

**alkè**  
ELECTRIC VEHICLES



**ATXEX**  
R A N G E



**ELECTRIC VEHICLES**

**DELIVERING SOLUTIONS**

**Ex****EXPLOSION  
PROOF  
ELECTRIC  
UTILITY  
VEHICLE****TOP  
PERFORMANCE****HEAVY  
DUTY  
MECHANICS****ROBUSTNESS:  
DESIGN TO  
LAST****MANY  
CERTIFICATIONS  
AVAILABLE****BATTERY  
AUTONOMY  
UP TO 90 km****WORKING DAYS  
EXCEEDING  
8 HOURS****LOAD  
CAPACITY  
UP TO  
1,205 KG****TOWING  
CAPACITY  
UP TO  
4,500 KG****CAN  
HANDLE  
SLOPES  
UP TO 25%****2 - 4  
SEATS  
CAB**

# ALKE' EXPLOSION PROOF ELECTRIC VEHICLES

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 Alke' 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.

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.

# DEALING WITH POTENTIALLY HAZARDOUS ENVIRONMENTS

**ATXEX**  
 RANGE

SOLUTIONS  
 FOR  
 EXPLOSION  
 PROOF  
 NEEDS

**Find out  
 among our  
 configurations  
 the best solution  
 for your needs!**

We can develop special configurations upon request for specific applications or sectors like underground (ATEX M2) or environments where explosive materials are present (e.g. ammunitions and firework products - IP 4X and IP 5X).

All the configurations presented are available for the vehicles with:

2-seat cab

4-seat cab

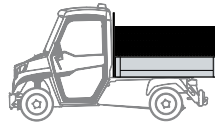
left-hand drive

DR1



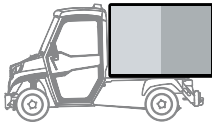
Dropside body

ME1



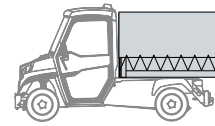
Dropside body with mesh sides extension

BV1



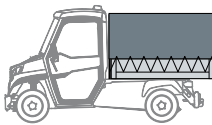
Box van body with sliding doors

TA1



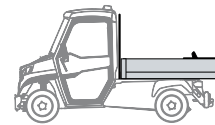
Tarpaulin body openable on three sides

TA2



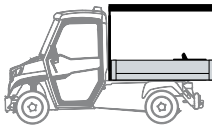
Tarpaulin body with customised colours

RS1



Rear seats kit

RS2



Rear seats kit with roof

AM1



Ambulance body

AM2



Ambulance body with roof

FL1



Flatbed

**ATXEX**  
 RANGE

READY  
 FOR  
 THE MOST  
 DEMANDING  
 CONDITIONS

**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.

## EXPLOSION PROOF APPLICATIONS



oil plants  
 offshore extraction platforms  
 natural gas plants  
 chemical plants  
 petrochemical industries  
 tunnels  
 mines  
 among others



**ATXEX**  
RANGE

FIND OUT  
MORE ABOUT  
THE **ALKE'**  
**ATX EX**  
MODELS

#### 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.



**KG**

max.  
capacity  
**1.205 kg**  
max. towing  
capacity  
**4.500 kg**

**II**

**2**  
SEAT  
CAB



max.  
autonomy  
**90 km**



cargo  
area  
**180x125 cm**

**ATX 340EX**

**ATX 340EDX**

**KG**

max.  
capacity  
**1.085 kg**  
max. towing  
capacity  
**4.000 kg**

**IIII**

**4**  
SEAT  
CAB



max.  
autonomy  
**85 km**



cargo  
area  
**180x125 cm**

The logo for ATXEX, with 'ATX' in white and 'EX' in yellow, set against a dark background of an industrial facility.

# ATXEX

VEHICLE'S  
COMPONENTS  
FOR APPLICATIONS  
ON POTENTIALLY  
HARZADOUS  
ENVIRONMENTS



**ALKE'** explosion proof versions have a 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.).



## 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

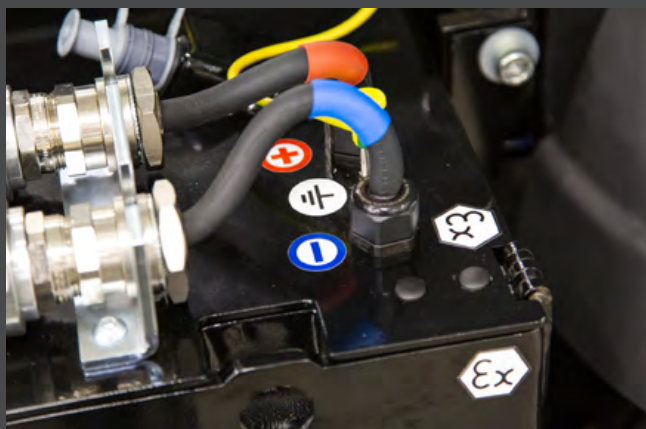
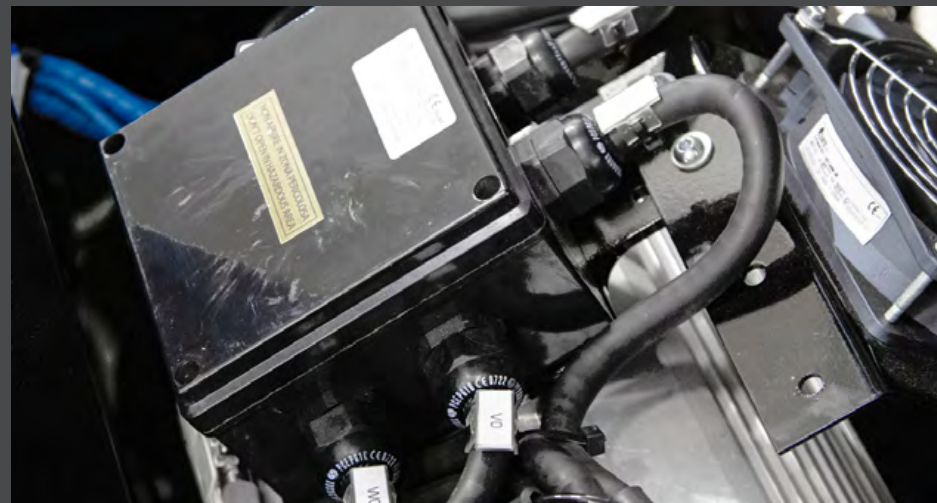
The **ALKE'** ATXEX versions for Zones 1 and 21 has as vehicle battery type the Ex-e filling system.

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.





# 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

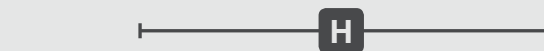
# ATXEX

RANGE



TECHNICAL  
DATA

The **ALKE' ATX EX** electric utility vehicles are available with 2 or 4 seats cab and a cargo bed and with the possibility of customised variants upon request.



|  |                    | 340EX         | 340EDX        | weight<br>[kg] |
|--|--------------------|---------------|---------------|----------------|
| <b>CAB SEATS</b>   |                    |               |               |                |
| seats inside the cab   |                    | 2             | 4             |                |
| <b>PERFORMANCE</b>   |                    |               |               |                |
| top speed  | [ km/h ]           | 35            | 35            |                |
| maximum negotiable slope (with high-performance batteries)   | [ % ]              | 20 (25 empty) | 20 (25 empty) |                |
| maximum autonomy   | Lead-Acid 14.4 kWh | 100           | 95            |                |
|  | Gel 13.2 kWh       | 90            | 85            |                |
| <b>DIMENSIONS</b>  |                    |               |               |                |
| A length (chassis version)                                   | [ mm ]             | 3.220         | 3.980         |                |
| B length (version with cargo bed)                            | [ mm ]             | 3.530         | 4.290         |                |
| C vehicle cab width (without rear-view mirrors)              | [ mm ]             | 1.270         | 1.270         |                |
| D vehicle cab width (with wing mirrors closed)               | [ mm ]             | 1.320         | 1.320         |                |
| E vehicle cab width (with wing mirrors open)                 | [ mm ]             | 1.570         | 1.570         |                |
| F cab height (with standard tyres)                           | [ mm ]             | 1.850         | 1.850         |                |
| G vehicle height with beacon light (with standard tyres)     | [ mm ]             | 1.940         | 1.940         |                |
| H wheelbase  | [ mm ]             | 2.130         | 2.890         |                |
| I approach angle   | [ ° ]              | 40            | 40            |                |
| J departure angle  | [ ° ]              | 12            | 9             |                |
| K rear axle distance from ground                             | [ mm ]             | 130           | 130           |                |
| L maximum loading bed length                                 | [ mm ]             | 1.800         | 1.800         |                |
| M maximum loading bed width                                  | [ mm ]             | 1.500         | 1.500         |                |
| standard dropside box dimensions                             | length x width     | 1.800 x 1.240 | 1.800 x 1.240 |                |
| <b>WEIGHTS   CAPACITY AND TOWING</b>                         |                    |               |               |                |
| UVW   unloaded vehicle weight (chassis version with battery) | Lead-Acid 14.4 kWh | 1.305         | 1.425         |                |
|  | Gel 13.2 kWh       | 1.305         | 1.425         |                |
| maximum traction power                                       | [ N ]              | 6.500         | 6.500         |                |
| maximum towing capacity (braked trailer)                     | [ kg ]             | 4.500         | 4.000         |                |
| maximum chassis load capacity                                | Lead-Acid 14.4 kWh | 1.205         | 1.085         |                |
|  | Gel 13.2 kWh       | 1.205         | 1.085         |                |
| <b>MOTOR   CONTROLLER</b>                                    |                    |               |               |                |
| 48V AC asynchronous induction electric motor                 |                    | •             | •             |                |
| maximum motor power  | [ kW ]             | 14            | 14            |                |
| maximum motor torque   | [ Nm ]             | 113           | 113           |                |
| CURTIS 48V control electronics                               |                    | •             | •             |                |
| vehicle performance settings (ECO and SPORT)                 |                    | •             | •             |                |
| <b>TRANSMISSION</b>  |                    |               |               |                |
| transmission with electronic speed variation                 |                    | •             | •             |                |
| rear wheel drive   |                    | •             | •             |                |
| heavy duty differential unit                                 |                    | •             | •             |                |
| <b>SUSPENSIONS</b>   |                    |               |               |                |
| front suspension with MacPherson type independent wheels     |                    | •             | •             |                |
| rear suspension with De-Dion bridge and stabiliser bar       |                    | •             | •             |                |
| <b>BRAKES</b>  |                    |               |               |                |
| front hydraulic discs brakes and rear hydraulic drum brakes  |                    | •             | •             |                |
| rear hydraulic drum brakes with mechanical servobrake        |                    | •             | •             |                |
| parking brake  |                    | •             | •             |                |
| regenerative brake   |                    | •             | •             |                |



|   |            |                               | 340EX | 340EDX | weight<br>[kg] |
|---|------------|-------------------------------|-------|--------|----------------|
| <b>STEERING</b>   |            |                               |       |        |                |
| rack and pinion steering  |            |                               | •     | •      |                |
| minimum turning radius   internal                                     |            | [ mm ]                        | 2.600 | 4.110  |                |
| <b>BODY   CHASSIS</b>   |            |                               |       |        |                |
| white body  |            |                               | •     | •      |                |
| customised body colour  |            |                               | Δ     | Δ      | + 0.0          |
| steel chassis with anti-corrosion treatment and powder coating finish |            |                               | •     | •      |                |
| impact-resistant polyethylene front and rear bumpers                  |            |                               | •     | •      |                |
| <b>SAFETY</b>   |            |                               |       |        |                |
| 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   |            |                               | •     | •      |                |
| <b>LIGHTS</b>   |            |                               |       |        |                |
| front and rear lights in road style                                   |            |                               | •     | •      |                |
| full LED rear lights  |            |                               | •     | •      |                |
| orange flashing LED on cab roof                                       |            |                               | Δ     | Δ      | + 2.0          |
| <b>CAB   COMFORT</b>  |            |                               |       |        |                |
| electric demister   |            |                               | Δ     | Δ      | + 7.0          |
| adjustable seats  |            |                               | •     | •      |                |
| front doors   |            |                               | Δ     | Δ      |                |
| front doors with sliding windows                                      |            |                               | Δ     | Δ      | + 0.0          |
| rear doors  |            |                               | —     | Δ      |                |
| armrests  |            |                               | •     | •      | + 3.5          |
| headrests   |            |                               | •     | •      |                |
| openable front windscreen   |            |                               | •     | •      |                |
| manual windscreen wiper   |            |                               | •     | •      |                |
| <b>DASHBOARD</b>  |            |                               |       |        |                |
| ECO / SPORT selector  |            |                               | •     | •      |                |
| speedometer (km / mph)  |            |                               | •     | •      |                |
| hour meter  |            |                               | •     | •      |                |
| indicators  |            | battery state of charge       | •     | •      |                |
|   |            | motor temperature             | •     | •      |                |
|   |            | inverter errors               | •     | •      |                |
| warning lights  | indicators | parking brake                 | •     | •      |                |
|   |            | low beam headlights           | •     | •      |                |
|   |            | battery capacity              | •     | •      |                |
|   |            | inverter temperature          | •     | •      |                |
|   |            | current delivered by inverter | •     | •      |                |
|   |            | brake oil shortage            | •     | •      |                |
|   |            | electric motor overheating    | •     | •      |                |
| <b>BATTERY</b>  |            |                               |       |        |                |
| type  |            | Lead-Acid 14.4 kWh            | •     | •      |                |
|   |            | Gel 13.2 kWh                  | Δ     | Δ      |                |
| number of batteries   |            | Lead-Acid 14.4 kWh            | 24x2V | 24x2V  |                |
|   |            | Gel 13.2 kWh                  | 24x2V | 24x2V  |                |
| estimated battery life  |            | Lead-Acid 14.4 kWh [ cycles ] | 1.500 | 1.500  |                |
|   |            | Gel 13.2 kWh [ cycles ]       | 1.200 | 1.200  |                |
| estimated battery charge time   |            | Lead-Acid 14.4 kWh [ hours ]  | 8     | 8      |                |
|   |            | Gel 13.2 kWh [ hours ]        | 11    | 11     |                |

|   |                                 | 340EX | 340EDX | weight<br>[kg] |
|---|---------------------------------|-------|--------|----------------|
| consumption for complete recharge   | Lead-Acid 14.4 kWh [ kWh ]      | 13    | 13     |                |
|   | Gel 13.2 kWh [ kWh ]            | 12    | 12     |                |
| battery charge on vehicle's external (PFC active)   | (power supply 230V 16A 50-60Hz) | •     | •      |                |
| battery swap system   | Lead-Acid 14.4 kWh              | •     | •      |                |
|   | Gel 13.2 kWh                    | •     | •      |                |
| battery top-up  | Lead-Acid 14.4 kWh              | •     | •      | + 0.0          |
| <b>CONFIGURATIONS AND CARGO AREA ACCESSORIES</b>  |                                 |       |        |                |
| dropside body with manual tipping (aluminium drop sides H30 cm)                               | 180 x 123 cm                    | •     | •      | + 130.0        |
| flatbed for special configurations  | 180 x 123 cm                    | Δ     | Δ      | + 90.0         |
| mesh sides extension H55 cm with rear drop side with upwards opening                          | for body 180 x 123 cm           | Δ     | Δ      | + 29.0         |
| tarpaulin body H108 cm openable on three sides for dropside body                              | for body 180 x 123 cm           | Δ     | Δ      | + 30.0         |
| custom colour for tarpaulin body  |                                 | Δ     | Δ      | + 0.0          |
| removable rear seats kit with two independent seats, platform and 2-points seat belts         |                                 | Δ     | Δ      | + 45.0         |
| tarpaulin roof H105 for rear seats kit  |                                 | Δ     | Δ      | + 30.0         |
| ambulance body equipped with spine board and box/seat for medical staff                       |                                 | Δ     | Δ      | + 75.0         |
| roof for ambulance body   |                                 | Δ     | Δ      | + 20.0         |
| box van body H122 cm 180 x 125 cm with sliding doors (2 per side)                             |                                 | Δ     | Δ      | + 130.0        |
| set 2 shelves for box van body with sliding doors (each shelf covers half of the depth)       | 180 x 125 cm                    | Δ     | Δ      | + 8.0          |
| <b>FRONT / REAR ACCESSORIES</b>   |                                 |       |        |                |
| front pin tow hitch   |                                 | •     | •      |                |
| rear ball tow hitch   |                                 | •     | •      |                |
| front protective bumper   |                                 | •     | •      |                |
| <b>TYRES</b>  |                                 |       |        |                |
| low-profile road tyres (front and rear 255/55 R 12) or road tyres (front and rear 175/70 R14) |                                 | •     | •      |                |
| spare wheel (provided separately)   |                                 | Δ     | Δ      | (ext.) +18.0   |

**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, at 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 trailers 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.

25

25 years experience



a key player in the electric vehicle industry



dealers in more than 40 countries



thousands of vehicles sold worldwide



zero emission electric vehicles



quality, innovation and performance



100% made in Italy



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ISO 9001:2015 - BN17607/17301  
ISO 14001:2015 - BN17607/17302  
OHSAS 18001:2007 - BN17607/17303

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