

SURESTART COMPRESSOR SOFT STARTERS

Features & Benefits

- ▶ Reduces inrush start-current by up to 70%
- ▶ Automatically optimizes the starting current without a user interface
- ▶ Voltages from 110 to 460 VAC, single and three phase
- ▶ Reduces required size of back-up generators or solar power systems
- ▶ Extends equipment life by reducing torque by up to 70%
- ▶ Provides brownout protection
- ▶ Protects compressors and motors from:
 - Stalling
 - Overheating
 - Contactor arcing damage
 - Mechanical shock
 - Motor reversal

Specifications

Contactor: Secondary

Power Supply & Control Voltage: Auto-start at power-up

Start Current Reduction: 70% (single phase); 40% (three phase)

Start Torque Reduction: Up to 70%

Starts Per Hour: 15

Short Circuit Current Rating (SCCR): 5 kA

Operating Temperature Range: -4 to 140°F (-20 to 60°C) Storage

Temperature Range: -40 to 185°F (-40 to 85°C)

Life Expectancy at Maximum Load Rate: Minimum 100,000 cycles

Dimensions:

– Standard: 5.30 x 2.94 x 1.96 in (135 x 75 x 50 mm)

– RV: 8.00 x 3.25 x 2.25 in (203 x 83 x 57 mm)

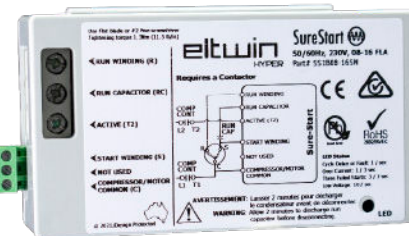
Weight: 1.11 lb (500 g)

IP Rating: Standard - IP20; RV - IP65

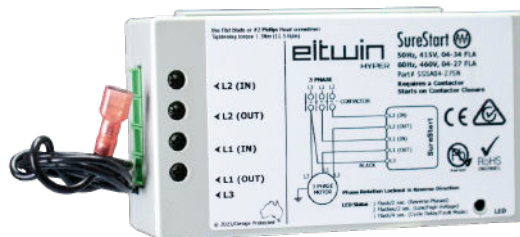


Ordering Information

Part No.	Nominal Voltage Rating VAC	Phase	Frequency Hz ±3%	Maximum Load Amps	Maximum Starting Amps	Motor Current, max FLA range	Motor Size hp	Minimum Startup Voltage	Maximum High Voltage	Shutdown on Low Voltage
SS0C04-20RW	115 - 120	Single Phase	60	20	120	4 - 20 A	—	103	130	98
SS0B12-20SN	110 - 115		60	20	35	12 - 20 A	0.75 - 1.5	103	126	98
SS1B08-16SN	208 - 230		50/60	16	35	8 - 16 A	1.75 - 3.5	180	253	175
SS1B16-32SN	208 - 230		50/60	32	65	16 - 32 A	3.5 - 7	180	253	175
SS2A04-28SN	208 - 230	Three Phase	50/60	38	150	4 - 28 A	2 - 10	187	253	176
SS3A04-27SN	380		50/60	38	150	4 - 27 A	2 - 15	342	422	323
SS4A04-34SN	415		50	38	150	4 - 34 A	2 - 20	373	460	353
SS5A04-27SN	460		60	38	150	4 - 27 A	2 - 20	414	510	391



Standard Single-Phase Model



Three-Phase Model



RV Single-Phase Model

Typical Locked Rotator Amperage (LRA) Reduction with Soft-Start

Motor Size	Before Soft-Start	After Soft-Start
7 hp	183 A	73 A
6 hp	150 A	60 A
5 hp	130 A	52 A
4 hp	100 A	40 A
3 hp	75 A	30 A
2 hp	50 A	20 A