Technical sheet:

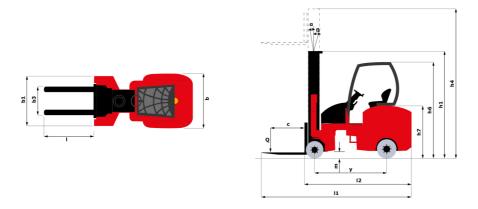
EMA II 17





Model Name			EMAII 17 Gleat	ed 011 30 April 2024 at 12.10.33 AW
Model Name		Technical characteristics		Metric
	1.1	Manufacturer		Manitou
	1.2	Model Name		EMA II 17
Max. capacity	1.3	Power source		Electrical
Load cleater of garaly Care Solit man	1.4	Operator type		Seated
Load distance, centre of drive axie to fork x 278 mm 1745	1.5	Max. capacity	Q	1700 kg
Weelbase Weight Service weight (Unidem) / rear axie (Unidem) Service weight (Unidem) / rear axie (Unidem) Service weight Service w	1.6	Load center of gravity	С	500 mm
Weelbase Weight	1.8		Х	
	1.9		٧	1745 mm
Service weight		Weight		
2.2 Weight on front aske (Unideen) / rear aske (Unideen) 4250 kg / 3250 kg Weight on front aske (Unideen) / rear aske (Unideen) 2000 kg / 4000 kg Wheels Solid tites 3.1 Tires type 412 x 152 3.2 Dimensions of front wheels 447 x 152 3.3 Dimensions of front wheels / rear wheels 2 / 2 3.5 Number of front wheels / rear wheels 2 / 2 3.6 Front wheel gauge b10 360 mm 3.7 Rear wheel gauge b11 10800 mm 4.8 Seat height's tand beight h6 2260 mm 4.8 Seat height's for overhead guard (cabin) h6 2260 mm 4.8 Seat height's tand beight h7 1000 mm 4.9 Overall length 11 3710 mm 4.9 Overall width b1 1000 mm 2.1 Overall width b1 1000 mm 2.2 Fork carriage Width b1 1000 mm 2.2 Fork carriage width b1 1000 mm 2.2 Fork carriage width b1 50 mm 3.3 Alse width for soll of searce at centre of wheelbase m2 130 mm 5.1 Twing speed (lad	2.1	•		6000 kg
Weight on front axle (Unladen) / rear axle (Unladen)	2.2	•		*
Minesta Tires type	2.3	- , , , ,		* *
Times type	2.0			2000 kg / 1000 kg
1	3 1			Solid tires
Dimensions of rear wheels				
2				
Number of drive wheels 2 3.6 Front wheel gauge				
From twheel gauge				
Rear wheel gauge bil 1080 mm			h10	
Height of overhead guard (cabin) h6 2260 mm 18.	3./		DII	1080 mm
4.8. Seat height/stand height h7 1200 mm .19 Overall length 11 3710 mm .20 Length to face of forks 12 2560 mm .21 Overall width b1 1080 mm .22 Fork section / width / length s / e / l 40 mm x 100 mm x 1150 mm .23 Fork camiage setton / width / length b3 860 mm .24 Fork camiage width b3 860 mm .31 Ground clearance below mast m1 50 mm .32 Ground clearance te denter of wheelbase m2 130 mm .33 A isie width for 800 x 1200 crossways Ast 1800 mm .34 A isie width for 800 x 1200 pallet lengthways Ast 2000 mm .43 A isie width for 800 x 1200 pallet lengthways Ast 2000 mm .5.1 Travel speed (laden / unladen) 9 km/h9-50 km/h 6.2 1 km/h9-50 km/h 6.3 5 km/h9-50 km/h 6.3 6.3 1 km/h9-50 km/h 6.3 6.7 6 cradeability (laden / unladen) 8 km/h9-50 km/h 6.3	4.7		16	0060
11 3710 mm 12 2560 mm 12				
Length to face of forks 12 2560 mm 21 Overall width 1080 mm 22 Forks section / width / length 5 / e / l 40 mm x 100 mm x 1150 mm 23 Fork carriage lSt0 2328 (class/form) A/B 2 2 24 Fork carriage width 50 mm 23 Ground clearance below mast m1 50 mm 31 Ground clearance at centre of wheelbase m2 130 mm 32 Ground clearance at centre of wheelbase m2 130 mm 33 Aisle Width for pallets 1000 x 1200 crossways Ast 1800 mm 33 Aisle Width for 800 x 1200 pallet lengthways Ast 2000 mm Performances				
		•		
2.22 Forks section / width / length \$ / 40 mm x 100 mm x 1150 mm 2.23 Fork carriage RISD 2328 (class/form) A/B 2 2.44 Fork carriage width b3 860 mm 3.21 Ground clearance at centre of wheelbase m2 130 mm 3.22 Ground clearance at centre of wheelbase m2 130 mm 3.34 Aisle Width for pallets 1000 x 1200 crossways Ast 2000 mm 3.34 Aisle width for 800 x 1200 pallet lengthways Ast 2000 mm 5.1 Travel speed (laden / unladen) 4 9 km/h-9.50 km/h 5.2 Lifting speed (laden / unladen) 9 km/h-9.50 km/h 3.5 m/s -0.45 m/s 5.2 Cardeability (laden / unladen) 9 km/h-9.50 km/h 4.5 m/s 5.7 Gradeability (laden / unladen) 9 km/h-9.50 km/h 4.5 m/s 5.7 Gradeability (laden / unladen) 9 km/h-9.50 km/h 4.5 m/s 6.1 Drive motor rating \$2.50 min 9 km 9 km/s 6.2 Lift motor rating at \$3.15% 9 km 9 km/s 6.4 Battery worlange / capacity				
Fork carriage ISO 2328 (class/form) A/B 2 3 860 mm 3 860 mm 3 3 8	4.21			
Fork carriage width	4.22		s / e / l	
3.31 Ground clearance below mast m1 50 mm .32 Ground clearance at centre of wheelbase m2 130 mm .33 Asise width for pallets 1000 x 1200 crossways Ast 1800 mm .34 Asise width for 800 x 1200 pallet lengthways Ast 20000 mm .34 Performances	4.23	, ,		
3.32 Ground clearance at centre of wheelbase m2 130 mm .33 Aisle Width for pallets 1000 x 1200 crossways Ast 1800 mm .34 Aisle width for 800 x 1200 pallet lengthways Ast 2000 mm Performances .1 Travel speed (laden / unladen) 9 km/h-9.50 km/h .5.2 Lifting speed (laden / unladen) 0.35 m/s 0.45 m/s .5.3 Lowering speed (laden / unladen) 0.40 m/s 0.36 m/s .5.7 Gradeability (laden / unladen) 8 % / 10.50 % .5.7 Gradeability (laden / unladen) 8 % / 10.50 % .5.1 Drive motor rating \$2.60 min 10 kW .6.1 Drive motor rating \$2.50 min 9 kW .6.2 Lift motor rating at \$3.15% 9 kW .6.3 Battery according to DIN 43531/35/36 A, B, C DIN 43595 .6.4 Battery voltage / capacity 48 V / 620 Ah .6.5 Battery weight (*/- 5%) 1030 kg .6.5 Battery weight (*/- 5%) 1030 kg .6.2 Working hydraulic pressure for attachments 200 bar <t< td=""><td>4.24</td><td>· ·</td><td></td><td></td></t<>	4.24	· ·		
.33 Aisle Width for pallets 1000 x 1200 crossways Ast 1800 mm .34 Aisle width for 800 x 1200 pallet lengthways Ast 2000 mm Performances 5.1 Travel speed (laden / unladen) 9 km/h-9.50 km/h 5.2 Liffing speed (laden / unladen) 0.35 m/s-0.45 m/s 5.3 Lowering speed (laden / unladen) 8 % / 10.50 % 5.7 Gradeability (laden / unladen) 8 % / 10.50 % 5.7 Gradeability (laden / unladen) 4 % / 10.50 % 6.1 Service brake Hydraulic Engine 6.1 Drive motor rating \$2.60 min 10 kW 6.2 Lift motor rating \$2.50 min 9 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN 43595 6.4 Battery voltage / capacity 48 V / 620 Ah 6.5 Battery weight (+/- 5%) 1030 kg 8.1 Type of drive control Mosfet AC speed controller 8.2 Working hydraulic pressure for attachments 200 bar 8.3 Oil flow rate for attachments 25 1/min 8.4 Measured/guaranteed mean noise level at the ear of the op	4.31	Ground clearance below mast	m1	50 mm
3.34 Aisle width for 800 x 1200 pallet lengthways Ast 2000 mm Performances 5.1 Travel speed (laden / unladen) 9 km/h-9.50 km/h 5.2 Lifting speed (laden / unladen) 0.35 m/s-0.45 m/s 5.3 Lowering speed (laden / unladen) 8 / 10.50 % 5.7 Gradeability (laden / unladen) 8 / 10.50 % 5.7 Service brake Hydraulic 6.10 Service brake Hydraulic 6.1 Drive motor rating \$2.60 min 10 kW 6.2 Lift motor rating at \$3.15% 9 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN 43595 6.4 Battery voltage / capacity 48 V / 620 Ah 6.5 Battery weight (+/- 5%) 1030 kg 8.1 Type of drive control Mosfet AC speed controller 8.2 Working hydraulic pressure for attachments 200 bar 8.3 Oil flow rate for attachments 25 l/min 8.4 Measured/guaranteed mean noise level at the ear of the operator < 73 dB	4.32	Ground clearance at centre of wheelbase	m2	130 mm
Performances	4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	1800 mm
5.1 Travel speed (laden / unladen) 9 km/h-9.50 km/h 5.2 Lifting speed (laden / unladen) 0.35 m/s-0.45 m/s 5.3 Lowering speed (laden / unladen) 0.40 m/s-0.36 m/s 5.7 Gradeability (laden / unladen) 8 % / 10.50 % 6.10 Service brake Hydraulic Engine 6.1 Drive motor rating \$2.60 min 10 kW 6.2 Lift motor rating at \$3.15% 9 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN 43595 6.4 Battery voltage / capacity 48 V / 620 Ah 6.5 Battery weight (+/- 5%) 1030 kg Miscellaneous 8.1 Type of drive control Mosfet AC speed controller 8.2 Working hydraulic pressure for attachments 200 bar 8.3 Oil flow rate for attachments 25 l/min 8.4 Measured/guaranteed mean noise level at the ear of the operator < 73 dB	4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	2000 mm
5.2 Lifting speed (laden / unladen) 0.35 m/s-0.45 m/s 5.3 Lowering speed (laden / unladen) 0.40 m/s-0.36 m/s 5.7 Gradeability (laden / unladen) 8 % / 10.50 % 6.10 Service brake Hydraulic Engine 6.1 Drive motor rating S2 60 min 10 kW 6.2 Lift motor rating at S3 15% 9 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN 43595 6.4 Battery voltage / capacity 48 V / 620 Ah 6.5 Battery weight (+/- 5%) 1030 kg Miscellaneous 8.1 Type of drive control Mosfet AC speed controller 8.2 Working hydraulic pressure for attachments 200 bar 8.3 Oil flow rate for attachments 25 l/min 8.4 Measured/guaranteed mean noise level at the ear of the operator < 73 dB		Performances		
Lowering speed (laden / unladen) 5.7 Gradeability (laden / unladen) 5.7 Gradeability (laden / unladen) 5.7 Gradeability (laden / unladen) 5.8 * / 10.50 % 5.10 Service brake Engine 6.1 Drive motor rating \$2.60 min 6.2 Lift motor rating at \$3.15% 6.3 Battery according to DIN 43531/35/36 A, B, C 6.4 Battery voltage / capacity 6.5 Battery weight (+/- 5%) 6.6 Battery weight (+/- 5%) 6.7 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 6.5 Machine of the control 6.6 Mosfet AC speed controller 6.7 A d B 6.8 Measured/guaranteed mean noise level at the ear of the operator 6.7 A d B	5.1	Travel speed (laden / unladen)		9 km/h-9.50 km/h
5.7 Gradeability (laden / unladen) Service brake Engine 6.1 Drive motor rating \$2.60 min 6.2 Lift motor rating at \$3.15% 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 Working hydraulic pressure for attachments 8.2 Working hydraulic pressure for attachments 8.3 Oil flow rate for attachments Measured/guaranteed mean noise level at the ear of the operator Messured/guaranteed mean noise level at the ear of the operator	5.2	Lifting speed (laden / unladen)		0.35 m/s-0.45 m/s
Service brake Engine 6.1 Drive motor rating \$2 60 min 6.2 Lift motor rating at \$3 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 Working hydraulic pressure for attachments 8.2 Working hydraulic pressure for attachments 8.3 Oil flow rate for attachments Measured/guaranteed mean noise level at the ear of the operator Hydraulic 10 kW 10 k	5.3	Lowering speed (laden / unladen)		0.40 m/s-0.36 m/s
Engine Incomposition of the protocol o	5.7	Gradeability (laden / unladen)		8 % / 10.50 %
5.1 Drive motor rating \$2.60 min 10 kW 6.2 Lift motor rating at \$3.15% 9 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN 43595 6.4 Battery voltage / capacity 48 V / 620 Ah 6.5 Battery weight (+/- 5%) 1030 kg Miscellaneous 8.1 Type of drive control Mosfet AC speed controller 8.2 Working hydraulic pressure for attachments 200 bar 8.3 Oil flow rate for attachments 25 l/min 8.4 Measured/guaranteed mean noise level at the ear of the operator < 73 dB	5.10	Service brake		Hydraulic
6.2 Lift motor rating at S3 15% 9 kW 6.3 Battery according to DIN 43531/35/36 A, B, C DIN 43595 6.4 Battery voltage / capacity 48 V / 620 Ah 6.5 Battery weight (+/- 5%) 1030 kg Miscellaneous 8.1 Type of drive control Mosfet AC speed controller 8.2 Working hydraulic pressure for attachments 200 bar 8.3 Oil flow rate for attachments 25 l/min 8.4 Measured/guaranteed mean noise level at the ear of the operator < 73 dB		Engine		
6.3 Battery according to DIN 43531/35/36 A, B, C DIN 43595 6.4 Battery voltage / capacity 48 V / 620 Ah 6.5 Battery weight (+/- 5%) 1030 kg Miscellaneous 8.1 Type of drive control Mosfet AC speed controller 8.2 Working hydraulic pressure for attachments 200 bar 8.3 Oil flow rate for attachments 25 l/min 8.4 Measured/guaranteed mean noise level at the ear of the operator < 73 dB	6.1	Drive motor rating S2 60 min		10 kW
6.4 Battery voltage / capacity 48 V / 620 Ah 6.5 Battery weight (+/- 5%) 1030 kg Miscellaneous Under Capacity Mosfet AC speed controller 8.2 Working hydraulic pressure for attachments 200 bar 8.3 Oil flow rate for attachments 25 l/min 8.4 Measured/guaranteed mean noise level at the ear of the operator < 73 dB	6.2	Lift motor rating at S3 15%		9 kW
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 1030 kg Mosfet AC speed controller 200 bar 25 l/min < 73 dB	6.3	Battery according to DIN 43531/35/36 A, B, C		DIN 43595
Miscellaneous 8.1 Type of drive control Mosfet AC speed controller 8.2 Working hydraulic pressure for attachments 200 bar 8.3 Oil flow rate for attachments 25 l/min 8.4 Measured/guaranteed mean noise level at the ear of the operator < 73 dB	6.4	Battery voltage / capacity		48 V / 620 Ah
Miscellaneous 8.1 Type of drive control Mosfet AC speed controller 8.2 Working hydraulic pressure for attachments 200 bar 8.3 Oil flow rate for attachments 25 l/min 8.4 Measured/guaranteed mean noise level at the ear of the operator < 73 dB	6.5	Battery weight (+/- 5%)		1030 kg
Type of drive control Mosfet AC speed controller Working hydraulic pressure for attachments Oil flow rate for attachments Measured/guaranteed mean noise level at the ear of the operator Mosfet AC speed controller 200 bar 25 l/min < 73 dB				
Working hydraulic pressure for attachments 200 bar 3.3 Oil flow rate for attachments 25 l/min 4.4 Measured/guaranteed mean noise level at the ear of the operator <73 dB	8.1			Mosfet AC speed controller
8.3 Oil flow rate for attachments 25 l/min 8.4 Measured/guaranteed mean noise level at the ear of the operator <73 dB	8.2	**		·
8.4 Measured/guaranteed mean noise level at the ear of the operator < 73 dB	8.3			
,	8.4			
8.4 Sound level at the drivers ear according to DIN 12 U53	8.4	Sound level at the driver's ear according to DIN 12 053		73 dB

EMA II 17 - Dimensional drawing



Characteristics of masts and residual capacities

Free Lift Triplex (FLT)		FLT 39	FLT 42	FLT 46	FLT 48	FLT 50	FLT 52	FLT 56	FLT 60	FLT 66	FLT 72	FLT 76
Mast/fork carriage tilt, forward	٠	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	2210	2300	2440	2500	2570	2640	2750	2900	3150	3400	3590
h2 - Mast free lift	mm	1390	1480	1620	1680	1750	1820	1930	2080	23300	2580	2770
h3 - Mast lifting height	mm	3930	4200	4620	4800	5010	5220	5550	6000	6600	7200	7620
h4 - Mast extended height	mm	4760	5030	5450	5630	5840	6050	6380	6830	7430	8030	8450
Residual capacity with integrated side shift at max heigth	kg	1250	1300	1300	1200	1200	1200	1200	1100	950	900	900





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