

Technical sheet :

EMA II 13



 **MANITOU**
HANDLING YOUR WORLD

Technical characteristics			Metric	Imperial
1.1	Manufacturer		Manitou	Manitou
1.2	Model Name		EMA II 13	EMA II 13
1.3	Power source		Electrical	Electrical
1.4	Operator type		Seated	Seated
1.5	Max. capacity	Q	1300 kg	2866 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	1855 mm	73 in
Weight				
2.1	Service weight		5900 kg	13007 lb
2.2	Weight on front axle (laden) / rear axle (laden)		3350 kg / 3850 kg	7385 lb / 8488 lb
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		1900 kg / 4000 kg	4189 lb / 8818 lb
Wheels				
3.1	Tires type		Solid tires	Solid tires
3.2	Dimensions of front wheels		412 x 127 mm	412 x 127 mm
3.3	Dimensions of rear wheels		457 x 152 mm	457 x 152 mm
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	825 mm	32 in
3.7	Rear wheel gauge	b11	1060 mm	42 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	3890 mm	153 in
4.20	Length to face of forks	l2	2740 mm	108 in
4.21	Overall width	b1	1060 mm	42 in
4.22	Forks section / width / length	s / e / l	40 mm x 100 mm x 1150 mm	2 in x 4 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	1700 mm	67 in
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	1900 mm	75 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-0.35 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 / 620 Ah	48 V / 620 Ah
6.5	Battery weight (+/- 5%)		1030 kg	2271 lb
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 13 - Dimensional drawing



Characteristics of masts and residual capacities

Free Lift Triplex (FLT)		FLT 42	FLT 50	FLT 56	FLT 60	FLT 66	FLT 76
α - Mast/fork carriage tilt, forward	°	1	1	1	1	1	1
β - Mast/fork carriage tilt, backward	°	3	3	3	3	3	3
h1 - Mast lowered height	in (mm)	92.9 (2360)	103.5 (2630)	110.6 (2810)	116.5 (2960)	126.4 (3210)	143.7 (3650)
h2 - Mast free lift	in (mm)	55.1 (1400)	68.9 (1750)	7.6 (193)	81.9 (2080)	91.7 (2330)	105.1 (2670)
h3 - Mast lifting height	in (mm)	165.4 (4200)	197.2 (5010)	218.5 (5550)	236.2 (6000)	259.8 (6600)	300 (7620)
h4 - Mast extended height	in (mm)	198 (5030)	232.7 (5910)	253.9 (6450)	271.7 (6900)	295.3 (7500)	335.4 (8520)
Residual capacity with integrated side shift at max height	lb (kg)	2866 (1300)	2646 (1200)	2425 (1100)	2205 (1000)	1984 (900)	1653 (750)



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