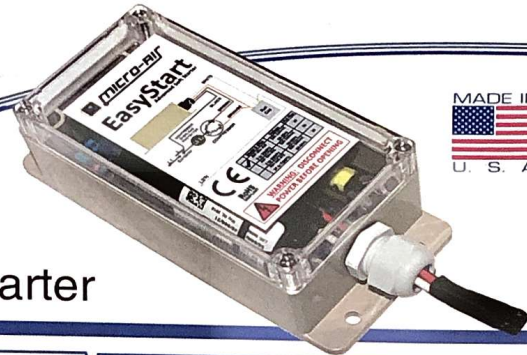




# MICRO-AIR

Improve Your Starts With EasyStart



## Thanks for purchasing our EasyStart™ Soft Starter

### Before You Begin...

We want you to be safe and successful so please read the below information before attempting to install our EasyStart Soft Starter.

### ① Safety First! ⚠️

ALL power sources should be turned off before installation. Voltages present can be lethal if improperly handled. A qualified installer should be contacted if you are not comfortable with the installation. Always be sure of your surroundings especially with rooftop installations.

### ② EasyStart Wiring Diagrams

Resource guides, wiring diagrams and complete product manuals can be found at: [www.micro-air.com/knowledgebank](http://www.micro-air.com/knowledgebank)

Select a wiring diagram for your air conditioning unit.

#### Recreational Vehicle



#### Marine Vessels



#### Residential Commercial



#### Other Applications



### ③ EasyStart Learning Process

EasyStart learns the first 5 successful starts of the motor.

Start the air conditioner from a utility AC power source allowing it to run for up to 10 minutes, or until you confirm the compressor has started (i.e. blowing noticeably cold air in cool mode or blowing noticeably warm air in heat mode). power off and repeat the process an additional 4 times. This allows EasyStart to learn and then gently start up the motor.

Note: A generator can be used for the learning process, but we recommend that Eco Mode be turned OFF.

### ④ Time For a Test

You should now be ready to test our EasyStart unit with your A/C and generator. Connect your generator to your environment as you would normally do and set your A/C to your comfort temperature.

Your A/C should now be able to gently start up and cool your RV, Boat or even Home with less noise and effort.

## Congratulations and Enjoy!

## Thank You For Your Business!

## Specifications

Voltage: 100 to 250 VAC  
Phase: Single  
Frequency: 50 or 60 Hz

## Part Numbers

ASY-364: 2 1/2 HP  
ASY-368: 5 HP

### Recommended Toolbox

Phillips Screwdriver  
Flathead Screwdriver  
Wire Stripper  
Crimping Tool  
Needle Nose Pliers  
Diagonal Pliers  
Electrical Tape

### Recommended Parts

3M Double-Stick Foam Tape  
Plastic bushing (split)  
Tie Wraps  
Quick Connect Receptacles  
End Splice Connectors  
Wire Caps  
Extra #14 AWG wire

Order Our Installation Kit Online  
Part Number: KIT-364-RT2

### Troubleshooting Guides

Did you know that our EasyStart units come with built-in LED troubleshooting indicator lights?

➡ Check out our easy to use charts on the reverse side to help determine issues with wiring, power or other items.

### ① Check Wiring and Connections

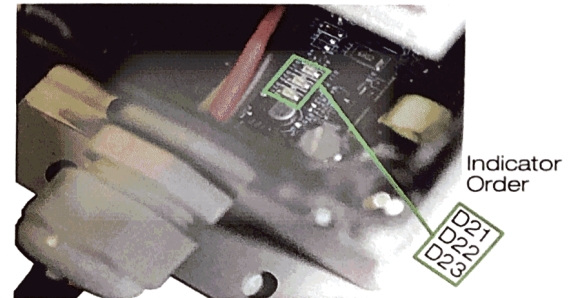
The most common mistake is incorrect wiring. Check that your wiring is correct with the diagram you selected and make sure all connection points are tightly connected.

### ② LED Troubleshooting Indicator Lights

Be sure that power has been removed for at least 5-7 minutes before powering back on.

Once your system is back on, EasyStart will record the error and allow you to see which indicator light or combinations of lights are lit.

Use one of the charts below that relates to your model in order to determine the error code.



### ③ Use one of the below charts for your model \*\* New UL 364/368 models contain a single fault LED indicator light.

#### EasyStart 364 LED Indicator Lights - Clear Cover

Confirm the light or lights that are lit to determine the type of fault detected.

LED Location: bottom/center inside of the unit where wiring harness enters.

	D21	D22	D23
Power Interruption		ON	ON
Stall	ON		ON
Over Current		ON	
Overload/Klixon Open	ON		
Line Voltage is >160V (pertains to X20-IP 120V model only)	ON	ON	
Start winding not detected - EasyStart improperly wired	ON	ON	ON

**Power Interruption:** Power was lost for several AC cycles of power and EasyStart shut down. This fault will also occur if power is applied before the 5-minute restart timer has expired.

**Stalled:** EasyStart is not seeing the condition where it can declare that the compressor is running and connect the compressor directly. This fault can be caused by an improperly sized or bad start capacitor in some systems. Note: RV systems are universal and do not have problems related to the start capacitor sizing. Stalling is usually a wiring related issue in these systems. This is also a problem that can be caused by the output voltage collapse on generator power due to high altitude or engine performance problems. Follow the steps in the "Verifying power to EasyStart" section.

**Over Current:** Compressor run current has exceeded the maximum value allowed by the device. Be sure the EasyStart you are using is rated for the compressor you have connected. Contact Micro-Air for help with this fault.

**Overload / Klixon Open:** The compressor overload in the common winding connection is open. This indicates poor air/water flow (i.e. overheated condenser) or a problem with the compressor.

**Line Voltage:** The 120V-only RV EasyStart (-X20-IP) cannot be used in 220V applications.

**Start Winding Not Detected:** One or more of the following wiring problems has occurred:

- The orange wire is not connected to the start winding.
- The Compressor Start winding is open.
- Line L2 is connected to the compressor start winding.

### ④ Additional Help

Still stuck? no problem! Simply provide the LED indicator light information with a description of the problem through our online support system.

#### \*\* EasyStart 368 LED Indicator Light - Clear Cover

The fault LED will flash whenever a fault occurs. Count the flashes to determine the type of fault detected.

FLASH	FAULT	LED INDICATIONS
Steady Green	Normal Operation	POWER (D35): A steady green LED indicates power to the board. It is not an indication of a problem.
1 Red	Unexpected Current	FAULT (DS1): Unexpected Current This fault occurs when EasyStart is first powered and a high current is detected. There is most likely a wiring problem that must be corrected before attempting another start.
2 Red	Over Current	This fault can occur during the start or while the compressor is in operation. Run currents in excess of 23 amps on 364 or 30 amps on 368 will cause a fault. Faults during a start can mean a wiring or compressor problem.
3 Red	Short Cycle Delay	Short cycle is used as an indication that power was removed then reapplied before the short cycle timer had expired. This fault will clear itself and start the compressor when the timer expires. Systems must wait five minutes from the time the compressor stops to restart the compressor.  (NOTE: Cutting JP2 disables the short cycle timer. This should NOT be done in most systems and can cause stall problems during the start.)
4 Red	Open Overload	Open overload indicates the compressor overload has opened. This fault is typically caused by a condenser problem such as blocked airflow or no water flow.
5 Red	Stall	Stalls can occur both during start and operation. This can indicate a collapse of line voltage, improper wiring or a bad compressor or run capacitor.
6 Red	Wrong Voltage	An EasyStart 364 configured for use only on 120-volt systems is being used on a 230-volt system.
7 Red	No signal from start winding	The orange wire is not connected to the start winding or the start winding is open. Check for wiring errors or loose connections.



<https://www.micro-air.com/SupportRequest>