# vimec

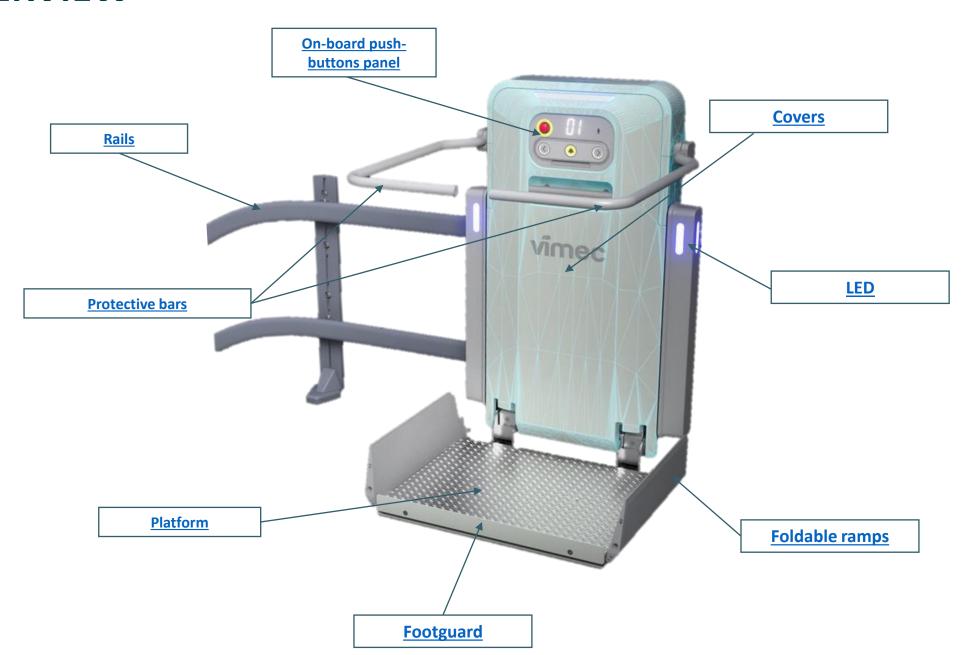
V6s TECHNICAL CATALOGUE

# **OVERVIEW**

V6s Curved staircases	225 kg 50x30 rail	300 kg 80x40 rail		
Rail size (mm)	50*30	80*40	<b>W</b>	
Min. stair width (mm)	945	1020		
Slope (min-max)	0° - !	50°		
Min. encumbrance of rail (mm)	100	135		
Min footprint when platform is closed (mm)	370	400	-	
Capacity (up to 45°)	225 kg	300 kg		
Capacity (over 45°)	225 kg	250 kg		
Speed	0.10	m/s	٥	۰
Battery power supply	24 V	/dc		E
Power consumption	0,2 l	<b>k</b> W		
Usage environment	Indoor/c	outdoor	- 0	
Operating temperature	-5°C/ +	-60°C		
Complies with the Euro	pean Directive 2014/30 "Electromagn	etic compatibility"		
Compl	iant with machinery directive 42/2006	5	200	



# **OVERVIEW**





### **EN 81-40 - CHECKLIST**



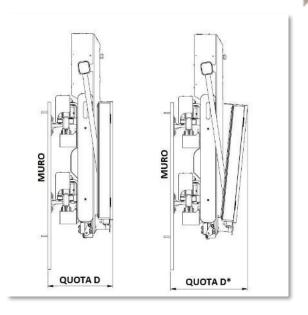
Below, we list all the points of the EN 81-40 standard respected by **V6s**:

Requirements	EN 81-40 ref.
Flame retardant and self-extinguishing materials	5.1.4.
Overload sensor (std for 1250x800, opt for other platforms)	5.1.6.2
Safety coefficient 2,5 for most load-bearing components	5.1.7
<u>IP 44</u>	5.1.8.2
Double chain traction with safety sensor	5.4.1.5
Driving pinion safety factor	5.4.5.1
Anti-trapping and anti-crushing guards	5.4.8.5
LED lights visual signs	5.5.16.2
Anti-slip walkable surface	5.6.4.1
Footguard 75 mm	5.6.4.4.3
<u>Handrail</u>	5.6.4.5.2
Gaps between bars = 100 mm	5.6.4.5.3
Interlocked arms 100N	5.6.4.7.7



# **VERSIONS** – OVERVIEW

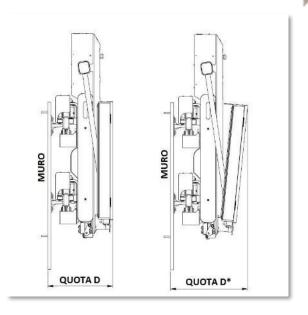
		V6	s with	80x40	rails					
L	Platform width	750	750	750	800	900	1000	1000	1250	
P	Platform depth	600	650	700	700	700	800	900	800	
	Rail encumbrance w/ wall fittings (mm)	TBD								
	Rail encumbrance w/ <b>std fittings</b> (mm)	135								
	Rail encumbrance w/ self-supporting fittings (mm)	215								
D	Min. closed platform (also with seat)		430				400			
D*	Min. closed platform with foot guard EN81-40 (also with seat)				44	<b>1</b> 5				
D**	Min. closed platform with front access				49	90				
	Capacity up to 40°		300 kg							
	Capacity over 40°				225	kg				





# **VERSIONS** – OVERVIEW

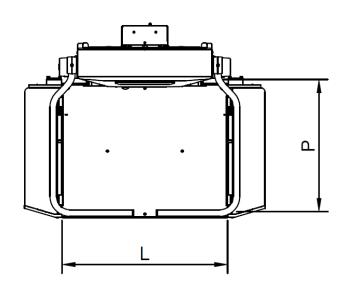
		V6	s with	50x30	rails					
L	Platform width	750	750	750	800	900	1000	1000	1250	
P	Platform depth	600	650	700	700	700	800	900	800	
	Rail encumbrance w/ wall fittings (mm)	TBD								
	Rail encumbrance w/ <b>std fittings</b> (mm)	100								
	Rail encumbrance w/ self-supporting fittings (mm)	180								
D	Min. closed platform (also with seat)		400				370			
D*	Min. closed platform with foot guard EN81-40 (also with seat)				41	5				
D**	Min. closed platform with front access	445								
	Capacity up to 40°	225 kg								
	Capacity over 40°				225	kg				

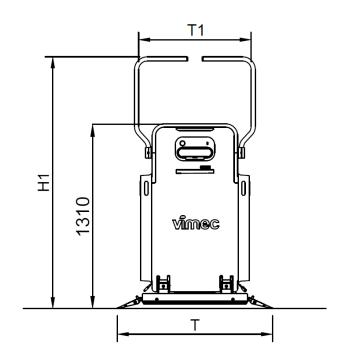


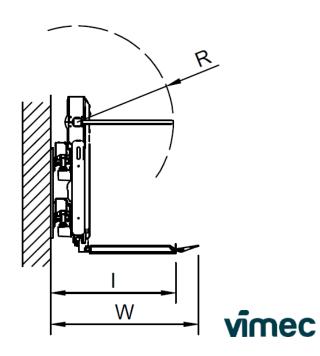


# **DIMENSIONS** — MACHINE BODY

			V6s v	with 80	x40 rails	s			
L	Platform width	750	750	750	800	900	1000	1000	1250
P	Platform depth	600	650	700	700	700	800	900	800
1	Min. lateral encumbrance	930	980		1030		1130	1230	1130
т	Platform width with open flaps		1120		1170	1270	13	70	1620
T1	Width with extended bars		740		790	890	99	90	1240
Н1	Height with open bars	1790	1840	1890			1990	2090	1990
R	Bar Path Radius	685	735		785		885	995	885

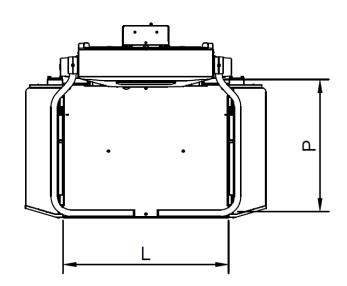


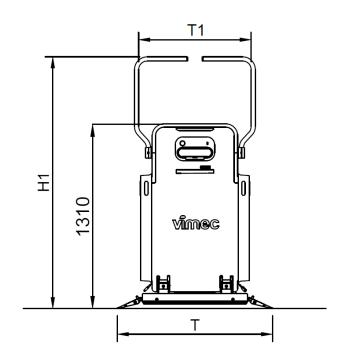


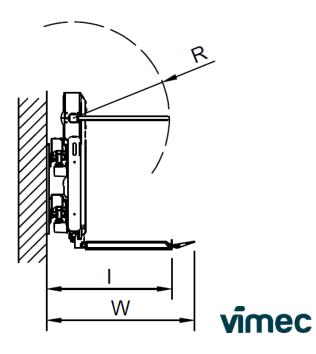


# **DIMENSIONS** — MACHINE BODY

	V6s with 50x30 rails											
L	Platform width	750	750	750	800	900	1000	1000	1250			
P	Platform depth	600	650	700	700	700	800	900	800			
ı	Min. lateral encumbrance	880	930		980		1080	1180	1080			
т	Platform width with open flaps		1120		1170	1270	13	70	1620			
T1	Width with extended bars		740		790	890	99	1240				
Н1	Height with open bars	1790	1840	1890			1990	2090	1990			
R	Bar path Radius	685	735		785		885	995	885			

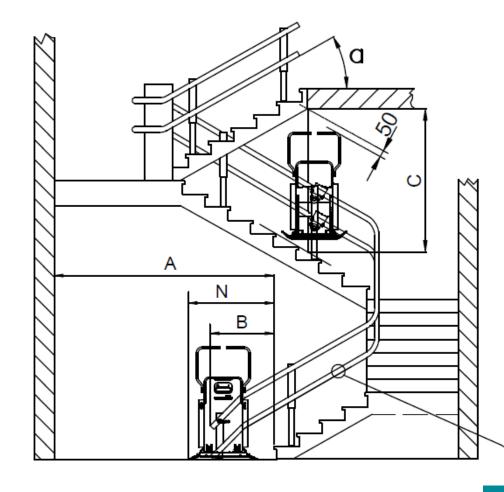






# **DIMENSIONS** — FRONT VIEW

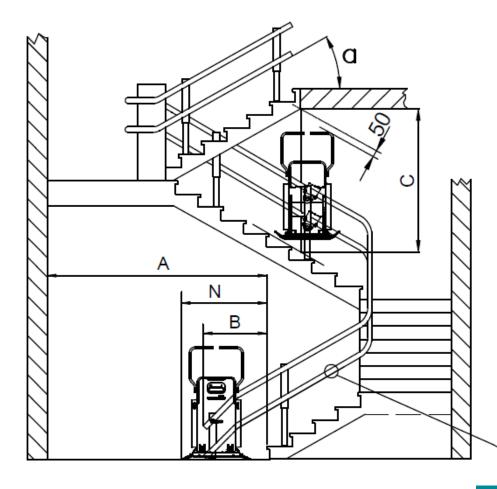
	V6s with 80x40 rails												
L	Platform width	750	750 750		800 900		1000	1000	1250				
P	Platform depth	600 650 700		700	700	800 900		800					
A	Lateral ascent (w/ drop nose)	2190			2240	2340	24	2690					
В	Landing rail footprint (w/drop nose)		990		1040	1140	12	1490					
N	Machine footprint on starting landing (w/drop nose)		1190			1340	14	1690					
С	Bars in working position		1810		1825	1855	18	1960					





# **DIMENSIONS** — FRONT VIEW

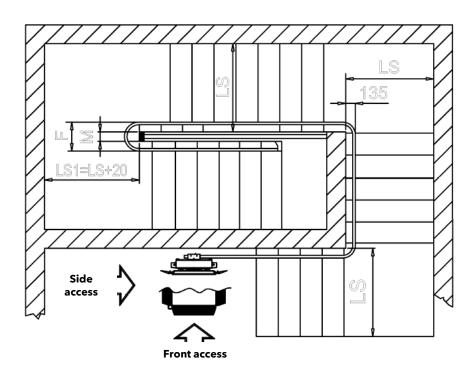
	V6s with 50x30 rails												
L	Platform width	750	750 750		800 900		1000	1000	1250				
P	Platform depth	600	650	700	700	700	800	900	800				
Α	Lateral ascent	2190			2240	2340	24	2690					
В	Landing rail footprint (w/drop nose)		990			1140	12	1490					
N	Machine footprint on starting landing (w/drop nose)		1190			1340	14	1890					
С	Bars in working position		1810		1825	1855	18	1960					





# **DIMENSIONS** — VIEW FROM ABOVE

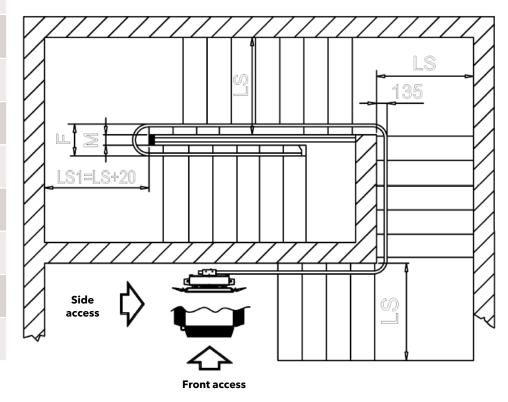
	V6s with 80x40 rails												
L	Platform width	750	750	750	800	900	1000	1000	1250				
P	Platform depth	600	650	700	700	700	800	900	800				
F 0 <m<110< th=""><th></th><th></th><th colspan="11">380</th></m<110<>			380										
F 110 <m<190< th=""><th></th><th></th><th colspan="10">460</th></m<190<>			460										
F M>190					460	+ M							
	With rounded flaps	1020	1060	1105	1115	1130	1240	1340	1310				
LS	With flaps NOT rounded	1035	1075	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.				
	With front access	1090	1150	1205	12	10	1310	1420	1355				





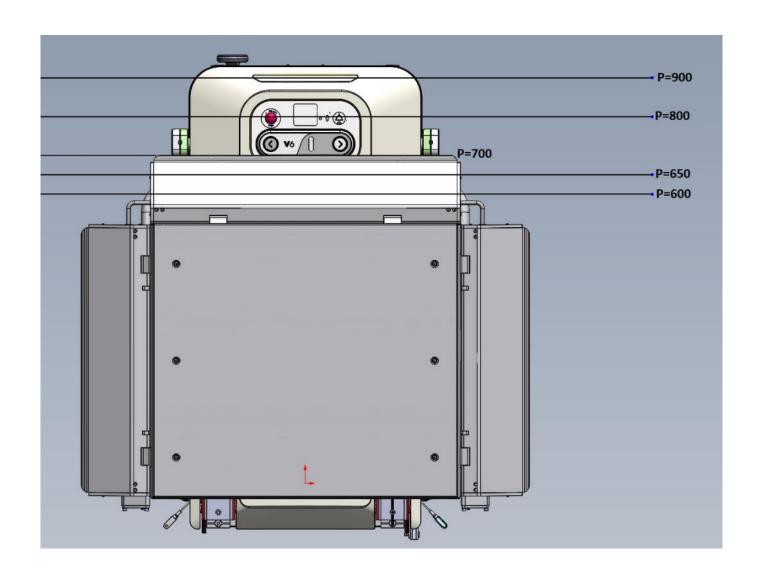
# **DIMENSIONS** — VIEW FROM ABOVE

		V6s	with 5	50х30 ı	rails					
L	Platform width	750	750	750	800	900	1000	1000	1250	
P	Platform depth	600	650	700	700	700	800	900	800	
F 0 <m<110< th=""><th></th><th></th><th></th><th></th><th>3</th><th>10</th><th></th><th></th><th></th></m<110<>					3	10				
F 110 <m<160< th=""><th></th><th></th><th colspan="8">360</th></m<160<>			360							
F 160 <m<210< th=""><th></th><th colspan="7">410</th></m<210<>		410								
F 210 <m<260< th=""><th></th><th></th><th></th><th></th><th>4</th><th>60</th><th></th><th></th><th></th></m<260<>					4	60				
F M>260					M +	200				
	With rounded flaps	960	1005	1050	1060	1075	1185	1280	1255	
LS	With flaps NOT rounded	980	1025	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	
	With front access	1055	1100	1150	1155	1160	1270	1380	1320	



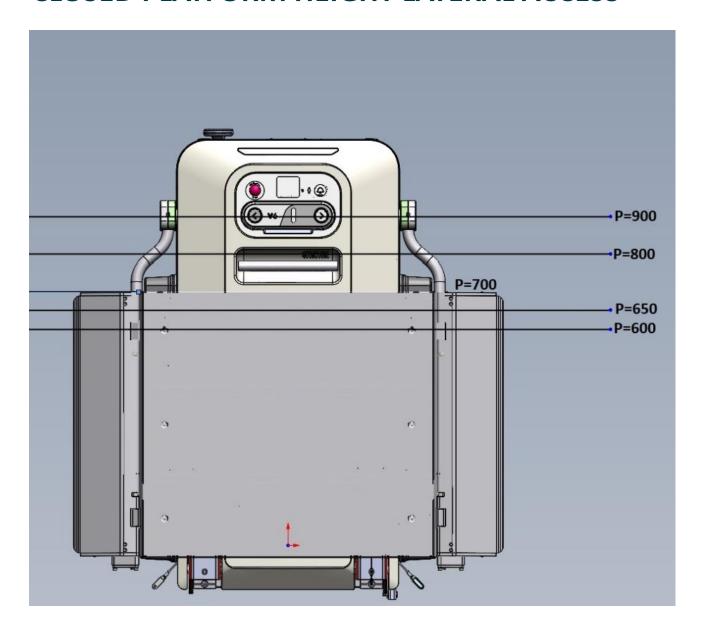


### **DIMENSIONS** — CLOSED PLATFORM HEIGHT FRONT ACCESS





# **DIMENSIONS** — CLOSED PLATFORM HEIGHT LATERAL ACCESS





# SALES MEMO – ON-BOARD CONTROLS

**Recessed red stop button** to prevent accidental activation

In RAL 7047 Telegrey 4 for all

versions



.....

Backlit display as standard - it disappears when the machine is idle



Directional buttons with extended active part – the whole area can be easily activated even without the use of hands!





### ON-BOARD PUSH-BUTTON PANEL

The standard on-board push-button panel is made of thermoplastic material and is 170 x 280 mm in size.

The on-board control panel includes:

- Round directional buttons with arrow for ascent and descent.
- Emergency "bell" button
- Stop button
- Display and indicator lights
- Magnetic activation key

The **arrow** and **bell buttons** are rounded and have a diameter of 40 mm – the entire surface is active to allow you to press the button more easily even without the use of your hands. Only the directional keys have the backlit crown.

The operation of the two directional buttons is of "dead's man" type and it is therefore necessary to constantly hold the button until the platform reaches the floors and stops automatically.

The **bell button** is always active regardless of the status of the key and it activates an **audible alarm** and the **auto-dialer** when present.





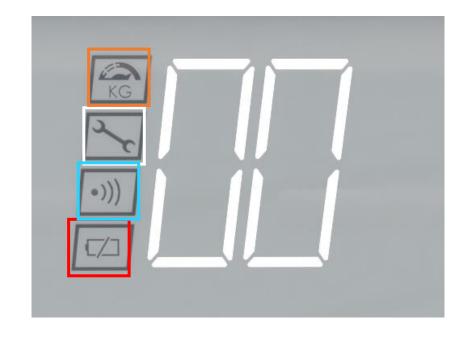
#### **DISPLAY AND INDICATOR LIGHTS**

#### **Overload light**

#### **Orange LED**

- Overload sensor standard for 1250x800
- Optional for other platforms

Fault reporting White LED



#### Radio signal reception

#### White LED

It is activated when the floor remote control or the remote control for attendant is used.

#### **Battery signal**

Green LED: battery charged
Orange LED: battery not fully charged
Red LED: low battery

V6s is equipped as standard with an **LED light display** located behind the dashboard cover. The symbols appear via backlight and then, when the machine is not running and not in error, the display is not visible.

The display provides information on the status and activity of the machine, in particular:

- **DIRECTION OF TRAVEL:** the display shows directional arrows in motion
- FLOOR where the car is located
- **ERROR CODES:** When the machine is in error, the display shows the corresponding error code to facilitate the technician and/or users in resolving the problem. Some errors are recoverable and can be fixed directly by the user through the user manual or the <u>app MyVimec</u>.



### **OTHER FEATURES**

All the V6s are integrated with an **aluminum handle** placed in the upper part of the stairlift is used as a support during the motion.

The "recessed" position of the handle avoids any accidental impact.

The length is 268 mm, and the diameter is 25 mm.

Compliant with regulation EN 81-40, 5.6.4.5.2, the space around the handle must be greater than 30 mm to ensure a comfortable grip for users.





A **folding seat** with a maximum capacity of 115 kg can also be ordered as an option.

The presence of the seat does not affect the footprint of the closed machine.



# **LED**

V6s is equipped to standard with **3 RGBW LED strips**, one positioned above the control panel and 2 placed on each side bumper.

The LEDs provide in an intuitive and immediate way some information on the status and activity of the machine, in detail:

GREEN LED fixed

Machine ready to be used

BLUE LED flashing

Moving machine

RED LED flashing

Movement not possible (e.g. due to obstruction)

RED LED fixed

Machine in error

GREEN LED flashing

Machine in self-centering zone

YELLOW LED flashing

Machine called from the floor





### **COVERS**

V6s has been designed to adapt to every condition and environment of use.

In particular, all hoods, caps and side panels have an **IP 44** rating which means that "internal" electrical and electronic devices are protected against the penetration of solid foreign bodies with a diameter of 1 mm and above and is protected from splashing water from all directions.



In addition, these components are fireproof or self-extinguishing and classified as **VO** according to the UL94 standard "Degree of Extinguishing of Plastics" – this means that in the event of a fire, the flame is extinguished within 10 seconds.



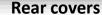
**COMPLIANT** Compliant with regulation EN 81-40, 5.1.4



**Upper Hood** 

Front cover available in RAL 9018 or 7024 and side panels









# **SALES MEMO – PROTECTIVE BARS**

ALUMINIUM RAL 9006



SIMPLE MANUAL UNLOCKING



DISTANCE BETWEEN BARS IN ACCORDANCE WITH 81-40

Between 100 and 150 mm





FOLDABLE DOWNWARDS



#### **INTERLOCKED BARS**

Resistant to an applied force of 100 Newtons both upwards and downwards





#### **FLOOR CONTROLS**

In the standard equipment of V6s, 2 floor radio push-button panels are included, one to be installed on floor 0 and one on floor 1.

The push-button panels consist of a wall housing and a removable remote control.

Using the O "call" button, the machine is called back to the desired floor.

Using the P "parking" button, the machine is sent to parking.

All push-button panels are enabled by a **removable magnetic key** (in orange) - you cannot use the machine without the key being inserted. 2 keys are provided for each standard supplied push-button panel (4 keys in total).

The remote control is supplied with a 3.7V rechargeable battery.

As with the on-board controls, all the floor controls are "dead's man" type (just remove your finger from the button and the machine stops).





### **ACCESS** — PLATFORM

V6s is always equipped with a **motorised platform** through an electromechanical actuator - it is necessary to keep the C button pressed on the push-button panel for the platform to open automatically, the connecting flap will be placed in the boarding position and the descent side bar in the working position.



A special manual manoeuvre allows you to close the platform in emergency conditions (see dedicated slide).

The platform is also protected by **safety flaps** on the right and left sides, with lateral access, and on 3 sides with front access (optional), which have the dual function of facilitating the ascent to the floors (open position) and containing the wheelchair during the path of the machine. Before the machine leaves the plane, the flaps are automatically brought to the safety position (inclined at 75°).

The flap facing the descent opens only on the lower floor of the path. In case of resistance to the movement of the flaps, an overcurrent protection intervenes by blocking the recalled function.

In case of standard side access, the platform is always equipped with a front foot guard with a standard height of 5.5 cm.

As an option, the foot guard is available EN 81-40 with height 7.5 cm.





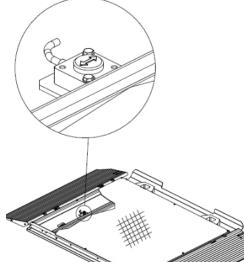
### **ACCESS** — PLATFORM



All the platforms are also equipped with **SAFETY EDGES UNDER THE PLATFORM** – under the platform are in fact installed microswitches able to stop the platform in the event that, moving down, there is any obstacle between the staircase / floor and the platform.

Until the obstacle is removed, the platform cannot proceed in its downward movement but can instead climb to allow the removal of the obstacle or the landing on the upper floor.







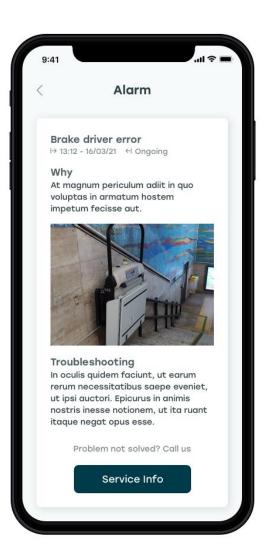
All platforms can be equipped with an **overload sensor** that aims to check for any overloads of the platform. In case of overload, the inclinometer causes the appropriate indicator light on the display to light and stops the machine.

The inclinometer is standard on the 1250x800 platform.

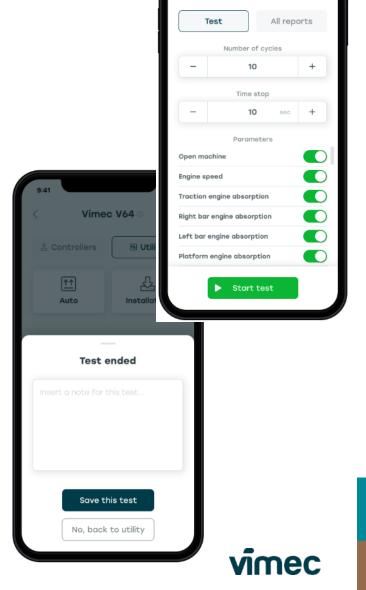


### MYVIMEC APP - TECHNICIAN

The MyVimec app is a very useful tool available to the technician / maintainer because it will allow you to:



- Receive real-time information on the **status** of the machine (e.g. battery charge level, machine position, etc.)
- Receive real-time information about machine alarms or error codes and machine recovery instructions
- Configure the machine on site
- Carry out tests (functionality still being defined)



CONNECTIVITY

Auto

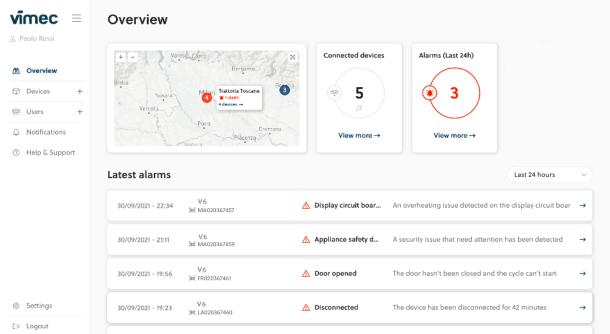
#### CONNECTIVITY

### **CLOUD - GATEWAY**

By installing an optional **gateway** device it will be possible to connect V6s to the data network or wi-fi and have information on the machine(s) available on the Cloud.

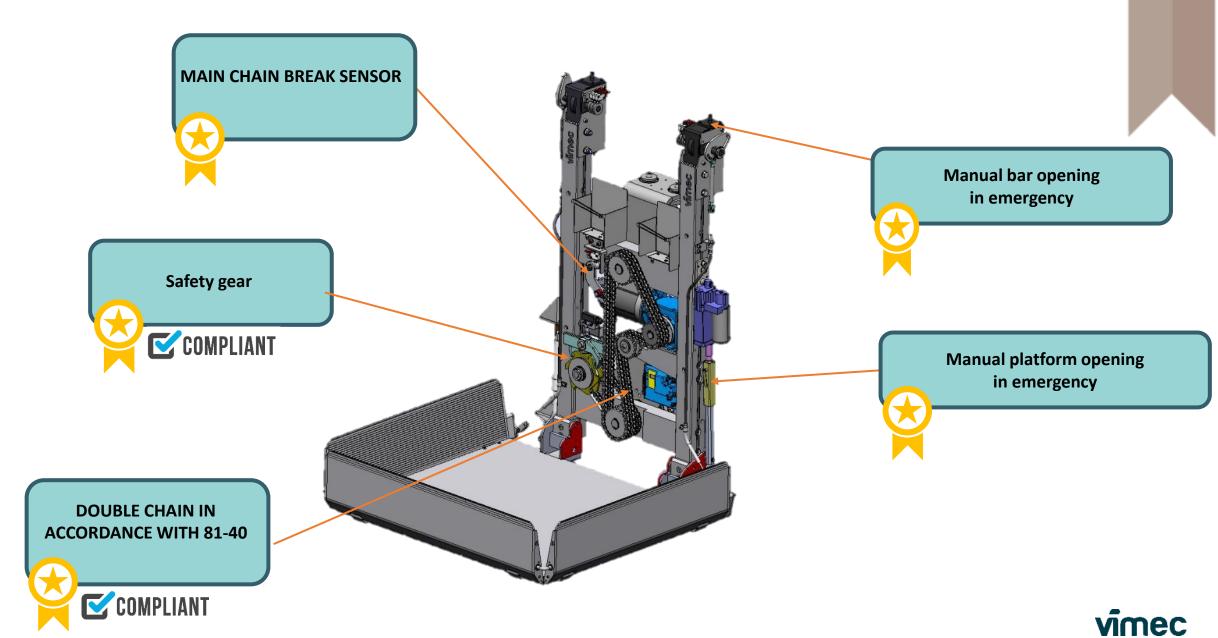
- Fleet management: in one place, all the data of your fleet are available
- Access to customized dashboards to consult the statistical data of the machines

Preventive maintenance: through access to the always updated data on the machine, it is possible to prevent any failures in your fleet.





# **SALES MEMO** – TRACTION



#### **TRACTION**



The traction system of the V6s is of the **rack and pinion type** on perforated guides.

V6s provides a standard:

- Double pinion
- Double towing chain equipped with a main chain break sensor (highlighted in red)

The mechanical safety gear and speed limiter (highlighted in **blue**) intervene in case of breakage of the traction organs or at a predetermined speed of descent higher than the nominal one.

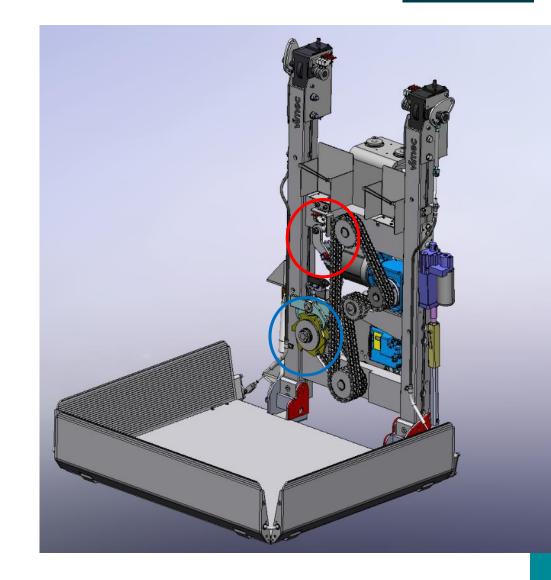
The intervention of the device causes the machine to stop.

V6s is powered by 2 x 24 Vdc batteries that can be recharged at charging stations.

The power and consumption data from the mains are:

Voltage: 100-300 Vac

Maximum power consumption: 180W





#### **TRACTION - RAILS**





The standard rails of V6s are made of S355 steel and treated with sandblasting, epoxy painting and additional cataphoresis in case of outdoor installations.

The standard color of the guide is **RAL 7024 Anthracite grey**.

N.B. It is possible to request an alternative colouring of the guide by warning the customer about the delicacy of this (in these cases the customer is required to fill out a dedicated form).

The V6s guides have two different sizes depending on the required loading capacity:

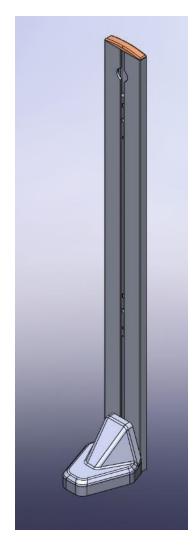
- 80 mm x 40 mm with capacity 300 kg
- 50 mm x 30 mm with capacity 225 kg

V6s comes standard with 2 charging stations located at the beginning and end of the guide – optionally, you can select them for each intermediate stop provided.



### **TRACTION - SUPPORTS**





#### STANDARD SUPPORTS WITH WALL ATTACHMENT

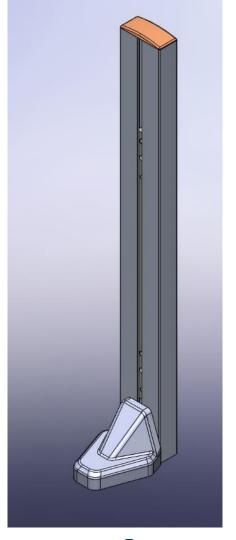
Made of steel RAL 7024

\* Supports in aluminium EN AW-6060 T6 available as option

#### **SELF-SUPPORTING PILLARS**

Made of steel RAL 7024

\* Supports in aluminium EN AW-6060 T6 available as option





#### **SAFETY** - OVERVIEW



As partly already discussed in the previous slides, V6s integrates numerous devices and measures that place it in first place among competitors in terms of safety.

Below, we list all the main security elements present on V6s:

- Protection bars
- Platform flaps and foot guard
- Double chain
- Manual unlocking of BARS and PLATFORM
- RESCUE MODE
- Electric and mechanical limit switches
- Shockproof, anti-skinning edges on the machine body and on the platform: they stop the motion of the machine in contact with any obstacle. However, they allow the movement of the machine in the opposite direction to that in which the obstacle was encountered to free the way.
- Safety edges under the platform
- Safety switches on side bumpers
- Inclinometer
- **Safety gear and speed limiter:** intervenes in case of breakage of the traction organs or at a predetermined speed of descent higher than the nominal one. The intervention of the device causes the machine to stop.



#### **SAFETY** – MANUAL UNLOCKING OF BARS AND PLATFORM





#### 1. MANUAL UNLOCKING BARS

By removing the upper bonnet through a few simple operations, you can manually fold the bars down by acting on the small shaft indicated in the image on the left.

#### 2. MANUAL PLATFORM UNLOCKING

By pressing the lever as shown in the image on the right, you can manually close the platform with the other hand – the operation can also be carried out by a single person.





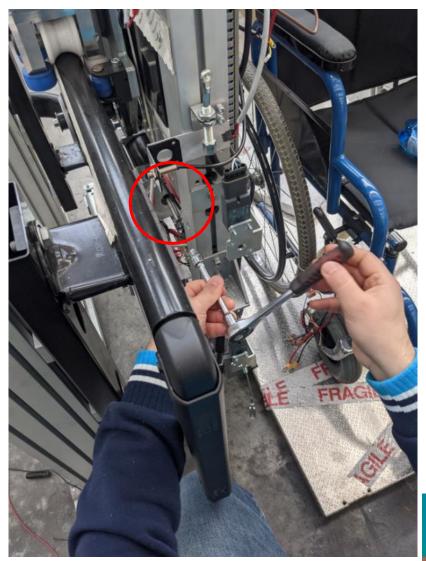
### **SAFETY - RESCUE MODE**



If the machine is blocked along the stair, it can be moved by a simple manual emergency manoeuvre or "**Rescue mode**". After unlocking the platform and arms, you act on the small shaft circled in red in the image through a tool supplied with the machine.

By turning the tool in the 2 directions it is possible to move the machine up or down.







# **SALES MEMO** – colors and materials



**Under-platform** 

Footguard

#### **SAME FOR BOTH VERSIONS:**

RAL 7047

Dashboard

RAL 9006

- Handrail
- Side flaps (and front where present)
  - Side bumpers and bars
    - Vimec logo

RAL 7024

Rails and supports



Front cover

Under-platform

Footguard

RAL 9018



# **SALES MEMO** – COLORS AND MATERIALS

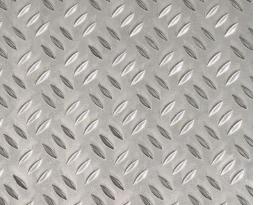


#### **SAME FOR BOTH VERSIONS:**

RAL 9006

- Upper hood with satin metal effect
  - Logo Vimec

Natural almond aluminium footboard



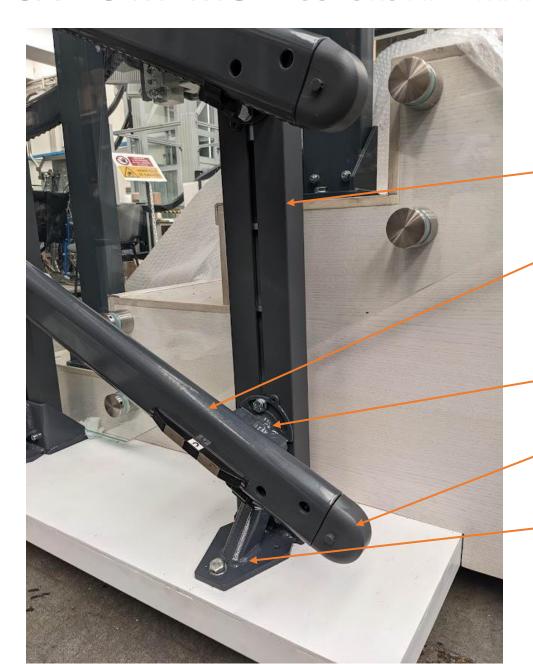
RAL 7024

Rear covers



vimec

### **SALES MEMO** – COLORS AND MATERIALS



RAL 7024

Fitting SMOOTH MATT

Rail SMOOTH

Flange ORANGE-PEEL GLOSSY

Rail end SMOOTH MATT

Foot ORANGE-PEEL GLOSSY

Foot cover SMOOTH MATT





### **SALES MEMO** – SPECIAL RAL COLOURS



Special RAL colours are available as option for:

#### < Front side

(including front cover of the machine body, platform double bottom, flaps and foot guard – side bumpers and upper hood not included)

Rear side > rear cover over the machine body



Rails and fittings (steel parts only, plastic covers and closures upon request)





### **SALES MEMO** – COLORS AND MATERIALS



CUSTOM WRAPPING ON REQUEST







### **ASSEMBLY**



Machine Body in ALUMINIUM





ONE MACHINE BODY FOR RIGHT/LEFT VERSION



ONE MACHINE BODY FOR INDOOR/OUTDOOR



ONE MACHINE BODY FOR ALL PLATFORM SIZES





# **ASSEMBLY**







WORK IN PROGRESS



