



# ICM870-32A

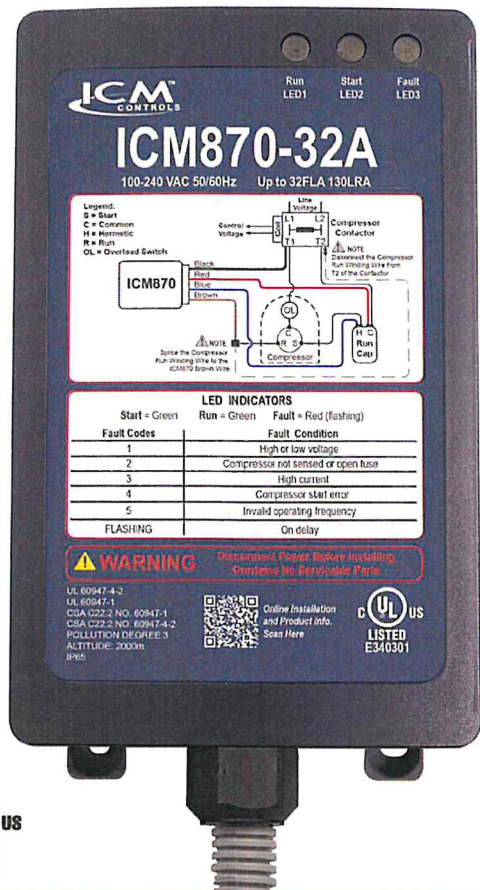
## Soft Start



Scan to see a full specifications, installation and agency certification information.

### APPLICATIONS:

APPLIANCE | ELECTRICAL | HVAC/R | MARINE | POOL & SPA | RV



## OVERVIEW

ICM870 Series soft starters are intended for use in Residential, Commercial, RV and Marine applications. Using a soft start in a backup power storage application provides several benefits including:

- 1) Reduces the initial inrush current necessary to start a motor/compressor. Reducing the excessive electrical draw from the power source, in turn allows for the use of a smaller generator or backup battery system.
- 2) Minimizes stress on the connected equipment by gradually ramping up the power output, reducing the risk of voltage spikes and equipment fatigue. This increases the overall lifespan of the A/C unit and backup power equipment via reduced wear and tear.
- 3) Dimming of household lights and the loud banging noise when the Air Conditioner starts up is often significantly reduced.

## FEATURES

- ✓ Reduces in-rush current/draw necessary at startup by up to 70%
- ✓ Prolongs the life of A/C by reducing excessive torque, wear and tear
- ✓ Reduces loud noises, light flickering, and breaker trips
- ✓ Built-in dynamic start delay
- ✓ Built-in self-learning algorithm
- ✓ Over-current protection
- ✓ Over/under voltage monitoring
- ✓ Built-in start capacitor
- ✓ LED fault indicators
- ✓ Ultrasonically sealed tamper-proof enclosure
- ✓ Installation hardware is included

## SPECIFICATIONS

- **Inputs:** L1 & L2
- **Nominal voltage:** 120 VAC, 240 VAC
- **Over voltage limits:** 240 VAC nominal = 264 VAC
- **Under voltage limits:** 120 VAC nominal = 95 VAC, 240 VAC nominal = 195 VAC
- **Outputs:** Compressor
- **Current:** Maximum nominal = 32A
- **Over current limits:**
  - ICM870-32A = 40A
- **Operating temperature:** -40°F to 131°F (-40°C to 55°C)
- **Storage temperature:** -40°F to 149°F (-40°C to 65°C)
- **Humidity:** 0-95% non-condensing
- **Enclosure:** IP65
- **Dimensions:** 7.94" x 4.20" x 2.10"

## REPLACES

The **ICM870A-32A** replaces the amperage-corresponding models from the following manufacturers:

**Dometic** (SmartStart)  
**Hyper Engineering** (Sure-Start)  
**Micro-Air** (EasyStart)  
**Network RV** (SoftStartRV)  
**Carlo Gavazzi** (SmoothStarter)

Content and specifications on sell sheets subject to change without notice.



7313 William Barry Blvd. North Syracuse, NY 13212  
www.icmcontrols.com | 1-800-365-5525 | info@icmcontrols.com

LIS512

# Features & Benefits

- ✓ Reduces in-rush current/draw necessary at startup by up to 70%
- ✓ Prolong the life of A/C by reducing excessive torque, wear and tear
- ✓ Reduced electrical draw allows for the use of a smaller generator or backup battery
- ✓ Reduce loud startup noises, light flickering, and breaker trips
- ✓ Built-in dynamic start delay
- ✓ Built-in self-learning algorithm
- ✓ Over-current protection
- ✓ Over/under voltage monitoring
- ✓ Built-in start capacitor
- ✓ LED fault indicators
- ✓ Ultrasonic sealed tamper-proof enclosure
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**ICM CONTROLS CORP.**  
7313 William Barry Blvd.  
North Syracuse, NY 13212



**phone:** 1-800-365-5525  
**fax:** 315-233-5276



**web:** [www.icmcontrols.com](http://www.icmcontrols.com)  
**Info:** [info@icmcontrols.com](mailto:info@icmcontrols.com)

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## What is a soft start?



# Overview

ICM870 Series soft starters are intended for use in Residential, Commercial, RV and Marine applications. Using a soft start in a backup power storage application provides several benefits.

Firstly, it reduces the initial inrush current necessary to start a motor/compressor. Reducing the excessive electrical draw from the power source, in turn allows the generator or backup battery to operate more equipment without loading it down.

Secondly, the addition of the ICM soft start greatly reduces the dimming of household lights and the loud noise that occurs at motor/compressor startup.

Lastly, it minimizes stress on the connected equipment by gradually ramping up the voltage, reducing the risk of voltage spikes and equipment fatigue. This increases the overall lifespan of the A/C unit and backup power equipment via reduced wear and tear.



## Which Model do I need?

Refer to your service panel or user manual to determine your actual RLA rating

**ICM870-9A:** For use with a Compressor Load Amp Rating (RLA) of up to Maximum of 9A

**ICM870-16A:** For use with a Compressor Load Amp Rating (RLA) of 9.1-16A Maximum

**ICM870-32A:** For use with a Compressor Load Amp Rating (RLA) of 16.1-32A Maximum

### Air Conditioning & Heat Pump Loads – Average (for reference only)

Size	BTU	*RLA	ICM870 Model
1 ton	12,000	6	ICM870-9A
2 ton	24,000	12	ICM870-16A
3 ton	36,000	16	ICM870-16A
4 ton	48,000	22	ICM870-32A
5 ton	60,000	26	ICM870-32A
6 ton	72,000	32	ICM870-32A

\* This chart is for quick reference only. It reflects the average Single-Phase Air Conditioning and Heat Pump conversions of Tonnage, BTU's, and RLA. Please refer to your service panel or user manual to *determine your equipment's actual RLA rating* before deciding which model ICM870 you need.

### APPLICATIONS:

Appliance, Electrical,  
HVAC/R, Marine,  
Pool & Spa, RV



ICM870-9A



ICM870-16A



ICM870-32A

### Easy 4-Wire Installation



Scan here to watch the Intro/Installation Video

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