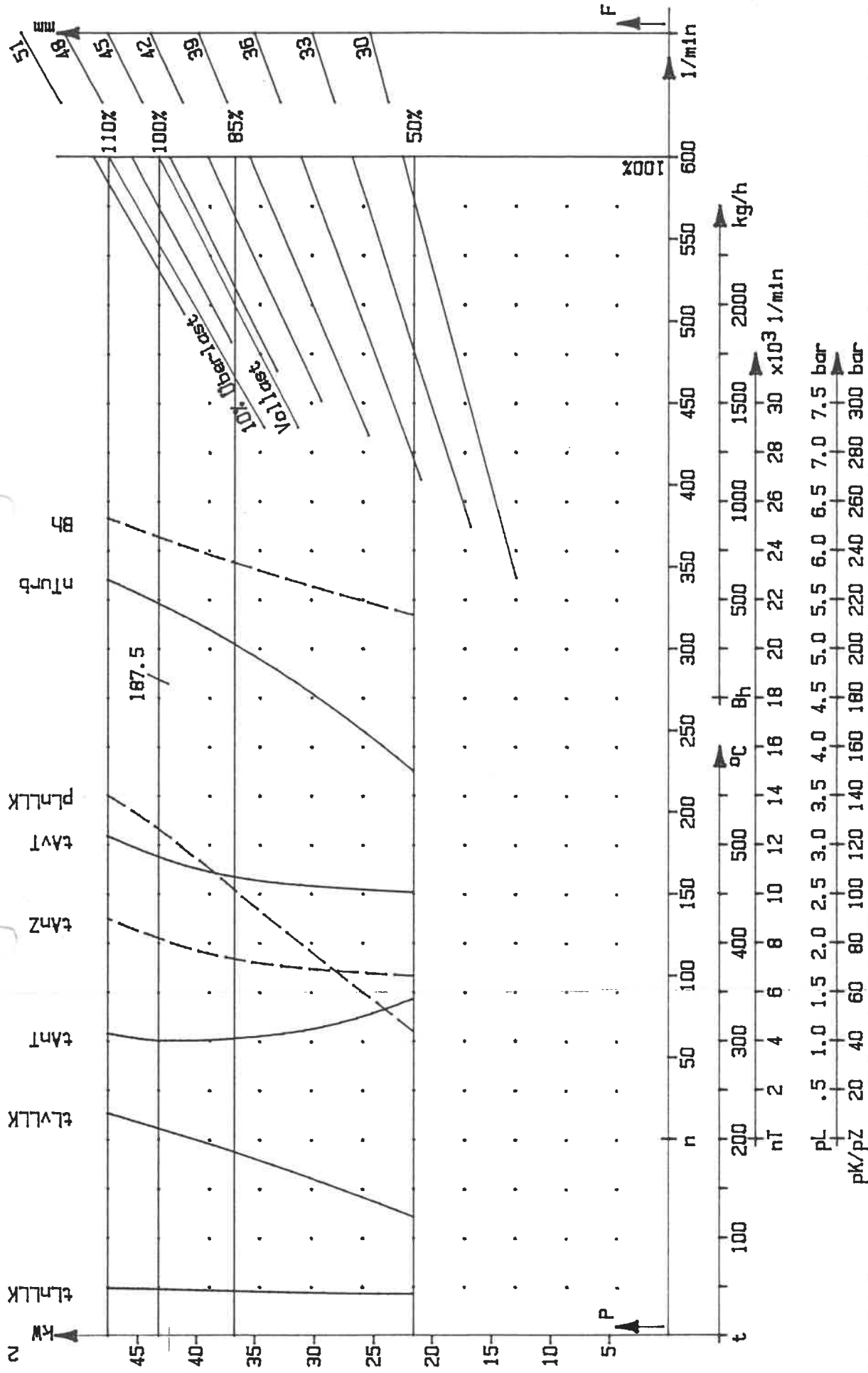


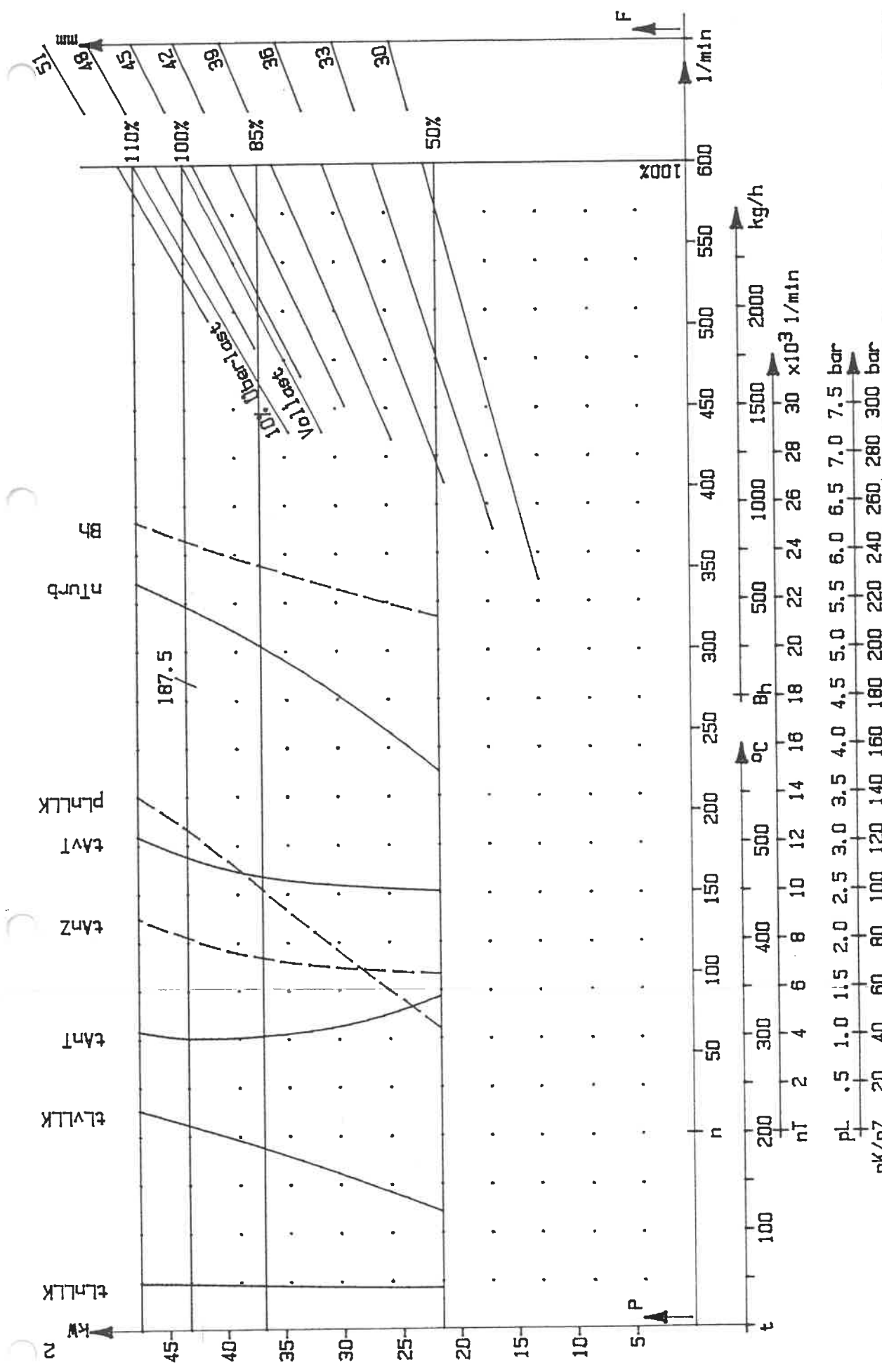
MaK Motoren GmbH & Co.KG		D I E S E L - E N G I N E Acceptance Test Record						Sheet 1 of 2				
Engine Type : 9 M 32			Order No. : 261234-1			Engine Serial No.: 37314						
Atmospheric conditions during test run:						Ambient temperature: 22 °C						
Atmospheric pressure: 1001 mbar			Relative humidity : 90 %			Altitude : 10 m						
We used for the test run:												
Heat value like actual Fuel oil analysis			: 42577 kJ/Kg			Test bed		: 50 / 5				
Luboil type : SAE 40						Hydraulic brake		: 14U 125 F				
Engine data: Four-stroke/direct injection/port engine/clockwise						rotation (viewed from the drive end)						
Rated power : 4320 kW		Rated speed : 600 rpm				Firing order: 1-2-4-6-8-9-7-5-3						
Bore : 320 mm		Stroke : 480 mm										
Turbocharger type : Napier NA 357		Serial No. : 241		Specification : 4 GS 126 B 180 K								
Max. speed : 23600 rpm		t max : 650 °C		Test : SHF 9920091								
Fuel injection pump: L'Orange PEO-GO 58 A			Plunger diameter : 28.0 mm			Idle stroke 'X' : 6.2 ± 0.1 mm						
Fuel injector : MaK E 2/1			Opening pressure : 450 bar			Specification :						
Generator : Type : Manufacturer :						Crankshaft : Drawing No.: 1.99.7-25.10.01-03 Number : F 376475						
Timing data : to drawing No. :		Bank		Cylinder								
				1	2	3	4	5	6	7	8	9
Inlet opens		45	A									
before T.D.C.			B									
Inlet closes		5	A									
after B.D.C.			B									
Exhaust opens		40	A									
before B.D.C.			B									
Exhaust closes		45	A									
after T.D.C.			B									
Flywheel diameter : 1439 mm		1° = 12.6 mm				Flywheel weight : 1405 kg						
Settings		Bank		Cylinder								
				1	2	3	4	5	6	7	8	9
Distance from liner top edge to piston top edge in T.D.C. [mm]		A	20.6	20.5	20.6	20.5	20.6	20.6	20.5	20.5	20.6	
		B										
Commencement of injection pump in degrees crank angle before T.D.C.		A	5.9									
		B										
Fuel injection pump thickness from the Steel Plate in [mm]		A	3.1	3.2	3.3	3.2	3.2	3.2	3.2	3.2	3.2	
		B										
Fuel injection pump rack position when control handle on 'stop' [mm]		A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
		B										
Fuel injection pump rack position [mm]		At	A	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	
		rated power	B									
Fuel inj. pump A/B no.: 8 blocked at 46.0 mm		At	A	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	
		no load	B									
Governor speed setting		n = 600 rpm	Air consumption for starting and reversing : (n = 3)									
Maximum speed no load		n = 602 rpm	Bottle capacity : 0.5 m³									
Minimum speed no load		n = 403 rpm	Initial pressure : 20.0 bar									
Minimum speed with load		n = rpm	Starting: last time at 10.0 bar									
			Remaining pressure in bottle : 9.5 bar									
No. 1 cylinder on flywheel end of engine			Acceptance:		FM41	Engineer	Approved	Surveyor				
Bank A = left viewed from drive end			Lloyds Kel 9800964		Date	27.09.99	27.10.99	03.11.99				
Bank B = right viewed from drive end			9 HC 99		Sign.	Schetsche	Barty					

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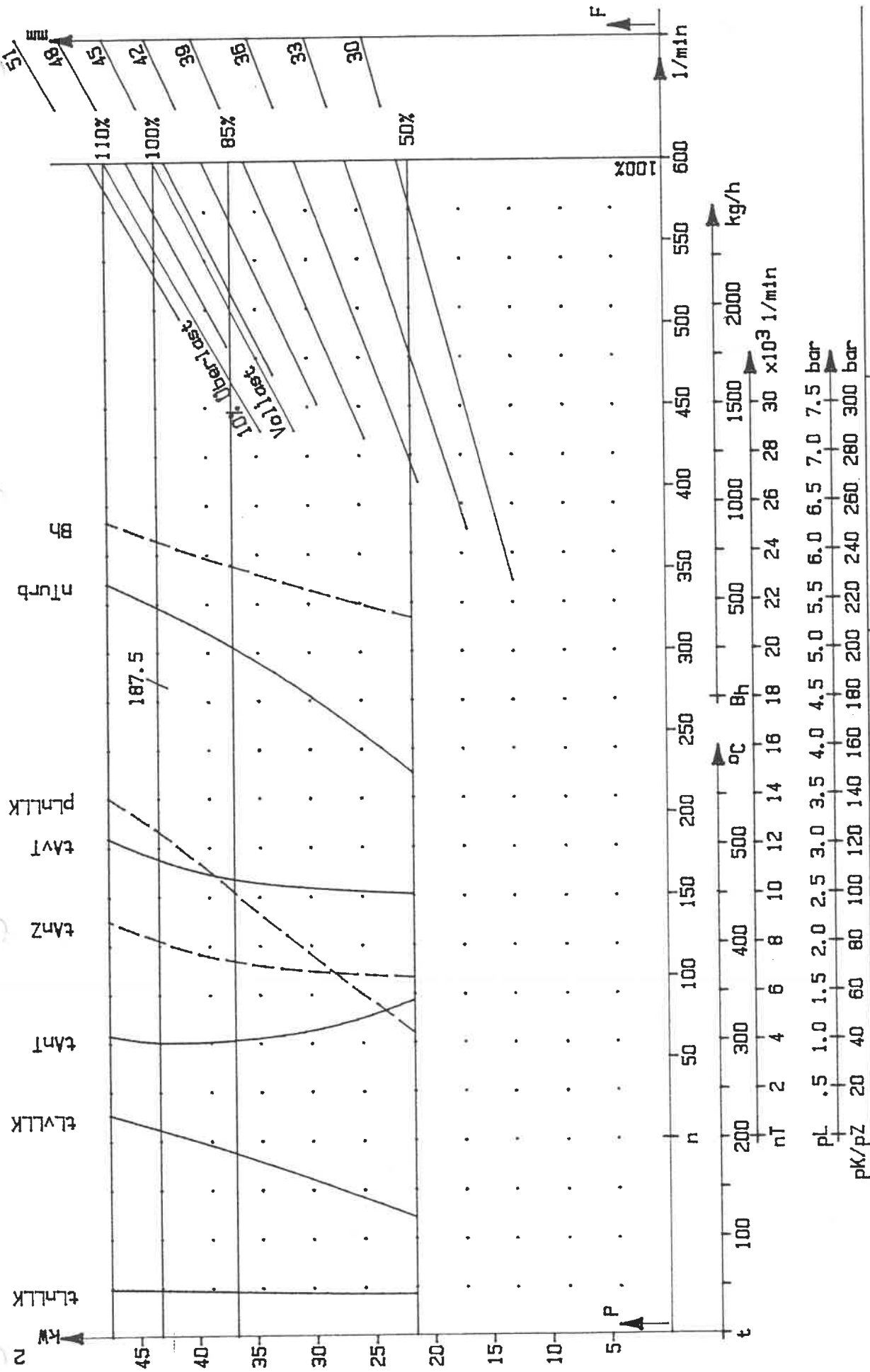


Basisdaten vom 04.10.1999: Kraftstoffdichte bei 15 °C =	t = 27 °C bei p = 1000 mbar 0 kg/l		P 100% = 4320 kW n 100% = 600 1/min	Motor-Nr.: 37314 Motor-Typ: 9 M 32

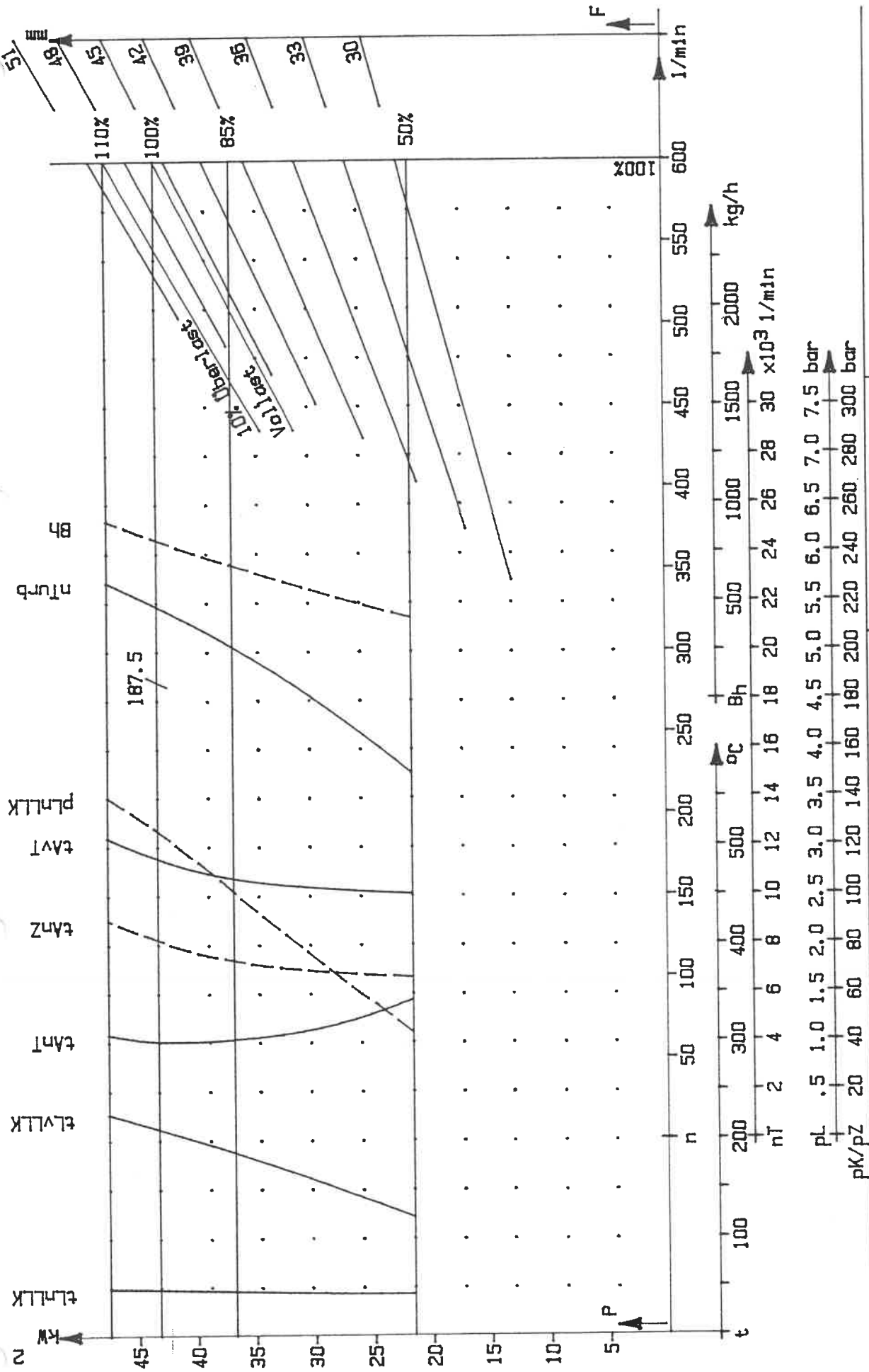
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Basisdaten vom 04.10.1999:		t = 27 °C bei p = 1000 mbar		P 100% = 4320 kW		Motor-Nr.: 37314	
Kraftstoffdichte bei 15 °C =		D kg/l		n 100% = 600 1/min		Motor-Typ: 9 M 32	



Basisdaten vom	04.10.1999;	t =	27 °C bei p = 1000 mbar	P	100% = 4320 kW	Motor-Nr.:	37314
Kraftstoffdichte bei 15 °C =			0 kg/l	n	100% = 600 l/min	Motor-Typ:	9 M 32



Basissdaten vom	04.10.1999:	t =	27 °C bei p = 1000 mbar	P	100% = 4320 kW	Motor-Nr.:	37314
Kraftstoffdichte bei 15 °C =		0 kg/l		n	100% = 600 1/min	Motor-Typ:	9 M 32

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