

Technical sheet :

# EMA II 18 HL-1



Technical characteristics			Metric
1.1	Manufacturer		Manitou
1.2	Model Name		EMA II 18 HL-1
1.3	Power source		Electrical
1.4	Operator type		Seated
1.5	Max. capacity	Q	1750 kg
1.6	Load center of gravity	c	500 mm
1.8	Load distance, centre of drive axle to fork	x	308 mm
1.9	Wheelbase	y	1745 mm
Weight			
2.1	Service weight		6900 kg
2.2	Weight on front axle (laden) / rear axle (laden)		4200 kg / 4500 kg
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		2200 kg / 4700 kg
Wheels			
3.1	Tires type		Solid tires
3.2	Dimensions of front wheels		412 x 178
3.3	Dimensions of rear wheels		457 x 178
3.5	Number of front wheels / rear wheels		2 / 2
3.5.2	Number of drive wheels		2
3.6	Front wheel gauge	b10	1110 mm
3.7	Rear wheel gauge	b11	1250 mm
Dimensions			
4.7	Height of overhead guard (cabin)	h6	2260 mm
4.8	Seat height/stand height	h7	1200 mm
4.19	Overall length	l1	3740 mm
4.20	Length to face of forks	l2	2590 mm
4.21	Overall width	b1	1250 mm
4.22	Forks section / width / length	s / e / l	40 mm x 125 mm x 1150 mm
4.23	Fork carriage ISO 2328 (class/form) A/B		2
4.24	Fork carriage width	b3	860 mm
4.31	Ground clearance below mast	m1	50 mm
4.32	Ground clearance at centre of wheelbase	m2	130 mm
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	1950 mm
4.34	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 %
5.10	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 / 775 Ah
6.5	Battery weight (+/- 5%)		1435 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
8.4	Sound level at the driver's ear according to DIN 12 053		73 dB

EMA II 18 HL-1 - Dimensional drawing



## Characteristics of masts and residual capacities

Free Lift Triplex (FLT)		FLT 80	FLT 84	FLT 86	FLT 90	FLT 95	FLT 100	FLT 102	FLT 106
$\alpha$ - Mast/fork carriage tilt, forward	°	1	1	1	1	1	1	1	1
$\beta$ - Mast/fork carriage tilt, backward	°	4	4	4	4	4	4	4	4
h1 - Mast lowered height	mm	3720	3900	4020	4150	4500	4590	4690	4820
h2 - Mast free lift	mm	2900	3080	3200	3330	3650	3770	3870	4000
h3 - Mast lifting height	mm	8010	8400	8610	9000	9500	10020	10200	10560
h4 - Mast extended height	mm	8840	9230	9440	9830	10475	10850	11175	11535
Residual capacity with integrated side shift at max height	kg	1250	1150	1150	1000	1000	750	750	650



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