



## CONSTRUCTION HOISTS

PRODUCT GUIDE

# ALIMAK SCANDO 650a 40-46 S

Access anytime, anywhere

**ALIMAK**

- 
- **ENHANCE SAFETY**
  - **DRIVE PRODUCTIVITY**
  - **PROMOTE SUSTAINABILITY**
  - **MAXIMISE CONNECTIVITY**

# ALIMAK SCANDO 650a 40-46 S

## A new generation of construction hoists

Alimak™ is proud to present a new generation of construction hoists that sets a new standard in the construction industry. The new Alimak Scando 650a 40-46 S model will enhance safety and drive productivity on construction sites and is one of the most sustainable hoists available on the market.

### SETTING A NEW STANDARD

Since its launch in 2004, the Alimak Scando 650 has become one of the world's most popular construction hoists, and it is now even better. We listened and have advanced the development of today's construction hoist. Thanks to an innovative design, the new Scando 650a is lighter, has a reduced environmental impact, and uses less electricity than its predecessor.

### DRIVING PRODUCTIVITY ON CONSTRUCTION SITES

The payload capacity has increased by 800 kg—from 3,200 kg to 4,000 kg—compared to the previous Scando 650 at the same car size. This results in a large performance increase, while at the same time, the hoist's energy operating consumption is 22% lower.

### THE FUTURE OF DIGITALISATION HAS ARRIVED

The Scando 650a connects with My Alimak, a customised web-based portal that provides vital performance insights, to enhance safety and productivity at construction projects.

The new Scando 650a is available in single or dual-car configurations and has a car size of 1.5 m x 4.6 m. It can be configured with a lifting height of 200 m with an increased lifting height of up to 400 m on demand. It is compatible with all existing Alimak Scando 650 mast, tie and accessory systems.

With its lower energy consumption and increased performance it will continue to be the natural choice at construction sites for transporting both personnel and construction materials.



**25 %**

capacity increase (4,000 kg / hoist car)

**22 %**

lower power consumption

## Enhance safety, drive productivity, promote sustainability and maximise connectivity

The all-new Scando 650a will enhance safety, increase productivity, and it is also one of the most sustainable construction hoists on the market today, with low electric energy consumption. My Alimak provides maximised connectivity and a wide range of beneficial features for enhanced vertical transportation logistics.



### **Drive Productivity**

*Thanks to an innovative design, the all-new Alimak hoist has an 800 kg higher capacity than its predecessor, and with enhanced performance, it will increase productivity at construction sites.*



### **Enhance Safety**

*Design improvements have been made to enhance safety during installation and maintenance. An advanced online tool is available to calculate reaction forces to ensure a safe installation of your hoist.*



### **Promote Sustainability**

*With low electric energy consumption and a low manufacturing carbon footprint, this is one of the most sustainable hoists in the world. It is designed for a long lifetime and reduces environmental impact by using less electricity.*



### **Maximise Connectivity**

*My Alimak gives you access to your connected Alimak hoists and provides important operational insights 24 hours a day, no matter where you are. These remote monitoring capabilities enhance on-site productivity and safety and streamline service support requirements.*

## Lighter weight. Lower energy consumption.

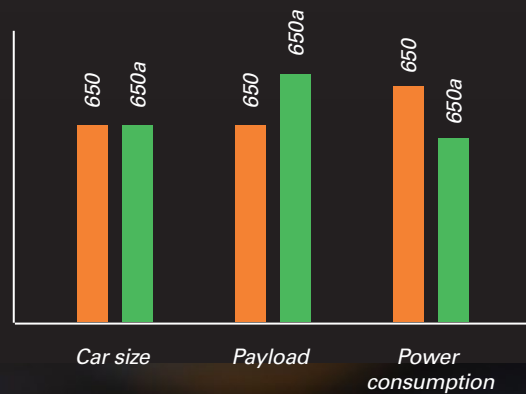
A completely new design concept, light weight, low energy consumption and low carbon footprint in the manufacturing, make this one of the most sustainable hoists in the world.

### ENHANCE SUSTAINABILITY

- Sustainability aspect has been considered in all stages of the development, from sourcing, production, transportation, and usage
- Alimak's manufacturing process uses 100% hydropower energy
- 22% lower energy consumption at average payload
- Designed for a long lifecycle and a low total cost of ownership
- Accessories fully backwards compatible with Alimak Scando 650
- The product is recyclable to approximate 97.5%

### NEW SCANDO 650a VS. SCANDO 650

The example below displays the performance of an Alimak Scando 650a 40-46 S in comparison to an Alimak Scando 650 32/46 FC-S.



## New features at a glance

The Alimak Scando 650a 40-46 S comes with a number of new features to make life easier for users and owners, during operation, transportation, storage, installation, dismantling, service and maintenance.

### 1. Hoist car

The new hoist car has a light and rigid design of painted steel and aluminum.

The payload capacity has increased by 800 kg— from 3,200 kg to 4,000 kg— compared to the previous Scando 650 at the same car size. This results in a large performance increase, while at the same time, the hoist's energy operating consumption is 22% lower.

Benefits: 25% capacity increase and 22% lower power consumption.

### 2. Vertical sliding door (C)

New door design with larger opening. Electrically monitored safety lock with indication light and fall protection safety.

Door opening: 4.00 m x 2.25 m (W x H).

Benefits: Larger door opening ease loading by forklift or directly from transportation into the hoists long side – enhances productivity.

### 3. Vertical sliding door

Reinforced stronger door panel with larger opening capability to load/unload larger goods. Electrically monitored safety lock with indication light.

Enhanced design door counterweights with chains.

Door opening: 1.5 m x 2.3 m (W x H)

Benefits: Increased opening height, easier to open, reduced wear on moving parts.

### 4. Handrail design

Enhanced lightweight aluminium handrails, reducing the risk for falling objects during installation and maintenance.

Benefits: Simplified installation. Enhanced safety during installation and maintenance.

### 5. Frequency converter

Smart Frequency Converter (FC) as standard

Benefits: Ensures maximum speed of the hoist independent of payload or any voltage drop.

Improved ride comfort, soft start regardless of load.

### 6. Electric motors

High energy efficiency motors with environmentally friendly design. Smaller, lighter and durable with low maintenance needs.

Benefits: Reduce environmental impact by using

less materials, less electricity and reducing CO<sub>2</sub> emissions. Smaller motors give more space for better access during installation and service.

### 7. Pulse encoder protection

Better protection and positioning to simplify and enhance safety during service.

Benefits: Better protection, designed for longer lifetime. Easier access and enhanced safety for service. In dual car applications, one car can be serviced while the other is still in operation.

### 8. Installation crane

Foldable jib installation crane equipped with or without an electrical chain hoist to ease the installation of mast sections, tie assemblies and landing gates.

Benefits: Provides improved ergonomics during installation. Light and detachable, easy to handle. Ball bearing for easy slewing.

### 9. Break resistor design

New foldable design to enhance safety during installation of mast sections and tie assemblies.

Benefits: Enhanced safety, improved ergonomics on the hoist car roof during installation and service.

### 10. Installation platform

A new foldable design installation platform simplifies and improves safety and ergonomics when installing and inspecting mast, ties, vertical pipe system and landing arrangements. High wear and tear resistance and slip-resistant floor.

Platform size: 1.24 m x 0.57 m (W x L)

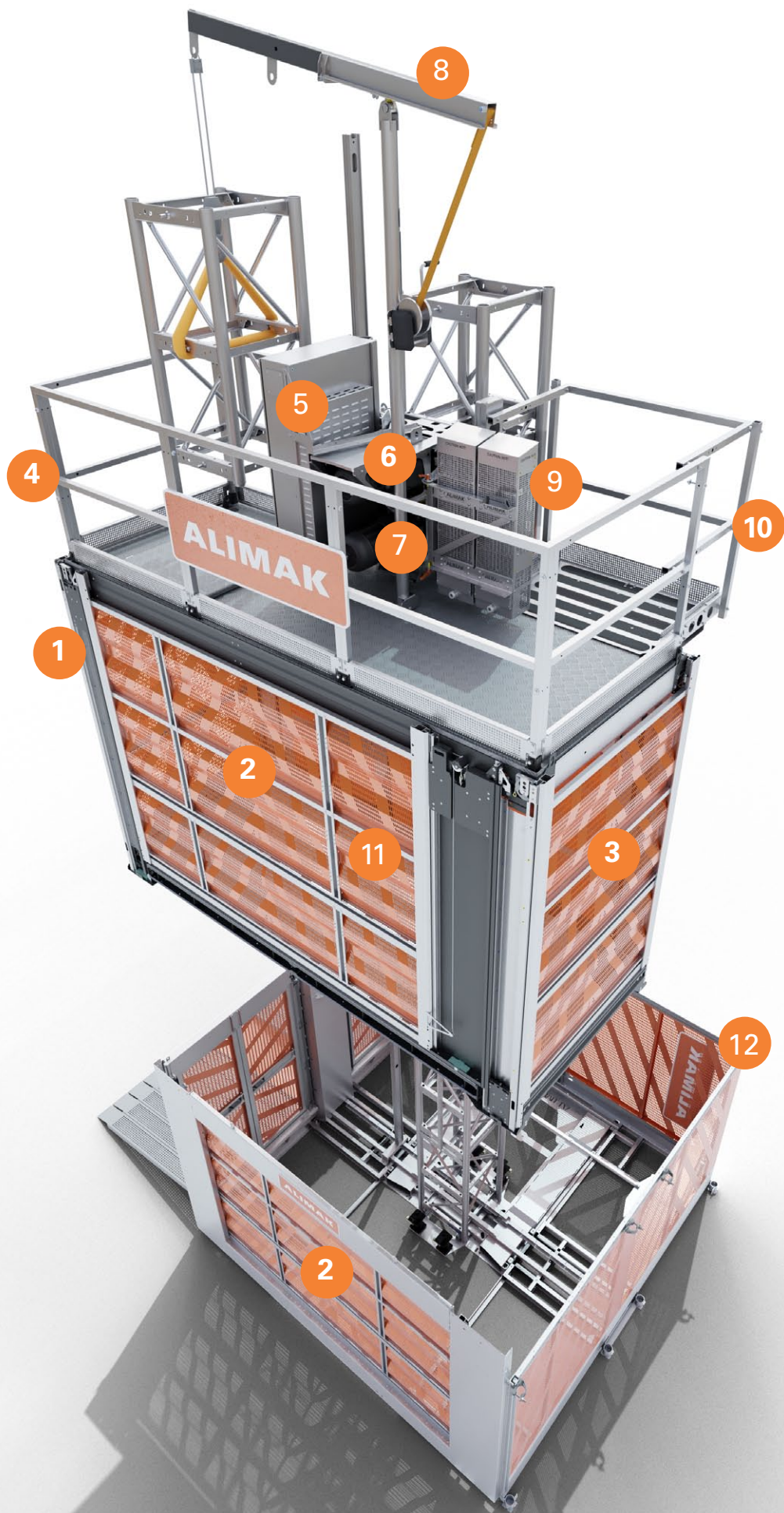
Benefits: Enhanced safety, improved ergonomics, lower costs during installation and service.

### 11. HMI solution with driving modes

Advanced HMI solution with new user-friendly interface provides real-time hoist status information. New driving modes will help to optimize the use of the hoist and enhance vertical transportation logistics at the jobsite.

### 12. Base enclosure

New design base enclosure is compatible with existing Alimak Scando 650 accessories. Possible step-in heights of 400 mm, 1,200 mm, and 1,500 mm depending on the hoist set-up.



## HMI Panel with new user-friendly interface and driving modes

New advanced HMI solution provides real-time hoist status information. Driving modes will help to optimize the use of the hoist and enhance vertical transportation logistics at the jobsite.

### LARGE-DISPLAY HMI PANEL

Industrial design HMI panel with high-resolution touch-screen and a new user-friendly interface, to optimize the use of the hoist.

- Modern stainless-steel design control panel
- User-friendly 10" TFT-LCD touch screen
- New advanced HMI solution delivers real-time hoist status information
- Water resistant screen with protective glass
- IP65 corrosion resistant

### DRIVING MODES

New driving modes will help the project manager optimize the use of the hoist and enhance vertical transportation logistics at the jobsite.



#### ECO mode

In Eco mode, the motors run at the most energy-efficient speed with low power consumption.



#### Optimised speed mode

Adapts and optimizes the speed dependent on current payload and available power.



#### Reduced speed mode

Reduced speed for low noise operation, beneficial if driving the hoist in residential areas at night.





# ALIMAK SCANDO 650a 40-46 S

## My Alimak – One Portal, Access Anytime, Anywhere

**My Alimak is a customised web- based portal developed by Alimak Group to enhance the safe and efficient use of Alimak construction products. The remote monitoring portal provides users with up-to-date information on their Alimak construction equipment.**

The My Alimak portal displays a wide variety of operational information – with data collected and displayed in an easy-to-read format – along with many additional features such as an advanced force calculation tool, Bim and document libraries. Access to this data gives owners improved support of overall asset management, by anticipating necessary maintenance and repairs as required, enhancing safety, ensuring maximum product uptime, and minimising downtime due to repairs.

### WHAT IS MY ALIMAK?

My Alimak provides vital data and information insights on equipment performance, predicting maintenance requirements becomes much simpler for your construction hoists. Information such as the number of trips, load, hours in operation and much more provides owners with accurate statistics of how the equipment is truly utilised.

### HOW DOES IT WORK?

My Alimak is empowered via remote monitoring of the innovative ALC systems utilised in Alimak products.

My Alimak and its connectivity solutions are included\* in all connected Alimak construction hoists equipped with a state-of-the-art hardware solution. Multiple users can access the portal, from different platforms at the same time – via Two-Factor Authentication (2FA), protecting your data against unauthorised access.



\* Check availability of My Alimak and its different features with your local Alimak representative.



## FEATURES AT A GLANCE

The My Alimak portal provides the maintenance team, operators, and product owners with access to:



### Information

General construction hoist specifications, such as serial number, product type, performance data and temperature.



### Status

View a wide variety of operational information and data of your Alimak hoist in real time.



### Alerts

Detect up-to-date alert messages for easy remote diagnostics, keeping down-time to a minimum.



### Location

Map with current positioning of all your connected hoists.



### Documents

Access to all technical documentation, manuals and certificates for your hoists.



### AliCalc

Advanced online tool to calculate reaction forces, saving time and enhancing safety.



### BIM Gallery

Integrate BIM-models at the planning phase of your construction project to visualise and optimise your vertical transportation requirements.



### Statistics

Analyse your hoist utilisation in an easy-to-read format and enhance construction logistics and sustainability with extended operational data.



### Parts Online

Easily find and identify Alimak spare parts online.



### Training

Easy access to available training courses online for your Alimak product.



### Support

Easy access to local technical support whenever needed.

## Technical specifications

### MAIN CHARACTERISTICS

- Light, robust design and excellent comfort
- Single and dual car configurations
- Triple entrance possible at ground level and at any landing level
- Energy efficient drive unit with low power consumption
- Light weight and high-efficiency helical gearbox of aluminum, provides low power consumption and reduced operational costs
- Advanced control system with group control and fault diagnostics system.
- New driving modes will help the project manager optimize the use of the hoist and enhance vertical transportation logistics at the jobsite.
- Built-in aluminum electrical cabinet maximises internal hoist dimensions for increased lifting capacity
- Wide range of optional equipment and functions
- My Alimak connectivity system
- Fully compliant with EN 12159:2024



### ALIMAK SCANDO 650a 40-46 S

Motor control	Frequency control (FC)
Payload capacity, max. / car	4,000 kg (8,800 lbs)
Travelling speed	76–100 m/min. (250–328 fpm)
Lifting height, max.	200 m (650 ft)
Car width, internal	1.5 m (4'-11")
Car length, internal	4.6 m (15'-1 7/8")
Car height, internal	2.3 m (7'-6 1/2")
Max. load space per car	15.8 m <sup>3</sup> (560 ft <sup>3</sup> )
No. of motors	3 x 22 kW
Safety device type	Alimak GFDIII H
Power supply range	400 V, 50 Hz, 3 phase
Recommended supply fuse	200 A
Starting current	175 A
consumption	91 kVA
Type of mast	650, tubular steel with integrated rack
Length mast section	1.508 m (4'-11 3/8")
Weight mast section with 1 rack	118 kg (260 lbs)
Rack module	5

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