

Technical sheet :

# ME 425 LD LIFT

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|       | Technical characteristics                               |           | Metric                   |
|-------|---|-----------|--------------------------|
| 1.1   | Manufacturer  |           | Manitou                  |
| 1.2   | Model Name  |           | ME 425 LD LIFT           |
| 1.3   | Power source  |           | Electrical - Lithium     |
| 1.4   | Operator type   |           | Seated                   |
| 1.5   | Max. capacity   | Q         | 2500 kg                  |
| 1.6   | Load center of gravity                                  | c         | 500 mm                   |
| 1.8   | Load distance, centre of drive axle to fork             | x         | 431 mm                   |
| 1.9   | Wheelbase   | y         | 1520 mm                  |
|       | Standard mast reference of the machine                  |           | FVD 30                   |
|       | <b>Weight</b>   |           |                          |
| 2.1   | Service weight  |           | 3830 kg                  |
| 2.2   | Weight on front axle (laden) / rear axle (laden)        |           | 5575 kg / 755 kg         |
| 2.3   | Weight on front axle (Unladen) / rear axle (Unladen)    |           | 1560 kg / 2270 kg        |
|       | <b>Wheels</b>   |           |                          |
| 3.1   | Tires type  |           | Solid tires              |
| 3.2   | Dimensions of front wheels                              |           | 23x9-10-18PR             |
| 3.3   | Dimensions of rear wheels                               |           | 18X7-8-14PR              |
| 3.5   | Number of front wheels                                  |           | 2                        |
| 3.5.2 | Number of drive wheels                                  |           | 2                        |
| 3.6   | Front wheel gauge                                       | b10       | 1046 mm                  |
| 3.7   | Rear wheel gauge  | b11       | 960 mm                   |
|       | <b>Dimensions</b>                                       |           |                          |
| 4.7   | Height of overhead guard (cabin)                        | h6        | 2186 mm                  |
| 4.8   | Seat height/stand height                                | h7        | 1155 mm                  |
| 4.12  | Height of towing bar (coupling height)                  | h10       | 440 mm                   |
| 4.19  | Overall length  | l1        | 3357 mm                  |
| 4.20  | Length to face of forks                                 | l2        | 2287 mm                  |
| 4.21  | Overall width   | b1        | 1271 mm                  |
| 4.22  | Forks section / width / length                          | s / e / l | 40 mm x 122 mm x 1070 mm |
| 4.23  | Fork carriage ISO 2328 (class/form) A/B                 |           | 2A                       |
| 4.24  | Fork carriage width                                     | b3        | 1038 mm                  |
| 4.31  | Ground clearance below mast                             | m1        | 120 mm                   |
| 4.32  | Ground clearance at centre of wheelbase                 | m2        | 115 mm                   |
| 4.33  | Aisle Width for pallets 1000 x 1200 crossways           | Ast       | 3670 mm                  |
| 4.34  | Aisle width for 800 x 1200 pallet lengthways            | Ast       | 3866 mm                  |
| 4.35  | Turning radius  | Wa        | 2035 mm                  |
|       | <b>Performances</b>                                     |           |                          |
| 5.1   | Travel speed (laden / unladen)                          |           | 16 km/h-17 km/h          |
| 5.2   | Lifting speed (laden / unladen)                         |           | 0.35 m/s-0.46 m/s        |
| 5.3   | Lowering speed (laden / unladen)                        |           | 0.51 m/s-0.54 m/s        |
| 5.5   | Drawbar pull (Laden / Unladen)                          |           | 6000 daN / 6500 daN      |
| 5.7   | Gradeability (laden / unladen)                          |           | 10 % / 18 %              |
| 5.10  | Service brake   |           | Hydraulic                |
|       | <b>Engine</b>   |           |                          |
| 6.1   | Drive motor rating S2 60 min                            |           | 17 kW                    |
| 6.2   | Lift motor rating at S3 15%                             |           | 23 kW                    |
| 6.3   | Battery according to DIN 43531/35/36 A, B, C            |           | No                       |
| 6.4   | Battery voltage / capacity                              |           | 76.80 V / 230 Ah         |
| 6.5   | Battery weight (+/- 5%)                                 |           | 180 kg                   |
| 6.6   | Energy consumption according to VDI cycle (kWh/h)       |           | 5.70 kWh/h               |
|       | <b>Miscellaneous</b>                                    |           |                          |
| 8.2   | Working hydraulic pressure for attachments              |           | 160 bar                  |
| 8.3   | Oil flow rate for attachments                           |           | 25 l/min                 |
| 8.4   | Sound level at the driver's ear according to DIN 12 053 |           | 70 dB                    |

## ME 425 LD LIFT - Dimensional drawing



# Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD)                               |    | FVD 30 | FVD 33 | FVD 37 | FVD 40 | FVD 45 |
|--|----|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward                       | °  | 6      | 6      | 6      | 6      | 6      |
| β - Mast/fork carriage tilt, backward                      | °  | 12     | 12     | 12     | 12     | 6      |
| h1 - Mast lowered height                                   | mm | 2000   | 2150   | 2400   | 2600   | 2850   |
| h2 - Mast free lift  | mm | 140    | 140    | 140    | 140    | 140    |
| h3 - Mast lifting height                                   | mm | 3000   | 3300   | 3700   | 4000   | 4500   |
| h4 - Mast extended height                                  | mm | 4046   | 4346   | 4746   | 5046   | 5546   |
| Residual capacity at max height                            | kg | 2500   | 2500   | 2500   | 2500   | 2450   |
| Residual capacity with integrated side shift at max height | kg | 2450   | 2450   | 2450   | 2450   | 2400   |

| Free Lift Triplex (FLT)                                    |    | FLT 40 | FLT 45 | FLT 48 | FLT 50 | FLT 55 | FLT 60 | FLT 65 |
|--|----|--------|--------|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward                       | °  | 6      | 6      | 3      | 6      | 3      | 3      | 3      |
| β - Mast/fork carriage tilt, backward                      | °  | 6      | 6      | 6      | 6      | 6      | 6      | 6      |
| h1 - Mast lowered height                                   | mm | 1950   | 2100   | 2200   | 2300   | 2450   | 2650   | 2850   |
| h2 - Mast free lift  | mm | 904    | 1054   | 1154   | 1254   | 1404   | 1604   | 1804   |
| h3 - Mast lifting height                                   | mm | 4000   | 4500   | 4800   | 5000   | 5500   | 6000   | 6500   |
| h4 - Mast extended height                                  | mm | 5046   | 5546   |        | 6046   |        | 7046   | 7546   |
| Residual capacity at max height                            | kg | 2500   | 2350   | 2250   | 2150   | 2050   | 1850   | 1600   |
| Residual capacity with integrated side shift at max height | kg | 2450   | 2300   | 2200   | 2100   | 2000   | 1800   | 1550   |

## Equipment

| Standard   |
|--|
| Audio warning on reverse movements                     |
| Battery - 35,3kWh - 76,8V - 460Ah - Lithium-ion        |
| Charger - 10kW- 32A - 380V - Lithium-ion - Three-phase |
| Electric parking brake                                 |
| LED front right and left working lights (x2)           |
| Load backrest - width : 1200 mm - LB 1200              |
| Overhead guard with glass roof                         |
| PVC mechanical suspension seat                         |
| Panoramic inner rear view mirror                       |
| Rear working light                                     |

| Optional                                  |
|---|
| 2 additional front working lights         |
| 3 way distributor with levers in line     |
| 4 way distributor with levers in line     |
| Battery - 47kWh - 76.8V - 608Ah - Lithium |
| Charger - 20kW - 32A - 380V - Lithium-ion |
| Charger - 8kW - 32A - 380V - Lithium-ion  |
| Closed cab                                |
| Hydraulic kit 3rd and 4th element         |
| Mini levers                               |
| Open cab                                  |



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