



## INDUSTRIAL ELEVATORS

PRODUCT GUIDE

# ALIMAK SE-Ex

Access anytime, anywhere

**ALIMAK**

## Passenger and freight elevator series for hazardous areas

Built on experience gained from thousands of installations worldwide, the latest Alimak SE-Ex modular series is designed to deliver on your access requirements for heavy transport needs in hazardous environments.

### EFFICIENCY, PRODUCTIVITY AND SAFETY

Increased efficiency, productivity and safety are just three of the benefits delivered by the latest Alimak SE-Ex range of freight and passenger elevator solutions from the company that pioneered the rack and pinion drive system back in 1962 to safely and efficiently transport people and materials.

The enhanced efficiency delivered by the Alimak SE-Ex stems in part from the unique modular design of the cars that provides a several different car sizes with payload capacities between 450 kg to 2,800 kg (1,000-6,170 lbs) within the standard range. All elevators are based on a variety of wall panels made of the characteristic Alimak self-locking, aluminum profiles. These wall panels meet different elevator needs, and create adaptable floor and roof configurations. A more rigid car design is built on a solid car floor and stiffened beams, which supports greater load capacity on a single mast.

### RACK AND PINION TECHNOLOGY

The Alimak SE-Ex is built on the simple but ingenious rack and pinion principle. Our rack and pinion elevators have their drive motors fitted on top of the car along with the brake and gearbox. The motor drives a pinion that moves along the rack, which is bolted to the elevator mast tower. This technology enables the elevator car to climb up and down the mast at controlled speed. Neither a machine room or a shaft are required.

### ELEVATOR CAR

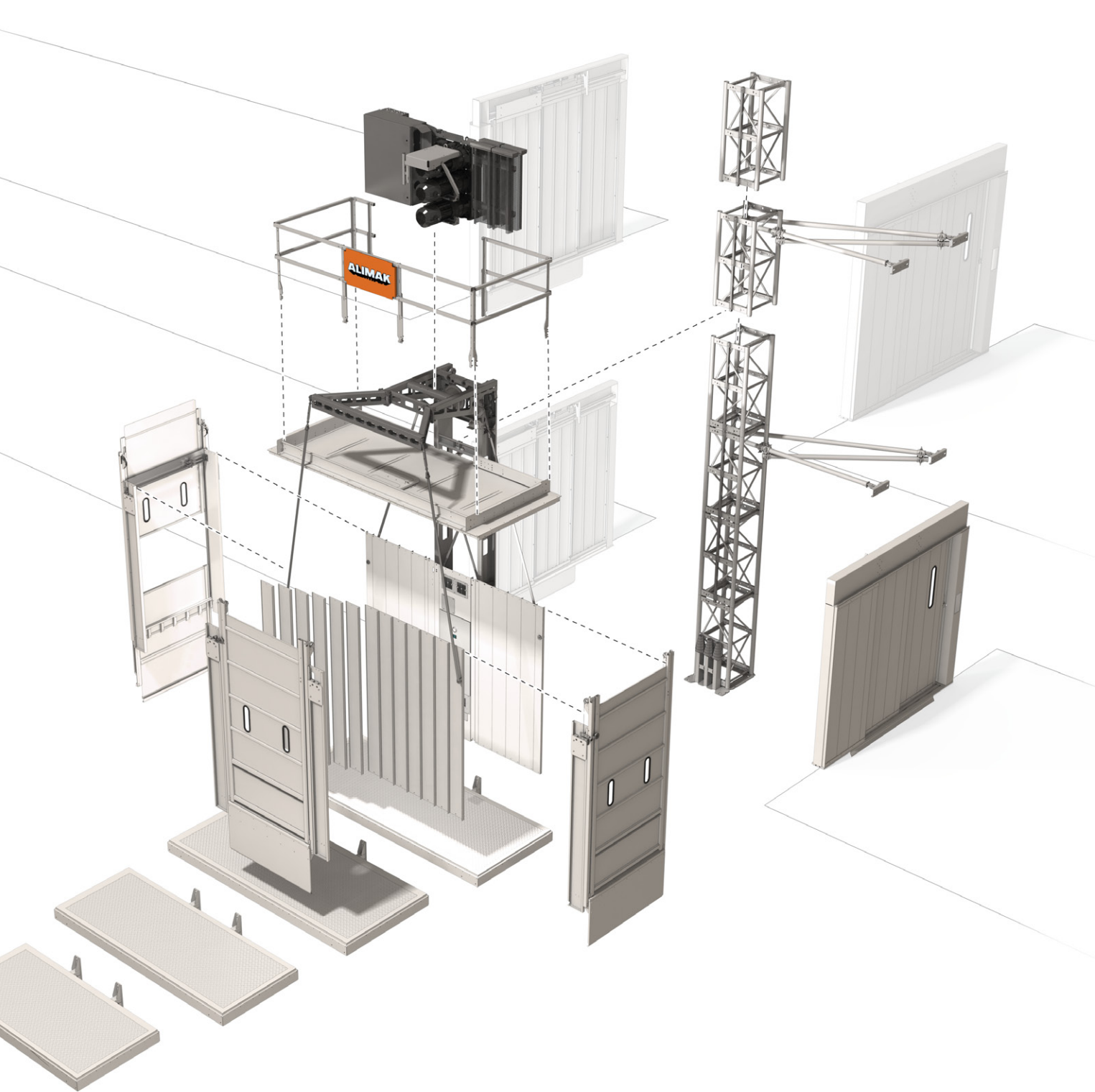
Made of extruded anodized saltwater-proof aluminum and hot dipped galvanized steel the Alimak SE-Ex elevator car maximizes operator comfort without compromising operating reliability. It also gives the elevator the ability to handle your toughest working environments. The rigid and strong car door, which is equipped with windows, can be located on any three sides of the car away from the mast and is mechanically and electrically interlocked to meet all applicable code requirements. Stainless steel car walls and doors are also available for extremely aggressive environments.

The galvanized mast tower gives a slim installation profile. Ties are used for attachment of the mast tower to the structure. A cable guiding system keeps the cable under tension. A one, two, three or four-sided enclosure with different types of doors can be supplied for each of the landings. It is available in either aluminum or stainless steel.

### POWERFUL DRIVE UNIT

There is a choice of direct-on-line control or frequency controlled electric motors. Each unit has electromechanical disc brakes and a centrifugal brake. The frequency control drive not only ensures smooth starting and stopping as well as smooth acceleration and deceleration, but also reduces wear and tear on elevator components such as brakes.





### **EASY TO OPERATE**

Alimak SE-Ex elevators are equipped with our well proven ALC-II control system. This system ensures excellent stopping accuracy and the ease of use. The ALC-II system can be provided with a wide range of options such as Auto return, Auto alarm and Fire and gas alarm.

### **REMOTE MONITORING**

The Alimak SE-Ex can be fitted with the A<sup>3</sup> remote monitoring system as an accessory. A<sup>3</sup> gives you the ability to fully monitor the elevator via a mobile network, the internet or your local network with a ModbusTCP client and trace any faults instantly. The system allows for an improved response time for corrective diagnostics to avoid elevator downtime.

### **SAFETY FEATURES**

The Alimak SE-Ex incorporates all the safety features that have made Alimak elevators a benchmark for the elevator industry worldwide. The Alimak safety device will engage should the elevator exceed the rated speed, bringing the car to a smooth stop. The elevator is normally equipped with a centrifugal brake, located between the motor and the gearbox, that allows passengers to be lowered to the landing below in the event of a power failure. The elevator is also fitted with an overload sensing device.

## Technical specifications

### MAIN BENEFITS

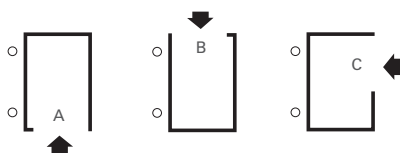
- Modular design delivering a wide range of car sizes and capacities
- Fully compliant with ATEX and EN-13463. Test witnessed by third party
- Two individual elevators can operate on one single mast column for greater operational flexibility
- Drive machinery located on the car means no costly machine room is required
- Fully collective elevator control system
- Durable materials: extruded aluminum car wall

- panels with car support frame and mast sections of hot dip galvanized steel. All stainless steel electrical cabinets and landing control boxes. Optional stainless steel cars
- Wide range of optional equipment and functions delivering you the right equipment for each individual task
- Remote Monitoring System –The online A<sup>3</sup> remote control can also be added to monitor elevator operations 24/7 and pro-actively trace faults should they arise to avoid downtime.

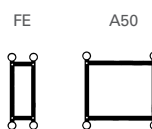
	FC	DOL
Motor control	Frequency control (FC)	Direct-on-line (DOL)
Payload capacity	1,200–2,800* kg (2,650 – 6,170* lbs)	450–2,000 kg (1,000 – 4,400 lbs)
Loading classifications (ANSI):	Class A, B, (C3)	Class A, B, (C3)
Travelling speed	0.5–0.7 m/s (100–140 ft/min)	0.32–0.6 m/s (60–120 ft/min)
Lifting height	Up to 80 m (260 ft) **	Up to 80 m (260 ft) **
No. of motors	1–3	1–2
Internal car width:	0.78 m – 1.82 m (2'-6 3/4" – 5'-11 3/4")	0.78 m – 1.82 m (2'-6 3/4" – 5'-11 3/4")
Internal car length:	1.30 m – 3.90 m (4'-3" – 12'-9 1/2")	1.30 m – 3.90 m (4'-3" – 12'-9 1/2")
Internal car height:	2.17 m and 2.52 m (7'-1 1/2" and 8'-4 1/2")	2.17 m and 2.52 m (7'-1 1/2" and 8'-4 1/2")
Door opening height:	2.01 m and 2.35 m (6'-7 1/4" and 7'-8 1/2")	2.01 m (6'-7 1/4")
Power supply range	380–500 V, 50 or 60 Hz, 3 phase	380–690 V, 50 or 60 Hz, 3 phase
Type of mast	Rectangular (FE) or square (A-50), tubular steel with integrated rack	
Length mast section	1.508 m (4'-11 3/8")	
Regulations	ATEX	NEC
Protection class	Zone 1*** or 2	Class I, Division 2
	Gas group I, IIA or IIB	Gas group C or D
	Temp. class T1–T3 (T4)	Temp. class T1–T3 (T4)
Dust	–	Class II, Division 2, Dust group F or G

\* Depending on cabin area. \*\* Increased lifting height on request. \*\*\* Zone 1 up to 1,600 kg payload capacity.

Car door configurations (A, B and C, or any other combination)



Type of mast



For other demands or specifications, please consult your Alimak representative.