

DLG-Data Sheet Tractors 2003

Renault Ares 836 RZ

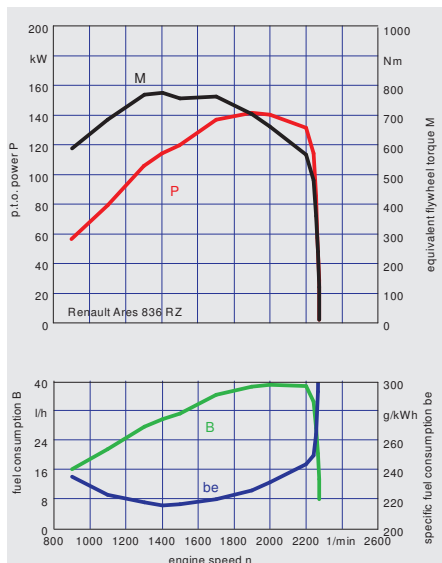
DLG-profi Test Issue No. 08/2003

Engine

John Deere 6068HRT&72, rated engine power 143 kW at 2200 min⁻¹, turbocharger, intercooler, 6 cylinder, capacity 6788 cm³, bore 106,5 mm, stroke 127 mm, water cooled, viscous fan, average pressure 11,5 daN/cm², fuel tank capacity 300 l

Measurement at main power take off

| | Rated engine speed 2200 min ⁻¹ | Engine speed at max power 1900 min ⁻¹ |
|---------------------|--|---|
| Power | 131,3 kW | 141,4 kW |
| Fuel consumption | 38,6 l/h | 38,5 l/h |
| Specific fuel cons. | 244 g/kWh | 227 g/kWh |



Average fuel consumption of

the 6 measurement points from the governor curve 23,6 l/h, 281 g/kWh

Equivalent flywheel torque

Max. torque 780 Nm at 1400 min⁻¹, torque increase 37 % at a speed drop of 36 %

Torque at engine speed 1000 min⁻¹

115 % rated to the torque at rated engine speed

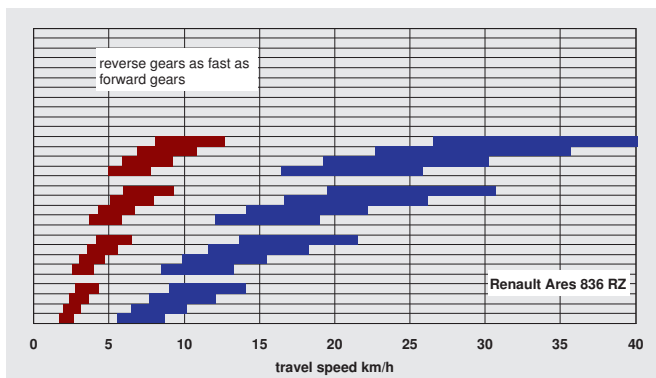
Power take off

Wet multi-disc clutch, electro-hydraulically operated by switch; 1 rear p.t.o., form 1, double shifting; changeable

| | | | | |
|----------------|------------------------|-------|------------------------|-------|
| Standard speed | 540 | 540 E | 1000 | 1000E |
| Engine speed | 1445 min ⁻¹ | - | 2091 min ⁻¹ | - |

Gearbox

Wet multi-disc clutch, 32 forward, 32 reverse; selectable gearbox with 4 gears, synchronised; range gearbox with 2 ranges, synchronised; quadruple power shift range; shuttle gearbox, power shifted; 2 shift levers, 4 switches



Speed scheme arranged by groups, for every gear in the speed range from the engine speed at max. torque to the rated engine speed.

Drawbar power

Max. power 123,0 kW at 11,5 km/h and engine speed 1900 min⁻¹, at 261 g/kWh; at rated engine speed 112,0 kW at 13,4 km/h, at 288 g/kWh

Chassis

All wheel drive, central driving shaft, wet multi-disc clutch, electro-hydraulically operated; front and rear multi-plate differential lock, common electro-hydraulically operated

| | |
|-------|------------------|
| Front | Tyre 540/65 R 30 |
| Rear | Tyre 650/65 R 42 |

Brakes

Oil-immersed disc brake at the rear axle; automatic engagement of 4WD; maximum mean deceleration 4,7 m/s² at 50 daN applied pedal pressure

Cab

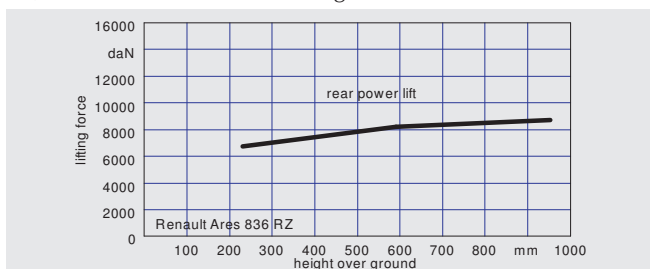
Renault K04Z5B, OECD-No. 4/0 556/1, 2 doors, rear and side windows tiltable, roof hatch, cooling water heat exchanger, air conditioner

Sound levels at drivers ear

| | Unloaded | Under load |
|--|------------|------------|
| At 7.5km/h, nominal gear selected, all openings closed | 71,6 dB(A) | 74,6 dB(A) |
| Open | 81,1 dB(A) | 82,4 dB(A) |
| In loudest gear, all openings closed | 72,1 dB(A) | 76,3 dB(A) |

Hydraulic system

Closed centre type; pressure and flow compensated system, power lift category 3, 2 external cylinders with 95 mm diameter, electronic lower link sensing



Oil tapping port

Max flow rate 114,9 l/min; max. hydraulic power 31,0 kW at 177 bar and 105,1 l/min; max. pressure 197 bar; oil together with gear box with 120 l capacity, available to external cylinders 40 l

Masses/Axle load

| Mass | Test tractor | Permissible total mass |
|-------|--------------|------------------------|
| Front | 3630 kg | 4600 kg |
| Rear | 4520 kg | 7400 kg |
| Total | 8150 kg | 12000 kg |

Tractor mass to engine power ratio 57 kg/kW

Dimensions

Width 2585 mm, length 4880 mm, height at top of exhaust silencer pipe 3018 mm, at cab 3035 mm, wheel base 2880 mm, distance from p.t.o. shaft end to trailer hitch 163 mm, distance from p.t.o. shaft end to lower link couplers 590 mm



Test centre
DLG-Prüfstelle für Landmaschinen

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