



ASPC Project



END CUSTOMER	: Arya Sasol Polymer Company
CONTRACTOR	: DYPNF Co., Ltd.
VENDOR NAME	: Airpack Netherlands BV
EQUIPMENT DESCRIPTION	: Screw Compressor & Roots Blower
PURCHASE ORDER NUMBER	: PO-PC2312-08

Customer Document : 3944-VD-0171-DYP-RE-400-DSH-0019
Number

Airpack Document Number : 23383-11B

Document Title : Compressor data sheets

Review Code and Status		Contractor Initials/Signature	Date signed
<input type="checkbox"/>	Code 1 REJECTED - Vendor to revise and Resubmit. Work cannot proceed	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	Code 2 Comments As Noted - Work May proceed, subject to compliance with and incorporation of comments	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	Code 3 No Comments - Work may proceed.	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	Code 4 Information only - Review not required.	<input type="text"/>	<input type="text"/>

02	Issued for Approval	04-07-2025	SC	KP	JJ
01	Issued for Approval	15-05-2025	SC	KP	JJ
00	Issued for Approval	18-03-2025	SC	KP	JJ
Rev. No.	Description	Date	Prepared by	Checked by	Approved by



300 KT polyethylene plant project (ASPC)



DATE: 4-7-2025

DOC NO.: 23383-11B COMPRESSOR DATA SHEET

REV. 02

PAGE: 2 of 6

1	VENDOR (COMPRESSOR)	Airpack Netherlands B.V.			REFERENCE :	23383-COM				
2	TYPE / MODEL	Aerzen VM100			SERIAL NO. :	T-2025-00804/00805				
3	SERVICE	Nitrogen compressor			OPERATION :	Continuous				
4	QUANTITY	2 (1+1)			ITEM NO. :	44C-40001A/B				
5	INLET CONDITIONS				PACKAGE SCOPE OF SUPPLY					
6	GAS HANDLED	Nitrogen			COMPRESSOR TYPE :	Oil free screw				
7	INLET CONDITIONS				DRIVER TYPE :	MV motor				
8	PRESSURE	bar(g)	0,05		COUPLING / GUARD :	Flexible / Non-sparking				
9	TEMPERATURE	°C	48		RCU AND SAFETY SWITCHES FOR MOTORS :	N/A				
10	REL. HUMIDITY	%	0		INTAKE FILTER / SILENCER :	By others / Included				
11	OPERATING DENSITY	kg/m3	1,1		INTERCOOLING :	N/A				
12	MOLECULAR MASS	g/mol	28		AFTERCOOLER :	N/A				
13	Cp/Cv		1,4		LUBE-OIL COOLER :	Air-cooled				
14	Z		1		LUBE-OIL FILTER :	Included				
16	VISCOSITY	PaS	1.92*10 ⁻⁵		AUTO CONDENSATE TRAP :	N/A				
17	DISCHARGE CONDITIONS				AIR DRYER :	N/A				
18	PRESSURE	bar(g)	1,89		NITROGEN GENERATOR :	N/A				
19	FLOW RATE	Nm³/h	6416		BLOW-OFF SILENCER :	N/A				
20	TEMPERATURE	°C	189		CONTROL PANEL :	LPS and Junction box				
21	CONNECTION	ANSI 10" 150# RF			VIBRATION MONITOR :	N/A				
22	COMP. PERFORMANCE				INTERCONNECTING PIPEWORK & VALVES :	N/A				
23	SPEED	rpm	6994		ACOUSTIC ENCLOSURE :	Included				
24	ABSORBED POWER	kW	356		FOUNDATION BOLTS :	Included				
25	TYPE	Oil free screw			RECEIVER VESSELS :	N/A				
26	DESIGN TEMP/PRESS	°C/bar(g)	-10-280 / 5		LIGHTING :	N/A				
27	COMPRESSION RATIO		2,73		BASEPLATE :	Included				
28	VOL. EFFICIENCY	%	99,8		FIRST OIL FILLING :	Included				
	NOISE @ 1M	dBA	80							
29	DRIVER PERFORMANCE 44C-40001A/B-M1				UTILITY SUPPLIES					
30	OPERATING SPEED	rpm	2988		ELECTRICAL SUPPLY :					
31	RATING	kW	450		V	6000	PH	3	Hz	50
32	MANUFACTURER	WEG			V	400	PH	3	Hz	50
33	NO. OF POLES	2			V	230	PH	1	Hz	50
34	DRIVE	DIRECT			COOLING MEDIUM :					
35		NOTE 1			TEMPERATURE :					
36	COOLING METHOD	TEFC			PRESSURE :					
37	SITE CONDITIONS				WEIGHTS AND DIMENSIONS					
38	ELEVATION	m	<1000		COMPRESSOR	kg	3716			
39	AMB. TEMPERATURE	°C	5-48		DRIVER	kg	4100			
40	AMB. PRESSURE	bar(g)	0		MISCELLANEOUS	kg	3900			
41	REL. HUMIDITY	%	65-100		TOTAL	kg	+/-12000			
42	AREA CLASSIFICATION	Zone 2 group IIB, T3								
43	NOISE LIMITATION	dBA	85		SIZE	mm	L X W X H	5700 X 2903 X 2080		
44										
45										
46					BEARING HOUSING					
47	CASING				TYPE					
48	MATERIAL	EN-GJL-250			BALL / ROLLER					
49	COOLING	AIR-COOLED			ROLLER					
50	DRIVE DIRECTION	CW			LUBRICATION					
51					LUBE SYSTEM :					
52					LUBE OIL PUMP DRIVE :					
53	ROTOR				SYSTEM OIL CAPACITY					
54	NO. OF LOBES MALE	4			LUBE OIL COOLER					
55	NO. OF LOBES FEMALE	6			LUBE OIL FILTER					
56	MATERIAL	C45N			THERMOSTATIC VALVE					
57										
58	TIMING GEARS				STANDARDS AND SPECIFICATIONS					
59	MATERIAL	16 Mn Cr5			Compressor: Mfr. Std.					
60	TYPE	HELICAL, TEETH HARDENED								
61	SEALING				INSTRUMENTATION					
62	SHAFT SEALING TYPE	LABYRINTH			FUNCTION			TYPE(S)		
63					COMPRESSOR INLET PRESSURE			GAUGE & TRANSMITTER		
65	SKID / COMPRESSOR CONNECTIONS (ASME B16.5)				COMPRESSOR DISCHARGE TEMPERATURE			TRANSMITTER		
66	NOZZLE	SIZE	RATING	FACING	POSITION	COMPRESSOR DISCHARGE PRESSURE			GAUGE & TRANSMITTER	
67	NITROGEN INLET	12"	150#	RF	TOP	COMPRESSOR OIL TEMPERATURE			TRANSMITTER	
68	NITROGEN DISCHARGE	10"	150#	RF	TOP	COMPRESSOR OIL PRESSURE			GAUGE & TRANSMITTER	
69	PSV OUTLET	6"	150#	RF	TOP	COMPRESSOR ENCLOSURE TEMPERATURE			TRANSMITTER	
70						COMPRESSOR OIL LEVEL			SIGHT GLASS	
70						MAIN MOTOR TEMPERATURE (BEARINGS AND WINDINGS)			RTD	

NOTES : 1: FOR MORE INFORMATION ABOUT THE DRIVER REFER TO MOTOR DATASHEET

72



300 KT polyethylene plant project (ASPC)



DATE: 4-7-2025

DOC NO.: 23383-11B COMPRESSOR DATA SHEET

REV. 02

PAGE: 3 of 6

1	VENDOR (COMPRESSOR):	Airpack Netherlands B.V.	REFERENCE :	23383-COM	
2	TYPE / MODEL:	Aerzen VML95	SERIAL NO.:	T-2025-00806/00807	
3	SERVICE:	Air compressor	OPERATION :	Continuous	
4	QUANTITY:	2 (1+1)	ITEM NO.:	44C-80001A/B	
5	INLET CONDITIONS			PACKAGE SCOPE OF SUPPLY	
6	GAS HANDLED:	Air	COMPRESSOR TYPE:	Oil free screw	
7	INLET CONDITIONS			DRIVER TYPE: MV motor	
8	PRESSURE	bar(g)	0	COUPLING / GUARD: Flexible / Non-sparking	
9	TEMPERATURE	°C	5-48	RCU AND SAFETY SWITCHES FOR MOTORS: N/A	
10	REL. HUMIDITY	%	65-100	INTAKE FILTER / SILENCER: Included	
11	OPERATING DENSITY	kg/m3	1.1	INTERCOOLING: N/A	
12	MOLECULAR MASS	g/mol	28.97	AFTERCOOLER: N/A	
13	Cp/Cv		1.4	LUBE-OIL COOLER: Air-cooled	
14	Z		1	LUBE-OIL FILTER: Included	
15	VISCOSITY	PaS	1.97*10 ⁻⁵		
16	INLET FILTER DIFF. PRESS.	Mbar	10	AUTO CONDENSATE TRAP: N/A	
17	DISCHARGE CONDITIONS			AIR DRYER: N/A	
18	PRESSURE	bar(g)	1.46	NITROGEN GENERATOR: N/A	
19	FLOW RATE	Nm ³ /h	4247	BLOW-OFF SILENCER: N/A	
20	TEMPERATURE	°C	167	CONTROL PANEL: LPS and Junction box	
21	CONNECTION		ANSI 10" 150# RF	VIBRATION MONITOR: N/A	
22	COMP. PERFORMANCE			INTERCONNECTING PIPEWORK & VALVES: N/A	
23	SPEED	rpm	6253	ACOUSTIC ENCLOSURE: Included	
24	ABSORBED POWER	kW	195	FOUNDATION BOLTS: Included	
25	TYPE		Oil free screw	RECEIVER VESSELS: N/A	
26	DESIGN TEMP/PRESS	°C/bar(g)	-10-230 / 3.2	LIGHTING: N/A	
27	COMPRESSION RATIO		2.44	BASEPLATE: Included	
28	VOL. EFFICIENCY	%	96.6	FIRST OIL FILLING: Included	
29	NOISE @ 1M	dBA	78		
29	DRIVER PERFORMANCE 44C-80001A/B-M1			UTILITY SUPPLIES	
30	OPERATING SPEED	rpm	2980	ELECTRICAL SUPPLY :	
31	RATING	kW	250	V	6000 PH 3 Hz 50
32	MANUFACTURER		WEG	V	400 PH 3 Hz 50
33	NO. OF POLES		2	V	230 PH 1 Hz 50
34	DRIVE		DIRECT	COOLING MEDIUM : AIR	
35			NOTE 1	TEMPERATURE: AMBIENT	
36	COOLING METHOD		TEFC	PRESSURE: AMBIENT	
37	SITE CONDITIONS			WEIGHTS AND DIMENSIONS	
38	ELEVATION	m	<1000	COMPRESSOR	kg 2568
39	AMB. TEMPERATURE	°C	5-48	DRIVER	kg 2141
40	AMB. PRESSURE	bar(g)	0	MISCELLANEOUS	kg TBD
41	REL. HUMIDITY	%	65-100	TOTAL	kg TBD
42	AREA CLASSIFICATION		Safe area		
43	NOISE LIMITATION	dBA	85	SIZE	mm L X W X H 5500 X 1700 X 1880
44					
45					
46	BEARING HOUSING				
47	CASING			TYPE	ANTI-FRICTION
48	MATERIAL		EN-GJL-250	BALL / ROLLER	ROLLER
49	COOLING		AIR-COOLED		
50	DRIVE DIRECTION		CW	LUBRICATION	
51				LUBE SYSTEM :	FORCED LUBRICATION, AIR COOLED
52				LUBE OIL PUMP DRIVE :	kW SHAFT DRIVEN
53	ROTORS			SYSTEM OIL CAPACITY	L TBD
54	NO. OF LOBES MALE		3	LUBE OIL COOLER	AIR-COOLED
55	NO. OF LOBES FEMALE		4	LUBE OIL FILTER	INCLUDED
56	MATERIAL		C45N	THERMOSTATIC VALVE	YES
57					
58	TIMING GEARS			STANDARDS AND SPECIFICATIONS	
59	MATERIAL		16 Mn Cr5	Compressor: Mfr. Std.	
60	TYPE		HELICAL, TEETH HARDENED		
61	SEALING			INSTRUMENTATION	
62	SHAFT SEALING TYPE		LABYRINTH	FUNCTION	TYPE(S)
63				COMPRESSOR INLET PRESSURE	GAUGE & TRANSMITTER
64				COMPRESSOR DISCHARGE TEMPERATURE	TRANSMITTER
65	SKID / COMPRESSOR CONNECTIONS (ASME B16.5)			COMPRESSOR DISCHARGE PRESSURE	GAUGE & TRANSMITTER
66	NOZZLE	SIZE	RATING	FACING	POSITION
67					
68	AIR DISCHARGE	10"	150#	RF	TOP
69				COMPRESSOR OIL TEMPERATURE	TRANSMITTER
70				COMPRESSOR OIL PRESSURE	GAUGE & TRANSMITTER
71				COMPRESSOR INLET FILTER DIFF.PRESSURE	TRANSMITTER
72				COMPRESSOR OIL LEVEL	SIGHT GLASS
73				MAIN MOTOR TEMPERATURE (BEARINGS AND WINDINGS)	RTD
71	NOTES : 1: FOR MORE INFORMATION ABOUT THE DRIVER REFER TO MOTOR DATASHEET				
72					



300 KT polyethylene plant project (ASPC)



DATE: 4-7-2025

DOC NO.: 23383-11B COMPRESSOR DATA SHEET

REV. 02

PAGE: 4 of 6

1	VENDOR (COMPRESSOR):	Airpack Netherlands B.V.	REFERENCE :	23383-COM		
2	TYPE / MODEL:	Aerzen GM100S	SERIAL NO.:	T-2025-00808/00809		
3	SERVICE:	Roots Blower	OPERATION :	Semi-Continuous		
4	QUANTITY:	2 (1+1)	ITEM NO.:	44C-80002A/B		
5	INLET CONDITIONS			PACKAGE SCOPE OF SUPPLY		
6	GAS HANDLED:	Air	COMPRESSOR TYPE:	Positive Displacement		
7	INLET CONDITIONS			DRIVER TYPE:	MV motor	
8	PRESSURE	bar(g)	0	COUPLING / GUARD:	V-Belt / V-Belt guard	
9	TEMPERATURE	°C	5-48	RCU AND SAFETY SWITCHES FOR MOTORS:	N/A	
10	REL. HUMIDITY	%	65-100	INTAKE FILTER / SILENCER:	Included	
11	OPERATING DENSITY	kg/m3	1.1	INTERCOOLING:	N/A	
12	MOLECULAR MASS	g/mol	28.97	AFTERCOOLER:	N/A	
13	Cp/Cv		1.4	LUBE-OIL COOLER:	Air-cooled	
14	Z		1	LUBE-OIL FILTER:	Included	
	VISCOSITY	PaS	1.97*10 ⁻⁵			
16	INLET FILTER DIFF. PRESS.	Mbar	10	AUTO CONDENSATE TRAP:	N/A	
17	DISCHARGE CONDITIONS			AIR DRYER:	N/A	
18	PRESSURE	bar(g)	0.97	NITROGEN GENERATOR:	N/A	
19	FLOW RATE	Nm³/h	4266	BLOW-OFF SILENCER:	N/A	
20	TEMPERATURE	°C	154	CONTROL PANEL:	LPS and Junction box	
21	CONNECTION		ANSI 10" 150# RF	VIBRATION MONITOR:	N/A	
22	COMP. PERFORMANCE			INTERCONNECTING PIPEWORK & VALVES:	N/A	
23	SPEED	rpm	2244	ACOUSTIC ENCLOSURE:	Included	
24	ABSORBED POWER	kW	193	FOUNDATION BOLTS:	Included	
25	TYPE		Positive Displacement	RECEIVER VESSELS:	N/A	
26	DESIGN TEMP/PRESS	°C/bar(g)	-10-155 / 2.1	LIGHTING:	N/A	
27	COMPRESSION RATIO		1.95	BASEPLATE:	Included	
28	VOL. EFFICIENCY	%	96.7	FIRST OIL FILLING:	Included	
	NOISE @ 1M	dBA	81			
29	DRIVER PERFORMANCE 44C-80002A/B-M1			UTILITY SUPPLIES		
30	OPERATING SPEED	rpm	1488	ELECTRICAL SUPPLY :		
31	RATING	kW	250	V	6000	PH 3 Hz 50
32	MANUFACTURER		WEG	V	400	PH 3 Hz 50
33	NO. OF POLES		4	V	230	PH 1 Hz 50
34	DRIVE		V-BELT	COOLING MEDIUM : AIR		
35			NOTE 1	TEMPERATURE: AMBIENT		
36	COOLING METHOD		TEFC	PRESSURE: AMBIENT		
37	SITE CONDITIONS			WEIGHTS AND DIMENSIONS		
38	ELEVATION	m	<1000	BLOWER	kg	1408
39	AMB. TEMPERATURE	°C	5-48	DRIVER	kg	2235
40	AMB. PRESSURE	bar(g)	0	MISCELLANEOUS	kg	TBD
41	REL. HUMIDITY	%	65-100	TOTAL	kg	TBD
42	AREA CLASSIFICATION		Safe area			
43	NOISE LIMITATION	dBA	85	SIZE	mm L X W X H	3000 X 2350 X 2600
44						
45						
46	BEARING HOUSING					
47	CASING			TYPE	ANTI-FRICTION	
48	MATERIAL		EN-GJL-200	BALL / ROLLER	ROLLER	
49	COOLING		AIR-COOLED			
50	DRIVE DIRECTION		CW	LUBRICATION		
51				LUBE SYSTEM :		OIL SPLASH LUBRICATION
52				LUBE OIL PUMP DRIVE :	kW	N/A
53	ROTORS/SHAFT			SYSTEM OIL CAPACITY	L	TBD
54	NO. OF LOBES MALE		3	LUBE OIL COOLER		AIR-COOLED
55	NO. OF LOBES FEMALE		3	LUBE OIL FILTER		INCLUDED
56	MATERIAL		EN-GJS-500-7	THERMOSTATIC VALVE		N/A
57						
58	TIMING GEARS			STANDARDS AND SPECIFICATIONS		
59	MATERIAL		16 Mn Cr5	Blower: Mfr. Std.		
60	TYPE		HELICAL, TEETH HARDENED			
61	SEALING			INSTRUMENTATION		
62	SHAFT SEALING TYPE		RADIAL SEAL RING	FUNCTION	TYPE(S)	
63				BLOWER INLET PRESSURE	GAUGE & TRANSMITTER	
65	SKID / COMPRESSOR CONNECTIONS (ASME B16.5)			BLOWER INLET FILTER DIFF. PRESSURE	TRANSMITTER	
66	NOZZLE	SIZE	RATING	FACING	POSITION	BLOWER DISCHARGE TEMPERATURE TRANSMITTER
67						BLOWER DISCHARGE PRESSURE GAUGE & TRANSMITTER
68	AIR DISCHARGE	10"	150#	RF	SIDE	MAIN MOTOR TEMPERATURE (BEARINGS AND WINDINGS) RTD
69						
70						
71	NOTES : 1: FOR MORE INFORMATION ABOUT THE DRIVER REFER TO MOTOR DATASHEET					
72						



300 KT polyethylene plant project (ASPC)



DATE: 4-7-2025

DOC NO.: 23383-11B COMPRESSOR DATA SHEET

REV. 02

PAGE: 5 of 6

1	VENDOR (COMPRESSOR): Airpack Netherlands B.V.	REFERENCE: 23383-COM		
2	TYPE / MODEL: Aerzen VM140	SERIAL NO.: T-2025-00810/00811		
3	SERVICE: Air compressor	OPERATION: Continuous		
4	QUANTITY: 2 (1+1)	ITEM NO.: 44C-80004A/B		
5	INLET CONDITIONS		PACKAGE SCOPE OF SUPPLY	
6	GAS HANDLED: Air	COMPRESSOR TYPE: Oil free screw		
7	INLET CONDITIONS		DRIVER TYPE: MV motor	
8	PRESSURE bar(g) 0	COUPLING / GUARD: Flexible / Non-sparking		
9	TEMPERATURE °C 5-48	RCU AND SAFETY SWITCHES FOR MOTORS: N/A		
10	REL. HUMIDITY % 65-100	INTAKE FILTER / SILENCER: Included		
11	OPERATING DENSITY kg/m3 1.1	INTERCOOLING: N/A		
12	MOLECULAR MASS g/mol 28.97	AFTERCoolER: N/A		
13	Cp/Cv 1.4	LUBE-OIL COOLER: Air-cooled		
14	Z 1	LUBE-OIL FILTER: Included		
15	VISCOSITY PaS 1.97*10⁻⁵			
16	INLET FILTER DIFF. PRESS. Mbar 10	AUTO CONDENSATE TRAP: N/A		
17	DISCHARGE CONDITIONS		AIR DRYER: N/A	
18	PRESSURE bar(g) 2.2	NITROGEN GENERATOR: N/A		
19	FLOW RATE Nm ³ /h 7339	BLOW-OFF SILENCER: N/A		
20	TEMPERATURE °C 205	CONTROL PANEL: LPS and Junction box		
21	CONNECTION ANSI 10" 150# RF	VIBRATION MONITOR: N/A		
22	COMP. PERFORMANCE		INTERCONNECTING PIPEWORK & VALVES: N/A	
23	SPEED rpm 5860	ACOUSTIC ENCLOSURE: Included		
24	ABSORBED POWER kW 479	FOUNDATION BOLTS: Included		
25	TYPE Oil free screw	RECEIVER VESSELS: N/A		
26	DESIGN TEMP/PRESS °C/bar(g) -10-280 / 5	LIGHTING: N/A		
27	COMPRESSION RATIO 3.17	BASEPLATE: Included		
28	VOL. EFFICIENCY % 96.5	FIRST OIL FILLING: Included		
29	NOISE @ 1M dBA 85			
29	DRIVER PERFORMANCE 44C-80004A/B-M1		UTILITY SUPPLIES	
30	OPERATING SPEED rpm 2985	ELECTRICAL SUPPLY:		
31	RATING kW 590	V 6000	PH 3 Hz 50	
32	MANUFACTURER WEG	V 400	PH 3 Hz 50	
33	NO. OF POLES 2	V 230	PH 1 Hz 50	
34	DRIVE DIRECT	COOLING MEDIUM: AIR		
35	NOTE 1	TEMPERATURE: AMBIENT		
36	COOLING METHOD TEFC	PRESSURE: AMBIENT		
37	SITE CONDITIONS		WEIGHTS AND DIMENSIONS	
38	ELEVATION m <1000	COMPRESSOR kg 5298		
39	AMB. TEMPERATURE °C 5-48	DRIVER kg 4002		
40	AMB. PRESSURE bar(g) 0	MISCELLANEOUS kg TBD		
41	REL. HUMIDITY % 65-100	TOTAL kg TBD		
42	AREA CLASSIFICATION Safe area			
43	NOISE LIMITATION dBA 85	SIZE mm L X W X H 6000 X 2180 X 3413		
44				
45				
46	BEARING HOUSING			
47	CASING		TYPE ANTI-FRICTION	
48	MATERIAL EN-GJL-250	BALL / ROLLER ROLLER		
49	COOLING AIR-COOLED			
50	DRIVE DIRECTION CW	LUBRICATION		
51		LUBE SYSTEM:	FORCED LUBRICATION, AIR COOLED	
52		LUBE OIL PUMP DRIVE: kW	SHAFT DRIVEN	
53	ROTORS		SYSTEM OIL CAPACITY L TBD	
54	NO. OF LOBES MALE 4	LUBE OIL COOLER	AIR-COOLED	
55	NO. OF LOBES FEMALE 6	LUBE OIL FILTER	INCLUDED	
56	MATERIAL C45N	THERMOSTATIC VALVE	YES	
57				
58	TIMING GEARS		STANDARDS AND SPECIFICATIONS	
59	MATERIAL 16 Mn Cr5	Compressor: Mfr. Std.		
60	TYPE HELICAL, TEETH HARDENED			
61	SEALING			
62	SHAFT SEALING TYPE LABYRINTH	INSTRUMENTATION		
63		FUNCTION	TYPE(S)	
64		COMPRESSOR INLET PRESSURE	GAUGE & TRANSMITTER	
65	SKID / COMPRESSOR CONNECTIONS (ASME B16.5)		COMPRESSOR DISCHARGE TEMPERATURE TRANSMITTER	
66	NOZZLE	SIZE	RATING	
67			FACING	
68	AIR DISCHARGE 10"	150#	RF	
69			POSITION	
70			COMPRESSOR DISCHARGE PRESSURE GAUGE & TRANSMITTER	
71			COMPRESSOR OIL TEMPERATURE TRANSMITTER	
72			COMPRESSOR OIL PRESSURE GAUGE & TRANSMITTER	
73			COMPRESSOR INLET FILTER DIFF.PRESSURE TRANSMITTER	
74			COMPRESSOR OIL LEVEL SIGHT GLASS	
75			MAIN MOTOR TEMPERATURE (BEARINGS AND WINDINGS) RTD	
76	NOTES : 1: FOR MORE INFORMATION ABOUT THE DRIVER REFER TO MOTOR DATASHEET			



300 KT polyethylene plant project (ASPC)



DATE: 4-7-2025

DOC NO.: 23383-11B COMPRESSOR DATA SHEET

REV. 02

PAGE: 6 of 6

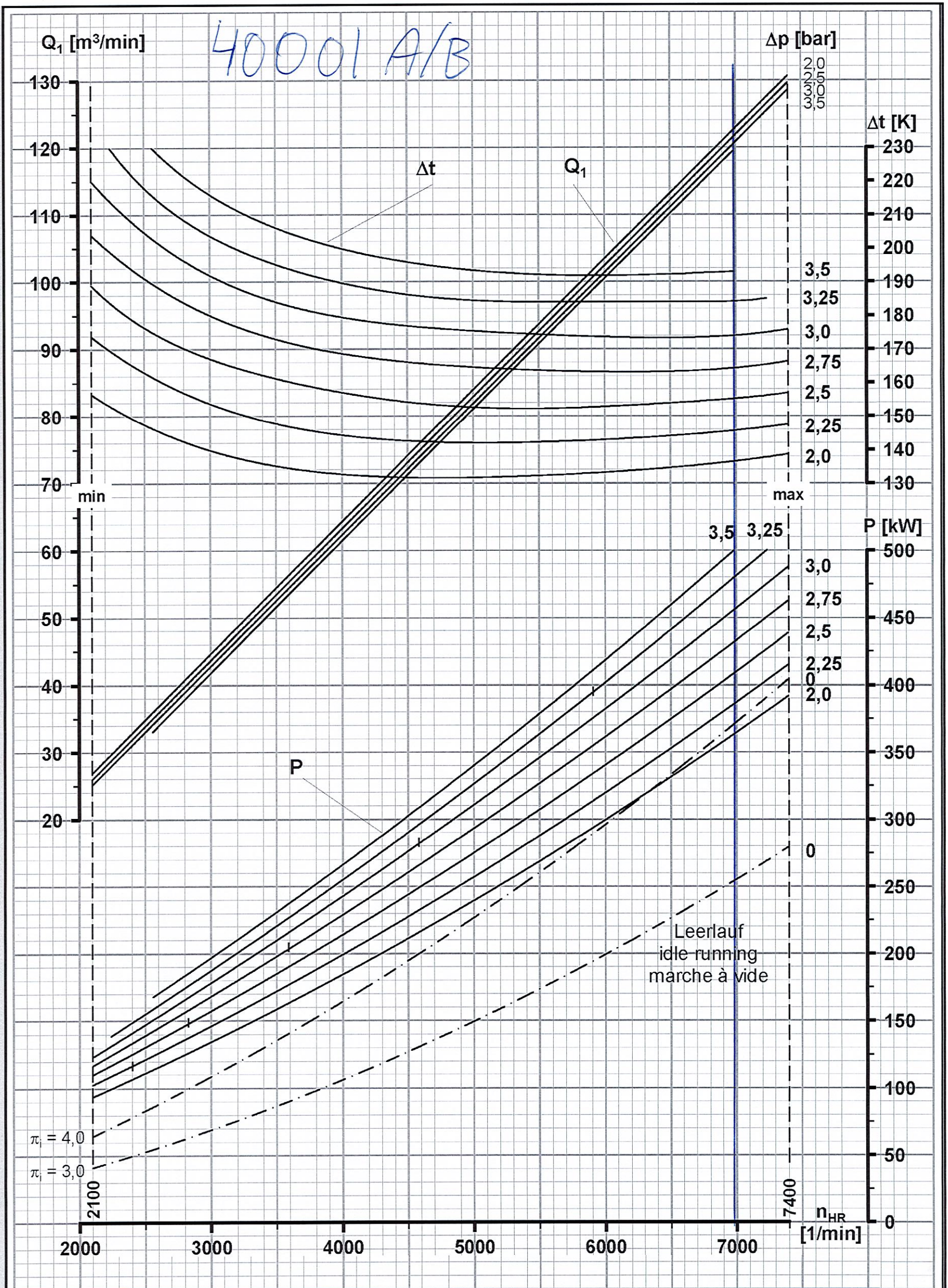
1	VENDOR (COMPRESSOR):	Airpack Netherlands B.V.			REFERENCE :	23383-COM				
2	TYPE / MODEL:	Aerzen VML95			SERIAL NO.:	T-2025-00812/00813/00814				
3	SERVICE:	Air compressor			OPERATION :	Continuous				
4	QUANTITY:	3 (2+1)			ITEM NO.:	44C-80005A/B/C				
5	INLET CONDITIONS				PACKAGE SCOPE OF SUPPLY					
6	GAS HANDLED:	Air			COMPRESSOR TYPE:	Oil free screw				
7	INLET CONDITIONS				DRIVER TYPE:	MV motor				
8	PRESSURE	bar(g)	0		COUPLING / GUARD:	Flexible / Non-sparking				
9	TEMPERATURE	°C	5-48		RCU AND SAFETY SWITCHES FOR MOTORS:	N/A				
10	REL. HUMIDITY	%	65-100		INTAKE FILTER / SILENCER:	Included				
11	OPERATING DENSITY	kg/m ³	1.1		INTERCOOLING:	N/A				
12	MOLECULAR MASS	g/mol	28.97		AFTERCOOLER:	N/A				
13	Cp/Cv		1.4		LUBE-OIL COOLER:	Air-cooled				
14	Z		1		LUBE-OIL FILTER:	Included				
15	VISCOSITY	PaS	1.97*10 ⁻⁵							
16	INLET FILTER DIFF. PRESS.	Mbar	10		AUTO CONDENSATE TRAP:	N/A				
17	DISCHARGE CONDITIONS				AIR DRYER:	N/A				
18	PRESSURE	bar(g)	1.41		NITROGEN GENERATOR:	N/A				
19	FLOW RATE	Nm ³ /h	4226		BLOW-OFF SILENCER:	N/A				
20	TEMPERATURE	°C	164		CONTROL PANEL:	LPS and Junction box				
21	CONNECTION		ANSI 10" 150# RF		VIBRATION MONITOR:	N/A				
22	COMP. PERFORMANCE				INTERCONNECTING PIPEWORK & VALVES:	N/A				
23	SPEED	rpm	6253		ACOUSTIC ENCLOSURE:	Included				
24	ABSORBED POWER	kW	189		FOUNDATION BOLTS:	Included				
25	TYPE		Oil free screw		RECEIVER VESSELS:	N/A				
26	DESIGN TEMP/PRESS	°C/bar(g)	-10-230 / 3.2		LIGHTING:	N/A				
27	COMPRESSION RATIO		2.39		BASEPLATE:	Included				
28	VOL. EFFICIENCY	%	96.6		FIRST OIL FILLING:	Included				
29	NOISE @ 1M	dBA	78							
29	DRIVER PERFORMANCE 44C-80005A/B/C-M1				UTILITY SUPPLIES					
30	OPERATING SPEED	rpm	2980		ELECTRICAL SUPPLY :					
31	RATING	kW	250		V	6000	PH	3	Hz	50
32	MANUFACTURER		WEG		V	400	PH	3	Hz	50
33	NO. OF POLES		2		V	230	PH	1	Hz	50
34	DRIVE		DIRECT		COOLING MEDIUM :	AIR				
35			NOTE 1		TEMPERATURE:	AMBIENT				
36	COOLING METHOD		TEFC		PRESSURE:	AMBIENT				
37	SITE CONDITIONS				WEIGHTS AND DIMENSIONS					
38	ELEVATION	m	<1000		COMPRESSOR	kg	2568			
39	AMB. TEMPERATURE	°C	5-48		DRIVER	kg	2141			
40	AMB. PRESSURE	bar(g)	0		MISCELLANEOUS	kg	TBD			
41	REL. HUMIDITY	%	65-100		TOTAL	kg	TBD			
42	AREA CLASSIFICATION		Safe area							
43	NOISE LIMITATION	dBA	85		SIZE	mm	L X W X H	5500 X 1700 X 1880		
44										
45										
46	CASING				BEARING HOUSING					
47					TYPE	ANTI-FRICTION				
48	MATERIAL		EN-GJL-250		BALL / ROLLER	ROLLER				
49	COOLING		AIR-COOLED							
50	DRIVE DIRECTION		CW		LUBRICATION					
51					LUBE SYSTEM :	FORCED LUBRICATION, AIR COOLED				
52					LUBE OIL PUMP DRIVE :	kW	SHAFT DRIVEN			
53	ROTORS				SYSTEM OIL CAPACITY	L	TBD			
54	NO. OF LOBES MALE		3		LUBE OIL COOLER		AIR-COOLED			
55	NO. OF LOBES FEMALE		4		LUBE OIL FILTER		INCLUDED			
56	MATERIAL		C45N		THERMOSTATIC VALVE		YES			
57										
58	TIMING GEARS				STANDARDS AND SPECIFICATIONS					
59	MATERIAL		16 Mn Cr5		Compressor: Mfr. Std.					
60	TYPE		HELICAL, TEETH HARDENED							
61	SEALING				INSTRUMENTATION					
62	SHAFT SEALING TYPE		LABYRINTH		FUNCTION	TYPE(S)				
63	CONVEYING CHAMBER SEAL TYPE		PISTON RING LABYRINTH		COMPRESSOR INLET PRESSURE	GAUGE & TRANSMITTER				
64	SKID / COMPRESSOR CONNECTIONS (ASME B16.5)				COMPRESSOR DISCHARGE TEMPERATURE	TRANSMITTER				
65	NOZZLE	SIZE	RATING	FACING	POSITION	COMPRESSOR DISCHARGE PRESSURE	GAUGE & TRANSMITTER			
66						COMPRESSOR OIL TEMPERATURE	TRANSMITTER			
67	AIR DISCHARGE	10"	150#	RF	TOP	COMPRESSOR OIL PRESSURE	GAUGE & TRANSMITTER			
68						COMPRESSOR INLET FILTER DIFF.PRESSURE	TRANSMITTER			
69						COMPRESSOR OIL LEVEL	SIGHT GLASS			
70						MAIN MOTOR TEMPERATURE (BEARINGS AND WINDINGS)	RTD			
71	NOTES : 1: FOR MORE INFORMATION ABOUT THE DRIVER REFER TO MOTOR DATASHEET									
72										

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Q_1 : Ansaugvolumenstrom (Luft)
bei $p_1 = 1,0$ bar und $t_1 = 20^\circ C$
 n_{HR} : Hauptrotordrehzahl
 n_V : Antriebswellendrehzahl
 P : Leistungsbedarf an der Kupplung
 Δt : Temperaturerhöhung
 Δp : Druckerhöhung
 π_i : Eingebautes Druckverhältnis

intake volume flow (air)
at $p_1 = 1,0$ bar and $t_1 = 20^\circ C$
main rotor speed
drive shaft speed
power required at the coupling
temperature rise
pressure difference
built-in compression ratio

débit aspiré (air)
pour $p_1 = 1,0$ bar et $t_1 = 20^\circ C$
vitesse du rotor principal
vitesse de l'arbre d'entraînement
puissance absorbée à l'accouplement
élévation de température
pression différentielle
rapport de compression interne

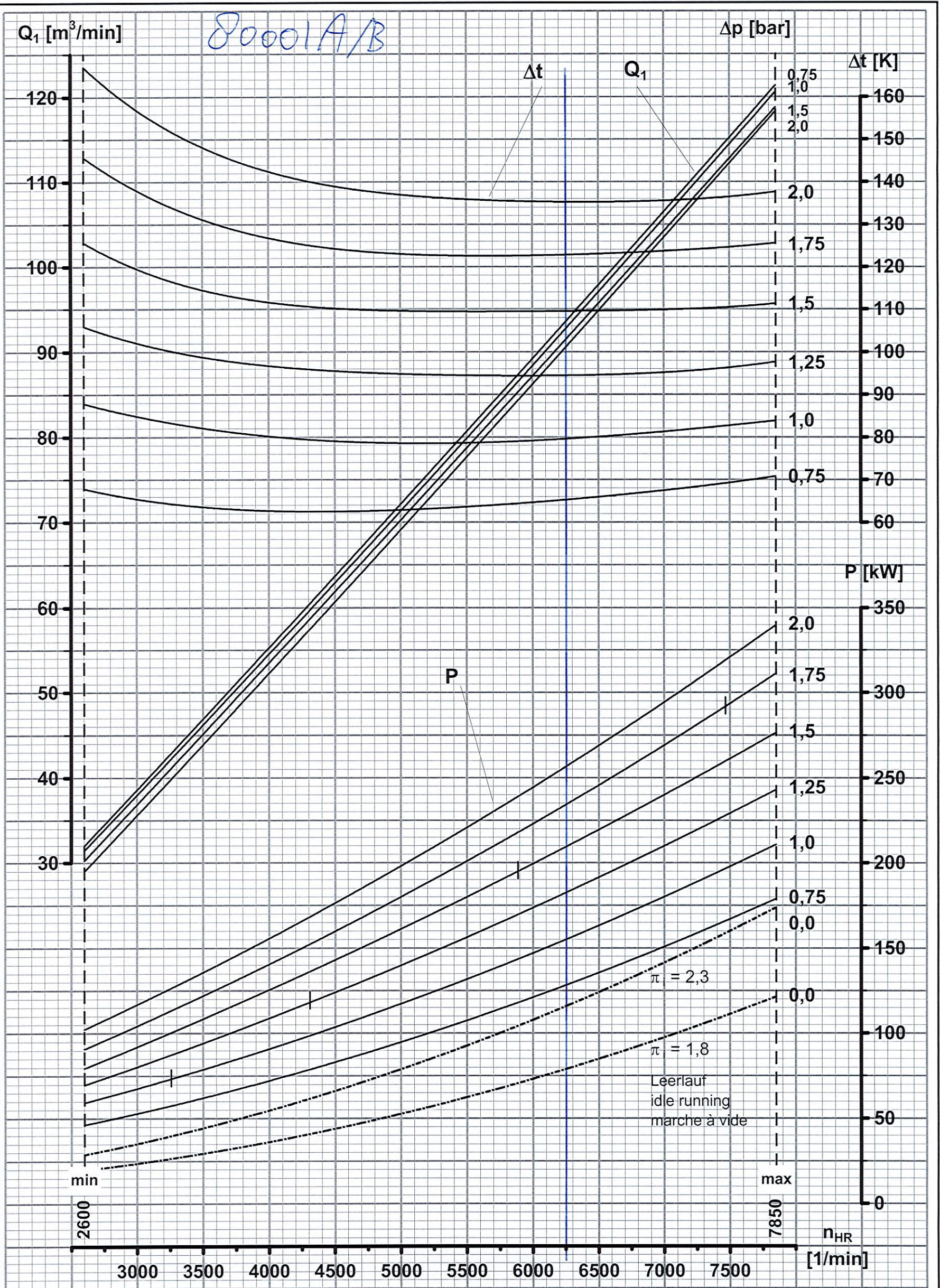
Leistungsdiagramm - Überdruck - für Schraubenverdichterstufe
performance diagram - overpressure - for screw compressor stage
courbes de fonctionnement - fonctionnement en pression - pour étage de compresseur à vis

VM 100

$n_V / n_{HR} = i$

TRD/Evers
11/2017

V2-882
4000661586



Q_1 : Ansaugvolumenstrom (Luft)
bei $p_1 = 1,0$ bar und $t_1 = 20^\circ C$

n_{HR} : Hauptrotordrehzahl

n_V : Verdichterwellendrehzahl

P : Leistungsbedarf an der Kupplung

Δt : Temperaturerhöhung

Δp : Druckerhöhung

π_i : Eingebautes Druckverhältnis

intake volume flow (air)
at $p_1 = 1.0$ bar and $t_1 = 20^\circ C$

main rotor speed

compressor shaft speed

power required at the coupling

temperature rise

pressure difference

built-in compression ratio

débit aspiré (air)
pour $p_1 = 1,0$ bar et $t_1 = 20^\circ C$

vitesse du rotor principal

vitesse de l'arbre du compresseur

puissance absorbée à l'accouplement

élévation de température

pression différentielle

rapport de compression interne

Leistungsdiagramm - Überdruck - für Schraubenverdichterstufe
performance diagram - overpressure - for screw compressor stage
courbes de fonctionnement - fonctionnement en pression - pour étage de compresseur à vis

VML 95

$n_V / n_{HR} = i$

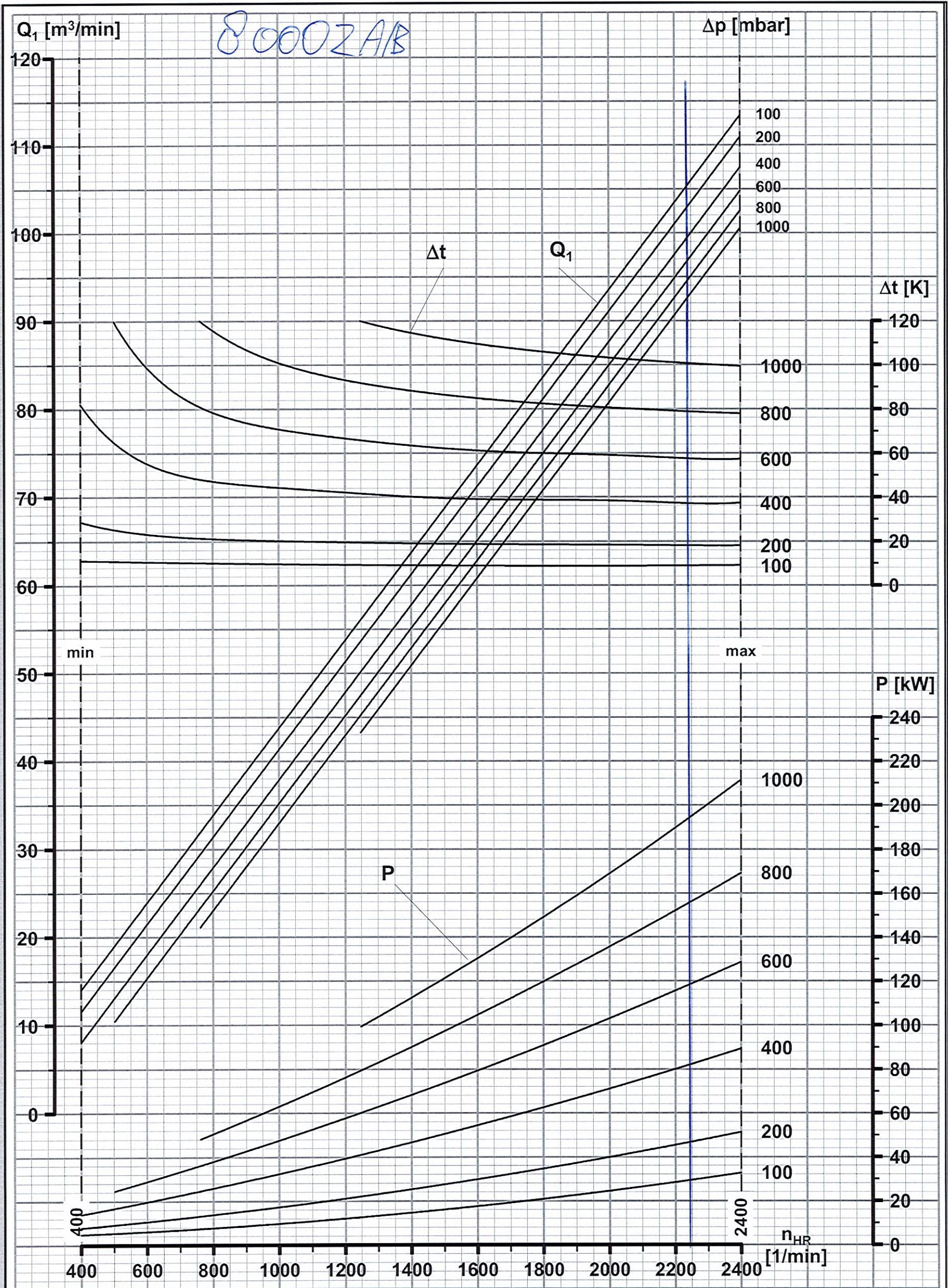
10/2007

V2 - 880 - a

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Q_1 : Ansaugvolumenstrom (Luft)
 bei $p_1 = 1,0$ bar und $t_1 = 20^\circ\text{C}$
 n_{HR} : Hauptrotordrehzahl
 n_V : Antriebswellendrehzahl
 P : Leistungsbedarf an der Kupplung
 Δt : Temperaturerhöhung
 Δp : Druckerhöhung

intake volume flow (air)
 at $p_1 = 1.0$ bar and $t_1 = 20^\circ\text{C}$
 main rotor speed
 drive shaft speed
 power required at the coupling
 temperature rise
 pressure difference

débit aspiré (air)
 pour $p_1 = 1,0$ bar et $t_1 = 20^\circ\text{C}$
 vitesse du rotor principal
 vitesse de l'arbre d'entraînement
 puissance absorbée à l'accouplement
 élévation de température
 pression différentielle

Leistungsdiagramm - Überdruck - für Drehkolbengebläsestufe
 performance diagram - overpressure - for stage of rotary piston blower
 courbes de fonctionnement - fonctionnement en pression - pour étage de surpresseur à pistons rotatifs

GM 100 S

$n_V / n_{HR} = 1$

03/2020
TRD / Evers

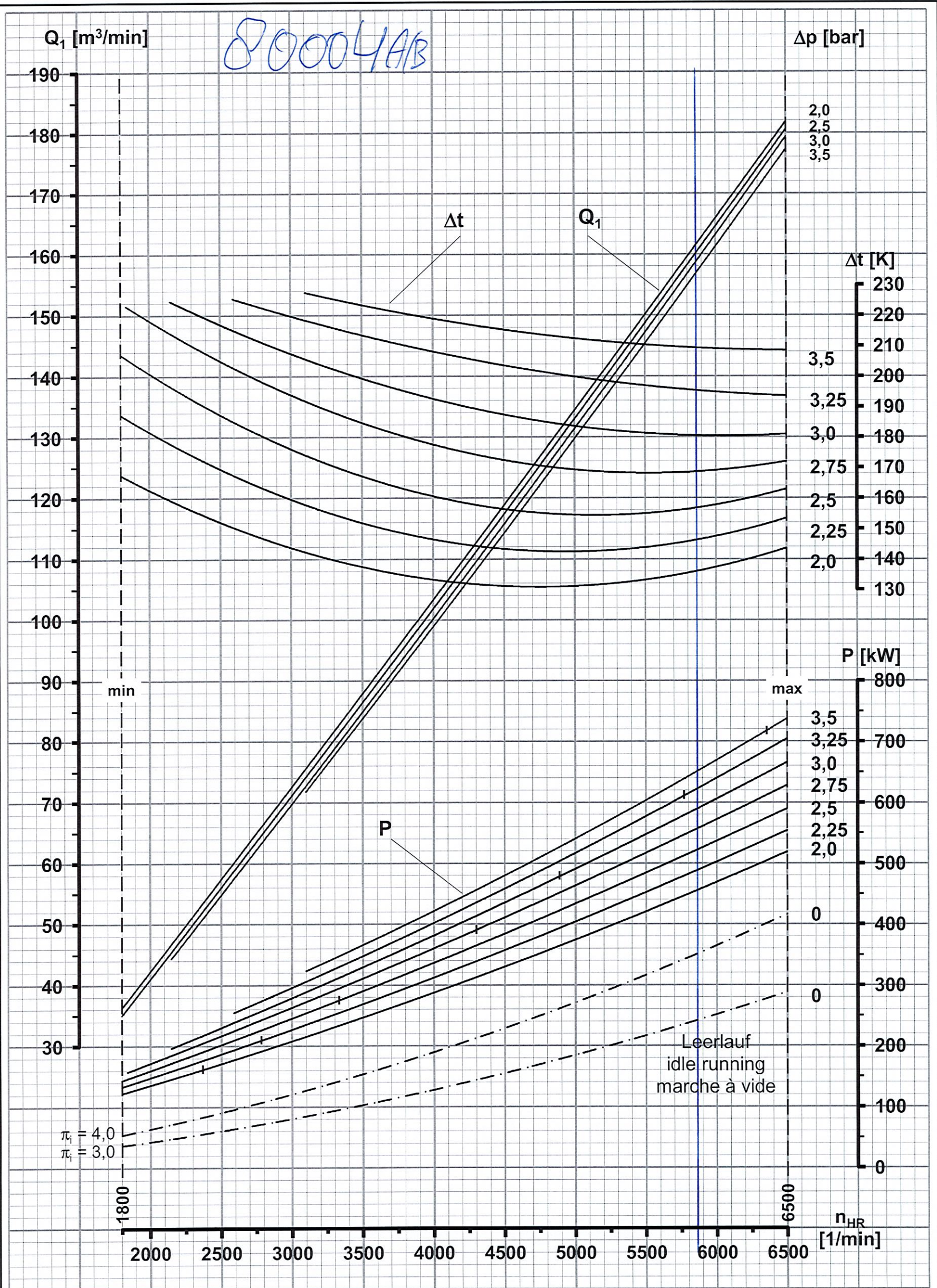
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Q₁ : Ansaugvolumenstrom (Luft)
bei p₁ = 1,0 bar und t₁ = 20°C
n_{HR} : Hauptrotordrehzahl
n_V : Antriebswellendrehzahl
P : Leistungsbedarf an der Kupplung
Δt : Temperaturerhöhung
Δp : Druckerhöhung
π_i : Eingebautes Druckverhältnis

intake volume flow (air)
at p₁ = 1.0 bar and t₁ = 20°C
main rotor speed
drive shaft speed
power required at the coupling
temperature rise
pressure difference
built-in compression ratio

débit aspiré (air)
pour p₁ = 1,0 bar et t₁ = 20°C
vitesse du rotor principal
vitesse de l'arbre d'entraînement
puissance absorbée à l'accouplement
élévation de température
pression différentielle
rapport de compression interne

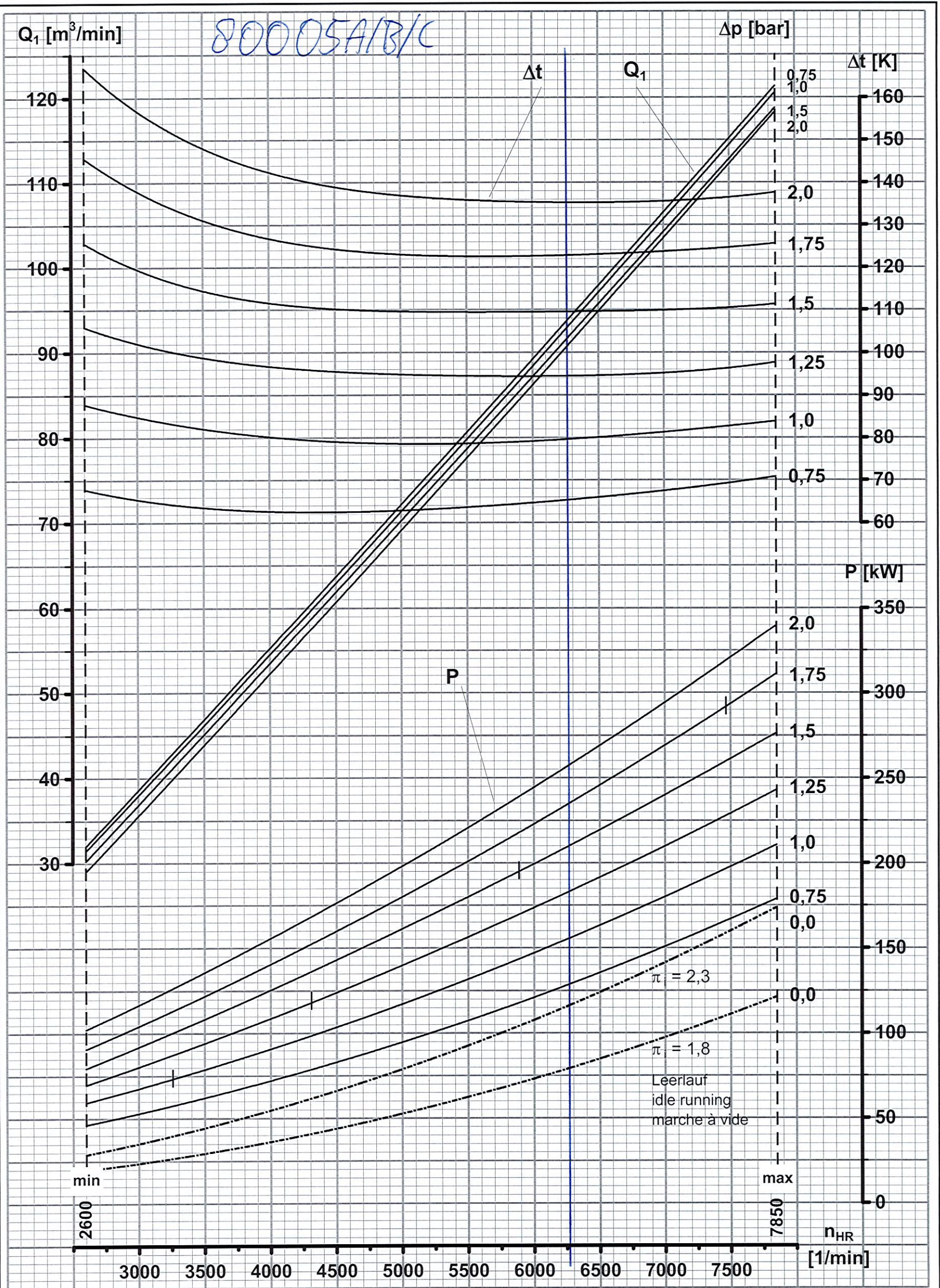
Leistungsdiagramm - **Überdruck** - für Schraubenverdichterstufe
performance diagram - **overpressure** - for screw compressor stage
courbes de fonctionnement - **fonctionnement en pression** - pour étage de compresseur à vis

VM 140

$n_V / n_{HR} = i$

06/2015

V2 - 886
SAP 4000123754



Q_1 : Ansaugvolumenstrom (Luft) bei $p_1 = 1,0$ bar und $t_1 = 20^\circ C$	intake volume flow (air) at $p_1 = 1.0$ bar and $t_1 = 20^\circ C$	débit aspiré (air) pour $p_1 = 1,0$ bar et $t_1 = 20^\circ C$
n_{HR} : Hauptrotordrehzahl	main rotor speed	vitesse du rotor principal
n_V : Verdichterwellendrehzahl	compressor shaft speed	vitesse de l'arbre du compresseur
P : Leistungsbedarf an der Kupplung	power required at the coupling	puissance absorbée à l'accouplement
Δt : Temperaturerhöhung	temperature rise	élévation de température
Δp : Druckerhöhung	pressure difference	pression différentielle
π_i : Eingebautes Druckverhältnis	built-in compression ratio	rapport de compression interne

Leistungsdiagramm - Überdruck - für Schraubenverdichterstufe
 performance diagram - overpressure - for screw compressor stage
 courbes de fonctionnement - fonctionnement en pression - pour étage de compresseur à vis

VML 95

$n_V / n_{HR} = i$	10/2007	V2 - 880 - a
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