Technical sheet:

## **ER 20**



Manufacture		Technical characteristics		Metric
1.4   Operator type	1.1	Manufacturer		MANITOU
1.5   Max. capacity   Q   2000 kg     1.6   Load distance, senter of drive axie to fork	1.2	Model Name		ER 20
1.5         Load center of gravity         c         600 mm           1.8         Load dishance, center of drive axie to fook         x         441 mm           1.9         Wheelbase         y         1500 mm           2.1         Service weight	1.3	Power source		Electrical
1.6	1.4	Operator type		Seated
1.0	1.5	Max. capacity	Q	2000 kg
1.0	1.6	Load center of gravity	С	600 mm
	1.8		х	441 mm
2.1         Service weight         3740 kg           Wheels         Wulkollan           3.1         Tires type         Wulkollan           3.5.2         Number of foot wheels - Size of food wheels         2.2 x.25 x.105           3.5         Number of foot wheels / rear wheels         1.2 3 x.25 x.105           3.6         Foot wheel gauge         b1         0 mm           3.7         Rear wheel gauge         b1         1128 mm           4.8         Seath-eight/stand height         7         107 mm           4.9         Overall length         11         2460 mm           4.20         Length to Face of forks         12         1310 mm           4.21         Overall width         16         127 mm         1310 mm           4.22         Fooks section / width / length         5 r e / 1         40 mmx x100 mm / 1150 mm         2 A         42 A           4.25         Fooks section / width / length         5 r e / 1         40 mmx x100 mm / 1150 mm         2 A         42 A         <	1.9	Wheelbase	у	1530 mm
Wincels   Wincels   Wilkolian   1 x 355 x 155   3.3   3.5		Weight		
Number of drive wheels - Size of drive wheels   1 x x 55 x 155   1 x 555 x 155   1 x 555 x 155   1 x 100 mm   1 x 100 mm	2.1	Service weight		3740 kg
3.5.2         Number of drive wheels - Size of drive wheels         1 x 355 x 155           3.3         Number of Ind wheels - Size of load wheels         2 x 285 x 105           3.5         Number of Ind wheels - Size of load wheels         1 / 2           3.6         Front wheel gauge         b10         0 mm           3.7         Rear wheel gauge         b10         1 mm           Olimensions           4.8         Seat height Stand height         h7         1077 mm           4.9         Uerall bright         l1         2460 mm           4.20         Length to face of forks         l2         1310 mm           4.21         Overall width         b1         1270 mm           4.22         Fork section / width / length         s / e / 1         40mm x 100 mm / 1150 mm           4.23         Fork section / width / length         s / e / 1         40mm x 100 mm / 1150 mm           4.24         Fork section / width / length         s / e / 2         40mm x 100 mm / 1150 mm           4.25         Ois section / width / length         s / e / 2         1           4.26         Distance between wheel arms/loading suffaces         b4         903 mm           4.25         Width over fork s min / max         b5         316 mm / 697 mm<		Wheels		
3.3         Number of load wheels - Size of load wheels         2 x 285 x 105           3.5         Number of front wheel year wheels         1 / 2           3.6         Front wheel gauge         b10         0 mm           3.7         Bear wheel gauge         b11         1128 mm           4.8         Seat height/stand height         h7         1077 mm           4.19         Overall length         11         2460 mm           4.20         Length to face of forks         12         1310 mm           4.21         Overall width         b1         1270 mm           4.22         Forks section / width / length         5 / / 1         40 mm x 100 mm / 1150 mm           4.23         Forks section / width / length         5 / / 1         40 mm x 100 mm / 1150 mm           4.24         Forks section / width / length         5 / / 1         40 mm x 100 mm / 1150 mm           4.25         Tork caraige [80 223 (class/fmm) / /B         2 / 2         2           4.25         Vidth over forks min / max.         b5         316 mm / 697 mm           4.25         Vidth over forks min / max.         b5         316 mm / 697 mm           4.32         Kincud eleannee at extente of wheelbase         m2         70 mm           4.33         Asi	3.1	Tires type		Vulkollan
3.5         Number of front wheels / ear wheels         1 / 2           3.6         Front wheel gauge         b10         0 mm           3.7         Rear wheel gauge         b11         11128 mm           4.8         Seat height/stand height         f)7         1077 mm           4.9         Overall length         11         2460 mm           4.20         Length to face of foks         12         1310 mm           4.21         Overall width         b1         1270 mm           4.22         Fork section / width / length         s / e / l         40 mm x 100 mm / 1150 mm           4.23         Fork camage ISO 2232 (class/form) A/B         x / e / l         40 mm x 100 mm / 1150 mm           4.26         Distance between wheel amms/loading surfaces         B4         903 mm           4.25.1         Width over forks min. / max.         b5         316 mm / 697 mm           4.26         Distance between wheel amms/loading surfaces         m2         70 mm           4.27         Ground clearance at centre of wheelbase         m2         70 mm           4.28         Aisie width for 1000 x 1200 pallet lengthways         Ast         22808 mm           4.33         Aisie width for 800 x 1200 pallet lengthways         Ast         22808 mm	3.5.2	Number of drive wheels - Size of drive wheels		1 x 355 x 155
3.6         Front wheel gauge         b10         0 mm           3.7         Rear wheel gauge         b11         1128 mm           4.8         Seat height/stand height         n7         1077 mm           4.9         Overall length         11         2460 mm           4.20         Length to face of forks         12         1310 mm           4.21         Overall width         1         12 mm           4.22         Fork section / width / length         5 / e / I         40 mm x 100 mm / 1150 mm           4.23         Fork cardiage ISO 2728 (class/form) A/B         2         2A           4.25         Distance between wheel amms/loading surfaces         94         903 mm           4.26         Distance between wheel amms/loading surfaces         94         903 mm           4.27         Width over forks min. / max.         95         316 mm / 697 mm           4.28         Ground clearance at centre of wheelbase         m2         70 mm           4.31         Alsie width for 1000 x 1200 pallet lengthways         Ast         22770 mm           4.32         Alsie width for 1000 x 1200 pallet lengthways         Ma         1750 mm           4.33         Alsie width for 1000 x 1200 pallet lengthways         Ma         113 0 km/h	3.3	Number of load wheels - Size of load wheels		2 x 285 x 105
Rear wheel gauge	3.5	Number of front wheels / rear wheels		1 / 2
3.7         Rear wheel gauge         b11         1128 mm           4.8         8. Sea height/stand height         h7         1077 mm           4.19         Overall length         11         2460 mm           4.20         Length fo face of forks         12         1310 nm           4.21         Overall widh         b1         1270 nm           4.22         Fork section / width / length         s / e / I         40 mm x 100 mm / 1150 mm           4.23         Fork carriage ISO 2282 (class/form) A/B         5         2 A           4.26         Distance between wheel amar/Joading surfaces         b4         903 mm           4.25.1         Width over forks min. / max.         b5         316 mm / 697 mm           4.26         Distance between wheel amar/Joading surfaces         b5         316 mm / 697 mm           4.27         Width over forks min. / max.         b5         316 mm / 697 mm           4.32         Ground clearance at centre of wheelbases         m6         2770 mm           4.33         Alse width for 800 x 1200 pallet lengthways         Ast         2808 mm           4.35         Tuming radius         Ma         1750 mm           5.1         Travel speed (laden unden)         3         14.30 km/h / 14.50 km/h	3.6	Front wheel gauge	b10	0 mm
4.8         Seat height/stand height         h7         1077 mm           4.19         Overall length         11         2460 mm           4.20         Length to face of forks         12         1310 mm           4.21         Overall width         b1         1270 mm           4.22         Fork seedino / width / length         s e / I         40 mm x 100 mm / 1150 mm           4.23         Fork carriage ISO 2232 (class/form) A/B         2A         4.26         Distance between wheel amms/loading surfaces         b4         903 mm           4.25.1         Width over fork s min. / max.         b5         316 mm / 697 mm           4.26.2         Ground clearance at centre of wheelbase         m2         70 mm           4.32         Ground clearance at centre of wheelbase         m2         70 mm           4.32         Ground clearance at centre of wheelbase         m2         2770 mm           4.33         A sise width for 1000 x 1200 pallet lengthways         Ast         2808 mm           4.34         A sise width for 800 x 1200 pallet lengthways         Ast         2808 mm           4.35         Tuming radius         M3         1750 mm           4.7         Height of overhead guard (cabin)         M3         1750 mm           5.2	3.7		b11	1128 mm
4.19       Overall length to face of forks       11       2460 mm         4.20       Length to face of forks       12       1310 mm         4.21       Overall width for 10 kith       15       1310 mm         4.22       Fork section / width / length       \$ /e / I       40 mm x 100 mm / 1150 mm         4.23       Fork carriage ISO 2228 (class/form) A/B       2A       2A         4.26       Distance between wheel amms/loading surfaces       b5       33 mm / 697 mm         4.25.1       Width over forks min. / max.       b5       31 mm / 697 mm         4.32       Ground clearance at centre of wheelbase       m2       70 mm         4.33       Alsie width for 1000 x 1200 pallet lengthways       Ast       22770 mm         4.34       Alsie width for 8000 x 1200 pallet lengthways       Ast       280 mm         4.35       Tuming radius       Wa       1.750 mm         4.34       Alsie width for 8000 x 1200 pallet lengthways       Ast       280 mm         4.37       Tuming radius       Wa       1.750 mm         4.34       Lifting speed (laden / unladen)       B       0.37 m/s / 0.53 m/s         5.1       Tavel speed (laden / unladen)       0.37 m/s / 0.63 m/s       0.55 m/s / 0.43 m/s         5.1       Gr		Dimensions		
4.20         Length to face of forks         I2         1310 mm           4.21         Overall width         b1         1270 mm           4.22         Forks section / width / length         s / e/1         40 mm x 100 mm / 1150 mm           4.23         Fork carriage ISO 2328 (class/form) A/B         2A           4.26         Distance between wheel arms/loading surfaces         b4         903 mm           4.25.1         Width over forks min. / max.         b5         316 mm / 697 mm           4.25.2         Ground clearance at centre of wheelbase         m2         70 mm           4.33         Alsie width for 1000 x 1200 pallet lengthways         Ast         2270 mm           4.34         Alsie width for 800 x 1200 pallet lengthways         Ast         2200 mm           4.7         Height of overhead guard (cabin)         Ma         1750 mm           4.7         Height of overhead guard (cabin)         Ma         1750 mm           5.1         Tawel speed (laden / unladen)         1.13.0 km/h / 14.50 km/h           5.2         Lifting speed (laden / unladen)         0.55 m/s / 0.43 m/s           5.4.1         Reach speed (with load / without load)         0.55 m/s / 0.43 m/s           5.7         Gradeability (laden / unladen)         0.02 m/s / 0.20 m/s	4.8	Seat height/stand height	h7	1077 mm
4.20         Length to face of forks         12         1310 mm           4.21         Overall width         b1         1270 mm           4.22         Fork section / width / length         s / e / 1         40 mm x 100 mm / 1150 mm           4.23         Fork carriage ISO 2328 (class / form) A / B         2A           4.26         Distance between wheel arms/loading surfaces         b4         903 mm           4.25.1         Width over forks min / max.         b5         316 mm / 697 mm           4.32         Ground clearance at centre of wheelbase         m2         70 mm           4.33         Aisle width for 1000 x 1200 pallet lengthways         Ast         22770 mm           4.34         Aisle width for 800 x 1200 pallet lengthways         Ast         280 mm           4.35         Turning radius         Wa         1750 mm           4.35         Turning radius         Wa         1750 mm           4.7         Height of overhead guard (cabin)         Wa         1750 mm           4.7         Height of overhead guard (wath minder)         1.30 km/h / 14.50 km/h           5.2         Lifting speed (laden / unladen)         0.5 m/s / 0.43 m/s           5.4         Reach speed (with of without load)         0.5 m/s / 0.43 m/s           5.7	4.19	Overall length	l1	2460 mm
4.22         Forks section / width / length         s / e/         40 mm x 100 mm / 1150 mm           4.23         Fork camiage ISO 238 (class/form) A/B         2A           4.26         Distance between wheel ams/loading surfaces         b4         903 mm           4.25.1         Width over forks min. / max.         b5         316 mm / 697 mm           4.32         Ground clearance at cente of wheelbase         m2         70 mm           4.33         Aisle width for 1000 x 1200 pallet lengthways         Ast         22770 mm           4.34         Aisle width for 800 x 1200 pallet lengthways         Ast         200 mm           4.35         Tuming radius         Wa         1750 mm           4.7         Height of overhead guard (cabin)         h6         2205 mm           4.7         Height of overhead guard (maken)         14.30 km/h / 14.50 km/h           5.2         Lifting speed (laden / unladen)         14.30 km/h / 14.50 km/h           5.2         Lifting speed (laden / unladen)         0.55 m/s / 0.37 m/s / 0.33 m/s           5.3         Lowering speed (laden / unladen)         0.05 m/s         6.90 % / 10.20 %           5.7         Reach speed (with load / without load)         7.20 km/s         6.90 % / 10.20 %           5.1         Service brake         15 km	4.20	Length to face of forks	12	1310 mm
4.23         Fork carriage ISO 2328 (class/form) A/B         2A           4.26         Distance between wheel arms/loading surfaces         b4         903 mm           4.25.1         Width over fork smin. / max.         b5         316 mm / 697 mm           4.32         Ground clearance at centre of wheelbase         m2         70 mm           4.33         Aisle width for 1000 x 1200 pallet lengthways         Ast         22770 mm           4.34         Aisle width for 800 x 1200 pallet lengthways         Ast         2808 mm           4.35         Tuming radius         Ma         1750 mm           4.37         Height of overhead guard (cabin)         h6         2205 mm           4.7         Height of overhead guard (cabin)         h6         2205 mm           5.1         Travel speed (laden / unladen)         0.37 m/s / 0.63 m/s         5.2           5.2         Lifting speed (laden / unladen)         0.55 m/s / 0.43 m/s         5.3           5.3         Lowering speed (with load / without load)         0.55 m/s / 0.20 m/s         6.90 % / 10.20 %           5.7         Gradeability (laden / unladen)         6.90 % / 10.20 %         6.90 % / 10.20 %           5.7         Gradeability (laden / unladen)         7.20 km         6.90 % / 10.20 %           6.1	4.21	Overall width	b1	1270 mm
4.26       Distance between wheel arms/loading surfaces       b4       903 mm         4.25.1       Wildth over forks min. / max.       b5       316 mm / 697 mm         4.32       Ground clearance at center of wheelbase       m2       70 mm         4.33       Aisle width for 1000 x 1200 pallet lengthways       Ast       22770 mm         4.34       Aisle width for 800 x 1200 pallet lengthways       Ast       2808 mm         4.35       Tuming radius       Wa       1750 mm         4.7       Height of overhead guard (cabin)       h6       2205 mm         5.1       Travel speed (laden / unladen)       14.30 km/h / 14.50 km/h         5.2       Lifting speed (laden / unladen)       0.37 m/s / 0.63 m/s         5.4.1       Reach speed (with load / without load)       0.55 m/s / 0.43 m/s         5.4.1       Reach speed (with load / without load)       0.55 m/s / 0.20 m/s         5.7       Gradeability (laden / unladen)       6.90 % / 10.20 %         5.10       Service brake       Electric         6.1       Drive motor rating \$2.60 min       7.20 kW         6.1       Drive motor rating \$2.60 min       15 kW         6.2       Lift motor rating \$2.60 min       9.00 % / 10.20 %         6.3       Battery voltage / capacity       <	4.22	Forks section / width / length	s / e / l	40 mm x 100 mm / 1150 mm
4.25.1       Width over forks min. / max.       b5       316 mm / 697 mm         4.32       Ground clearance at centre of wheelbase       m2       70 mm         4.33       Aisle width for 1000 x 1200 pallet lengthways       Ast       2770 mm         4.34       Aisle width for 800 x 1200 pallet lengthways       Ma       1750 mm         4.35       Tuming adius       Wa       1750 mm         4.7       Height of overhead guard (cabin)       h6       2205 mm         5.1       Tavel speed (laden / unladen)       0.37 m/s / 0.63 m/s         5.2       Lifting speed (laden / unladen)       0.55 m/s / 0.43 m/s         5.3       Lowering speed (laden / unladen)       0.55 m/s / 0.43 m/s         5.1       Reach speed (with load / without load)       0.20 m/s / 0.20 m/s         5.7       Gradeability (laden / unladen)       0.90 m/s / 0.20 m/s         5.10       Senice brake       Electric         Englin       15 kW         6.1       Drive motor rating \$2.60 min       7.20 kW         6.2       Lift motor rating \$2.50 min       7.20 kW         6.3       Battery according to DIN 43531/35/36 A, B, C       DIN 43531 C         6.4       Battery weight (*/-5%)       9.00 kg         Miscellaneous       Battery wei	4.23	Fork carriage ISO 2328 (class/form) A/B		2A
4.32       Ground clearance at centre of wheelbase       m2       70 mm         4.33       Aisle width for 1000 x 1200 pallet lengthways       2770 mm         4.34       Aisle width for 800 x 1200 pallet lengthways       Ast       2808 mm         4.35       Tuming radius       Wa       1750 mm         4.7       Height of overhead guard (cabin)       h6       2205 mm         Performances         5.1       Travel speed (laden / unladen)       14.30 km/h 14.50 km/h         5.2       Lifting speed (laden / unladen)       0.37 m/s / 0.63 m/s         5.3       Lowering speed (laden / unladen)       0.55 m/s / 0.43 m/s         5.4.1       Reach speed (with load / without load)       0.55 m/s / 0.43 m/s         5.7       Gradeability (laden / unladen)       0.50 m/s / 0.20 m/s         5.10       Service brake       Electric         Engine         6.1       Drive motor rating \$2.60 min       7.20 kW         6.2       Lift motor rating \$2.50 min       15 kW         6.3       Battery according to DIN 43531/35/36 A, B, C       DIN 43531 C         6.4       Battery weight (+/- 5%)       920 kg         Miscellaneous       Historic       25 l/min           8.1       T	4.26	Distance between wheel arms/loading surfaces	b4	903 mm
4.33       Aisle width for 1000 1200 pallet lengthways       Ast       2770 mm         4.34       Aisle width for 800 x 1200 pallet lengthways       Ast       2808 mm         4.35       Turning radius       Wa       1750 mm         4.7       Height of overhead guard (cabin)       h6       2205 mm         Performances         5.1       Travel speed (laden / unladen)       14.30 km/h / 14.50 km/h         5.2       Lifting speed (laden / unladen)       0.37 m/s / 0.63 m/s         5.3       Lowering speed (laden / unladen)       0.55 m/s / 0.43 m/s         5.4.1       Reach speed (with load / without load)       0.20 m/s / 0.20 m/s         5.7       Gradeability (laden / unladen)       6.90 % / 10.20 %         5.10       Service brake       Electric         Engine         6.1       Drive motor rating S2 60 min       7.20 kW         6.2       Lift motor rating S2 60 min       7.20 kW         6.3       Battery according to DIN 43531/35/36 A, B, C       DIN 43531 C         6.4       Battery voltage / capacity       48 V / 620 Ah         6.5       Battery weight (+/- 5%)       920 kg         Miscellaneous         8.1       Type of drive control       Electronic	4.25.1	Width over forks min. / max.	b5	316 mm / 697 mm
4.34       Aisle width for 800 x 1200 pallet lengthways       Ast       2808 mm         4.35       Tuming radius       Wa       1750 mm         4.7       Height of overhead guard (cabin)       h6       2205 mm         Performances         5.1       Travel speed (laden / unladen)       14.30 km/h / 14.50 km/h         5.2       Lifting speed (laden / unladen)       0.37 m/s / 0.63 m/s         5.3       Lowering speed (with load / without load)       0.55 m/s / 0.43 m/s         5.4.1       Reach speed (with load / without load)       0.20 m/s / 0.20 m/s         5.7       Gradeability (laden / unladen)       0.20 m/s / 0.20 m/s         5.10       Service brake       Electric         Engine         6.1       Drive motor rating \$2.60 min       7.20 kW         6.2       Lift motor rating at \$3.15%       15 kW         6.3       Battery according to DIN 43531/35/36 A, B, C       15 kW         6.3       Battery weight (+/-5%)       48 V/ 620 Ah         6.5       Battery weight (+/-5%)       920 kg         Miscellaneous       Miscellaneous       15 l/min         8.1       Type of drive control       Electronic         8.3       Oil flow rate for attachments       25 l/mi	4.32	Ground clearance at centre of wheelbase	m2	70 mm
4.35       Tuming radius       Wa       1750 mm         4.7       Height of overhead guard (cabin)       h6       2205 mm         Performances         5.1       Travel speed (laden / unladen)       14.30 km/h / 14.50 km/h         5.2       Lifting speed (laden / unladen)       0.37 m/s / 0.63 m/s         5.3       Lowering speed (laden / unladen)       0.55 m/s / 0.43 m/s         5.4.1       Reach speed (with load / without load)       0.20 m/s / 0.20 m/s         5.7       Gradeability (laden / unladen)       6.90 % / 10.20 %         5.10       Service brake       Electric         Engine         6.1       Drive motor rating \$2.60 min       7.20 kW         6.2       Lift motor rating at \$3.15%       15 kW         6.3       Battery according to DIN 43531/5/36 A, B, C       DIN 43531 C         6.4       Battery voltage / capacity       48 V / 620 Ah         6.5       Battery weight (+/- 5%)       920 kg         Miscellaneous         8.1       Type of drive control       Electronic         8.3       Oil flow rate for attachments       25 l/min	4.33	Aisle width for 1000 x 1200 pallet lengthways		2770 mm
Height of overhead guard (cabin)   h6   2205 mm	4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	2808 mm
Performances         14.30 km/h / 14.50 km/h           5.1         Travel speed (laden / unladen)         14.30 km/h / 14.50 km/h           5.2         Lifting speed (laden / unladen)         0.37 m/s / 0.63 m/s           5.3         Lowering speed (with load / without load)         0.20 m/s / 0.20 m/s           5.4.1         Reach speed (with load / without load)         0.20 m/s / 0.20 m/s           5.7         Gradeability (laden / unladen)         6.90 % / 10.20 %           5.10         Service brake         Electric           6.1         Dive motor rating \$2.60 min         7.20 kW           6.2         Lift motor rating \$2.60 min         15 kW           6.3         Battery according to DIN 43531/35/36 A, B, C         DIN 43531 C           6.4         Battery voltage / capacity         48 V / 620 Ah           6.5         Battery weight (+/- 5%)         920 kg           Miscellaneous         Electronic           8.1         Type of drive control         Electronic           8.3         Oil flow rate for attachments         25 I/min	4.35	Turning radius	Wa	1750 mm
5.1       Travel speed (laden / unladen)       14.30 km/h / 14.50 km/h         5.2       Lifting speed (laden / unladen)       0.37 m/s / 0.63 m/s         5.3       Lowering speed (with load / without load)       0.55 m/s / 0.43 m/s         5.4.1       Reach speed (with load / without load)       0.20 m/s / 0.20 m/s         5.7       Gradeability (laden / unladen)       6.90 % / 10.20 %         5.10       Service brake       Electric         Engine         6.1       Drive motor rating \$2.60 min       7.20 kW         6.2       Lift motor rating at \$3.15%       15 kW         6.3       Battery according to DIN 43531/35/36 A, B, C       DIN 43531 C         6.4       Battery voltage / capacity       48 V / 620 Ah         6.5       Battery weight (+/- 5%)       920 kg         Miscellaneous         8.1       Type of drive control       Electronic         8.3       Oil flow rate for attachments       25 l/min	4.7	Height of overhead guard (cabin)	h6	2205 mm
5.2       Lifting speed (laden / unladen)       0.37 m/s / 0.63 m/s         5.3       Lowering speed (laden / unladen)       0.55 m/s / 0.43 m/s         5.4.1       Reach speed (with load / without load)       0.20 m/s / 0.20 m/s         5.7       Gradeability (laden / unladen)       6.90 % / 10.20 %         5.10       Service brake       Electric         Engine         6.1       Drive motor rating \$2.60 min       7.20 kW         6.2       Lift motor rating at \$3.15%       15 kW         6.3       Battery according to DIN 43531/35/36 A, B, C       DIN 43531 C         6.4       Battery voltage / capacity       48 V / 620 Ah         6.5       Battery weight (+/- 5%)       920 kg         Miscellaneous         8.1       Type of drive control       Electronic         8.3       Oil flow rate for attachments       25 l/min		Performances		
5.3       Lowering speed (laden / unladen)       0.55 m/s / 0.43 m/s         5.4.1       Reach speed (with load / without load)       0.20 m/s / 0.20 m/s         5.7       Gradeability (laden / unladen)       6.90 % / 10.20 %         5.10       Service brake       Electric         Engine         6.1       Drive motor rating \$2.60 min       7.20 kW         6.2       Lift motor rating at \$3.15%       15 kW         6.3       Battery according to DIN 43531/35/36 A, B, C       DIN 43531 C         6.4       Battery voltage / capacity       48 V / 620 Ah         6.5       Battery weight (+/- 5%)       920 kg         Miscellaneous         8.1       Type of drive control       Electronic         8.3       Oil flow rate for attachments       25 l/min	5.1	Travel speed (laden / unladen)		14.30 km/h / 14.50 km/h
5.4.1       Reach speed (with load / without load)       0.20 m/s / 0.20 m/s         5.7       Gradeability (laden / unladen)       6.90 % / 10.20 %         5.10       Service brake       Electric         Engine         6.1       Drive motor rating S2 60 min       7.20 kW         6.2       Lift motor rating at S3 15%       15 kW         6.3       Battery according to DIN 43531/35/36 A, B, C       DIN 43531 C         6.4       Battery voltage / capacity       48 V / 620 Ah         6.5       Battery weight (+/- 5%)       920 kg         Miscellaneous         8.1       Type of drive control       Electronic         8.3       Oil flow rate for attachments       25 l/min	5.2	Lifting speed (laden / unladen)		0.37 m/s / 0.63 m/s
5.7       Gradeability (laden / unladen)       6.90 % / 10.20 %         5.10       Service brake       Electric         Engine         6.1       Drive motor rating S2 60 min       7.20 kW         6.2       Lift motor rating at S3 15%       15 kW         6.3       Battery according to DIN 43531/35/36 A, B, C       DIN 43531 C         6.4       Battery voltage / capacity       48 V / 620 Ah         6.5       Battery weight (+/- 5%)       920 kg         Miscellaneous         8.1       Type of drive control       Electronic         8.3       Oil flow rate for attachments       25 l/min	5.3	Lowering speed (laden / unladen)		0.55 m/s / 0.43 m/s
Electric         Engine       Companies         6.1       Drive motor rating \$2.60 min       7.20 kW         6.2       Lift motor rating at \$3.15%       15 kW         6.3       Battery according to DIN 43531/35/36 A, B, C       DIN 43531 C         6.4       Battery voltage / capacity       48 V / 620 Ah         6.5       Battery weight (+/- 5%)       920 kg         Miscellaneous         8.1       Type of drive control       Electronic         8.3       Oil flow rate for attachments       25 l/min	5.4.1	Reach speed (with load / without load)		0.20 m/s / 0.20 m/s
Engine         Companies           6.1         Drive motor rating S2 60 min         7.20 kW           6.2         Lift motor rating at S3 15%         15 kW           6.3         Battery according to DIN 43531/35/36 A, B, C         DIN 43531 C           6.4         Battery voltage / capacity         48 V / 620 Ah           6.5         Battery weight (+/- 5%)         920 kg           Miscellaneous           8.1         Type of drive control         Electronic           8.3         Oil flow rate for attachments         25 l/min	5.7	Gradeability (laden / unladen)		6.90 % / 10.20 %
6.1       Drive motor rating S2 60 min       7.20 kW         6.2       Lift motor rating at S3 15%       15 kW         6.3       Battery according to DIN 43531/35/36 A, B, C       DIN 43531 C         6.4       Battery voltage / capacity       48 V / 620 Ah         6.5       Battery weight (+/- 5%)       920 kg         Miscellaneous         8.1       Type of drive control       Electronic         8.3       Oil flow rate for attachments       25 l/min	5.10	Service brake		Electric
6.2       Lift motor rating at \$3 15%       15 kW         6.3       Battery according to DIN 43531/35/36 A, B, C       DIN 43531 C         6.4       Battery voltage / capacity       48 V / 620 Ah         6.5       Battery weight (+/- 5%)       920 kg         Miscellaneous         8.1       Type of drive control       Electronic         8.3       Oil flow rate for attachments       25 l/min		Engine		
6.3       Battery according to DIN 43531/35/36 A, B, C       DIN 43531 C         6.4       Battery voltage / capacity       48 V / 620 Ah         6.5       Battery weight (+/- 5%)       920 kg         Miscellaneous         8.1       Type of drive control       Electronic         8.3       Oil flow rate for attachments       25 l/min	6.1	Drive motor rating S2 60 min		7.20 kW
6.4 Battery voltage / capacity 48 V / 620 Ah 6.5 Battery weight (+/-5%) 920 kg  Miscellaneous  8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min	6.2	Lift motor rating at S3 15%		15 kW
6.5       Battery weight (+/- 5%)       920 kg         Miscellaneous         8.1       Type of drive control       Electronic         8.3       Oil flow rate for attachments       25 l/min	6.3	Battery according to DIN 43531/35/36 A, B, C		DIN 43531 C
Miscellaneous  8.1 Type of drive control Electronic 8.3 Oil flow rate for attachments 25 l/min	6.4	Battery voltage / capacity		48 V / 620 Ah
8.1     Type of drive control     Electronic       8.3     Oil flow rate for attachments     25 l/min	6.5	Battery weight (+/- 5%)		920 kg
8.3 Oil flow rate for attachments 25 l/min		Miscellaneous		
	8.1	Type of drive control		Electronic
8.4 Sound level at the driver's ear according to DIN 12 053 60.80 dB	8.3	Oil flow rate for attachments		25 I/min
	8.4	Sound level at the driver's ear according to DIN 12 053		60.80 dB

## ER 20 - Dimensional drawing



## Characteristics of masts and residual capacities

Free Lift Triplex (FLT)		FLT 48	FLT 54	FLT 57	FLT 63	FLT 68	FLT 73	FLT 80	FLT 85	FLT 90
α - Mast/fork carriage tilt, forward	•	3	3	3	3	3	3	3	3	3
β - Mast/fork carriage tilt, backward	۰	1	1	1	1	1	1	1	1	1
h1 - Mast lowered height	mm	2140	2340	2640	2790	2957	3040	3190	3357	3523
h2 - Mast free lift	mm	16001	1800	1900	2100	2250	2400	2650	2800	2980
h3 - Mast lifting height	mm	4800	5400	5700	6300	6750	7250	7950	8450	8950
h4 - Mast extended height	mm	5380	5980	6880	7330	7830	8080	8530	9030	9530
Residual capacity with integrated side shift at max heigth	kg	2000	2000	2000	1850	1600				





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