

HF-QP-STA02

Improve Your Starts With HF-QP-STA02 Soft Starter

Thanks for purchasing our Soft Starter

Before You Begin...

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



WARNINGS

Disconnect the power before opening or installing.
Remove all other starters, eg, PTC, hard starters.
Do not switch running and starting windings.
Do not use external capacitors (built-in).

1. Safety First!

All power must be turned off before installation. If not all the switches are turned off successfully, the voltage may be fatal. If you have any doubts or concerns about installation, please contact a professional installer. The whole installation process needs to always ensure that the environment around you is safe, especially for roof installations.

2. Product Introduction

Soft starter is an air conditioner soft start controller designed for single-phase soft start of air conditioning power system. It regulates the starting voltage of the compressor/motor intelligently to effectively reduce the inrush and surge current during starting, thus consuming less power from On-site AC power supply system. It still provides sufficient starting torque for the compressor and motor.

3. Before installing:

For installation steps and wiring diagrams, please refer to: <http://softstart.ifjf.net/>

4. Soft Starter Learning Process

Start the air conditioner from the public AC power supply and run the motor for 10 minutes until you are sure that the compressor has started (i.e. blowing obvious cold air in cooling mode or obvious warm air in heating mode), turn off the power supply and repeat the process for 4 times. Allow the motor to learn and then gently start the motor.

Note: While the generator can be used in the learning process, we recommend turning off the eco mode.

5. Product Features

- Limit inrush current
- Eliminate current surges and voltage drops
- Built-in electronic overload protection relay to extend motor/compressor life
- Integral bypass contactors reduce heat generation
- Smoother start and stop with controlled torque
- Reduce vibration and mechanical damage
- Reduce shock and drive line stress during start-up
- No additional starting capacitors and AC contactors are required
- Easy to wire and install
- Reduce equipment downtime
- High reliability and long life

6. Time For a Test

You should now be ready to test our motor with your air conditioner and generator. Connect the generator to your environment in the usual way and set the air conditioner to a comfortable temperature.

Your air conditioner should now be able to gently start and cool your RV, boat, and even home with less noise and energy. It can help you save money and protect the environment.

Congratulations and Enjoy!

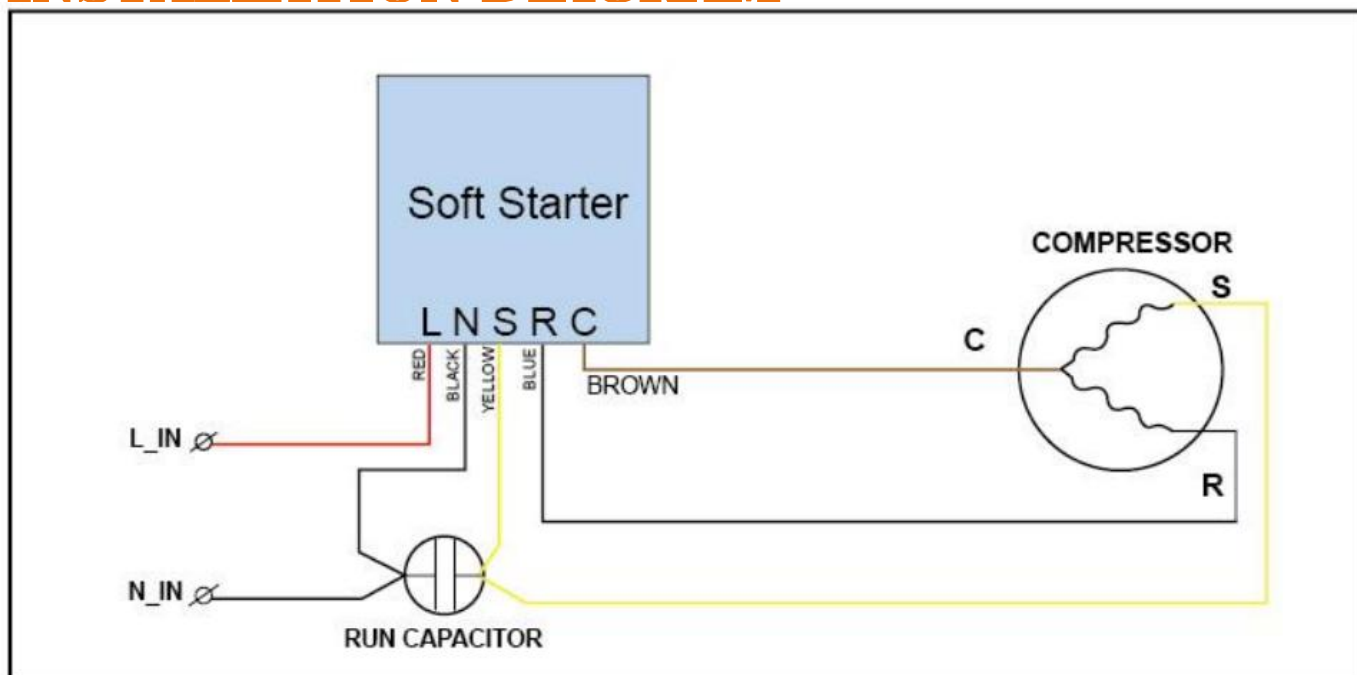
TECHNICAL PARAMETERS

Nominal Working Voltage	110VAC (90~135VAC)/220VAC (187~266VAC), single
Maximum Continuous Working Voltage	135VAC
Maximum Continuous Working Current	18A
Over Current Limit	30A/1 minute
Maximum Non-repetitive Inrush Current	170A(<20 ms)
Maximum Surge Current	120A(<350 ms).
Soft Start-up Time	1±0.5s.
Current Consumption	48mA (Capacitive 110VAC,220VAC)
Power Consumption	less than 3W
Operation Hours	better than 45,000 hours (rated working temperature)
Effective Soft Start On/Off Service	>100,000 times (soft-start interval not less than 3minutes)
The Insulation Resistance Between Housing & Chassis	>300M
Withstand Voltage Between Housing & Chassis	>3000VAC in 1
Shock Resistance	better than 200m/s ² and 11ms
Anti-vibration	10~55mm (double amplitude,5mm)
Protection Restart Time Interval	180
Working Temperature	-104°F ~185°F (-40°C ~ 85°C)
Working Humidity	0~95% RH (<104°F /40°C)
Application	Air-conditioner (apply to single-phase 110V 1HP-1.5HP/220V 1HP-3HP)

LED INDICATOR LIGHT SIGNALS

●	LED1 (RUN)	Green Light On	Running Indicator: The indicator light is green when it is in normal operation.
●	LED2 (ERROR)	Red Light On	Protection Mode Indicator: Red indicator indicates a startup failure, being protected.
●	LED3 (START)	Red Light On	Working Indicator: The indicator light is red when it is in the process of soft starting, and the indicator light will go off after the soft starting is completed.
●	LED4 (SELF-TEST)	Red Light On	Self-test Status Indicator: The soft starter has a self-test program of 0.5 seconds at power-up, at this time, the indicator will be on red, and the indicator will go off after the self-test is completed.

INSTALLATION DIAGRAM



Dongguan Huifeng Tech.Co., Ltd.

Room 301, No.42, xiangyuan Road, Nancheng Street, Dongguan, Guangdong