

**CENTRIFUGAL COMPRESSOR
DATA SHEET
SI-UNITS**

PAGE **1-GUS** OF **6**
JOB NO. **24235500** ITEM NO. _____
PURCH. ORDER NO. _____ DATE _____
INQUIRY NO. _____ BY **GRAETZ**
REVISION **0** DATE **05.12.97**

1	APPLICABLE TO: ☒ PROPOSAL ☐ PURCHASE ☐ AS BUILT	REQUISITION NO.: _____
2	FOR ABB	UNIT _____
3	SITE REHDENGT	SERIAL NO. _____
4	SERVICE Erdgas-Speicher	NO. REQUIRED 1
5	☒ CONTINUOUS ☐ INTERMITTENT ☐ STANDBY	DRIVER TYPE (3.1.1) Gasturbine
6	MANUFACTURER MANNESMANN DEMAG ☒ MODEL 08MV5A	DRIVER ITEM NO. _____
7	NOTE: INFORMATION TO BE COMPLETED: ☐ BY PURCHASER ☒ BY MANUFACTURER	
8	OPERATING CONDITIONS	
9	(ALL DATA ON PER UNIT BASIS)	
10	CONDITIONS AT BATTERY LIMITS	
11	☒ GAS HANDLED (ALSO SEE PAGE _____)	
12	☒ SUCTION VOLUME FLOW m³/h	7318. 5530. 5021. 4018.
13	☐ NORMAL VOLUME FLOW Nm³/h	450000. 340000. 450000. 360060.
14	☒ WEIGHT FLOW kg/h	328421. 248170. 328421. 262800.
15	☒ SUCTION PRESSURE bar	60.00 60.00 84.00 84.00
16	☒ SUCTION TEMPERATURE °C	22.0 22.0 22.0 22.0
17	☒ DISCHARGE PRESSURE bar	165.00 200.00 165.0 200.0
18	☒ DISCHARGE TEMPERATURE °C	
19	INLET CONDITIONS AT CASING FLANGE	
20	☒ PRESSURE bar	60.00 60.00 84.00 84.00
21	☒ TEMPERATURE °C	22.0 22.0 22.0 22.0
22	☒ RELATIVE HUMIDITY %	0.00 0.00 0.00 0.00
23	☒ MOLECULAR WEIGHT kg/kmol	16.361 16.361 16.361 16.361
24	☒ COMPRESSIBILITY (Z1) -	0.8913 0.8913 0.8562 0.8562
25	☒ INLET VOLUME FLOW m³/h	7318. 5530. 5021. 4018.
26	DISCHARGE CONDITIONS AT CASING FLANGE	
27	☒ PRESSURE bar	165.00 200.00 165.0 200.0
28	☒ TEMPERATURE °C	119.1 143.8 85.0 106.3
29	☒ COMPRESSIBILITY (Z2) -	0.9638 0.9947 0.9279 0.9627
30		
31	☒ POLYTROPIC HEAD kJ/kg	161.76 201.43 99.25 133.58
32	☒ POLYTROPIC EFFICIENCY %	80.35 76.32 79.76 76.49
33	☒ N ACC. ASME PTC 10	1.5590 1.6084 1.6827 1.7390
34	☒ k AVG -	1.4047 1.4059 1.4784 1.4816
35	☒ SPEED rpm	11107. 11739. 8695. 9564.
36	☒ ESTIMATED SURGE AT ABOVE SPEED m³/h	see performance curves
37	☒ POWER REQUIREMENT INTERNAL kW	18366 18193 11352 12748
38	☒ MECHANICAL LOSSES kW	612 621 582 592
39	☒ POWER REQUIREMENT ¹⁾ AT DRIVER COUPL. kW	19287 19527 11934 13340
40	☐ GUARANTEE POINT	JA JA NEIN NEIN
41	☐ PERFORMANCE CURVE NUMBER ID NO 26772215	Blatt 2 Blatt 2 Blatt 3 Blatt 3
42		
43	PROCESS CONTROL:	
44	METHOD: ☒ BYPASS FROM _____ TO _____	
45	☐ ANTISURGE BYPASS: ☐ MANUAL ☒ AUTOMATIC	
46	☐ SUCTION THROTTLING FROM _____ TO _____	
47	☐ SPEED VARIATION FROM _____ TO _____	
48	☐ OTHER _____	
49	SIGNAL: ☐ SOURCE _____	
50	☐ TYPE _____	
51	☐ RANGE: FOR PNEUMATIC CONTROL _____ RPM TO _____ RPM	
52	OTHER _____	
53	SERVICE: ☒ CONTINUOUS ☐ INTERMITTENT ☐ STAND BY	
54	REMARKS: 1.Messtoleranz entspr. VDI 2045	
55		
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