

AIRCRAFT RESCUE and FIRE FIGHTING VEHICLE

in accordance with ICAO



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PANTHER 6x6 S

This specification describes a ROSENBAUER Aircraft Rescue & Fire Fighting (ARFF) Vehicle of the latest generation.

We reserve the right to replace components that are no longer available with alternative products. However, we guarantee that the replaced parts will perform the same function, with the same or better quality.

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GENERAL

1 x

1 x

CA135-0001

CA14X-A001

PANTHER 6x6 S MY20 PANTHER General

The ARFF-vehicle PANTHER is primarily intended to actively combat aircraft fires and to assist and protect the airport rescue team during evacuation of passengers. Fast and safe vehicle response to the emergency site as well as effective agent discharge are essential for a successful mission. These PANTHER design features will ensure that this important task can be achieved.

The careful selection of components, like high performance 4-stroke diesel engine, automatic power shift transmission system, permanent all-wheel-drive, high performance coil spring suspension system and single-wheel configuration have made the PANTHER to a remarkable leader in its class.

Rapid acceleration due to high horse power to weight ratio, excellent maintained top speed, extreme mobility (off-road and paved-road operation) and reliable braking system type ABS will allow the emergency crew to safely reach the scene of an accident even under toughest conditions.

All components of this vehicle result from new, first class products which have been continuously developed and improved, making the vehicle absolutely reliable under any environmental condition, e.g. desert, tropical and salt water areas or high altitude.

The chassis design provides easy accessibility for servicing of individual components. Minimizing the utilization of high maintenance parts as well as avoiding parts which require special tools, in conjunction with usage of standard off-the-shelf parts wherever possible, will minimize the vehicle downtime. Off-the-shelf parts are used, wherever possible, in order to reduce the maintenance costs and expenses for special tools, and in consequence the general vehicle downtime and operating expenses.

A Rosenbauer high performance primary agent system, including a centrifugal pump, a variety of available turret options including high-reach extendible turrets STINGER, high volume low attack turret HVLA and a fully automatic foam proportioning system with instant change of proportioning rate, offers powerful fire fighting capabilities.

The spacious cab design with aluminium structure, large opening doors and convenient stairway entry on both sides offer safety and comfort for the crew members during standby, travel modes and during emergency fire fighting operations.

A large glare-reducing curved windscreen with insulating, laminated safety glass provides best visibility for driver and turret operator.

Quality Standards

CA14X-AQ01

1 x

Quality standards RBI

This ARFF-vehicle is produced by a Rosenbauer International AG. The company is certified according to the following standards demanded world-wide:

Quality Management System according to ISO 9001:2015

Environmental Management System according to ISO 14001:2015



Compliance Management System according to ISO 37301:2021

Occupational Health and Safety Management System according to ISO 45001:2018

Energy Management System according to ISO 50001:2018

Warranty/Guarantee

CA14X-AG011 xWarranty conditions 24 months
A twentyfour (24) months warranty - bumper to bumper - is provided in
accordance with our warranty conditions and maintenance manuals
supplied with the vehicles. The spare parts (or subsitutes) availability for
vehicle and equipment mounted is confirmed from the day of final at site
acceptance for a period of not less than 15 years. The price of the same
will be based on the valid list price at the time of the spare parts request.

Final Accep	tance	
CA14X-FA02	1 x	 Final acceptance scope 2 Final acceptance test at the plant through sales and order manager Pump test bench (approx. 2h) Tilt angle, torsion and hill test Test drive (max. 1h)
CA14X-FA04	1 x	CE marking

Design

Painting and Corrosion Protection

CA146-AL02 CA146-AL09 CA135-AL10	1 x 1 x 1 x	 Rims RAL 9005 jet black Springs RAL 9005 jet black Upper parts of superstructure RAL 3000 flame red The pump compartment, tank, lower compartment and the upper part of the rear compartment as well as design parts of the cab are painted RAL 3000 flame red, plain (two-pot painting). All light alloy parts inside and on top of the roof remain unpainted. Cab, body roof and hinged steps are covered with anti skid composite material. The edges inside and outside the body, which are not welded or sealed, are covered with automotive sealant to prevent moisture from entering any of the body panels. Underbody coating is provided on all chassis and body parts, wherever required.
CA135-AL14	1 x	Lower parts of superstructure RAL 7016 anthracite grey The fender and lower part of rear compartment, as well as design parts are painted in RAL 7016 anthracite grey, plain (two-pot painting).
CA135-AL15	1 x	Front bumper RAL 7016 anthracite grey The front bumper is painted in RAL 7016 anthracite grey (fine structure).
CA135-AL19	1 x	Roller shutters made of aluminium RAL 7016 anthracite grey



CA14X-AL28	1 x	Turret design cover - same color as upper parts of superstructure
Lettering		
CA146-AL25	1 x	Standard lettering The lettering is done according to Rosenbauer standard.

Documentation

Operating Manu	al	
CA14X-AD02	1 x	Documentation in English The documentation in English including delivery of digital files, sealed in moisture-proof plastic, will be delivered with the PANTHER.
CXXXX-0081	2 x	Operating manual for chassis and fire fighting system (hardcopy) Operating manual for chassis and fire fighting system (hardcopy)
CXXXX-0082	2 x	Operating manual for chassis and fire fighting system (data carrier) Operating manual for chassis and fire fighting system (data carrier)

Maintenance Ma	nual	
CA14X-AD02	1 x	Documentation in English The documentation in English including delivery of digital files, sealed in moisture-proof plastic, will be delivered with the PANTHER.
CXXXX-0083	2 x	Maintenance manual for chassis and fire fighting system (hardcopy) Maintenance manual for chassis and fire fighting system (hardcopy)
CXXXX-0084	2 x	Maintenance manual for chassis and fire fighting system (data carrier) Maintenance manual for chassis and fire fighting system (data carrier)
Spare Parts List		

CA14X-AD25	1 x	Spare parts catalog, interactive online
		A spare parts catalog for the chassis and firefighting superstructure is
		supplied as an interactive online spare parts catalog in German and

Additional	Documentat	ion
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CA14X-AD05	1 x	Offer drawing An offer-drawing of the vehicle with main dimensions, 1-fold, on data carrier in English and German is added to the documentation.
CA14X-AD08	1 x	Electric wiring diagram An electric wiring diagram, 1-fold, on data carrier in English or German is added to the documentation.



Performance, Weights and Dimensions

CA135-AA01	1 x	Performance, weights and dimensions PANTHER 6x6 S Performance Acceleration from 0-80 km/h: within 29 sec. at approx. 33,000 kg operation weight up to an altitude of 800 m above sea level Top speed: approx. 115 km/h Gradient: 50 % Turning diameter: wall to wall 28.4 m
		Weights Permissible axle weight ratio front/1st rear/2nd rear axle: 11,200 kg / 11,200 kg / 11,200 kg Total permissible GVW: 33,600 kg Anticipated Actual Operation Weight: The anticipated operation weight is shown in our axle weight distribution diagram attached.
		Dimensions Overall Length: without bumper turret and without rear access ladder: approx. 11,110 mm If specified: with bumper turret RM15: approx. 11,260 mm for rear access ladder: + approx. 200 mm Overall Width: without rear mirrors: approx. 2,500 mm with rear mirrors: approx. 2,500 mm Overall Height: with roof turret RM35: approx. 3,650 mm Angle of approach / departure: 30° / 30° Inter axle clearance angle: 12° Underbody clearance: mind. 490 mm Under axle clearance: approx. 330 mm Fording ability: 330 mm
CA14X-AK01	1 x	Tilt angle 28°
CHASSIS AN	ID CA	В
Chassis		
Chassis - Genera	ıl	
CA146-AL01	1 x	Chassis frame RAL 9005 jet black The chassis frame and the outside step frames are painted in RAL 9005 jet black (two-pot painting).
CA135-CC06	1 x	Chassis Model RBI 33.700_6x6S MY20 Wheel base: 4,900 mm + 1,500 mm A high performance chassis, well-suited for the special demands of ARFF-operations.



Extraordinary performance at high speed and outstanding driving stability on a paved road as well as off-the-road are the operational characteristics provided.

Easy accessibility to all major and minor service points, a dedicated chassis module electric cabinet as well as usage of commercially available components and parts enable maintenance with little effort and therefore ensure lowest life cycle costs.

Axles

Kessler all-wheel-drive axle system is provided. Long time experience as well as an extensive testing cycle applied to pre-series vehicles ensures reliability and longevity in this specific ARFF-application.

The usage of torque increasing planetary hub ends reduces the size of the differential housings and improves the ground clearance for extensive off-the-road operation.

Front Axle:

Make: Kessler

Model: LT61 PL80

Type: The front axle is of the front driving/steer type with suitable reduction gearing via planetary gears at the hubs (double reduction). A driver operated differential lock is provided.

1st / 2nd Rear Axle:

Make: Kessler

Model: D61 DD PL80 / D 61 PL80

Type: Double reduction with suitable reduction gearing via planetary gears at the hubs. Driver operated differential locks and an inter-axle lock on the first rear axle are provided.

Suspension

The vehicle comprises a high performance coil spring system. A variable rate coil spring in combination with a 4-link V-rod / trailing rod system over bar axle provides superior off-road capabilities.

Front and Rear Suspension:

Type: High mobility off-road / paved road suspension. Design: Variable rate coil spring suspension with shock absorbers and stabilizer bar.

Frame

A box section welded ladder frame construction with a box section rail and tubular cross members offers an exceptional distortion stiffness.

Towing Connections

In the front two (2) towing eyes, in the rear two (2) supports for shakles in the frame rails are provided.

1 x Shackle in the rear

Two (2) shackles for rear mounting are delivered with the vehicle.

1 x Chassis tool set

A tool set, consisting of: one (1) hammer, 16 oz. one (1) crescent wrench, 10" one (1) crescent wrench, 12" one (1) screwdriver, 6", flat blade one (1) screwdriver, 8", flat blade one (1) screwdriver, 12", flat blade one (1) screwdriver TORX #15 one (1) screwdriver TORX #20 one (1) screwdriver Phillips, head 6" one (1) screwdriver Phillips, head 8"

CA14X-C004

CA14X-CW01



		one (1) slip joint pliers, 8" one (1) vise-grip wrench with wire cutter one (1) grease gun 6000 psi one (1) tool box, 15", plastic material one (1) lug nut wrench one (1) hydraulic bottle jack, 12 tons will be delivered with the chassis.
Engine		
CA14X-CB04	1 x	Engine braking system The engine brake is activated by pressing the brake pedal. The system can be deactivated by pressing an ON/OFF switch located on the dashboard.
CA135-CM01	1 x	Engine Model VOLVO D16 High performance diesel engine with electronically controlled fuel injection system, Euro V emission ratio certified. No. of cylinders: 6, in line Aspiration: turbocharger, charge air cooling, 4-cycle Engine output: 700 HP (515 kW) at 1,800 rpm Maximum torque: 3,150 Nm at 1,200 rpm Displacement: 16.1 liters Exhaust system: Stainless steel pipe and muffler with integrated diesel catalytic converter and vertical exhaust tip with rain flap.
CA146-CE03	1 x	Engine and gearbox pre-heater Heating elements with power supply by a quick disconnect plug/socket ensure full engine power performance immediately after start-up. Engine: AC 230 V / 1,500 W heater Transmission: 230 V / 300 W heater
CA135-CE06	1 x	 Engine cooling system The water cooling system is designed for ambient temperatures from -25°C to +50°C. Construction: heavy duty type cooler, transmission oil cooler included in water cooling cycle; remote mounted semi-transparent reservoir tank for easy filling access; reservoir is visible from an access door at the top of the vehicle. Air flow: Thermostatically controlled pusher fan is providing fresh air to radiator.
Transmission		
CA135-CG01	1 x	 Twin Disc Gearbox Fully automatic 6-speed gearbox with TDEC 501 control system, integral transfer case and separate torque converter. Make/Model: Twin Disc TD61-1179 Location: Mid-mounted on the chassis, lowered between the frame rails guaranteeing excellent ground clearance and a low center of gravity of the chassis. Torque converter: Make/Model: Twin Disc 8MLW-1758-1 Lock up clutch with torsion damper, effective in all ranges.



Fuel Tank		
CA135-CK01	1 x	260 litres fuel tank The ECE-certified, with filter element and pump equipped fuel tank is mounted on the left side of the chassis in the rear compartment, maintaining an optimal weight distribution. Capacity: 260 litres (nominal) Material: Aluminum
CA135-CK02	1 x	Ad-Blue tank On the left side of the chassis in the rear compartment the Ad-Blue tank for operation of the Euro 5 engine is located. Capacity: 20 litres (nominal) Material: Polyethylene (PE)
Brakes		
CA135-CB06	1 x	Drum brakes Front Brakes: Type: simplex wedge type drum brakes Dimension: 410 mm x 180 mm with type 20 chambers Rear Brakes: Type: simplex wedge type drum brakes Dimension: 410 mm x 180 mm with type 20/24 chambers Parking Brake: Type: spring apply, pneumatic activated release; acting on rear axle(s); two chambers per axle; parking brake warning light indicator on cab dashboard
CA135-CB08	1 x	 Braking system EBS Dual circuit brake system (complies with ECE-R 13) type EBS; brakes directly mounted onto hub and wheel; vehicle can still be stopped safely also in case of a drive shaft failure. With the integration of the EBS type brake system, the deceleration requirement of the driver is forwarded electronically by the system to all brake components. This leads to shorter reaction times of the components as well as more equal wear of brake pad and discs (load depending brake force distribution). Following functions are included in the system: ELB (Automatic load depending brake force distribution) ABS (Anti Blocking System) ABS Offroad - Mode (changed reaction times of ABS for optimized brake performance offroad) air tanks with drain valves; air compressor discharge line made of stainless steel/Teflon; reservoir capacity approximately 150 liters; air dryer with heated element. Actuations: Service brake: hinged treadle foot valve Parking brake: dash mounted lever valve



Service brake performance: exceeding NFPA/ICAO requirements
32 km/h - 0 in less than 12 m
64 km/h - 0 in less than 49 m
Holding capacity of service brake: min. 50% slope
Holding capacity of parking brake: min. 20% slope
Pneumatically operated fire fighting functions are supplied from a
separately dedicated, pressure protected accessory reservoir.

Wheels (rims and tires)			
CA135-CR13	1 x	Tires 395/85 R 20 On all axles Single wheels for optimal off-road performance are mouted; tires with high mobility non-directional tread; all wheels are interchangeable (without restrictions) Rim type: steel, 10.00W - 20 single-part design Tire type: 395/85 R 20 HCS	
CA135-CR11	1 x	Spare wheel One (1) spare wheel 395/85 R 20 HCS will be delivered loose.	
Steering system			
CA135-CL01	1 x	Steering A ram-assisted power steering system in ECE-compliant design is installed. An additional back-up pump, to supply hydraulic pressure in the event of a failure of engine driven pump, is driven directly by the transfer case.	
Assistance syste	em		
CA14X-CB08	1 x	ESC (Electronic Stability Control) The braking system EBS is additionally equipped with an active stability regulation system (ESC) which minimizes the risk of tilting, roll over and skidding in critical driving situations. ESC includes track stabilization (yaw regulation) in critical situations, the engine torque can be reduced and targeted braking forces can be initiated at individual wheels. ESC operates automatically without activation by the driver. In addition, the system can prevent roll over scenarios (Roll Stability Control) in case the lateral acceleration is too high, by reducing engine torque and active braking.	
Electrical system	n of cha	ssis/vehicle	
CA135-CE07	1 x	Electrical system 24 V Electrical harness: The electrical wiring is circuit/function numbered for easy identification and the wiring terminals are crimped properly. Wiring harness is neatly routed with proper radius. Looms or conduits are used where necessary. The chassis wiring is installed on the chassis frame rail and is clamped to minimize wear. Batteries: Two (2) x 12 V 190 Ah, maintenance free batteries, are mounted in a battery case on the right rear side of the vehicle. A battery	

disconnector/isolator switch to fully disconnect the vehicle's battery supply is mounted in the rear of the vehicle.



CA14X-CE02 1 x Alternator 24V / 150A

Cab

Cab - General		
CA135-KL01	1 x	Center steering system Position of steering: centered Steering column: tilt-telescoping type, pneumatically locked Steering wheel: four-spoke type with diameter 457 mm, Steering column stalk with following functions: light, horn button, indicator and windshield wiper
CA135-KA02	1 x	Cab PANTHER 6x6 S MY20 The two-door Rosenbauer safety cab is made out of aluminum profiles in combination with aluminium panels. The cab is designed and certified according to the latest legal regulations ECE R29-3. A large windscreen in combination with the side window arrangement provide excellent horizontal and vertical visibility. The windscreen is made of laminated safety glass, side windows are made of tempered safety glass. A low positioned outside step and an integrated step and a wide opening door on each side allow safe and easy access into the cab even with breathing apparatus. Access to the roof turret through a sliding type roof hatch is possible by using the rear wall mounted steps. The cab is flexibly mounted onto the chassis frame by means of rubber cone bearing elements.
		 Exterior Cab Equipment A heavy duty steel bumper covered with elements made of glassfibre-reinforced material (GRP) to protect the lower cab section. For service needs these elements may easily be tilted down. Two (2) pairs of high intensity headlights (high beam and low beam) as well as One (1) pair of fog lights integrated in the bumper One (1) pair of turn signal indicators integrated in the bumper Rear mirror system (compliant to ECE R46) consisting of a main, wide angle and front mirror, heated; main mirror electrically adjustable Three (3) windscreen wipers with jet washers 18 litres reservoir
		 Interior Cab Equipment The ergonomically designed instrument panel is equipped with all necessary controls, instruments and warning lights, clustered in driving instruments (left of the steering wheel) and controls/switches for the firefighting system (right of the steering wheel). All switches, displays and are equipped with background and function lights. Controls are arranged in a way to enable a single man operation of the vehicle. uniform colour-coded grab handles Vinil floor mat, non slip two (2) grab handles for passenger entry assistance one (1) sun visor

- two (2) dome lights, two colours (selectable)
- combined heater and air condition, control on the instrument panel



CA14X-KB04	1 x	1 driver and 4 crew members
Seats		
CA14X-KS01	1 x	Driver's seat Air-suspended, fixable and vinyl covered seat (Make: ISRINGHAUSEN) with multiple adjustments (horizontal, vertical, tilt, backrest, headrest) and 3-point safety belt.
CA14X-KS03	1 x	Co-driver seat Vinyl covered turret operator's seat with 3-point safety belt and integrated bracket suitable for SCBA.
CA14X-KS07	1 x	Seat left side at the rear A vinyl covered, flip-up type, crew member's seat, complete with 3-point safety belt and integrated bracket suitable for SCBA, is mounted on the left side of the cabin.
CA135-KS21	1 x	Seat at rear wall A further crew member's seat, complete with 3-point safety belt and SCBA brackets, is mounted right in the rear.
CA135-KS22	1 x	Seat at rear wall A further crew member's seat, complete with 3-point safety belt and SCBA brackets, is mounted left in the rear.
Brackets for b	reathina	apparatus
CA14Y-KP03	1 v	Type of SCBA bracket

CA14X-KP03	1 x	Type of SCBA bracket
		Type of SCBA bracket: for 1 single cylinder, made of steel, diameter 155

Doors		
CA135-KT01	1 x	Hinged doors Large safety doors are provided, on the left and on the right side of the vehicle. The doors are equipped with huge glass elements to ensure a perfect view. To provide a maximum safety for the crew members, also with SCBA's, the doors can be opened up to 90° and the antiskid steps into the cabin are placed at an ergonomic height. The doors are equipped with manually operated sliding type windows.
СА14Х-КТ07	1 x	Ramp mirror, right side

Electrical appliances in cab

CA14X-KE011 xCombined air conditioning / heating system, manually operated
The combined heating/air-conditioning system is divided into two (2)
modules, which allows optimal air conditioning/heating of the cabin. One
module is positioned at the left backside of the cab roof and one module
is positioned in the area of the cab floor. By manually operating of the
heating/air conditioning system, the temperature can be effectively
adjusted to the individual needs.
The cooling performance of the modules is 2x 9,5 kW

CA14X-KE09 1 x Map reading lamp on cab's dashboard right side



CA14X-KE10	1 x	Socket 12 V in cabin One (1) socket 12 V (without cigarette lighter) is installed in the dashboard area.
CA14X-KE16 CA14X-KE17 CA14X-KE20	2 x 2 x 1 x	Mounting of portable searchlight incl. charger, left side Mounting of portable searchlight incl. charger, right side Interior lighting of cab Colour of dome lights can be changed over from white to red. The dome lights can be switched off permanently / switched in automatic mode / permanently switched on by means of a switch in the cabin. When set to automatic mode, the dome lights are switched depending on opening / closing the doors.

Control panel for driving operation

•		
CA14X-BE01	1 x	Driver display All information necessary for driving operations is shown on a driver display in the driver's perfect field of vision. Information: Speedometer (electronic) Transmission mode (N / active gear / R) Odometer Transmission oil temperature Coolant temperature Dual air pressure (indication and warning) Differential locks activated Fuel level Ad-blue level Voltmeter External temperature Clock (Local time and UTC) Indicator left/right Lights (low beam / high beam, fog lights, rear fog lights) Additional brake system deactivated Warnings: Engine oil pressure low Coolant temperature high Coolant level low Transmission oil temperature high Park brake engaged Fuel level low Stake pads worn out (only disc brakes) Quick release air pressure system activated Information is classified in warnings (amber colour) and fault indications (red colour), a text message in the driver's display is shown in addition to the symbol.
CA14X-BE02 CA14X-BE04 CA14X-BE08 CA14X-BE38 CA14X-BE28	1 x 1 x 1 x 1 x 1 x	Indicator of speed in km/h Indicator of pressure in bar Indicator of temperature in °C Indicator of volume in liters Engine oil temperature absolute value shown In the driver display, the current engine oil temperature is shown as an absolute value in addition to the graphic indication.



CA14X-BE55	1 x	Display language Russian All information shown in the driver's or pump display will be in russian language.
CA14X-BE13	1 x	Labels of operational controls in English Additionally to the labelling by explicit symbols, all switches / operating elements are lettered in English language.
Control panel f	or vehic	le operations in cab
CA14X-BE41	1 x	 Control system RBC LCS The control of the superstructure and extinguishing system is performed via the RBC LCS Display 10" in a structured menu navigation. All necessary operating elements are designed as buttons in the respective menu. A status LED and the display indicate activated buttons. The following buttons are located below the display: Screen selection for message overview: all active indications, warnings and errors at a glance Function button for warning lights: Activation/deactivation of all warning lights Function button for acoustic warning device (for integrated system): Activation/deactivation of the sequential horn (only available with

- active caution lights)
 Screen selection for pump operation: Opening/closing of the pressure outlets, display of the current position of the roof-mounted turret. It is automatically switched to this image when the water pump is started in "Pump and Roll" mode.
- Screen selection for foam operation: Operation of the foam proportioning system with preselection of the foam function at the first button press
 - Screen selection for water supply / manual pump operation: Operation of water supply as well as drainage, pressure governor
- Function button scene lighting: Activation/deactivation of the complete scene lights
- Screen selection Vehicle information (start/home screen): Vehicle status indicators such as open doors or hatches, water tank level, foam tank level, extinguishing system status, function button for switching off the front flashlights when the emergency warning lights are active

Additional screens (cameras, operating hours, chassis status, service, settings) in the display contain detailed information on the individual systems. The pump pressure is shown on all screens on the top operating level.

The display automatically adapts to the ambient conditions by means of brightness adjustment and color switching. In the display settings menu, it is possible to switch between the available display languages. In addition, the units can be changed directly in the display.

CA14X-BE19

LCS Digipot

1 x

Activation and deactivation of the fire pump (automatic mode) as well as engine speed adjustment is done via LCS-Digipot. Pressing the "Start"-button activates an automatic mode (Pump and Roll) with following functions:



		 Activation of PTO of torque converter Increase engine speed Open water tank suction valve Engage priming pump (if specified) Engine speed is infinitely variable via turn switch. 		
CA14X-BE42	1 x	Display with touch functionality All functions on the individual menus can be operated both via the hardware keys on the side and via touch on the icons on the display		
BODY				
Body - General				
CA135-QA01	1 x	Superstructure modules general Materials of the superstructure are selected with regard to a high loading capacity at optimized weight. Modules are made of aluminium, plastics (PP, ABS) and glassfibre reinforced plastic (GRP). The construction of superstructure and water/foam tanks as well as the arrangement of fastenings are designed to guarantee best and safe on- and off-road performance. The vehicle production is performed to the highest standard. With special system solutions, Rosenbauer uses the advantages of industrial production possibilities.		
Lower Compar	tment	5		
CA135-QG02	1 x	Lower compartments On the left and right side in front of the (first) rear axle underneath the water/foam tank one (1) storage locker each is located. They are closed by means of roller shutters. Compartments are made of bolted, glued Aluminium panels. The storage lockers are well ventilated. The lights installed are activated automatically on door opening.		
Lower compartm	ent, left	side		
CA14X-QE09	1 x	Socket 24 V in lower compartment, left side One (1) socket 24V, with supply from the vehicle's power system, installed in the underbody compartment		
Lower compartm	ent, rig	ht side		
CA14X-QE10	1 x	Socket 24 V in lower compartment, right side One (1) socket 24V, with supply from the vehicle's power system, installed in the underbody compartment		



Pump Compartments

CA135-QP01	1 x	 Pump compartment The pump compartment is located between cab and water/foam tank and incorporates the fire pump, foam proportioning system and its manifolds (as well as the dry chemical powder unit, if specified). Pump and piping are mounted to the pump compartment with flexible rubber joints in order to reduce vibration transfer and the resulting noise emission. The structure consists of glued and bolted self-supporting bent aluminium plates. Dust- and weatherproof aluminium roller shutters with lockable bar-lock system are used. The dual-skinned design guarantees that the roller shutters can always be opened, even if a tool has come off its bracket, which normally would block the roller shutter. The profiles are embedded in a special type of polyester material, low on noise and moving smoothly. Additional space is provided on both sides to store fire fighting and
		moving smoothly. Additional space is provided on both sides to store fire fighting and rescue equipment.
		The lighting is automatically activated when the roller shutter is opened.

Rear Compartments

CA135-QH05	1 x	Rear compartment The engine-/rear compartment consists of glued and bolted self- supporting bent aluminium plates. The compartment is flexibly mounted onto the chassis frame by means of rubber cone bearing and closed by roller shutters and a step. The outside covering of the compartment and door is made of aluminium. The design of the engine-/rear compartment offer a good ventilation and a easy access to the engine for maintenance. The compartment offers sufficient space to store fire fighting and rescue equipment. The lighting is automatically activated when the roller shutter is opened.
CA14X-QH02	1 x	Rear-mounted access ladder One (1) access ladder in the rear of the vehicle for roof access. Hand grips are provided where necessary.

Brackets for Equipment in Body

CXXXX-0199 1 x Manual ladder lo

Manual ladder lowering device for 12m 3 sectional ladder

WATER/FOAM TANKS

CA135-TW15 1 x		Water tank, capacity 9,100 litres
		Capacity: values in liter usable content according to NFPA 414
		Material: polypropylene (PP)
		Baffle plates: longitudinal and transversal



		Manhole: 450 mm inside diameter; covered with hinged,spring loaded quick opening lid (also acting as overpressure safety device) Overflow venting: consisting of overflow dome, drainage pipe incorporated in the tank and extension hose directed to the ground below the chassis frame Drainage: with drainage hose mounted and extended below the chassis frame onto the left side of the vehicle; ball type valve DN50, manually actuated, mounted onto the drainage hose. Tank sump: of sufficient size to minimize swirl Tank level sensor: type ROSENBAUER "Fludometer" The water tank is flexibly mounted onto the chassis frame by means of rubber cone bearings.
CA14X-TW23	1 x	Water tank drainage line The water tank is drained with a drain hose that is extended below under the chassis frame onto the left side under the lower/equipment compartment. The positioning of the manual ball valve DN50 is mounted onto hose directly.
Water tank filling	connec	ctions, left side
CA14X-TW13	1 x	External tank filling line(s) One (1) external tank filling connection, consisting of: - Non-return valve mounted on the tank flange - One (1) filling line DN100 reduced to one (1) filling connection DN65 with butterfly type valve manually actuated, strainer and fix and blind coupling
CCA00-CR00 CXXXX-0011	1 x 1 x	Coupling according customer request GOST 80
Water tank filling	connec	ctions, right side
CA14X-TW13	1 x	External tank filling line(s) One (1) external tank filling connection, consisting of: - Non-return valve mounted on the tank flange - One (1) filling line DN100 reduced to one (1) filling connection DN65 with butterfly type valve manually actuated, strainer and fix and blind coupling
CCA00-CR00 CXXXX-0011	1 x 1 x	Coupling according customer request GOST 80
Foam Tank		
CA135-TS12	1 x	Foam tank, capacity 1200 litres Capacity: values in litres usable content Location: installed in pump compartment Material: polypropylene (PP) Baffle plates: transversely Manhole: 450 mm inside diameter; covered with a hinged, spring loaded quick opening lid



		Overflow venting: consisting of overflow dome, drainage pipe incorporated in the tank and extension hose directed to the ground below the chassis frame Drainage: Please refer to "foam tank filling line". Tank level sensor: Rosenbauer "FLUDOMETER"
CA14X-TS13	1 x	Filling and drainage line foam tank One (1) foam compound tank filling and drainage line DN40 with hose and manually operated ball type valve extended below the chassis frame onto the left side of the vehicle.
CCA00-ST53	1 x	Coupling Storz 38 incl. blind cap made of brass

FIRE FIGHTING SYSTEM

CC915-FG02	1 x	Fire extinguishing system in general The water/foam system has been developed, designed and manufactured to perfectly match the pump and foam proportioning performance to achieve the output requirements specified herein. Static and dynamic pressure tests will be done accordingly in the testing department prior to delivery. This vehicle concept provides fully independent pump-and-roll operation and stationary operation mode.
Water Pump		
CA135-PW16	1 x	 Truck-mounted fire pump Model Rosenbauer N65 in light alloy The single stage centrifugal fire pump Rosenbauer N65 meets and exceeds the requirements of NFPA Material: Pump housing, impellers and diffusers are made of aluminum light alloy, pump shaft made of high grade stainless steel. Rated capacity: 6,500 l/min at 10 bar tank suction operation Maximum capacity: 7,000 l/min at 14 bar tank suction operation The pump output is capable of discharging the total requirement of specified roof turret, or turret mounted on an extendible water way, bumper turret or ground sweep nozzles, hand line nozzles and under truck nozzles discharging simultaneously at designed pressures. An overheating protection, guided underneath the vehicle, is provided. An engine driven power divider with modulated clutch is incorporated in the torque converter housing to achieve the specified discharge requirements while the vehicle is driven under operating conditions. A power take-off (PTO) is mounted onto the power divider housing to drive the fire pump and perform the pump capacity specified under Item "Water Pump". PTO rotation: opposite engine The power dividing system can be engaged / disengaged by the buttons on the LCS Digipot mounted in the cab and the external pump operation panel at any time. In pump-and-roll mode, the PTO clutch is engaged and vehicle's engine speed is raised to a pre-set revolution to achieve the specified pump output.



		It activates the converter input modulated clutch which is allowed to slip as necessary to control the vehicle speed from stand-by operation up to a driving speed depending on the transmission range selected and throttle pedal position. It will not effect the pre-set pump discharge volume and pressure while shifting from forward to reverse motion. Pump-and-roll speed acc. to NFPA 414: forward motion: 0 - 16.1 km/h reverse motion: 0 - 8.0 km/h
CC2XX-RE60	1 x	Pump tested according EN1028 FPN10-6000 (1580 gpm/150 PSI) Delivery rate is 6.000 lpm (1.580 gpm) at nominal supply pressure rate of 10 bar (150PSI).
CC2XX-PR15	1 x	 Piston priming pump KAP210P (profession) automatic with pneumatic priming control The function of the piston priming pump is as followed: Ball valve in suction line is opened pneumatically - controlled by a pressure switch - mounted in the pressure outlet of the centrifugal pump; when opening the ball valve in suction line, the V-belt is stretched by a spring and priming procedure may start. As soon as the priming pump is delivering water and the pressure exceeds approx 1.5bar, the ball valve is automatically locked and the V-belt is released from tension by a pneumatic cylinder - priming procedure is completed. If required, the pressure switch can be overridden by a push- button on the control panel. The suction valve is closed in case of pump operation in idling speed, feeding or when working with lowest pressure. Priming performance: 30% vacuum in 4 seconds: for a volume of 100 liters (26.4 gallons) * The volume of the pump, pump module (piping) and suction hoses has to be calculated to determine the priming performance.
CA14X-PW12	1 x	Pressure governor An electronically working pressure control unit (pressure governor) maintains the pump pressure constant during stationary operation, independent of the required water volume. The engine speed is adjusted fully automatically by the pressure governor according to the pressure setting. The pressure governor can detect can detect rapid flow rate changes and control the pump accordingly. This function relieves the operator who no longer needs to actively control the pump pressure in stationary operation.

Foam Proportioning System

CC3XX-FR01

1 x

Foam system tested according Rosenbauer Standard Allowed deviation of the proportioning rate (PR):

- 0 to +30%: = 1%
- 0 to +25%: > 1% to 3%
- 0 to +15%: > 3% to 6%
- 0 to +10%: > 6%

Calculation of the proportioning rate (according NFPA 412):



Proportioning rate = 100 / (water + foam) * foam 100% foam concentrate = 100% water

FIXMIX		
CC24X-AF33	1 x	 Around the pump foam system FIXMIX 2.0 A made out of light alloy, with 3 proportioning rates The proportioning rate is electro-mechanically controlled, the adjustment of the foam compound flow rate works mechanically based on the current water flow rate in order to keep the proportioning rate constant within the specified constraints. The pre-adjusted proportioning rate can be changed at any time without interruption of the extinguishing operation. Three (3) proportioning rates can be selected (e.g. 1%, 3% and 6%). The system will be pre-calibrated and adjusted for foam compounds with a viscosity up to 60 cSt (higher viscose foam compounds on request) Material: housing made out of corrosion resistant light alloy, foam proportioning unit made out of brass, plastics and stainless steel Measuring range water: 100 l/min up to 500 l/min with an accuracy of 0 to +50% above 500 l/min up to the nominal output of the pump with an accuracy of 0 up to +30% (max. 1%point absolute) Foam compound flow: 5 up to 500 l/min (for a viscosity up to 60 cSt)
CC24X-AF90	1 x	Flushing system for FIXMIX 2.0 An automatic foam flushing mode is incorporated to clean the foam system with fresh water after having closed the foam suction valves.
Pump Syste	m	
Pump connect	ions	
CC915-PI01	1 x	Piping water lines galvanized steel and foam lines stainless steel All water piping and pump connections are made of corrosion-resistant, hot-dip galvanized steel or rigid rubber hoses or flexible rubber joints. All foam piping and pump connections are made of high-grade stainless steel, brass or rigid rubber hoses. Where necessary, pipes are connected with the pump compartment by means of flexible rubber joints. All remote controlled valves are equipped with a manually actuated emergency override system
Water tank suc	ction line	
CC915-PS02	1 x	Water tank suction line One (1) water tank suction line DN200 with electro-pneumatically operated butterfly type valve
Foam tank suc	tion line	
CC915-FS02	1 x	Foam tank suction line One (1) foam tank suction line DN65 with electro-pneumatically operated butterfly type valve



External water suction line, left side

CC915-PS13	1 x	External suction line, left side One (1) lateral water suction line DN125 with fix and blind coupling and with a manually actuated butterfly type valve. Use of suction line requires a priming pump.
CCA00-CR00 CXXXX-0011	1 x 1 x	Coupling according customer request GOST 125
External foam su	ction lir	ne, left side
CC91X-FS20	1 x	External foam suction line, left side One (1) lateral foam suction line DN50 with fix and blind coupling and with a manually actuated ball type valve. The external suction line is also used as flushing line. External suction capacity depending on the coupling used (Storz C = 420 I, Storz $38 = 370$ I).
CCA00-ST53	1 x	Coupling Storz 38 incl. blind cap made of brass
Supply lines		
CC91X-WR01	1 x	Recirculation line (pump to water tank) One (1) water tank filling line via pump (churn line) DN50 with electro- pneumatically operated ball type valve
CC915-DM02	1 x	Roof turret connection line One (1) roof turret supply line DN100 with electro-pneumatically operated butterfly type valve
CC915-DM31	1 x	Bumper turret connection line for RM15 One (1) bumper turret supply line DN65 with electro-pneumatically operated butterfly type valve
CC91X-DN80	1 x	Connection line to under-truck nozzles One (1) under-truck nozzles supply line DN50 with electro-pneumatically operated ball type valve.

Normal pressure outlets, left side

CC91X-DN61	1 x	Normal pressure discharge for hose reel or hose tray, left side One (1) discharge line DN38 normal pressure on the left side of the vehicle, with ball type valve electro-pneumatically actuated, (for hose reel or hose tray, whatever specified)
CC91X-DN11	1 x	One normal pressure discharge DN65 with manual operated butterfly type valve
CC91X-DN31	1 x	One normal pressure discharge DN65 with pneumatically operated butterfly type valve
CC91X-DR01	1 x	One pressure regulator for normal pressure discharge DN65

Normal pressure outlets, right side

CC91X-DN11	1 x	One normal pressure discharge DN65 with manual operated
		butterfly type valve



CC91X-DN31	1 x	One normal pressure discharge DN65 with pneumatically operated butterfly type valve
CC91X-DR01	1 x	One pressure regulator for normal pressure discharge DN65
CCA00-CR00	4 x	Coupling according customer request
CXXXX-0282	4 x	GOST 80

Pump Unit Control Panel

CC598-KF31	1 x	Button proportioning rate 1%

- CC598-KF32 1 x Button proportioning rate 3%
- CC598-KF33 1 x Button proportioning rate 6%
- CC598-KW10 1 x Button water tank suction
- CC598-KF11 1 x Button foam tank 1
- CC598-KF13 1 x Button external foam suction
- CC598-KW20 1 x Button water tank filling via pump
- CC598-KN10 1 x Button normal pressure outlet left
- CC598-KN30 1 x Button normal pressure outlet right
- CC91X-OP01 1 x Pump operation panel for pump module, left side

An additional pump operation panel is located in the pump compartment. This consists of:

- LCS Digipot (Start/Stop fire pump, engine speed adjustment)
- LCS Digiview (Display of informations like water-/foam tank level) as well as
- additional buttons mentioned below
- water-activated pressure gauges
- Following actions can be activated in stationary mode:
 - start the water pump
 - open the tank suction valve
 - start of the priming pump
 - change of the pump speed
 - activate foam system

Discharges are normally manually operated. If pneumatic discharges are chosen, these can also be operated via the pump panel.

CC91X-OP05 1 x Pump operation panel for pump module, right side

An additional pump operation panel is located in the pump compartment. This consists of:

- LCS Digipot (Start/Stop fire pump, engine speed adjustment)
- LCS Digiview (Display of informations like water-/foam tank level) as well as
- additional buttons mentioned below
- water-activated pressure gauges

Following actions can be activated in stationary mode:

- start the water pump
- open the tank suction valve
- start of the priming pump
- change of the pump speed
- activate foam system

Discharges are normally manually operated. If pneumatic discharges are chosen, these can also be operated via the pump panel.

CC91X-OP80 1 x Mano-Vacuumeter and NP-Manometer left side



CC598-KW01	1 x	Button priming
CC598-KS01	1 x	Button drain
CC598-KS30	1 x	Button flush internally around-the-pump proportioning system

Quick Attack Water/Foam

Hose reel in lower compartment, left side

CA14X-PH01	1 x	Hose reel in lower compartment, left side A quick-attack hose reel is mounted in the compartment underneath the tank for easy access. The flanged side walls and the drum are made of high-quality lightweight plastic material.
CA14X-PH02	1 x	Normal pressure hose reel The hose reel included in the scope of delivery is designed for normal pressure
CA14X-PH06	1 x	Hose reel on swiveling device mounted Hose reel mounted on a hinged swing out type frame with 45° and 90° locking position. An electric drive to rewind the hose is provided and incorporated in the hose drum in order to save space. The manual crank for emergency override is fixed adjacent to the hose reel.
CA14X-PH07	1 x	Rubber hose pre-connected to hose reel A 30 m rigid rubber hose with 32 mm inside diameter is pre-connected to the hose reel.
CA14X-PH13	1 x	Branch pipe RB 101 EN A Rosenbauer pistol grip type Select Flow Nozzle model RB 101 EN is connected to the hose. It is made of hard anodized light alloy and can be adjusted to an output of 130, 230, 300 or 475 l/min. Operating pressure:7 bar
СА14Х-РН17	1 x	Valve control for hose reel A button for the actuation of the electro-pneumatically operated valve is mounted adjacent to the hose reel.

Dry Chemical Powder Unit

CA14X-V002	1 x	 Dry chemical powder unit PLA 250 Design: one (1) dry powder container corrosion-resistant unfilled Working pressure: 12 to 13 bar, overpressure safety valve is preset at 14 bar Standards: The unit fulfils European standard. A test certificate from
CA14X-V008	1 x	Standards: The unit fulfills European standard. A test certificate from German Federal Technical Supervision Agency (TÜV) will be provided. Dry powder BC foam compatible, 250 kg filling Dry chemical powder unit will be fill with type BC foam compatible powder.



CA146-V016	1 x	Discharge expelling agent Expelling agent valve is opened manually. One (1) discharge manually actuated for hose reel / collapsible hose.
CA14X-V022	1 x	 Operational controls, right side Operating/actuating elements for the functions mentioned below are located on the right side. Pressure build-up for powder container Powder discharge Powder flushing and pressure discharge Pressure gauge for powder container Pressure gauge for nitrogen cylinder
CA14X-V023	1 x	Expelling gas system one (1) nitrogen cylinder, capacity 25 litres, filled at a pressure of 200 bar; test pressure 300 bar; cylinder is painted according to manufacturer's standard; pressure build-up time for the container is approx.15 seconds
Quick Attack	k Powd	er

Powder hose tray, right vehicle side

CA14X-VF05	1 x	Quick attack hose, right vehicle side One (1) hose tray is mounted in the stated position on the vehicle. The tray accommodates a collapsible (lay flat) fire hose with a length of 30 m and Storz C (52) coupling and is designed for quick attack operation.
CA14X-VF02	1 x	Dry powder pistol One (1) trigger operated powder nozzle is pre-connected to the powder hose. Output: 2,5 kg/sec Throw range:approx. 8 m, no wind
Turret(s)		
Turret on cab ro	of	
CA146-WD01 1	1 x	Roof turret, Model Rosenbauer RM80C, non-aspirated Configuration:
		 non-air-aspirated, without foam barrel and deflector
		 Two (2) LED spotlights are integrated.
		 Two (2) LED flashlights showing that the turret is in active mode according to EN1846-3
		• One (1) turret pressure manometer is installed in the turret. Throw ranges are depending on temperature of foam and ambient air.

Maximum throw ranges at 100 % discharge rate:

- Full jet water: far point 100 m, no wind
- Full jet foam (AFFF):far point 90 m, no wind
- Dispersed pattern / fog stream: far point 25 m and width 12 m, no wind



		Expansion rate: using AFFF non-air-aspirated according to NFPA 412 Test method or equal to 3:1 *) 25 % drainage time: using AFFF non-air-aspirated according to NFPA 412 Test method B or equal to 0.75 min *) *) Figures above relate to tests made with Sthamex and Fomtec, each AFFF 3 % foam compound according to NFPA. They vary when using different brands or products produced under license. Rotation: 270° Elevation:0 - 70° Depression:0 - 15° (depending on cab contour) A roof hatch and a platform is provided inside the cab to be able to reach hand wheels mounted directly on the turret for manual emergency control.
CA14X-WD19	1 x	Nozzle setting water/foam Discharge rates: • Full discharge: 6,000 l/min (water operation) • Reduced discharge rating: 3,000 l/min
CA14X-WE05	1 x	 Pistol grip for roof turret The pistol grip is mounted on the centre console within a comfortable reach of driver and co-driver. All necessary switches for turret operation are mounted directly on the pistol grip or nearby. Buttons are backlit to guarantee an easy identification also during night operation. The turret is equipped with an electronic control device in order to synchronize the pistol grip movement with the turret movement. The light-guide function of the pistol grip indicates the position of the turret. Automatic attack mode: The turret automatically moves to the same attack direction as the pistol grip is positioned. Automatic storage mode: The turret moves to transport position and is locked automatically. Contour following function: The contour of the vehicle's roof can be programmed in a simple teach-in mode. This allows the turret to avoid contact with any obstacles mounted on the roof, such as rotating beacons or speakers.
Turret on bumpe	r	
CXXXX-0097 CA14X-WF01	1 x 1 x	 1500 liters/min Bumper turret, Model Rosenbauer RM15C Configuration: non-air-aspirated, without foam barrel One (1) LED light is integrated in the bumper turret. Actuation: electrically remote controlled from inside the cab by means of a joystick and manually operated by means of hand wheels. Throw ranges are depending on temperature of foam and ambient air. Maximum throw ranges: Full jet foam (AFFF): far point 60 m, no wind Full jet water: far point 65 m, no wind Dispersed pattern / fog stream: far point 15 m and width 9 m, no wind Expansion rate: using AFFF non-air aspirated according to NFPA 412 Test method B or equal to 3:1 *)



		 25 % drainage time: using AFFF non-air aspirated according to NFPA 412 Test method B or equal to 0.75 min *) *) Figures above relate to tests made with Sthamex and Fomtec, each AFFF 3 % foam compound according to NFPA. They vary when using different brands or products produced under licence. Rotation: 180° (depending on cab contour) Elevation: 0-80° Depression: 0-40° 	
CC400-AW21	1 x	Nozzle setting water / foam Full discharge rate: 1,500 l/min at 10 bar, 400 gal/min at 145 psi	
CA135-WE08 Self Protectio	1 x n Nozz	<section-header> Joystick for bumper turret One (1) joystick is mounted on the dashboard within a comfortable reach of driver and co-driver. All necessary switches for turret operation are mounted directly on the joystick or nearby. Buttons are backlit to guarantee an easy identification also during night operation. The control of the turret is speed proportional, larger movements of the joystick result in higher speed of turret movement. The following functions can be preprogrammed: Automatic attack mode: The turret automatically moves to the same attack direction as the pistol grip is positioned. Automatic storage mode: The turret moves to transport position and is locked automatically. Contour following function: The contour of the vehicle can be programmed in a simple teach-in mode. This allows the turret to avoid contact with any obstacles on the vehicle's front, such as introvs for example. </section-header>	
CA146-WB03	1 x	Ground sweep + under-truck nozzles Ground sweep nozzles: • none Under-truck nozzles: • one (1) in front of front axle • one (1) behind front axle • one (1) behind front axle • one (1) in front of 1st rear axle • one (1) between 1st and 2nd rear axle • discharge rate per nozzle approx. 50 l/min Pattern: dispersed Control: One (1) button on the LCS control display inside the cab to actuate all nozzles at the same time. The valves are electro- pneumatically operated.	

ELECTRICS, PNEUMATICS



Lighting		
CA14X-EB01	1 x	Traffic lighting acc. to European standard Traffic lights are compliant to ECE regulations.
CA135-EB03	1 x	Front headlights, halogen Four (4) front headlights (halogen) consisting of two (2) low beam lights and two (2) high beam lights
CA135-EB09	1 x	Fog light, LED with daytime running light function Two (2) fog lights are mounted in the lower section of the front bumper.
CA146-EB14	1 x	Scene lights, LED Three (3) high intense LED scene lights on the right and three (3) on the left side of the vehicle, mounted in the upper part of the superstructure
CA14X-EB70	1 x	Roof illumination LED One (1) LED light installed on the roof to illuminate the body roof.
Warning Devic	es	
Warning lights		
CA14X-EW06	1 x	Visual warning lights Visual warning lights in blue colour
CA135-EB17	1 x	Flashlights cab roof Two (2) LED flashlights located on top of the cab, integrated in roof cover.
CA135-EB19	1 x	Flashlights rear compartment Two (2) LED flashlights integrated in the top corners of the rear compartment.
CA14X-EB20	1 x	Preparation for airfield obstruction lights One (1) quick connection support will be installed in preparation for an amber rotating beacon on the cab roof including power supply
CA14X-EB21	1 x	Preparation for airfield obstruction lights, rear compartment One (1) quick connection support will be installed in preparation for a rotating beacon amber on the rear compartment including power supply.
Acoustic warning	9	
CA14X-EW01	1 x	Reverse buzzer
Communicatio	'n	
CA14X-EU01	2 x	Preparation for radio installation, 1 set Preparation for installation of one (1) radio set (mounting of voltage converter and cable for antennas, radio device is not included).



CA14X-EU03	2 x	Radio set installed by Rosenbauer
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CXXXX-0605 2 x Free Text Radio type

Camera(s	5)
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CA14X-EK08	1 x	Reversing camera
		A robust and compact rear view camera with 180° angle of view for best overview is installed. The camera image is equipped with dynamic quide
		lines that are displayed depending on the steering angle.
		When reverse gear is engaged, the pump display is automatically
		switched to the image of the rear view camera.

External Power Supplies

CA14X-EF10	1 x	External power supply, Model RettBox Air
		One (1) auto-eject socket type RettBox 230 V/50Hz/ 32A for power
		supply and supply of compressed air, mating plug will be supplied loose
		with the vehicle

CA14X-EF01 1 x External power supply at rear compartment, left side

Electrical Installations

CA14X-E011	1 x	Battery charger
		One (1) battery charger 230 V / 50 Hz is installed

Compressed Air Supply and Connections

CA14X-DF01	1 x	External compressed air supply, on rear compartment
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