Technical sheet:

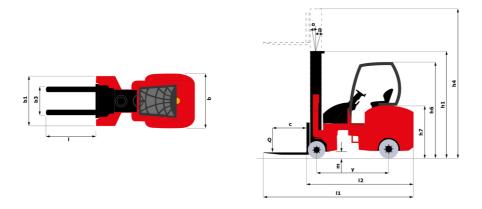
EMA II 20





| | | | 1A 11 20 Greated Off April 10, 2023 at 2.37 1 W C | | | | |
|------|---|------------|---|--|--|--|--|
| | Technical characteristics | | Metric | | | | |
| 1.1 | Manufacturer | | Manitou | | | | |
| 1.2 | Model Name | | EMA II 20 | | | | |
| 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 | У | 1745 mm | | | | |
| | Weight | | | | | | |
| 2.1 | Service weight | | 6600 kg | | | | |
| 2.2 | Weight on front axle (laden) / rear axle (laden) | | 4800 kg / 4400 kg | | | | |
| 2.3 | Weight on front axle (Unladen) / rear axle (Unladen) | | 2200 kg / 4400 kg | | | | |
| | Wheels | | 2200 kg / 1100 kg | | | | |
| 3.1 | Tires type | | Solid tires | | | | |
| 3.2 | Dimensions of front wheels | | 412 x 178 | | | | |
| 3.3 | Dimensions of front wheels | | 457 x 152 | | | | |
| 3.5 | Number of front wheels / rear wheels | | 2 / 2 | | | | |
| .5.2 | Number of from wheels Number of drive wheels | | 2 | | | | |
| 3.6 | Front wheel gauge | b10 | 1125 mm | | | | |
| 3.7 | Rear wheel gauge | b10 b11 | 1200 mm | | | | |
| 3.7 | Dimensions | DII | 1200 111111 | | | | |
| 4.7 | | hc | 2260 mm | | | | |
| | Height of overhead guard (cabin) | h6 | | | | | |
| 4.8 | Seat height/stand height | h7 | 1200 mm | | | | |
| 1.19 | Overall length | l1 | 3710 mm | | | | |
| 1.20 | Length to face of forks | 12 | 2560 mm | | | | |
| 1.21 | Overall width | b1 | 1200 mm | | | | |
| 1.22 | Forks section / width / length | s / e / l | 40 mm x 125 mm x 1150 mm | | | | |
| 1.23 | Fork carriage ISO 2328 (class/form) A/B | | 2 | | | | |
| 1.24 | Fork carriage width | b3 | 860 mm | | | | |
| 1.31 | Ground clearance below mast | m1 | 50 mm | | | | |
| 1.32 | Ground clearance at centre of wheelbase | m2 | 130 mm | | | | |
| 1.33 | Aisle Width for pallets 1000 x 1200 crossways | Ast | 1900 mm | | | | |
| 1.34 | Aisle width for 800 x 1200 pallet lengthways | Ast | 2100 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 / 750 Ah | | | | |
| 6.5 | Battery weight (+/- 5%) | | 1135 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 | | | | |
| | Sound level at the driver's ear according to DIN 12 053 | | 73 dB | | | | |

EMA II 20 - Dimensional drawing



Characteristics of masts and residual capacities

| Free Lift Triplex (FLT) | | FLT 42 | FLT 45 | FLT 50 | FLT 56 | FLT 60 | FLT 66 | FLT 72 | FLT 76 | FLT 80 | FLT 86 | FLT 90 | FLT 95 | FLT 102 |
|---|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| α - Mast/fork carriage tilt, forward | ۰ | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| β - Mast/fork carriage tilt, backward | ٠ | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| h1 - Mast lowered height | mm | 2300 | 2410 | 2570 | 2750 | 2900 | 3150 | 3400 | 3590 | 3720 | 4020 | 4150 | 4500 | 4690 |
| h2 - Mast free lift | mm | 1480 | 1590 | 1750 | 1930 | 2080 | 2330 | 2580 | 2770 | 2900 | 3200 | 3330 | 3650 | 3870 |
| h3 - Mast lifting height | mm | 4200 | 4530 | 5010 | 5550 | 6000 | 6600 | 7200 | 7620 | 8010 | 8610 | 9000 | 9500 | 10200 |
| h4 - Mast extended height | mm | 5030 | 5360 | 5840 | 6380 | 6830 | 7430 | 8030 | 8450 | 8840 | 9440 | 9830 | 10475 | 11175 |
| Residual capacity with integrated side shift at max heigth | kg | 1800 | 1700 | 1600 | 1500 | 1400 | 1300 | 1200 | 1150 | 1080 | 1000 | 1000 | 900 | 750 |





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