

Rev.	Revision Note	Prepared by	Checked by	Approved by	Date	BLOWER Datasheet	
0		TEBNSE	JNGL	JAWGSE	20230614		
Project:		Monserud RA900 rehab		Tag no./ Name:		GST1-VX04 / Biogass vifte	
Project number:		1350051301		Application:		Blower	
Customer:		Ringerike Kommune		Process Area:			
Location:		Monserud, Norway		Document number:		RWA2022N00160-RAM-SP-00002	
Plant:		Monserud Renseanlegg		Document status:		For Quotation	
EQUIPMENT							
1	Equipment Type	Frequency Controlled Industrial Blower					
2	Mode of Operation	Intermittent					
3	Number of Units	1					
4	Manufacturer	* Vendor to advise					
5	Model	* Vendor to advise					
ATEX CLASSIFICATION							
6	Zone	ATEX Zone 1					
7	Gas group	IIA					
8	Temperature class	T1					
LOCATION							
9	Indoor / Outdoor	Indoor					
10	Corrosive environment	No					
11	Heated / Unheated	Heated					
CONNECTIONS							
12	Inlet connection	Flange DN100 PN10					
13	Outlet connection	Flange DN100 PN10					
PROCESS DATA							
14	Case description	Highest volumetric design flow			Lowest volumetric design flow		
15	Fluid	Biogas			Biogas		
16	Mass flowrate	kg/h	97		36		
17	Volumetric flowrate	Nm3/h	135		50		
18	Average molecular weight	g/mol	26		26		
19	Ambient pressure	Pa	101325		101325		
20	Solids content	ppm	-		-		
21	Particle size	mm	-		-		
SUCTION CONDITIONS							
22	Suction pressure	barg	0,03		0,02		
23	Suction temperature	°C	3-45		3-45		
DISCHARGE CONDITIONS							
24	Discharge pressure	barg	0,05		0,025		
25	Differential static pressure	bar	0,02		0,005		
AMBIENT CONDITIONS							
26	Max ambient temperature	°C	30		30		
27	Min ambient tempature	°C	10		10		
28	Max relative humidity	%					
29	Min relative humidity	%					
DESIGN CONDITIONS							
30	Max design pressure	barg	0,5		0,5		
31	Min design pressure	barg	0		0		
32	Max design temperature	°C	60		60		
33	Min design temperature	°C	0		0		
FLUID COMPOSITION							
COMPONENT		Mol weight	COMPOSITION BASIS:		Mass fractions		
			COMPOSITION wt%				
34	CH4	16	65				
35	H2O	18	1				
36	CO2	44	34				
37							
38							
39							
40							
41							
NOTES							
1. Blower must deliver 135 Nm3/h at 45°C. 2. Vendor to specify maximum and minimum volume flow at both 3°C and 45°C. 3. Rated voltage 3x400/690 V, 50 Hz.							