Technical sheet :

EMA II 20 HD-1

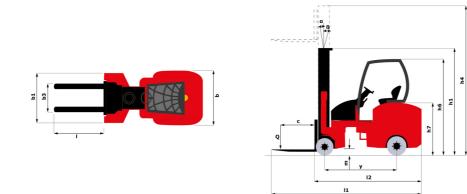




	Technical characteristics	
1.1	Manufacturer	
1.2	Model Name	
1.3	Power source	
1.4	Operator type	
1.5	Max. capacity	Q
1.6	Load center of gravity	c
1.8	Load distance, centre of drive axle to fork	x
1.9	Wheelbase	у
	Weight	,
2.1	Service weight	
2.2	Weight on front axle (laden) / rear axle (laden)	
2.3	Weight on front axle (Unladen) / rear axle (Unladen)	
2.5	Wheels	
3.1	Tires type	
3.1	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	

20 HD-1	Cleated 011 27 April 2024 at 00.10.36 010
	Metric
	Manitou
	EMA II 20 HD-1
	Electrical
	Seated
Q	2000 kg
с	500 mm
х	278 mm
у	1745 mm
	6900 kg
	4200 kg / 4500 kg
	2200 kg / 4700 kg
	Solid tires
	412 x 178
	457 x 178
	2/2
	2
10	1110 mm
11	1250 mm
h6	2260 mm
10 h7	1200 mm
17	3710 mm
12	2560 mm
o1	1250 mm
e/l	40 mm x 125 mm x 1150 mm
0,1	2
53	- 860 mm
n1	50 mm
n2	130 mm
st	1950 mm
st	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
	Mosfot AC speed controller
	Mosfet AC speed controller 200 bar
	200 bar 25 l/min
	23 1/100 < 73 dB
	73 dB
	10 00

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
Mast/fork carriage tilt, forward	۰	1	1	1	1	1	1	1	1	1	1	1
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



Head Office B.P. 249 - 430 rue de l'Aubinière 44150 Ancenis Cedex - France Tel: +33 (0)2 40 09 10 11 - Fax: +33 (0)2 40 09 10 97 www.manitou.com



This publication provides a description of the configuration versions and options for Manitou products, which may differ for equipment. The equipment presented in this brochure may be part of a series, as an option, or it may not be available, depending on the versions. Manitou reserves the right, at any time and without notice, to amend the specifications described and represented. The specifications provided do not bind the manufacturer. For more details, please contact your Manitou agent. This is not a contractually binding document. The presentation of the products is not contractually binding. List of specifications non-exhaustive. The logos as well as the visual identity of the company are owned by Manitou and cannot be used without authorisation. All rights reserved. The photos and diagrams contained in this brochure are only provided for consultation and information purposes.

MANITOU BF SA - Limited company with board of directors - Share capital: 39,668,399 euros - 857 802 508 RCS Nantes