

AIRGO SS is a compact and easy to use soft starter for single phase two wire AC induction motors. AIRGO SS is a fully solid state solution.

Motor ramp-up time as well as initial torque can be independently adjusted through the built-in potentiometers.

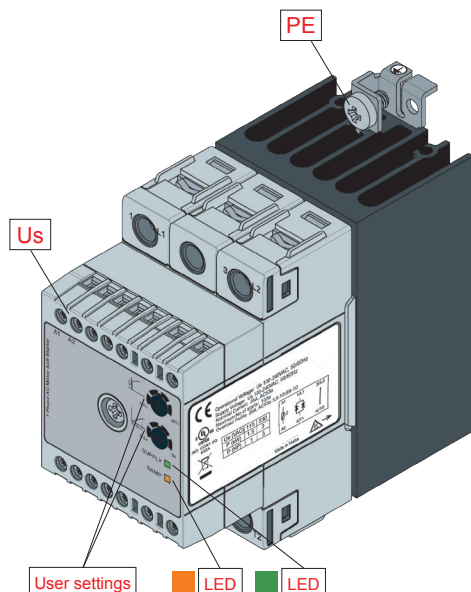
A green LED gives indication of control voltage presence. Ramp-up and full-voltage indication are provided through an orange LED.

When it comes to soft starters, rely on the **GO to experts!**

FEATURES:

- **Long lifetime.** Wire bonding technology reduces thermal and mechanical stresses of the output chips resulting in a larger number of possible operational cycles compared to other assembly technologies.
- **Ease of use.** The AIRGO SS is a very simple soft starter requiring just 2 user adjustments.
- **Conforms to UL508A requirements for Industrial Control Panels.** The AIRGO SS range is certified as a listed product. All models carry a 100 kArms Short Circuit Current Rating.
- **Wide supply voltage range.** The AIRGO SS has 2 control voltage ranges: 24 VAC/DC or 100–240 VAC. This wide range ensures that the product works well even in installations with a weak power supply.
- **Fast wiring.** The AIRGO SS does not require additional wires for the start/stop signal. It will start ramp-up function as soon as mains voltage is applied.
- **1-phase AC induction motors used in:** pumps, compressors, fans, conveyors

STRUCTURE



APPLICATIONS:

- 1-phase heat pumps, chillers, roof tops, refrigeration cabinets with operational voltage of 220–400VAC

MAIN FEATURES:

- Self-learning algorithm adjusts start parameters according to load
- No user adjustments required
- Limits starting current of 1-phase motors

Element	Component	Function
1/L1, 3/L2	Power connections	Mains connections – L1 for live and L2 for Neutral (or L2) connection
2/T1, 2/T2	Power connections	Load connections - T1 for live and T2 for Neutral (or L2) connection
Us	Supply connections	Terminals for supply voltage
Green LED	Supply voltage indication	Indicates presence of supply voltage
Orange LED	Ramp-up/Full-voltage indication	Indicates status of AIRGO SS
PE	Protective Earth	Connection for protective earth
User settings (1)	Initial torque setting	Sets the initial torque at which AIRGO SS will start the ramp-up sequence. A lower initial torque results in a lower starting current.
User settings (2)	Ramp-up time setting	Sets the time at which the AIRGO SS will reach full voltage at its output. Set the ramp-up time slightly longer than actual motor starting time.

POWER SUPPLY (US)

	AIRGO-SS...ACDC	AIRGO-SS...AC
Supply voltage range, Us	24VDC, -15%/+20%, 24VAC, -15%/+15%	90 – 265VAC
Isolation Input to Output Output to Case Input to Case	2.5 kVrms 4 kVrms 4 kVrms	
Max. supply current	80 mA	60 mA

POWER SUPPLY (US)



Working temperature	-40°C to +60°C (-40°F to +140°F)
Storage temperature	-40°C to +100°C (-40°F to +212°F)
Relative humidity	<95% non condensing @ 40°C
Pollution degree	2
Installation category	III (Fixed installations)

Installation altitude	0–1000 m
Vibration resistance	2g / axis (2–100 Hz, IEC60068-2-6, EN50155, EN61373)
Impact resistance	15/11 g/ms (EN50155, EN61373)
EU RoHS compliant	Yes

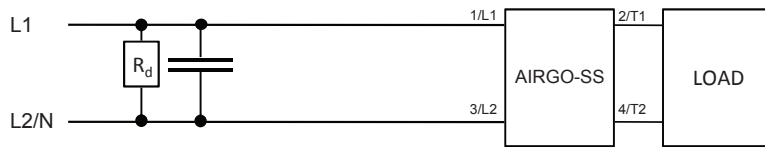
OUTPUTS

	AIRGO-SS12	AIRGO-SS16	AIRGO-SS25
Overload cycle @ 40°C surrounding temperature (acc. to IEC/EN 60947-4-2)	AC53a:3.5-10:99-10		
Maximum number of starts/hr @ rated overload cycle @ 40°C surrounding temperature	10	10	10
Rated operational current @ 40°C	12 AAC	16 AAC	25 AAC
Minimum operational current	250 mA	400 mA	400 mA
Rated operational current @ 40°C	1800 A²s	6600 A²s	6600 A²s

COMPATIBILITY AND CONFORMANCE

Conformance	LVD: EN/IEC 60947-4-2, EMCD: EN/IEC 60947-4-2, UL: UL508, E172877, cUL: C22.2 No.14-13, E172877
Approvals	 
UL short circuit current rating	100 kArms (refer to short circuit current section, Type 1 - UL508)

CONNECTION DIAGRAMS



$R_d = 1M\Omega, 0.5W$
 Filter has to be connected across both LOAD and the AIRGO SS device

