

iManifold[®] Report

Mr. David A Customer

1234 Main Street
Apt. # 4-B
Glenwillow, OH 44139

Date of Service 3/13/2017
Time of Service 11:20:00 AM

Work Performed
Equipment Service

Evans Heating and Air Conditioning

2800 S. Jennifer Ave.
Suite 300
Solon, OH 44139

Field Technician
Joe Technician

iManifold ID
abc123abc123



User Inputs / Measurements

Pressures	Value	Verified
Suction Pressure	118 psig	✓
High Pressure	350 psig	✓

Temperatures		
Suction Line Temperature	121°F	✓
Discharge Line Temperature	90°F	
Liquid Line Temperature	115°F	✓
Outdoor Air Temperature	75°F	

Superheat / Subcooling		
Superheat	18°F	✓
Subcooling	17°F	✓

Air Side Measurements	
Supply Air Dry Bulb	55°F
Supply Air Relative Humidity	93%
Return Air Dry Bulb	70°F
Return Air Relative Humidity	40%

Airflow	
Actual Airflow	1100 cfm
Nominal Tonnage	4

Electrical: Condenser	
Nominal System Voltage	240 volts
Phase	3
L1 - L2 Voltage	108 volts
L1 Current	9.9 amps
L1-L3 Voltage	108 volts
L2 Current	9.9 amps
L2-L3 Voltage	108 volts
L3 Current	9.9 amps
Power Factor	0.95

Electrical: Air Handler	
Nominal System Voltage	240 volts
Phase	3
L1-L2 Voltage	107 volts
L1 Current	9.9 amps
L1-L3 Voltage	107 volts
L2 Current	9.9 amps
L2-L3 Voltage	107 volts
L3 Current	9.8 amps
Power Factor	0.97

System Information

Type of System	Air Conditioning	Type of Metering Device	Fixed Orifice
System Configuration	Split	Refrigerant	R410A
Nominal Tons	4	BTU's	48,000
Type of Condenser	6-8 SEER Stand. Eff.	Nominal Airflow	1,600 cfm
Type of Evaporator	Standard	Target Box Temperature	°F
Target Subcooling	21°F	Target Superheat	21°F

Condenser Model #
Trane abc12345xyz12345abc123

Evaporator Model #
Carrier 0123456789012345

Condenser Serial #
xyz-12345-4567

Evaporator Serial #
xyz-12345-4567

System Performance

System Capacity		Evaporator Performance	
Actual Airflow	1100 cfm	Temperature Split	19.2
BTU / Hour Total	44,120	Target Temperature Split	19
BTU / Hour Sensible	32,604	Deviation from Target	0.2
BTU / Hour Latent	11,266	System Electrical Efficiency	
Condenser Watts	6,592	Total Watts	11,394
Air Handler Watts	4,801	Current EER	3.86
kW Total	12.91	Dehumidification	
kW Sensible	9.57	Lbs / Hour	10.47
kW Latent	3.3	Gallons / Hour	1.32
Sensible Heat Ratio	0.74		
Bypass Factor	-0.38		

Comments

System had dirty condenser coil. The condenser was cleaned to obtain optimal performance.