








VAIA CAR - Brochure V804FS / FS+ - 03-2009



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	<b>CARICATORE STRADA-ROTAIA</b>	<b>V804FS / FS+</b>
	<b>ROAD/RAIL LOADER</b>	
	<b>RETROEXCAVADORA BIVIAL</b>	<b>CHARGEUR ROUTE/RAIL</b>
		
		<b>LADER BAHN/STRASSE</b>

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**DOUBLE ACTING LOADER VAIA CAR TYPE V804FS / FS+**

**Electronic Diesel Engine**

- Make .....: **DEUTZ** (alternatively **CATERPILLAR**)
- Pressure charger system .....: **by an exhaust turbo charger and with intercooler**
- Cycle .....: **DIESEL 4 stroke**
- Cooling system .....: **by liquid**
- Specific consumption with optimal charge .....: **209 g/KWh**
- Max. power .....: **129 KW (173 HP)** at 2300 RPM
- Pull-in torque .....: **670 Nm** at 1600 RPM

**Performances**

- Max. travel speed on road .....: km/h **27**
- Max. travel speed on railway .....: km/h **35**
- Max. capacity on plain road (with CE certified machine) .....: kg **10.800**
- Max. capacity on plain railway (with CE certified machine) .....: kg **7.200**
- Max. surmountable slope on road .....: % **62**
- Max. surmountable slope on railway .....: % **40**
- Max. tractive effort on road .....: N **248.000**
- Max. tractive effort on railway .....: N **155.000**
- Max. slope permitted while working on superelevated railway .....: mm **160 (6°)**
- Total machine weight in work configuration .....: kg **31.000**
- Rail gauge .....: **all types**
- Minimum rotation radius of the ballast .....: mm **1.800**
- Maximum rotation radius of the ballast .....: mm **2.565**
- Maximum range radius of the boom .....: mm **7.220**
- Rotation angle of turning tower .....: **360°**
- Clearance gauge .....: type **U.I.C.**
- Twin road tires .....: type **MICHELIN 9.00 R20**
- Inflation pressure of tires .....: bar **10**
- Rail wheels .....: mm **405**
- Rail wheels outline .....: type **UNI**
- Gasoil tank capacity .....: lt **240**
- Hydraulic oil quantity .....: lt **460**

**Noise tests**

- Guaranteed acoustic power level .....: dB(A) **105**
- Acoustic pressure level of driving cab .....: dB(A) **79**

**Hydraulic system**

- n. 1 axial pistons pumps with variable displacement run the **main services**;
- n. 1 axial pistons pumps with variable displacement run the **hydrostatic high performances close circuit transmission**;
- n. 1 gear pump with fixed displacement run the **auxiliary services**.

**Braking system**

- **Service brake**: ..... hydro-pneumatic type with double independent circuit
- **Fail-safe brake**: ..... acting on one axle, incorporated with service brake.
- **Parking brake**: ..... mechanic type, operating on transmission axle.
- **Rail brake system**: ..... automatic, negative system with two cylinders fitted on railway axle.

**Electric system : 24 Volts tension fed by two hermetic batteries.**

**Translation** : hydrostatic 4WD, differential axes with epicyclic reduction gear unit.

**Translation on railways** : it is performed by the contact between iron wheels and rubber tyres with a suitable device for contact pressure adjusting, or by contact between tyres and rail on 1435 mm gauge. The rail-road system can be build for any existing gauge.

**Steering system** : hydraulic servo assisted with orientable steering wheel and automatic steering locking system when operating on rails.

**Driving cab** : two seats, wide visibility with heatless pans, sound dampened; equipped with cooling and heating air system. Complete control panel with hour counter, oil pressure gauge, air pressure gauge, fuel level indicator and centralized panel for main functions controls.

**Operator seat** : anatomic, ergonomic, adjustable with the operator heavy, adjustable and liftable arm supports joisticks controls with hall integrated electrical auxiliary functions.

**Homologations** : according to actual community rules, has been subjected to CE certification.

**SAFETY DEVICES**

- Adjustable device for max. height boom limitation under electrified line.
- Mechanical devices to limit turret rotation.
- Computerized automatic safe load device on three levels: tires, rails and superelevation.
- Automatic device to lock the ballast during work on railroad.
- Emergency pump in case of diesel engine failure.
- Electric implantation master switch.
- Block valves at every hydraulic cylinders.
- Fire extinguisher.
- Electro-hydraulic device for blocking of the controls which activate main and auxiliary services ("operator being present")
- Mechanical cross device for single movement of main control levers.
- Automatic steering locking system when operating on rails.
- Automatic negative braking system on railway axle.
- Automatic negative-active suspensions system on railway axle

**OPTIONALS**

- TIP-TRONIC gear. ....: A/C.
- French Agréement homologation. ....: Rails clamps.
- TÜV homologation. ....: Catalytic exhaust system.
- Orientable deportée boom version. ....: Predisposition for different gauges.
- 3<sup>rd</sup> boom for brushcutter. ....: Liftable cabine (1000 mm).
- Double drive system on rails. ....: Overturning cab.
- Wagon towing system. ....: Railway lightening devices.

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