



CAGI VERIFICATION PROGRAM
 A Program of the Compressed Air and Gas Institute

RESULTS OF TEST OF AN AIR Dryer (RD-VP8)

MANUFACTURER: Sullair	TRADE NAME: Sullair
UNIT MODEL NO.: RC-500-4603-60-A	SERIAL NO.: 0415SA00307
Refrigerant Type: R134A	CAGI TEST NO.: RD-15009-R-1
UNIT TYPE: Cycling	DATE(S) OF TEST: 7/02/2015

SUMMARY

TEST PARAMETER	CERTIFIED	MEASURED	CERTIFIED VS. MEASURED	RESULT OF TEST
FULL FLOW RATINGS*				
OUTLET PRESSURE DEWPOINT, °F*	39.5	42.8	108.35%	-----
SYSTEM PRESSURE DROP, PSI	3	2.4	80.00%	P
TOTAL POWER INPUT, KW	4.21	4.23	100.48%	P
Specific Power Input At Full Flow, KW / 100 CFM	0.84	0.84	100.00%	P
10% FLOW RATINGS*				
RATED AIR FLOW, SCFM	50	50.2	100.40%	-----
OUTLET PRESSURE DEWPOINT, °F*	39.5	39.2	99.24%	P
SYSTEM PRESSURE DROP, PSI	1	0.03	3.00%	P
TOTAL POWER INPUT, KW	0.93	0.87	93.55%	-----
Specific Power Input At 10% Flow, KW / 100 CFM	1.87	1.72	91.98%	P

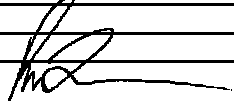
Allowable Tolerance Table*

Volume Flow Rate at Specified Conditions		Pressure Dew Point	Specific Energy Consumption	System Pressure Drop, PSI
Cu. M / min	Cu. Ft / min		%	
Below 0.5	Below 15	+4 °F	+8	+1
0.5 to 1.5	15 to 50		+7	
1.5 to 15	50 to 500		+6	
Above 15			+5	

Remarks: UUT **Passed** all required test parameters for CAGI Verification Testing

CODE:	P - Passed	F - Failed	ND - No Decision	MD - Model Discontinued	RTM - Returned to Mfg.	TBR - To Be Recertified	SR - See "Remarks"	NP - Not Performed
--------------	------------	------------	------------------	-------------------------	------------------------	-------------------------	--------------------	--------------------

Report Prepared by: Don Hubbard
Title: Project Engineer
Date: 7/07/2015
Signature: 

Report Reviewed by: Robert Fisher
Title: Project Engineer
Date:
Signature: 



Intertek Testing Services NA Inc., 1809 10th Street, Plano TX 75074; Tel: (972) 202-8800 Fax: (972) 202-8801

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense, or damage occasioned by the use of this report. Only the client is authorized to permit copying or distribution of the report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product, or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report itself does not imply that the material, product, or service is or ever has been under an Intertek certification program.

1.0 Dryer Data Sheet

Data sheet linked to CAGI during selections

DRYER DATA SHEET Refrigerant Dryers				
MODEL DATA				
1	Manufacturer	SULLAIR		
2	Date	4 29 2015		
3	Model Number	RC500		
4	Cycling / Non-Cycling	CYCLING		
5	Refrigerant Type	R134A		
	DESCRIPTION	FULL FLOW	10% FLOW	UNITS
6	Tested Flow ^a	500	50	scfm ^b
7	Outlet Pressure Dewpoint	39,5	39,5	°F
8	Pressure Drop	3	1	psi(d)
9	Total Dryer Input Power	4,21	0,93	kW
10	Specific Package Power ^c	0,84	1,87	kW/100 scfm

Notes:

a. Dryer ratings at the following inlet conditions to the dryer (as per ISO 7183, Table 2, Option A2):

- Inlet Compressed Air Temperature: 100°F (38°C)
- Inlet Compressed Air Pressure: 100 psig (7 Bar)
- Max. Ambient Air Temperature: 100°F (38°C)
- Inlet Compressed Air Relative Humidity: 100% (Saturated)

b. SCFM defined as the volume of free air in cubic feet per minute measured at 14.5 psia (1.0 Bar), 68°F (20°C) temperature and 0% R.H. (0 WVP).

c. (Total Dryer Input Power/tested flow) x 100

Member

This form was developed by the Compressed Air and Gas Institute for the use of its members. CAGI has not independently verified the reported data.



Consult the CAGI website, www.cagi.org, for a list of participants in the third party verification program.

Form Number REF 010 Rev 7 5-12

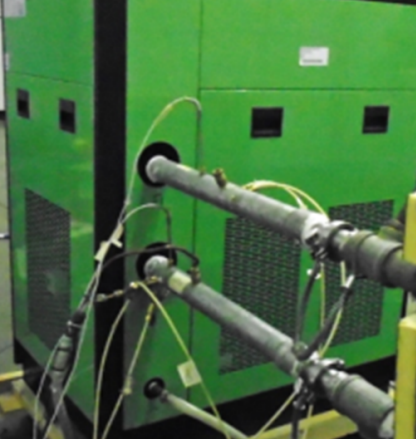
Photo #1 Test unit identification



 SULLAIR Industrial Compressor Division • P.O. Box 5 • Allentown, Pennsylvania 18105 • Tel. 610-261-5000	MODEL NO RC-500-460-3-60-A	
	PART NO 62250206-743	
	SERIAL NO 64155A00307	
	(Leave blank)	

Max. Refrigerant Pressure	261 Psig	22 Barg
Max. Air Pressure	220 Psig	15 Barg
Max. Air Flow Temp.	101 °F	38 °C
Min. Inlet Temp.	40 °F	4 °C
Max. Inlet Temp.	120 °F	49 °C
Max. Oil-Film Capacity	600 cc	
Max. Pressure/Service Rating	500	

Intake	400 cfm (11.3 m ³ /min)
Flowing	0 cfm
Refrigerant	R-134a 13.3 lb (6.0 kg)
Weight	60 lb (27 kg)
Net	1.0 lb (0.45 kg)
Compressor	5.7 (25.8) in. (146.1 mm) Ø
Control Valve Size	1/2 in. (12.7 mm) Ø



ID# DAL1504170932-001
Client: CAGI 2015
ENG: Don Hubbard
Model:
Test:

A standard 1D barcode is located at the bottom of the white label, below the 'Test:' field.

2.1 Images Continued

Photo #5 Test unit set-up



Photo #6 Test unit set-up



Photo #7 Test unit condenser fan



Photo #8 Test unit compressor



3.0 Critical Components Impacting Dryer Performance

Dryer Description:		
Manufacturer: Sullair		
Model No: RC-500-460-3-60-A		
Serial No:0415SA00307		
☐ Air-Cooled	☒ Cycling	☐ Water-Cooled
Volts: 460		
Amps: -----		
Phase: 3		
Hertz: 60		
Refrigerant type: R134A		

Compressor Description:		
Manufacturer: Copland Scroll		
Model No: ZR61KCE-TFD-522		
Serial No: 14H293877		
Volts: 460		
Amps: 11 MAX		
Phase: 3		
Hertz: 60		

Fan Motor Description		
Manufacturer: Ziehl-Abegg		
Model No: FN035-4DKOFV7P2		
Part No: 30707593		
Volts: 265/460		
Amps: .79/.46		
Phase: 3		
Hertz: 60		
RPM: 1630		
HP: -----		

Filled out by: Don Hubbard
Date: 7/07/2015

4.0 Full Flow Test

Customer	Sullair	Date	7/2/2015
Project Number	G102062103	Time	5:39:57
Psy Room	35Ton	Test Number	1
Test Type	Full Flow	Test Standard	Iso 7183
Dryer Model	RC-500-460-3-60-A	Engineer	Don Hubbard
Dryer Serial	0415SA00307	Tech	Thomas Stiles
Rated Operating PSI	100	Conditions	100 /100/100
Dryer Type	Refrigeration	Volt Min	3
Cycling Type	Cycling	Volt Max	460
Refrigerant Type	R134a	Phase	3
Refrigerant Charge	59.20Z		

	Average Data	Min Data	Max Data	Units
Dryer Amb Dry	97.13	96.94	97.35	° F
Dryer Amb Wet	61.78	61.25	62.42	° F
Dryer Amb Humidity	10.60	9.70	11.80	%
Comp Amb Dry	81.86	81.28	82.64	° F
Comp Amb Wet	63.17	62.56	64.25	° F
Comp Amb Humidity	36	35	37	%
Comp Disch	102.2	97.2	103.4	PSIG
Inlet Dew Point	97.80	96.00	99.40	° F
Dryer Inlet Temp	98.40	97.40	99.50	° F
Dryer Outlet Temp	87.40	86.50	88.70	° F
Outlet Dew Point	42.80	41.00	44.50	° F
Pressure Drop	2.4	2.3	2.6	psi(d)
Dryer Inlet	102.1	97.0	103.3	PSIG
Airflow	503.5	479.1	513.3	SCFM
Barometric	29.256	29.250	29.262	" Hg
Main Watts	4.23	4.20	4.27	kW
Specific Power	0.84	0.82	0.89	kW/100 scfm
Dryer Comp Disch	198.42	197.92	199.15	° F
Dryer Leav Cond Coil	114.56	114.11	115.14	° F
Dryer Comp Suction	52.04	51.35	52.97	° F

Comments:

4.1 10% Flow

Customer	Sullair	Date	7/2/2015
Project Number	G102062103	Time	3:32:07
Psy Room	35Ton	Test Number	2
Test Type	10% Flow	Test Standard	Iso 7183
Dryer Model	RC-500-460-3-60-A	Engineer	Don Hubbard
Dryer Serial	0415SA00307	Tech	Thomas Stiles
Rated Operating PSI	100	Conditions	100/100/100
Dryer Type	Refrigeration	Volt Min	460
Cycling Type	Cycling	Volt Max	460
Refrigerant Type	R134a	Phase	3
Refrigerant Charge	59.20Z		

	Average Data	Min Data	Max Data	Units
Dryer Amb Dry	98.00	97.64	98.39	° F
Dryer Amb Wet	66.64	66.16	67.43	° F
Dryer Amb Humidity	18.30	17.70	19.50	%
Comp Amb Dry	82.78	81.83	85.04	° F
Comp Amb Wet	69.59	67.20	71.82	° F
Comp Amb Humidity	53	46	61	%
Comp Disch	99.6	96.1	100.5	PSIG
Inlet Dew Point	98.30	97.70	99.10	° F
Dryer Inlet Temp	101.10	99.70	103.30	° F
Dryer Outlet Temp	95.80	94.90	97.40	° F
Outlet Dew Point	39.20	37.10	41.80	° F
Pressure Drop	0.03	-0.09	0.12	psi(d)
Dryer Inlet	99.5	96.0	100.4	PSIG
Airflow	50.2	48.8	50.6	SCFM
Barometric	29.238	29.231	29.247	" Hg
Main Watts	0.87	-0.01	4.30	kW
Specific Power	1.72	-0.02	8.71	kW/100 scfm
Dryer Comp Disch	143.83	115.45	194.08	° F
Dryer Leav Cond Coil	104.08	97.81	115.64	° F
Dryer Comp Suction	66.21	38.94	84.04	° F

Comments:

5.0 Revision Summary				
Date/ Proj # Site ID	Project Handler/ Reviewer	Section	Item	Description of Change