ELECTRIC VEHICLES

**EXPLOSION PROOF ELECTRIC UTILITY VEHICLE**

- **TOP PERFORMANCE**
- **HEAVY DUTY MECHANICS**
- **ROBUSTNESS:** DESIGN TO LAST
- **MANY CERTIFICATIONS AVAILABLE**

### Specifications:

- **BATTERY AUTONOMY** up to 90 km
- **WORKING DAYS EXCEEDING 8 HOURS**
- **LOAD CAPACITY** up to 1,265 kg
- **TOWING CAPACITY** up to 4,500 kg
- **CAN HANDLE SLOPES** up to 25%
- **2 - 4 SEATS CAB**

- **EX**
The **Alke’ ATX EX** Electric Utility Vehicles were developed to work in the hardest, most demanding conditions in chemical and petrochemical industries, production sites of mineral oil and natural gas, mining, tunnel construction and maintenance and many other sectors. They can be used for logistics, maintenance, first aid, firefighting, surveillance services, units with mobile cranes, etc.

The **Alke’ ATX EX** are designed to avoid any ignition risk in the surrounding atmosphere during their normal use and are built using special, certified components. Design, prototyping and manufacturing of all Alkè explosion-proof vehicles are carried out entirely in Italy, using the best of European and North American components in order to guarantee top quality and safety standards.
Alke' electric utility vehicles are used daily by the most significant names in industry in more than 40 countries across the globe. Alke' ATX EX have been operating for years in critical areas such as the frozen lands of northern Europe or the extreme temperatures of the Sahara or other remote locations in the Far East and Africa.
COMFORT IN THE CAB
Air-conditioning system (work up to 55°C) and electric heating system, both explosion-proof certified.

HIGH AUTONOMY AND NON-STOP OPERATION
Battery swap system can double the autonomy, thanks to the fast replace procedure of the batteries.

FIND OUT MORE ABOUT THE ALKE’ ATX MODELS
ELECTRIC VEHICLES

TEMPERATURE MONITORING SYSTEM

In order to avoid risk of overheating, the surface temperature is checked by a specific sensors, according to the class and limit of the temperature requested as standard. If this occurs, the vehicle will automatically shutdown, lighting the related indicator.

An earth leakage check system (versions for Zones 1 and 21) automatically shuts the vehicle down if the maximum value should be exceeded, lighting the indicator on the dashboard panel.

An appropriate “Reset” pushbutton allows the vehicle to be moved out of the dangerous area in case of temperature and (versions for Zones 1 and 21 only) earth leakage sensor’s alarms intervention.

ELECTRICAL EQUIPMENT AND SYSTEM

The electric wiring system has armoured cables for ducts subject to movement or without any mechanical protection.

Light blue wires are used for the connections of components with built-in protection, and their relative cable glands (certified for their respective categories). The system is fitted with a 2-pole emergency battery cut-off switch.

BATTERIES AND CONNECTORS

The Alke’ ATXEX versions for Zones 1 and 21 has as vehicle battery type the Ex-e filling system.

Battery connectors are Ex-d type certified. On the versions for Zones 2 and 22 the batteries and relative connectors respect the EN 60079-15 standard.

NON ELECTRIC PARTS

The disk or drum brakes are equipped with wear and temperature sensors to avoid the formation of sparks caused by the friction between metals, and to prevent friction overtemperatures from exceeding the value of the required temperature class and limit.

The seats of versions for Zones 1 and 21 are covered with an antistatic material and, where necessary, the external plastic surfaces are treated with electroconductive paint. All tyres are electro-conductive. Accessories, such as flashing beacon, reversing beeper, headlights, etc. are explosion-proof.

Alkè explosion proof versions have specific design and safety expedients concerning the electrical system (batteries, connectors, sensors, control unit, etc.) and non-electric parts that could generate high temperatures or sparks (mechanical parts, brakes, plastic elements, etc.)
CERTIFICATIONS AVAILABLE

for EUROPE, ASIA, MIDDLE EAST
in conformity with ATEX 2014/34/EU
3G IIB T3 · 3D IIB T3
2G IIB T3 · 2D IIB T3
M2 T150°C

for NORTH AMERICA
in conformity with UL 583, Directive NEC 505
Class I Division 2
Class II Division 2
Class I Division 1
Class II Division 1

for AUSTRALIA
2G IIB T3 in conformity with
ATEX 2014/34/EU delivered with
CAD certificate for each vehicle plus an
overall specific ATEX certificate
The ATX EX electric vehicles are available with 2 or 4 seats cab and a cargo bed with the possibility of customised variants upon request.
## DELIVERING SOLUTIONS

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### CAB SEATS
- Seats inside the cab

### PERFORMANCE
- **Top speed**
  - 340EX: 35 km/h
  - 340EDX: 35 km/h
- **Maximum negotiable slope (with high-performance batteries)**
  - 340EX: 20% (25 empty)
  - 340EDX: 20% (25 empty)
- **Maximum autonomy**
  - Lead-Acid 14.4 kWh: 100 km
  - Gel 13.2 kWh: 90 km

### DIMENSIONS
- **Length (chassis version)**: 3,220 mm
- **Length (version with cargo bed)**: 3,530 mm
- **Vehicle cab width (without rear-view mirrors)**: 1,270 mm
- **Vehicle cab width (with wing mirrors closed)**: 1,320 mm
- **Vehicle cab width (with wing mirrors open)**: 1,570 mm
- **Height (with standard tyres)**: 2,130 mm
- **Vehicle height with beacon light (with standard tyres)**: 2,800 mm
- **Wheelbase**: 2,130 mm
- **Approach angle**: 40°
- **Departure angle**: 12°
- **Rear axle distance from ground**: 130 mm
- **Maximum loading bed length**: 1,800 mm
- **Maximum loading bed width**: 1,500 mm
- **Standard dropside box dimensions**: 1,800 x 1,240 mm

### WEIGHTS | CAPACITY AND TOWING
- **Unloaded vehicle weight (chassis version with battery)**
  - Lead-Acid 14.4 kWh: 1,305 kg
  - Gel 13.2 kWh: 1,305 kg
- **Maximum traction power**: 6,500 N
- **Maximum towing capacity (braked trailer)**: 4,500 kg
- **Maximum chassis load capacity**
  - Lead-Acid 14.4 kWh: 1,205 kg
  - Gel 13.2 kWh: 1,205 kg

### MOTOR | CONTROLLER
- **48V AC, asynchronous induction electric motor**
- **Maximum motor power**: 14 kW
- **Maximum motor torque**: 113 Nm
- **CURTIS 48V control electronics**
- **Vehicle performance settings (ECO and SPORT)**

### TRANSMISSION
- **Transmission with electronic speed variation**
- **Rear wheel drive**
- **Heavy duty differential unit**

### SUSPENSIONS
- **Front suspension with MacPherson type independent wheels**
- **Rear suspension with De-Dion bridge and stabiliser bar**

### BRAKES
- **Front hydraulic disc brakes and rear hydraulic drum brakes**
- **Rear hydraulic drum brakes with mechanical servobrake**
- **Parking brake**
- **Regenerative brake**

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* as standard  △ optional  — not compatible
## STEERING
- rack and pinion steering
- minimum turning radius | internal

## BODY | CHASSIS
- white body
- customised body colour
- steel chassis with anti-corrosion treatment and powder coating finish
- impact-resistant polyethylene front and rear bumpers

## SAFETY
- 3-point seat belt for driver and passenger(s)
- presence sensor on driver's seat
- horn / reverse buzzer
- safety switch inside the cab for 48 V drive battery
- tyre repair kit

## LIGHTS
- front and rear lights in road style
- full LED rear lights
- orange flashing LED on cab roof

## CAB | COMFORT
- electric demister
- adjustable seats
- front doors
- front doors with sliding windows
- rear doors
- armrests
- headrests
- openable front windscreen
- manual windscreen wiper

## DASHBOARD
- ECO / SPORT selector
- speedometer (km / mph)
- hour meter
- battery state of charge
- battery capacity
- inverter temperature
- motor temperature
- inverter errors
- current delivered by inverter
- parking brake
- brake oil shortage
- low beam headlights
- electric motor overheating

## BATTERY
- type
- number of batteries
- estimated battery life
- estimated battery charge time

<table>
<thead>
<tr>
<th></th>
<th>340EX</th>
<th>340EDX</th>
<th>weight (kg)</th>
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<tbody>
<tr>
<td>340EX</td>
<td>2.600</td>
<td>4.110</td>
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<tr>
<td>weight (kg)</td>
<td></td>
<td></td>
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<tr>
<td>Consumption for Complete Recharge</td>
<td>Lead-Acid 14.4 kWh</td>
<td>Gel 13.2 kWh</td>
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<td>--------------------------------------------------</td>
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<tr>
<td>Battery Charge on Vehicle's External (PFC Active)</td>
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<tr>
<td>Battery Swap System</td>
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<tr>
<td>Battery Top-Up</td>
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<tr>
<th>Configurations and Cargo Area Accessories</th>
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<tbody>
<tr>
<td>Dropside Body with Manual Tipping (Aluminium Drop Sides H30 cm)</td>
<td>180 x 123 cm</td>
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<tr>
<td>Flatbed for Special Configurations</td>
<td>180 x 123 cm</td>
<td>Δ</td>
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<tr>
<td>Mesh Side Extension H55 cm with Rear Drop Side with Upwards Opening</td>
<td>for body 180 x 123 cm</td>
<td>Δ</td>
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<tr>
<td>Tarpaulin Body H108 cm Openable on Three Sides for Dropside Body</td>
<td>for body 180 x 123 cm</td>
<td>Δ</td>
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<tr>
<td>Custom Colour for Tarpaulin Body</td>
<td></td>
<td>Δ</td>
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<tr>
<td>Removable Rear Seats Kit with Two Independent Seats, Platform and 2-Points Seat Belts</td>
<td></td>
<td>Δ</td>
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<tr>
<td>Tarpaulin Roof H105 for Rear Seats Kit</td>
<td></td>
<td>Δ</td>
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<tr>
<td>Ambulance Body Equipped with Spine Board and Box/Seat for Medical Staff</td>
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<td>Δ</td>
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<tr>
<td>Roof for Ambulance Body</td>
<td></td>
<td>Δ</td>
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<tr>
<td>Box Van Body H122 cm 180 x 125 cm with Sliding Doors (2 per side)</td>
<td>180 x 125 cm</td>
<td>Δ</td>
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<tr>
<td>Set 2 Shelves for Box Van Body with Sliding Doors (Each Shelf Covers Half of the Depth)</td>
<td>180 x 125 cm</td>
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<tr>
<th>Front / Rear Accessories</th>
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<tbody>
<tr>
<td>Front Pin Tow Hitch</td>
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<tr>
<td>Rear Ball Tow Hitch</td>
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<tr>
<td>Front Protective Bumper</td>
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<th>Tyres</th>
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<tr>
<td>Low-Profile Road Tyres (Front and Rear 255/55 R12) or Road Tyres (Front and Rear 175/70 R14)</td>
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<tr>
<td>Spare Wheel (Provided Separately)</td>
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**Note:** Top speed: approximate, obtained on a flat surface in optimum usage conditions and in SPORT mode. Maximum negotiable slope: approximate and assessed with vehicle empty in ideal usage conditions on discontinuous ramps. Maximum autonomy: approximate and obtained on a flat surface in optimum usage conditions, with ECO mode and energy saver and adopting a correct driving style, as a speed no higher than 60% of the maximum speed, for non-continuous use (battery discharged in 5 hours). Estimated battery lifespan: approximate figure, based on the information in the manufacturer's possession at the time this file was published. Maximum towing capacity: calculated in optimum usage conditions; the trailer's must have repulsion brakes and comply with the law. Maximum vertical weight on the tow hitch: 120kg. The technical specifications indicated in this catalogue (performance, autonomy, dimensions, etc.) depend - or may depend - on temperature, terrain, driving style, accessories, load or use of the vehicle. The data usually refers to use on a flat surface in optimum usage conditions - i.e. a basic vehicle version with no load and with the lightest battery, on an even and paved road surface with an outdoor temperature of 25°C, the battery fully charged, on board electronic devices switched off, and without any other accessory consumption. The technical specifications, design and performance levels indicated in this technical data sheet are by way of example only and may be subject to modifications without prior notice.
With more than 25 years of experience and thousands of vehicles on the market, Alke' is a key player in the electric road and industrial vehicle industry at an international level. Its products are positioned at the high end of the market in terms of quality and performance and are now sold in more than 40 countries around the world covering all continents. Amongst its customers, Alke’ is proud to be able to include big names in the industry, important organisations and exclusive locations.

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a key player in the electric vehicle industry
dealers in more than 40 countries
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100% made in Italy

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