

Electric Counterbalance Truck

E20 – E35

Capacity 2.0–3.5 t | Series 1252

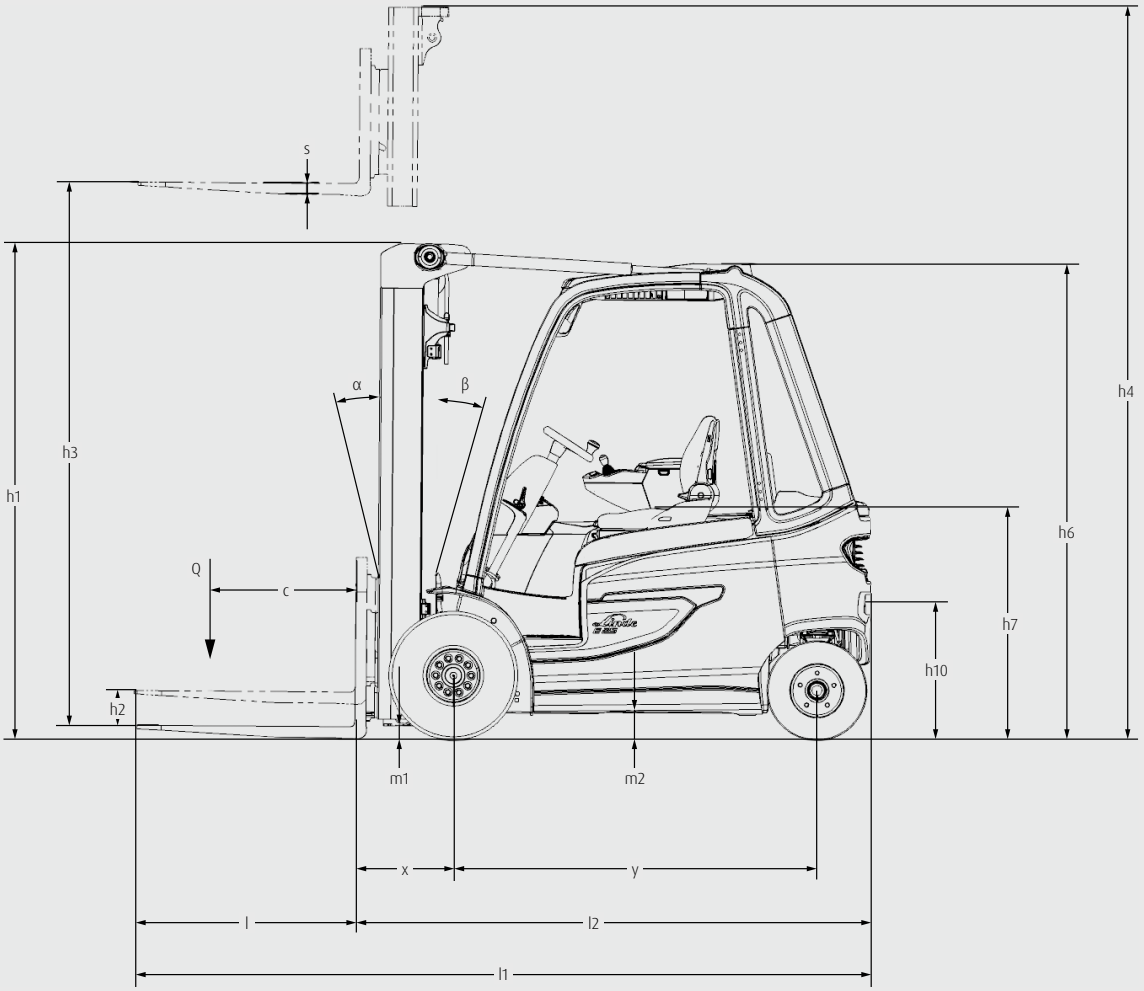
High-Performance Indoor Specialist

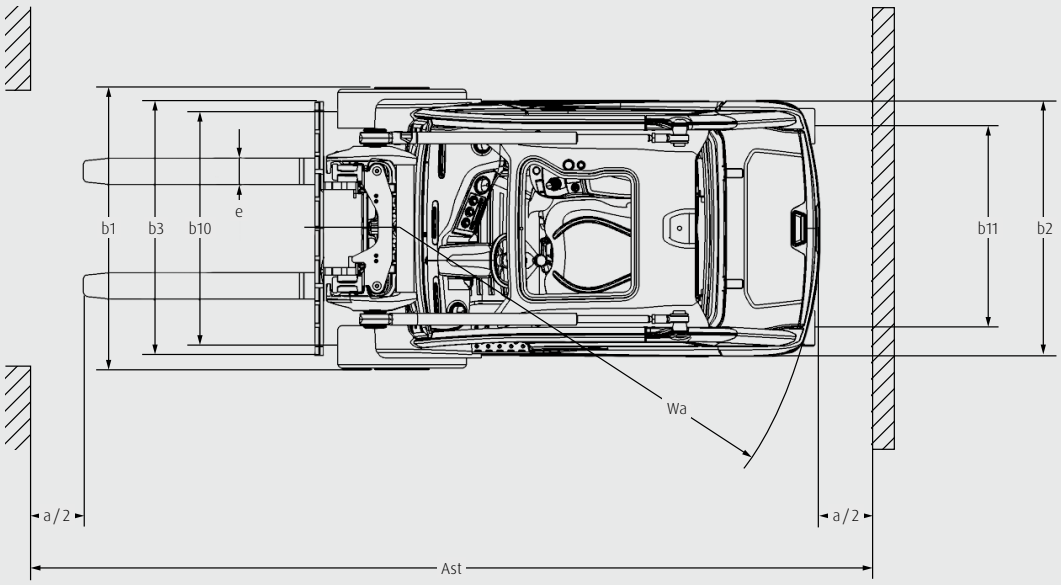
→ The twin-motor front-wheel drive together with combi steering axle facilitates maneuverability
→ Optimally suited for indoor use thanks to excellent maneuverability and compact design
→ Available with lead-acid battery, lithium-ion battery, or fuel cell
→ Optimally prepared for embedding within digital logistic processes thanks to data transmission unit fitted as standard

TECHNICAL DATA (According to VDI 2198)

Characteristics	1.1	Manufacturer		LINDE	LINDE	LINDE	LINDE	LINDE
	1.2	**Manufacturer's type designation**		**E25/600HL**	**E30**	**E30L**	**E30/600H**	**E30/600HL**
	1.2 a	Series		1252-01	1252-01	1252-01	1252-01	1252-01
	1.3	Power unit		Battery	Battery	Battery	Battery	Battery
	1.4	Operation		Seat	Seat	Seat	Seat	Seat
	1.5	Load capacity / Load	Q (t)	2.5	3.0	3.0	3.0	3.0
	1.6	Load centre distance	c (mm)	600	500	500	600	600
	1.8	Axle centre to fork face	x (mm)	455.5	448.5	448.5	453.5	453.5
	1.9	Wheelbase	y (mm)	1831	1722	1817	1686	1831
Weights	2.1	Service weight	kg	5387 [1]	5063 [1]	4994 [1]	5684 [1]	5651 [1]
	2.2	Axle load with load, front / rear	kg	6673 / 1214	7123 / 940	7111 / 883	7543 / 1141	7557 / 1094
	2.3	Axle load without load, front / rear	kg	2732 / 2655 [1]	2471 / 2592 [1]	2545 / 2449 [1]	2668 / 3016 [1]	2831 / 2820 [1]
Wheels / Tyres	3.1	Tyres rubber, SE, pneumatic, polyurethane		SE	SE	SE	SE	SE
	3.2	Tyre size, front		225 / 75-10 (23x9-10)	225 / 75-10 (23x9-10)	225 / 75-10 (23x9-10)	250 / 60-12 (23x10-12)	250 / 60-12 (23x10-12)
	3.3	Tyre size, rear		200 / 50-10	200 / 50-10	200 / 50-10	200 / 50-10	200 / 50-10
	3.5	Wheels, number front / rear (x = driven)		2x / 2	2x / 2	2x / 2	2x / 2	2x / 2
	3.6	Track width, front	b10 (mm)	972	972	972	996	996
	3.7	Track width, rear	b11 (mm)	900	884	884	884	884
Dimensions	4.1	Mast / fork carriage tilt, forward / backward	a / b (°)	5.0 / 8.0	5.0 / 8.0	5.0 / 8.0	5.0 / 8.0	5.0 / 8.0
	4.2	Height of mast, lowered	h1 (mm)	2322	2172	2172	2327	2326
	4.3	Free lift	h2 (mm)	150	150	150	150	150
	4.4	Lift	h3 (mm)	3295	2995	2995	3295	3295
	4.5	Height of mast, extended	h4 (mm)	4054	3754	3754	4059	4058
	4.7	Height of overhead guard (cabin)	h6 (mm)	2325 [3]	2165 [3]	2165 [3]	2325 [3]	2325 [3]
	4.8	Seat height relating to SIP / stand height	h7 (mm)	1260	1102	1102	1260	1260
	4.12	Towing coupling height	h10 (mm)	668	606	606	665	665
	4.19	Overall length	l1 (mm)	3535	3441	3536	3388	3533
	4.20	Length to fork face	l2 (mm)	2535	2441	2536	2388	2533
	4.21	Overall width	b1 / b2 (mm)	1180 / -	1179 / -	1179 / -	1244 / -	1244 / -
	4.22	Fork dimensions DIN ISO 2331	s / e / l (mm)	45 × 100 × 1000	45 × 100 × 1000	45 × 100 × 1000	50 × 120 × 1000	50 × 120 × 1000
	4.23	Fork carriage to ISO 2328, class / type A, B		2A	3A	3A	3A	3A
	4.24	Width of fork carriage	b3 (mm)	1150	1150	1150	1150	1150
	4.31	Ground clearance, below mast	m1 (mm)	119	120	117	118	118
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	120	120	120	120	120
	4.34.1	Aisle width for pallets 1000 × 1200 crossways	Ast (mm)	3853 [2]	3760 [2]	3855 [2]	3706 [2]	3851 [2]
	4.34.2	Aisle width with pallet 800 × 1200 along forks	Ast (mm)	3982 [2]	3888 [2]	3983 [2]	3835 [2]	3980 [2]
	4.35	Turning radius	Wa (mm)	2079	1992	2087	1934	2079
	4.36	Minimum pivoting point distance	b13 (mm)	0	0	0	0	0
Performance	5.1	Travel speed, with / without load	km / h	20 / 20	20 / 20	20 / 20	20 / 20	20 / 20
	5.2	Lifting speed, with / without load	m / s	0.43 / 0.54	0.4 / 0.54	0.4 / 0.54	0.4 / 0.54	0.4 / 0.54
	5.3	Lowering speed, with / without load	m / s	0.58 / 0.57	0.58 / 0.57	0.58 / 0.57	0.58 / 0.57	0.58 / 0.57
	5.5	Tractive force, with / without load	N	6700 / 6700	6700 / 6700	6700 / 6700	6700 / 6700	6700 / 6700
	5.6	Maximum tractive force, with / without load	N	18000 / 18000	18000 / 18000	18000 / 18000	18000 / 18000	18000 / 18000
	5.7	Climbing ability, with / without load	%	17.6 / 24.6	17.6 / 26.3	17.6 / 26.7	17.6 / 23.4	17.6 / 23.6
	5.8	Maximum climbing ability, with / without load	%	20.8 / 32.3	20.2 / 34.6	20.4 / 35.2	18.8 / 30.7	18.9 / 31.0
	5.9	Acceleration time, with / without load	s	5.4 / 4.6	5.4 / 4.6	5.4 / 4.5	5.5 / 4.7	5.5 / 4.7
	5.10	Service brake		hydr. / mech.	hydr. / mech.	hydr. / mech.	hydr. / mech.	hydr. / mech.
Drive	6.1	Drive motor rating S2 60 min	kW	2x 11	2x 11	2x 11	2x 11	2x 11
	6.2	Lift motor rating at S3 15 %	kW	17	17	17	17	17
	6.3	Battery according to DIN 43531 / 35 / 36 A, B, C, no		43 536 A	43 536 A	43 536 A	43 536 A	43 536 A
	6.4	Battery voltage / rated capacity (5 h)	(V) / (Ah)	80 / 700 / 775	80 / 460 / 500	80 / 575 / 625	80 / 560 / 620	80 / 700 / 775
	6.4.a	Battery energy content	kWh	49.6	32	40	39.68	49.6
	6.5	Battery weight (± 5 %)	kg	1863	1210	1458	1558	1863
	6.6	Energy consumption according to DIN EN 16796	kWh / h	6.6	7	7	7	6.9
	6.6.1	CO2 equivalent according to EN 16796	kg / h	3.6	3.8	3.8	3.8	3.6
	6.7	Turnover output according to VDI 2198	t / h	187.0	225.0	225.0	223.0	223.0
	6.8	Turnover efficiency according to VDI 2198	t / kWh	20	23.2	23.3	23.1	23.6
Others	8.1	Type of drive unit		Digital / stepless	Digital / stepless	Digital / stepless	Digital / stepless	Digital / stepless
	10.1	Operating pressure for attachments	bar	200	225	225	225	225
	10.2	Oil flow for attachments	l / min	50	50	50	50	50
	10.7	Sound pressure level LpAZ (at the driver's seat)	dB (A)	< 65	< 65	< 65	< 65	< 65
	10.8	Towing coupling, design / type, DIN 15 170		similar to form H	similar to form H	similar to form H	similar to form H	similar to form H
	11.2	Static stability		1.84	1.57	1.56	1.61	1.63

1) Figures with battery, see line 6.4 / 6.5. 2) Including a 200 mm (min.) operating aisle clearance. 3) All Truck types are available as container version; h6 = -100 mm


s
α
β
h1
h3
h4
h6
h7
h10
h2
Q
c
m1
m2
x
y
l
l2
l1


b1
b3
b10
e
b11
b2
Wa
a/2
a/2
Ast

MAST TABLES

STANDARD MAST (in mm)

Series	1532						
Lift	**h3: 3030**	**h3: 3130**	**h3: 3230**	**h3: 3430**	**h3: 3730**	**h3: 4030**	**h3: 4530**
Height measurements	h1: 2190 h2: 150 h4: 3695	h1: 2240 h2: 150 h4: 3795	h1: 2290 h2: 150 h4: 3895	h1: 2390 h2: 150 h4: 4095	h1: 2540 h2: 150 h4: 4395	h1: 2690 h2: 150 h4: 4695	h1: 2940 h2: 150 h4: 5195
Model							
E20	○	○	○	○	○	○	○
E25 / E25 L	○	○	○	○	○	○	○
E20 / 600 H	–	–	–	○	○	○	○

Series	1533						
Lift	**h3: 3095**	**h3: 3295**	**h3: 3395**	**h3: 3695**	**h3: 3995**	**h3: 4195**	**h3: 4495**
Height measurements	h1: 2225 h2: 150 h4: 3856	h1: 2325 h2: 150 h4: 4056	h1: 2375 h2: 150 h4: 4156	h1: 2525 h2: 150 h4: 4456	h1: 2675 h2: 150 h4: 4756	h1: 2775 h2: 150 h4: 4956	h1: 2925 h2: 150 h4: 5256
Model							
E30 / E30 L	○	○	○	○	○	○	○
E25 / 600 H	–	○	○	○	○	○	○
E30 / 600 H	–	○	○	○	○	○	○
E35 L	○	○	○	○	○	○	○
E25 / 600 HL	–	○	○	○	○	○	○
E30 / 600 HL	–	○	○	○	○	○	○
E35 HL	–	○	○	○	○	○	○

DUPLEX MAST (in mm)

Series	1532			1533				
Lift	**h3: 3100**	**h3: 3300**	**h3: 3400**	**h3: 3165**	**h3: 3265**	**h3: 3365**	**h3: 3465**	**h3: 3765**
Height measurements	h1: 2140 h2: 1445 h4: 3787	h1: 2240 h2: 1545 h4: 3987	h1: 2290 h2: 1595 h4: 4087	h1: 2180 h2: 1395 h4: 3951	h1: 2230 h2: 1445 h4: 4051	h1: 2280 h2: 1495 h4: 4151	h1: 2330 h2: 1545 h4: 4251	h1: 2480 h2: 1695 h4: 4551
Model								
E20	○	○	○	–	–	–	–	–
E25	○	○	○	–	–	–	–	–
E20 / 600 H	–	–	○	–	–	–	–	–
E25 L	○	○	○	–	–	–	–	–
E30 / E30 L	–	–	–	○	○	○	○	○
E25 / 600 H	–	–	–	–	–	○	○	○
E30 / 600 H	–	–	–	–	–	○	○	○
E35 L	–	–	–	○	○	○	○	○
E25 / 600 HL	–	–	–	–	–	○	○	○
E30 / 600 HL	–	–	–	–	–	○	○	○
E35 HL	–	–	–	–	–	○	○	○

TRIPLEX MAST (in mm)

Series	1532					
Lift	**h3: 4610**	**h3: 4760**	**h3: 4910**	**h3: 5060**	**h3: 5560**	**h3: 6510**
Height measurements	h1: 2135 h2: 1445 h4: 5295	h1: 2185 h2: 1495 h4: 5445	h1: 2235 h2: 1545 h4: 5595	h1: 2285 h2: 1595 h4: 5745	h1: 2485 h2: 1795 h4: 6245	h1: 2835 h2: 2145 h4: 7195
Model						
E20	○	○	○	○	○	○
E25	○	○	○	○	○	○
E20 / 600 H	–	–	–	○	○	○
E25 L	○	○	○	○	○	○

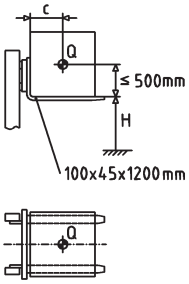
Series	1533							
Lift	**h3: 4680**	**h3: 4830**	**h3: 4980**	**h3: 5130**	**h3: 5330**	**h3: 5480**	**h3: 5930**	**h3: 6580**
Height measurements	h1: 2180 h2: 1395 h4: 5473	h1: 2230 h2: 1445 h4: 5623	h1: 2280 h2: 1495 h4: 5773	h1: 2330 h2: 1545 h4: 5923	h1: 2430 h2: 1645 h4: 6123	h1: 2480 h2: 1695 h4: 6273	h1: 2630 h2: 1845 h4: 6723	h1: 2880 h2: 2095 h4: 7373
Model								
E30 / E30 L	○	○	○	○	○	○	○	○
E25 / 600 H	–	–	○	○	○	○	○	○
E30 / 600 H	–	–	○	○	○	○	○	○
E35 L	○	○	○	○	○	○	○	○
E25 / 600 HL	–	–	○	○	○	○	○	○
E30 / 600 HL	–	–	○	○	○	○	○	○
E35 HL	–	–	○	○	○	○	○	○

○ Optional equipment – Not available

h1: Height of mast, lowered **h2:** Free lift **h3:** Lift **h4:** Height of mast, extended

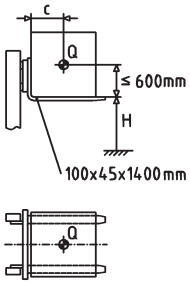
LOAD CAPACITY

E20



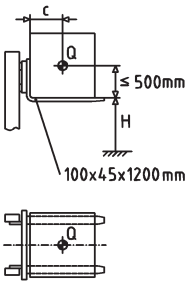
H (mm)	Q (kg)			
7000	1400	1260	1150	1050
6900	1460	1310	1190	1100
6800	1520	1370	1240	1140
6700	1580	1420	1290	1190
6600	1640	1470	1340	1230
6500	1700	1520	1390	1280
6400	1760	1580	1440	1320
6300	1820	1640	1490	1370
6200	1880	1690	1540	1410
6100	1940	1740	1590	1460
≤ 6000	2000	1800	1640	1500
c (mm)	400 - 500	600	700	800

E20 / 600 H



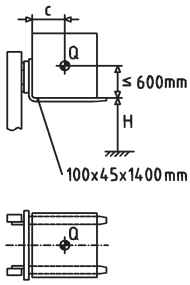
H (mm)	Q (kg)			
7000	1400	1270	1170	1080
6900	1460	1320	1220	1120
6800	1520	1380	1270	1170
6700	1580	1430	1320	1220
6600	1640	1490	1370	1260
6500	1700	1540	1420	1310
6400	1760	1600	1470	1360
6300	1820	1650	1520	1400
6200	1880	1710	1570	1450
6100	1940	1760	1620	1490
≤ 6000	2000	1820	1670	1540
c (mm)	400 - 600	700	800	900

E25 / E25 L



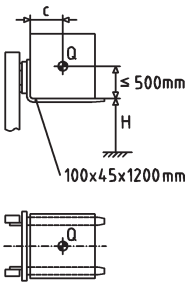
H (mm)	Q (kg)			
7000	1400	1260	1150	1050
6800	1540	1390	1270	1160
6600	1690	1520	1390	1270
6400	1840	1650	1510	1380
6200	1980	1790	1630	1490
6100	2060	1850	1690	1550
6000	2130	1920	1750	1600
5900	2200	1990	1810	1660
5800	2280	2050	1870	1710
5700	2350	2120	1930	1770
5600	2420	2180	1990	1820
≤ 5500	2500	2250	2050	1880
c (mm)	400 - 500	600	700	800

E25 / 600 H, E25 / 600 HL



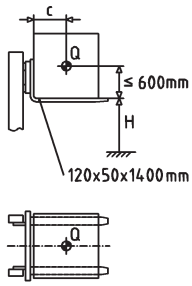
H (mm)	Q (kg)			
7000	1700	1550	1420	1320
6900	1780	1620	1490	1380
6800	1860	1690	1560	1440
6700	1940	1770	1630	1510
6600	2020	1840	1690	1570
6500	2100	1910	1760	1630
6400	2180	1990	1830	1690
6300	2260	2060	1900	1760
6200	2340	2130	1960	1820
6100	2420	2210	2030	1880
≤ 6000	2500	2280	2100	1940
c (mm)	400 - 600	700	800	900

E30 / E30 L



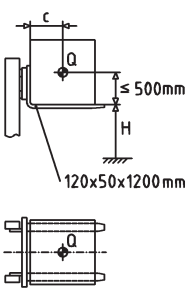
H (mm)	Q (kg)			
7000	1700	1530	1400	1290
6800	1900	1710	1560	1440
6600	2100	1890	1730	1590
6500	2200	1990	1810	1670
6400	2300	2080	1890	1740
6300	2400	2170	1980	1820
6200	2500	2260	2060	1890
6100	2600	2350	2140	1970
6000	2700	2440	2230	2050
5900	2800	2530	2310	2120
5800	2900	2620	2390	2200
≤ 5900	3000	2710	2470	2270
c (mm)	400 - 500	600	700	800

E30 / 600 H, E30 / 600 HL



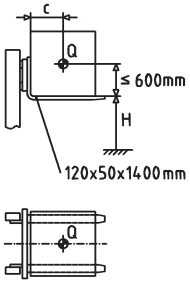
H (mm)	Q (kg)			
7000	2000	1820	1680	1550
6900	2100	1910	1760	1630
6800	2200	2000	1840	1710
6700	2300	2100	1930	1790
6600	2400	2190	2010	1860
6500	2500	2280	2100	1940
6400	2600	2370	2180	2020
6300	2700	2460	2260	2100
6200	2800	2550	2350	2170
6100	2900	2640	2430	2250
≤ 6000	3000	2740	2520	2330
c (mm)	400 - 600	700	800	900

E35 L / E35 HL



H (mm)	Q (kg)			
7000	2300	2080	1900	1740
6900	2420	2190	2000	1840
6800	2540	2290	2090	1930
6700	2660	2400	2190	2020
6600	2780	2510	2290	2110
6500	2900	2620	2390	2200
6400	3020	2730	2490	2290
6300	3140	2840	2590	2380
6200	3260	2950	2690	2480
6100	3380	3050	2790	2570
≤ 6000	3500	3160	2890	2660
c (mm)	400 - 500	600	700	800

E30 / 600 HL Beverage



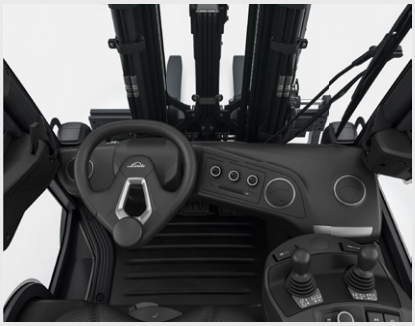
H (mm)	Q (kg)			
7000	2300	2100	1930	1790
6900	2400	2190	2010	1860
6800	2500	2280	2100	1940
6700	2600	2370	2180	2020
6600	2700	2460	2260	2100
6500	2800	2550	2350	2170
6400	2900	2640	2430	2250
≤ 6300	3000	2740	2520	2330
c (mm)	400 - 600	700	800	900

STANDARD AND OPTIONAL EQUIPMENT

		E 20 – E 35
Safety	Linde Curve Assist – automatic drive speed reduction when cornering	●
	Electrical seat beld monitoring – Visual and acoustic feedback	●
	Linde Load Assist – increased safety at high lift heights	●
	BlueSpot and TruckSpot – optical warning signal for pedestrians and drivers	○
	Load weight indicator	○
	Linde Safety Pilot – load-dependent travel and lifting speed intervention plus additonal functions	○
	Linde Safety Guard – truck to truck warning and truck to pedestrian warning	○
	Speed limitations (via switch, indoor-outdoor, load depending)	○
	Restraint systems (different options)	○
	Lightning: LED Stripes	○
	Lightning: VertiLight	○
	Motion Detection - registers movements in the back of the truck and prohibits the driving backwards	○
Digitalisation	Data Transmission Online	●
	Data Transmission Wifi	○
	Linde connect:desk – local fleet managment with different functional modules	○
	Linde connect:cloud – fleet management as a service (hosted version)	○
	Pre-Operation-Check – individualizable daily check protocol for operational readiness	○
	Truck Call App – coordination of transport orders	○
Operation / Load Handling	Double pedal control – stepless acceleration and fast reversing	●
	Single pedal control – stepless acceleration	○
	Linde Load Control – central levers fully integrated in the armrest of precise control of all hydraulic functions	●
	Individual Lever System	○
Workplace	Innovative decoupling concept wih ring bearings for lowest human vibrations	●
	Ergonomic and sace truck acess due to a low entry step and handle bar at a-pillar and bonnet	●
	Tilt adjustable steering column	●
	Overhead guard comfort for maximum head clearance	●
	Operator's seat – mechanical quick weight adjustment	●
	Various seating options such as heating, air suspension, active seat ventilation, longitudinal suspension	○
	Operators seat – Swiveling seat	○
	Coloured 3.5" LED display with steering angle indicator,, tilt angle indicator and remaining travel indicator	●
	Coloured 7" LED multifunction display integrates additional functions e.g. cameras and Linde Safety Pilot	○
	Top screen armored glass	○
	Alloy doors with openable window and door monitoring	○
	DIN A4 illuminated clipboad	○
	Fully integrated heater	○
	Fully integrated air conditoning inclusive defog function	○
	Radio, DAB+, MP3 Player inclusive Bluetooth hands-free equipment	○
Mast	Top mounted tilting cylinders – including maintenance free bearings	●
	Best visibility through asymmetric, nested mast profiles on standard, duplex, triplex mast	●
	Electronic damped tilt stop	●
	Hydaulic accumulator for high driving comfort and less wear	○
Attache-ment / Forks	Reinforced Linde forks – easy adjustable and long life time	○
	Integrated sideshift with full lift capacity and roller guided	○
	Integrated fork positioner "view" for high residual capacities and optimized visibility	○
	Street sweeper preparation	○
Axles and Tyres	Combi steering axle	●
	Super Elastic (SE) tyres	●
	Closed Shoulder Tyres CS 20	○
	Pneumatic tyres	○
	Antistatic, non marking tyres	○
	Anti-spray mudflaps front and rear	○
Drive and Brake-System	Two motor front wheel drive	●
	Synchronous reluctance motor for lift and drive function	●
	Power setting efficiency, economy, performance	●
	Linde combi-steering axle – excellent maneuverability in smallest areas	○
	Automatic parking brake	●

● Standard equipment ○ Optional equipment

CHARACTERISTICS



Driver workplace

Ergonomics

→ Spacious driver's cab and ergonomic seat ensure fatigue-free working
→ Optimum view of both the load and surroundings
→ Layout of control elements reduces the physical strain on the driver
→ Separation of the workstation, mast, and drive and steering axles reduces physical strain on the driver, including on uneven surfaces



Linde combi steering axle

Handling

→ The twin-motor front-wheel drive together with combi steering axle provides exceptional maneuverability
→ Overhead tilt cylinder and warp-resistant mast design ensure safe load handling
→ Synchronous reluctance motor for lift and drive function increases power and energy efficiency
→ A choice between lead-acid, lithium-ion battery, or fuel cell energy-storage systems
→ Wireless access to driver data allows data analysis and connection to logistic, safety, and fleet management systems



All-round visibility

Safety

→ Chassis, A-pillar, mast, and roof construction provide the driver with optimum visibility of the load and surroundings
→ The truck's low center of gravity reduces the risk of tipping
→ Linde Curve Assist reduces speed in relation to the steering angle when cornering
→ Linde Load Assist reduces the risk of tipping accidents when moving loads at height
→ Automatic parking brake inclusive hill-hold function



Easy service access

Service

→ Long service intervals e.g. 6000 h / 3 years hydraulic oil / filter change
→ Easy access to main components
→ Driver display shows all important truck information to the driver
→ Remote fault diagnosis and firmware updates can be conducted without a service technician, in turn saving costs
→ Truck Health Monitoring enables comprehensive fault monitoring and faster fault localization wear and damage is identified early thus increasing truck availability
→ Modular assemblies allow for quick replacement, shortening downtime during repairs

Presented by:

Subject to modification in the interest of progress. Illustrations and technical details could include options and not binding for actual constructions. All dimensions subject to usual tolerances.

Linde Material Handling

Linde Material Handling GmbH
Carl-von-Linde-Platz | 63743 Aschaffenburg | Germany
Phone + 49 6021 99 0 | Fax + 49 6021 99 1570
www.linde-mh.com | info@linde-mh.com

Printed in Germany | 872.e.0,5.0621.IndA.se