

Ficha técnica :

# **EMA II 20 HD-1**

---



 **MANITOU**  
HANDLING YOUR WORLD

|       | Technical characteristics                                       |           | Métrico                    |
|-------|-----------------------------------------------------------------|-----------|----------------------------|
| 1.1   | Manufacturer                                                    |           | Manitou                    |
| 1.2   | Model Name                                                      |           | EMA II 20 HD-1             |
| 1.3   | Power source                                                    |           | Electrical                 |
| 1.4   | Operator type                                                   |           | Seated                     |
| 1.5   | Max. capacity                                                   | Q         | 2000 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                                                       | y         | 1745 mm                    |
|       | Weight                                                          |           |                            |
| 2.1   | Service weight                                                  |           | 6900 kg                    |
| 2.2   | Weight on front axle (laden) / rear axle (laden)                |           | 4200 kg / 4500 kg          |
| 2.3   | Weight on front axle (Unladen) / rear axle (Unladen)            |           | 2200 kg / 4700 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       | 1250 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                                                  | l1        | 3710 mm                    |
| 4.20  | Length to face of forks                                         | l2        | 2560 mm                    |
| 4.21  | Overall width                                                   | b1        | 1250 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                         |           | 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       | 1950 mm                    |
| 4.34  | Aisle width for 800 x 1200 pallet lengthways                    | Ast       | 2150 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-0.36 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 / 775 Ah              |
| 6.5   | Battery weight (+/- 5%)                                         |           | 1435 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                      |

EMA II 20 HD-1 - Diagrama dimensional



# Características de los mástiles y capacidad residual

| Free Lift Triplex (FLT)                                     |    | FLT 56 | FLT 60 | FLT 66 | FLT 70 | FLT 76 | FLT 80 | FLT 86 | FLT 90 | FLT 95 | FLT 102 | FLT 106 |
|-------------------------------------------------------------|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| Mast/fork carriage tilt, forward                            | °  | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1       | 1       |
| Mast/fork carriage tilt, backward                           | °  | 3      | 3      | 3      | 3      | 3      | 3      | 3      | 3      | 3      | 3       | 3       |
| h1 - Mast lowered height                                    | mm | 2750   | 2900   | 3150   | 3290   | 3590   | 3720   | 4020   | 4150   | 4500   | 4690    | 4820    |
| h2 - Mast free lift                                         | mm | 1930   | 2080   | 2330   | 2470   | 2770   | 2900   | 3200   | 3330   | 3650   | 3870    | 4000    |
| h3 - Mast lifting height                                    | mm | 5550   | 6000   | 6600   | 7020   | 7620   | 8010   | 8610   | 9000   | 9500   | 10200   | 10560   |
| h4 - Mast extended height                                   | mm | 6380   | 6830   | 7430   | 7850   | 8450   | 8840   | 9440   | 9830   | 10475  | 11175   | 11535   |
| Residual capacity with integrated side shift at max heighth | kg | 1600   | 1450   | 1450   | 1300   | 1300   | 1200   | 1100   | 1000   | 900    | 750     | 650     |

**Oficina Central**

B.P. 249 - 430 rue de l'Aubinière

44150 Ancenis Cedex - Francia

Tel.: 00 33 (0)2 40 09 10 11 - Fax: 00 33 (0)2 40 09 10 97

[www.manitou.com](http://www.manitou.com)

Esta publicación describe las versiones y posibilidades de configuración de los productos Manitou que puedan diferir en equipamiento. Los equipamientos presentados en este folleto pueden ser de serie, opcionales o no estar disponibles en algunas versiones. Manitou se reserva el derecho, en cualquier momento y sin previo aviso, de modificar las especificaciones descritas y representadas. Las especificaciones aportadas no comprometen al fabricante. Para más información, póngase en contacto con su concesionario Manitou. Documento no contractual. Presentación de los productos no contractual. Lista de especificaciones no exhaustiva. Los logos y la identidad visual de la empresa son propiedad de Manitou y no pueden ser utilizados sin autorización. Todos los derechos reservados. Las fotos y los esquemas contenidos en este folleto se ofrecen para consulta y a título indicativo solamente.

Manitou BF SA - Sociedad anónima con Consejo de Administración - Capital social: 39 668 399 euros - 857 802 508 RCS Nantes