Report on test in accordance
with O.E.C.D. STANDARD CODE

O.E.C.D. No. 598



Agricultural Tractor EICHER 3155
trade name: EICHER 4038

Manufacturer
Gebr. Eicher, Traktoren- und Landmaschinenwerke GmbH
D-8380 Landau a.d. Isar

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This bulletin is based on engineering tests in accordance with the O.E.C.D. STANDARD CODE for the Official Testing of Agricultural Tractor Performance. It does not contain an evaluation of the tractor performance on practical work.

Duration of tests: May till December 1979

DLG-Testing-Station for Agricultural Machinery, Max-Eyth-Weg 1,
D-6114 Groß Umstadt

This report has been approved by the O.E.C.D. Coordinating Centre (C.N.E.E.M.A., France) as being in accordance with the O.E.C.D. STANDARD CODE.

Date of Approval: 7th March 1980 O.E.C.D. No. 598

In this report all performance characteristics are given corresponding to the International System of Units.

The reference to the former used Technical System of Units is given by the following relations:

Forces	1 daN = 10 N	= 1,02 kp	or 1 kp	= 0,981 daN
Powers	1 kW	= 1,36 PS	or 1 PS	= 0,736 kW
Pressures	1 bar	= 1,02 kp/cm^2	or 1 kp/cm^2	= 0,981 bar
	1000 mbar = 750,1 mm Hg			

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PRÜFUNGS-ABTEILUNG
EICHER 3155

Test No. 79-56

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Tractor manufacturer:	GEBRÜDER EICHER GMBH D-8380 Landau
Submitted for test by:	Manufacturer
Selected by:	Manufacturer with agreement by DLG
Place of running-in:	Landau
Duration of running-in:	Engine and tractor appr. 30 hours

SPECIFICATION OF TRACTOR

Tractor

Make:	EICHER
Model:	3155 trade name 4038 wheel tractor, unit construction, rear wheel driven
Serial no.:	146313

Engine

Make:	PERKINS ENGINES S.A.
Model:	AD 3.152
Type:	4-stroke Diesel-engine, direct injection, water-cooled
Serial no.:	CE 22490 U 530 661 T 44247
Cylinders:	3, in line, bore 91,4 mm, stroke 127 mm, displacement 2500 cm^3; compression ratio 18,5 replaceable dry cylinder liners
Valves:	Overhead
Fuel system:	AC fuel feed pump CAV distributor injection pump SW 46/700/3/2320 manufacturer's production setting 42,5 mm^3/stroke at rated engine speed; injection timing 26° before TDC; CAV multihole injection nozzles BDLL 1505 6372, injection pressure 175 bar; CAV fuel filter with replaceable cartridge; capacity of fuel tank 85 l
Governor:	Mechanically acting centrifugal variable speed governor, incorporated in injection pump; governed range of engine speed 770 to 2260 rev/min, rated engine speed 2150 rev/min

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Air cleaner:	MANN PICLON dry paper element filter with precleaner, with replaceable cartridge and acoustically operating maintenance indicator
Exhaust silencer:	LEISTRITZ multi chamber reflexion-type silencer, 100 mm dia, 640 mm long, on the left hand side of engine cowling, mouth showing upward, mouth 2230 mm above ground
Lubrication system:	Forced feed from gear pump; strainer in sump; PERKINS oil filter in full flow with replaceable cartridge and by-pass valve; cartridge change at all oil changes; oil capacity 6,5 l; recommended oil quality MIL-L-2104 B; recommended oil viscosities: winter SAE 10W summer SAE 20W/20 tropics SAE 30 oil change interval 150 hours
Cooling system:	Pressurized water cooling system with pump; overpressure set to 0,5 bar; thermostat with by-pass; fan with 4 blades, 394 mm dia, cooling water capacity 10 l
Starting system:	Electrical LUCAS screw-push starter motor M 45 G-12V, 1,8 kW; CAV flame plug in intake pipe
Electrical equipment:	12 Volt BOSCH 3-phase alternator G1 14V 28A, 1 lead-acid battery 88 Ah at 20 hours rating

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Transmission

Clutch:	FICHTEL UND SACHS AG dry dual disc clutch DUT 250/250 operated by dual stage pedal; both discs 250 mm dia
Gear box:	Own make speed change gear with 4 forward speeds and 1 reverse speed, reverse and 1st gear collar shifted, 2nd gear sliding gear shifted, 3rd and 4th gear synchronized; group gear with 2 groups L and H, L-group collar shifted, H-group sliding gear shifted; totally 8 forward speeds and 2 reverse speeds
Rear axle and final drives:	MASSEY-FERGUSON S.A. bevel gear drive with crown wheel and pinion; bevel gear differential with lock, pedal operated, self disengaging;
Front axle:	Not propelled
Oil capacity:	Gear box in common with rear axle drive and hydraulic system 30 l
Oil changing interval:	600 hours
Recommended oil quality:	Transmission oil SAE 80 MIL-L-2105

Total ratios and speeds see page 8

Power take-off

Semi-independent p.t.o.,
at rear of tractor,
driven through the second disc of the dual disc clutch;
engaged by pre-selection lever and the 2nd stage of the clutch pedal;
height above ground 515 mm,
300 mm behind rear axle centre line,
in tractor's median plane;
2 interchangeable p.t.o. shafts
for 540 rev/min and
1000 rev/min p.t.o. speeds;
by interchanging p.t.o.-stub-shafts
correct speed ratio is selected:

540 rev/min p.t.o.
35 mm dia, 6 splines DIN 9611
and ISO 500 type 1;
613 rev/min at rated engine speed,
standard p.t.o. speed 540 rev/min at
1893 rev/min engine speed

1000 rev/min p.t.o.
35 mm dia, 21 splines DIN 9611
and ISO 500 type 2;
1131 rev/min at rated engine speed,
standard p.t.o. speed 1000 rev/min at
1900 rev/min engine speed

p.t.o. speeds may be set by aid of tractormeter;
direction of rotation clockwise,
viewed from tractor rear

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Total ratios and speeds (tyres 12,4 R 32)

Group	Gear	Total ratio engine : driving wheels	Nominal travelling speed *) at rated engine speed km/h
Forward speeds			
L	1	221,32	2,34
	2	150,90	3,44
	3	110,49	4,70
	4	82,31	6,30
H	1	55,33	9,38
	2	37,73	13,75
	3	27,62	18,78
	4	20,58	25,21
Reverse speeds			
L	R	162,58	3,19
H	R	40,63	12,75

*) calculated with the RADIUS INDEX 640 mm as per WdK 154

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Power lift

Hydraulic system:

MASSEY-FERGUSON S.A.
hydraulic power lift in unit construction;
MF axial-type pump with 29 l/min delivery at rated engine speed,
in gear box, driven by the disc of the p.t.o. clutch;
MF control valve for lifting, lowering, draft control, position control and floating position;
top link sensing;
maximum oil pressure 220 bar;
1 single acting main cylinder with 79,3 mm bore and 120,7 mm stroke,
without overpressure relief valve;

MF gear-type pump for auxiliary hydraulic system, 37 l/min delivery at rated engine speed,
in gear box, driven by the disc of the p.t.o. clutch;
both pumps stall if 2nd stage of clutch pedal is depressed;
up to 3 single or double acting additional control valves with oil tappings available

oil capacity 30 l in common with gear box;
max. 11 l may be taken off through oil tappings when tractor is travelling,
12 l when tractor is working stationary

Implement linkage:

Three point linkage category I DIN 9674

lift rods adjustable from 545 to 650 mm

lifting range above ground with

short lift rods	from 421	to	976 mm
long lift rods	from 106	to	796 mm

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Holed bar: Long bar, fitted on clevis of lower links;
length between the joint balls 680 mm,
width 80 mm, thickness 30 mm;
centre hole and 2 holes on either side
between the joint balls,
2 holes on either side outside of
the joint balls;
totally 9 holes, all holes 33 mm diameter;
height above ground adjustable by power lift
in the range from 181 to 1051 mm,
depending on lift rods length,
measured at the surface of the bar;
distance of holes centre line with lower
links in horizontal position:

from rear axle centre	825 mm
from p.t.o. shaft end	525 mm

Pull attachments

Trailer hitch: CRAMER
height above ground adjustable by shifting
to 725 mm and 834 mm,
hitch hole 33 mm diameter;
distance of hitch hole centre to
rear axle centre 490 mm, to
p.t.o.-shaft end 19 mm,
permissible vertical load 900 kg

Towing hitch: 605 mm above ground

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Steering	ZAHNRADFABRIK FRIEDRICHSHAFEN AG hydrostatic steering model 8450 with own oil circuit; PLESSEY gear type pump with 6 cm^3/rev delivery, directly driven by engine; oil capacity 5 l, transmission oil ATF type A; oil changing once a year; 1 double acting ram with 63 mm bore and 102 mm stroke, acting with elbow lever on tierods
Brakes	
Parking brake:	Mechanically acting on the drums of the service brake; operated by hand lever with ratchet
Service brake:	GIRLING internal-expanding-shoe brakes at the rear wheels, mechanically pedal operated, drum diameter 355 mm
Steering brake:	2 additional hand levers on the left hand side of driver's seat, acting on the parking brake
Wheels	
Steered wheels:	2 pneumatics in front 7,5L-15 6 ply diagonal type tyre casing; maximum permissible load per tyre 720 kg at 2,75 bar inflation pressure and 30 km/h; track width from 1210 to 1815 mm, adjustable in steps of 101 mm by extending telescopic half axles; rims 5,5J-15

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Driving wheels:	At rear 2 pneumatics 12,4 R 32 6 ply, radial type tyre casing; maximum permissible load per tyre 1355 kg at 1,7 bar inflation pressure and 30 km/h; track width adjustable from 1260 to 1890 mm in steps of about 100 mm each by turning wheels and offset lug type rims; rims W 11 x 32
Wheel base:	2113 mm
Safety frame	Own make OECD tested approval no. CSD 0017/1-a (F)
Seat	GRAMMER DS 85 H4 upholstered seat with back rest; adjustable spring with shock absorber; height of driver's platform above ground 710 mm; height of unloaded seat above platform adjustable to 3 positions: 490, 520 and 550 mm; for and aft adjustable about 150 mm
Number of grease points	21

Track setting during tests

front axle	1311 mm
rear axle	1260 mm

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Dimensions

Total length:	3485 mm	without ballast
	3485 mm	with ballast
Total width:	1610 mm	without ballast
	1910 mm	with ballast
Total height:	2230 mm	to mouth of exhaust silencer
Ground clearance:	370 mm	below gear box

Weights

Ready for use as tested, with safety frame

		without driver	with driver
Without ballast:	front	860 kg	875 kg
	rear	1310 kg	1375 kg
	total	2170 kg	2250 kg
Front ballast:	5 front weights 40 kg each		200 kg
Rear ballast:	water in the tyres		269 kg
	2 weights per wheel 64 kg each		256 kg
With ballast:	front	1085 kg	1100 kg
	rear	1810 kg	1875 kg
	total	2895 kg	2975 kg

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Lighting equipment — Electrical 12 Volt
as per German legislation

	Dimensions mm	Height above ground to centre mm	Distance from outside edge of tractor to centre mm
Head lights	145 x 90	935	665
Side lights	70 x 20	1300	130
Rear lights	30 x 65	1365	163
Reflectors			
1st pair	130 x 40	1125	165
2nd pair	60 Ø	605	340

Permissible total weights and axle loads

for all available wheel equipment

Wheel equipment front	Wheel equipment rear	Permissible total weight kg	Permissible axle load front kg	Permissible axle load rear kg
5,50-16 6 ply 6,00-16 6 ply	12,4-28 6 ply	3000	1200	2400
	12,4-32 6 ply			
7,5L-15 6 ply 6,50-16 6 ply 7,50-16 6 ply	9,5-36 6 ply		1400	

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FUELS AND LUBRICANTS USED IN TESTS

Fuel:	ARAL Diesel-fuel DIN 51601
	specific gravity at 15°C
	at engine tests 0,830 kg/l
	at p.t.o. tests 0,831 kg/l
	at drawbar tests 0,828 kg/l
Engine:	ESSO ESSOLUBE HDX SAE 20W/20
Transmission, rear axle and hydraulic:	ESSO transmission oil SAE 80
Steering:	OEST ATF oil type A

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COMPULSORY TESTS

(1) MAIN POWER TAKE-OFF PERFORMANCE (540 rev/min)

Date of tests: 22nd June 1979
Type of dynamometer: SCHENCK hydraulic dynamometer U1-40

Power kW	Speed engine rev/min	Speed p.t.o. rev/min	Fuel consumption total l/h	Fuel consumption total kg/h	Fuel consumption specific g/kWh	Specific energy kWh/l
Maximum power						
At 2-hour test						
24.8	2150	613	8.25	6.85	276	3.01
At standard p.t.o. speed						
23.9	1893	540	7.49	6.22	261	3.19
At the speed recommended for drawbar work						
24.8	2150	613	8.25	6.85	276	3.01
Part loads, the governor hand lever in the position corresponding to the maximum power at full load						
(i) 85% of the torque at maximum power at 2-hour test						
21.6	2201	628	7.47	6.20	287	2.89
(ii) unloaded						
-	2267	647	2.94	2.44	-	-
(iii) 50% of the load defined in (i)						
11.0	2237	638	5.08	4.23	385	2.16
(iv) maximum power						
24.8	2150	613	8.25	6.85	276	3.01
(v) 25% of the load defined in (i)						
5.5	2251	642	3.94	3.28	593	1.40
(vi) 75% of the load defined in (i)						
16.5	2217	632	6.31	5.24	321	2.59

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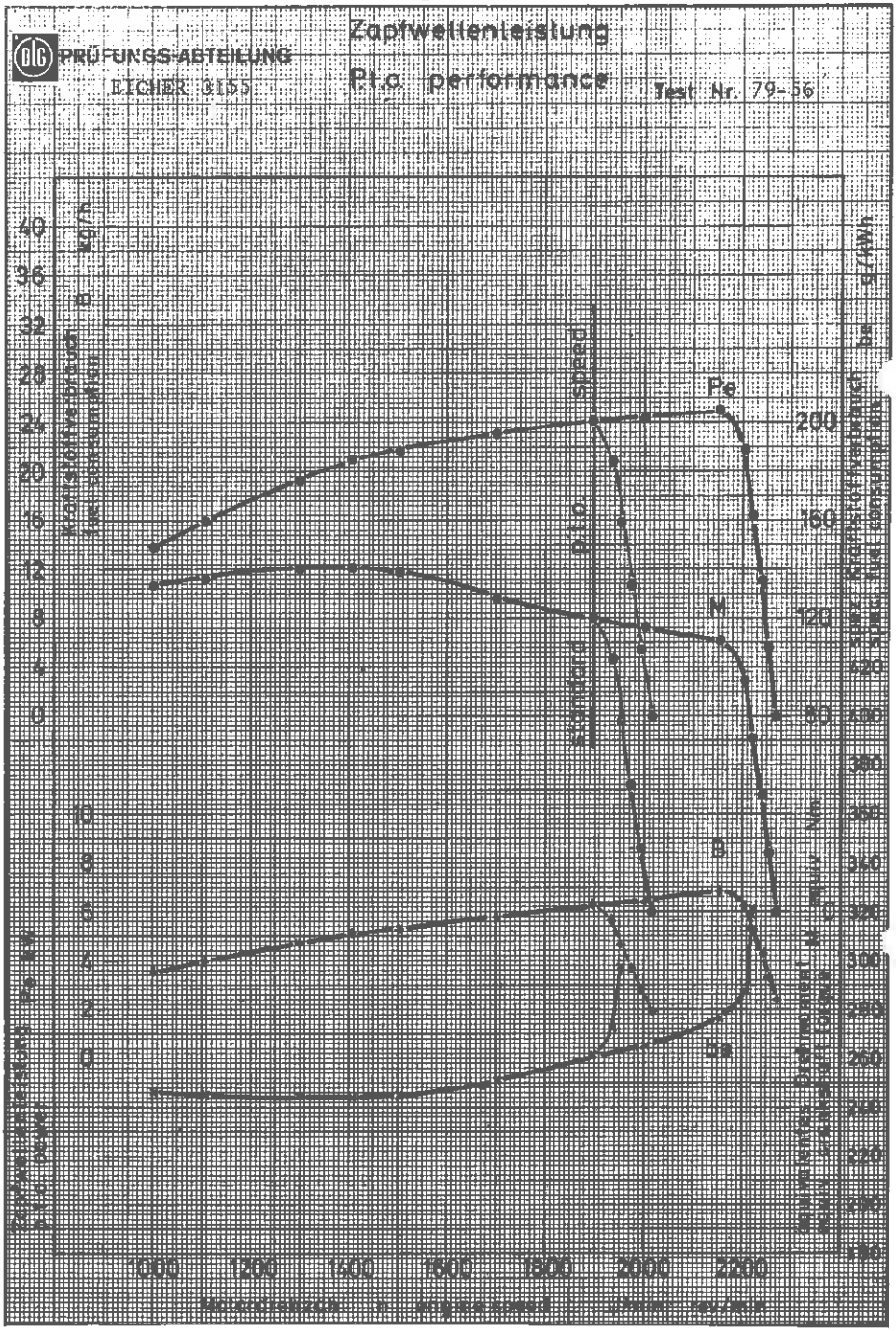
Test No. 79-56

Power kW	Speed engine rev/min	Speed p.t.o. rev/min	Fuel consumption total l/h	Fuel consumption total kg/h	Fuel consumption specific g/kWh	Specific energy kWh/l
Part loads, the governor hand lever in the position corresponding to the standard p.t.o. speed at full load						
(i) 85% of the torque at maximum power at standard p.t.o. speed						
20.7	1931	551	6.79	5.64	272	3.05
(ii) unloaded						
-	2014	574	2.33	1.93	-	-
(iii) 50% of the load defined in (i)						
10.6	1971	562	4.39	3.65	345	2.41
(iv) maximum power						
23.9	1893	540	7.49	6.22	261	3.19
(v) 25% of the load defined in (i)						
5.3	1991	568	3.33	2.76	518	1.60
(vi) 75% of the load defined in (i)						
15.7	1949	556	5.61	4.66	297	2.79

Standard specific fuel consumption (g/kWh): 287/385/272/345

No load maximum engine speed: 2267 rev/min
Equivalent crankshaft torque at maximum power (2 hours): 110 Nm
Maximum equivalent crankshaft torque: 141 Nm at 1404 rev/min of the engine

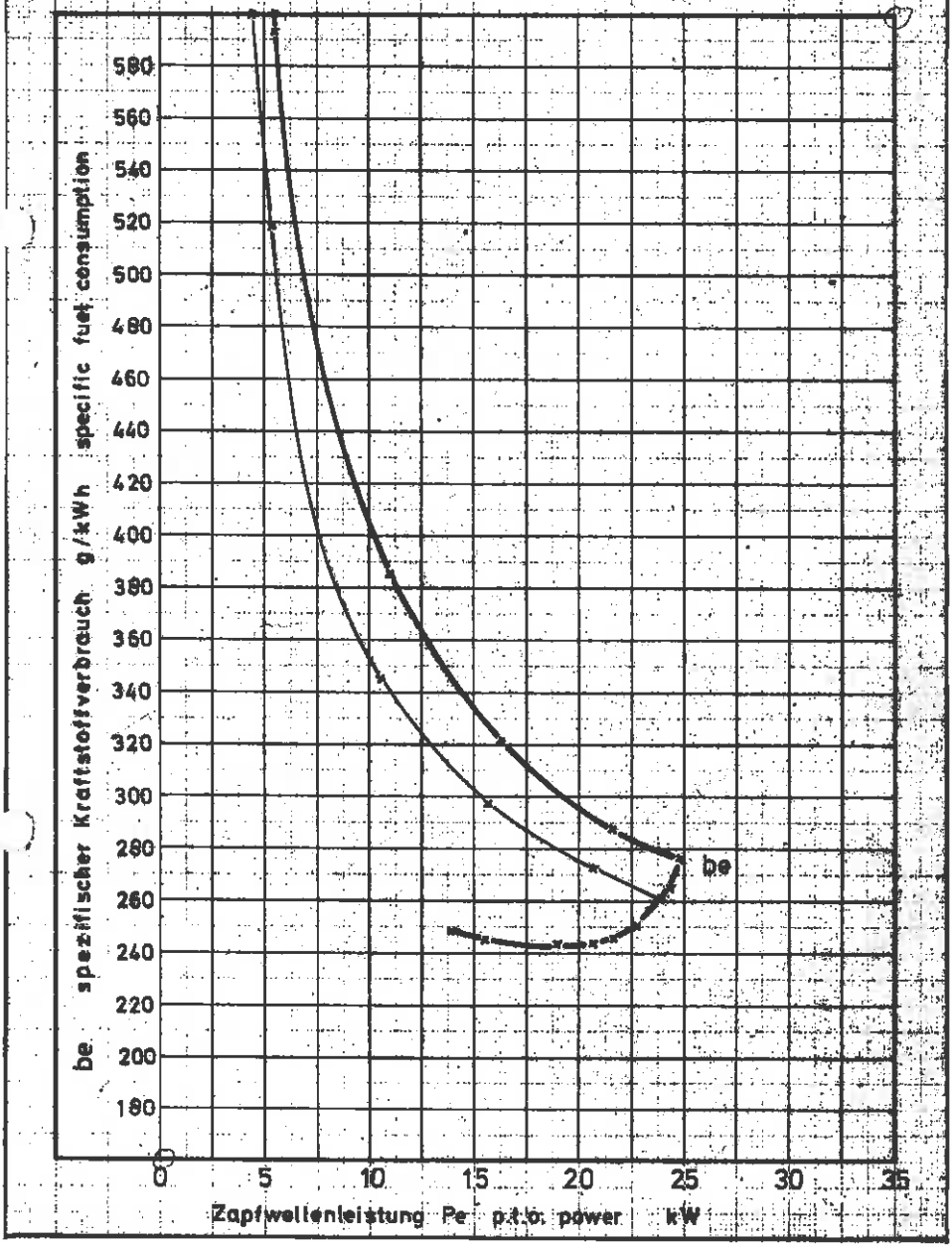
Mean atmospheric conditions:	temperature	25°C
	pressure	994 mbar
	relative humidity	80 %
Maximum temperatures:	coolant	76°C
	engine oil	104°C
	fuel	25°C
	engine air intake	26°C


PRÜFUNGS-ABTEILUNG
EICHER 8155
Zapfwellenleistung
P.t.o. performance
Test Nr. 79-56
Pe
M
B
Be
Standard P.t.o. speed
Kraftstoffverbrauch bei Zapfwellenleistung
Fuel consumption at p.t.o.
Drehmoment
Torque
Motordrehzahl
Engine speed
1000
1200
1400
1600
1800
2000
2200
200
160
120
80
40
0
10
8
6
4
2
0
40
36
32
28
24
20
16
12
8
4
0

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Zapfwellenleistung
P.t.o. performance

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(2) DRAWBAR PERFORMANCE

Date of tests: 22nd November till 4th December 1979
Type of track: Concrete

Gear No. and Group	Driving speed km/h	Power kW	Drawbar pull daN	Engine speed rev/min	Slip of wheels %
(i) MAXIMUM POWER with ballast height of drawbar above ground 665 mm					
1 L	2,02	15,0	2681	2202	15,0
2 L	2,98	20,6	2494	2151	11,6
3 L	4,26	21,6	1825	2148	7,1
4 L	5,86	21,7	1335	2147	4,9
1 H	8,84	22,4	911	2146	3,0
2 H	13,12	21,1	579	2149	1,9
(ii) FIVE-HOUR-TEST at 75% of pull at maximum power in 4th L gear					
4 L	6,07	16,9	1001	2192	3,5
(iii) FIVE-HOUR-TEST at pull corresponding to 15% wheel slip in test (i)					
1 L	2,07	15,4	2681	-	-
(iv) MAXIMUM POWER without ballast height of drawbar above ground 680 mm					
1 L	2,00	11,4	2059	2218	15,0
2 L	2,92	16,7	2060	2200	14,9
3 L	4,05	20,3	1803	2148	10,9
4 L	5,67	21,0	1332	2149	7,2
1 H	8,66	21,8	905	2151	4,7
2 H	12,90	21,1	590	2150	3,2

Total oil consumption during ten hours duration of tests (ii) and (iii) 64 g/h

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Tyres size front: 7,5L-15 6 ply
rear: 12,4 R 32 6 ply

Tread bar height at the beginning of drawbar tests
77% of the value when new

Specific energy kWh/l	Specific fuel consumpt. g/kWh	Temperatures Fuel °C	Coolant °C	Engine-oil °C	Atmospheric conditions Tempe-rature °C	Relative humidity %	Pressure mbar
tyre inflation pressure 0,9 bar							
2,20	375	17	72	83	7	97	1005
2,47	335	16	75	102	11	68	1009
2,60	319	13	75	96	6	94	1005
2,61	317	13	75	96	5	96	1005
2,69	308	11	75	94	6	84	1005
2,54	326	11	75	96	6	85	1005
2,44	339	18	75	96	16	62	1009
-	-	18	75	99	17	56	1009
tyre inflation pressure 0,8 bar							
1,93	430	9	75	95	2	98	1013
2,26	368	9	74	93	2	99	1013
2,43	340	16	75	95	12	71	1013
2,52	328	16	75	101	12	74	1013
2,62	316	15	75	97	7	79	1011
2,53	327	15	75	101	7	90	1011

Test (iii) was carried out with additional ballast,
the figures not quoted are therefore irrelevant

(3) TURNING SPACE AND TURNING CIRCLE

Wheel equipment front: 7,5L-15 6 ply
rear: 12,4 R 32 6 ply

Track of wheels front: 1311 mm
rear: 1260 mm

	With brakes		Without brakes	
	left-hand m	right-hand m	left-hand m	right-hand m
Radius of turning space	3,48	3,16	4,04	3,50
Radius of turning circle	3,31	2,97	3,87	3,31

(4) LOCATION OF CENTRE OF GRAVITY

Height above ground	771 mm
Distance forward from rear axle centre	829 mm
Distance from tractor's median plane	3 mm to the left

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(5) BRAKING PERFORMANCE

A) SERVICE BRAKE

Date of tests: 26th November 1979
Type of track: Concrete
Type of decelerometer: MOTO-METER-Bremsverzögerungs- und Pedalkraftschreiber

Weight of ballasted tractor with driver 2975 kg

Cold brakes

		With ballast	Without ballast
Travelling speed	km/h	25,1	25,1
Deceleration	m/s^2	3,8	3,7
Stopping distance	m	7,0	7,2
Force on pedal	daN	28	25
Force on pedal to achieve a deceleration of 2,5 m/s^2	daN	16	10

Brake fade characteristics (hot tests)

Deceleration	hot/cold	%	100	100
Stopping distance	cold/hot	%	100	100
Force on pedal	cold/hot	%	104	125

B) PARKING BRAKE

Tractor facing up 16% slope
Pull on hand brake 14 daN, tractor does not roll

Tractor facing down 16% slope
Pull on hand brake 15 daN, tractor does not roll

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(6) AMBIENT NOISE EMITTED BY THE TRACTOR

Date of test: 23rd November 1979
Type of track: Concrete
Type of sound level meter: BRÜEL AND KJAER model 2209

Results of test

Gear: 4 H
Travelling speed before acceleration: 19,3 km/h
Sound level: 87,0 dB(A)

(7) NOISE AT THE DRIVER'S EAR LEVEL

Date of tests: 20th November 1979
Type of track: Concrete
Type of sound level meter: BRÜEL AND KJAER model 2209

The tractor was fitted with EICHER safety frame

Results of tests

Gear	Drawbar pull at which the tractor develops the maximum sound level daN	Travelling speed nominal km/h	Travelling speed effective km/h	Sound level dB(A)
1 L	2047	2,34	1,87	94,5
2 L	2031	3,44	2,86	96,5
3 L	1799	4,70	3,95	98,0
4 L *)	1298	6,30	5,64	97,5
1 H	908	9,38	8,52	97,5
2 H	581	13,75	12,91	97,5
3 H	416	18,78	17,62	97,5
4 H	light load	25,21	25,7	94,5

*) the 4th L gear corresponds to the travelling speed nearest to 7,5 km/h

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(8) HYDRAULIC PUMP PERFORMANCE AND POWER LIFT

Date of tests: 15th and 16th October 1979

HYDRAULIC PUMP

Power lift circuit

(1) Opening pressure of relief valve in power lift circuit	175 bar
Sustained pressure by open relief valve	220 bar
(2) Pump delivery rate at minimum pressure and rated engine speed	29,1 l/min
(3) Pump delivery rate at max. hydraulic power	27,1 l/min
corresponding delivery pressure	175 bar
power	8,0 kW

Auxiliary hydraulic circuit

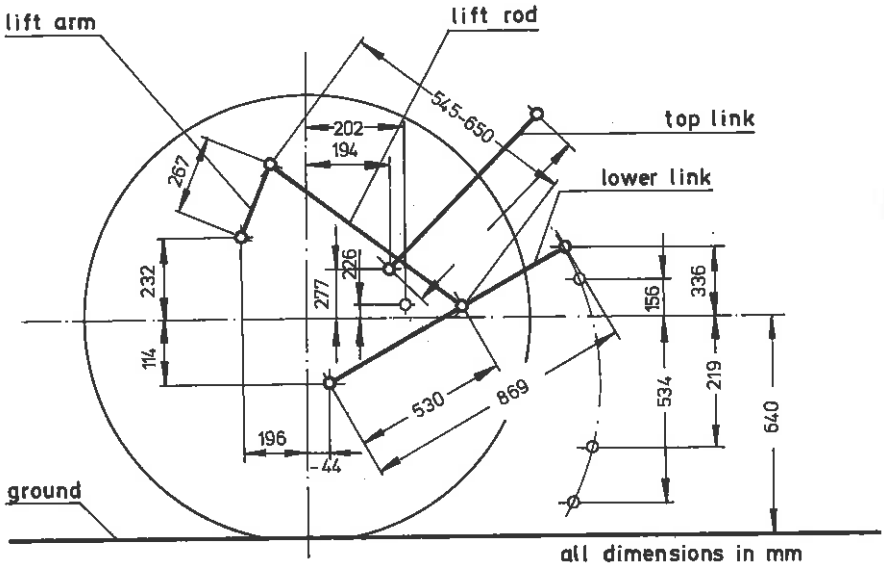
(1) Opening pressure of relief valve in remote circuit	146 bar
Sustained pressure by open relief valve	172 bar
(2) Pump delivery rate at minimum pressure and rated engine speed	37,4 l/min
(3) Pump delivery rate at max. hydraulic power	37,5 l/min
corresponding delivery pressure	150 bar
power	9,4 kW

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POWER LIFT

Dimensions of linkage geometry for the table on page 27



LINKAGE GEOMETRY when connected to the standard frame	Maximum mechanical advantage	Minimum mechanical advantage
Projected length in side view:		
Lower links	869 mm	869 mm
Lift arms	267 mm	267 mm
Lift rods	650 mm	545 mm
Top link	655 mm	653 mm
Distance of lift rod connection point from pivot point of lower link	530 mm	530 mm
The following dimensions are given relative to rear axle centre line 640 mm above ground		
Lower link pivot point	44 mm forward, 144 mm below	44 mm forward, 114 mm below
Top link pivot point	194 mm behind, 277 mm above	202 mm behind, 226 mm above
Lift arm pivot point	196 mm forward, 232 mm above	196 mm forward, 232 mm above
Maximum and minimum height of lower link hitch points	156 mm above, 534 mm below	336 mm above, 219 mm below
Height of lower link hitch points above ground when locked in highest transport position	796 mm	976 mm

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LIFTING FORCES

Lifting heights relative to horizontal lower links

mm	-430	-420	-400	-300	-200	-120	-105	-100	0
at hitch points maximum mechanical advantage									
daN							1660	1670	1780
minimum mechanical advantage									
daN		1210	1220	1320	1430			1490	1530

Max. force exerted throughout the whole range 1660 daN

Front of tractor does not lift if front axle is ballasted to its max. allowable load (1400 kg)

at test frame maximum mechanical advantage									
daN	1480		1480	1470	1450			1430	1370
minimum mechanical advantage									
daN						1450		1450	1440

Max. force exerted throughout the whole range 1200 daN

Front of tractor does not lift if front axle is ballasted to its max. allowable load

PRÜFUNGS-ABTEILUNG

Test No. 79-56

+100	+200	+270	+300	+305	+400	+450	+500	+600	+645

lift rods 545 mm long

1860	1890		1910		1930	1940			

lift rods 650 mm long

1560	1590	1630							

lift rods 650 mm long, high top link pivot point

1330	1260		1210	1200					

lift rods 545 mm long, low top link pivot point

1410	1360		1290		1200		1130	1060	1030

All values of forces for pressure 177 bar at max. hydraulic power, see page 25; calculated from measurements at max. oil pressure 220 bar

PRÜFUNGS-ABTEILUNG
EICHER 3155

Test No. 79-56

OPTIONAL TESTS

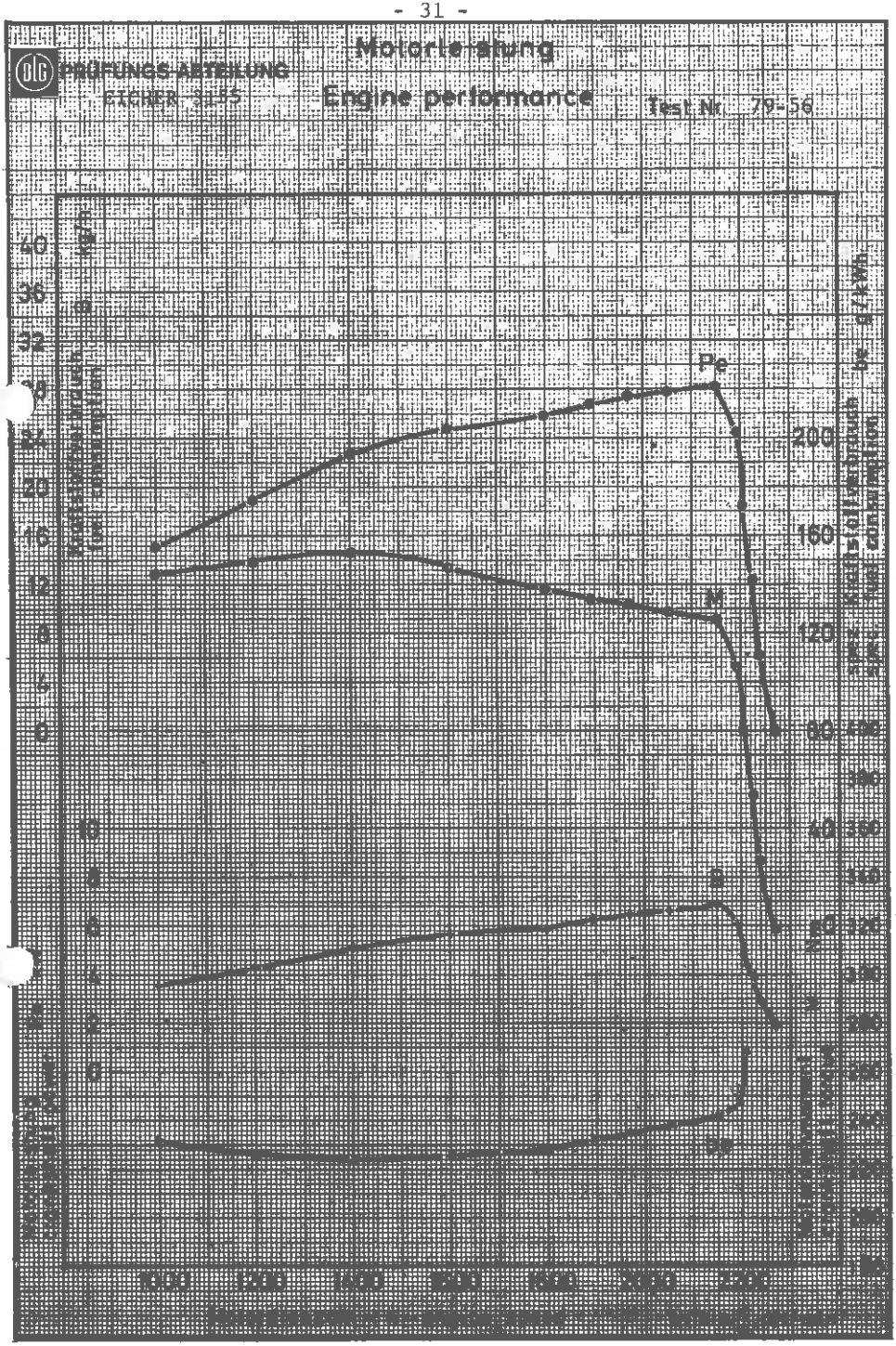
(9) ENGINE PERFORMANCE

Date of tests: 11th till 14th May 1979
Type of dynamometer: SCHENCK eddy-current dynamometer W 150

Power kW	Engine speed rev/min	Fuel consumption total l/h	Fuel consumption total kg/h	Fuel consumption specific g/kWh	Specific energy kWh/l
Maximum power					
At 2-hour test					
28.3	2150	8.26	6.86	242	3.42
At standard p.t.o. speed (540 rev/min)					
26.8	1893	7.49	6.22	232	3.57
At the speed recommended for drawbar work					
28.3	2150	8.26	6.86	242	3.42
Part loads					
(i) 85% of the torque at maximum power at 2-hour test					
24.5	2189	7.32	6.08	248	3.35
(ii) unloaded					
-	2266	2.39	1.98	-	-
(iii) 50% of the load defined in (i)					
12.4	2222	4.72	3.92	315	2.64
(iv) maximum power					
28.3	2150	8.26	6.86	242	3.42
(v) 25% of the load defined in (i)					
6.3	2237	3.48	2.88	461	1.80
(vi) 75% of the load defined in (i)					
18.5	2202	5.99	4.98	269	3.08

Optimum fuel consumption: 221 g/kWh at 21.3 kW and 1398 rev/min
No load maximum engine speed: 2266 rev/min
Torque at maximum power (2 hours): 126 Nm
Maximum torque: 155 Nm at 1403 rev/min of the engine

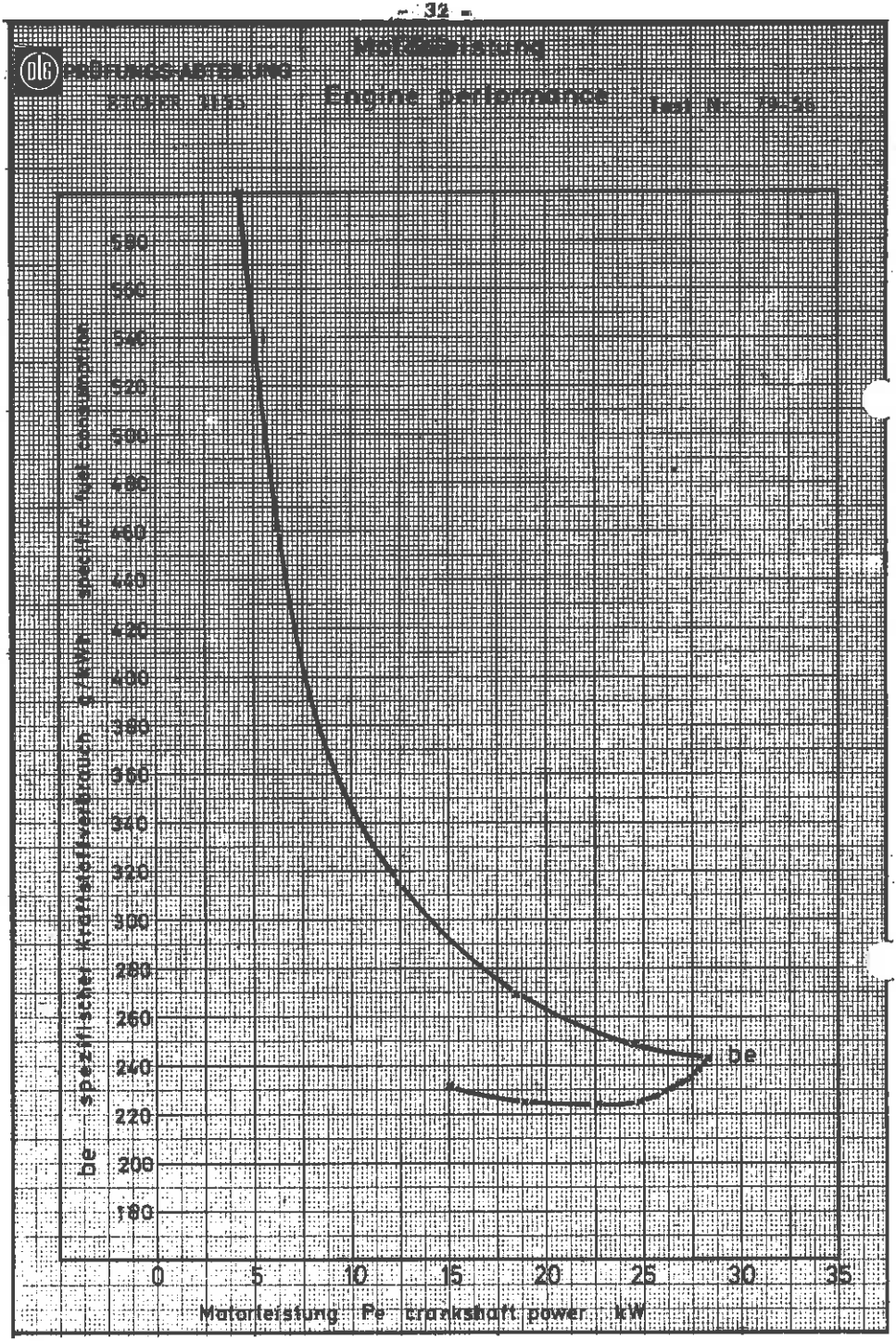
Mean atmospheric conditions:	temperature	25 °C
	pressure	1009 mbar
	relative humidity	47 %
Maximum temperatures:	coolant	76 °C
	engine oil	90 °C
	fuel	25 °C
	engine air intake	25 °C

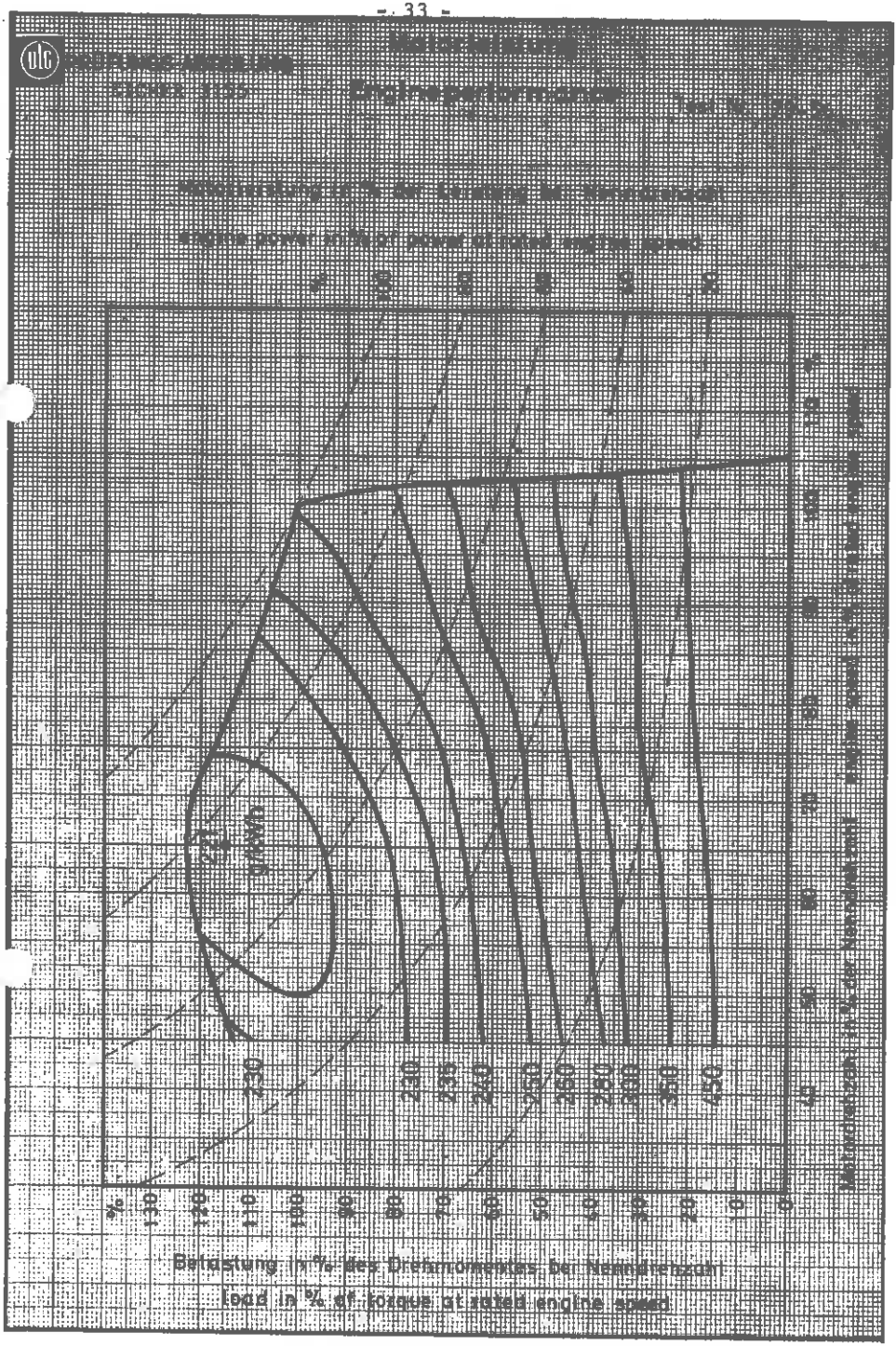

Motorleistung
Engine performance
PRÜFUNGS-ABTEILUNG
FICHTER 31.85
Test Nr. 79-56
Pe
M
n
Leistung
Drehmoment
Drehzahl
spez. Kraftstoffverbrauch
spec. fuel consumption
g/kWh
kW
Nm
1/min

Motorleistung

PRÜFSTANDS-ABTEILUNG

STIHL 075 Engine performance Test Nr. 79-36




Motorenbau
Engine performance
Typ 12 V 4
Motordrehzahl in % der Nennzahl der Umdrehungen
engine speed in % of speed at rated engine speed
Belastung in % des Drehmomentes bei Nennmotorendrehzahl
load in % of torque at rated engine speed
Motordrehzahl in % der Nennzahl der Umdrehungen
engine speed in % of speed at rated engine speed
g/PSh

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