

# air-x-changers

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Purchaser BTB COMPRESSORS 1510-270L

Ref. No. PO 21623 Destination 3406TAW-270HP / STOCK

1 MODEL 72AVI

Air-x-changer

## PERFORMANCE

1 Service	EJW/ELOW	TAW	IC	AC
2 Flow	90GPM	30GPM	2.00MMSCFD	2.95MMSCFD
3 Fluid	50%GLY	50%GLY	.650SPGR	.650SPGR
4 Temperature in, °F	205.0	134.4	215.0	225.0
5 Temperature out, °F	182.6	130.0	124.0	124.0
6 Pressure, PSI			150PSIG	250PSIG
7 Pressure Drop, PSI	3.4	7.1	1.3	2.0
8 Heat Load, BTU/HR	951727	58991	211855	352580
9 True MTD	70.1	26.2	50.0	51.0
10 Overall Rate	173.0	175.0	58.6	66.5
11 Fouling Factor	.0005	.0005	.0020	.0020
12 Tube Surface, Sq. Ft.	79	18	74	105
13 Total Surface, Sq. Ft.	1250	282	1169	1673
14 Sections, No. of	COMBINED	COMBINED	1	1
15 Connected	SINGLY	SINGLY	SINGLY	SINGLY
16 No. Passes	2	2	1	2
17 Design Temp., °F	300/-20	300/-20	300/-20	300/-20
18 Design Press., PSIG	14*	14*	655	655
19 Test Press., PSIG	75	75	983	983
20 Nozzles	3-STUB	1-1/2-CPLG	(3)4-300RF	(3)4-300RF
21 Tubes, OD x BWG	5/8X16	5/8X16	5/8X16	5/8X16
22 Material	SA214 STEEL	SA214 STEEL	SA214 STEEL	SA214 STEEL
23 No./Sect., Lgth., Ft.	62, 8	14, 8	58, 8	83, 8
24 No. Rows	3	3	5	5
25 Flanges			SA105SCH 80	SA105SCH 80
26 Fins, Type	WHEEL	WHEEL	WHEEL	WHEEL
27 Material	AL	AL	AL	AL
28 100% UT				ONE HEADER
29 100% X-RAY				ONE NOZZLE
30 Headers, Type	BOX	BOX	BOX	BOX
31 Material	STEEL	STEEL	STEEL	STEEL
32 Counterflow				
33 Corrosion Allowance			.0625	.0625
34 Grooved Tube Sheet			DBL	DBL
35 Plugs, Type	TAPER	TAPER	SHOULDER	SHOULDER
36 Material	BRASS	BRASS	STEEL	STEEL
37 Retarders				
38 Accelerators			.250	
39 ASME Code Stamp & N.B.			YES	YES
40 Total SCFM	37497	Temp. In °F 95	Temp. Out °F 133.7	Elev., Ft. 2500

## MECHANICAL EQUIPMENT - STRUCTURES

41 No. Fans	1 HP/Fan 14.6	RPM 530	Dia. 72	No. Blades 6	Material ALUMINUM	Make MOORE-33ED
42 Drive	V-BELT BY OTHERS					
43						
44 Draft Type	INDUCED	No. of Bays	Overall Width	Length	Height	
45 Guards	FAN	Assembly	PACKAGED			
46						
47 Est. Shipping Weight	5550 LBS					
48 Accessories						
49	*-BUILT TO STANDARD 50# DESIGN; BUT DESIGNATED 14#					
50	TO ELIMINATE NECESSITY OF PROVINCIAL REGISTRATION					

1	Purchaser	<b>ENERFLEX</b>	Ultimate User	<b>CHECK RATING</b>
2	Inquiry	<b>Q1140142</b>	Destination	
3	No. Units	<b>1</b>	Model:	<b>SECTIONS</b>
4	Reference		Reference	<b>G3406TA</b>
	Assembly:	<b>PACKAGED</b>	Draft:	
			Overall Size (WxLxH),	~
				Est. Wt., lbs:

**PERFORMANCE**

5	Service	<b>**EJW</b>	<b>**TAW</b>
6	Flow		
7	Fluid		
8	Temp. In / Out, f		
9	Pressure, psia		
10	Pressure Drop, psi		
11	Heat Load, btu/hr		
12	True LMTD, f		
13	Overall Rate, U, btu/hr ft <sup>2</sup> f		
14	Fouling Factor, ft <sup>2</sup> hr f / btu		
15	Surface, Bare / Extended, sq.ft.	<b>118 / 1875</b>	<b>42 / 665</b>
16	Sections, No./Connected	<b>(1) COMBINED w/2</b>	<b>(1) COMBINED w/1</b>
17	Design Temp. (Max / Min), f	<b>300/-20</b>	<b>300/-20</b>
18	Design / Test Press., psig	<b>*14 / 65</b>	<b>*14 / 65</b>
19	Pass Arrangement	<b>CROSSFLOW</b>	<b>CROSSFLOW</b>
20	No. Tube Rows/Tube Passes	<b>5 / 2</b>	<b>5 / 2</b>
21	Section Weight, lbs	<b>1150</b>	<b>Combined w/1</b>
22	Tubes, OD x BWG	<b>5/8X16(.060MIN)</b>	<b>5/8X16(.060MIN)</b>
23	Material	<b>SA214</b>	<b>SA214</b>
24	No. Per Section / Length, ft	<b>93 / 8</b>	<b>33 / 8</b>
25	Retarders		
26	Accelerators		
27	Fins, Type	<b>L-TENSION / WHEEL</b>	<b>L-TENSION / WHEEL</b>
28	Material	<b>ALUMINUM</b>	<b>ALUMINUM</b>
29	Nozzles, Rating/Type	<b>STUB</b>	<b>3000CPLG</b>
30	Material / Bore	<b>SA106 GR.B / SCH-40</b>	<b>SA105</b>
31	(No. Inlets) / Size, in	<b>(1) / 3IN</b>	<b>(1) / 1.5IN</b>
32	(No. Outlets) / Size, in	<b>(1) / 3IN</b>	<b>(1) / 1.5IN</b>
33	Headers, Type	<b>RECT. TUBE</b>	<b>RECT. TUBE</b>
34	Material	<b>SA500 GR.B</b>	<b>SA500 GR.B</b>
35	Corrosion Allow., in		
36	Grooved Tubesheet		
37	Plugs, Type	<b>TAPER</b>	<b>TAPER</b>
38	Plugs Material	<b>B-16 BRASS</b>	<b>B-16 BRASS</b>
39	Industry Specifications	<b>AXC-STD</b>	<b>AXC-STD</b>
40	ASME Code Stamp / N.B.		
41	Canadian Registration #		
42	PWHT		
43	NACE		

44 **Inspection/NDT**  
**F=** 100% R.T of all header seam & nozzle butt welds PLUS 100% U.T. of all attachment welds. **S=** Spot R.T. of 1 long seam & 1 end closure, per header  
**U=** 100% UT of all header seam, nozzle and coupling attachment & nozzle butt welds. **B=** 100% R.T. of all nozzle butt welds.  
**SB= S PLUS B** as each are described above. **UB= U PLUS B** as each are described above.

AIR-SIDE PERFORMANCE		FAN DATA		DRIVER DATA		REDUCER DATA	
45	Ambient Air Temp., In, f	<b>100</b>	No. Fans / Make	<b>MOORE-CL10K-HD</b>	Type	<b>EXISTINBG</b>	Type
46	Elevation, ft	<b>7100</b>	Blade Material	<b>ALUMINUM</b>			
47	Air Flow, SCFM	<b>16,772</b>	HP @ RPM	<b>18.35 @ 530</b>			
48	Air Temp., Out, f	<b>159.5</b>	Dia., in / No. Blades	<b>72 / 8</b>			
49	Min. Ambient, f	<b>-20</b>	Blade Angle, Deg	<b>16 @ Clevis</b>			
50			Series/Blade Adj.	<b>36-HDVT/Manual</b>			
51			Fan Hub Bushing	<b>TAPER</b>			

52 \* Actually built to standard 50# design. Designated 14# to eliminate necessity of Provincial registration.  
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55 **\*\* REPLACEMENT UTILITY SECTIONS**  
56  
57  
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REV	DATE	BY	DESCRIPTION