Technical sheet:

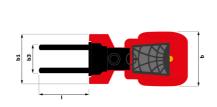
EMA II 20 HD-2

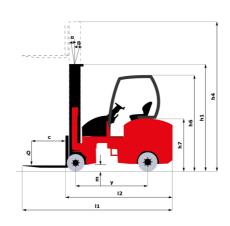




			EMA II 20 HD-2 Created on July 3, 2025 at 9.45 PM UT				
	Technical characteristics		Metric	Imperial			
1.1	Manufacturer		Manitou	Manitou			
1.2	Model Name		EMA II 20 HD-2	EMA II 20 HD-2			
1.3	Power source		Electrical	Electrical			
.4	Operator type		Seated	Seated			
1.5	Max. capacity	Q	2000 kg	4409 lb			
.6	Load center of gravity	C	500 mm	20 in			
.8	Load distance, centre of drive axle to fork	X	278 mm	11 in			
.9	Wheelbase	У	1745 mm	69 in			
	Weight						
.1	Service weight		8700 kg	19180 lb			
.2	Weight on front axle (laden) / rear axle (laden)		6330 kg / 4080 kg	13955 lb / 8995 lb			
.3	Weight on front axle (Unladen) / rear axle (Unladen)		3480 kg / 5220 kg	7672 lb / 11508 lb			
	Wheels		5 135 mg / 5225 mg	101210, 1100010			
.1	Tires type		Solid tires	Solid tires			
.2	Dimensions of front wheels		412 x 178	412 x 178			
.3	Dimensions of rear wheels		457 x 178	457 x 178			
.5	Number of front wheels / rear wheels		2/2	2/2			
5.2	Number of drive wheels		2	2			
.6	Front wheel gauge	b10	1110 mm	44 in			
.7	Rear wheel gauge	b10	1370 mm	54 in			
.,	Dimensions	011	1370 11111	34 III			
.7	Height of overhead quard (cabin)	h6	2260 mm	89 in			
.8	Seat height/stand height	h7	1200 mm	47 in			
.o 19	Overall length	II7 I1	3710 mm	47 III			
20	Length to face of forks	12	2560 mm	140 III			
21	Overall width	b1	1350 mm	53 in			
22	Forks section / width / length	s / e / l	40 mm x 125 mm x 1150 mm	2 in x 5 in x 45 in			
	·	5/6/1	40 mm x 123 mm x 1130 mm	2 111 X 3 111 X 43 111			
23	Fork carriage ISO 2328 (class/form) A/B	b 2	860 mm				
24	Fork carriage width	b3		34 in			
31	Ground clearance below mast	m1	50 mm	2 in			
32	Ground clearance at centre of wheelbase	m2	130 mm	5 in			
33	Aisle Width for pallets 1000 x 1200 crossways	Ast	2000 mm	79 in			
34	Aisle width for 800 x 1200 pallet lengthways	Ast	2200 mm	87 in			
_	Performances		0.501 41.01 41	5 1 6 1			
.1	Travel speed (laden / unladen)		8.50 km/h-9 km/h	5 mph-6 mph			
.2	Lifting speed (laden / unladen)		0.35 m/s-0.45 m/s	1 ft/s-1 ft/s			
.3	Lowering speed (laden / unladen)		0.40 m/s-0.36 m/s	1 ft/s-1 ft/s			
.7	Gradeability (laden / unladen)		6 % / 8 %	6 % / 8 %			
10	Service brake		Hydraulic	Hydraulic			
	Engine			40.111			
.1	Drive motor rating S2 60 min		10 kW	10 kW			
.2	Lift motor rating at S3 15%		9 kW	9 kW			
.3	Battery according to DIN 43531/35/36 A, B, C		DIN 43595	DIN 43595			
.4	Battery voltage / capacity		48 V / 930 Ah	48 V / 930 Ah			
.5	Battery weight (+/- 5%)		1300 kg	2866 lb			
	Miscellaneous						
.1	Type of drive control		Mosfet AC speed controller	Mosfet AC speed controller			
.2	Working hydraulic pressure for attachments		200 bar	2901 PSI			
.3	Oil flow rate for attachments		25 l/min	7 US gpm			
.4	Measured/guaranteed mean noise level at the ear of the operator		< 73 dB	< 73 dB			
3.4	Sound level at the driver's ear according to DIN 12 053		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	in (mm)	108.3 (2750)	114.2 (2900)	124 (3150)	141.3 (3590)	146.5 (3720)	158.3 (4020)	163.4 (4150)	180.7 (4590)	189.8 (4820)
h2 - Mast free lift	in (mm)	76 (1930)	81.9 (2080)	91.7 (2330)	109.1 (2770)	114.2 (2900)	126 (3200)	131.1 (3330)	148.4 (3770)	157.5 (4000)
h3 - Mast lifting height	in (mm)	216.5 (5500)	236.2 (6000)	259.8 (6600)	300 (7620)	315.4 (8010)	339 (8610)	354.3 (9000)	394.5 (10020)	415.7 (10560)
h4 - Mast extended height	in (mm)	144.9 (3680)	268.9 (6830)	292.5 (7430)	332.7 (8450)	348 (8840)	371.7 (9440)	387 (9830)	433.1 (11000)	454.3 (11540)
Residual capacity with integrated side shift at max heigth	lb (kg)	3307 (1500)	3307 (1500)	3197 (1450)	3086 (1400)	2976 (1350)	2866 (1300)	2756 (1250)	2205 (1000)	1874 (850)





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