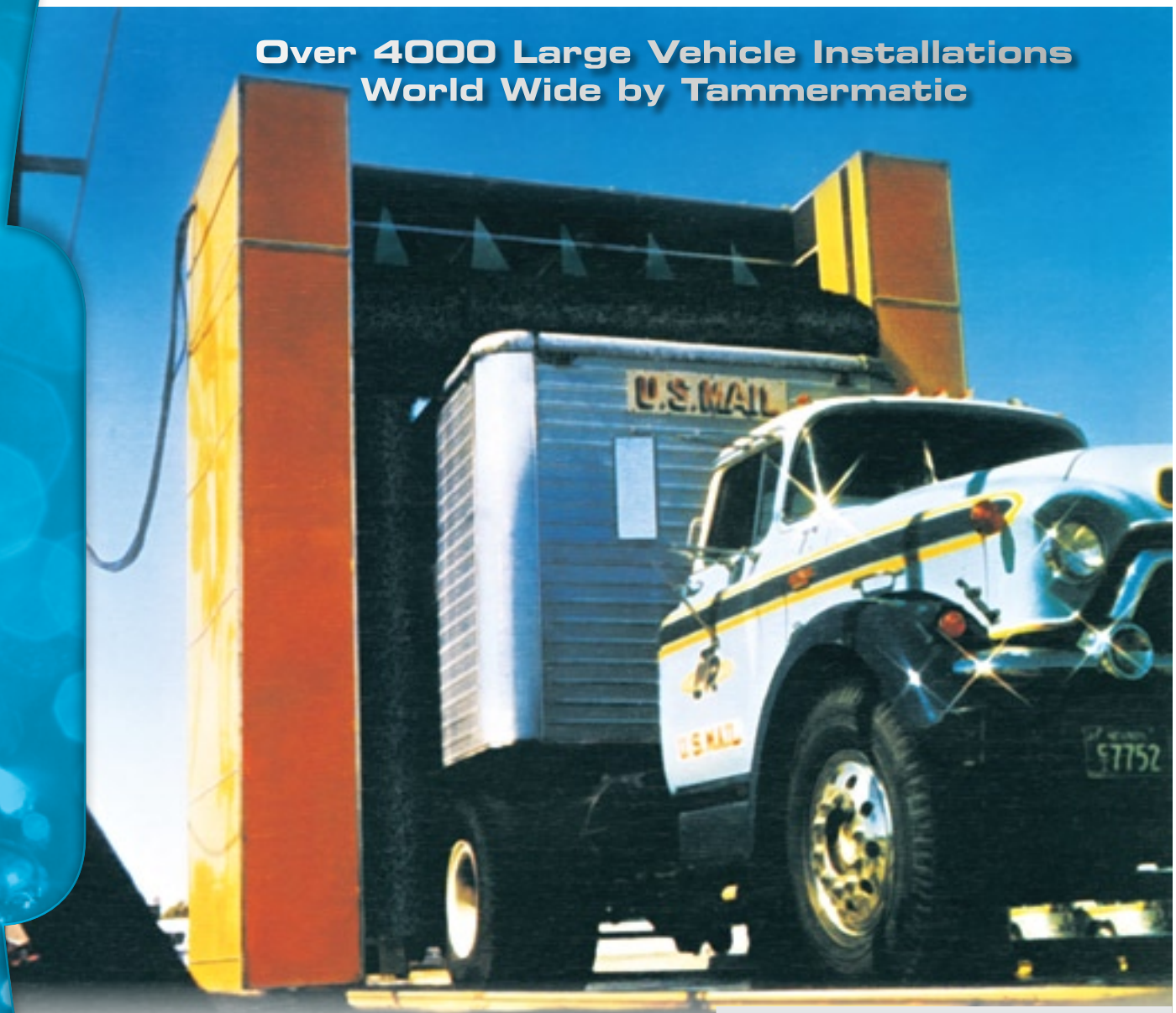
RAINBOW ULTIMA

Ultimate Fleet Cleaning Power

TAMMERmatic

www.tammermatic.com

Vehicle Wash Systems with Decades of Global Experience and Know-How



Over 4000 Large Vehicle Installations World Wide by Tammermatic

Tammermatic is well known pioneer in vehicle wash system development and manufacturer of reliable and well performing fleet and car washers.

Tammermatic has manufactured thousands of Rainbow fleet washers during past decades. The deliveries have taken place to every continent.

The operators include post offices, transit and cargo companies, car and truck manufacturers, dairies, military bases, food and beverage manufacturers and several other enterprises.

Rainbow Ultima - Ultimate Cleaning Power for Regular and Irregular Fleets

The new Rainbow Ultima Fleet Washer presents State-of-the-Art technology in large vehicle cleaning industry and fulfils extensive needs of variety of applications.

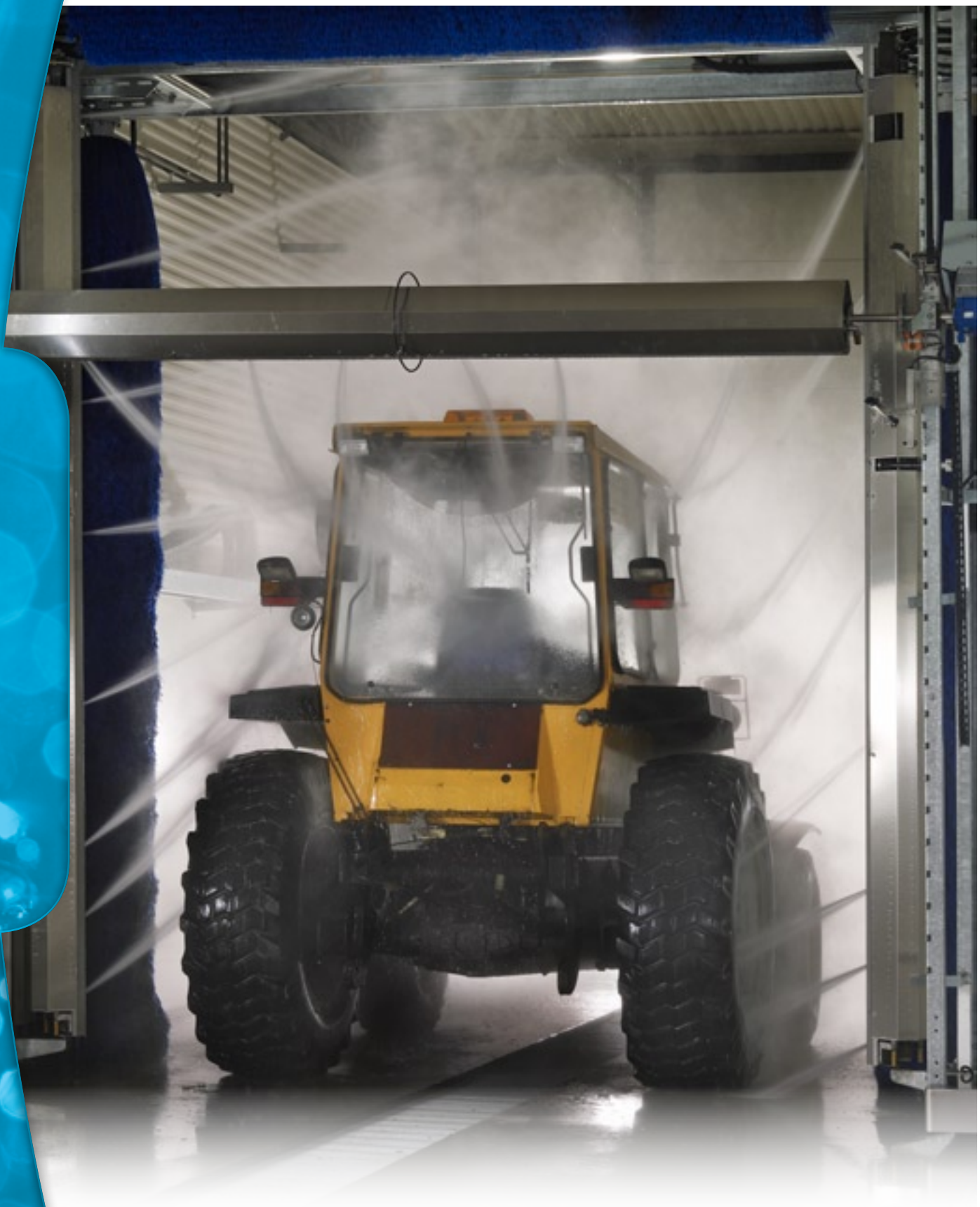
The top models combine advanced brushless and brush wash methods and clean all kind of vehicles from cars to complex shaped tractors and trailers.

For buses and other box-shaped vehicles, which are washed on regular basis, a two-brush Ultima gantry is a prudent invest.

Cleaning a standard sizes bus with a two-brush cross-over wash takes less than two minutes.

After chemical prewash the oscillating and pivoting high-pressure jets clean hard-to-brush shaped vehicles fast and effectively

Best Available Cleaning Power for Hard-to-Clean Shaped Vehicles



Rainbow Ultima equipped with prewash and high-pressure systems with oscillating and profiling solid-stream nozzle assemblies offers best available cleaning power for tanker- and garbage trucks and other hard-to-clean shaped vehicles.

For standard application Ultima can be equipped with conventional flat high-pressure nozzles.

The Key-Element

High-Pressure Washing

Transportation vehicles have a larger number of areas beyond the reach of brushes.

Therefore it goes without saying that high-pressure washing plays a major role in large vehicle cleaning processes.

Additionally, the high-pressure water jets remove sand and other coarse particles, which could potentially scratch finishes of vehicles during the brush stage of the wash.

The Ultima range utilises both the conventional flat spray and advanced solid stream pattern techniques. The flat spray nozzles are for standard and solid stream nozzles for demanding applications.

Solid Stream Nozzles

for Far-Reaching Cleaning Power

A flat spray pattern is ideal over short and medium distances. However, a solid stream spray pattern is more effective over greater cleaning distances.

Ultima machines feature high-pressure spray units with 3 parallel, solid stream nozzles. The water jets form a uniform impact area on the target surface.

Double Coverage Sweeping Technique for Enhanced Cleaning

Vertically sweeping side jets clean the sides from sills to the roof.

For enhanced cleaning, they oscillate up and down so that they overlap each other. Similarly, the high-pressure water jets on the rotary head oscillate sideways.

High-pressure water jets, from nozzles situated in the rotary head, clean the vertical and horizontal surfaces from bumper to bumper.

Rotational motions of the head, together with the lateral oscillating pattern, direct the far-reaching water jets into vehicle recesses that are beyond the reach of brushes.

Bogey & Wheel Spray Banks

Bogey & Wheel spray banks provide extra cleaning power for vehicle lower areas.

Vertical front contour-tilting action

An advanced brush inclination is an important feature in modern wash machines. In the Tammermatic Rainbow Ultima the solution is to control pneumatically the brush inclination instead of the traditional power push & tilt method. The new control is a unique solution which gives an excellent wash result as well as is safe for the large wind shield areas of modern vehicles.

Chassis Washers for Dead-weight Removal

The power spray function of Bogey & Wheel spray banks can be executed together with general high-pressure applications as well as with brush cycles.

Ultima models can be equipped with a chassis washer either with a static or oscillating high-pressure nozzle assemblies.

The chassis washer is to be installed to the entrance end of the washbay. The cleaning cycle is executed when a vehicle moves over the spray-head while entering into the washbay.

A chassis washer can be fed either with a separate multistage centrifugal pump (18.50 kW, 360 l/min, 30 bar) or with piston pumps (2 x 18.5 kW, 2 x 125 l/min, 75 bar).

If the gantry is equipped with a high pressure system no additional pump for chassis wash is needed.

Ultimate Unparalleled Compatibility and Cleaning Power with Any Given Fleet

Automated cleaning of vehicles on road might be a demanding task due to various shapes and sizes of the fleets.

A straight forward basic brush wash with or without prewash is an adequate method for vehicles with regular shapes.

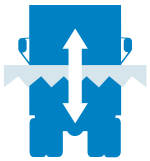
Cleaning of vehicles with irregular shapes requires contouring of brushes and movable spray banks that have to be performed at optimum distance from surfaces to be cleaned.

The control system of the Ultima - the most advanced in the industry - produces unparalleled contouring accuracy. It offers a wide range of selectable and built-in program elements, contouring modes and functional features, which facilitate customising the wash programs to suit any needs of the fleet in question.

Program elements, contouring modes and functional features


Prewash application from lower spray banks

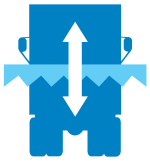

Prewash application from upper and lower spray banks


Prewash application from contouring rotary head

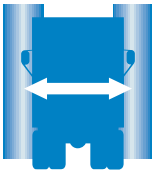

Prewash application with two different chemicals or with one chemical with two different strengths


High-pressure application from lower spray banks

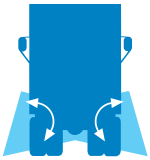

High-pressure application from bogie & wheel spray banks

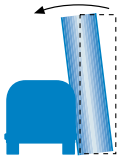

High-pressure application from contouring rotary head

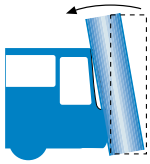

High-pressure application from upper and lower spray banks

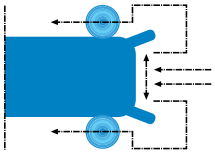

Wraparound 2-brush wash

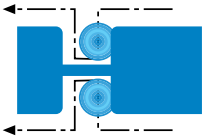

3-brush wash with contouring top brush and wraparound side brushes

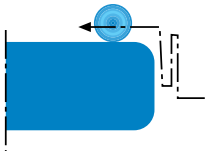

Oscillating under carriage wash

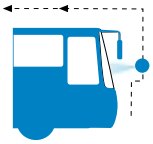

Vertical side contour-tilting action for vans and other small vehicles

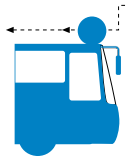

Vertical front contour-tilting action

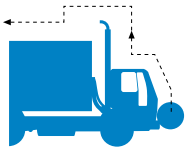

Front mirror override mode for side brush trajectories

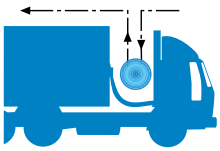

Adjustable draw bar limit for side brushes

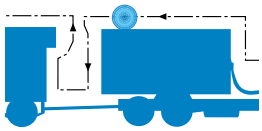

Side brush cross-over wash - performed with both brushes

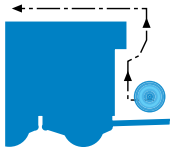

Automatic front mirror override mode for rotary head trajectory

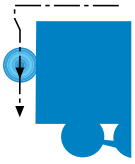

Front mirror override mode for top brush trajectory

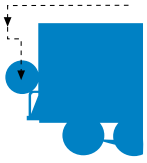

Pre-programmed override sequence for rotary head and top brush


Automatic arctic gap sensing feature

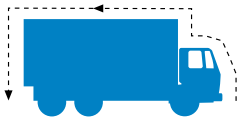

Two settings for top brush lower limit and arctic level

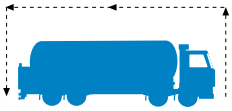

Top brush - back-off feature

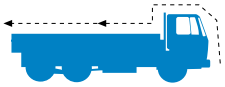

Top brush - intensified rear wash / back-on feature


Adjustable load platform limit for top brush


Small vehicle mode: effects to brush pressure and top brush lower limit settings


Full contouring mode for rotary head and top brush


Full override mode for rotary head and top brush


Open top and flat bed vehicle mode for rotary head and top brush

Features and High-lights

- Overhead front and rear panels
- Primed and epoxy painted frame structure
- AC inverter driven lift motors
- Wraparound side brushes
- Profiling top brush
- Stainless steel splash shields
- Stainless steel housing for gantry motor control panel
- Bright LED positioning display
- Motor-starters for brushes with soft-start feature
- Touch-sensitive safety-flaps
- AC inverter driven gantry travel motors
- Centralized lubrication system
- Derailing locks

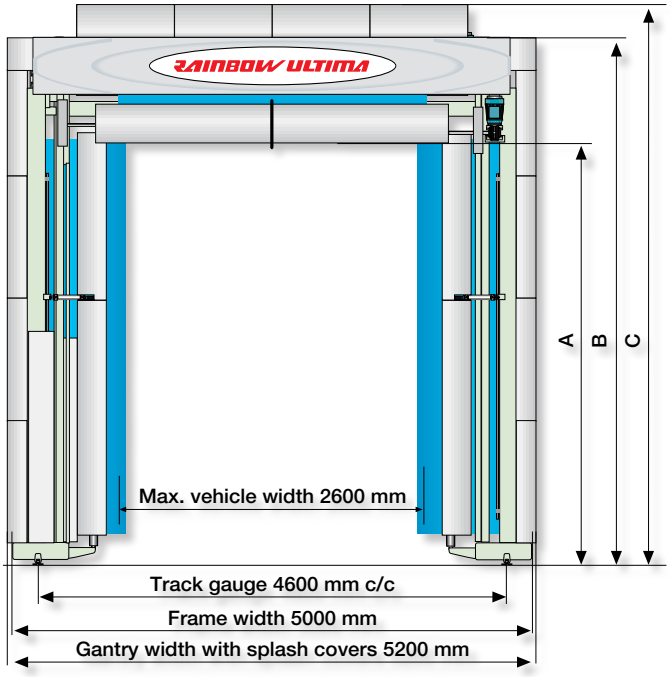
Prewash arches

- Vertical full height pivoting solid spray banks
- Vertical full height pivoting and divided spray banks
- Vertical partial height pivoting spray banks for intensified treatment of vehicles lower areas
- Horizontal spray banks placed on contour profiling rotary head

HP arches

- Vertical full height pivoting solid spray banks - flat spray nozzles
- Vertical full height pivoting and divided spray banks - solid-stream nozzles
- Bogey & wheel spray banks - solid-stream nozzles
- Horizontal spray banks placed on contour profiling rotary head - available with flat or solid-stream HP nozzles.

Dimensions and Service Connections



Basic 2-Brush version				
A = Wash height / mm	4200	4500	4800	5100
B = Frame height / mm	4900	5200	5500	5800
C = Total height / mm	4900	5200	5500	5800
Washbay min. height / mm	5000	5300	5600	5900
Washbay length: vehicle + 5500 mm (safety distances 2 x 500mm included). Min. washbay width 5600 mm.				
Power supply 3NPE 50 Hz, 400 V Rated power: 9 kW, Back-up fuses: 3 x 35 A				
Water supply: DN25, 3.5 bar, 150 l/min				
Compressed air supply: DN10, 6-8 bar				

2-Brush version with 18.5 kW & 20 bar HP-pump				
A = Wash height / mm	4200	4500	4800	5100
B = Frame height / mm	4900	5200	5500	5800
C = Total height / mm	4900	5200	5500	5800
Washbay min. height / mm	5000	5300	5600	5900
Washbay length: vehicle + 5500 mm (safety distances 2 x 500mm included). Min. washbay width 5600 mm.				
Power supply 3NPE 50 Hz, 400 V Rated power: 27 kW, Back-up fuses: 3 x 63 A				
Water supply; DN50, 3.5 bar, 300 l/min				
Compressed air supply: DN10, 6-8 bar				

Basic 3-Brush version				
A = Wash height / mm	4200	4500	4800	5100
B = Frame height / mm	4900	5200	5500	5800
C = Total height / mm	5500	5800	6100	6400
Washbay min. height / mm	5600	5800	6200	6500
Without top splash shield total and washbay heights are reduced by 200 mm.				
Washbay length: vehicle + 6000 mm (safety distances 2 x 500 mm included). Min. washbay width 5600 mm.				
Power supply 3NPE 50 Hz, 400 V Rated power: 10.5 kW, Back-up fuses: 3 x 35 A				
Water supply: DN 25, 3.5 bar, 150 l/min				
Compressed air supply: DN10, 6-8 bar				

3-Brush version with 18.5 kW & 20 bar HP-pump				
A = Wash height / mm	4200	4500	4800	5100
B = Frame height / mm	4900	5200	5500	5800
C = Total height / mm	5500	5800	6100	6400
Washbay min. height / mm	5600	5800	6200	6500
Without top splash shield total and washbay heights are reduced by 200 mm.				
Washbay length: vehicle + 6000 mm (safety distances 2 x 500 mm included). Min. washbay width: 5600 mm w/o top HP arch, w/ HP top arch min. washbay length is vehicle + 7500 mm.				
Power supply 3NPE 50 Hz, 400 V Rated power: 29 kW, Back-up fuses: 3 x 80 A				
Water supply: DN50, 3.5 bar, 300 l/min				
Compressed air supply: DN10, 6-8 bar				

3-Brush version with 2 x 18.5 kW & 70 bar HP-pump				
A = Wash height / mm	4200	4500	4800	5100
B = Frame height / mm	4900	5200	5500	5800
C = Total height / mm	5500	5800	6100	6400
Washbay min. height / mm	5600	5800	6200	6500
Without top splash shield total and washbay heights are reduced by 200 mm.				
Washbay length: vehicle + 6000 mm (safety distances 2 x 500 mm included). Min. washbay width: 5600 mm w/o top HP arch, w/ HP top arch min. washbay length is vehicle + 7500 mm.				
Power supply 3NPE 50 Hz, 400 V Rated power: 46 kW, Back-up fuses: 3 x 100 A				
Water supply: DN50, 3.5 bar, 300 l/min				
Compressed air supply: DN10, 6-8 bar				

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