### EP10-15KRT PAC, EP13-20(C)PNT, EP16-20(C)PN, EP25-35(C)N, EP40-50(C)(S)2

## **DELIVERING MORE**

1

ELECTRIC POWERED LIFT TRUCKS 1.0 - 5.0 TONNES





### 1.0 - 1.5 TONNES | 24V **LIGHT DUTY ECONOMY**

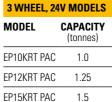
Ideal for relatively light duties and intermittent shift patterns, these trucks are extremely compact and easy to use by inexperienced staff with only a little training. They are also very economical, with energy consumption typically as low as 4.75 kW/h in the applications for which they are designed.

### TYPICAL APPLICATIONS

- Grocery stores
- · Do-it-yourself stores
- Garden centres
- Food and beverage distribution
- Container stuffing
- Narrow aisle work

### Inbuilt intelligence

Like our larger electric lift trucks, these models are individually programmable to suit the operator and task. They also offer five simpleto-select pre-set operating modes for different situations and user priorities. Their electronics include built-in system protection and a fault memory. With the assistance of these features the operator is able to work at maximum efficiency, while correct use and maintenance is simplified and downtime is minimised.



### **Big on comfort**

Operators of these extremely compact trucks enjoy levels of comfort that would normally be found only on larger models. Their standard specification includes a full-suspension, adjustable seat and a tiltable steering column which can be set at the operator's preferred angle. There is also a comfortable amount of floor space, despite the small dimensions of the truck.

### **Ergonomic and safe**

This is particularly welcome when working in narrow aisles and other confined areas. and forks.





VOLTAGE (V)	LOAD CENTRE (mm)
24	500
24	500
24	500

On/off access is easy from both sides, thanks to rounded panel corners and low step heights. Whenever the operator leaves the seat, the Presence Detection System (PDS) prevents any accidental movement of the truck or its mast



### **KEY FEATURES AT A GLANCE**

- Economical 24V AC drive motor, mounted on the rear (steering) axle, gives optimum torque/speed balance.
- Low-voltage cut-out protection system prevents damage to battery through
- MicroCommand<sup>®</sup> AC controller
- eters to operator and task for

- Dual tilt cylinder mast configuration improves rigidity and stability for high lifting.

- Reversing alarm is fitted as standard to

### 1.3 - 2.0 TONNES | 48V VERSATILE **3&4WHEELPOWER**

These dependable 'workhorses' are kind to the environment and gentle on the operator – but tough in the face of wet, dusty and other adverse conditions. Compact and highly manoeuvrable, they are well suited to workplaces with restricted space and height such as containers, lorries and drive-in racking.

### **TYPICAL APPLICATIONS**

- Food and beverage manufacturing and wholesale
- Fishing and fish processing
- Chemicals, textiles and rubber
- General and refrigerated warehousing and storage
- Machinery and heavy equipment
- Electric equipment and components

### Unstoppable performance

The trucks will work non-stop in a huge variety of applications and conditions. Blasting rain, splashing water, mud, dust and other contaminants are no problem, thanks to their maintenance-free wet disc brakes and IPX4 component sealing. For back-to-back shifts, the optional lateral battery exchanger ensures no time is wasted - while accommodation of both DIN and BS size batteries avoids complication. Extra productivity is gained by a long service interval of 1.000 hours.

To avoid downtime and expense resulting from damage to the truck, load and racking - and, most importantly, to protect the operator and other workers – a number of safety features are built into the design. They include PDS+ (Presence Detection System+), which prevents all movement of the truck and its hydraulics if the driver is not seated. PDS+ also has an automatic parking brake and hill hold function. Intuitive

Speed Control automatically avoids excessively fast cornering.

### Perfect precision and control

From the comfort of an adjustable suspension seat, the operator finds an array of ergonomically designed controls within easy reach. The 'steerby-wire' system has a small steering wheel just 25 cm – which requires minimal turning effort. Fingertip hydraulic controls are set into an adjustable armrest and there is an auto-style pedal layout.

The masts and overhead guard (OHG) are designed to give a clear view of the fork tips, racking and loads. An optional Hi-Viz OHG enhances upward views while protecting the operator from small falling objects and rain. Made from polycarbonate, with a glass layer to prevent scratches and discoloration, it is reinforced with steel towards the rear while its front is totally transparent.

### More choices

The Hi-Viz OHG (High Visibility Over Head Guard) can be complemented by a range of all-weather cabin packages and equipment, with options including front and rear panels, side doors, wipers, heater, 12V connector, sun visor, tilt cylinder covers and interior light.

In addition to the wide selection of options and capacities, you can choose between compact (C) - for tight spaces - and standard chassis versions in both the 3 wheel (T) and 4 wheel model lists. Turning circles are particularly small in the 3 wheel trucks, which are ideal for intensive shortshuttle work and use in confined areas.

### **3 WHEEL, 48V MODELS**

1.3 1.5	48 48	500 500
1.5	48	500
		000
1.6	48	500
1.6	48	500
1.8	48	500
1.8	48	500
2.0	48	500
	1.6   1.8   1.8	1.6     48       1.8     48       1.8     48       2.0     48

MODEL	(tonnes)	VOLTAGE (V)	LOAD CENTRE (mm)		
EP16CPN	1.6	48	500		
EP16PN	1.6	48	500		
EP18CPN	1.8	48	500		
EP18PN	1.8	48	500		
EP20PN	2.0	48	500		
-					





### **KEY FEATURES AT A GLANCE**

- Wet disc brakes require no maintenance and are unaffected by water, dirt or salt.
- Long service interval 1,000 hours increases uptime.
- Small steering wheel and 'steer-by-wire' system gives comfortable, precise control with minimal effort.
- Presence Detection System+ (PDS+) provides automatic parking brake and hill hold function, while preventing all travel and hydraulic movement if the operator is not seated.
- IPX4 sealing protects motors and other electrical components from rain, splashing water, mud and dust.
- Intuitive Speed Control automatically adjusts drive speed, in proportion to the steering angle, for safe cornering.
- LED working lights are highly effective and require no maintenance.

- Mast and overhead guard (OHG) structure provides excellent all-round visibility.
- OHG is designed for simple fitting of panel cabins.
- Rear grab handle with integral horn button
- Diagnostics and precise matching of performance to operator and application needs can be achieved quickly and simply via laptop connection.
- ergonomic.
- controls makes load handling comfortable, effortless and precise.
- Fully adjustable suspension seat ensures comfort for all shapes and sizes of operator
- Tiltable steering column adjusts to suit operator.

- increases comfort and safety while reversing.
- Familiar auto-style pedal layout is intuitive and
- Adjustable armrest with fingertip hydraulic

- Open step design allows easy on/off access.
- Accommodation of both DIN and BS size batteries gives extra flexibility.
- Access to all components is simple and quick, to minimise downtime for servicing.
- Market-leading low noise levels add to operator comfort.
- Multi-function display ensures operator and service engineer awareness of truck status, encouraging correct use and maintenance.

### 2.5 - 3.5 TONNES | 80V INTENSIVE PRODUCTIVITY

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.

### **TYPICAL APPLICATIONS**

- Food and beverage manufacturing and wholesale
- Paper manufacturing and wholesale
- Foundries
- Chemicals, textiles and rubber
- Machinery and heavy equipment

### Agile and intelligent

The perfect lift truck should constantly adjust its own performance characteristics as circumstances change, and in this range the idea of intelligent automatic adaptation has been taken to a whole new level. Its adaptive speed control, which is part of the Responsive Drive System (RDS), seems to know how the driver wants the truck to behave at any moment. Reacting to how quickly the accelerator pedal and hydraulic controls are being moved, it instantly selects the most appropriate mode. RDS also smooths out all stops, starts and other movements.

Compared to traditional cornering systems, this truck's intelligent curve control reduces speed in a much more natural and comfortable way. Starting with a small reduction, as the turn begins, the system responds so smoothly to the steering that the driver notices no sudden change or tilting sensation as the truck corners. Another great advance over its competitors is the next-generation dual drive 4 wheel steering system, which makes the truck much more manoeuvrable. With +100° rear axle rotation and curve control, turns are tight and smooth. When reversing, side turns can be made immediately

MODEL	(tonnes)	VOLTAGE (V)	LOAD CENTRE (mm)
EP25N	2.5	80	500
EP25CN	2.5	80	500
EP30N	3.0	80	500
EP30CN	3.0	80	500
EP35N	3.5	80	500

without pushing back. Uniquely, the truck can actually be steered using the front axle. As well as giving improved agility and grip, the system reduces tyre wear and stress on the rear axle.

#### Comfortably in control

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. A totally redesigned adjustable armrest brings the new progressive hydraulic controls and related functions within comfortable reach of the operator's fingertips. Even entering or leaving the cabin is easy, thanks to the step's large, high-grip surface, the long grab handle and the curved shape of the battery cover and side panel, which encourage fast, flowing motion.

The operator is kept fully informed via a colour display, which can be read easily from different angles. Clear messages are given in the operator's language, along with helpful symbols. A twin-mode key switch can be set to ECO or PRO, depending on the driver's experience and the need for low energy use or rapid performance.





- Responsive Drive System (RDS) with adaptive speed control adjusts truck performance modes in reaction to quickness of foot and fingertip movements, to meet driver's changing needs, and ensures smooth starts and stops.
- Intelligent curve control makes speed reduction in cornering feel natural, with no sensation of leaning, for safe but productive driving.
- Twin-mode key switch offers ECO setting for beginners, or for low energy consumption, and PRO for experienced drivers and high performance, while optional customisation is available to meet specific needs.
- Next-generation dual drive 4 wheel steering system, with curve control, +100° rear axle rotation, instant no-push side turns and unique ability to steer using front axle, delivers unbeatably agile manoeuvring, better traction and longer tyre life.
- Full-colour, weather-protected, clear-view display, with information in operator's own language and simple-to-learn functionality, advises on truck status, avoids misuse and protects your investment.
- Totally redesigned adjustable armrest, combining anatomical support with free movement and perfect hand positioning, features spring-force-optimised fingertip hydraulic controls or – as an option – intuitive joystick control.
- Wide, high-grip step, long grab handle and curved truck design allow fast, smooth-flowing on-off access to large, comfortable operator space with flat, unobstructed floor.
- Ergonomic layout of controls and display, together with adjustable seat and steering wheel position, optimised pedal angles and excellent all-round view, allows strain-free operation.
- Armrest options include control of forward/ reverse selection, clamp release and automatic tilt centring, using only the driver's fingers.
- Intelligent speed and movement reduction (optional) automatically limits travel and tilt rates when forks are above free lift height, to optimise both stability and agility.
- Automatic hydraulic parking brake and hill hold function, instantly engaged when accelerator is released, prevents rolling on ramps without need for use of a switch or lever.
- High standard specification includes Presence Detection System+ (PDS+), maintenance-free wet disc brakes and IP54 sealing of main components.

### 4.0 - 5.0 TONNES | 80V **HEAVY DUTY EFFICIENCY**

**Designed to handle intensive** applications and harsh environments, where you would normally expect to use IC engine machines, these powerful trucks offer a clean and extremely efficient alternative. Ideal for both outdoor and indoor operation, and able to use a variety of heavy attachments, there is sure to be a configuration within the range of models. capacities, chassis sizes and options to meet your exact needs.

#### Typical applications:

- Food and beverage manufacturing and wholesale
- Paper and pulp
- Saw mills
- Furniture
- Steel works and foundries
- Ports
- Carpet manufacturing and wholesale
- Chemicals, textiles and rubber
- Machinery and heavy equipment
- Automotive assembly
- Building and construction

#### Power and economy

The latest innovations in intelligent, highefficiency design generate maximum power while consuming substantially less energy than competitors' trucks. In most applications a single charge will keep the truck going through two shifts. This has been achieved through developments such as the compact component layout, the market's most advanced AC control system and optimised use of regenerative braking.

Lateral battery extraction, with the option of an ergonomic adapter for the easiest and quickest exchanges in the industry, helps to keep the trucks in constant productive motion. Profits are also maximised by reducing

EP45 2 4.5 80 500 EP50 2 4.99 80 500 EP50S 2 5.0 80 600 damage and wear through use of long-life components like wet disc brakes and sealed motors. Clear information for operators and

CAPACITY VOLTAGE LOAD CENTRE

500

500

600

500

80

80

80

80

engineers, through a premium display, is another aid to extending the truck's life.

### **Comfort and protection**

**4 WHEEL, 80V MODELS** 

(tonnes)

4.0

4.0

4.0

4.5

MODEL

EP40C 2

EP40 2

EP40S 2

EP45C 2

The high-comfort floating operator cabin has a spacious floor, a fully adjustable, fullsuspension seat and a compact steering wheel on a column with both telescopic and tilt adjustment. There is a choice between standard hydrostatic steering and the option of parametric electronic steering, for the ultimate in effortless precision. An adjustable armrest places the hydraulic controls – a fingertip unit or, if you prefer, a joystick - in the perfect position for each operator. Other operator-friendly touches include a full-length convenience trav.

Operators are protected not just by the truck's robust construction but by a host of automated assistance features. These include controls on access, drive speed with forks lifted, cornering speed and movement on ramps. As well as standard lights, there are various optional lighting kits, mirrors and other accessories to meet different practical and safety needs.





### **KEY FEATURES AT A GLANCE**

- Compact component layout minimises material costs and increases efficiency.
- Premium display ensures operator awareness of truck status, through clear, simple, informative readouts, encouraging correct use and maintenance.
- Wet disc brakes require no maintenance and are unaffected by water, dirt or salt.
- Sealing to IP54 standard protects motors and electrical connectors from rain, splashing water, mud and dust.
- Intelligent design reduces energy consumption by up to 25%, allowing non-stop operation and extended shifts.
- The industry's most advanced AC control system delivers smooth, precise operation and minimises the risk of operator error.
- ECO and PRO pack options match the truck to its application, providing the appropriate performance-enhancing features and avoiding excessive wear of components.
- Ergonomic adapter option for battery installation and locking allows quick, easy and safe exchanges.
- Added operator protection features give automated assistance to the user, including access control, drive and lift control, curve control, an anti-rollback function and an automatic parking brake, for safe, smooth, easy operation.
- Automatic parking brake and anti-rollback function hold the truck safely in position, particularly on ramps.
- Drive and lift control smoothly reduces travel speed to a safe level when the forks are elevated.
- Curve control automatically adjusts drive speed, in proportion to the steering angle, for safe cornering.
- Access control prevents use of the truck if the seat belt is not correctly fastened.
- Adjustable armrest with fingertip hydraulic controls makes load handling comfortable, effortless and precise.
- Hydrostatic steering or option of parametric electronic steering – gives high-precision control with minimal effort.

### MAXIMISING YOUR UPTIME

To maximise uptime and maintain the performance levels of these durable trucks, we build easy servicing into their design.

Our advanced controllers not only optimise power and efficiency but allow on-the-go system monitoring, self diagnostics and fault memory logging. They warn of problems, tell the technician where to look and even give a reminder when a service is due. With all areas easily accessible, and no need for external test equipment, servicing is fast and simple.

For the best possible return on your investment, your Cat dealer can tailor a cost-effective preventative maintenance plan.

### TOTAL SOLUTIONS FOR EVERY CHALLENGE

The performance and durability of these Cat electric lift trucks is without question. It owes much to the expertise, advanced technology and strict quality standards applied by our ultra-modern production centre.

To help you choose the right model and configuration, and maintain its productivity, we have an equally dedicated network of dealers. With their specialist knowledge, wide experience and excellent service they will support you in every way to maximise your profits.

As well as electric counterbalance trucks, they offer a comprehensive range of warehouse equipment and IC engine lift trucks. They also have a broad selection of acquisition options – including outright purchase, short or long term rental and leasing – and will tailor a plan to meet the needs of your business.

Whatever your problem, Cat Lift Trucks and its dealers have the solution.



Whatever materials handling equipment you need, our global network of Cat lift trucks dealers is equipped to provide the solution.

Our constant investment in selecting, developing and supporting our dealer network ensures you receive not just the best equipment but the best service, advice and support in the industry.

### **BUILT FOR IT.**

# MACHINES CAN BE BOUGHT. RELATIONSHIPS HAVE TO BE BUILT.

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