Air Conditioner Soft Start Kit for Normal Power Conditions & Emergencies

SoftStartHome™ By SoftStartUSA

The Best A/C Soft Start Kit for Home Air Conditioners up to 6-Ton Size (72,000 BTUs)



Get maximum comfort and performance from virtually any central air conditioning system by upgrading HVAC systems with a SoftStart Home™ soft starter.

SoftStart Home™ reduces the power required to start an air conditioner by 50-70%! By dramatically reducing the startup draw, using a SoftStart Home results in many important advantages:

- Quiet A/C startup – no jarring thump, flickering lights or tripping breaker when A/C starts.
- Low-amp startup cuts strain on compressor to help extend A/C life.
- Helps start and run A/C on a backup generator.
- Starts home A/C with solar energy system without straining battery power supply to other appliances.
- Model SSH6T is compatible with 115VAC-230VAC air conditioners; up to 6-ton/72,000 BTUs.
- Meets CE, ETL requirements.

A/C POWER INNOVATION BREAKTHROUGH

SOFTSTART HOME FEATURES & ADVANTAGES

- Works with single-phase 110/220 VAC air conditioners
- Module housing is sealed with epoxy resin to withstand extreme environments
- Fastens securely to A/C interior surface with fasteners and/or commercial-strength adhesive backing



- Soft start circuitry delivers up to 70% inrush current reduction during A/C or heat pump start-ups
- Greatly reduces heat-induced stress on compressor windings to prolong compressor life
- LEDs indicate proper operation and other startup conditions
- Easy installation (less than 15 minutes)
- Allows A/C or heat pump startup even when using lower power backup source (portable generator, solar-energized batteries, etc.). Keeps A/C running during blackouts, brown-outs or other electrical power emergencies
- Includes easy crimp-on wire connectors, fastening hardware and zip-ties to secure wiring
- Rated for maximum surge of 130 amps, working current of 42 amps

BONUS INSTALLATION KIT



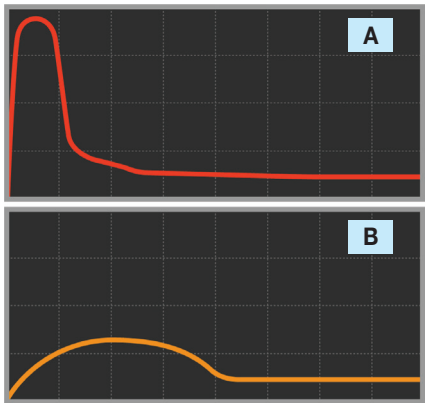
Complete installation kit provides all the connectors and fasteners to meet virtually any air conditioner or heat pump wiring requirements.

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PERFORMANCE DETAILS

SOFTSTART HOME™ CAPABILITIES

Sharply reduces start-up power demand of appliances that require a high inductive load at startup (such as air conditioners and heat pumps). SoftStart Home reduces the startup power demand by up to 70%.



Graph A indicates startup power of a typical air conditioner. The high spike at STARTUP means the A/C pullS 7-8 times the power normally needed to RUN the A/C. This can overheat compressor windings and cause premature failure.

Graph B indicates startup of a typical RV air conditioner powered through a SoftStart Home module. The power spike is quickly reduced to eliminate noise, vibrations, premature compressor failure, and other problems associated with A/C startup.

Standard central A/C uses 7-8 times the normal running amperage during startup.

SoftStart Home startup uses only 2-3 times the normal running amperage during startup.

TECHNICAL SPECIFICATIONS – SOFTSTART HOME A/C STARTER

Model number:	SSH6T
Nominal working voltage:	110VAC (90~135VAC) & 220VAC (187~266VAC), 1 phase
Compressor support capacity:	6 tons; 72,000 BTUs
Power consumption:	Less than 3W
Protection restart time interval:	3 minutes
Maximum continuous working voltage:	135VAC/266VAC
Maximum continuous working current:	42A
Maximum surge current:	130A (<350 ms)
Soft start-up time:	1±0.5s
Current consumption:	48mA
Operation hours:	More than 45,000 hours (rated working temperature)
Protection restart time interval:	3 minutes
Working temperature:	-40ºF to 185ºF (-40ºC to 85ºC)
Working humidity:	0~95% RH – <104ºF (<40ºC)
Dimensions	8 H x 3.7 W x 2.7 D in. (203 × 94 × 69 mm)
Weight	1 lb. 13 oz. (0.82 kg)
Warranty:	One-year limited warranty (standard); Three-year limited warranty available (see details inside product package)
Listings:	CONFORMS TO UL STD. 60730-1 CERTIFIED TO CSA STD. E60730-1

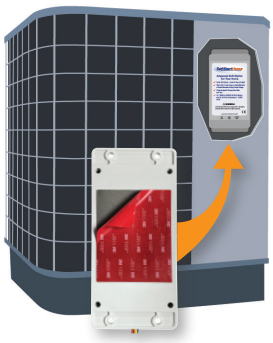
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Specifications are subject to change without notice.

INSTALLATION / OPERATION

DETERMINE A LOCATION

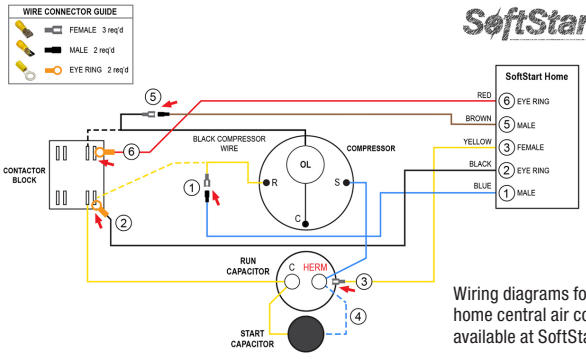
1. A SoftStart Home unit easily attaches under the central A/C cover to a vertical surface near the compressor and other components. Secure with provided fasteners and/or adhesive pad on back of unit.



Size and location not shown to scale.

CONNECT WIRING

2. Turn off electric power to A/C or heat pump, then make wiring connections based on diagrams provided at SoftStartHome.com. All wiring connectors are provided with each unit.



Wiring diagrams for most popular home central air conditioners are available at SoftStartHome.com.

RUN A/C or HEAT PUMP

3. Turn on electric power to A/C or heat pump, then run for 30 minutes at ambient temperature to calibrate SoftStart Home unit (set thermostat to near-outdoor temperature). Then run A/C or heat pump normally.

LED INDICATORS

Run LED1

- Green light indicates normal operation.
- Red light indicates "protect" mode from over-heat or other condition. Auto resets in 3 minutes.

Start LED2

- Red light indicates beginning of soft start process. Turns off when startup is complete.

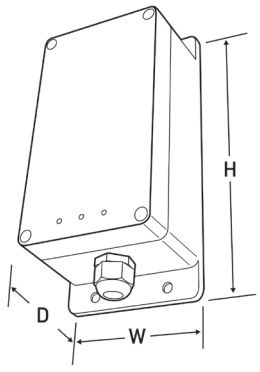
Self-Test LED3

- Red light indicates beginning of self-test at every startup. Turns off when self-test is complete.

PRODUCT DIMENSIONS

MODEL SSH6T

8" H x 3.7"W x 2.7"D
(203 x 94 x 69 mm)



SKU NUMBER	UPC	DESCRIPTION	PACKAGE DIMENSION	PACKAGE CUBE	PACKAGE WEIGHT	CASE PACK
SSH6T	742839343360	Soft starter for 6-ton A/C unit	9.75 W x 5.5 H x 4.5 D in.	0.140	2 lb.	10

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