

Mechanical Data Sheet

For


Air Compressor


CO₂ Capture Facility

Kårstø, Norway

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GASSNOVA			Project No. - Originator - Disc Code - Doc Type - Serial No. 10112936 - PB - R -DAS - 0005				

1	SERVICE		SERVICE AND INSTRUMENT AIR		
2	EQUIPMENT NUMBER(S)		1-PA-MC-101A/B		
3	QUANTITY		2 (TWO)		
4	AIR QUALITY		OIL-FREE		
5	AIR DELIVERY: SPECIFIED / BID	(scmh)	(NOTE 2)	500	
6	DESIGN PRESSURE	(barg)	*		
7	OPERATING PRESSURE: STARTING / UNLOADING	(barg)	6.9	8.6	
8	ALTITUDE ABOVE SEA LEVEL	(m)	7		
9	DESIGN AMBIENT TEMPERATURE: MIN./MAX.	(C)	-17	30	
10	DESIGN RELATIVE HUMIDITY	(__ % at __ C)	85	@	19
11	TYPE OF COMPRESSOR:		ROTARY SCREW		
12	NUMBER OF STAGES:		*		
13	VOLUMETRIC EFF.: 1ST STAGE / 2ND STAGE	(%)	*	*	
14	AIR TEMPERATURE LEAVING COMPRESSOR:	(C)	*		
15	SEISMIC AND WIND DESIGN REQUIREMENTS				
16	COOLING TYPE		AIR COOLED		
17	COOLING WATER				
18	FLOW RATE	(m3/hr)	N/A		
19	TEMPERATURE: INLET/OUTLET	(C)	N/A	N/A	
20	PRESSURE DROP:	(bar)	N/A		
21	PRESSURE: OPERATING / DESIGN	(barg)	N/A	N/A	
22	TUBE MATERIAL		N/A		
23	COOLING AIR FAN				
24	CAPACITY	(m3/hr)	*		
25	PRESSURE AVAILABLE FOR BUYER DUCTING	(mm H2O)	*		
26	SPEED		(RPM)		
27	MAXIMUM ALLOWABLE NOISE LEVELS	(__ dBA at __ m)	85	@	1
28	LUBRICATION SYSTEM TYPE:		FORCED		
29	MATERIAL: CASING		CAST IRON		
30	ROTATING ELEMENTS		HIGH ALLOY STEEL		
31	BEARING TYPES: RADIAL / AXIAL		*	*	
32	SHAFT SEAL TYPE:		*		
33	CONNECTIONS:				
34	AIR DISCHARGE	(SIZE / TYPE / FACING)	*	*	*
35	COOLING WATER INLET:	(SIZE / TYPE / FACING)	N/A	N/A	N/A
36	COOLING WATER OUTLET:	(SIZE / TYPE / FACING)	N/A	N/A	N/A
37	INTAKE FILTER - SILENCER		REQUIRED		
38	MFR. / TYPE		*		
39	SIZE / MODEL NO.		*		
40	PARTICLE REMOVAL	(microns)	5		
41	DRIVER:	ENCLOSURE	RATED KILOWATTS		
42		VOLTAGE	FREQUENCY		
43	CONTROL PANEL NEMA RATING		IP 54		
44	WEATHER PROTECTION	FREEZE PROTECTION	REQUIRED	REQUIRED	
45	BOLT DOWN PROVISIONS		REQUIRED		
46	COATING SYSTEM		-		
47	LOCATION		OUTDOOR		
48	P&ID NUMBERS(S)		M6-PA-00001		
49	MANUFACTURER	MODEL NUMBER	*	*	
50	WEIGHT: COMPRESSOR / HEAVIEST PIECE		(kg)		
NOTES:					
1. Seller shall replace all * (asterisks) with applicable information.					
2. Seller shall size air compressor based on air dryer net outlet flow rate requirement of 420 m3/hr.					
		PRELIMINARY AIR COMPRESSOR DATA SHEET (MCRA) CO2 KARSTO PROJECT		Job No.: 25474-000	
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AIR COMPRESSORS		
Item No	Description	Requirement
1	TYPE	Induction
2	VOLTAGE	400 V
3	PHASE	3
4	FREQUENCY (Hz)	50 Hz
5	STARTING VOLTAGE	80 to 105% Nominal Voltage
6	INSULATION CLASS	F
7	TEMP RISE (°C @ RATING)	Limited to 10 K BELOW CLASS B
8	STARTING CURRENT	Limited to 5 times
9	PULL OUT TORQUE @ FULL VOLTAGE	At least 200% of rated
10	NO. OF STARTS - HOT	2
11	NO. OF STARTS - COLD	3
12	MOTOR ENCLOSURE	IP54, EEx(d) OR EEx(e)
13	COOLING	TEFC
14	PLUG-IN TERMINALS	Yes (Fully Insulated Suitable for 25 kA Fault Current)
15	TERMINAL BOX ENCLOSURE	IP55
16	SOUND LEVEL	Not to Exceed 80 dB @ one Meter
17	BEARING TYPE	Same Style As Driven Equipment
18	QUALITY STANDARD	ISO 9001:2000 or Equivalent
19	ROUTINE TEST PER IEC 60034	YES
20	INSULATION RESISTANCE TEST	FOR WINDINGS, RTDS AND BEARINGS
21	FULL LOAD LOSS AND EFFICIENCY TEST	YES
22	LOCKED ROTOR TEST	YES
23	OVER SPEED	YES
24	VIBRATION	YES
25	NOISE	YES
26	WITHSTAND VOLTAGE TEST	YES
27	POWER	At 100% service load (power requirement of the driven machine), the electric motor shall not be loaded more than 90%
28	PTC THERMISTOR PROTECTION	REQUIRED
29	TEMPERATURE RISE TEST AT FULL LOAD	YES (2 FREQUENCY TEST MAYBE USED)
30	COIL IMPULSE TEST	Yes, 10 % additional coil to be produced and randomly tested for impulse with increasing voltage until breakdown



PRELIMINARY AIR COMPRESSOR DATA SHEET (MCRA)

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