Technical sheet :

## EMA II 20 HD-2



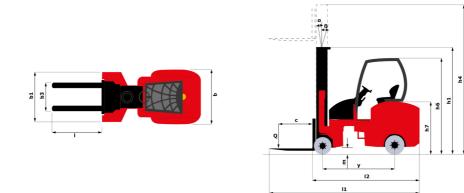


Metric Manitou

		EMA II 20 HD-2
	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	y y
1.5	Weight	,
2.1	Service weight	
2.1	Weight on front axle (laden) / rear axle (laden)	
2.2	Weight on front axle (Unladen) / rear axle (Unladen)	
2.3	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	b11
	Dimensions	
4.7	Height of overhead guard (cabin)	h6
4.8	Seat height/stand height	h7
4.19	Overall length	11
4.20	Length to face of forks	12
4.21	Overall width	b1
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	

	Manitou								
	EMA II 20 HD-2								
	Electrical								
	Seated								
)	2000 kg								
;	500 mm								
:	278 mm								
,	1745 mm								
	8700 kg								
	6330 kg / 4080 kg								
	3480 kg / 5220 kg								
	Solid tires								
	412 x 178								
	457 x 178								
	2/2								
	2								
0	1110 mm								
11	1370 mm								
6	2260 mm								
7	1200 mm								
1	3710 mm								
2	2560 mm								
1	1350 mm								
e/I	40 mm x 125 mm x 1150 mm								
	2								
3	860 mm								
1	50 mm								
2	130 mm								
st	2000 mm								
st	2200 mm								
	8.50 km/h-9 km/h								
	0.35 m/s-0.45 m/s								
	0.40 m/s-0.36 m/s								
	6 % / 8 %								
	Hydraulic								
	10 kW								
	9 kW								
	DIN 43595								
	48 V / 930 Ah								
	1300 kg								
	Mosfet AC speed controller								
	200 bar								
	25 l/min								
	< 73 dB								
	73 dB								

EMA II 20 HD-2 - Dimensional drawing



## Characteristics of masts and residual capacities

Free Lift Triplex (FLT)		FLT 55	FLT 60	FLT 66	FLT 76	FLT 80	FLT 86	FLT 90	FLT 100	FLT 106
α - Mast/fork carriage tilt, forward	۰	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
h1 - Mast lowered height	mm	2750	2900	3150	3590	3720	4020	4150	4590	4820
h2 - Mast free lift	mm	1930	2080	2330	2770	2900	3200	3330	3770	4000
h3 - Mast lifting height	mm	5500	6000	6600	7620	8010	8610	9000	10020	10560
h4 - Mast extended height	mm	3680	6830	7430	8450	8840	9440	9830	11000	11540
Residual capacity with integrated side shift at max heigth	kg	1500	1500	1450	1400	1350	1300	1250	1000	850



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