Technical sheet:

## **EMA II 18 HL-2**





|       | Technical characteristics                                       |            | Metric                     |
|-------|---|------------|----------------------------|
| 1.1   | Manufacturer  |            | Manitou                    |
| 1.2   | Model Name  |            | EMA II 18 HL-2             |
| 1.3   | Power source  |            | Electrical                 |
| 1.4   | Operator type   |            | Seated                     |
| 1.5   | Max. capacity   | Q          | 1750 kg                    |
| 1.6   | Load center of gravity  | С          | 500 mm                     |
| 1.8   | Load distance, centre of drive axle to fork                     | x          | 308 mm                     |
| 1.9   | Wheelbase   | у          | 1745 mm                    |
|       | Weight  |            |                            |
| 2.1   | Service weight  |            | 8700 kg                    |
| 2.2   | Weight on front axle (laden) / rear axle (laden)                |            | 6330 kg / 4080 kg          |
| 2.3   | Weight on front axle (Unladen) / rear axle (Unladen)            |            | 3480 kg / 5220 kg          |
|       | Wheels  |            |                            |
| 3.1   | Tires type  |            | Solid tires                |
| 3.2   | Dimensions of front wheels                                      |            | 412 x 178                  |
| 3.3   | Dimensions of rear wheels                                       |            | 457 x 178                  |
| 3.5   | Number of front wheels / rear wheels                            |            | 2 / 2                      |
| 3.5.2 | Number of drive wheels  |            | 2                          |
| 3.6   | Front wheel gauge   | b10        | 1110 mm                    |
| 3.7   | Rear wheel gauge  | b11        | 1350 mm                    |
|       | Dimensions  |            |                            |
| 4.7   | Height of overhead quard (cabin)                                | h6         | 2260 mm                    |
| 4.8   | Seat height/stand height  | h7         | 1200 mm                    |
| 4.19  | Overall length  | <br>I1     | 3740 mm                    |
| 4.20  | Length to face of forks   | 12         | 2590 mm                    |
| 4.21  | Overall width   | b1         | 1350 mm                    |
| 4.22  | Forks section / width / length                                  | s / e / l  | 40 mm x 125 mm x 1150 mm   |
| 4.23  | Fork carriage ISO 2328 (class/form) A/B                         | 37671      | 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                   |            | 2000 mm                    |
| 4.33  | ,   | Ast<br>Ast | 2000 mm                    |
| 1.34  | Aisle width for 800 x 1200 pallet lengthways  Performances      | ASI        | 2200 111111                |
| 5.1   | Travel speed (laden / unladen)                                  |            | 9 km/h-9.50 km/h           |
| 5.2   | , ,   |            |                            |
| 5.3   | Lifting speed (laden / unladen)                                 |            | 0.35 m/s-0.45 m/s          |
| 5.7   | Lowering speed (laden / unladen)                                |            | 0.40 m/s-0.36 m/s          |
|       | Gradeability (laden / unladen)                                  |            | 8 % / 10.50 %              |
| 5.10  | Service brake   |            | Hydraulic                  |
|       | Engine  |            | 40.170                     |
| 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 / 930 Ah              |
| 6.5   | Battery weight (+/- 5%)   |            | 1300 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 I/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                      |

EMA II 18 HL-2 - Dimensional drawing



## Characteristics of masts and residual capacities

| Free Lift Triplex (FLT)  |    | FLT 80 | FLT 84 | FLT 90 | FLT 95 | FLT 100 | FLT 102 | FLT 110 | FLT 120 | FLT 125 | FLT 127 |
|--|----|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| α - Mast/fork carriage tilt,<br>forward                          | ۰  | 1      | 1      | 1      | 1      | 1       | 1       | 1       | 1       | 1       | 1       |
| β - Mast/fork carriage tilt,<br>backward                         | ۰  | 4      | 4      | 4      | 4      | 4       | 4       | 4       | 4       | 4       | 4       |
| h1 - Mast lowered height   | mm | 3720   | 3900   | 4150   | 4270   | 4590    | 4690    | 5000    | 5340    | 5550    | 5570    |
| h2 - Mast free lift  | mm | 2900   | 3080   | 3330   | 3650   | 3770    | 3870    | 4180    | 4520    | 4680    | 4750    |
| h3 - Mast lifting height   | mm | 8010   | 8400   | 9000   | 9500   | 10020   | 10200   | 11010   | 12000   | 12510   | 12720   |
| h4 - Mast extended height  | mm | 8840   | 9230   | 9830   | 10350  | 10850   | 11175   | 11985   | 13005   | 13485   | 13695   |
| Residual capacity with<br>integrated side shift at<br>max heigth | kg | 1250   | 1250   | 1250   | 1100   | 1100    | 1000    | 850     | 750     | 700     | 500     |





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