Technical sheet :

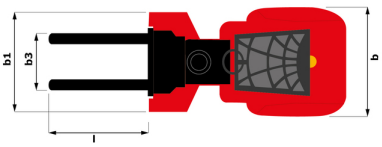
EMA II 20

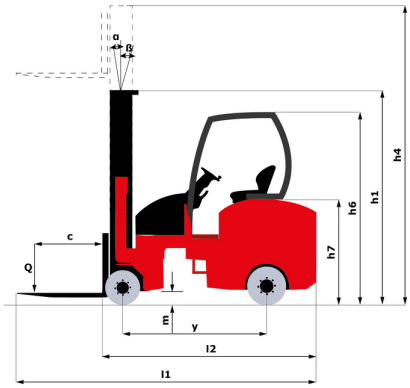


MANITOU
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	Technical characteristics		Metric	Imperial
1.1	Manufacturer		Manitou	Manitou
1.2	Model Name		EMA II 20	EMA II 20
1.3	Power source		Electrical	Electrical
1.4	Operator type		Sitting	Sitting
1.5	Max. capacity	Q	2000 kg	4409 lb
1.6	Load center of gravity	c	500 mm	20 in
1.8	Load distance, centre of drive axle to fork	x	278 mm	11 in
1.9	Wheelbase	y	1745 mm	69 in
	Weight			
2.1	Service weight		6600 kg	14551 lb
2.2	Weight on front axle (laden) / rear axle (laden)		4800 kg / 4400 kg	10582 lb / 9700 lb
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		2200 kg / 4400 kg	4850 lb / 9700 lb
	Wheels			
3.1	Tires type		PPS	PPS
3.2	Dimensions of front wheels		412 x 178	412 x 178
3.3	Dimensions of rear wheels		457 x 152	457 x 152
3.5	Number of front wheels / rear wheels		2 / 2	2 / 2
3.5.2	Number of drive wheels		2	2
3.6	Front wheel gauge	b10	1125 mm	44 in
3.7	Rear wheel gauge	b11	1200 mm	47 in
	Dimensions			
4.7	Height of overhead guard (cabin)	h6	2260 mm	89 in
4.8	Seat height/stand height	h7	1200 mm	47 in
4.19	Overall length	l1	3710 mm	146 in
4.20	Length to face of forks	l2	2560 mm	101 in
4.21	Overall width	b1	1200 mm	47 in
4.22	Forks section / width / length	s / e / l	40 mm x 125 mm x 1150 mm	2 in x 5 in x 45 in
4.23	Fork carriage ISO 2328 (class/form) A/B		2	2
4.24	Fork carriage width	b3	860 mm	34 in
4.31	Ground clearance below mast	m1	50 mm	2 in
4.32	Ground clearance at centre of wheelbase	m2	130 mm	5 in
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	1900 mm	75 in
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	2100 mm	83 in
	Performances			
5.1	Travel speed (laden / unladen)		9 km/h-9.50 km/h	6 mph-6 mph
5.2	Lifting speed (laden / unladen)		0.35 m/s-0.45 m/s	1 ft/s-1 ft/s
5.3	Lowering speed (laden / unladen)		0.40 m/s-0.36 m/s	1 ft/s-1 ft/s
5.7	Gradeability (laden / unladen)		8 % / 10.50 %	8 % / 10.50 %
5.10	Service brake		Hydraulic	Hydraulic
	Engine			
6.1	Drive motor rating S2 60 min		10 kW	10 kW
6.2	Lift motor rating at S3 15%		9 kW	9 kW
6.3	Battery according to DIN 43531/35/36 A, B, C		DIN 43595	DIN 43595
6.4	Battery voltage / capacity		48 V / 750 Ah	48 V / 750 Ah
	Miscellaneous			
8.1	Type of drive control		Mosfet AC speed controller	Mosfet AC speed controller
8.2	Working hydraulic pressure for attachments		200 bar	2901 PSI
8.3	Oil flow rate for attachments		25 l/min	7 US gpm
8.4	Measured/guaranteed mean noise level at the ear of the operator		< 73 dB	< 73 dB
8.4	Sound level at the driver's ear according to DIN 12 053		73 dB	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
Mast/fork carriage tilt, forward	°	1	1	1	1	1	1	1	1	1	1	1	1	1
Mast/fork carriage tilt, backward	°	3	3	3	3	3	3	3	3	3	3	3	3	3
h1 - Mast lowered height	in (mm)	90.6 (2300)	94.9 (2410)	101.2 (2570)	108.3 (2750)	114.2 (2900)	124 (3150)	133.9 (3400)	141.3 (3590)	146.5 (3720)	158.3 (4020)	163.4 (4150)	177.2 (4500)	184.6 (4690)
h2 - Mast free lift	in (mm)	58.3 (1480)	62.6 (1590)	68.9 (1750)	76 (1930)	81.9 (2080)	91.7 (2330)	101.6 (2580)	109.1 (2770)	114.2 (2900)	126 (3200)	131.1 (3330)	143.7 (3650)	152.4 (3870)
h3 - Mast lifting height	in (mm)	165.4 (4200)	178.3 (4530)	197.2 (5010)	218.5 (5550)	236.2 (6000)	259.8 (6600)	283.5 (7200)	300 (7620)	315.4 (8010)	339 (8610)	354.3 (9000)	374 (9500)	401.6 (10200)
h4 - Mast extended height	in (mm)	198 (5030)	211 (5360)	229.9 (5840)	251.2 (6380)	268.9 (6830)	292.5 (7430)	316.1 (8030)	332.7 (8450)	348 (8840)	371.7 (9440)	387 (9830)	412.4 (10475)	440 (11175)
Residual capacity with integrated side shift at max heigth	lb (kg)	3968 (1800)	3748 (1700)	3527 (1600)	3307 (1500)	3086 (1400)	2866 (1300)	2646 (1200)	2535 (1150)	2381 (1080)	2205 (1000)	2205 (1000)	1984 (900)	1653 (750)

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