Technical sheet:

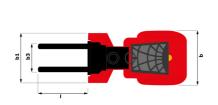
## EMA II 13

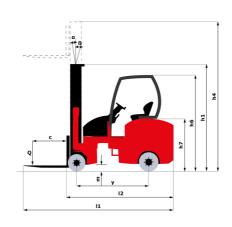




|     |   |           | EMA II 13 Greated on September 20, 2024 at 2.55.35 AWI 0 |                            |  |  |
|-----|---|-----------|--|----------------------------|--|--|
|     | Technical characteristics                                       |           | Metric   | Imperial                   |  |  |
| 1.1 | Manufacturer  |           | Manitou  | Manitou                    |  |  |
| .2  | Model Name  |           | EMA II 13  | EMA II 13                  |  |  |
| .3  | Power source  |           | Electrical   | Electrical                 |  |  |
| .4  | Operator type   |           | Seated   | Seated                     |  |  |
| .5  | Max. capacity   | Q         | 1300 kg  | 2866 lb                    |  |  |
| .6  | Load center of gravity  | С         | 500 mm   | 20 in                      |  |  |
| .8  | Load distance, centre of drive axle to fork                     | Х         | 278 mm   | 11 in                      |  |  |
| .9  | Wheelbase   | у         | 1855 mm  | 73 in                      |  |  |
|     | Weight  |           |  |                            |  |  |
| .1  | Service weight  |           | 5900 kg  | 13007 lb                   |  |  |
| .2  | Weight on front axle (laden) / rear axle (laden)                |           | 3350 kg / 3850 kg  | 7385 lb / 8488 lb          |  |  |
| .3  | Weight on front axle (Unladen) / rear axle (Unladen)            |           | 1900 kg / 4000 kg  | 4189 lb / 8818 lb          |  |  |
|     | Wheels  |           |  |                            |  |  |
| .1  | Tires type  |           | Solid tires  | Solid tires                |  |  |
| .2  | Dimensions of front wheels                                      |           | 412 x 127 mm   | 412 x 127 mm               |  |  |
| .3  | Dimensions of rear wheels                                       |           | 457 x 152 mm   | 457 x 152 mm               |  |  |
| .5  | Number of front wheels / rear wheels                            |           | 2/2  | 2 / 2                      |  |  |
| 5.2 | Number of drive wheels  |           | 2  | 2                          |  |  |
| .6  | Front wheel gauge   | b10       | 825 mm   | 32 in                      |  |  |
| .7  | Rear wheel gauge  | b11       | 1060 mm  | 42 in                      |  |  |
|     | Dimensions  |           |  |                            |  |  |
| .7  | Height of overhead guard (cabin)                                | h6        | 2260 mm  | 89 in                      |  |  |
| .8  | Seat height/stand height  | h7        | 1200 mm  | 47 in                      |  |  |
| 19  | Overall length  | l1        | 3890 mm  | 153 in                     |  |  |
| 20  | Length to face of forks   | 12        | 2740 mm  | 108 in                     |  |  |
| 21  | Overall width   | b1        | 1060 mm  | 42 in                      |  |  |
| 22  | Forks section / width / length                                  | s / e / l | 40 mm x 100 mm x 1150 mm                                 | 2 in x 4 in x 45 in        |  |  |
| 23  | Fork carriage ISO 2328 (class/form) A/B                         |           | 2  | 2                          |  |  |
| 24  | Fork carriage width   | b3        | 860 mm   | 34 in                      |  |  |
| 31  | Ground clearance below mast                                     | m1        | 50 mm  | 2 in                       |  |  |
| 32  | Ground clearance at centre of wheelbase                         | m2        | 130 mm   | 5 in                       |  |  |
| 33  | Aisle Width for pallets 1000 x 1200 crossways                   | Ast       | 1700 mm  | 67 in                      |  |  |
| 34  | Aisle width for 800 x 1200 pallet lengthways                    | Ast       | 1900 mm  | 75 in                      |  |  |
|     | Performances  |           |  |                            |  |  |
| .1  | Travel speed (laden / unladen)                                  |           | 9 km/h-9.50 km/h   | 6 mph-6 mph                |  |  |
| .2  | Lifting speed (laden / unladen)                                 |           | 0.35 m/s-0.45 m/s  | 1 ft/s-1 ft/s              |  |  |
| .3  | Lowering speed (laden / unladen)                                |           | 0.40 m/s-0.35 m/s  | 1 ft/s-1 ft/s              |  |  |
| .7  | Gradeability (laden / unladen)                                  |           | 8 % / 10.50 %  | 8 % / 10.50 %              |  |  |
| 10  | Service brake   |           | Hydraulic  | Hydraulic                  |  |  |
|     | Engine  |           | ,  |                            |  |  |
| .1  | Drive motor rating S2 60 min                                    |           | 10 kW  | 10 kW                      |  |  |
| .2  | Lift motor rating at S3 15%                                     |           | 9 kW   | 9 kW                       |  |  |
| .3  | Battery according to DIN 43531/35/36 A, B, C                    |           | DIN 43595  | DIN 43595                  |  |  |
| .4  | Battery voltage / capacity                                      |           | 48 V / 620 Ah  | 48 V / 620 Ah              |  |  |
| .5  | Battery weight (+/- 5%)   |           | 1030 kg  | 2271 lb                    |  |  |
|     | Miscellaneous   |           |  | 22, 110                    |  |  |
| .1  | Type of drive control   |           | Mosfet AC speed controller                               | Mosfet AC speed controller |  |  |
| .2  | Working hydraulic pressure for attachments                      |           | 200 bar  | 2901 PSI                   |  |  |
| .3  | Oil flow rate for attachments                                   |           | 25 I/min   | 7 US gpm                   |  |  |
| .4  | Measured/guaranteed mean noise level at the ear of the operator |           | < 73 dB  | < 73 dB                    |  |  |
| .4  | Sound level at the driver's ear according to DIN 12 053         |           | 73 dB  | 73 dB                      |  |  |
| •   | countries at the difference can according to bill 12 000        |           | 70 UD  | 70 00                      |  |  |

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       |              |
|--|---------|--------------|--------------|--------------|--------------|--------------|--------------|
| α - Mast/fork carriage tilt, forward                       |         | 1            | 1            | 1            | 1            | 1            | 1            |
| β - Mast/fork carriage tilt, backward                      | ۰       | 3            | 3            | 3            | 3            | 3            | 3            |
| h1 - Mast lowered height                                   | in (mm) | 92.9 (2360)  | 103.5 (2630) | 110.6 (2810) | 116.5 (2960) | 126.4 (3210) | 143.7 (3650) |
| h2 - Mast free lift  | in (mm) | 55.1 (1400)  | 68.9 (1750)  | 7.6 (193)    | 81.9 (2080)  | 91.7 (2330)  | 105.1 (2670) |
| h3 - Mast lifting height                                   | in (mm) | 165.4 (4200) | 197.2 (5010) | 218.5 (5550) | 236.2 (6000) | 259.8 (6600) | 300 (7620)   |
| h4 - Mast extended height                                  | in (mm) | 198 (5030)   | 232.7 (5910) | 253.9 (6450) | 271.7 (6900) | 295.3 (7500) | 335.4 (8520) |
| Residual capacity with integrated side shift at max heigth | lb (kg) | 2866 (1300)  | 2646 (1200)  | 2425 (1100)  | 2205 (1000)  | 1984 (900)   | 1653 (750)   |





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