## **SPECIFICATIONS ELECTRIC POWERED LIFT TRUCKS** 80V, 2.5 - 3.5 TONNES



# **INTENSIVE PRODUCTIVITY**



EP25AN EP25ACN EP30AN EP30ACN EP35AN

## **AGILE AND INTELLIGENT**

THIS RANGE ANSWERS THE NEED FOR HIGH-POWERED PERFORMANCE IN APPLICATIONS WHERE IC ENGINE LIFT TRUCKS AND THEIR EMISSIONS ARE NOT PERMISSIBLE. DESIGNED TO COPE WITH INTENSIVE DUTIES AND TOUGH CONDITIONS, THE TRUCKS ARE HIGHLY PRODUCTIVE AND, AT THE SAME TIME, A PLEASURE TO DRIVE, THANKS TO THEIR AGILITY, INTELLIGENCE AND COMFORT.





The Cat<sup>®</sup> *Responsive Drive System (RDS)* seems to know how the driver wants the truck to behave at any moment. Reacting to the speed of accelerator pedal and hydraulic control movement, it instantly selects the most appropriate performance mode. *RDS* also smooths out all stops, starts and other actions.



Dynamic aids like *RDS*, *OmniTurn* all-wheel steering and intelligent curve control create a remarkably agile driving experience. When extra acceleration or climbing torque are needed, *PowerBurst* kicks in to give you a boost. Electric differential locking gives additional confidence in slippery conditions.

Smoother, faster and safer materials handling is enabled by advanced hydraulic technologies like *SmoothFlow*, which optimise mast and fork movements according to load weights and lift heights. Control is precise and effortless via the latest fingertip levers or joysticks.



The spacious, high-comfort cabin and its equipment are ergonomically designed to allow strain-free operation with minimal need for the driver to move. Features include a flat, unobstructed floor, adjustable seat and steering wheel, pedals at optimum angles and, to maximise the view, a specially inclined dashboard and counterweight.

## LOWER COST OF OWNERSHIP

- Robust construction reduces repair and replacement needs and helps maintain truck's high residual value.
- OmniTurn all-wheel steering reduces tyre wear.
- Simple plug-in diagnostics and troubleshooting, together with easy access to components, reduces downtime and maintains efficient performance.
- Multi-function display encourages correct use and maintenance of truck.
- Sideways exchange option speeds up battery swaps.
- High energy efficiency and availability of ECO mode extends working hours (runtime) per battery charge.
- Li-ion battery option adds even greater efficiency and runtime, along with minimal maintenance needs and much longer life, for lower long-term total cost of operation (TCO).

## **UNMATCHED PRODUCTIVITY**

- *PowerBurst* automatically delivers extra torque to maintain ramp speed or provide strong acceleration, even when carrying heavy loads.
- *Responsive Drive System (RDS)* adapts performance rapidly in reaction to speed of pedal and hydraulic control operation, and ensures all movements, stops and starts are smooth.
- *OmniTurn* all-wheel steering offers better grip, smoother turning and unbeatably agile manoeuvring, aided by a +100° rear turning axle which enables instant side turns with no initial backward movement.
- Electric differential lock maximises grip on slippery surfaces by locking front wheels to increase traction (activated automatically at small steering angles or manually via an optional pedal function).
- Intelligent curve control maximises cornering safety by smoothly adjusting truck speed and minimising side forces.
- Automatic tilt centring system offers dual functionality: slight downward fork angle for smooth pallet entry and exit without scraping or dragging; and fork levelling for stable load transport.
- *SmoothFlow* hydraulic system automatically adjusts to load weight, ensuring fast but smooth and precise control of all mast and fork actions whether individual or simultaneous.
- Automatic hydraulic control tuning maintains steady mast and chassis movements when lifting above 2.5 metres\*. (\*Activation height depends on mast chosen.)
- Passive sway control allows mast tilting forces to be absorbed by chassis during higher lifts. (Applies mainly above 3.0 metres.)
- Li-ion option with quick-connect access point enhances performance and permits fast opportunity charging for continuous operation without battery changes.
- Pre-set ECO and PRO modes can be selected for different drivers and tasks, while customised settings (including lifting and lowering) can be applied by service engineers.

## **SAFETY AND ERGONOMICS**

- Market-leading *SilentRun+* hydraulic pumps (optional) plus quiet drive units and other low-noise technologies keep driver comfortable and stress-free, increase awareness of surrounding activity and avoid disturbing neighbours and co-workers.
- Spacious operator compartment offers comfortable, adjustable seat, large, flat, uncluttered floor, and plenty of foot and head room.
- Easy, smooth entry/exit is aided by long grab handle and non-slip step.
- Easy-to-read colour display keeps drivers fully informed.
- Obstacle-free design gives a clear all-round view of the truck's surroundings and outer dimensions with no need to lean.
- Useful storage spaces include suitable pockets for tools, mobile devices, bottles, tape dispensers and pens.
- Weatherproof cabin options include transparent roof, steel or PVC doors, windscreen, two sliding windows on each side, rear window, front/rear wipers/washers, heater, and deluxe cabin.
- Spring-force-optimised fingertip hydraulic controls on adjustable, comfortable armrest ensure ergonomically perfect hand positioning, anatomical support and free movement.
- Dual joystick option separates functions such as clamp opening, to avoid accidental moves, and is especially useful if fingertip levers are too small for operation with gloves (or large hands).
- Ergonomic steering wheel has tilt-adjustable column for comfortable driving position with no need to lean forward.
- Pedal design, position and angles reduce fatigue for drivers of any height or foot size.
- Standard working lights include front and rear LEDs, with automatic reversing light, all protected within the overhead guard structure.
- Safety lights (optional) include red lines, highlighting exclusion boundary around truck, blue or red points (front and rear) warning pedestrians of truck's approach, and amber strobes.
- Standard safety features include operator presence pedal, hill hold, automatic park brake and wet disc brakes, for added confidence and control.

# **STANDARD EQUIPMENT AND OPTIONS**

			4 WHEEL 80	v	
GENERAL	EP25AN	EP25ACN	EP30AN	EP30ACN	EP35AN
4-wheel chassis, 80V, front wheel dual drive					
Forks with a length of 1,070mm, equipped with load backrest					
3-valve hydraulic fingertip control mounted on an ergonomic armrest	•	•		•	
Key pre-set economy or high-performance mode (ECO / PRO)	•	•	•	•	•
Battery compartment side door					
Multifunctional interactive full-colour display	•		•	•	•
Intelligent curve control	•				
Tiltable steering column			•	•	
TruckTool set-up and diagnostics					
PDS (seat switch timeout = all functions are disabled; the truck will go into the stop mode,			•		
automatically applied parking brake)					
Full-suspension vinyl Grammer MSG65 seat					
CE name plates - language markings	•		•	•	٠
Operations and Maintenance Manual					
DIN battery connectors on frame					
Battery door detection sensor					
Fingertip control armrest					
Manual control levers	0	0	0	0	0
Dual joysticks	0	0	0	0	0
POWER SOURCE					
Integrated Li-ion battery*	0	0	0	0	0
Lead-acid battery	0	0	0	0	0
FRAME					
Battery sideways exchange (SWE) chassis	0	0	0	0	0
Roller bed, chassis integrated (for battery SWE)					
Battery tray (for roller-guided battery SWE)	0	0	0	0	0
Battery sideways exchange tool**	0	0	0	0	0
Li-ion battery easy charging	0	0	0	0	0
T-bar battery stand	0	0	0	0	0
LIGHTING					
LED work lights (2 at front and 1 at rear)					
Automated reversing light			•		٠
Auto light switch	0	0	0	0	0
Amber strobe	0	0	0	0	0
Amber strobe mounted low	0	0	0	0	0
'Red point' rear light	0	0	0	0	0
'Red point' rear light mounted low	0	0	0	0	0
'Red point' front light	0	0	0	0	0
'Blue point' rear light	0	0	0	0	0
'Blue point' rear light mounted low	0	0	0	0	0
'Blue point' front light	0	0	0	0	0

	4 WHEEL 80V				
ELECTRICAL SYSTEM	EP25AN	EP25ACN	EP30AN	EP30ACN	EP35AN
Smart reversing alarm	0	0	0	0	0
Current output	0	0	0	0	0
12V connector	0	0	0	0	0
Operator presence pedal	0	0	0	0	0
Electric differential lock	0	0	0	0	0
Dual pedal layout	0	0	0	0	0
Drive direction selection switch on ergonomic armrest (forward-backward) (only with fingertip controls)			•		
Drive direction lever in steering column (forward-neutral-reverse)	0	0	0	0	0
Road light kit	0	0	0	0	0
PIN code access with start switch	0	0	0	0	0
Automated lift controls					
Automatic tilt centring via the F2 button with FC TILT/C	0	0	0	0	0
Load weight indicator					
OPERATOR'S CABIN					
Grammer MSG65 seat					
Grammer MSG65 with heater	0	0	0	0	0
Grammer MSG65 with cloth upholstery	0	0	0	0	0
Grammer MSG65 with cloth upholstery and heater	0	0	0	0	0
Grammer MSG75	0	0	0	0	0
Grammer MSG75 with heater	0	0	0	0	0
Grammer MSG75 with cloth upholstery	0	0	0	0	0
Grammer MSG75 with cloth upholstery and heater	0	0	0	0	0
Backrest extension	0	0	0	0	0
ACCESSORIES					
Rear view mirror	0	0	0	0	0
External rear view mirror	0	0	0	0	0
Dead angle mirror	0	0	0	0	0
Wide view mirror	0	0	0	0	0
A4 size paper holder	0	0	0	0	0
Accessory clamp	0	0	0	0	0
Fire extinguisher	0	0	0	0	0

\* Li-ion battery option is available in selected regions. \*\* Backwards compatible with the EP14-20A(C)NT, EP16-20A(C)N and EP25-35(C)N ranges.

# **STANDARD EQUIPMENT AND OPTIONS CONTINUED**

	4 WHEEL 80V					
CABIN	EP25AN	EP25ACN	EP30AN	EP30ACN	EP35AN	
Steel doors, available in combination with options REAR and FR+TP						
PVC doors, available in combination with options REAR and FR+TP	0	0	0	0	0	
Sun visor, available in combination with option FR+TP	0	0	0	0	0	
Interior package, available in combination with REAR and door	0	0	0	0	0	
Heater, available in combination with REAR and steel doors, 2000W	0	0	0	0	0	
Safety doors	0	0	0	0	0	
Container design (available only with	0	0	0	0	0	
sideways battery exchange option)						
Deluxe cabin	0	0	0	0	0	
EXTERIOR						
Special colour (RAL) for the frame and counterweight	0	0	0	0	0	
FORKS & CARRIAGE						
Various fork lengths (920 - 1970mm), widths (100/120mm) and thicknesses (40/45mm),	0	0	0	0	0	
fork deletion						
Side shifter W1000mm	0	0	0	0	0	
Integrated side shifter W1000mm	0	0	0	0	0	
Fork positioner + integrated side shifter	0	0	0	0	0	
Load backrest						

	4 WHEEL 80V				
HYDRAULIC SYSTEM	EP25AN	EP25ACN	EP30AN	EP30ACN	EP35AN
3/4/5-way valve armrest-mounted fingertip control	0	0	0	0	0
3/4-way valve manual control	0	0	0	0	0
Lift control	0	0	0	0	0
Double action FC 3 v, for clamp usage	0	0	0	0	0
Double action FC 4 v, for clamp usage	0	0	0	0	0
Double action MC 3 v, for clamp usage	0	0	0	0	0
Double action MC 4 v, for clamp usage	0	0	0	0	0
Hydraulic accumulator	0	0	0	0	0
Adjustable hydraulic pressure (for 3rd and 4th valve)	0	0	0	0	0
Food grade hydraulic oil	0	0	0	0	0
Biodegradable hydraulic oil	0	0	0	0	0
Cold area hydraulic oil VG15	0	0	0	0	0
Hot area hydraulic oil VG46	0	0	0	0	0
3-way piping	0	0	0	0	0
4-way piping	0	0	0	0	0
TYRES					
Solid pneumatic tyres					
Pneumatic tyres	0	0	_		_
Non-marking solid tyres	0	0	—	—	—
Non-marking cushion tyres	0	0	0	0	0
Cushion tyres	0	0	0	0	0
Solid pneumatic twin tyres	0	0	0	0	0
Wide stance drive wheels	0	0	0	0	0

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$7$ Gradeability, with / without load $\%$ $15/25$ $13/22$ $13/22$ $12/20$ $3$ Maximum gradeability, with / without load $\%$ $15/25$ $13/22$ $12/20$ $3$ Acceleration time (10 metres) with / without load $\%$ $41/3.8$ $41/3.8$ $42/3.8$ $42/3.8$ $44/3.8$ $4$ Acceleration time (10 metres) with / without load $metres$ $W/draulic$ $Hydraulic$ $Hydraulic$ $Hydraulic$ $Hydraulic$ $0$ Service brakes (mechanical / hydraulic / pleutric / pleutric / pleutric) $metres$ $W/draulic$ $Hydraulic$ $Hydraulic$ $Hydraulic$ $Hydraulic$ $0$ Service brakes (mechanical / hydraulic / pleutric) $MW$ $22.8$ $2 \times 8$ $2$ If motor output at 15% duty factor $WW$ $20.8$ $20.8$ $25.5$ $25.5$ $25.5$ $3$ $43536A$ $43536A$ $43536A$ $43536A$ $43536A$ $43536A$ $4$ Battery voltage / capacity at 5-hour discharge $V/Ah$ $80/700 \cdot 775$ $80/560 \cdot 620$ $80/700 \cdot 775$ $80/560 \cdot 620$ $80/700 \cdot 775$ $10$ Miscellareaus $Max$ $AC$ <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
aMaximum gradeability with vithout load%23 / 3823 / 3820 / 3420 / 3318 / 31aAcceleration time (10 metres) with vithout loads%4.1 / 3.84.1 / 3.84.2 / 3.84.2 / 3.84.4 / 3.8bService brakes (mechanical / hydraulic / ledctric / neumatic)sHydraulicHydraulicHydraulicHydraulicHydraulicHydraulicbEletrice motrsss2.8 / 82.8 / 82.8 / 82.8 / 82.8 / 82.8 / 81Dive motor capacity (60 min. short duty)KW20.82.5.52.5.52.5.53.5 / 84.3 / 3.8 / 83Battery to 10x 43 531 / 3.5 / 8 / 10 / 2 / noKW4.3 / 3.8 / 8 / 10 / 2 / no4.3 / 3.8 / 84.3 / 3.8 / 84.3 / 3.8 / 84.3 / 3.8 / 84Battery voltage / capacity at 5-hour dischargeV / AhKg80 / 700 - 77580 / 500 - 62080 / 700 - 77580 / 500 - 62080 / 700 - 7751Maximum operating pressure for attachmentsKgACACACACACACACAC1Maximum operating pressure for attachmentsKg30 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
aAcceleration time (10 metres) with / without loadsbService brakes (mechanical / hydraulic / electric / pneumatic)Service brakes (mechanical / hydraulic / electric / pneumatic)HydraulicHydraulicHydraulicHydraulicHydraulicbElettric motorService brakes (mechanical / hydraulic / electric / pneumatic)Service brakes (mechanical / hydraulic / electric / pneumatic)Service brakes (mechanical / hydraulic / electric / pneumatic)HydraulicHydraulicHydraulicHydraulicHydraulicHydraulicbDirve motor capacity (160 min. short duty)Sith / 35 / 36 A / B / C / noService brakes (mechanical / hydraulic / electric / pneumatic)Service brakes (mechanical / hydraulic / electric / pneumatic)Service brakes (mechanical / hydraulic / electric / pneumatic)HydraulicHydraulicHydraulicHydraulicHydraulic1Drive motor capacity (160 min. short duty)Sith / 35 / 36 A / B / C / noN/Service brakes (mechanical / hydraulic / electric / pneumatic)N/Service brakes (mechanical / hydraulic / electric / pneumatic)Sith / 35 / 36 A / B / C / noAst = Working aisle width with load3MiscellaneousV / AhKgSith / 35 / 36 A / B / C / noKgSith / 35 / 36 / B / 700 - 775Sith / 35 / 36 / B / 700 - 775Sith / 35 / 36 / B / 700 - 775Sith / 36 / B / 700 - 775 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>								
10Service brakes (mechanical / hydraulic / ledetric / pneumatic)ImplementImp		%						
Eletric motorAst = Working aisle width with load1Drive motor capacity (60 min. short duty)kW2Lift motor output at 15% duty factorkW2Lift motor output at 15% duty factorkW3Battery to DIN 43 531 / 35 / 36 A / B / C / nokW4Battery voligate / capacity at 5-hour dischargeV / Ah5Battery weightkg0Miscellaneouskg1Maximum operating pressure for attachmentsl/min20il flow for attachmentsl/min3030303030303030303015570 - H80For attachments10Ning coupling, type DIN 15170DIN 15170 - H10Ning coupling, type DIN 15170	5.9 Acceleration time (10 metres) with / without load	S	4.1 / 3.8	4.1 / 3.8	4.2 / 3.8	4.2 / 3.8	4.4 / 3.8	
1Drive motor capacity (60 min. short duty)KW $2 \times 8$	5.10 Service brakes (mechanical / hydraulic / electric / pneumatic)		Hydraulic	Hydraulic	Hydraulic	Hydraulic	Hydraulic	
Index Drive motor capacity (60 min. short duty)KW $2 \times 8$ $4 \times 536A$ $43536A$ </td <td>6.0 Eletric motor</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Ast = Working aisle width with load</td>	6.0 Eletric motor							Ast = Working aisle width with load
2Lift motor output at 15% duty factorKW20.820.825.525.525.5 $Ast = Wa + \sqrt{(16 + x)^2 + (\frac{b12}{2} - b13)^2} + a$ 3Battery voltage / capacity at 5-hour dischargeV/Ah43536A43536A43536A43536A43536A4Battery voltage / capacity at 5-hour dischargeV/Ah80 / 700 - 77580 / 560 - 62080 / 700 - 77580 / 560 - 62080 / 700 - 7755Battery weightKK1558186315581863185318637MiscellaneousKKAcAcAcAcAc1Type of drive controlAsimum operating pressure for attachmentsbar185185185205201 flow for attachmentsI/min303030303030a = Safety clearance201 flow for attachmentsMB(A)6565666666b12 = Pallet width8Toxing coupling, type DIN 15170DIN 15170 - HDIN 15170 - HDIN 15170 - HDIN 15170 - H	Drive motor capacity (60 min. short duty)	kW	2×8	2×8	2×8	2×8	2×8	
A         Battery voltage / capacity at 5-hour discharge         V / Ah         80 / 700 - 775         80 / 560 - 620		kW	20.8	20.8	25.5	25.5	25.5	Act = $\frac{1}{2} \sqrt{\frac{1}{16} + \frac{1}{2}} \sqrt{\frac{1}{16} + \frac{1}{2}} \sqrt{\frac{1}{2}} \sqrt{\frac{1}$
4       Battery voltage / capacity at 5-hour discharge       V / Ah       80 / 700 - 775       80 / 560 - 620       80 / 700 - 775       80 / 700 - 775       80 / 700 - 775       80 / 700 - 775       80 / 700 - 775       80 / 700 - 775       80 / 700 - 775       80 / 700 - 775       80 / 700 - 775       80 / 700 - 775       80 / 700 - 775       80 / 700 - 775								As $t = vva + V(10 + x)^{2} + V(10 + x)^{2} + V(13) + a$
5Battery weightkg186315581863155818631863Wa = furning radius0MiscellaneousImage: Second of the controlImage: Second of the control of	6.4 Battery voltage / capacity at 5-hour discharge	V / Ah						
Miscellaneous       AC       AC <td>, , , , ,</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	, , , , ,							
Image: properting pressure for attachmentsACACACACACACAC1Maximum operating pressure for attachmentsbar185185185185205a = Safety clearance20 if flow for attachmentsI/min303030303030b12 = Pallet width310 is glow opuling, type DIN 151700 IN 15170 - HDIN 15170 - HDIN 15170 - HDIN 15170 - HDIN 15170 - H	8.0 Miscellaneous	-9						
Maximum operating pressure for attachments         bar         185         185         185         205         a = Safety clearance           2         01 flow for attachments         1 /min         30         30         30         30         30           2         01 flow for attachments         1 /min         30         30         30         30         30           7         Noise level, value at operator's ear (EN 12053)         dB(A)         65         66         66         66           8         Towing coupling, type DIN 15170         DIN 15170 - H			AC.	AC.	AC.	AC.	AC.	I6 = Pallet length (800 or 1000 mm)
2       01 flow for attachments       1 / min       30       30       30       30       30         7       Noise level, value at operator's ear (EN 12053)       dB (A)       65       66       66       66         8       Towing coupling, type DIN 15170       DIN 15170 - H		har						
And the second secon								,
1.8 Towing coupling, type DIN 15170 DIN 15170 - H								DTZ - TANGE WIULII
		ub (M)						
Zuplus secondad with MOCCE and the	h7 values recorded with MSG65 seat type		514 13170-11	Div 10170-11	Div 10170-11	Div 10170-11	Div 10170-11	

\* h7 values recorded with MSG65 seat type.

	EP25ACN / EP25AN				EP25	ACN	EP2	5AN	
Mast Type	h3 mm	h1 mm	h4 mm	h2/h5 mm	tilt angle (fwd-rev)° Standard	0@ c=500mm kg	0@ c=600mm kg	0@ c=500mm kg	0@ c=600mm kg
Simplex	3000	1995*	4055	100	6/8	2500	2250	2500	2250
	3300	2145*	4355	100	6/8	2500	2250	2500	2250
	3740	2410	4795	100	6/8	2500	2250	2500	2250
	4100	2590	5155	100	6/8	2500	2250	2500	2250
	4500	2800	5555	100	6/8	2500	2250	2500	2250
	5000	3050	6055	100	6/8	2475	2250	2500	2250
	5500	3300	6555	100	6/4	2400	2225	2450	2250
	6000	3550	7055	100	6/4	2000	2000	2000	2000
Duplex	3000	1995*	4055	940	6/8	2500	2250	2500	2250
	3300	2145*	4355	1090	6/8	2500	2250	2500	2250
	3700	2410	4755	1355	6/8	2500	2250	2500	2250
	4020	2590	5075	1535	6/8	2500	2250	2500	2250
Triplex	3730	1805*	4785	750	6/6	2500	2250	2500	2250
	4030	1905*	5085	850	6/6	2500	2250	2500	2250
	4300	1995*	5355	940	6/6	2500	2250	2500	2250
	4750	2145*	5805	1090	6/6	2500	2250	2500	2250
	5060	2265	6115	1210	6/6	2450	2250	2500	2250
	5500	2410	6555	1355	6/6	2350	2200	2500	2250
	5990	2590	7045	1535	6/4	2275	2075	2375	2225
	6500	2850	7555	1795	6/4	2075	2025	1925	1925
	7000	3050	8055	1995	6/4	1575	1575	1475	1475

		EP30ACN	/ EP30A	N			EP30ACN	EP30ACN	EP30AN	EP30AN
Mast Type	h3 mm	h1 mm	h4 mm	h2/h5 mm	tilt angle (fwd-rev)° Standard		0@ c=500mm kg	0@ c=600mm kg	0@ c=500mm kg	0@ c=600mm kg
Simplex	3030	2015*	4083	145	6 - 8		3000	2700	3000	2700
	3270	2135*	4323	145	6 - 8	İ.	3000	2700	3000	2700
	3700	2400	4753	145	6 - 8	İ.	3000	2700	3000	2700
	4000	2580	5053	145	6 - 8		3000	2700	3000	2700
	4500	2840	5553	145	6 - 8		3000	2700	3000	2700
	5000	3090	6053	145	6 - 8		2900	2700	3000	2700
	5500	3340	6553	145	6 - 4		2800	2600	2925	2700
	6000	3605	7053	145	6 - 4		2675	2475	2625	2575
Duplex	3000	2025*	4053	973	6 - 8		3000	2700	3000	2700
	3250	2145*	4303	1093	6 - 8		3000	2700	3000	2700
	3700	2410	4753	1358	6 - 8		3000	2700	3000	2700
	4010	2590	5063	1538	6 - 8		3000	2700	3000	2700
Triplex	3690	1805*	4743	753	6 - 6		3000	2700	3000	2700
	3990	1905*	5043	853	6 - 6		3000	2700	3000	2700
	4320	2025*	5373	973	6 - 6		3000	2700	3000	2700
	4700	2145*	5753	1093	6 - 6		2950	2700	3000	2700
	5060	2265	6113	1213	6 - 6		2875	2650	3000	2700
	5450	2410	6503	1358	6 - 6		2800	2600	2900	2700
	5970	2590	7023	1538	6 - 4		2625	2475	2725	2575
	6470	2850	7523	1798	6 - 4		1975	1975	2075	2075
	7000	3050	8053	1998	6 - 4		1425	1425	1575	1575

## Mast Performance and Capacity

h1	Height with mast lowered
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- h2 Standard free lift
- h3 Lift height
- h4 Height with mast raised
- h5 Full free lift
- Lifting capacity, rated loadLoad centre (distance)
- c Load centre (dista

\* Lower than overhead guard

\*\* Without load back rest free lift height is increased by 395mm

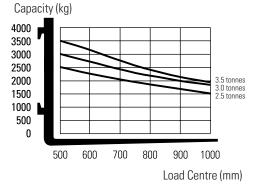
\* Lower than overhead guard

\*\* Without load back rest free lift height is increased by 350mm

			E	EP35AN			
Mast Type	h3	h1	h4	h2/h5	tilt angle (fwd-rev)°	0@ c=500mm	0@ c=600mm
	mm	mm	mm	mm	Standard	kg	kg
Simplex	3000	2170*	4045	100	6/8	3500	3150
	3300	2290	4345	100	6/8	3500	3150
	3720	2500	4765	100	6/8	3500	3150
	4000	2755	5045	100	6/8	3500	3150
	4500	3000	5545	100	6/8	3500	3150
	5000	3250	6045	100	6/8	3500	3150
	5500	3500	6545	100	6/4	3400	3150
	6000	3750	7045	100	6/4	2775	2775
Duplex	3010	2170*	4055	1125	6/8	3500	3150
	3300	2290	4345	1245	6/8	3500	3150
	3720	2615	4765	1570	6/8	3500	3150
	4000	2755	5045	1710	6/8	3500	3150
Triplex	3730	1930*	4775	885	6/6	3500	3150
	4010	2050*	5055	1005	6/6	3500	3150
	4390	2170*	5435	1125	6/6	3500	3150
	4700	2290	5745	1245	6/6	3500	3150
	5030	2435	6075	1390	6/6	3450	3150
	5580	2615	6625	1570	6/6	3175	3075
	5990	2755	7045	1710	6/4	2875	2875
	6510	2930	7555	1885	6/4	2225	2225
	7000	3125	8045	2080	6/4	1675	1675

## **Capacities at various load centres**

Simplex - h3 = 3300mm



### **Battery Dimensions**

			EP25AN	EP25ACN	EP30AN	EP30ACN	EP35AN
Battery voltage	V	ſ	80	80	80	80	80
Capacity at 5-hour discharge	Ah		700-775	560-620	700-775	560-620	700-775
Battery weight, (+/-5%)	kg		1863	1558	1863	1558	1863
Battery box dimensions							
Length	mm		1028	1028	1028	1028	1028
Width	mm		855	711	855	711	855
Height	mm		784	784	784	784	784
Battery compartment size							
Length	mm		1056	1056	1056	1056	1056
Width	mm		865	720	865	720	865
Height*	mm		790	790	790	790	790

\* 5mm tolerance

\* Lower than overhead guard

\*\* Without load back rest free lift height is increased by 240mm

# **CAT® LI-ION BATTERIES**

## TIME TO SWITCH?

Lithium-ion (Li-ion) battery technology is now available as an option in almost all Cat<sup>®</sup> electric counterbalance and warehouse truck ranges. While lead-acid batteries remain a popular choice for our customers, and still have much to offer, they present various challenges which Li-ion can overcome.

Perhaps the most noticeable change when switching to Li-ion is the use of opportunity charging. Instead of exchanging batteries between shifts, you can simply plug into a fast charger during short breaks and keep the same battery going 24/7. This, together with other efficiency, environmental and safety benefits, makes Li-ion a very appealing alternative.





#### Cat Li-ion advantages over lead-acid

Switching to Li-ion requires a higher initial investment, but this should be viewed against Li-ion's ongoing savings on energy, equipment, labour and downtime.

- Longer life 3 to 4 times lead-acid lifespan reduces overall battery investment
- **Higher efficiency** energy losses during charging and discharging are up to 30% lower, so electricity consumption is reduced
- **Longer runtime** thanks to more efficient battery performance and use of opportunity charges, which can be given at any time without damaging the battery or shortening its lifespan
- **Consistently high performance** with a more constant voltage curve maintains greater truck productivity, even toward the end of a shift
- Faster charging enables full charge in as little as 1 hour with the fastest chargers
- No battery changing fast opportunity charges 15 minutes for several hours of extra runtime enable continuous operation with just one battery and minimise the need to buy, store and maintain spares
- **No daily maintenance** the battery stays on board the truck for charging and there is no need for water top-ups or electrolyte checks
- **No gas** or acid spills avoids the space, equipment and running costs of a battery room and ventilation system
- Inbuilt protection intelligent battery management system (BMS) automatically prevents excessive discharge, charge, voltage and temperature, as well as virtually eliminating misuse

Batteries and chargers with different capacities are available. Your dealer will identify the best combination for your needs. You should also ask your dealer about optional 5-year warranties, subject to annual check-ups, which give extra peace of mind.

#### info@catlifttruck.com | www.catlifttruck.com

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NOTE: Performance specifications may vary depending on standard manufacturing tolerances, vehicle condition, types of tyres, floor or surface conditions, applications, or operating environment. Trucks may be shown with non-standard options. Specific performance requirements and locally available configurations should be discussed with your Cat lift trucks Dealer. Cat Lift Trucks follows a policy of continual product improvement. For this reason, some materials, options and specifications could change without notice.

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