

# SureStart

Compressor soft starters / for single phase applications



- Enables compressor start-up on lower sized generators and battery-inverter backup power sources.
- Soft-starters developed for starting and running single phase scroll compressor motors. They offer significant start current reduction by up to 60-70%. The customised "PN" option is used to start high inertia loads such as reciprocating compressors and offers a start current reduction by up to 20-50%.
- Reducing the start current prevents light flickering as well as ensures compressor protection and reduces start up noise.
- Eltwin Hyper SureStart offers a multitude of compressor safety protection features such as: Low voltage protection, reverse scroll detection and overcurrent limit shutdown.
- Automatic adjustment of the starting current to match compressor size and available supply voltage. Contactor protected from arcing damage. LED indicator for any fault diagnosis. Supply line impedance monitoring and compensation for every start.
- Reduces the supply line voltage drop experienced during startups as well as monitoring supply voltage while the compressor is running to prevent motor stalling during start up or run modes.

Type	SS0B12-20SN	SS1B08-16SN	SS1B16-32SN	SS1B08-20PN
Nominal Voltage rating	110-115VAC	208-230VAC	208-230VAC	208-230VAC
Single/Three phase	Single Phase	Single Phase	Single Phase	Single Phase
Main Frequency (Tolerance +/-3 Hz)	60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Motor Current, max RLA/FLA range	12A -20A	8A - 16A	16A - 32A	08A - 20A
Contactor	Secondary	Secondary	Secondary	Secondary
LRA max	85A	85A	180A	150A
Start Current reduction	60 % - 70 % of LRA	60 % - 70 % of LRA	60 % - 70 % of LRA	20 % - 50 % of LRA
Startup torque reduction	30-40%	30-40%	30-40%	10-30%
Degree of protection	IP20	IP20	IP20	IP20
Operating Temperature (°C / °F)	-20° to 60°C / -4° to 140°F	-20° to 60°C / -4° to 140°F	-20° to 60°C / -4° to 140°F	-20° to 60°C / -4° to 140°F
Storage Temperature (°C / °F)	-40° to 85°C / -40° to 185°F	-40° to 85°C / -40° to 185°F	-40° to 85°C / -40° to 185°F	-40° to 85°C / -40° to 185°F
Number of starts per hour	15 starts / hr	15 starts / hr	15 starts / hr	10 starts / hr
Minimum startup voltage	103V	180V	180V	180V
Maximum high voltage	130V	253V	253V	253V
Shutdown on low voltage	90V	175V	175V	175V
Short Circuit Current Rating SCCR, kA	5	5	5	5
Power Supply & Control voltage	Auto-Start at Power Up	Auto-Start at Power Up	Auto-Start at Power Up	Auto-Start at Power Up
Dimensions	5.30" x 2.94" x 1.96" (135 x 75 x 50mm)	5.30" x 2.94" x 1.96" (135 x 75 x 50mm)	5.30" x 2.94" x 1.96" (135 x 75 x 50mm)	5.30" x 2.94" x 1.96" (135 x 75 x 50mm)
Weight g / lb	500g / 1.1 lb	500g / 1.1 lb	500g / 1.1 lb	500g / 1.1 lb

## General data

- Secondary operates in series with contactor
- Life expectancy at maximum rated load minimum 100,000 operations
- ETL approved
- CE approved
- RoHS compliant

