

Page 1
Section
Dimensions
Car data

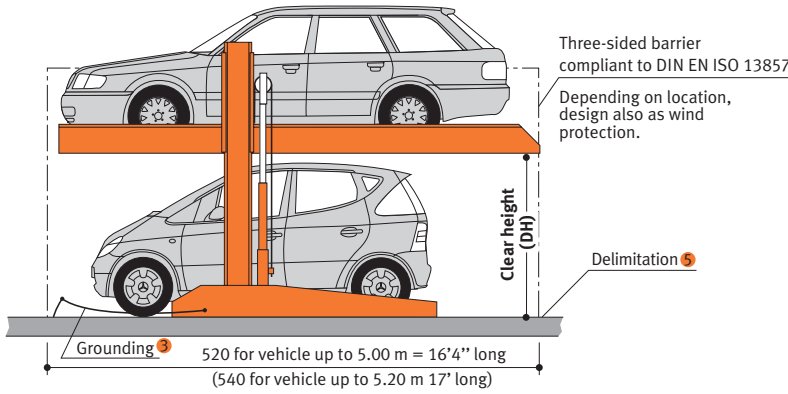
Page 2
Width dimensions
Load per parking sp.

Page 3
Approach
Load plan
Installation

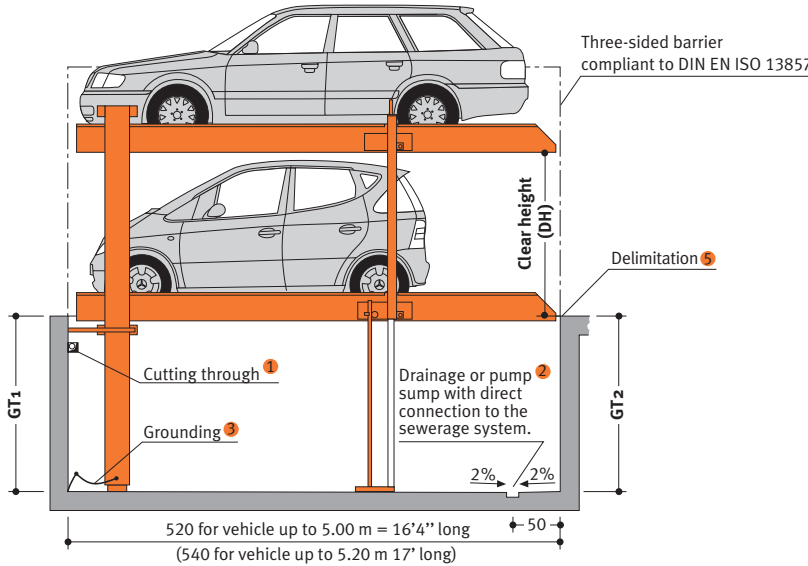
Page 4
Electrical installation
Technical data

Page 5
To be performed by the customer
Description

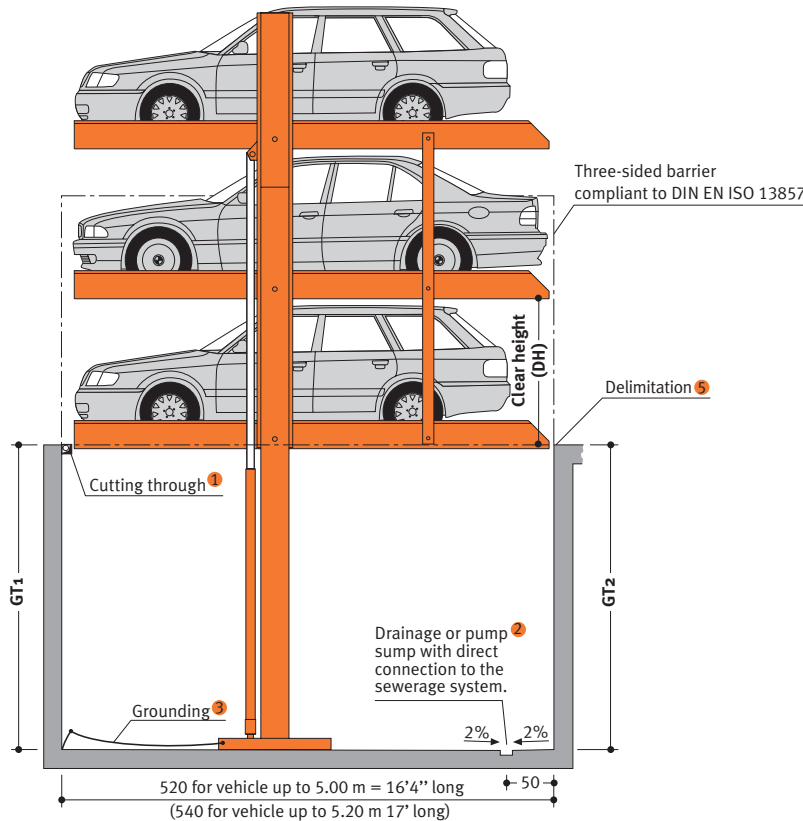
SingleVario 2061



Stack Parker 2062



Stack Parker G63



Notes

- 1 For dividing walls: cutting through 10x10 cm (for pipes)
- 2 An oil separator and petrol trap must be included in planning if there is a connection to the sewerage system.
- 3 Potential equalization from foundation grounding connection to system (provided by the customer).
- 4 For detailed information regarding parking space load of platforms, see page 2.
- 5 In accordance with DIN EN 14 010, 10 cm wide, yellow-black markings compliant to ISO 3864 must be applied by the customer in the access area in front of the drive-on area of the upper platform edge (2061) or on the pit edge (2062 and G63) to mark the danger zone (see »Load Plan« Page 3).

Product Data



2061/2062/G63

Outdoors

Dimensions:

All space requirements are minimum finished dimensions. Tolerances for space requirements +₀³. Dimensions in cm.

EB (single platform) = 2 vehicles
DB (double platform) = 4 vehicles

Suitable for:

Standard passenger car and station wagon.
Height and length according to contour.

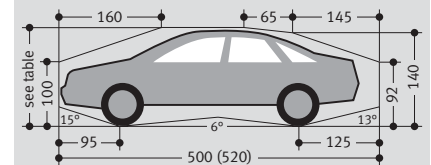
Type	DH*	car height			
		GT1	GT2	lower	middle
2061-170	170	-	-	160	-
2061-190	190	-	-	180	-
2061-210	210	-	-	200	-
2062-170	156	170	175	150	-
2062-185	171	185	190	165	-
2062-195	181	195	200	175	-
2062-205	191	205	210	185	-
2062-215	201	215	220	195	-
G63-330	155	330	335	150	150
G63-370	175	370	375	170	170

* = without car

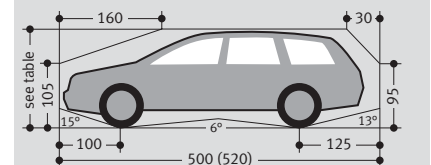
To the extent that the conditions of the construction do not restrict the height, the car height on the upper parking slots is not restricted.

width	1,90 m
weight	max. 1500 4
wheel load	max. 375 kg

Standard passenger car



Standard station wagon



Standard passenger cars are vehicles without any sports options such as spoilers, low-profile tyres etc.



Klaus Multiparking GmbH
Hermann-Krum-Straße 2
D-88319 Aitrach
Phone +49-75 65-5 08-0
Fax +49-75 65-5 08-88
E-Mail info@multiparking.com
Internet www.multiparking.com

Page 1
Section
Dimensions
Car data

Page 2
Width
dimensions
Load per
parking sp.

Page 3
Approach
Load plan
Installation

Page 4
Electrical
installation
Technical
data

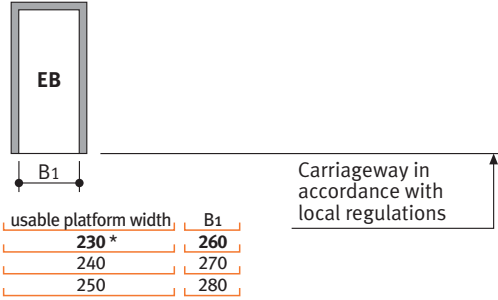
Page 5
To be performed by the customer
Description

Width and loading

Dimensions in cm. Weight in kg.

SingleVario 2061

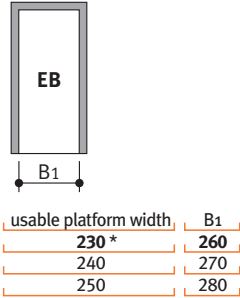
Single Platform (EB)



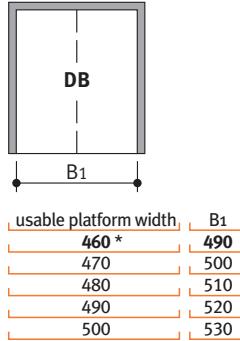
Carriageway in accordance with local regulations

Stack Parker 2062

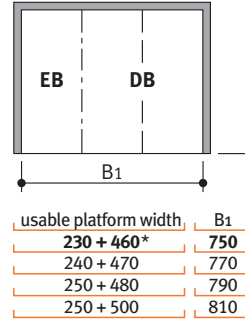
Single Platform (EB)



Double Platform (DB)



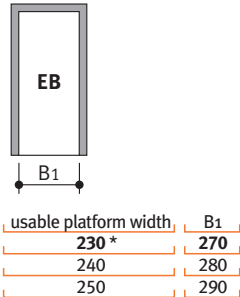
Single and Double Platform (EB + DB) – Examplet



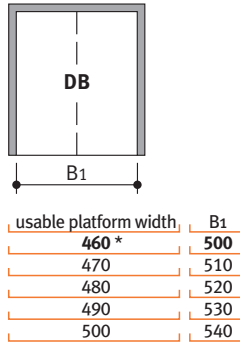
Carriageway in accordance with local regulations

Stack Parker G63

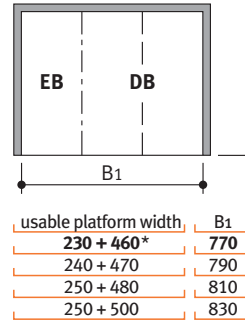
Single Platform (EB)



Double Platform (DB)



Single and Double Platform (EB + DB) – Examplet



Carriageway in accordance with local regulations

* = standard width (parking space width 2.30 m)

Please note:

! End parking spaces are generally more difficult to drive into. Therefore we recommended for end parking spaces our wider platforms. Parking on standard width platforms with larger vehicles may make getting into and out of the vehicle difficult. This depends on type of vehicle, approach and above all on the individual driver's skill.

Load per parking space

For countries where snow loads* are a crucial factor

Parking spaces	load	wheel load
upper parking spaces	1500 kg	375 kg
middle parking spaces (G63)	2000 kg	500 kg
lower parking spaces	2000 kg	500 kg

Against surcharge (only for EB):

Parking spaces	load	wheel load
upper parking spaces	2000 kg	500 kg
middle parking spaces (G63)	2500 kg	625 kg
lower parking spaces	2500 kg	625 kg

For countries where snow loads is no relevant factor

Parking spaces	load	wheel load
upper parking spaces	2000 kg	500 kg
middle parking spaces (G63)	2000 kg	500 kg
lower parking spaces	2000 kg	500 kg

Against surcharge (only for EB):

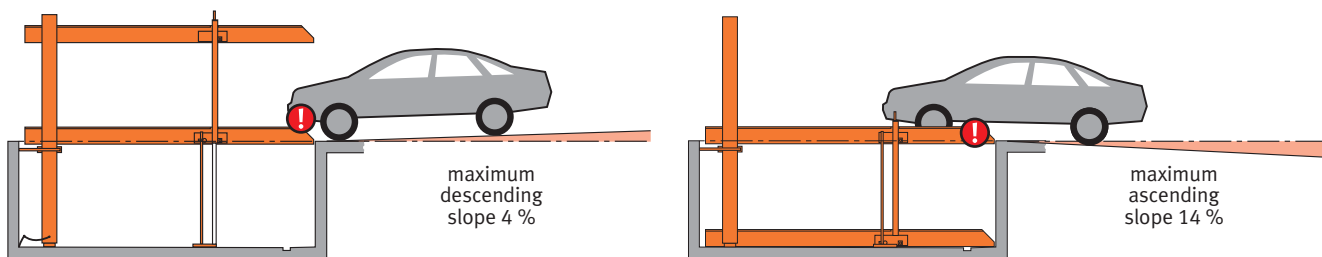
Parking spaces	load	wheel load
upper parking spaces	2500 kg	625 kg
middle parking spaces (G63)	2500 kg	625 kg
lower parking spaces	2500 kg	625 kg

* = Applies to a snow depth of 20 cm; in case of larger snow depths the snow must be removed.

- Page 1
Section
Dimensions
Car data
- Page 2
Width
dimensions
Load per
parking sp.
- Page 3
Approach
Load plan
Installation
- Page 4
Electrical
installation
Technical
data
- Page 5
To be performed by the customer
Description

Approach

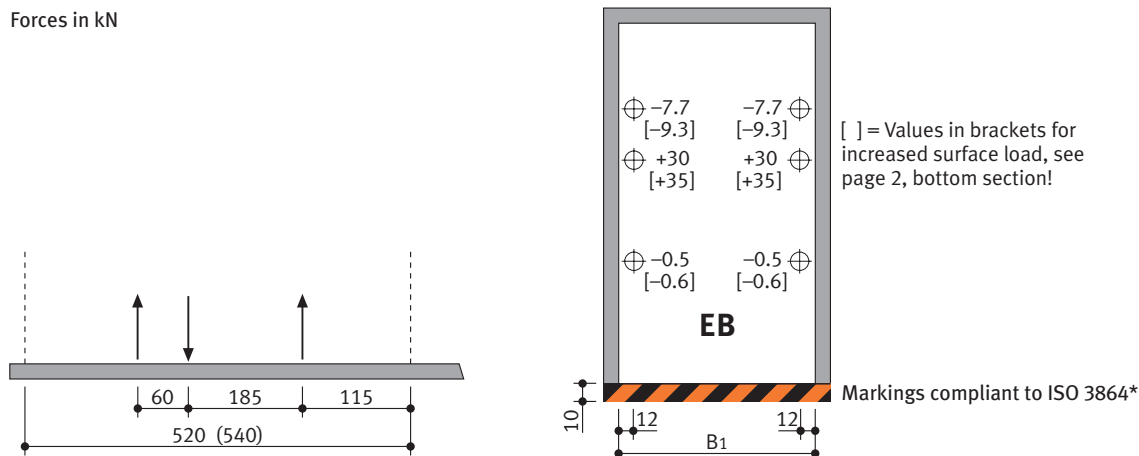
Example: 2062



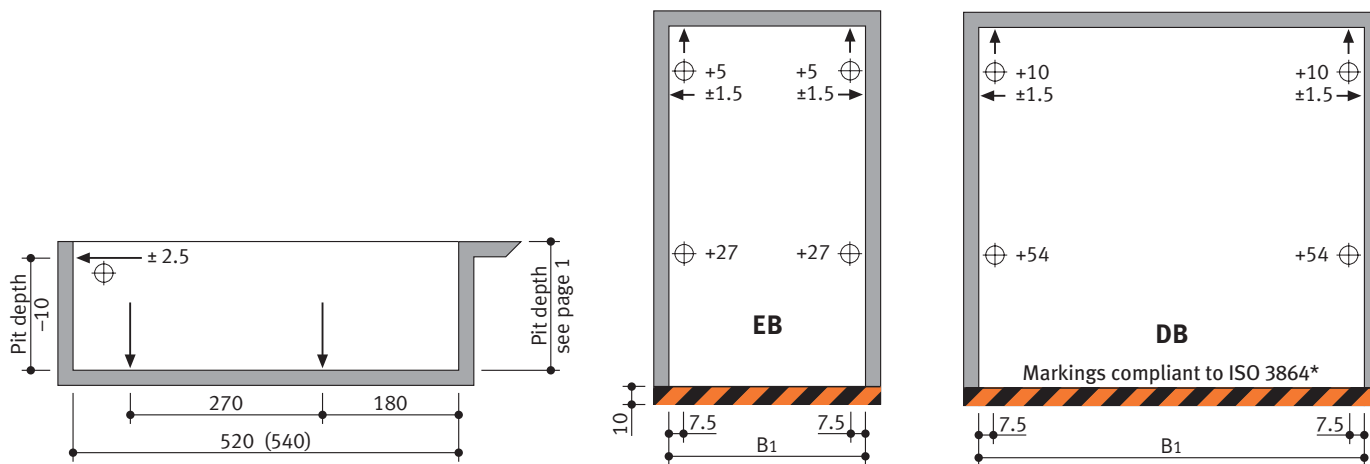
! The illustrated maximum approach angles must not be exceeded. Incorrect approach angles will cause serious manoeuvring & positioning problems on the parking system for which the local agency of Klaus accepts no responsibility.

Load plan SingleVario 2061

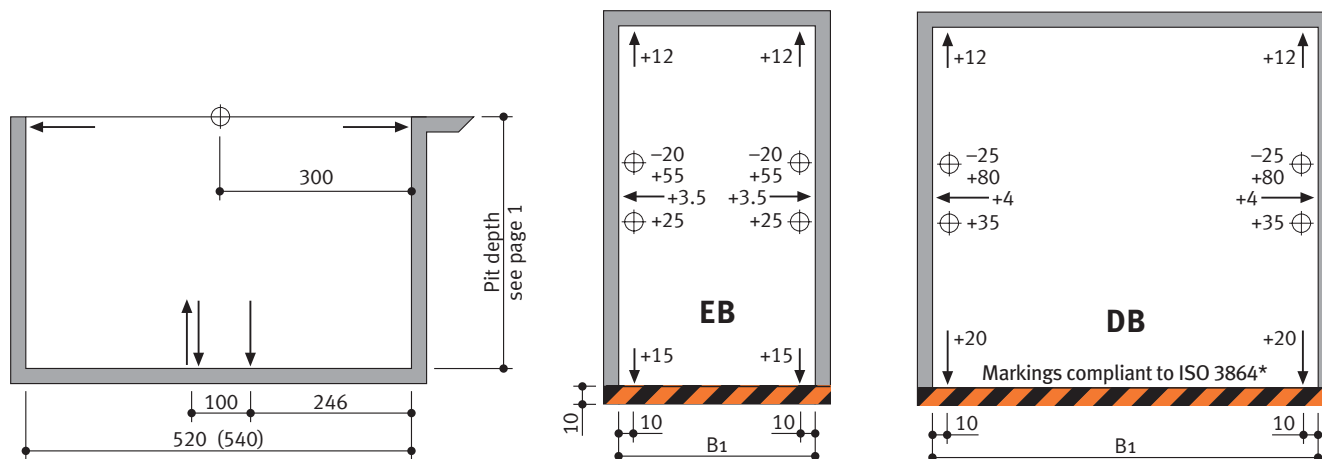
Forces in kN



Load plan 2062



Load plan G63



! Units are dowelled to the floor. Drilling depth: approx. 15 cm. Floor and walls below the drive-in level are to be made of concrete (quality minimum C20/25)!

* = Colors used in this illustration are not ISO 3864 compliant

Page 1
Section
Dimensions
Car data

Page 2
Width
Dimensions
Load per
parking sp.

Page 3
Approach
Load plan
Installation

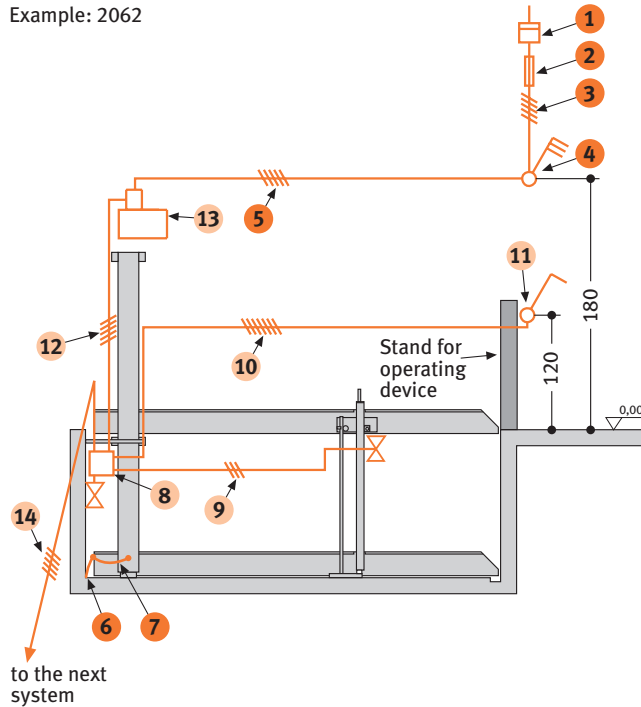
Page 4
Electrical
installation
Technical
data

Page 5
To be performed
by the customer
Description

Electrical installation

Installation diagram

Example: 2062



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 [20 A*] (slow) or circuit breaker 3 x 16 A [20 A*] (trigger characteristic K or C)	in the supply line	1 per unit
3	1	Supply line 5 x 2.5 mm ² (3 PH + N + PE) with marked wire and protective conductor	to main switch	1 per unit
4	1	Lockable main switch	defined at the plan evaluation	1 per unit
5	1	Supply line 5 x 2.5 mm ² (3 PH + N + PE) with marked wire and protective conductor	from main switch to unit	1 per unit
6	every 10 m	Foundation earth connector	corner pit floor	
7	1	Equipotential bonding in accordance with DIN EN 60204 from foundation earth connector to the system		1 per system

* = for 5.2 kW hydraulic unit

Electrical data (included in delivery of Klaus Multiparking)

No.	Description
8	Terminal box
9	Control line 3 x 0.75 mm ² (PH + N + PE)
10	Control line 7 x 1.5 mm ² with marked wire and protective conductor
11	Operating device
12	Control line 5 x 1.5 mm ² with marked wire and protective conductor
13	Hydraulic unit 3.0 kW, three-phase current, 400 V / 50 Hz
14	Control line 5 x 1.5 mm ² with marked wire and protective conductor

Technical data

Range of application

Generally, this parking system is not suited for short-time parkers (temporary parkers). Please do not hesitate to contact your local KLAUS agency for further assistance.

Units

Low-noise power units mounted to rubber-bonded-to metal mountings are installed. Nevertheless we recommend that parking system's garage be built separately from the dwelling. If it is not possible to install the hydraulic power units with the solenoid valves in adjacent buildings or spaces, the power unit and the solenoid valves must be housed in a cabinet (at an extra charge).

Available documents

- wall recess plans
- maintenance offer/contract
- declaration of conformity
- test sheet on airborne and slid-borne sound

Corrosion protection

See separate sheet regarding corrosion protection.

Gap covers

When using the stack parkers 2062 and G63, any existing gaps between the systems or the platforms and the walls of the pit must be reduced to approx. 10 cm by installing sheet-metal covers (at an extra charge).

Shoring and trussing of the vertical columns

When using stack parkers 2061 and G63, the vertical columns must be laterally supported for stability reasons (at an extra charge), provided local conditions do not allow a junction to the building.

Environmental conditions

Environmental conditions for the area of multiparking systems: Temperature range -10 to +40 °C. Relative humidity 50 % at a maximum outside temperature of +40 °C. If lifting or lowering times are specified, they refer to an environmental temperature of +10 °C and with the system set up directly next to the hydraulic unit. At lower temperatures or with longer hydraulic lines, these times increase.

Operating device

The home and off position of the system for the 2062 and G63 stacking parker must always be in the lowered position. Special controls with key interlock are required that ensure that the key can only be removed when the system has been lowered to its lowest position. Depending on the conditions of the construction project, a stand may be necessary for the control elements (at an extra charge).

Sound insulation

According to DIN 4109 (Sound insulation in buildings), para. 4, annotation 4, Klaus Multiparkings are part of the building services (garage systems).

Normal sound insulation:

DIN 4109, para. 4, Sound insulation against noises from building services.

Table 4 in para. 4.1 contains the permissible sound level values emitted from building services for personal living and working areas. According to line 2 the maximum sound level in personal living and working areas must not exceed 30 dB (A).

Noises created by users are not subject to the requirements (see table 4, DIN 4109).

The following measures are to be taken to comply with this value:

- Sound protection package according to offer/order (Klaus Multiparking GmbH)
- Minimum sound insulation of building $R'_w = 57$ dB (to be provided by customer)

Increased sound insulation (special agreement):

DIN 4109, Amendment 2, Information on planning and execution, proposals for increased sound insulation.

Agreement: Maximum sound level in personal living and working areas 25 dB (A). *Noises created by users are not subject to the requirements (see table 4, DIN 4109).*

The following measures are to be taken to comply with this value:

- Sound protection package according to offer/order (Klaus Multiparking GmbH)
- Minimum sound insulation of building $R'_w = 62$ dB (to be provided by customer)

Note: User noises are noises created by individual users in our Multiparking systems. These can be noises from accessing the platforms, slamming of vehicle doors, motor and brake noises.

Page 1	Section
Dimensions	Car data
Page 2	Width dimensions
Load per parking sp.	
Page 3	Approach
Load plan	Installation
Page 4	Electrical installation
Technical data	
Page 5	To be performed by the customer
Description	

To be performed by the customer

Safety fences

Constraints according to DIN EN ISO 13857 must be put in place on three sides (all except the entrance side), unless buildings border the system area.

Numbering of parking spaces

Consecutive numbering of parking spaces.

Building services

Lighting, ventilation, fire extinguishing and fire alarm systems.

Drainage (2062/G63)

For the front area of the pit we recommend a drainage channel, which you connect to a floor drain system or sump (50 x 50 x 20 cm). The drainage channel may be inclined to the side, however not the pit floor itself (longitudinal incline is available). For reasons of environmental protection we recommend to paint the pit floor, and to provide oil and petrol separators in the connections to the public sewage network.

Strip footings (2062/G63)

If due to structural conditions strip footings must be effected, the customer shall provide an accessible platform reaching to the top of the said strip footings to enable and facilitate the mounting work.

Marking

According to DIN EN 14 010, a warning that identifies this danger area must be placed in the entrance area that conforms to ISO 3864. This must be done according to EN 92/58/EWG for systems without a pit 10 cm from the edge of the platform and for systems with a pit (platforms within the pit) 10 cm from the edge of the pit.

Wall cuttings

Any necessary wall cuttings according to page 1.

Electrical supply to the main switch / Foundation earth connector

Suitable electrical supply to the main switch and the control wire line must be provided by the customer during installation. The functionality can be monitored on site by our fitters 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.

In accordance with DIN EN 60204 (Safety of Machinery. Electrical Equipment), grounding of the steel structure is necessary, provided by the customer (distance between grounding max. 10 m).

If the following are not included in the quotation, they will also have to be provided / paid for by the customer:

- Mounting of contactor and terminal box to the wall valve, complete wiring of all elements in accordance with the circuit diagram
- Costs for final technical approval by an authorized body
- Main switch
- Control line from main switch to hydraulic unit

Description Single platform (EB) and Double platform (DB)

General description

2061: Multiparking system providing dependent parking spaces for 2 cars one on top of the other each. The lower vehicle parks directly on the floor plate. The vehicle parked on the bottom must be driven out before lowering the platform.

2062: Multiparking system providing independent parking spaces for 2 cars (EB), 2 x 2 cars (DB), one on top of the other each.

G63: Multiparking system providing independent parking spaces for 3 cars (EB), 2 x 3 cars (DB), one on top of the other each.

Dimensions are in accordance with the underlying dimensions of parking pit, height and width

The parking bays are accessed horizontally (installation deviation $\pm 1\%$).

Vehicles are positioned on each parking space (2061 only upper parking space) using wheel stops on the right side (adjust according to operating instructions).

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

Operating instructions are attached to each operator's stand.

Multiparking system 2061 consisting of:

- 2 steel pillars with bases that are mounted on the floor (short or long steel pillar bases can be selected optionally).
- 2 sliding platforms (mounted to the steel pillars with sliding bearings)
- 1 platform
- 1 mechanic synchronization control system (to ensure synchronous operation of the hydraulic cylinders while lowering and lifting the platform)
- 1 hydraulic cylinder
- 1 automatic hydraulic safety valve (prevents accidental lowering of the platform while accessing the platform)
- Dowels, screws, connecting elements, bolts, etc.
- The platforms and parking spaces are end-to-end accessible for parking!

Multiparking system 2062 consisting of:

- 2 steel pillars (mounted on the floor)
- 2 sliding platforms (mounted to the steel pillars with sliding bearings)
- 2 platforms
- 1 mechanic synchronization control system (to ensure synchronous operation of the hydraulic cylinders while lowering and lifting the platform)
- 2 hydraulic cylinders
- 2 rigid supports (connect the platforms)
- 1 automatic hydraulic safety valve (prevents accidental lowering of the platform while accessing the platform)
- Dowels, screws, connecting elements, bolts, etc.
- The platforms and parking spaces are end-to-end accessible for parking!

Multiparking system G63 consisting of:

- 2 steel pillars with base elements (mounted on the floor)
- 2 sliding platforms (mounted to the steel pillars with sliding bearings)
- 2 platforms
- 1 mechanic synchronization control system (to ensure synchronous operation of the hydraulic cylinders while lowering and lifting the platform)
- 2 hydraulic cylinders
- 2 rigid supports (connect the platforms)
- Welded hydraulic lines up to installed globe valve
- 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
- Central side member [only DB]
- Cross members [DB long and short cross members]
- Safety railings – along the platforms (if required)
- Screws, nuts, washers, distance tubes, etc.

Hydraulic system consisting of:

- Hydraulic cylinder
- Solenoid valve
- Safety valve
- Hydraulic conduits
- 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

Hydraulic unit consisting of:

- Hydraulic power unit (low-noise, installed onto a console with a rubber-bonded-to-metal mounting)
- Hydraulic oil reservoir
- Oil filling
- Internal geared wheel pump
- Pump holder
- Clutch
- 3-phase-AC-motor (3.0/5.2 kW, 230/400 V, 50 Hz)
- Contactor (with thermal overcurrent relay and control fuse)
- Test manometer
- Pressure relief valve
- Hydraulic hoses (which reduce noise transmission onto the hydraulic pipe)

We reserve the right to change this specification without further notice

The Klaus company 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.