

## Standard Equipment/Optional Equipment

### Standard Equipment

<b>General:</b>	Ground clearance 80 mm
Individual fingertip control levers for precision load handling	Automatically adjusts the max. travel speed according to the actual load weight
Midi steering wheel, adjustable in length, height and angle	Max. travel speed 13 km/h
360° steering with steering angle indicator	Chill store design, down to +1° Celsius
Single pedal with hand operated direction selection	<b>Mast:</b>
Maintenance-free AC 7.2 kW traction and 15 kW lift motor	Tilting clear-view triplex mast with excellent visibility
Polyurethane drive and load wheel tyres	<b>Safety:</b>
Battery residual capacity display	Automatic electric parking brake
48 V batteries with capacities from 465 Ah to 930 Ah	Electromagnetic disc brake on the drive wheel and electric load wheel brake
Battery reaches forward for changing or daily checks	Polycarbonate screen between operator and mast
Key switch or PIN code entry	Automatic slowdown at end of reach travel and max. lift
Foot step to floor, 400 mm, including instep handle	Lift height related travel speed reduction
Integral control console with 60 mm horizontal adjustment	Battery lock with creep speed interlock
Armrest adjustable in height	Linde Curve Assist
Rear view mirror	Load weight indicator +/- 100 kg
Fork spreader V= 560-1550 mm to select	Lift height indicator above free lift
a) manually, b) hydraulically	
<b>New Standard Features:</b>	
Comfort fabric suspension seat with tilting high backrest and inflatable lumbar support	
Electrically adjustable floor plate height 550-620 mm	

### Optional Equipment

Manual or hydraulic fork spreader up to 2,220 mm overall width across forks	Comfort PVC suspension seat with tilting high backrest, inflatable lumbar support and headrest
Alternative fork lengths	Headrest
Auto levelling of forks	Heated seat
Lift height preselector, operates only above free lift stage	12 V DC Power Socket
Height assistance system	Clipboard
Lift stop with or without override switch	Mounting for data terminal (RAM C/ RAM D holder)
Lower and reach back interlock 600 mm with override	Radio / CD and MP3
Creep speed from predetermined lift height	Battery mounted on rollers in truck
2 x rear facing working lights	Equipment bar
Flashing beacon on overhead guard (increased h6 to 2270 mm)	Lateral driving camera and monitor (not in combination with rear view mirror)
Flashing beacon on cabin (increased h6 to 2325 mm)	Alternative colour schemes
Mesh on overhead guard	Ambient cabin, with electrical heating
Audible battery discharge indication, present at 25% (adjustable)	Opening window in cabin door
Automatic truck shut-off	Intercom System
Maintenance interval display	Internal panorama mirror
Traction control system	Wide selection of battery chargers for single and multiple shift applications

Other options available on request.



## Electric Four Way Reach Truck Capacity 2000 kg + 2500 kg R 20 F – R 25 F

Series 8923

Linde Material Handling

Linde

### Safety

Designed for optimum operator comfort and safety. Multi directional ability enables long or wide loads to be handled safely and efficiently. To operate the truck either key switch entry or PIN access are available as standard. Personal ID is available with pre-programmed performance parameters for ten individual operator. The electromagnetic drive wheel disc brake and regenerative braking together with seamless proportional electric braking on the steered load wheel provide assured, precise stopping power.

### Performance

Rapid lift and traction speeds are controlled by energy efficient digital AC technology for maximum productivity. The truck can be driven in any direction with smooth precision. The drive wheel and steered load wheel are synchronized to ensure safe rapid direction changes and maneuvering for productive, cost-efficient load handling.

### Comfort

The ergonomic tilting seat with high backrest and inflatable lumbar support and combined with height adjustable floor plate provide a superb, fatigue-free working environment. A tapered backrest profile enables strain free turning of the upper torso when travelling or maneuvering.

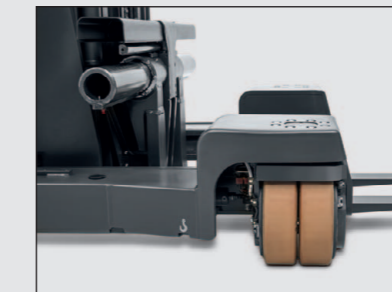
## Features

### Superb working environment

- Ergonomic comfort seat has a high, tilting backrest and inflatable lumbar support.
- A tapered backrest profile enables strain-free turning of the upper torso when travelling or maneuvering.
- Additionally the dynamic tilting backrest provides a clear upward view to the load and forks, without straining the neck.
- The steering and control consoles are adjustable.
- Cushioned, adjustable armrest
- Electrically adjustable floor plate height 550-620 mm

### Maneuverability

- Four-way traction ability provides outstanding multi-directional versatility and maneuverability for handling long or wide loads across the forks as well as standard pallets.
- Synchronised steering system for rapid, seamless transfer between normal and lateral driving.
- 360° steering with direction selection



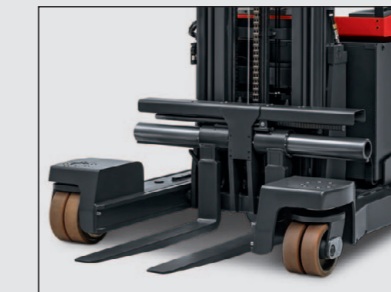
### Servicing

- Easy service access
- Maintenance-free AC traction, lift and steer motors
- Digital control system enables performance parameters to be individually adjusted
- Modern CAN bus technology
- Up to 1000 operating hours between services



### Mast and load handling

- Tilting clear-view triplex mast with full free lift
- Lifting, lowering, mast reach and mast tilt are electronically adjustable.
- Fork spreader designed to enhance load-handling efficiency, manually or hydraulically; standard V=560-1550 mm (optional V=560-2220 mm)



### Digital truck controller

- Task-specific parameter configuring
- Excellent reliability and safety
- Very energy efficient
- Electronic system automatically self-checks at power-on

### Stability

- Chassis designed for maximum structural integrity and durability
- A low centre of gravity provides optimum stability and high residual capacities
- Robust integrated manual or hydraulic fork spreader to handle long or wide loads with ease.
- All tyres are Polyurethane for long life
- Rugged, clear view overhead guard

### Batteries

- Battery capacities to suit every application: 465 Ah to 930 Ah
- Rapid and easy lift-out battery changing system. Optional battery carrier on steel rollers
- Optional audible warning when battery level is low



### Operator compartment

- Optimum visibility with new overhead guard design
- Ambient cabin, with electrical heating
- Document compartment with cup holder
- 12 V electrical socket to charge devices
- Storage holders for drinks and pen/pencils
- Lateral driving camera and monitor
- Ambient cabin with electrical heating

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# Technical Data according to VDI 2198

Characteristics	1.1	Manufacturer	LINDE	LINDE		
	1.2	Manufacturer's type designation	<b>R20F</b>	<b>R25F</b>		
	1.2a	Series	8923	8923		
	1.3	Power unit	Battery	Battery		
	1.4	Operation	Seat	Seat		
	1.5	Load capacity/Load	Q (t)	2.0	2.5	
	1.6	Load centre distance	c (mm)	600	600	
	1.8	Axle centre to fork face	x (mm)	449 <sup>1)</sup>	527 <sup>1)</sup>	
	1.9	Wheelbase	y (mm)	1505	1665	
Weights	2.1	Service weight	(kg)	4360	4960	
	2.3	Axle load without load, front/rear	(kg)	2550 / 1810	2880 / 2080	
	2.4	Axle load, fork outreached, with load, front/rear	(kg)	800 / 5560	660 / 6800	
	2.5	Axle load, fork retracted, with load, front/rear	(kg)	2349 / 4011	2770 / 4690	
	Wheels/Tyres	3.1	Tyres rubber, SE, pneumatic, polyurethane	Polyurethane	Polyurethane	
3.2		Tyre size, front		Ø 355 x 155		
3.3		Tyre size, rear		Ø 320 x 100 / Ø 260 x 85		
3.5		Wheels, number front/rear (x = driven)		1x / 4		
3.6		Track width, front	b10 (mm)	0	0	
3.7		Track width, rear	b11 (mm)	1444	1444	
Dimensions		4.1	Mast/fork carriage tilt, forward/backward	a/b (°)	1.5/3.5   1.0/3.0   1.0/1.0 <sup>2)</sup>	1.5/3.5   1.0/3.0   1.0/1.0 <sup>2)</sup>
	4.2	Height of mast, lowered	h1 (mm)	2800	3367	
	4.3	Free lift	h2 (mm)	2070	2637	
	4.4	Lift	h3 (mm)	6250	7500	
	4.5	Height of mast, extended	h4 (mm)	7000	8250	
	4.7	Height of overhead guard (cabin)	h6 (mm)	2215	2215	
	4.8	Height of seat/stand on platform	h7 (mm)	1087	1087	
	4.10	Height of reach legs	h8 (mm)	430	430	
	4.15	Height, lowered	h13 (mm)	50	50	
	4.19	Overall length	l1 (mm)	2473 <sup>1)</sup>	2555 <sup>1)</sup>	
	4.20	Length to fork face	l2 (mm)	1323 <sup>1)</sup>	1405 <sup>1)</sup>	
	4.21	Overall width	b1/b2 (mm)	1744 / 1498	1744 / 1498	
	4.22	Fork dimensions DIN ISO 2331	s/e/l (mm)	45 x 125 x 1150	45 x 125 x 1150	
	4.23	Fork carriage to ISO 2328, class/type A, B		-	-	
	4.24	Width of fork carriage	b3 (mm)	1500 / 2170	1500 / 2170	
	4.25	Fork spread	b5 (mm)	556-1555 / 556-2220	556-1555 / 556-2220	
	4.26	Distance between wheel arms/loading surfaces	b4 (mm)	903	903	
	4.28	Reach travel	l4 (mm)	704 <sup>1)</sup>	782 <sup>1)</sup>	
	Performance	4.32	Ground clearance, centre of wheelbase	m2 (mm)	80	80
		4.34.1	Aisle width for pallets 1000 x 1200 crossways	Ast (mm)	2787 <sup>1)</sup>	2896 <sup>1)</sup>
4.34.2		Aisle width with pallet 800 x 1200 along forks	Ast (mm)	2823 <sup>1)</sup>	2915 <sup>1)</sup>	
4.35		Turning radius	Wa (mm)	1772	1932	
4.37		Length of chassis	l7 (mm)	1942	2102	
5.1		Travel speed, with/without load	(km/h)	13 / 13	13 / 13	
5.2		Lifting speed, with/without load	(m/s)	0.33 / 0.55	0.32 / 0.53	
5.3		Lowering speed, with/without load	(m/s)	0.54 / 0.47	0.53 / 0.53	
5.4		Reach speed, with/without load	(m/s)	0.2 / 0.2	0.2 / 0.2	
5.8		Maximum climbing ability, with/without load	(%)	10.0 / 15.0	9.0 / 14.0	
Drive	5.9	Acceleration time, with/without load	(s)	5.7 / 5.0	6.2 / 5.2	
	5.10	Service brake		electric/mechanic	electric/mechanic	
	6.1	Drive motor rating S2 60 min	(kW)	7.2	7.2	
	6.2	Lift motor rating at S3 15%	(kW)	15	15	
	6.3	Battery according to DIN 43531/35/36 A,B,C,no		43 531 / C	43 531 / C	
	6.4	Battery voltage/rated capacity (5h)	(V)/(Ah)	48 / 465	48 / 620	
Others	6.5	Battery weight (± 5%)	(kg)	712	892	
	8.1	Type of drive unit		Electronic/stepless	Electronic/stepless	
	10.1	Operating pressure for attachments	(bar)	150	150	
	10.2	Oil flow for attachments	(l/min)	25	25	
10.7	Sound pressure level LpAZ (at the driver's seat)	(dB(A))	59,7	59,7		

1) Alternative batteries may alter given dimensions.  
2) 1/1 above lift height 6750 mm

3) Including a 200 mm (min.) operating aisle clearance.

