)  | 6232 (245.4) | 1967 (77.4)    |
|              | 6300 (248.0)    | 2650 (104.3) | 6832 (269.0) | 2167 (85.3)    |
|              | 7000 (275.6)    | 2883 (113.5) | 7532 (296.5) | 2400 (94.5)    |

| Mast type          | ASR160I        |              |              |                |
|--------------------|----------------|--------------|--------------|----------------|
|                    | h3+h13 mm (in) | h1 mm (in)   | h4 mm (in)   | h2+h13 mm (in) |
| INITIAL LIFT<br>TV | 3600 (141.7)   | 2355 (92.7)  | 4112 (162.0) | 1853 (73.0)    |
|                    | 4200 (165.4)   | 2655 (104.5) | 4712 (185.5) | 2153 (84.8)    |
|                    | 4500 (177.2)   | 2805 (110.4) | 5012 (197.3) | 2303 (90.7)    |
| DTFV               | 4800 (189.0)   | 2155 (84.8)  | 5339 (210.2) | 1673 (66.0)    |
|                    | 5400 (212.6)   | 2355 (92.7)  | 5939 (233.8) | 1873 (73.7)    |
|                    | 5700 (224.4)   | 2455 (96.7)  | 6239 (245.6) | 1973 (77.7)    |
|                    | 6300 (248.0)   | 2655 (104.5) | 6839 (269.2) | 2173 (85.6)    |
| 7000 (275.6)       | 2888 (113.7)   | 7539 (297.0) | 2406 (94.7)  |                |

|  | ASR125 | ASR160 | ASR160I | ASR200 |
|--|--------|--------|---------|--------|
| <b>GENERAL</b>   |        |        |         |        |
| Standard display including hour meter and battery indicator    | ●      | ●      | ●       | ●      |
| Key switch entry   | ●      | ●      | ●       | ●      |
| Electric power steering  | ●      | ●      | ●       | ●      |
| Speed-regulated lift motor and proportional valve for lowering | ●      | ●      | ●       | ●      |
| Tandem load wheels Vulkollan                                   | ●      | ●      | ●       | ●      |
| Overhead guard   | ●      | ●      | ●       | ●      |
| Adjustable armrest   | ●      | ●      | ●       | ●      |
| Adjustable steering wheel                                      | ●      | ●      | ●       | ●      |
| Storage compartment under armrest                              | ●      | ●      | ●       | ●      |
| Writing desk with paper clip                                   | ●      | ●      | ●       | ●      |
| Battery rollers  | ●      | ●      | ●       | ●      |
| Initial lift   | -      | -      | ●       | -      |
| Chill store design, down to -10°C                              | ●      | ●      | ●       | ●      |
| <b>POWER SOURCE</b>  |        |        |         |        |
| Lead-acid batteries  | □      | □      | □       | □      |
| <b>ENVIRONMENT</b>   |        |        |         |        |
| Cold store design, 0°C to -30°C                                | □      | □      | □       | □      |
| <b>DRIVE AND LIFT CONTROLS</b>                                 |        |        |         |        |
| Height-adjustable steering wheel                               | ●      | ●      | ●       | ●      |
| Fingertip controls for lifting/lowering                        | ●      | ●      | ●       | ●      |

● Standard    □ Option

|  | ASR125 | ASR160 | ASR160I | ASR200 |
|--|--------|--------|---------|--------|
| <b>WHEEL OPTIONS</b>   |        |        |         |        |
| Vulkollan  | ●      | ●      | ●       | ●      |
| Tractothan   | □      | □      | □       | □      |
| Super grip   | □      | □      | □       | □      |
| <b>OTHER OPTIONS</b>   |        |        |         |        |
| Side stabilizers   | –      | □      | □       | □      |
| Ergo forks trailing control , EFTC   | □      | □      | □       | □      |
| 360-degree steering  | □      | □      | □       | □      |
| Multifunctional display incl. BDI and hour meter, PIN code login (100 codes) and graphic icons | □      | □      | □       | □      |
| Foldable seat  | □      | □      | □       | □      |
| Load backrest  | □      | □      | □       | □      |
| Key switch entry (in combination with multifunctional display)                                 | □      | □      | □       | □      |
| Laser positioning guide  | –      | □      | □       | □      |
| Load weight indicator  | □      | □      | □       | □      |
| Lift height indicator  | –      | □      | □       | □      |
| Level assistance system LAS  | –      | □      | □       | □      |
| Loading assistance   | –      | □      | □       | □      |
| Panoramic ProVision roof   | □      | □      | □       | □      |
| 12V DC power socket  | □      | □      | □       | □      |
| 5V USB socket  | □      | □      | □       | □      |
| Accessory rack   | □      | □      | □       | □      |
| Writing desk incl. RAM C holder  | □      | □      | □       | □      |
| Accessory rack holder RAM system size C  | □      | □      | □       | □      |
| Accessory rack holder RAM system size C, 2 pcs   | □      | □      | □       | □      |
| Accessory rack holder RAM size D   | □      | □      | □       | □      |
| Working lights LED   | □      | □      | □       | □      |
| Increased drive speed  | □      | □      | □       | □      |
| Special RAL color  | □      | □      | □       | □      |

● Standard □ Option



**MAST DIMENSIONS, VDI2198 (4.34A)**

| Basic Capacity<br>kg (lbs)    |                 | 1250<br>(2755)    | 1600<br>(3527)    | 1600<br>(3527)    | 2000<br>(4409)    | 2000<br>(4409)    |
|-------------------------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Chassis / Battery<br>carriage |                 | Junior/<br>BC 465 | Junior/<br>BC 465 | Senior/<br>BC 775 | Junior/<br>BC 465 | Senior/<br>BC 775 |
| Mast type                     | Initial<br>lift |                   |                   |                   |                   |                   |
| Duplex                        | No              | 2409              | N/A               | N/A               | N/A               | N/A               |
| DUPLEX<br>WITH FREE<br>LIFT   | No              | 2409              | 2481              | 2583              | 2527              | 2631              |
| TRIPLEX<br>WITH FREE<br>LIFT  | No              | N/A               | 2481              | 2583              | 2527              | 2631              |
| DUPLEX                        | Yes             | 2486              | N/A               | N/A               | N/A               | N/A               |
| DUPLEX<br>WITH FREE<br>LIFT   | Yes             | 2486              | 2525              | 2626              | 2556              | 2684              |
| TRIPLEX<br>WITH FREE<br>LIFT  | Yes             | N/A               | 2525              | 2626              | 2556              | 2684              |

**MAST DIMENSIONS, AST3 (4.34B)**

| Basic Capacity<br>kg (lbs)    |                 | 1250<br>(2755)    | 1600<br>(3527)    | 1600<br>(3527)    | 2000<br>(4409)    | 2000<br>(4409)    |
|-------------------------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Chassis / Battery<br>carriage |                 | Junior/<br>BC 465 | Junior/<br>BC 465 | Senior/<br>BC 775 | Junior/<br>BC 465 | Senior/<br>BC 775 |
| Mast type                     | Initial<br>lift |                   |                   |                   |                   |                   |
| Duplex                        | No              | 2243              | N/A               | N/A               | N/A               | N/A               |
| DUPLEX<br>WITH FREE<br>LIFT   | No              | 2243              | 2316              | 2417              | 2361              | 2465              |
| TRIPLEX<br>WITH FREE<br>LIFT  | No              | N/A               | 2316              | 2417              | 2361              | 2465              |
| DUPLEX                        | Yes             | 2320              | N/A               | N/A               | N/A               | N/A               |
| DUPLEX<br>WITH FREE<br>LIFT   | Yes             | 2320              | 2359              | 2460              | 2390              | 2518              |
| TRIPLEX<br>WITH FREE<br>LIFT  | Yes             | N/A               | 2359              | 2460              | 2390              | 2518              |

It's all about  
the price.  
**But what  
price?**

**Reduce your Total Cost of Operation  
with UniCarriers Forklift**

We agree. Price is everything. Or to be more specific: your Total Cost of Operation (TCO). That's why we're so focused on cutting costs and improving your material handling. The truck and its performance play an important role, but this is even more about how we can support you in optimizing your warehouse operations to give you the best value for your money. Which – in the long run – is what creates a winner.

SB-ASR 07-2022

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