



# 602 I-O SLD

Wine Cellar Split System

## Technician Installation Guide

Refrigerant <b>R134a</b>	Voltage <b>115V (103–127V)</b>
Condenser Model <b>M7ZH-H046-IAV-177</b>	Initial Charge <b>2.83 lbs (45.3 oz)</b>
Liquid Line <b>1/4" sweat</b>	Suction Line <b>3/8" sweat</b>
Max Fuse Size <b>15 Amp</b>	Min. Circuit Ampacity <b>5.9 A</b>

### Wine Cellar Systems

802 Heaton Street • Hamilton, Ohio 45011

Phone: (513) 863-6596

[techsupport@coolwineguys.com](mailto:techsupport@coolwineguys.com)

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<b>How to Use This Guide</b>
Follow sections 1–9 in order for a complete installation.
Section 10 contains system specifications. Section 11 covers warranty and product registration.
Tech Support: (513) 863-6596   techsupport@coolwineguys.com
Product Registration: productregistration@coolwineguys.com

## 1 — Evaporator Coil Location & Mounting

### Location

- Mount on the wall directly across from the entrance door for optimal airflow.
- This position purges warm outside air whenever the cellar door is opened.
- If the opposite-wall location is not possible, performance is not significantly affected — cellars are closed 99% of the time.

### Mounting

- Mount near the ceiling with adequate clearance on all sides.
- Leave a gap equal to the unit's height between the top of the unit and the ceiling.
- Never enclose the evaporator behind racking, cabinetry, mesh screening, wire, or wooden slats.
- Airflow must be completely unrestricted for maximum efficiency.

#### **❑ DO NOT ENCLOSE THE EVAPORATOR**

Racking, cabinetry, mesh, wire, or wood slats around the evaporator WILL restrict airflow and degrade system performance.

## 2 — Condenser Placement



### Outdoor Condenser

- Position in a well-ventilated area with clear airflow on all sides.
  - Discharge air should be directed away from walls or other obstructions.
- Keep at least 6 feet away from other appliances: A/C condensers, pool heaters/pumps, grilles.
- Raise off the ground using pump up risers or concrete blocks to prevent obstruction by snow, leaves, or debris. Minimum clearance should be at least 8 inches.

### Indoor Condenser

- Position in a well-ventilated area — typically on a platform in the utility room.
  - Discharge air should be directed away from walls or other obstructions.
- Keep at least 6 feet away from furnaces, water heaters, boilers, and laundry equipment.
- Avoid areas with heavy dust or moisture.
- Do not install in locations accessible to children or pets.

#### **❑ Fan Hazard Reminder**

Even with fan guards installed, condensers present risk of injury from fan blades, metal edges, and hot surfaces.

### 3 — Line Set Installation

Specification	Requirement
Liquid Line Size	1/4" sweat
Suction Line Size	3/8" sweat
Min. Length	10 feet
Max. Length	75 feet
Insulation	Both lines required — UV-protected insulation recommended

#### Installation Steps

1. Use only the specified line set sizes. Wrong sizing causes restrictions, improper oil return, or overcharging.
2. Insulate both the liquid and vapor lines. Use UV-protected insulation for best performance.
3. If the condenser is mounted higher than the evaporator, install a "P" trap in the suction line.
4. Never coil or loop the line set for short runs — run a horizontal section out and back to achieve the 10 ft minimum.
5. Connect using flare fittings at Evaporator and sweat connections at Condenser.
6. Removal of flare fittings on Evaporator will result in a voided warranty.

### 4 — Leak Testing

7. Charge system to 225 psi using nitrogen or compressed air.
8. Apply leak testing liquid (bubble solution) to all connection points.
9. Allow the system to hold pressure for 15 minutes and watch for bubbles.

#### If Bubbles Appear:

1. Purge all pressure from the system.
2. Locate and repair the leak.
3. Repeat the full leak test (Steps 1–3).

### 5 — System Evacuation

10. Connect gauges and vacuum pump to the condenser service ports.
11. Pull system down to below 500 microns. This may take up to 1 hour.
12. When below 500 microns, shut off the vacuum pump and isolate the system.
13. Hold for 15–20 minutes. System must maintain below 1,000 microns.
14. If pressure rises above 1,000 microns, check for moisture or loose fittings and repeat evacuation.

#### TIP

Never share vacuum pumps across different refrigerant types.

## 6 — Thermostat Wiring

Use the thermostat provided and follow the thermostat wiring diagram in Section 10.

### Outdoor Condenser Wiring (Terminals: R and Y)

- "R" terminal → Red wire (condenser) + Small Red terminal wire (evaporator)
- "Y" terminal → Yellow wire (condenser) + Small Green terminal wire (evaporator)
- "C" terminal → Blue common wire from condenser

### Indoor Condenser Wiring (Terminals: R and G)

- "R" (thermostat) → Small Red terminal (evaporator) → "R" on Condenser Fan Center
- "Y" (thermostat) → Small Green terminal (evaporator) → "G" on Condenser Fan Center
- "C" (thermostat) → "C" on Condenser Fan Center (common)

#### Non-Included Thermostat Warning

If using a third party thermostat connect the yellow condenser wire and green evaporator wire to the "Y" terminal on thermostat.

Failure to do so will cause the evaporator fan motor to run continuously.

### TH1110U4000 Thermostat Setup Codes

Code	Setting	Description
1050	<b>F</b>	Temperature Units – Fahrenheit
2000	<b>5</b>	System Type – Cool Only
2070	<b>1</b>	Compressor Stages – 1
3125	<b>0</b>	No Fan Lockout After Cool Call
3140	<b>3</b>	Compressor Cycle Rate
3240	<b>1</b>	Compressor Protection – 5 Minute Lockout
4100	<b>99</b>	Maximum Cooling Set Point
4101	<b>50</b>	Minimum Cooling Set Point
7110	<b>0</b>	No Filter Reminder
14005	<b>2</b>	Maximum Info on Display
14020	<b>0</b>	No Temperature Display Offset

## 7 — Charging the System

### Initial Charge

15. Charge with R134a only. Initial charge: 2.83 lbs (45.3 oz). See specifications for line-length adjustments.
16. Allow the system to run for at least 10 minutes before adding or removing refrigerant.

## Sight Glass Guide

Refrigerant	Sight Glass at Full Charge	Action If Bubbles Remain
R22	Clear — no bubbles	Continue charging until clear
R134a	Some bubbles OK	Bubbles should be noticeably fewer than at start of charge

## Final Pressure Checks (at 55°F cellar temperature)

	R22	R134a
Suction Pressure (psi)	65–78	25–30
Liquid Pressure (psi)	250–300	145–185
Superheat Target (°F)	8–15	8–15

### ❑ Cannot Achieve Superheat Target?

DO NOT adjust the TXV without calling Wine Cellar Systems first.

Phone: (513) 863-6596 | techsupport@coolwineguys.com

Check back 2–3 days after installation to verify the system is holding the desired cellar temperature.



## 8 — System Specifications

### System Overview

Specification	Value
System	602 IDC / ODC SLD R134a
Condenser Model	M7ZH-H046-IAV-177
Compressor	RRT62C1E-IAV-104
Refrigerant	R134a
Initial Charge	2.83 lbs (45.3 oz)
Liquid Line	1/4" sweat
Suction Line	3/8" sweat
Oil Type	POE
Oil Recharge	15 oz

## Evaporator Specs

Specification	Value
Air Flow (Low/Med/High)	142 / 249 / 322 CFM
Sound Level	42 dB
Running Amps	3.56 A
Installed Size	30-9/16" x 11-1/3" x 9-11/16"
Installed Weight	19.8 lbs
Boxed Size	33 x 14 x 12"
Boxed Weight	24.3 lbs
Coil Coating	"Black Frog" Protective Epoxy Coil Coating

## Condenser Specs — Indoor

Specification	Value
Installed Size	11.7" x 17.5" x 13.5"
Boxed Size	29 x 20 x 17"
Installed Weight	24.0 lbs
Boxed Weight	48 lbs



## Condenser Specs — Outdoor

Specification	Value
Installed Size	26" x 18" x 14"
Boxed Size	29 x 20 x 17"
Installed Weight	63 lbs
Boxed Weight	75 lbs

## Condenser Electrical Specs

Specification	Value
Voltage Range	103–127V (115V nominal)
Min. Circuit Ampacity	5.9 A
Max. Fuse Size	15 amp
Compressor RLA / LRA	4.3 / 20.8
Fan RLA	0.58 A

## 9 — Pre-Commissioning Checklist

Complete ALL items before powering on the system:

<input type="checkbox"/>	Indoor unit is properly mounted and secured
<input type="checkbox"/>	Outdoor/indoor condenser is properly mounted and secured
<input type="checkbox"/>	System is properly grounded — all ground terminals tightened
<input type="checkbox"/>	Fuses / protection devices installed per this document — NOT bypassed
<input type="checkbox"/>	Power supply voltage matches identification label on the unit (115V)
<input type="checkbox"/>	No loose connections or damaged electrical components in the disconnect box
<input type="checkbox"/>	No damaged components or squeezed refrigerant pipes
<input type="checkbox"/>	No refrigerant leaks detected (leak test complete)
<input type="checkbox"/>	All refrigerant pipes (gas and liquid) are thermally insulated
<input type="checkbox"/>	Correct pipe sizes installed: liquid 1/4", suction 3/8"
<input type="checkbox"/>	King valves (gas and liquid) on outdoor unit are fully open
<input type="checkbox"/>	Field wiring follows this document and local codes
<input type="checkbox"/>	Drainage flows smoothly — no traps, no water retention
<input type="checkbox"/>	Indoor unit receives thermostat signals correctly
<input type="checkbox"/>	Specified interconnection wire gauge is used
<input type="checkbox"/>	Air purge completed
<input type="checkbox"/>	Test run performed — system holds temperature

## 10 — Warranty & Service Contact

### Limited One-Year Warranty

- Covers defects in materials and workmanship under normal use and maintenance.
- Defective parts replaced at no charge when returned prepaid to factory.
- Replacement parts assume the unused portion of the original warranty.
- Warranty does NOT cover labor costs for repair, removal, or installation.

### 3-Year Limited Evaporator Coil Warranty

- The evaporator coil is covered against defects in materials and workmanship for **three (3) years** from the original date of installation.
- Coverage includes coil leaks and refrigerant-side failures attributable to manufacturing defects, including any failure of the “Black Frog” protective epoxy coil coating.
- A defective coil will be replaced at no parts charge when returned to the factory shipping prepaid. Labor is not included.
- This extended coil warranty is void if the evaporator flare fittings are removed, the coil is physically damaged, or the unit is operated with an incompatible refrigerant or incorrect charge.

- To register a coil warranty claim, contact Wine Cellar Systems at [techsupport@coolwineguys.com](mailto:techsupport@coolwineguys.com) or (513) 863-6596 with proof of installation date and model/serial number.

### Warranty Exclusions

- Normal maintenance items
- Damage from faulty installation or application by others
- Failures due to voltage conditions, blown fuses, or electrical interruption
- Misapplication, abuse, unauthorized alteration, or improper operation
- Damage from floods, fires, lightning, or corrosive atmosphere
- Non-approved parts not supplied by Wine Cellar Systems
- Units installed outside the United States
- Installations above radiant heating systems or heated space

### Service Contact – CONTACT ORIGINAL INSTALLER FIRST!!!

Contact	Information
Company	Wine Cellar Systems
Address	802 Heaton Street, Hamilton, Ohio 45011
Phone	(513) 863-6596
Tech Support Email	techsupport@coolwineguys.com
Product Registration	productregistration@coolwineguys.com

Service Order
Step 1: Contact the original installer.
Step 2: Contact the dealer.
Step 3: Contact Wine Cellar Systems at (513) 863-6596 or <a href="mailto:techsupport@coolwineguys.com">techsupport@coolwineguys.com</a>

### Installation Record

Model Number	
Serial Number	
Date of Installation	
Installed By	
Installer Phone	

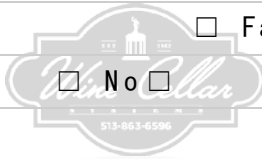
## 11 — Product Registration

### Register Your Product

Register your Wine Cellar Systems product to activate your warranty and receive support.  
 Email: productregistration@coolwineguys.com  
 Please include your model number, serial number, date of installation, and installer information.

**Product Registration Form**

<b>Model Number</b>	
<b>Serial Number</b>	
<b>Date of Purchase</b>	
<b>Date of Installation</b>	
<b>Installer / Company Name</b>	
<b>Installer Address</b>	
<b>City / State / Zip</b>	
<b>Installer Phone</b>	
<b>Installer Email</b>	
<b>Geographic Area Serviced</b>	
<b>Equipment Difficulty</b>	Easy <input type="checkbox"/> Fair <input type="checkbox"/> Hard <input type="checkbox"/>
<b>Instructions Quality</b>	Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor <input type="checkbox"/>
<b>Additional Info Needed?</b>	Yes <input type="checkbox"/> No <input type="checkbox"/>



**If yes, what did it concern?**



**E-Mail completed registration to:**  
[productregistration@coolwineguys.com](mailto:productregistration@coolwineguys.com)

