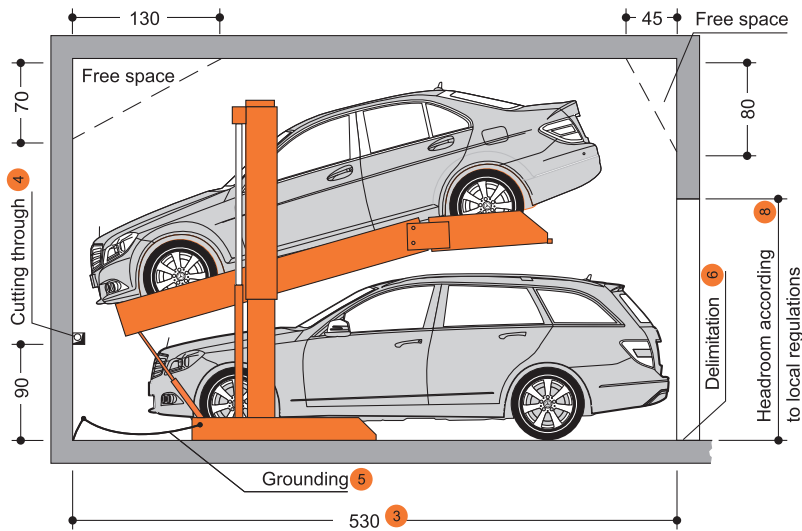


### Garage without door (basement garage)



### Dimensions

All space requirements are minimum finished dimensions.

Tolerances for space requirements  $\pm 3$  mm. <sup>1</sup>  
Dimensions in cm.

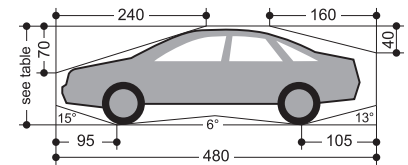
EB (single platform) = 2 vehicles

### Suitable for

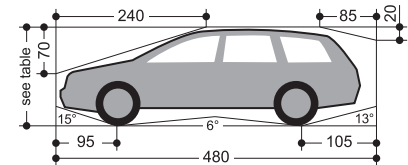
Standard passenger cars:  
Limousine, station wagon, SUV, van  
according to clearance and maximal  
surface load.

- Width 190 cm
- Weight max. 2500 kg
- Wheel load max. 625 kg

Clearance profile Limousine (L)



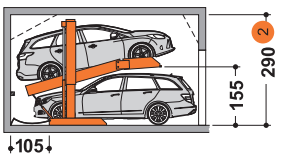
Clearance profile Station wagon (S)



**!** Before lowering the platform, the vehicle parked on the lower parking space must be driven off!

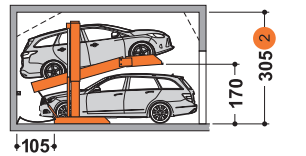
### Version 1: above backward; below forward

#### 2015-155



car height above (L+S)	car height below (L+S)
290	155

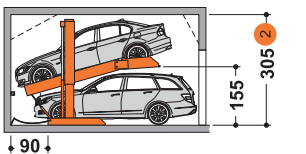
#### 2015-170



car height above (L+S)	car height below (L+S)
305	170

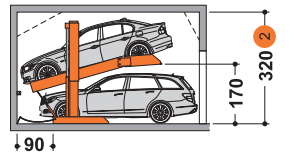
### Version 2: above and below forward

#### 2015-155



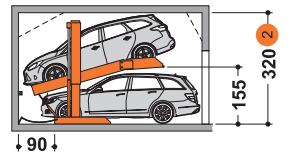
car height above (L)	car height below (L+S)
305	155

#### 2015-170



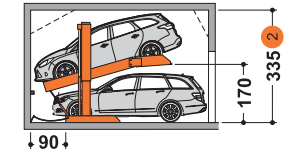
car height above (L)	car height below (L+S)
320	170

#### 2015-155



car height above (L+S)	car height below (L+S)
320	155

#### 2015-170



car height above (L+S)	car height below (L+S)
335	170

- 1 To follow the minimum finished dimensions, make sure to consider the tolerances according to VOB, part C (DIN 18330 and 18331) and the DIN 18202.
- 2 If a higher ceiling height is available higher cars can be parked.
- 3 If the total driveway length is greater, the max. vehicle length for the lower parking space increases accordingly.
- 4 For dividing walls: cutting through 10 x 10 cm.
- 5 Potential equalization from foundation grounding connection to system (provided by the customer).
- 6 10 cm wide yellow black markings must be applied by the customer to the edge of the platform in the access area to mark the danger zone in front of the supporting surface of the upper platform edge (see 'Load plan' on page 2)
- 7 L = Limousine / S = Station wagon
- 8 Must be at least as high as the greatest car height + 5 cm.

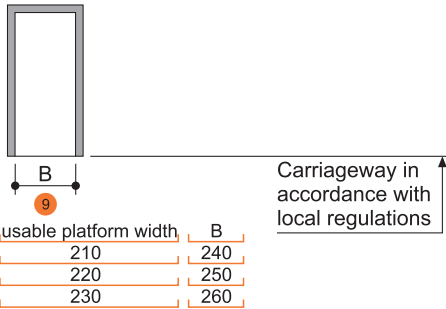
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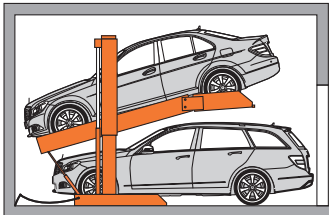
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## Width dimensions

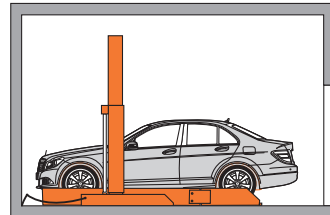


## Function

### System lifted

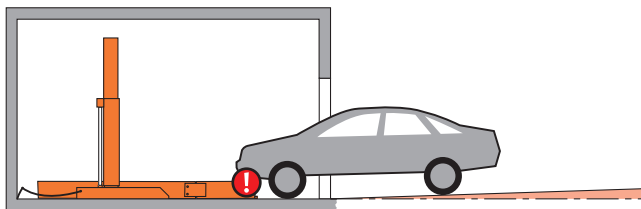


### System lowered

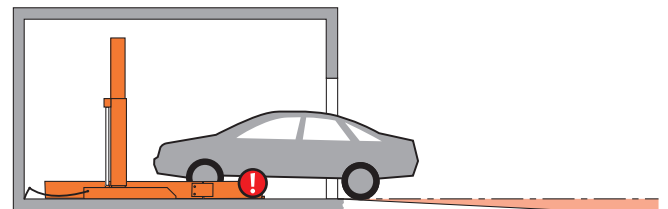


Before lowering the platform, the vehicle parked on the lower parking space must be driven off!

## Approach



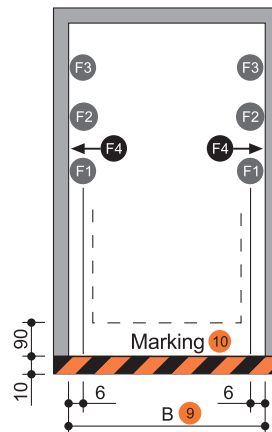
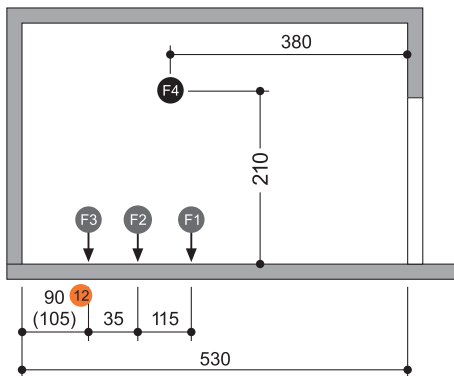
maximum descending slope 4 %



maximum ascending slope 14 %

**!** The illustrated maximum approach angles must not be exceeded. Incorrect approach angles will cause serious maneuvering & positioning problems on the parking system for which the local agency of the KLAUS Multiparking accepts no responsibility.

## Load plan



platform load	F1	F2	F3	F4	11
2500 kg	-6	+22	-6	±1	

**!** Units are dowelled to the floor. Drilling depth: approx. 15 cm.  
Floor and walls are to be made of concrete (quality minimum C20/25)!  
The dimensions for the points of support are rounded values. If the exact position is required, please contact KLAUS Multiparking.

9 Dimension B see above  
10 Marking compliant to ISO 3864 (colors used in this illustration are representative)

11 All forces in kN (Static Loads)  
12 Version 1 and 2 see page 1

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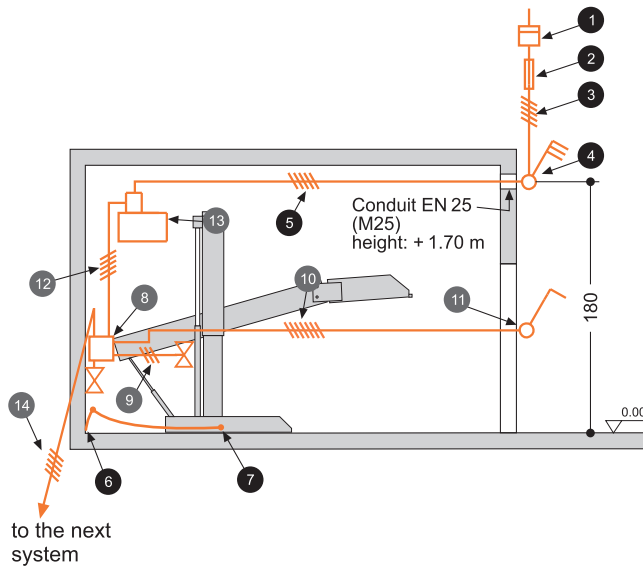
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## Electrical installation

### Installation diagram



### Electrical data (to be performed by the customer)

No.	Quantity	Description	Position	Frequency
1	1	Electricity meter	in the supply line	
2	1	Main fuse: 3 x fuse 16 A (slow) or circuit breaker 3 x 16 A (trigger characteristic K or C)	in the supply line	1 per Hydraulic power pack unit
3	1	Supply line 5 x 2.5 mm <sup>2</sup> (3 PH + N + PE) with marked wire and protective conductor	to main switch	1 per Hydraulic power pack unit
4	1	RCBO (or MCB + ELCB), 16 Amp./4 Pole, 100 mA (for 1.5 KW HPP motor rating) RCBO (or MCB + ELCB), 25 Amp./4 Pole, 100 mA (for 3.0 KW HPP motor rating)	defined at the plan evaluation	1 per Hydraulic power pack unit
5	1	Supply line 5 x 2.5 mm <sup>2</sup> (3 PH + N + PE) with marked wire and protective conductor	from main switch to unit	1 per Hydraulic power pack unit
6	every 10 m	Foundation earth connector	corner pit floor	
7	1	Equipotential bonding from foundation earth connector to the system		1 per system

### Electrical data (included in delivery of KLAUS Multiparking)

No.	Description
8	Terminal box
9	Control line 3 x 0.75 mm <sup>2</sup> (PH + N + PE)
10	Control line 5 x 0.75 mm <sup>2</sup> with marked wire and protective conductor
11	Operating device
12	Control line 5 x 0.75 mm <sup>2</sup> with marked wire and protective conductor
13	Hydraulic unit 1.5 kW, three-phase current, 415 VAC / 50 Hz or Hydraulic unit 3.0 kW, three-phase current, 415 VAC / 50 Hz
14	Control line 5 x 0.75 mm <sup>2</sup> with marked wire and protective conductor

## Technical data

### Field of application

Generally parking system is suitable for the same car length for which the wheel stop is adjusted at the time of installation. In case different car is to be parked, wheel stop adjustment confirmation from KLAUS Multiparking shall be required.

### Units

we recommend that parking system's garage be built separately from the dwelling.

### Available documents

- Wall recess plans
- Maintenance offer/contract
- Declaration of conformity

### Building application documents

According to LBO and GaVo (garage regulations) the Multiparking systems are subject to approval.

### Care

To avoid damages resulting from corrosion, make sure to follow our cleaning and care instructions and to provide good ventilation of your garage.

### Railings

If there are traffic routes next to or behind the installations, railings must be installed by the customer. Railings must also be in place during construction.

### Environmental conditions

Environmental conditions for the area of multiparking systems: Temperature range 5° C to +40° C. Maximum outside temperature of +45° C.

If the local circumstances differ from the above, please contact KLAUS Multiparking.

### CE Certification

The systems offered correspond to DIN EN 14010 and the EC Machinery Directive 2006/42/EG.

## To be performed by the customer

### Safety fences

Any constraints that may be necessary in order to provide protection, for pathways directly in front, next to or behind the unit. This is also valid during construction.

### Numbering of parking spaces

Consecutive numbering of parking spaces.

### Marking

A warning that identifies this danger area must be placed in the entrance area. This must be done for systems without a pit 10 cm from the edge of the platform.

### Building services

Any required lighting, ventilation, fire extinguishing and fire alarm systems as well as clarification and compliance with the relevant regulatory requirements.

### Wall cuttings

Any necessary wall cuttings according to page 1.

### Electrical supply to the power point/foundation earth connector

Main power point: 4 pole RCBO (or MCB + ELCB), 16 Amp IDN (sensitivity/leakage current) 100 mA.

The functionality can be monitored on site by our filters together with the electrician. If this cannot be done during installation for some reason for which the customer is responsible, the customer must commission an electrician at their own expense and risk.

Electrical equipment, grounding of the steel structure is necessary, provided by the customer (distance between grounding max. 10 m.)

## Description Single platform (EB)

### General description

Multiparking system providing dependent parking spaces for 2 cars one on top of the other each. The lower vehicle parks directly on the floor. The vehicle parked on the bottom must be driven out before lowering platform.

Dimensions are in accordance with the underlying dimensions of height and width.

The upper vehicle is driven onto and parked on an inclined platform with a slope of approx. 5%.

Vehicles are positioned on the upper parking space using wheel stop on the left side (adjust according to operating instructions).

The user is responsible for positioning the vehicle.

Operation via operating device with hold-to-run-device using master keys.

The operating elements are usually mounted either in front of the column or on the outside of the door frame

Operating instructions are attached to each operator's stand.

For garages with doors at the front of the parking system the special dimensional requirements have to be taken into account.

### Multiparking system consisting of:

- 2 steel pillars with bases that are mounted on to the floor
- 2 sliding platforms (mounted to the steel pillars with sliding bearings)
- 1 platform
- 1 telescopic taught rod between platform and base plates, a mechanic synchronization control system (to ensure synchronous operation of the sliding platforms while lowering and lifting the platform)
- 1 hydraulic cylinder
- Automatic mechanic locking system (prevents accidental lowering of the platform from its upper limit position)
- Dowels, screws, connecting elements, bolts, etc.
- The platforms and parking spaces are end-to-end accessible for parking.

### Platforms consisting of:

- Platform base sections
- Adjustable wheel stops
- Canted access plates
- Side members
- Cross members
- Screws, nuts, washers, distance tubes, etc.

### Hydraulic system consisting of:

- Hydraulic cylinder
- Solenoid valve
- Safety valve
- Hydraulic pipes
- Screwed joints
- High-pressure hoses
- Installation material

### Electric system consisting of:

- Operating device (Emergency Stop, lock, 1 master key per parking space)
- Terminal box at wall valve
- Electrical locking device

### Hydraulic unit consisting of:

- Hydraulic power unit on metal mounting
- Hydraulic oil reservoir
- Oil filling
- Internal geared wheel pump
- 3-phase-AC-motor
- Contactor (with thermal overcurrent relay and control fuse)
- Pressure relief valve
- Hydraulic hoses (which reduce noise transmission onto the hydraulic pipe)

## We reserve the right to change this specification without further notice

KLAUS Multiparking reserves the right in the course of technical progress to use newer or other technologies, systems, processes, procedures or standards in the fulfillment of their obligations other than those originally offered provided the customer derives no disadvantage from their so doing.

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