Technical sheet:

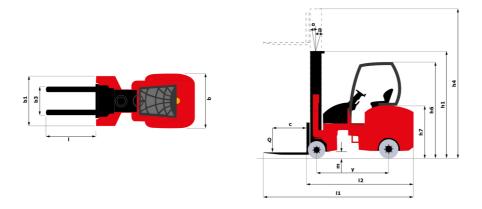
## EMA II 13





|       |   | EMA II 13 CIE | EMA II 13 Created on 28 April 2024 at 7.39.57 PW UTC |  |  |  |
|-------|---|---------------|--|--|--|--|
|       | Technical characteristics                                       |               | Metric   |  |  |  |
| 1.1   | Manufacturer  |               | Manitou  |  |  |  |
| 1.2   | Model Name  |               | EMA II 13  |  |  |  |
| 1.3   | Power source  |               | Electrical   |  |  |  |
| 1.4   | Operator type   |               | Seated   |  |  |  |
| 1.5   | Max. capacity   | Q             | 1300 kg  |  |  |  |
| 1.6   | Load center of gravity  | c             | 500 mm   |  |  |  |
| 1.8   | Load distance, centre of drive axle to fork                     | X             | 278 mm   |  |  |  |
| 1.9   | Wheelbase   | у             | 1855 mm  |  |  |  |
|       | Weight  |               |  |  |  |  |
| 2.1   | Service weight  |               | 5900 kg  |  |  |  |
| 2.2   | Weight on front axle (laden) / rear axle (laden)                |               | 3350 kg / 3850 kg                                    |  |  |  |
| 2.3   | Weight on front axle (Unladen) / rear axle (Unladen)            |               | 1900 kg / 4000 kg                                    |  |  |  |
| 2.0   | Wheels  |               | 1700 kg / 4000 kg                                    |  |  |  |
| 3.1   | Tires type  |               | Solid tires  |  |  |  |
| 3.2   | Dimensions of front wheels                                      |               | 412 x 127 mm   |  |  |  |
| 3.3   | Dimensions of rear wheels                                       |               | 412 X 127 IIIII<br>457 x 152 mm                      |  |  |  |
|       |   |               | 457 X 152 IIIIII<br>2 / 2                            |  |  |  |
| 3.5   | Number of front wheels / rear wheels                            |               |  |  |  |  |
| 3.5.2 | Number of drive wheels  | 110           | 2  |  |  |  |
| 3.6   | Front wheel gauge   | b10           | 825 mm   |  |  |  |
| 3.7   | Rear wheel gauge  | b11           | 1060 mm  |  |  |  |
|       | Dimensions  |               |  |  |  |  |
| 4.7   | Height of overhead guard (cabin)                                | h6            | 2260 mm  |  |  |  |
| 4.8   | Seat height/stand height  | h7            | 1200 mm  |  |  |  |
| 4.19  | Overall length  | I1            | 3890 mm  |  |  |  |
| 4.20  | Length to face of forks   | I2            | 2740 mm  |  |  |  |
| 4.21  | Overall width   | b1            | 1060 mm  |  |  |  |
| 4.22  | Forks section / width / length                                  | s / e / l     | 40 mm x 100 mm x 1150 mm                             |  |  |  |
| 4.23  | Fork carriage ISO 2328 (class/form) A/B                         |               | 2  |  |  |  |
| 4.24  | Fork carriage width   | b3            | 860 mm   |  |  |  |
| 4.31  | Ground clearance below mast                                     | m1            | 50 mm  |  |  |  |
| 4.32  | Ground clearance at centre of wheelbase                         | m2            | 130 mm   |  |  |  |
| 4.33  | Aisle Width for pallets 1000 x 1200 crossways                   | Ast           | 1700 mm  |  |  |  |
| 4.34  | Aisle width for 800 x 1200 pallet lengthways                    | Ast           | 1900 mm  |  |  |  |
|       | Performances  |               |  |  |  |  |
| 5.1   | Travel speed (laden / unladen)                                  |               | 9 km/h-9.50 km/h                                     |  |  |  |
| 5.2   | Lifting speed (laden / unladen)                                 |               | 0.35 m/s-0.45 m/s                                    |  |  |  |
| 5.3   | Lowering speed (laden / unladen)                                |               | 0.40 m/s-0.35 m/s                                    |  |  |  |
| 5.7   | Gradeability (laden / unladen)                                  |               | 8 % / 10.50 %  |  |  |  |
| 5.10  | Service brake   |               | Hydraulic  |  |  |  |
|       | Engine  |               |  |  |  |  |
| 6.1   | Drive motor rating S2 60 min                                    |               | 10 kW  |  |  |  |
| 6.2   | Lift motor rating at S3 15%                                     |               | 9 kW   |  |  |  |
| 6.3   | Battery according to DIN 43531/35/36 A, B, C                    |               | DIN 43595  |  |  |  |
| 6.4   | Battery voltage / capacity                                      |               | 48 V / 620 Ah  |  |  |  |
| 6.5   | Battery weight (+/- 5%)   |               | 1030 kg  |  |  |  |
|       | Miscellaneous   |               |  |  |  |  |
| 8.1   | Type of drive control   |               | Mosfet AC speed controller                           |  |  |  |
| 8.2   | Working hydraulic pressure for attachments                      |               | 200 bar  |  |  |  |
| 8.3   | Oil flow rate for attachments                                   |               | 25 l/min   |  |  |  |
| 8.4   | Measured/guaranteed mean noise level at the ear of the operator |               | < 73 dB  |  |  |  |
| 8.4   | Sound level at the driver's ear according to DIN 12 053         |               | 73 dB  |  |  |  |
| 0.4   | Sound level at the univers ear according to DIN 12 053          |               | / o UB   |  |  |  |

EMA II 13 - Dimensional drawing



## Characteristics of masts and residual capacities

| Free Lift Triplex (FLT)                                    |    | FLT 42 | FLT 50 | FLT 56 | FLT 60 | FLT 66 | FLT 76 |
|--|----|--------|--------|--------|--------|--------|--------|
| Mast/fork carriage tilt, forward                           |    | 1      | 1      | 1      | 1      | 1      | 1      |
| Mast/fork carriage tilt, backward                          | ۰  | 3      | 3      | 3      | 3      | 3      | 3      |
| h1 - Mast lowered height                                   | mm | 2360   | 2630   | 2810   | 2960   | 3210   | 3650   |
| h2 - Mast free lift  | mm | 1400   | 1750   | 193    | 2080   | 2330   | 2670   |
| h3 - Mast lifting height                                   | mm | 4200   | 5010   | 5550   | 6000   | 6600   | 7620   |
| h4 - Mast extended height                                  | mm | 5030   | 5910   | 6450   | 6900   | 7500   | 8520   |
| Residual capacity with integrated side shift at max heigth | kg | 1300   | 1200   | 1100   | 1000   | 900    | 750    |





## **Head Office**

B.P. 249 - 430 rue de l'Aubinière 44150 Ancenis Cedex - France Tel: +33 (0)2 40 09 10 11 - Fax: +33 (0)2 40 09 10 97 www.manitou.com



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