Technical sheet:

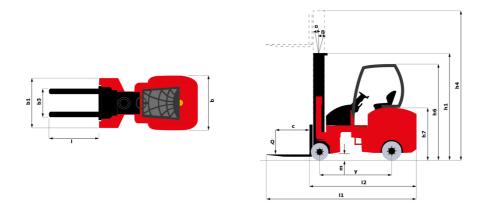
EMA II 18 HL-2





Model Name			EMAII 18 HE-2 GIGO	ted on April 30, 2024 at 4.03.20 Aivi
Model Name		Technical characteristics		Metric
Power source	1.1	Manufacturer		Manitou
	1.2	Model Name		EMA II 18 HL-2
Max. capacity	1.3	Power source		Electrical
Load cleater of garalty C Software C Soft	1.4	Operator type		Seated
	1.5	Max. capacity	Q	1750 kg
Weight Weight Service weight Ser	1.6	Load center of gravity	c	500 mm
Weight Weight Service weight Ser	1.8		х	
Meight Service weight Service weig	1.9		٧	1745 mm
Service weight Service weight Service		Weight		
Weight on front able (laden) / near axie (Unladen) \$3300 kg / 4000 kg	2.1	•		8700 ka
Weight on front axie (Unladen) / rear axie (Unladen) Substitute	2.2	•		
	2.3			
	2.0	. , , , ,		0.00 kg / 0220 kg
	3.1			Solid tires
3.5 Number of front wheels / rear wheels 2 / 2 5.2 Number of drive wheels 2 3.6 Find wheel gauge b10 1110 mm 3.7 Rear wheel gauge b11 1350 mm 4.7 Helph of owerhead guard (cabin) h6 2260 mm 4.8 Seat helph/stand height h7 1200 mm 4.9 Overall length 11 3740 mm 4.9 Lepth to face of forks 12 2590 mm 2.0 Length to face of forks 12 2590 mm 2.1 Overall width b1 1350 mm 2.2 Fork section / width / length \$ / ** 40 mm x 125 mm x 1150 mm 2.2 Fork carriage width \$ / ** \$ / ** 2 2 2.4 Fork carriage width \$ / ** \$ / ** 2 2 2 4 / ** 2 2 2 2 4 / ** 2 2 3 8 / ** 2 2 130 mm 3 80 mm 3 80 mm				
5.5 2 Number of drive wheels 2 3.6 6 Finnt wheel gauge b10 1110 mm 3.7 Rear wheel gauge b11 1350 mm 4.7 Height of overhead guard (cabin) h6 2260 mm 4.8 Seat height stand height h7 1200 mm 1.9 Overall length l1 3740 mm 1.2 Length of ace of forks l2 2590 mm 2.0 Verall width b1 1350 mm 2.2 Fork section / width / length s / e / l 40 mm x 125 mm x 1150 mm 2.2 Fork carriage SISO 2328 (class/form) A/B 2 2 2.2 Fork carriage width b3 860 mm 3.1 Ground clearance below mast m1 50 mm 3.2 Ground clearance at centre of wheelbase m2 130 mm 3.3 Alsie width for 800 x 1200 rensways Ast 2000 mm 5.1 Tavel speed (laden / unladen) Ast 2000 mm 5.2 Liffing speed (laden / unladen) 9 km/h-9.50 km/h 5.2 Liffing speed (laden / unladen) 0.40 m/s-9.36 m/s 5.3 Lowering speed (laden / unladen) 0.40 m/s-9.36 m/s 5.4 Gr				
Sear wheel gauge				
			h10	
Height of overhead guard (cabin) h6 2260 mm 1.8	3./		BII	1350 mm
4.8 Seat height/stand height h7 1200 mm .19 Overall length 11 3740 mm .20 Length to face of forks 12 2590 mm .21 Overall width b1 1350 mm .22 Fork section / width / length s / e / l 40 mm x 125 mm x 1150 mm .23 Fork carriage lSO 2928 (class/form) A/B s / e / l 40 mm x 125 mm x 1150 mm .24 Fork carriage width b3 860 mm .31 Ground clearance below mast m1 50 mm .32 Ground clearance at centre of wheelbase m2 130 mm .33 Aisle Width for pallets 1000 x 1200 crossways Ast 2000 mm .34 Aisle width for 800 x 1200 pallet lengthways Ast 2000 mm .4 List width for 800 x 1200 pallet lengthways Ast 2000 mm .5.1 Travel speed (laden / unladen) 9 km/h-9.50 km/h 9 km/h-9.50 km/h .5.2 Lift mg speed (laden / unladen) 0.40 m/s-0.35 m/s-0.45 m/s 8 k / 10.50 % .5.7 Gradeability (laden / unladen)	4.7			2000
19 Overall length 11 3740 mm 12 2590 mm 12 2590 mm 12 2590 mm 1300 mm 13				
		-		
.22 Forks section / width / length s / e / l 40 mm x 125 mm x 1150 mm .23 Fork carriage Width b3 860 mm .24 Fork carriage Width b3 860 mm .31 Ground clearance below mast m1 50 mm .32 Ground clearance at centre of wheelbase m2 130 mm .33 Aisle Width for pallets 1000 x 1200 crossways Ast 2000 mm .34 Aisle Width for 800 x 1200 pallet lengthways Ast 22000 mm .34 Travel speed (laden / unladen) 9 km/h-9.50 km/h 9 km/h-9.50 km/h .5.1 Travel speed (laden / unladen) 9 km/h-9.50 km/h 9 km/h-9.50 km/h .5.2 Lifting speed (laden / unladen) 9 km/h-9.50 km/h 9 km/h-9.50 km/h .5.2 Grodeability (laden / unladen) 9 km/h-9.50 km/h 9 km/h-9.50 km/h .5.7 Gradeability (laden / unladen) 9 km/h-9.50 km/h 9 km/h-9.50 km/h .5.7 Gradeability (laden / unladen) 9 km/h-9.50 km/h 9 km/h-9.50 km/h .5.1 Bezive kerbase 9 km/h-9.50 km/h 9 km/h-9.50 km/h				
Fork carriage ISO 2328 (class/form) A/B 2 3 860 mm 3 860 mm 3 3 86	4.21			
Fork carriage width			s / e / l	
3.31 Ground clearance below mast m1 50 mm .32 Ground clearance at centre of wheelbase m2 130 mm .33 Aisle Width for pallets 1000 x 1200 pallet lengthways Ast 2000 mm .34 Aisle width for 800 x 1200 pallet lengthways Ast 2200 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 % .5.1 Engine Hydraulic .5.2 Lift motor rating \$2.60 min 10 kW .5.2 Lift motor rating \$2.60 min 10 kW .5.2 Lift motor rating \$2.60 min 9 kW .5.3 Battery according to DIN 43531/35/36 A, B, C DIN 43595 .6.4 Battery voltage / capacity 48 V, 930 Ah .6.5 Battery weight (+/- 5%) 1300 kg .6.5 Battery weight (+/- 5%) Mosfet AC speed controller .		, ,		
.32 Ground clearance at centre of wheelbase m2 130 mm .33 Aisle Width for pallets 1000 x 1200 crossways Ast 2000 mm .34 Aisle width for 800 x 1200 pallet lengthways Ast 2200 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) 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 \$2.50 min 10 kW 6.2 Lift motor rating \$1.53 15% 9 kW 6.3 Battery voltage / capacity 48 V / 930 Ah 6.5 Battery voltage / capacity 48 V / 930 Ah 6.5 Battery weight (+/- 5%) 1300 kg Miscellaneous Mosfet AC speed controller 8.2 Working hydraulic pressure for attachments 200 bar 6.1 Oil flow rate for attachments 25 l/min <td>4.24</td> <td>· ·</td> <td></td> <td></td>	4.24	· ·		
.33 Aisle Width for pallets 1000 x 1200 crossways Ast 2000 mm .34 Aisle width for 800 x 1200 pallet lengthways Ast 2200 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 Gradeability (laden / unladen) 8 % / 10.50 % 6.1 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 / 930 Ah 6.5 Battery weight (+/- 5%) 1300 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	4.31			
Asile width for 800 x 1200 pallet lengthways Performances 5.1 Travel speed (laden / unladen) 5.2 Lifting speed (laden / unladen) 5.3 Lowering speed (laden / unladen) 5.7 Gradeability (laden / unladen) 5.8 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%) 6.5 Battery weight (+/- 5%) 6.7 Working hydraulic pressure for attachments 8.2 Working hydraulic pressure for attachments Oil flow rate for attachments Ast 2200 mm 9 km/h-9.50 km/h 0.35 m/s-0.45 m/s 8 % / 10.50 % 8 % / 10.50 % 9 kW 10 kW	4.32		m2	
Performances	4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	2000 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 / 930 Ah 6.5 Battery weight (+/- 5%) 1300 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 I/min	4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	2200 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 % 5.10 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 / 930 Ah 6.5 Battery weight (+/- 5%) 1300 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 I/min				
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 % 5.8 Engine	5.1	Travel speed (laden / unladen)		9 km/h-9.50 km/h
5.7 Gradeability (laden / unladen) 8 % / 10.50 % 6.10 Service brake Hydraulic 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 / 930 Ah 6.5 Battery weight (+/- 5%) 1300 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 I/min	5.2	Lifting speed (laden / unladen)		0.35 m/s-0.45 m/s
Service brake	5.3	Lowering speed (laden / unladen)		0.40 m/s-0.36 m/s
Engine 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 / 930 Ah 6.5 Battery weight (+/-5%) 1300 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 I/min	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 / 930 Ah 6.5 Battery weight (+/-5%) 1300 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 I/min	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 / 930 Ah 6.5 Battery weight (+/- 5%) 1300 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 I/min		Engine		
6.3 Battery according to DIN 43531/35/36 A, B, C DIN 43595 6.4 Battery voltage / capacity 48 V / 930 Ah 6.5 Battery weight (+/- 5%) 1300 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 I/min	6.1	Drive motor rating S2 60 min		10 kW
6.4 Battery voltage / capacity 48 V / 930 Ah 6.5 Battery weight (+/- 5%) 1300 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 I/min	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 Oil flow rate for attachments 1300 kg Mosfet AC speed controller 200 bar 25 I/min	6.3	Battery according to DIN 43531/35/36 A, B, C		DIN 43595
Miscellaneous Mosfet AC speed controller 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	6.4	Battery voltage / capacity		48 V / 930 Ah
8.1Type of drive controlMosfet AC speed controller8.2Working hydraulic pressure for attachments200 bar8.3Oil flow rate for attachments25 l/min	6.5	Battery weight (+/- 5%)		1300 kg
Working hydraulic pressure for attachments 200 bar 3.3 Oil flow rate for attachments 25 l/min		Miscellaneous		
8.3 Oil flow rate for attachments 25 I/min	8.1	Type of drive control		Mosfet AC speed controller
8.3 Oil flow rate for attachments 25 I/min	8.2	Working hydraulic pressure for attachments		200 bar
	8.3			25 l/min
	8.4	Measured/guaranteed mean noise level at the ear of the operator		< 73 dB
	8.4			

EMA II 18 HL-2 - Dimensional drawing



Characteristics of masts and residual capacities

Free Lift Triplex (FLT)		FLT 80	FLT 84	FLT 90	FLT 95	FLT 100	FLT 102	FLT 110	FLT 120	FLT 125	FLT 127
Mast/fork carriage tilt, forward	۰	1	1	1	1	1	1	1	1	1	1
Mast/fork carriage tilt, backward	۰	4	4	4	4	4	4	4	4	4	4
h1 - Mast lowered height	mm	3720	3900	4150	4270	4590	4690	5000	5340	5550	5570
h2 - Mast free lift	mm	2900	3080	3330	3650	3770	3870	4180	4520	4680	4750
h3 - Mast lifting height	mm	8010	8400	9000	9500	10020	10200	11010	12000	12510	12720
h4 - Mast extended height	mm	8840	9230	9830	10350	10850	11175	11985	13005	13485	13695
Residual capacity with integrated side shift at max heigth	kg	1250	1250	1250	1100	1100	1000	850	750	700	500





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