Technical sheet :

EMA II 20 HD-1





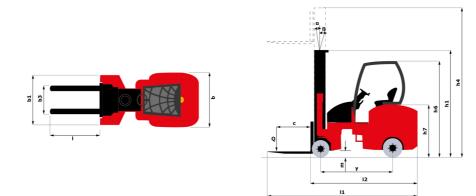
EMA II 20 HD-1	Created on April	18, 2025	at 9:45 AM UTC
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Metric Manitou EMA II 20 HD-1

	Technical characteristics	
1.1	Manufacturer	
1.2	Model Name	
1.3	Power source	
1.4	Operator type	
1.5	Max. capacity	Q
1.6	Load center of gravity	c
1.8	Load distance, centre of drive axle to fork	x
1.9	Wheelbase	у
	Weight	
2.1	Service weight	
2.2	Weight on front axle (laden) / rear axle (laden)	
2.3	Weight on front axle (Unladen) / rear axle (Unladen)	
	Wheels	
3.1	Tires type	
3.2	Dimensions of front wheels	
3.3	Dimensions of rear wheels	
3.5	Number of front wheels / rear wheels	
3.5.2	Number of drive wheels	
3.6	Front wheel gauge	b10
3.7	Rear wheel gauge	b10
5.7	Dimensions	DIT
4.7	Height of overhead guard (cabin)	h6
4.7	Seat height/stand height	h7
4.0	Overall length	17
4.19	-	12
	Length to face of forks Overall width	b1
4.21		
4.22	Forks section / width / length	s / e / l
4.23	Fork carriage ISO 2328 (class/form) A/B	
4.24	Fork carriage width	b3
4.31	Ground clearance below mast	m1
4.32	Ground clearance at centre of wheelbase	m2
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast
	Performances	
5.1	Travel speed (laden / unladen)	
5.2	Lifting speed (laden / unladen)	
5.3	Lowering speed (laden / unladen)	
5.7	Gradeability (laden / unladen)	
5.10	Service brake	
	Engine	
6.1	Drive motor rating S2 60 min	
6.2	Lift motor rating at S3 15%	
6.3	Battery according to DIN 43531/35/36 A, B, C	
6.4	Battery voltage / capacity	
6.5	Battery weight (+/- 5%)	
	Miscellaneous	
8.1	Type of drive control	
8.2	Working hydraulic pressure for attachments	
8.3	Oil flow rate for attachments	
8.4	Measured/guaranteed mean noise level at the ear of the operator	
8.4	Sound level at the driver's ear according to DIN 12 053	

EMA II 20 HD-1
Electrical
Seated
2000 kg
500 mm
278 mm
1745 mm
6900 kg
4200 kg / 4500 kg
2200 kg / 4700 kg
Solid tires
412 x 178
457 x 178
2 / 2
2
1110 mm
1250 mm
2260 mm
1200 mm
3710 mm
2560 mm
1250 mm
40 mm x 125 mm x 1150 mm
2
860 mm
50 mm
130 mm
1950 mm
2150 mm
9 km/h-9.50 km/h
0.35 m/s-0.45 m/s
0.40 m/s-0.36 m/s
8 % / 10.50 %
Hydraulic
10 kW
9 kW
DIN 43595
48 V / 775 Ah
1435 kg
Mosfet AC speed controller
200 bar
25 l/min

EMA II 20 HD-1 - Dimensional drawing



Characteristics of masts and residual capacities

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
α - Mast/fork carriage tilt, forward	۰	1	1	1	1	1	1	1	1	1	1	1
β - Mast/fork carriage tilt, backward	۰	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 heigth	kg	1600	1450	1450	1300	1300	1200	1100	1000	900	750	650



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