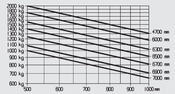
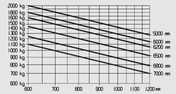
Load Capacity Diagrams

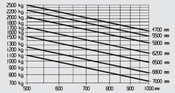
E20R



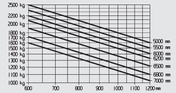
E20/600RH



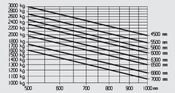
E25R/E25RL



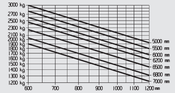
E25/600RH, E25/600RHL



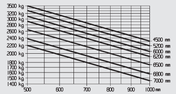
E30R/E30RL



E30/600RH, E30/600RHL



E35RL/E35RHL



Standard Equipment/Optional Equipment

Standard Equipment

- Standard truck height or comfort version (+ 80 mm)
- Hydrostatic power steering
- Linde twin accelerator pedals for all vehicle movements
- Central lever (joystick control) integrated into the adjustable armrest
- 2 x 9 kW maintenance free AC drive motors
- 22 kW AC maintenance free lift motor
- Different ECO modes providing the perfect combination of performance and efficiency
- Graphic display of remaining battery operating time in minutes
- Automatic parking brake
- Linde patented combi axle in all models up to 3.5t
- Linde dual motor drive
- Proportional reduction of travel speed when cornering (Curve Assist)
- Seamless electronic control of all traction and hydraulic movements
- Standard chassis suitable for working in ISO containers with appropriate mast (not high comfort version)
- Hydraulically cushioned full suspension PVC operator's seat with armrest
- Comprehensive digital instrument display
- Generous storage facilities for writing materials and miscellaneous items
- Superelastic tyres

Mast

- Clearview standard mast
- Fork carriage width: 1,080 mm for E20, E20/600H, E25, E25L 1,150 mm for E25/600H, E25/600HL, E30, E30/600H, E30/600HL, E30L, E35L, E35HL
- Fork length 1,000 mm

Optional Equipment

- Top screen: 20mm armored safety glass & wipe/wash system
- Windshield: 10mm frameless armored safety glass
- Rear screen
- Overhead guard sun blind
- Single pedal accelerator with forward/reverse selector
- Fabric covered comfort seat
- Super-comfort seat with air suspension, heater and backrest extension
- Swiveling seat
- Individual or single hydraulic control joystick
- Clipboard with LED illumination
- Alternative fork carriage widths
- Integrated sideshift
- Integrated fork spreader
- One or two additional hydraulic circuits for attachments
- Working lamps and truck lights with LED technology
- Flashing beacon/rotating beacon/BlueSpot™
- Audible reversing alarm
- Electrical socket 12 V
- External, internal and panoramic mirror
- Integrated charger unit, optionally with electrolyte circulation
- Active ventilation for battery charging
- Alternative tyre types
- Alternative custom paintwork
- Connected solutions like access control for individual driver authorization, recording and remote transfer of the operating hours and active usage analysis of complete truck fleet

Other options available on request

Revolutionary Roadster

Electric Counterbalanced Trucks Capacity 2000 - 3500 kg E20R, E25R, E30R, E35R

Series 387

Linde Material Handling

Safety

The world's first Roadster for counterbalanced trucks is setting the new standard in terms of visibility and safety. This unique design allows for a superb panorama view due to removed A-pillars. A steel strutted roof or an optional armored glass roof, which is connected at the mast and the tilt cylinder support, forms the new protective zone around the operator.

Performance

One would expect a high performance truck to have a high performance traction system – and that is exactly what the Linde compact drive axle and lift system delivers. Powerful motors and intelligent electronic control form an impressive power pack to deliver the highest level of productivity.

Comfort

Consistently high levels of performance and efficiency for extended periods are only possible if the operator feels comfortable. The ergonomic layout of all the controls, the adjustability of the armrest and seat, Linde Load Control, and twin accelerator pedals provide the best possible intuitive interface between the truck and the operator. Combined with the excellent view, the Roadster offers the operator unmatched operating comfort.

Reliability

An electric forklift truck depends on reliable electronic systems. The Linde electronic control system provides a high level of reliability because of its dual circuit monitoring system and sealed aluminium housings which provides total protection for the electronics from the ingress of dust and moisture.

Productivity

Effective in operation, efficient in reducing costs: The unique Linde energy management system ensures intelligent and economical consumption of energy. Energy can also be obtained quickly utilising the optional built-in charging unit or one of the four simple and rapid battery changing methods. The result: more uptime and increased productivity. The unbeatable visibility of the Roadster specially for load and environment further improves the productivity.

Features

Linde compact drive axle

- Twin drive design with high performance Linde AC technology
- Optimum energy efficiency
- Maintenance-free oil-bath vane brake
- Automatic parking brake
- Latest DCB-power moduls are mounted on the drive axle - highest efficiency due to very compact conductors to the motors

Linde hydrostatic power steering

- Minimal physical demands on the operator
- Compact ergonomically designed steering wheel
- Linde combi steer axle for outstanding manoeuvrability

Linde twin accelerator control

- Seamless, rapid reversing without repositioning the feet
- Short pedal travel
- Fatigue-free working
- Increased throughput and performance

Linde Load Control

- Small tactile joystick integrated into the adjustable armrest
- Precise and effortless fingertip joystick control of all mast functions
- Safe and highly efficient load handling

Linde Dual Motor Drive

- Two powerful AC drive motors integrated in the front axle
- Infinitely acceleration and variable torque characteristics
- Extremely quiet in operation

Linde operator's compartment

- Ergonomically designed for efficient, fatigue-free working
- Spacious operator's compartment with generous floor plate area
- Cushioned comfort – mast and drive axle are isolated from the chassis and cab by a unique resilient suspension system that absorbs shock loadings

World's best visibility

- Removed of the A-pillars for an excellent view to load and environment
- Large and open steel strutted roof enables superb visibility to the top
- Optional the world's largest armored glass forklift truck roof for an unobstructed view
- Reduced risk of accidents due to better all-around visibility
- Integrated access grip for safe and easy entry

Linde energy management

- Optimised energy consumption
- Accurate battery condition indicator
- Simple horizontal or vertical battery changing options
- Optional built-in high frequency charger for convenience and flexibility
- Record of battery usage and condition

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Linde Material Handling

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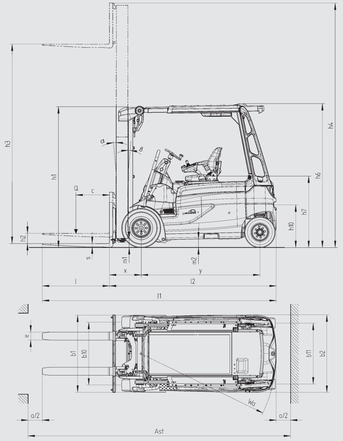
Technical Data according to VDI 2198

Characteristics	1.1	Manufacturer		LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE	LINDE
	1.2	Model designation		**E20R**	**E20/600RH**	**E25R**	**E25/600RH**	**E25RL**	**E25/600RHL**	**E30R**	**E30/600RH**	**E30RL**	**E30/600RHL**	**E35RL**	**E35RHL**
	1.2a	Series		387-00	387-00	387-00	387-00	387-00	387-00	387-00	387-00	387-00	387-00	387-00	387-00
	1.3	Power unit		Battery	Battery	Battery	Battery	Battery	Battery	Battery	Battery	Battery	Battery	Battery	Battery
	1.4	Operation		Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat	Seat
	1.5	Load capacity/Load	Q (t)	2.0	2.0	2.5	2.5	2.5	2.5	3.0	3.0	3.0	3.0	3.5	3.5
	1.6	Load centre	c (mm)	500	600	500	600	500	600	500	600	500	600	500	500
	1.8	Axle centre to fork face	x (mm)	445	445	445	468	445	468	471	476	471	476	476	476
	1.9	Wheelbase	y (mm)	1622	1651	1622	1651	1767	1796	1665	1651	1767	1796	1810	1796
Weights	2.1	Service weight	(kg)	3951 [1]	4601 [1]	4437 [1]	5030 [1]	4365 [1]	5055 [1]	4937 [1]	5581 [1]	4980 [1]	5459 [1]	5356 [1]	5639 [1]
	2.2	Axle load with load, front/rear	(kg)	5333 / 618	5617 / 984	6123 / 814	6611 / 919	6132 / 733	6589 / 966	7125 / 812	7579 / 1002	7131 / 849	7519 / 940	8025 / 831	8152 / 987
	2.3	Axle load without load, front/rear	(kg)	2168 / 1783 [1]	2351 / 2250 [1]	2166 / 2271 [1]	2494 / 2536 [1]	2295 / 2070 [1]	2602 / 2453 [1]	2375 / 2562 [1]	2624 / 2957 [1]	2482 / 2498 [1]	2722 / 2737 [1]	2638 / 2718 [1]	2750 / 2889 [1]
Wheels/Tyres	3.1	Tyres rubber, SE, pneumatic, polyurethane		SE	SE	SE	SE	SE	SE	SE	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)	225/75-10 (23x9-10)	225/75-10 (23x9-10)	225/75-10 (23x9-10)	225/75-10 (23x9-10)	250/60-12 (23x10-12)	225/75-10 (23x9-10)	250/60-12 (23x10-12)	315/45-12	315/45-12
	3.3	Tyre size, rear		180/60-10	180/60-10	200/50-10	200/50-10	200/50-10	200/50-10	200/50-10	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	2x / 2	2x / 2	2x / 2	2x / 2	2x / 2	2x / 2	2x / 2
	3.6	Track width, front	b10 (mm)	942	942	942	942	942	942	942	980	942	980	1028	1028
	3.7	Track width, rear	b11 (mm)	900	900	886	886	886	886	886	886	886	886	886	886
Dimensions	4.1	Mast/fork carriage tilt, forward/backward	a/b (°)	5.0 / 5.0	5.0 / 5.0	5.0 / 5.0	5.0 / 5.0	5.0 / 5.0	5.0 / 5.0	5.0 / 5.0	5.0 / 5.0	5.0 / 5.0	5.0 / 5.0	5.0 / 5.0	5.0 / 5.0
	4.2	Height of mast, lowered	h1 (mm)	2223	2273	2223	2269	2223	2269	2270	2272	2269	2271	2267	2267
	4.3	Free lift	h2 (mm)	150	150	150	150	150	150	150	150	150	150	150	150
	4.4	Lift	h3 (mm)	3130	3230	3130	3195	3130	3195	3195	3195	3195	3195	3195	3195
	4.5	Height of mast, extended	h4 (mm)	3793	3893	3793	3956	3793	3956	3957	3959	3956	3958	3954	3954
	4.7	Height of overhead guard (cabin)	h6 (mm)	2128 [2]	2293 [3]	2128 [2]	2293 [3]	2128 [2]	2293 [3]	2128 [2]	2293 [3]	2128 [2]	2293 [3]	2128 [2]	2293 [3]
	4.8	Height of seat/stand on platform	h7 (mm)	1002	1160	1002	1160	1002	1160	1002	1160	1002	1160	1002	1160
	4.12	Towing coupling height	h10 (mm)	621	656	621	658	624	659	623	656	622	661	626	659
	4.19	Overall length	l1 (mm)	3318	3352	3318	3375	3463	3520	3444	3383	3539	3528	3594	3528
	4.20	Length to fork face	l2 (mm)	2318	2352	2318	2375	2463	2520	2444	2383	2539	2528	2594	2528
	4.21	Overall width	b1/b2 (mm)	1150 / 1148	1150 / 1146	1150 / 1148	1150 / 1146	1150 / 1148	1150 / 1146	1150 / 1178	1228 / 1146	1150 / 1148	1228 / 1146	1322 / 1178	1322 / 1146
	4.22	Fork dimensions	s/e/l (mm)	45 x 100 x 1000	45 x 100 x 1000	45 x 100 x 1000	45 x 100 x 1000	45 x 100 x 1000	45 x 100 x 1000	45 x 100 x 1000	50 x 120 x 1000	45 x 100 x 1000	50 x 120 x 1000	50 x 120 x 1000	50 x 120 x 1000
	4.23	Fork carriage to ISO 2328, class/type A, B		2A	2A	2A	2A	2A	2A	3A	3A	3A	3A	3A	3A
	4.24	Width of fork carriage	b3 (mm)	1080	1080	1080	1150	1080	1150	1150	1150	1150	1150	1150	1150
	4.31	Ground clearance, below mast	m1 (mm)	130	130	129	127	130	127	136	136	136	136	129	129
	4.32	Ground clearance, centre of wheelbase	m2 (mm)	120	120	120	120	120	120	120	120	120	120	120	120
	4.33	Aisle width with pallet 1000 x 1200 across forks	Ast (mm)	3638 [4]	3672 [4]	3638 [4]	3693 [4]	3783 [4]	3838 [4]	3762 [4]	3700 [4]	3857 [4]	3845 [4]	3911 [4]	3845 [4]
	4.34	Aisle width with pallet 800 x 1200 along forks	Ast (mm)	3766 [4]	3800 [4]	3766 [4]	3822 [4]	3911 [4]	3967 [4]	3891 [4]	3830 [4]	3986 [4]	3975 [4]	4041 [4]	3975 [4]
	4.35	Turning radius	Wa (mm)	1873	1907	1873	1907	2018	2052	1973	1907	2068	2052	2118	2052
	4.36	Minimum pivoting point distance	b13 (mm)	0	0	0	0	0	0	0	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	20 / 20	20 / 20	20 / 20	20 / 20	20 / 20	20 / 20	20 / 20
	5.2	Lifting speed, with/without load	(m/s)	0.45 / 0.56	0.45 / 0.56	0.45 / 0.56	0.44 / 0.53	0.45 / 0.56	0.44 / 0.53	0.42 / 0.51	0.42 / 0.51	0.42 / 0.51	0.42 / 0.51	0.39 / 0.51	0.39 / 0.51
	5.3	Lowering speed, with/without load	(m/s)	0.54 / 0.54	0.54 / 0.54	0.54 / 0.54	0.56 / 0.56	0.54 / 0.54	0.56 / 0.56	0.56 / 0.56	0.56 / 0.56	0.56 / 0.56	0.56 / 0.56	0.56 / 0.56	0.56 / 0.56
	5.5	Tractive force, with/without load	(N)	4600 / 4600	4600 / 4600	4600 / 4600	4600 / 4600	4600 / 4600	4600 / 4600	4600 / 4600	4600 / 4600	4600 / 4600	4600 / 4600	4600 / 4600	4600 / 4600
	5.6	Maximum tractive force, with/without load	(N)	15000 / 15000	15000 / 15000	15000 / 15000	15000 / 15000	15000 / 15000	15000 / 15000	15000 / 15000	15000 / 15000	15000 / 15000	15000 / 15000	15000 / 15000	15000 / 15000
	5.7	Climbing ability, with/without load	(%)	8.2 / 12.2	7.5 / 10.6	7.1 / 10.8	6.4 / 9.4	7.2 / 11.2	6.4 / 9.4	6.1 / 9.6	5.8 / 8.7	6.1 / 9.5	5.8 / 8.8	5.5 / 9.0	5.4 / 8.5
	5.8	Maximum climbing ability, with/without load	(%)	25.4 / 39.0	23.0 / 33.4	21.6 / 34.1	19.7 / 29.3	22.1 / 35.4	19.6 / 29.3	18.7 / 30.0	17.5 / 27.0	18.6 / 29.7	17.6 / 27.2	16.8 / 27.8	16.3 / 26.4
	5.9	Acceleration time, with/without load	(s)	4.1 / 4.0	4.1 / 4.0	4.1 / 4.0	4.1 / 4.0	4.1 / 4.0	4.2 / 4.0	4.2 / 4.0	4.2 / 4.0	4.2 / 4.0	4.2 / 4.0	4.3 / 4.1	4.3 / 4.1
	5.10	Service brake		hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.	hydr./mech.
Drive	6.1	Drive motor, 60 minute rating	(kW)	2x 9	2x 9	2x 9	2x 9	2x 9	2x 9	2x 9	2x 9	2x 9	2x 9	2x 9	2x 9
	6.2	Lift motor, rating at S3 15%	(kW)	22	22	22	22	22	22	22	22	22	22	22	22
	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	43 536 / A	43 536 / A	43 536 / A	43 536 / A	43 536 / A	43 536 / A	43 536 / A
	6.4	Battery voltage/rated capacity (5h)	(V/Ah)	80 / 460/500	80 / 560/620	80 / 460/500	80 / 560/620	80 / 575/625	80 / 700/775	80 / 460/500	80 / 560/620	80 / 575/625	80 / 700/775	80 / 575/625	80 / 700/775
	6.5	Battery weight (± 5%)	(kg)	1210	1558	1210	1558	1458	1863	1210	1558	1458	1863	1458	1863
	6.6	Power consumption according to VDI cycle	(kWh/h)	6.4	7	7.4	7.9	7.3	7.9	8.6	8.7	8.6	8.7	9.5	9.8
Others	8.1	Type of drive control		Digital/stepless	Digital/stepless	Digital/stepless	Digital/stepless	Digital/stepless	Digital/stepless	Digital/stepless	Digital/stepless	Digital/stepless	Digital/stepless	Digital/stepless	Digital/stepless
	8.2	Operating pressure for attachments	(bar)	170	170	170	170	170	170	170	170	170	170	170	170
	8.3	Oil flow for attachments	(l/min)	50	50	50	50	50	50	50	50	50	50	50	50
	8.4	Noise level at operator's ear	(dB(A))	< 65	< 65	< 65	< 65	< 65	< 65	< 65	< 65	< 65	< 65	< 65	< 65

1) Figures with battery, see line 6.4/6.5.
2) Comfort Version h6=2208 mm
3) Comfort Version h6=2373 mm
4) Including a 200 mm (min.) operating aisle clearance.



Standard mast		E20R/E20R* E25R/E25R* E25RL/E25RL*	E20R/E20R* E20-600RH E25R/E25R* E25RH/E25RHL*	E20R, E20R*, E20-600RH, E20-600R* E25R, E25R*, E25RL, E25RL*				E30R/E30R* E30RL/E30RL* E35RL/E35RL*	E25-600RH E25-600RHL E30-600RH E30-600RHL	E25-600RH*, E25-600RHL* E30-600RH*, E30-600RHL* E35RHL*			
Lift	h3	3130	3230	3430	3730	4030	4530	5030	3095	3195	3495	3695	3995	4495	4995
Mast retracted	h1	2225	2275	2375	2525	2675	2925	3175	2224	2274	2424	2524	2674	2924	3174
Mast extended	h4	3795	3895	4095	4395	4695	5195	5695	3853	3953	4253	4453	4753	5253	5753
Free lift	h2	150	150	150	150	150	150	150	150	150	150	150	150	150	150

Duplex mast		E20R/E20R* E25R/E25R* E25RL/E25RL*	E20R* E20-600RH E25R* E25RL*		E25R/E25RL E30R/E30RL E35RL	E25-600RH E25-600RHL E30R* E30RL* E30-600RH E30-600RHL E35RL*/E35RHL*	E25-600RH* E25-600RHL* E25R-E30RL* E30-600RH* E30-600RHL* E35RL*/E35RHL*			
Lift	h3	3200	3300	3500	3800	4100	2965	3265	3765	4065
Mast retracted	h1	2176	2226	2326	2476	2626	2075	2225	2475	2625
Mast extended	h4	3870	3927	4170	4470	4770	3745	4045	4545	4845
Free lift	h2	1505	1555	1655	1805	1955	1295	1445	1695	1845

Triplex mast		E20R E25R E25RL	E20R* E25R* E25RL*	E20R* E20-600RH E25R* E25RL*	E20R* E20-600RH* E25R* E25RL*	E20R* E20-600RH		E25/E25RL E30R/E30RL E35RL	E25R*/E25RL* E30R*/E30RL* E35RL*	E25-600RH E25-600RHL E30-600RH E30-600RHL		E25-600RH*/E25-600RHL* E30-600RH*/E30-600RHL* E35RL*/E35RHL*		
Lift	h3	4460	4760	4910	5210	5560	6010	6660	4380	4680	4830	4980	5330	5930	6430
Mast retracted	h1	2075	2175	2225	2325	2475	2625	2875	2074	2174	2224	2274	2424	2624	2824
Mast extended	h4	5130	5430	5580	5880	6230	6680	7330	5150	5450	5600	5750	6100	6700	7200
Free lift	h2	1405	1505	1555	1655	1805	1955	2205	1295	1395	1445	1495	1645	1845	2045

(*) = Comfort version + 80mm
Figures in mm
Figures for other equipments and masts on request