300 KT polyethylene plant project (ASPC)

DATE: 20/05/2025	DOC NO.: 23383-11B COMPRESSOR DATA SHEET	REV. 01	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	%	TBD	FIRST OIL FILLING	Included					
	NOISE @ 1M	dBA	80							
29	**DRIVER PERFORMANCE**			**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 :			AIR			
35			NOTE 1	TEMPERATURE:			AMBIENT			
36				PRESSURE:			AMBIENT			
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	TBD			
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	TBD			
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	DRIVEN BY GEARBOX			
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**			**INSTRUMENTATION**						
62	SHAFT SEALING TYPE		LABYRINTH	FUNCTION			TYPE(S)			
63	CONVEYING CHAMBER SEAL TYPE		PISTON RING LABYRINTH	COMPRESSOR INLET PRESSURE			GAUGE & TRANSMITTER			
65	**SKID / COMPRESSOR CONNECTIONS (ANSI)**			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			
71	**NOTES : 1: FOR MORE INFORMATION ABOUT THE DRIVER REFER TO 3944-VD-0171-DYP-RE-400-LST-0004**									
72										

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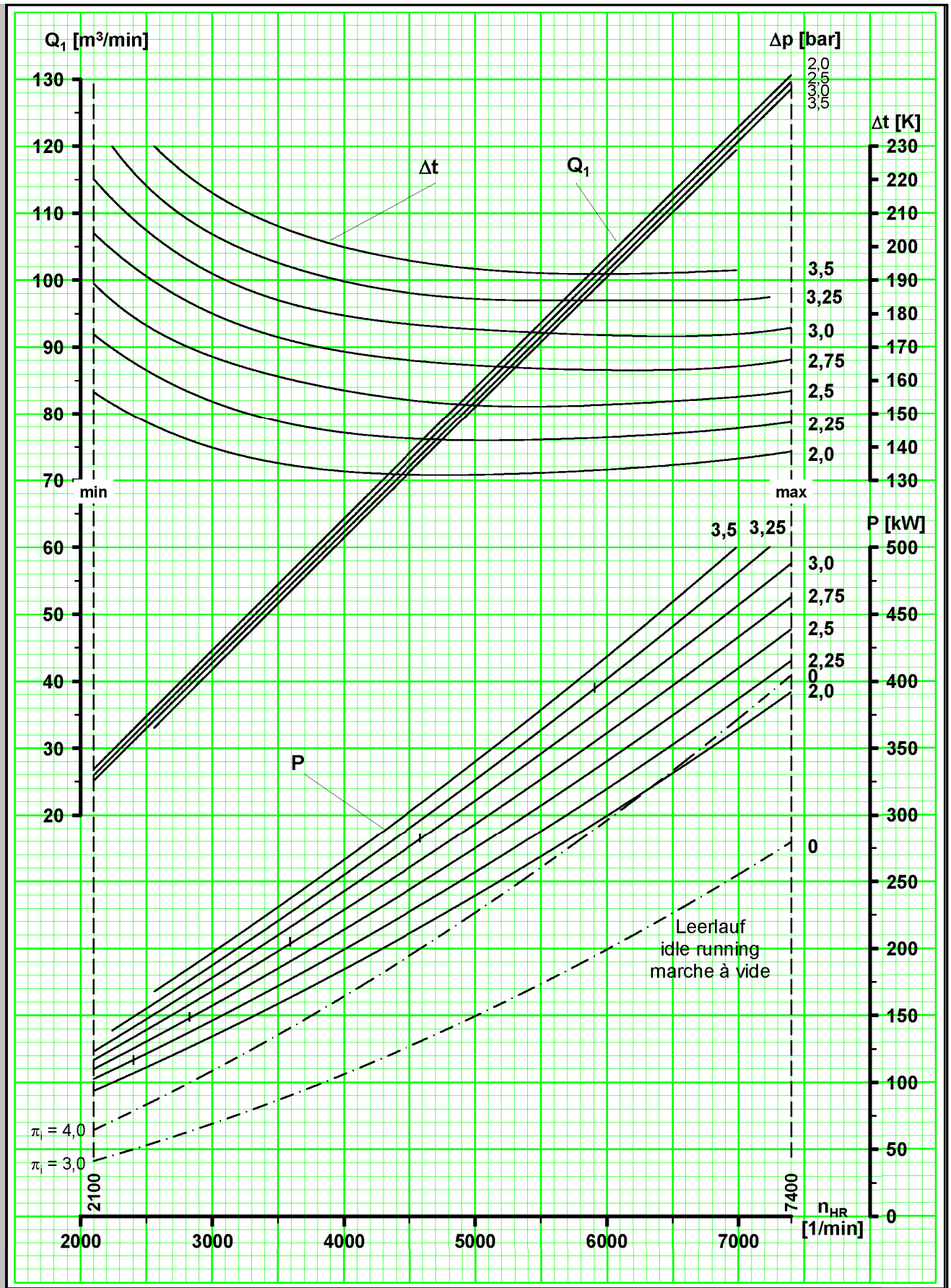


Q_1 : Ansaugvolumenstrom (Luft) bei p_1 = 1,0 bar und t_1 = 20°C	intake volume flow (air) at p_1 = 1.0 bar and t_1 = 20°C	débit aspiré (air) pour p_1 = 1,0 bar et t_1 = 20°C
n_{HR} : Hauptrotordrehzahl	main rotor speed	vitesse du rotor principal
n_V : Antriebswellendrehzahl	drive shaft speed	vitesse de l'arbre d'entraînement
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

VM 100

$n_V / n_{HR} = i$	TRD/Evers 11/2017	V2-882 4000661586

AERZEN
EXPECT PERFORMANCE

Startup Curve

Project
[redacted]

Annotations

Client	Order Number
	[redacted]

		Operating Mode Δp=1840 mbar		☑ Idle Mode $p1 = p2$=1063 mbar (a)	
Main rotor speed	n_{HR}	**6994**	1/min	**6994**	1/min
Motor Speed	n_{Mot}	**2988**	1/min	**2988**	1/min
Power consumption at coupling	P_K	**356**	kW	**40**	kW
Torque at Motor Shaft	M_L	**1138**	Nm	**128**	Nm
Moment of Inertia at Motor Shaft	$J_{red} = mr^2$	**9,99**	kgm²		
		Operating Mode		Idle Mode	

The nominal rating of the driving machine must be selected at least 10% higher than the power of the compressor shaft.

Application Example. All information is subject to change.

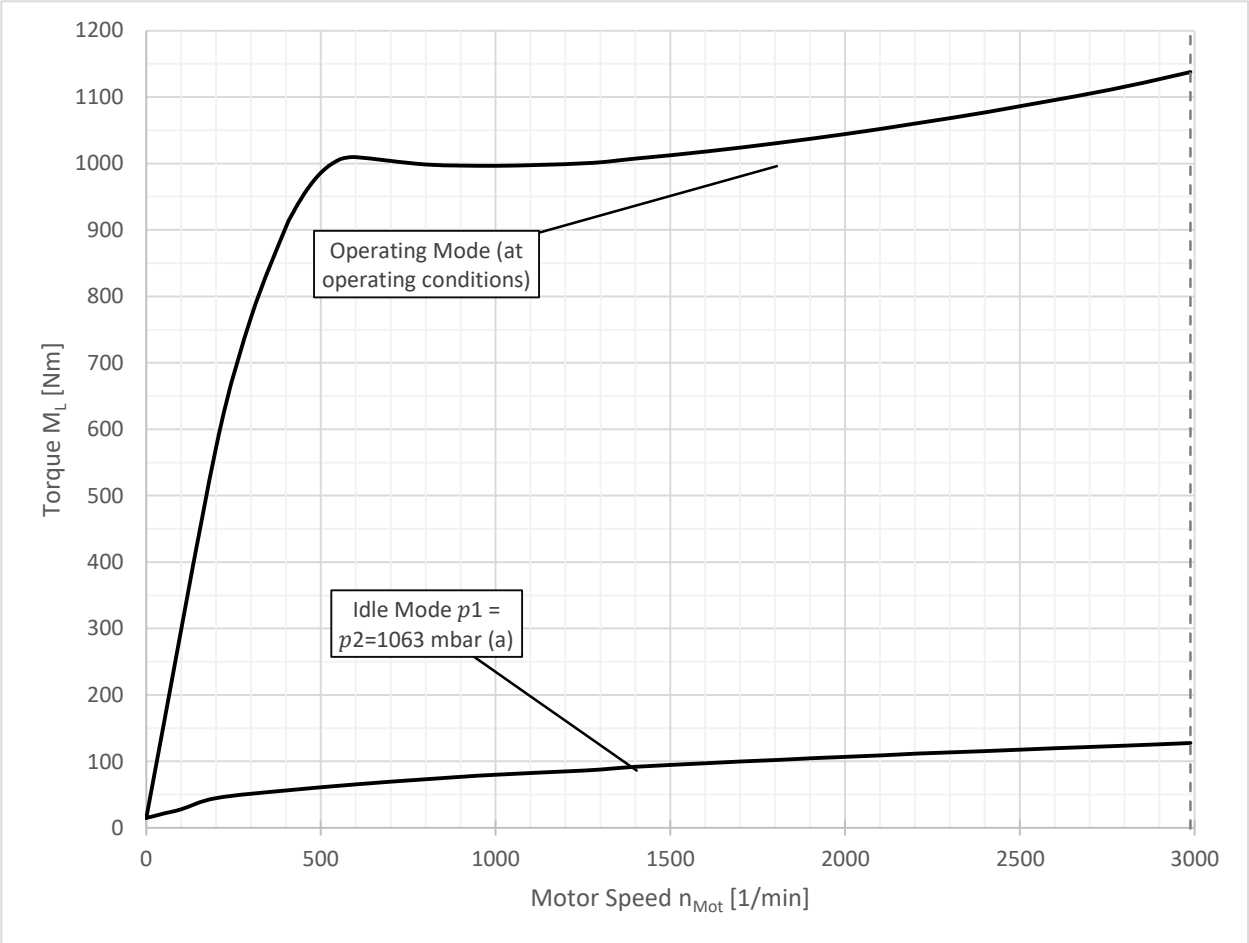
AERZEN
EXPECT PERFORMANCE

Startup Curve

Project
[redacted]

Annotations

Client	Order Number
	[redacted]



Startup Curve Screw Compressor VM 100

AERZEN
EXPECT PERFORMANCE

Startup Curve

Project
[redacted]

Annotations

Client	Order Number
	[redacted]

Application Example. All information is subject to change.

300 KT polyethylene plant project (ASPC)

DATE: 20/05/2025	DOC NO.: 23383-11B COMPRESSOR DATA SHEET	REV. 01	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					
	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	Nm³/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	%	TBD		FIRST OIL FILLING	Included					
	NOISE @ 1M	dBA	78								
29	DRIVER PERFORMANCE				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					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	TBD			
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	DRIVEN BY GEARBOX				
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				
65	SKID / COMPRESSOR CONNECTIONS				COMPRESSOR DISCHARGE TEMPERATURE		TRANSMITTER				
66	NOZZLE	SIZE	RATING	FACING	POSITION	COMPRESSOR DISCHARGE PRESSURE		GAUGE & TRANSMITTER			
67						COMPRESSOR OIL TEMPERATURE		TRANSMITTER			
68	AIR DISCHARGE	10"	150#	RF	TOP	COMPRESSOR OIL PRESSURE		GAUGE & TRANSMITTER			
69						COMPRESSOR INLET FILTER DIFF.PRESSURE		TRANSMITTER			
70						COMPRESSOR OIL LEVEL		SIGHT GLASS			
70						MAIN MOTOR TEMPERATURE (BEARINGS AND WINDINGS)		RTD			

71 NOTES : 1: FOR MORE INFORMATION ABOUT THE DRIVER REFER TO 3944-VD-0171-DYP-RE-400-LST-0004

72

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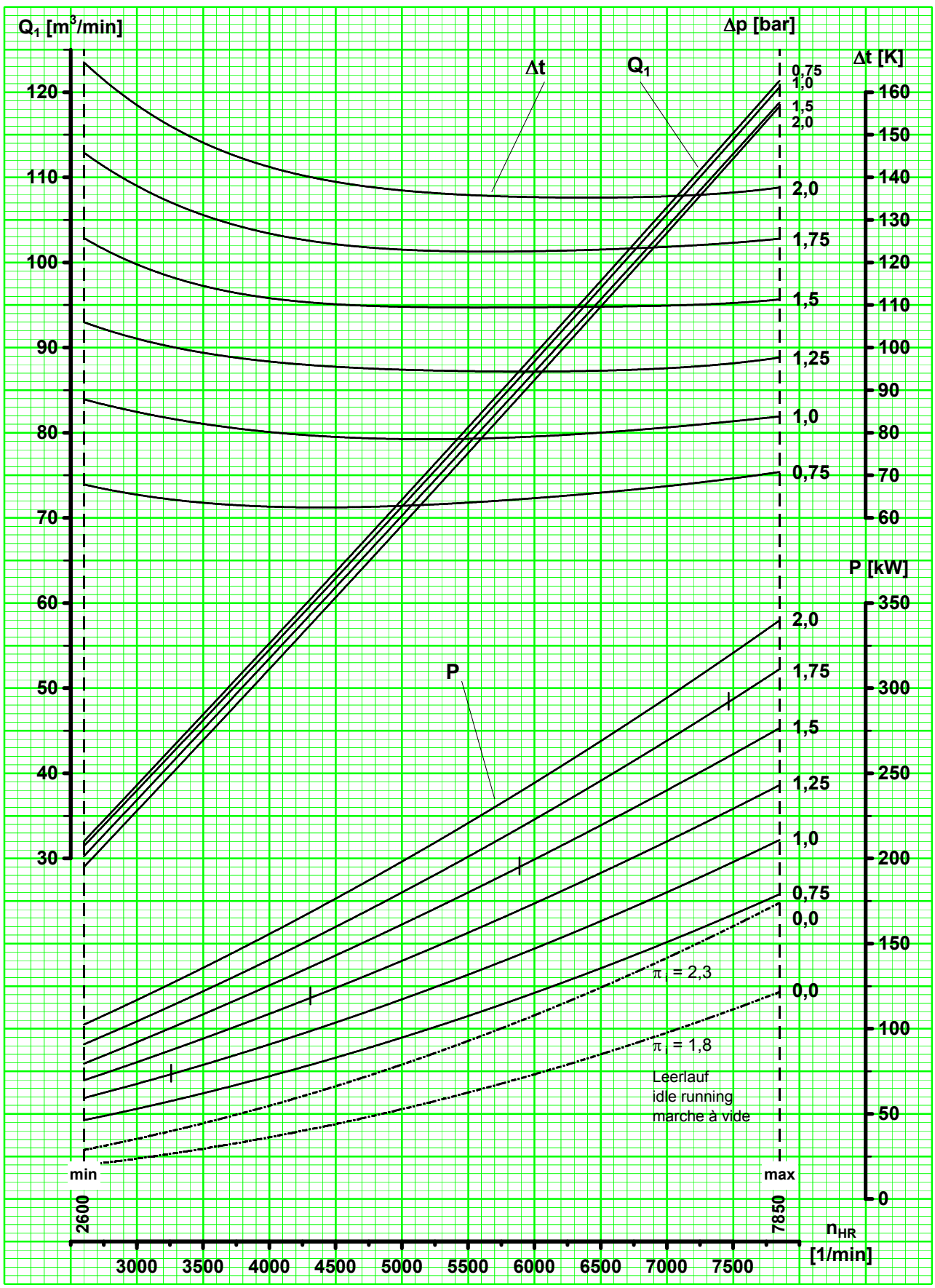

Q_1 : Ansaugvolumenstrom (Luft) bei p_1 = 1,0 bar und t_1 = 20°C	intake volume flow (air) at p_1 = 1.0 bar and t_1 = 20°C	débit aspiré (air) pour p_1 = 1,0 bar et t_1 = 20°C
n_{HR} : Hauptrotordrehzahl	main rotor speed	vitesse du rotor principal
n_V : Verdichterwellendrehzahl	compressor shaft speed	vitesse 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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EXPECT PERFORMANCE

Startup Curve

Project
[redacted]

Annotations

Client	Order Number
	[redacted]

		Operating Mode Δp=1460 mbar		☑ Idle Mode $p1 = p2$=1013 mbar (a)	
Main rotor speed	n_{HR}	**6253**	1/min	**6253**	1/min
Motor Speed	n_{Mot}	**2980**	1/min	**2980**	1/min
Power consumption at coupling	P_K	**195**	kW	**40**	kW
Torque at Motor Shaft	M_L	**625**	Nm	**128**	Nm
Moment of Inertia at Motor Shaft	$J_{red} = mr^2$	**6,33**	kgm²		
		Operating Mode		Idle Mode	

The nominal rating of the driving machine must be selected at least 10% higher than the power of the compressor shaft.

Application Example. All information is subject to change.

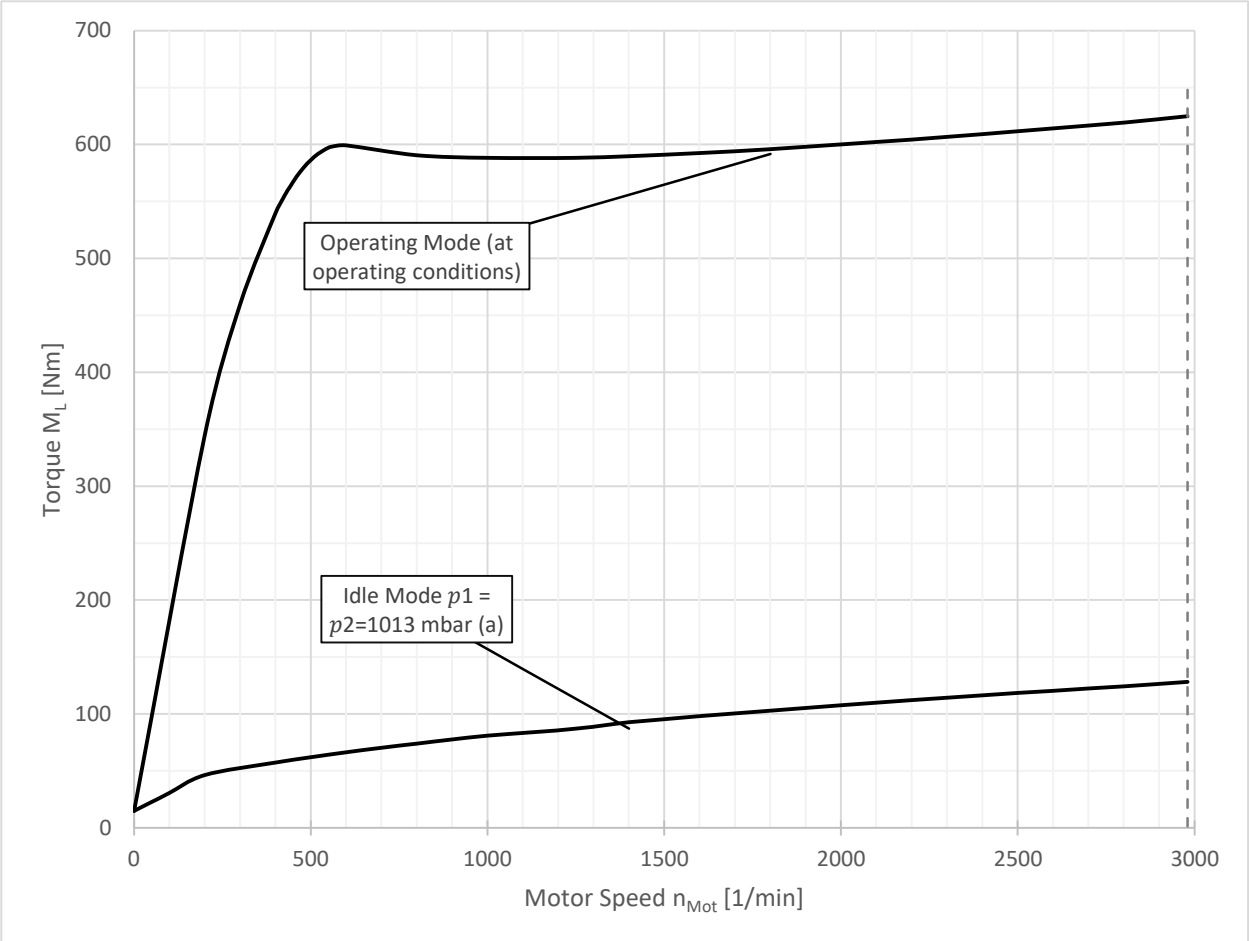
AERZEN
EXPECT PERFORMANCE

Startup Curve

Project
[redacted]

Annotations

Client	Order Number
	[redacted]



Startup Curve Screw Compressor VML 95

AERZEN
EXPECT PERFORMANCE

Startup Curve

Project
[redacted]

Annotations

Client	Order Number
	[redacted]

Application Example. All information is subject to change.

300 KT polyethylene plant project (ASPC)

DATE: 20/05/2025	DOC NO.: 23383-11B COMPRESSOR DATA SHEET	REV. 01	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 :	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	%	TBD	FIRST OIL FILLING	Included						
	NOISE @ 1M	dBA	81								
29	**DRIVER PERFORMANCE**			**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				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	TBD				
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	CONVEYING CHAMBER SEAL TYPE		PISTON RING LABYRINTH x4	BLOWER INLET PRESSURE				GAUGE & TRANSMITTER			
65	**SKID / COMPRESSOR CONNECTIONS**			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											
70											
71	NOTES : 1: FOR MORE INFORMATION ABOUT THE DRIVER REFER TO 3944-VD-0171-DYP-RE-400-LST-0004										
72											

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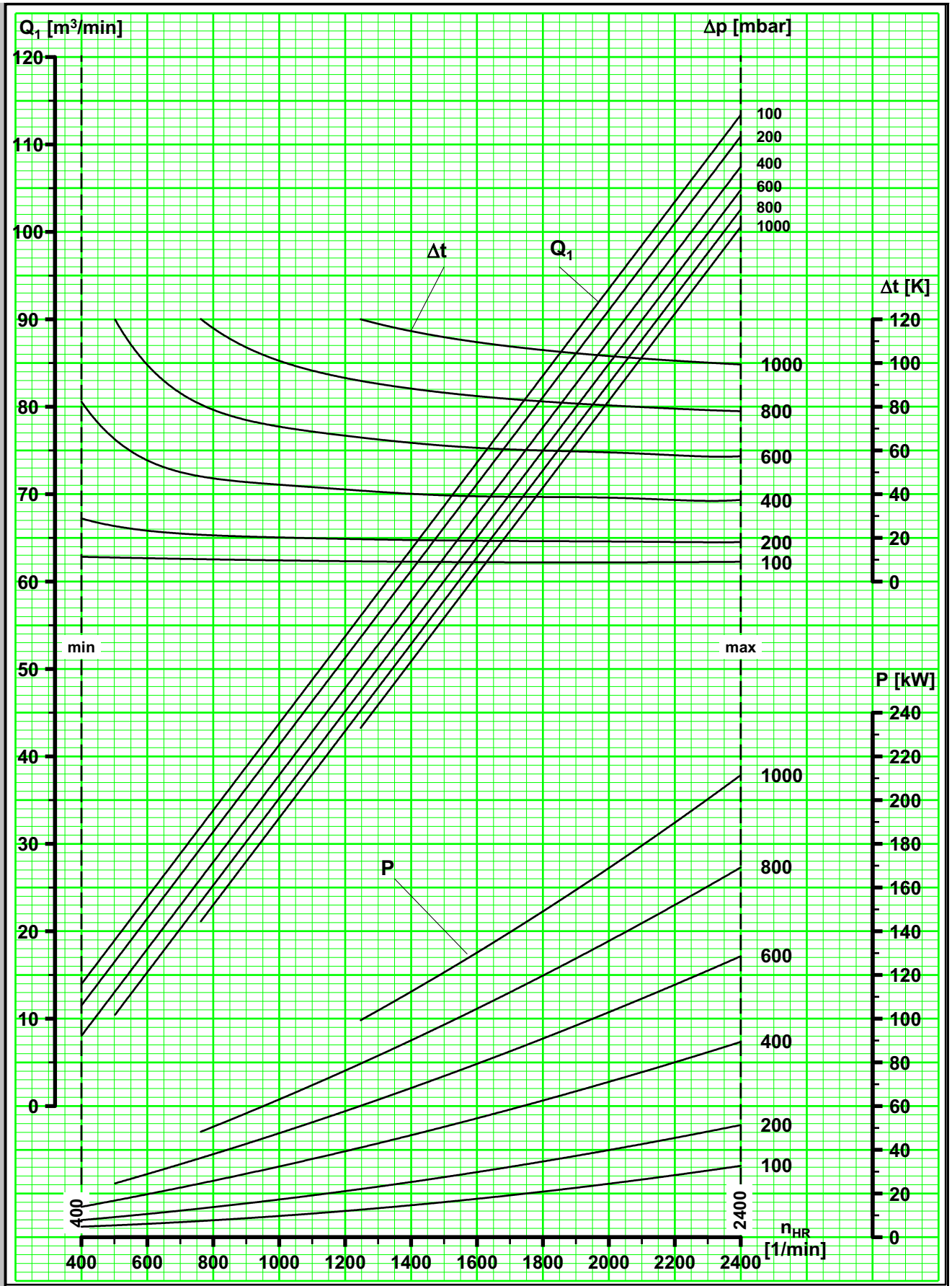


Q_1 : Ansaugvolumenstrom (Luft) bei p_1 = 1,0 bar und t_1 = 20°C	intake volume flow (air) at p_1 = 1.0 bar and t_1 = 20°C	débit aspiré (air) pour p_1 = 1,0 bar et t_1 = 20°C
n_{HR} : Hauptrotordrehzahl	main rotor speed	vitesse du rotor principal
n_V : Antriebswellendrehzahl	drive shaft speed	vitesse de l'arbre d'entraînement
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

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

nV / nHR = 1	03/2020 TRD / Evers	4000556899

AERZEN
EXPECT PERFORMANCE

Startup Curve

Project
[redacted]

Annotations

Client	Order Number
	[redacted]

		Operating Mode Δp=970 mbar		☑ Idle Mode $p1 = p2$=1013 mbar (a)	
Main rotor speed	n_{HR}	**2244**	1/min	**2244**	1/min
Motor Speed	n_{Mot}	**1488**	1/min	**1488**	1/min
Power consumption at coupling	P_K	**193**	kW	**40**	kW
Torque at Motor Shaft	M_L	**1239**	Nm	**257**	Nm
Moment of Inertia at Motor Shaft	$J_{red} = mr^2$	**6,82**	kgm²		
		Operating Mode		Idle Mode	

The nominal rating of the driving machine must be selected at least 10% higher than the power of the compressor shaft.

Application Example. All information is subject to change.

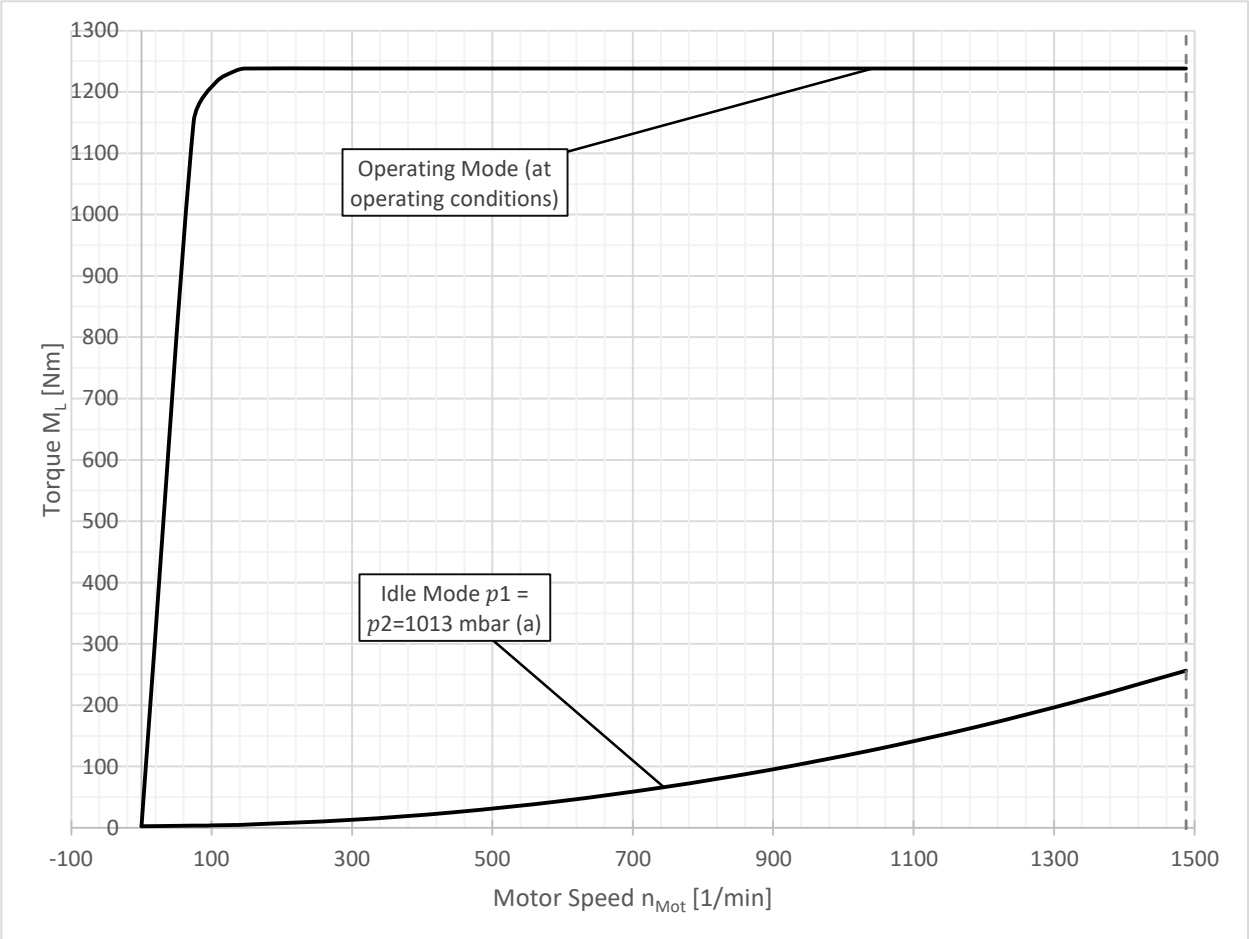
AERZEN
EXPECT PERFORMANCE

Startup Curve

Project
[redacted]

Annotations

Client	Order Number
	[redacted]



Startup Curve Blower GM 100S

AERZEN
EXPECT PERFORMANCE

Startup Curve

Project
[redacted]

Annotations

Client	Order Number
	[redacted]

Application Example. All information is subject to change.

300 KT polyethylene plant project (ASPC)

DATE: 20/05/2025	DOC NO.: 23383-11B COMPRESSOR DATA SHEET	REV. 01	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						
	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	Nm³/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	%	TBD	FIRST OIL FILLING	Included						
	NOISE @ 1M	dBA	85								
29	**DRIVER PERFORMANCE**			**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				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	TBD				
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	DRIVEN BY GEARBOX				
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**			**INSTRUMENTATION**							
62	SHAFT SEALING TYPE		LABYRINTH	FUNCTION			TYPE(S)				
63	CONVEYING CHAMBER SEAL TYPE		PISTON RING LABYRINTH	COMPRESSOR INLET PRESSURE			GAUGE & TRANSMITTER				
65	**SKID / COMPRESSOR CONNECTIONS**			COMPRESSOR DISCHARGE TEMPERATURE			TRANSMITTER				
66	NOZZLE	SIZE	RATING	FACING	POSITION	COMPRESSOR DISCHARGE PRESSURE			GAUGE & TRANSMITTER		
67						COMPRESSOR OIL TEMPERATURE			TRANSMITTER		
68	AIR DISCHARGE	10"	150#	RF	TOP	COMPRESSOR OIL PRESSURE			GAUGE & TRANSMITTER		
69						COMPRESSOR INLET FILTER DIFF.PRESSURE			TRANSMITTER		
70						COMPRESSOR OIL LEVEL			SIGHT GLASS		
70						MAIN MOTOR TEMPERATURE (BEARINGS AND WINDINGS)			RTD		

71 **NOTES : 1: FOR MORE INFORMATION ABOUT THE DRIVER REFER TO 3944-VD-0171-DYP-RE-400-LST-0004**

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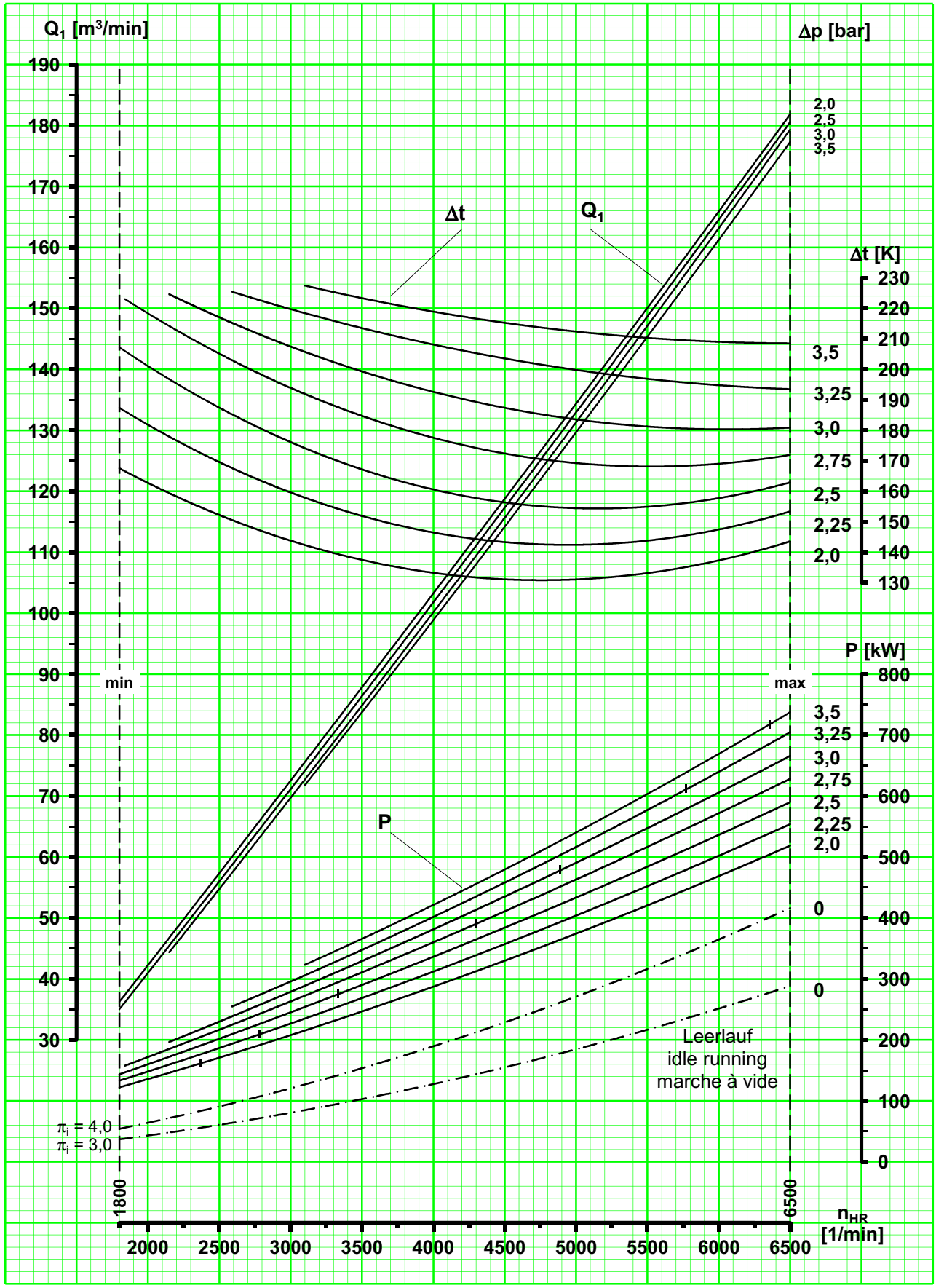


Q_1 : Ansaugvolumenstrom (Luft) bei p_1 = 1,0 bar und t_1 = 20°C	intake volume flow (air) at p_1 = 1.0 bar and t_1 = 20°C	débit aspiré (air) pour p_1 = 1,0 bar et t_1 = 20°C
n_{HR} : Hauptrotordrehzahl	main rotor speed	vitesse du rotor principal
n_V : Antriebswellendrehzahl	drive shaft speed	vitesse de l'arbre d'entraînement
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

VM 140

$n_V / n_{HR} = i$	06/2015	V2 - 886 SAP 4000123754

AERZEN
EXPECT PERFORMANCE

Startup Curve

Project
[redacted]

Annotations

Client	Order Number
	[redacted]

		Operating Mode Δp=2200 mbar		☑ Idle Mode $p1 = p2$=1013 mbar (a)	
Main rotor speed	n_{HR}	**5860**	1/min	**5860**	1/min
Motor Speed	n_{Mot}	**2985**	1/min	**2985**	1/min
Power consumption at coupling	P_K	**479**	kW	**40**	kW
Torque at Motor Shaft	M_L	**1532**	Nm	**128**	Nm
Moment of Inertia at Motor Shaft	$J_{red} = mr^2$	**24,33**	kgm²		
		Operating Mode		Idle Mode	

The nominal rating of the driving machine must be selected at least 10% higher than the power of the compressor shaft.

Application Example. All information is subject to change.

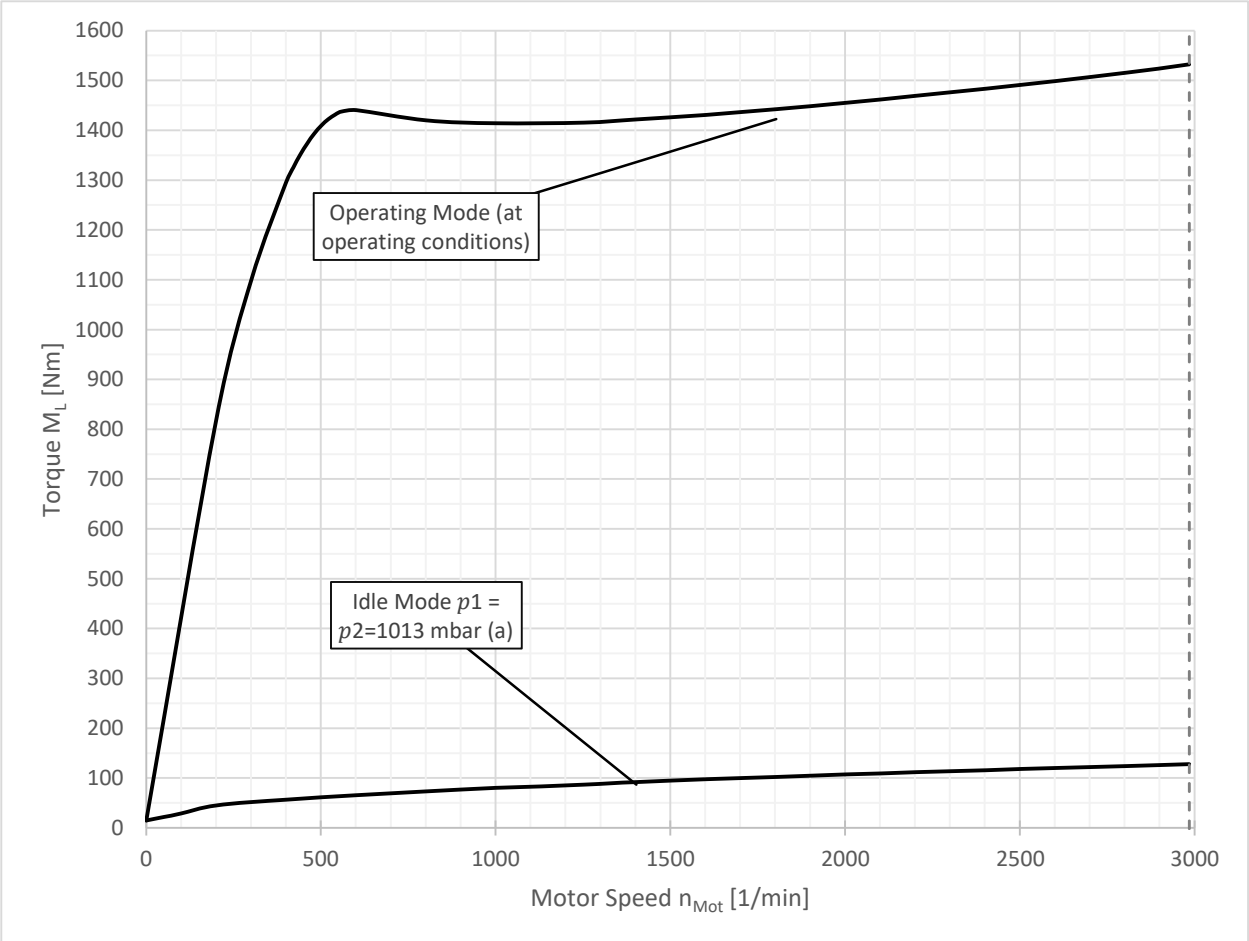
AERZEN
EXPECT PERFORMANCE

Startup Curve

Project
[redacted]

Annotations

Client	Order Number
	[redacted]



Startup Curve Screw Compressor VM 140

AERZEN
EXPECT PERFORMANCE

Startup Curve

Project
[redacted]

Annotations

Client	Order Number
	[redacted]

Application Example. All information is subject to change.

300 KT polyethylene plant project (ASPC)

DATE: 20/05/2025	DOC NO.: 23383-11B COMPRESSOR DATA SHEET	REV. 01	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/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)	1.41		NITROGEN GENERATOR:	N/A					
19	FLOW RATE	Nm³/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	%	TBD		FIRST OIL FILLING	Included					
	NOISE @ 1M	dBA	78								
29	DRIVER PERFORMANCE				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					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	TBD			
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	DRIVEN BY GEARBOX				
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				
65	SKID / COMPRESSOR CONNECTIONS				COMPRESSOR DISCHARGE TEMPERATURE		TRANSMITTER				
66	NOZZLE	SIZE	RATING	FACING	POSITION	COMPRESSOR DISCHARGE PRESSURE		GAUGE & TRANSMITTER			
67						COMPRESSOR OIL TEMPERATURE		TRANSMITTER			
68	AIR DISCHARGE	10"	150#	RF	TOP	COMPRESSOR OIL PRESSURE		GAUGE & TRANSMITTER			
69						COMPRESSOR INLET FILTER DIFF.PRESSURE		TRANSMITTER			
70						COMPRESSOR OIL LEVEL		SIGHT GLASS			
70						MAIN MOTOR TEMPERATURE (BEARINGS AND WINDINGS)		RTD			

71 NOTES : 1: FOR MORE INFORMATION ABOUT THE DRIVER REFER TO 3944-VD-0171-DYP-RE-400-LST-0004

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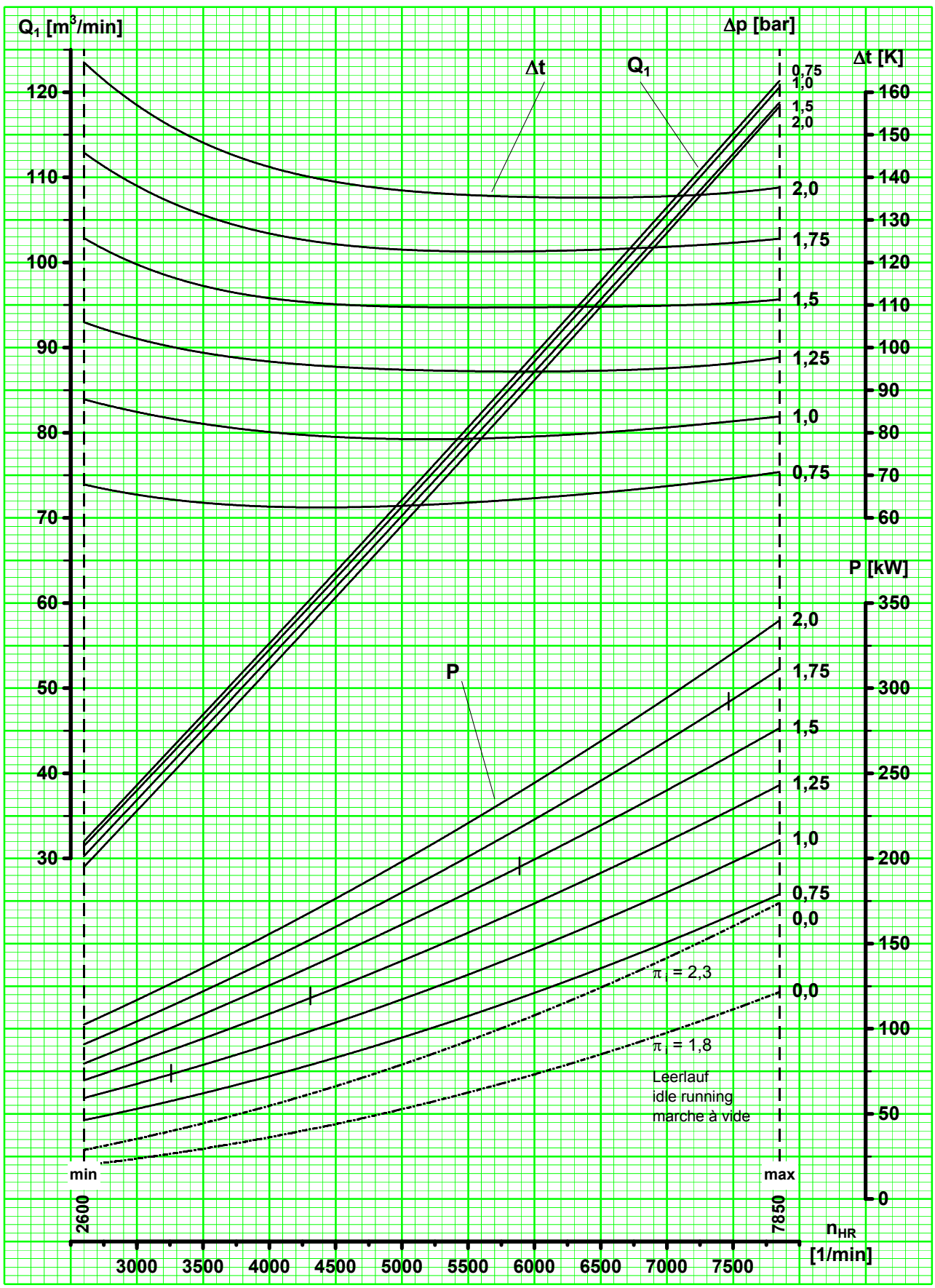


Q_1 : Ansaugvolumenstrom (Luft) bei p_1 = 1,0 bar und t_1 = 20°C	intake volume flow (air) at p_1 = 1.0 bar and t_1 = 20°C	débit aspiré (air) pour p_1 = 1,0 bar et t_1 = 20°C
n_{HR} : Hauptrotordrehzahl	main rotor speed	vitesse du rotor principal
n_V : Verdichterwellendrehzahl	compressor shaft speed	vitesse 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**

AERZEN
EXPECT PERFORMANCE

Startup Curve

Project
[redacted]

Annotations

Client	Order Number
	[redacted]

		Operating Mode Δp=1410 mbar		☑ Idle Mode $p1 = p2$=1013 mbar (a)	
Main rotor speed	n_{HR}	**6253**	1/min	**6253**	1/min
Motor Speed	n_{Mot}	**2980**	1/min	**2980**	1/min
Power consumption at coupling	P_K	**189**	kW	**40**	kW
Torque at Motor Shaft	M_L	**606**	Nm	**128**	Nm
Moment of Inertia at Motor Shaft	$J_{red} = mr^2$	**6,33**	kgm²		
		Operating Mode		Idle Mode	

The nominal rating of the driving machine must be selected at least 10% higher than the power of the compressor shaft.

Application Example. All information is subject to change.

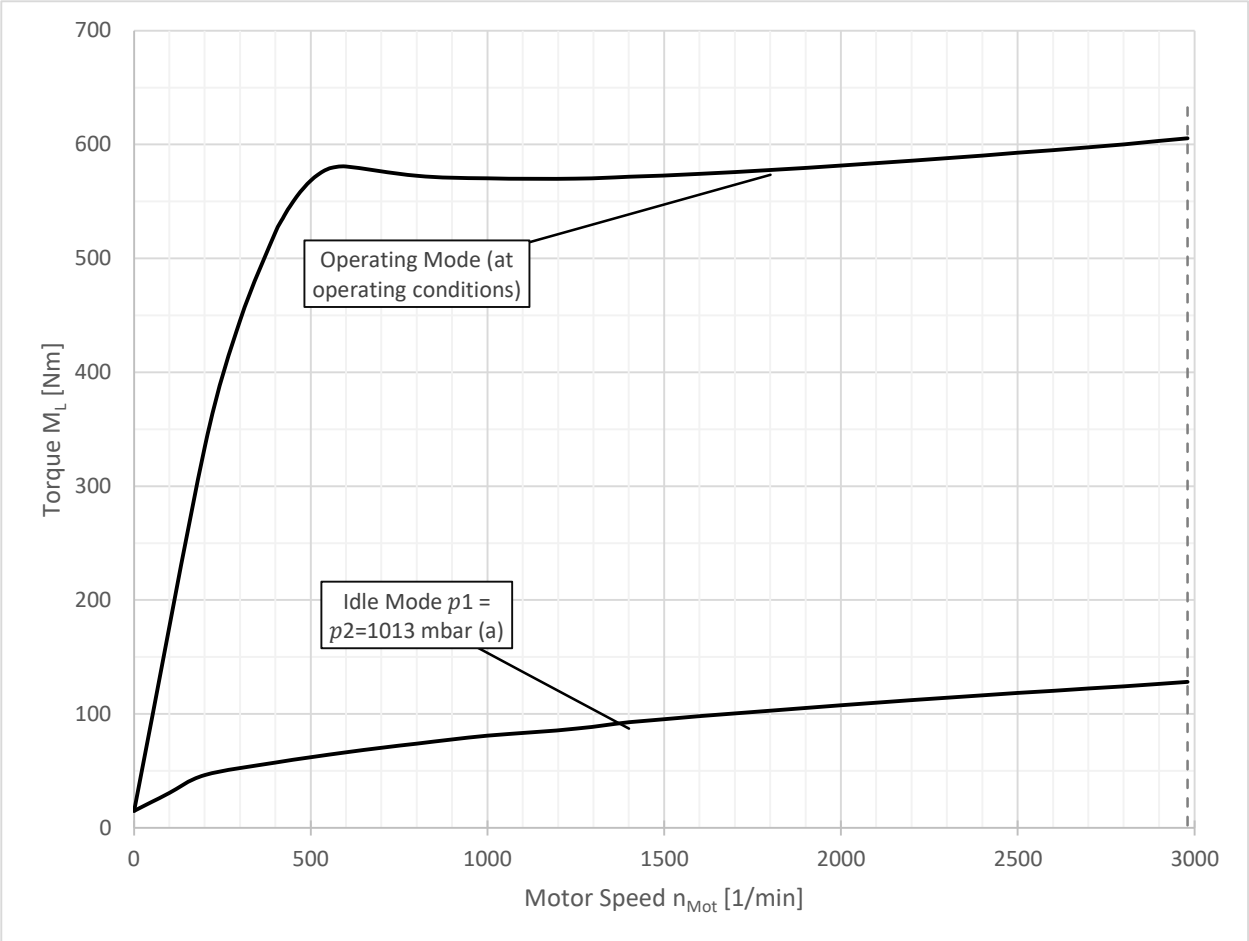
AERZEN
EXPECT PERFORMANCE

Startup Curve

Project
[redacted]

Annotations

Client	Order Number
	[redacted]



Startup Curve Screw Compressor VML 95

AERZEN
EXPECT PERFORMANCE

Startup Curve

Project
[redacted]

Annotations

Client	Order Number
	[redacted]

Application Example. All information is subject to change.