# NRM20N2 NRM25N2

Preliminary Specifications

Multi-way reach trucks 2.0 - 2.5 tonnes





	Charasteristics				
1.1	Manufacturer			Cat Lift Trucks	Cat Lift Trucks
1.2	Manufacturer's type designation			NRM20N2	NRM25N2
1.3	Power source: (battery, diesel, LP gas, petrol)			Battery	Battery
1.4	Operator type: pedestrian, (operator)-standing, -seated			Seated	Seated
1.5	Load capacity	α	(kg)	2000	2500
1.6	Load center distance		(mm)	600	600
1.8	Load wheel axle to fork face (forks lowered)		(mm)	337	337
1.9	Wheelbase		(mm)	1552	1552
	Weight		()		1002
2.1	Truck weight with load, with maximum battery weight		kg	6888*	7784**
2.3	Axle loadings without load & with maximum battery weight, drive/load side		kg	2672 / 2 x 1108*	2907 / 2 x 1188**
2.4	Axle loading, mast forward, with nominal load, drive/load side		kg	591 / 2 x 3148*	521 / 2 x 3631**
2.5	Axle loading, mast retracted, with nominal load, drive/load side		kg	2292 / 2 x 2298*	2292 / 2 x 2298**
	Tyres		Ĭ		
3.1	Tyres: PT=Power Thane, Vul=Vulkollan, drive / load side			Vul	Vul
3.2	Tyre dimensions, drive side		(mm)	Ø360 x 140	Ø360 x 140
3.3	Tyre dimensions, load side	(	(mm)	Ø285 x 75 x 2	Ø285 x 75 x 2
3.5	Number of wheels, load / drive side, (x=driven)			2+2/1x	2+2/1x
3.7	Track width (center of tyres), load side	b11	(mm)	1384	1384
	Dimensions				
4.1	Fork tilt, forwards / backwards	∂/В	0	2.0 / 6.0	2.0 / 6.0
4.2	Height with mast lowered	h1 (	(mm)	see table	see table
4.3	Free lift		(mm)	see table	see table
4.4	Lift height	h3	(mm)	see table	see table
4.5	Height, mast extended	h4 (	(mm)	see table	see table
4.7	Height to top of overhead guard	h6 (	(mm)	2190	2190
4.8	Seat- or stand height	h7 (	(mm)	1030	1030
4.10	Height of support legs		(mm)	447	447
4.15	Fork height, fully lowered	h13 (	(mm)	50	50
4.19	Overall length		(mm)	2630	2630
4.20	Length to fork face		(mm)	1480	1480
4.21	Overall width		(mm)	1730	1730
4.22	Fork dimensions (thickness, width, length)		(mm)	50 / 120 / 1150	50 / 120 / 1150
4.24	Fork carriage width		(mm)	1700 / 2200	1700 / 2200
4.25	Outside width over forks (minimum/maximum)		(mm)	500-1700 / 2200	500-1700 / 2200
4.26	Innerwidth of the support legs		(mm)	900	900
4.28	Mast reach		(mm)	610	610
4.32	Ground clearance at center of wheelbase, (forks lowered)		(mm)	75	75
4.33a	Working aisle width (Ast) with 1000 x1200 mm pallets, load crosswise		(mm)	2887	2887
4.34b	Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise		(mm)	2850	2850
4.35	Turning radius		(mm)	1787	1787
4.37	Truck length including support legs	17	(mm)	1982	1982
F 1	Performance Travel and with / without load		l /l-	14/14	14/14
5.1	Travel speed, with / without load Lifting speed, with / without load		km/h	14/14	14/14
5.2	Lowering speed, with / without load		m/s	0.43 / 0.58 0.50 / 0.55	0.39 / 0.58 0.50 / 0.55
5.3	Reach speed, with / without load		m/s	0.1 / 0.1	0.50 / 0.55
5.4 5.8	Maximum gradeability, with / without load		m/s %	11.0 / 17.0	11.0 / 17.0
	Acceleration time (10 metres) with / without load				5.6 / 5.1
5.9 5.10	Service brake		S	5.4 / 5.0 Mechanical	Mechanical
5.10	Electric motors			Medianical	ivieciialiicai
6.1	Drive motor capacity ( S2 60 min. short duty)		kW	7.5	7.5
6.2	Lift motor output at S3 15% duty factor		kW	14	14
6.4	Battery voltage/capacity at 5-hour discharge	,	V/Ah	48 / 775, 930	48 / 775, 930
6.5	Battery weight		v/AII kg	1100, 1300	1100, 1300
6.6	Energy consumption according to EN 16796 cycle***	IA.	Nh/h	4.5	4.5
0.0	Miscellaneous	KV	v 11/11	т.J	т.J
8.1	Type of drive control			Stepless	Stepless
10.7****	Level of noise at ear level of the driver according to EN ISO 4871 in work LpAZ	4	IB(A)	Stepless 68	Stepless 68
10.7.1****	Level of noise at ear level of the driver according to EN ISO 487, drive/lift/idle LpAZ		IB(A)	80	80
Body	Whole-body vibration (EN 13 059:2002)		m/s <sup>2</sup>	0.5	0.5
	Hand-arm vibration ( EN 13 059:2002)	1	m/s2	<2.5	<2.5
Hand	וומות מוווי יוטומנוטוון בוז וס ססט.בסטבן		111/32	\Z.J	\Z.J











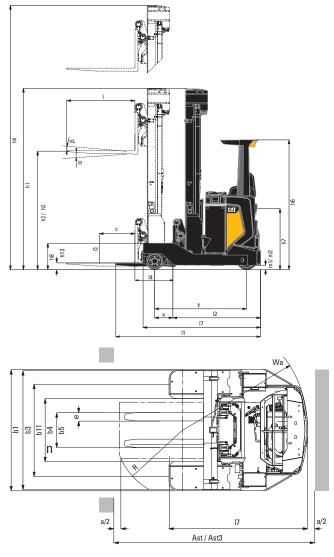






 $<sup>^{\</sup>ast}$  Weight values measured with 5700mm lift height mast & 775Ah battery  $^{\ast\ast}$  Weight values measured with 10000mm lift height mast & 930Ah battery

<sup>\*\*\*</sup> Energy consumption values measured with 5700mm lift height mast
\*\*\*\* Inaccuracy of 4dB (A)



Ast

h12

a TREV = Wa +  $\sqrt{(16-x)^2+(b12/2)^2}+a$ 

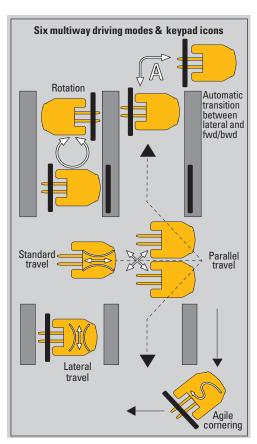
Ast3 = Wa + I6 -x +a

= Pallet length (1200 mm)

= Pallet width (800 or 1200 mm)

= Safety clearance = 2 x 100 mm

= Triplex with free lift



#### **Lower Cost of Ownership**

- Durable components and quick service access minimise downtime and bills.
- High-strength, single-unit load wheels, with cast instead of welded parts, turn within the chassis to avoid risk of collision damage and are easy to reach for maintenance.
- Full-colour display panel, with clear information in operator's own language and simple-to-learn functionality, advises on truck status, avoids misuse and protects your investment.

#### **Unmatched Productivity**

- All-wheel synchronised steering, together with fork positioner, simplifies handling of long loads in narrow aisles.
- Multi-directional travel forward/backward, sideways, diagonal and rotational – is complemented by an agile cornering mode and another for automatic transition between normal and lateral modes without stopping.
- Each load wheel has an independent steering motor, controller and brake system, and turns 360° in either direction, for unbeatable manoeuvrability, speed and precision.
- Responsive Drive System (RDS), featuring S<sup>4</sup> mast handling, reacts to speed of accelerator pedal and hydraulic control movement, adjusting performance mode to meet operator's changing needs.
- High-quality fork positioner, with inbuilt tilt function, has a wide spread to cope with a great variety of load dimensions.

#### **Safety and Ergonomics**

- State-of-the-art adjustable armrest combines anatomical support with free movement, perfect hand positioning and spring-force-optimised fingertip hydraulic controls for comfortable, low-effort operation.
- Intermediate step and ergonomic grab handles allow easy and quick 'swinging' transfers to and from a spacious, high-comfort cabin whose low seat position gives extra headroom.
- Driver comforts include fully adjustable seat and steering wheel, optimally shaped and angled pedals, and other intuitive, ergonomically arranged controls.
- Automatic aids include progressive steering, curve control and reduction of drive and reach speed with mast height, for smooth, safe and efficient driving.
- Lift height indicator is included as standard to encourage safe handling.
- Hydraulic braking is highly effective, allowing confident highspeed work, and requires little maintenance.

#### **Options**

- Choice of fork positioner widths (1700mm or 2200mm)
- Blue safety light
- Working lights
- Load weight indicator
- High-comfort Grammer seats
- Overhead guard with mesh or Plexiglas
- Audio system
- Custom-designed or special RAL colour side covers
- DC/DC converter
- USB power supply for mobile charging
- Additional power supply for warehouse management system (WMS) PC

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Since the 1960s we have been producing lift trucks designed to last and built to perform in some of the toughest environments in the world.

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For customers with continental operations our 'International Fleet Sales & Services' department delivers the benefits of the global Cat Lift Trucks network, through a single point of contact.

For cost-effective solutions, or to find your nearest dealer, contact Cat Lift Trucks, your partner in materials handling.

NRM20N2 / NRM25N2							
Mast Type	h1	h2	h3	h4			
	mm	mm	mm	mm			
TREV	2510	1800	5400	6200			
	2610	1900	5700	6500			
	2677	1967	5900	6700			
	2810	2100	6300	7100			
	3043	2333	7000	7800			
	3210	2500	7500	8300			
	3377	2666	8000	8800			
	3543	2833	8500	9300			
	3710	3000	9000	9800			
	3877	3167	9500	10300			
	4043	3334	10000*	10800			

### Mast Performance and Capacity

TREV = Triplex with free lift h1 = Lowered mast height

h2 = Free lift h3 = Lift height

h4 = Raised mast height

\* only available for NRM25N2

Model		Battery Weight	4.33 (1000 x 1200mm crosswise) Ast	4.34 (800 x 1200mm lenghtwise) Ast3	L4 4.28	L2 4.20	L1 4.19	x 1.8
NRM20N2	Ah	kg	mm	mm	mm	mm	mm	mm
&	775	1100	2887	2850	610	1480	2630	337
NRM25N2	930	1300	2887	2850	610	1480	2630	337





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