Technical sheet:

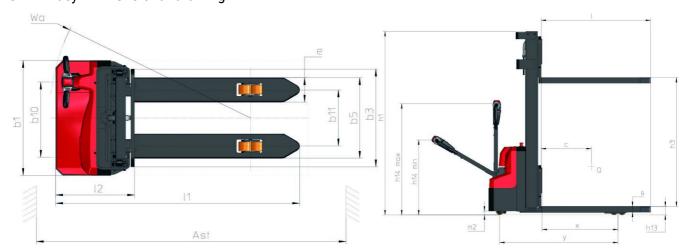
ES 112 EASY





Technical characteristics			ES 112 EASY CIE	led off May 13, 2024 at 9.30.33 AM 010
1.2 Model Name		Technical characteristics		Metric
1.1	1.1	Manufacturer		MANITOU
1.4 Operator type	1.2	Model Name		ES 112 Easy
1.5	1.3	Power source		Electrical
1.5	1.4	Operator type		Pedestrian
1.6	1.5		Q	1200 kg
Neelbase	1.6		С	600 mm
	1.8	Distance from Load backrest to center of rear axle	X	795 mm
2.1 Service weight 610 kg	1.9	Wheelbase	у	1188 mm
2.2 Weight on froat avile (laden) / rear axie (unladen) 448 kg / 152 kg		Weight		
2.3 Weight on front axie (Unladen) / rear axie (Unladen) A48 kg / 162 kg	2.1	Service weight		610 kg
Wheels	2.2	Weight on front axle (laden) / rear axle (laden)		645 kg / 1165 kg
Winels Polyurefiane Polyurefiane Polyurefiane Polyurefiane A / 80x64	2.3	. , , , ,		
3.1 Tires type				3 3
3.3 Number of load wheels / Size of load wheels 1,8 80x64 3.4 Number of stabilizer wheels 1,8 80x64 3.5 Number of from wheels / Size of dine stabilizer wheels 3.5 Number of from wheels / Size of dine stabilizer wheels 3.5 Number of drive wheels / Size of dine wheels 3.6 Front wheel gauge b10 3.7 Rear wheel gauge b11 396 mm	3.1			Polyurethane
3.4 Number of stabilizer wheels / Size of the stabilizer wheels 2 / 4 3.5 Number of front wheels / Irear wheels 2 / 4 3.5 Number of front wheels / Size of drive wheels 1/210x70 3.6 Front wheel gauge b10 566 mm 3.7 Rear wheel gauge b11 396 mm Dimensions		•		•
3.5 Number of front wheels / rear wheels 2 / 4 3.5.2 Number of drive wheels / Size of drive wheels 3.6 Front wheel gauge b10 566 mm 3.7 Rear wheel gauge b11 396 mm 500 mm				
3.5.2 Number of drive wheels / Size of drive wheels 1/210x70 566 mm 3.7 Rear wheel gauge b10 566 mm 3.7 Rear wheel gauge b11 396 mm 566 mm 3.7 Rear wheel gauge b11 396 mm 566 mm 3.7 Rear wheel gauge b11 396 mm 566 mm 3.7 March 567 mm 567 mm 567 mm 567 mm 567 mm 567 mm 568				
3.6 Front wheel gauge b10 566 mm 3.7 Rear wheel gauge b11 396 mm Dimensions 4.15 Fork height in low position h13 85 mm 4.19 Overall length i1 1698 mm 4.20 Length to face of forks I2 555 mm 4.21 Overall width b1 800 mm 4.22 Fork section / width / length s / e / I 60 mm / 170 mm / 1150 mm 4.24 Fork carriage width b3 680 mm 4.31 Ground clearance below mast m1 26 mm 4.32 Ground clearance at centre of wheelbase m2 25 mm 4.33 Aisle Width for pallets 1000 x 1200 crossways Ast 215 mm 4.34 Aisle width for 800 x 1200 pallet lengthways Ast 216 mm 4.35 Tuning radius Wa 1392 mm Performances Wa 1392 mm 5.1 Travel speed (laden / unladen) 4.20 km/h / 4.50 km/h 5.2 Lifting speed (laden / unladen) 0.12 m/s / 0.12 m/s 5.3 Lowering speed (laden / unladen) 6 % / 10 % 5.3 Lowering speed (laden / unladen) 0.12 m/s / 0.12 m/s 5.3 Lowering speed (l				
Sear wheel gauge			b10	
Dimensions				
4.15 Fork height in low position h13 85 mm 4.19 Overall length i1 1698 mm 4.20 Length to face of forks i2 555 mm 4.21 Overall width b1 800 mm 4.22 Forks section / width / length \$ / e / I 60 mm / 170 mm / 1150 mm 4.24 Fork carriage width b3 680 mm 4.31 Ground clearance below mast m1 26 mm 4.32 Ground clearance at centre of wheelbase m2 26 mm 4.33 Aisle width for pallets 1000 x 1200 crossways Ast 2226 mm 4.34 Aisle width for 800 x 1200 pallet lengthways Ast 2161 mm 4.35 Tuming radius Wa 1392 mm Performances Travel speed (laden / unladen) 4.20 km/h / 4.50 km/h 5.2 Lifting speed (laden / unladen) 0.11 m/s / 0.15 m/s 5.3 Lowering speed (laden / unladen) 0.12 m/s / 0.12 m/s 5.3 Max Gradeability (laden / unladen) 6 % / 10 % 5.10 Service brake Electro magnetic Engine<				
4.19 Overall length 11 1698 mm 4.20 Length to face of forks 12 555 mm 4.21 Overall width b1 800 mm 4.22 Fork section / width / length \$ / e / I 60 mm / 170 mm / 1150 mm 4.24 Fork carriage width b3 680 mm 4.31 Ground clearance below mast m1 26 mm 4.32 Ground clearance at centre of wheelbase m2 26 mm 4.33 Alsie Width for pallets 1000 x 1200 crossways Ast 2226 mm 4.34 Alsie width for 800 x 1200 pallet lengthways Ast 2161 mm 4.35 Tuming radius Wa 1392 mm Performances Value speed (laden / unladen) 4.20 km/h 4.50 km/h 5.1 Travel speed (laden / unladen) 0.11 m/s / 0.15 m/s 5.3 Lowering speed (laden / unladen) 0.12 m/s / 0.12 m/s 5.3 Lowering speed (laden / unladen) 6 % / 10 % 5.10 Service brake Electro magnetic Engine 6.1 Drive motor rating \$2 60 min 0.65 kW	4.15		h13	85 mm
4.20 Length to face of forks 12 555 mm 4.21 Overall width b1 800 mm 4.22 Forks section / width / length s / e / l 60 mm / 170 mm / 1150 mm 4.24 Fork carriage width b3 680 mm 4.31 Ground clearance below mast m1 26 mm 4.32 Ground clearance at centre of wheelbase m2 26 mm 4.33 Aisle Width for pallets 1000 x 1200 crossways Ast 2226 mm 4.34 Aisle width for 800 x 1200 pallet lengthways Ast 2161 mm 4.35 Tuming radius Wa 1392 mm Performances 5.1 Travel speed (laden / unladen) 4.20 km/h / 4.50 km/h 5.2 Lifting speed (laden / unladen) 0.11 m/s / 0.15 m/s 5.3 Lowering speed (laden / unladen) 0.12 m/s / 0.12 m/s 5.3 Lowering speed (laden / unladen) 6.% / 10 % 5.10 Service brake Electro magnetic Engine 6.1 Drive motor rating st S3 15% 2.20 kW 6.2 Lift motor rating at S3 15% 2.20 kW				
4.21 Overall width b1 800 mm 4.22 Forks section / width / length s / e / l 60 mm / 170 mm / 1150 mm 4.24 Fork carriage width b3 680 mm 4.31 Ground clearance below mast m1 26 mm 4.32 Ground clearance at centre of wheelbase m2 26 mm 4.33 Aisle Width for pallets 1000 x 1200 crossways Ast 2226 mm 4.34 Aisle width for 800 x 1200 pallet lengthways Ast 2161 mm 4.35 Tuming radius Wa 1392 mm Performances 5.1 Travel speed (laden / unladen) 4.20 km/h / 4.50 km/h 5.2 Lifting speed (laden / unladen) 0.11 m/s / 0.15 m/s 5.3 Lowering speed (laden / unladen) 0.11 m/s / 0.12 m/s 5.8 Max Gradeability (laden / unladen) 6 % / 10 % 5.10 Service brake Electro magnetic Engine 0.65 kW 6.1 Drive motor rating \$2.60 min 0.65 kW 6.2 Lift motor rating at \$3.15% 2.20 kW 6.4 Battey voltage / capacity 2.4 V / 60 Ah			12	
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4.24 Fork carriage width b3 680 mm 4.31 Ground clearance below mast m1 26 mm 4.32 Ground clearance at centre of wheelbase m2 26 mm 4.33 Aisle Width for pallets 1000 x 1200 crossways Ast 2226 mm 4.34 Aisle width for 800 x 1200 pallet lengthways Ast 2161 mm 4.35 Tuming radius Wa 1392 mm Performances 5.1 Travel speed (laden / unladen) 4.20 km/h / 4.50 km/h 5.2 Lifting speed (laden / unladen) 0.11 m/s / 0.15 m/s 5.3 Lowering speed (laden / unladen) 0.12 m/s / 0.12 m/s 5.8 Max Gradeability (laden / unladen) 6 % / 10 % 5.10 Service brake Electro magnetic Engine 6.1 Drive motor rating \$2 60 min 0.65 kW 6.2 Lift motor rating at \$3 15% 2.20 kW 6.4 Battery voltage / capacity 24 V / 60 Ah Battery technology Lithium-ion 6.5 Battery weight (+/- 5%) 18 kg		Forks section / width / length	s / e / l	60 mm / 170 mm / 1150 mm
4.31 Ground clearance below mast m1 26 mm 4.32 Ground clearance at centre of wheelbase m2 26 mm 4.33 Aisle Width for pallets 1000 x 1200 crossways Ast 2226 mm 4.34 Aisle width for 800 x 1200 pallet lengthways Ast 2161 mm 4.35 Tuming radius Wa 1392 mm Perfomances 5.1 Travel speed (laden / unladen) 4.20 km/h / 4.50 km/h 5.2 Lifting speed (laden / unladen) 0.11 m/s / 0.15 m/s 5.3 Lowering speed (laden / unladen) 0.12 m/s / 0.12 m/s 5.8 Max Gradeability (laden / unladen) 6 % / 10 % 5.10 Senice brake Electro magnetic Engine 6.1 Drive motor rating 32 60 min 0.65 kW 6.2 Lift motor rating at S3 15% 2.20 kW 6.4 Battery voltage / capacity 24 V / 60 Ah Battery technology Lithium-ion 6.5 Battery weight (+/- 5%) 18 kg	4.24	•		680 mm
4.32 Ground clearance at centre of wheelbase m2 26 mm 4.33 Aisle Width for pallets 1000 x 1200 crossways Ast 2226 mm 4.34 Aisle width for 800 x 1200 pallet lengthways Ast 2161 mm 4.35 Tuming radius Wa 1392 mm Performances 5.1 Travel speed (laden / unladen) 4.20 km/h / 4.50 km/h 5.2 Lifting speed (laden / unladen) 0.11 m/s / 0.15 m/s 5.3 Lowering speed (laden / unladen) 0.12 m/s / 0.12 m/s 5.8 Max Gradeability (laden / unladen) 6 % / 10 % 5.10 Service brake Electro magnetic Engine 6.1 Drive motor rating s2 60 min 0.65 kW 6.2 Lift motor rating at S3 15% 2.20 kW 6.4 Battery voltage / capacity 24 V / 60 Ah Battery technology Lithium-ion 6.5 Battery weight (+/- 5%) 18 kg	4.31	·	m1	26 mm
4.34 Aisle width for 800 x 1200 pallet lengthways Ast 2161 mm 4.35 Tuming radius Wa 1392 mm Performances 5.1 Travel speed (laden / unladen) 4.20 km/h / 4.50 km/h 5.2 Lifting speed (laden / unladen) 0.11 m/s / 0.15 m/s 5.3 Lowering speed (laden / unladen) 0.12 m/s / 0.12 m/s 5.8 Max Gradeability (laden / unladen) 6 % / 10 % 5.10 Service brake Electro magnetic Engine 6.1 Drive motor rating S2 60 min 0.65 kW 6.2 Lift motor rating at S3 15% 2.20 kW 6.4 Battery voltage / capacity 24 V / 60 Ah Battery technology Lithium-ion 6.5 Battery weight (+/- 5%) 18 kg				
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Performances 5.1 Travel speed (laden / unladen) 4.20 km/h / 4.50 km/h 5.2 Lifting speed (laden / unladen) 0.11 m/s / 0.15 m/s 5.3 Lowering speed (laden / unladen) 0.12 m/s / 0.12 m/s 5.8 Max Gradeability (laden / unladen) 6 % / 10 % 5.10 Service brake Electro magnetic Engine 6.1 Drive motor rating \$2 60 min 0.65 kW 6.2 Lift motor rating at \$3 15% 2.20 kW 6.4 Battery voltage / capacity 24 V / 60 Ah Battery technology Lithium-ion 6.5 Battery weight (+/- 5%) 18 kg	4.34	· · · · · · · · · · · · · · · · · · ·	Ast	2161 mm
5.1 Travel speed (laden / unladen) 4.20 km/h / 4.50 km/h 5.2 Lifting speed (laden / unladen) 0.11 m/s / 0.15 m/s 5.3 Lowering speed (laden / unladen) 0.12 m/s / 0.12 m/s 5.8 Max Gradeability (laden / unladen) 6 % / 10 % 5.10 Service brake Electro magnetic Engine 6.1 Drive motor rating \$2 60 min 0.65 kW 6.2 Lift motor rating at \$3 15% 2.20 kW 6.4 Battery voltage / capacity 24 V / 60 Ah Battery technology Lithium-ion 6.5 Battery weight (+/- 5%) 18 kg	4.35	Turning radius	Wa	1392 mm
5.2 Lifting speed (laden / unladen) 0.11 m/s / 0.15 m/s 5.3 Lowering speed (laden / unladen) 0.12 m/s / 0.12 m/s 5.8 Max Gradeability (laden / unladen) 6 % / 10 % 5.10 Service brake Electro magnetic Engine 6.1 Drive motor rating \$2 60 min 0.65 kW 6.2 Lift motor rating at \$3 15% 2.20 kW 6.4 Battery voltage / capacity 24 V / 60 Ah Battery technology Lithium-ion 6.5 Battery weight (+/- 5%) 18 kg		Performances		
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5.3 Lowering speed (laden / unladen) 0.12 m/s / 0.12 m/s 5.8 Max Gradeability (laden / unladen) 6 % / 10 % 5.10 Service brake Electro magnetic Engine 6.1 Drive motor rating \$2 60 min 0.65 kW 6.2 Lift motor rating at \$3 15% 2.20 kW 6.4 Battery voltage / capacity 24 V / 60 Ah Battery technology Lithium-ion 6.5 Battery weight (+/- 5%) 18 kg	5.2	Lifting speed (laden / unladen)		0.11 m/s / 0.15 m/s
5.8 Max Gradeability (laden / unladen) 6 % / 10 % 5.10 Service brake Electro magnetic Engine 6.1 Drive motor rating \$2 60 min 0.65 kW 6.2 Lift motor rating at \$3 15% 2.20 kW 6.4 Battery voltage / capacity 24 V / 60 Ah Battery technology Lithium-ion 6.5 Battery weight (+/- 5%) 18 kg	5.3			0.12 m/s / 0.12 m/s
Engine Company 6.1 Drive motor rating \$2.60 min 0.65 kW 6.2 Lift motor rating at \$3.15% 2.20 kW 6.4 Battery voltage / capacity 24 V / 60 Ah Battery technology Lithium-ion 6.5 Battery weight (+/- 5%) 18 kg	5.8	Max Gradeability (laden / unladen)		6 % / 10 %
6.1 Drive motor rating \$2 60 min 0.65 kW 6.2 Lift motor rating at \$3 15% 2.20 kW 6.4 Battery voltage / capacity 24 V / 60 Ah Battery technology Lithium-ion 6.5 Battery weight (+/- 5%) 18 kg	5.10	Service brake		Electro magnetic
6.2 Lift motor rating at S3 15% 2.20 kW 6.4 Battery voltage / capacity 24 V / 60 Ah Battery technology Lithium-ion 6.5 Battery weight (+/- 5%) 18 kg		Engine		
6.2 Lift motor rating at \$3 15% 2.20 kW 6.4 Battery voltage / capacity 24 V / 60 Ah Battery technology Lithium-ion 6.5 Battery weight (+/- 5%) 18 kg	6.1	Drive motor rating S2 60 min		0.65 kW
Battery technology Lithium-ion 6.5 Battery weight (+/- 5%) 18 kg	6.2	Lift motor rating at S3 15%		2.20 kW
6.5 Battery weight (+/- 5%) 18 kg	6.4	Battery voltage / capacity		24 V / 60 Ah
, , , ,		Battery technology		Lithium-ion
Miscellaneous	6.5	Battery weight (+/- 5%)		18 kg
		Miscellaneous		
8.1 Type of drive control DC	8.1	Type of drive control		DC
8.4 Sound level at the driver's ear according to DIN 12 053 65 dB	8.4	Sound level at the driver's ear according to DIN 12 053		65 dB

ES 112 Easy - Dimensional drawing



Characteristics of masts and residual capacities

Central Cylinder Duplex (CCD)		CCD 27	CCD 36
h1 - Mast lowered height	mm	1924	2458
h3 - Mast lifting height	mm	2700	3600
h4 - Mast extended height	mm	3274	4258
Residual capacity at max height	ka	1000	600

Central Cylinder Simplex (CCS)		CCS 15
h1 - Mast lowered height	mm	1992
h2 - Mast free lift	mm	1475
h3 - Mast lifting height	mm	1500
h4 - Mast extended height	mm	2015
Residual capacity at max height	kg	1200





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