



# WEG SSW07 Series Soft Starters

## Overview

Soft Starters are static starting devices designed for the acceleration, deceleration and protection of three-phase, electric induction motors through the control of the voltage applied to the motor. The SSW07, with DSP (Digital Signal Processor) control, was designed to provide great performance on motor starts and stops with an excellent cost-benefit ratio. Easy to set up, the SSW07 simplifies start-up activities and daily operations.

The SSW07 is compact, optimizing space in electric panels. It incorporates all electric motor protections and adapts to customer needs through its easy-to-install optional accessories. Optionally, a keypad, a communication interface or a motor PTC input can be added to the product.

## Features

- Universal voltage (220-575 VAC)
- Built-in run rated (AC1) bypass contactor
- Significant reduction of mechanical stresses through the coupling and transmission devices (gearboxes, pulleys, gears, conveyors, etc.) during the start
- Increases motor and machine mechanical equipment lifetime through elimination of mechanical shock
- Easy operation, setup, maintenance and installation
- Simple setpoint programming through trim pots
- Operates in environments up to 131°F (55°C) without current reduction
- Integral electronic motor protection
- Built-in electronic overload relay
- Avoids "water hammer" in pumps
- Limitation of voltage drop during start
- Switch type power supply with EMC filter for the control electronics (110-240 VAC)
- WEG WPS software compatible
- Conformal coated circuit boards
- Advantages
- Reduction of mechanical stresses over the coupling and transmission devices (gearboxes, pulleys, gears, conveyors, etc.) during start-up
- Increases motor and machine mechanical equipment lifetime by reducing mechanical stress
- Easy operation, setup, and maintenance
- Simple electrical installation
- Operates in environments up to 131°F (55°C) without current reduction for all models
- Integral electronic motor protection



- "Kick-Start" function for starting high breakaway torque loads
- Reduces "water hammer" in pump applications
- Limitation of voltage drop during start
- Voltage range of 220 to 575 VAC
- Switched mode power supply with EMC filter for the control of electronics (110-240 VAC)
- Built-in bypass contacts providing size reduction and energy saving
- Voltage monitoring of the electronics

## Optional Accessories

- Remote HMI interface with 3m [9.84 ft] or 5m [16.40 ft] cable
- RS-232 communication kit
- RS-485 communication kit
- Motor PTC kit
- Ventilation kit for size 2 (45-85A)
- Ventilation kit for size 3 (130-200A)
- IP20 kit for sizes 3 and 4 (130-412A)

## Applications

Typical examples of light/moderate loads

- Centrifugal pumps
- Immersed centrifugal pumps
- Blade vacuum pumps
- Screw compressors
- Paper refiners
- Sieving machines
- Mixers

Typical examples of heavy loads

- Stone crushers
- Centrifuges
- Wood chippers
- Wood slicing machines
- Conveyors
- Axial and centrifugal fans
- Ball mills (ceramic)
- Hammer mills

## Standards & Approvals





# WEG SSW07 Series Soft Starters

## Selecting the Right Soft Starter

### SSW07 Soft Starters – Selection – Steps 1 & 2 (of 4)

| Step 1: Select the application from the list and follow that column down.                |                                                                                                                                   | Typical Applications                                                                                                                                                                                       |                                                                                                                                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                          |                                                                                                                                                 |                                 |
|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
|                                                                                          |                                                                                                                                   | Standard Duty                                                                                                                                                                                              |                                                                                                                                                                          | Medium Duty                                                                                                                                                                                                                      |                                                                                                                                                                                          | Heavy Duty                                                                                                                                      | Light Duty                      |
|                                                                                          |                                                                                                                                   | Default Agitator<br>Bow Thruster - Zero Pitch<br>Compressor - Rotary Vane<br>Compressor - Scroll<br>Conveyor - Unloaded<br>Fan - Low Inertia < 85A<br>Feeder - screw<br>Lathe machines<br>Mixer - Unloaded | Molding Machine<br>Plastic and textile machines<br>Pump - Submersible<br>Centrifugal Pump - Submersible<br>Rotodynamic<br>Saw - Band<br>Transformers, voltage regulators | Ball mill<br>Bow Thruster - Loaded<br>Compressor - Centrifugal<br>Compressor - Reciprocating<br>Compressor - Rotary Screw<br>Conveyor - Loaded<br>Grinder<br>Hammer mill<br>Mills - Flour, etc.<br>Mixer - Loaded<br>Pelletizers | Pump - Positive displacement<br>Reciprocating<br>Pump - Positive displacement<br>Rotary<br>Pump Jack<br>Rolling mill<br>Roots Blower<br>Saw - Circular<br>Screen - Vibrating<br>Tumblers | *For centrifuges make selection at I(A) = motor FLA x 2.3<br>Crusher<br>Fan - High Inertia > 85A<br>Shredder<br>Wood chipper<br>Press, flywheel | Unloaded / Lightly loaded motor |
| Step 2: Confirm the rated starting capability of the soft start against the application. | Trip Class                                                                                                                        | 10                                                                                                                                                                                                         | 20                                                                                                                                                                       |                                                                                                                                                                                                                                  | 30                                                                                                                                                                                       | 5                                                                                                                                               |                                 |
|                                                                                          | Rated Starting Capability                                                                                                         | 3x Motor Current - 30s<br>3.5x Motor Current - 15s                                                                                                                                                         | 4x Motor Current - 20s                                                                                                                                                   |                                                                                                                                                                                                                                  | 4.5x Motor Current - 30s                                                                                                                                                                 | 3x Motor Current - 5s                                                                                                                           |                                 |
|                                                                                          | Max Starts per Hour                                                                                                               | 10 starts/hr                                                                                                                                                                                               | 6 starts/hr                                                                                                                                                              |                                                                                                                                                                                                                                  | 4 starts/hr                                                                                                                                                                              | 4 starts/hr                                                                                                                                     |                                 |
|                                                                                          | Index Rating Standard: AC53b:3-30: 330; Overcurrent = 3x soft starter rated current for 30s; SSW07 frame 2&3 with ventilation kit |                                                                                                                                                                                                            |                                                                                                                                                                          |                                                                                                                                                                                                                                  |                                                                                                                                                                                          |                                                                                                                                                 |                                 |

### SSW07 Soft Starters – Selection – Step 3 (of 4)

Step 3: Consider the operating environment and make the model selection based on a higher horsepower rating.

|                           |                                                                                                                                                                                                                        |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Height Above Sea Level    | Standard operating height is 3280ft. For every 328ft, increase motor HP by 1%, up to 13,200ft.<br>Example: For a 100HP motor at 4900ft, make model selection based on 105HP (5% higher).                               |
| Operating Temperature     | Standard operating temperature is 50°C [122°F]. For every 1°F above, increase motor HP by 2.2%, up to 60°C [140°F].<br>Example: For a 100HP motor at 55.6°C [132°F], make model selection based on 122HP (22% higher). |
| Increased Starts per Hour | See Stellar Series SR33 or SR55 for more than 10 starts/hr                                                                                                                                                             |

### SSW07 Soft Starters – Selection – Step 4 (of 4)

Step 4: Select SSW07 model based on your motor voltage and horsepower

| Motor Size         |         |         |         |      | Soft Starter Size                         |                                           |                                           |
|--------------------|---------|---------|---------|------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| In-Line Connection |         |         |         |      | Application Trip Class                    |                                           |                                           |
| I (A)              | HP @    |         |         |      | Class 10                                  | Class 20                                  | Class 30                                  |
|                    | 230VAC* | 460VAC* | 575VAC* | Size |                                           |                                           |                                           |
| 17                 | 5       | 10      | 15      | 1    | <a href="#">SSW070017T5SZ</a>             | <a href="#">SSW070017T5SZ</a>             | <a href="#">SSW070017T5SZ</a>             |
| 24                 | 7.5     | 15      | 20      | 1    | <a href="#">SSW070024T5SZ</a>             | <a href="#">SSW070024T5SZ</a>             | <a href="#">SSW070024T5SZ</a>             |
| 30                 | 10      | 20      | 25      | 1    | <a href="#">SSW070030T5SZ</a>             | <a href="#">SSW070030T5SZ</a>             | <a href="#">SSW070045T5SZ<sup>1</sup></a> |
| 45                 | 15      | 30      | 40      | 2    | <a href="#">SSW070045T5SZ<sup>1</sup></a> | <a href="#">SSW070045T5SZ<sup>1</sup></a> | <a href="#">SSW070061T5SZ<sup>1</sup></a> |
| 61                 | 20      | 40      | 50      | 2    | <a href="#">SSW070061T5SZ<sup>1</sup></a> | <a href="#">SSW070085T5SZ<sup>1</sup></a> | <a href="#">SSW070085T5SZ<sup>1</sup></a> |
| 85                 | 30      | 60      | 75      | 2    | <a href="#">SSW070085T5SZ<sup>1</sup></a> | <a href="#">SSW070130T5SZ<sup>2</sup></a> | <a href="#">SSW070130T5SZ<sup>2</sup></a> |
| 130                | 50      | 100     | 125     | 3    | <a href="#">SSW070130T5SZ<sup>2</sup></a> | <a href="#">SSW070171T5SZ<sup>2</sup></a> | <a href="#">SSW070171T5SZ<sup>2</sup></a> |
| 171                | 60      | 125     | 150     | 3    | <a href="#">SSW070171T5SZ<sup>2</sup></a> | <a href="#">SSW070200T5SZ<sup>2</sup></a> | <a href="#">SSW070200T5SZ<sup>2</sup></a> |
| 200                | 75      | 150     | 200     | 3    | <a href="#">SSW070200T5SZ<sup>2</sup></a> | <a href="#">SSW070255T5SH1Z</a>           | <a href="#">SSW070255T5SH1Z</a>           |
| 255                | 100     | 200     | 250     | 4    | <a href="#">SSW070255T5SH1Z</a>           | <a href="#">SSW070312T5SH1Z</a>           | <a href="#">SSW070312T5SH1Z</a>           |
| 312                | 125     | 250     | 300     | 4    | <a href="#">SSW070312T5SH1Z</a>           | <a href="#">SSW070365T5SH1Z</a>           | <a href="#">SSW070412T5SH1Z</a>           |
| 365                | 150     | 300     | 350     | 4    | <a href="#">SSW070365T5SH1Z</a>           | <a href="#">SSW070412T5SH1Z</a>           | -                                         |
| 412                | 150     | 350     | 400     | 4    | <a href="#">SSW070412T5SH1Z</a>           | -                                         | -                                         |

\* 230VAC=220-240VAC, 460VAC=440-480VAC, 575VAC=575VAC

1) With ventilation kit SSW0708900=KVT-2B

2) With ventilation kit SSW0708900=KVT-3C

WEG Soft Starter Selection Tool Software is available online at [automationdirect.com/selectors/softstarters](http://automationdirect.com/selectors/softstarters)



# WEG SSW07 Series Soft Starters

**WEG SSW07 Compact Soft Starters Selection Chart <sup>1, 4</sup>**

| Part Number                                         | Price      | Motor Volts | Motor HP | Soft Starter Amps | Frame Size | Dimensions (HxWxD) (in [mm])             | Approx. Weight (lb [kg]) |
|-----------------------------------------------------|------------|-------------|----------|-------------------|------------|------------------------------------------|--------------------------|
| <b>Input Power Supply: 3-Phase, 220/230VAC</b>      |            |             |          |                   |            |                                          |                          |
| <a href="#"><u>SSW070017T5SZ</u></a> <sup>2</sup>   | \$706.00   | 220/230VAC  | 5        | 17                | 1          | 6.4 x 3.7 x 6.2 [162.1 x 95.0 x 157.0]   | 2.9 [1.3]                |
| <a href="#"><u>SSW070024T5SZ</u></a> <sup>2</sup>   | \$757.00   |             | 7.5      | 24                | 1          |                                          |                          |
| <a href="#"><u>SSW070030T5SZ</u></a> <sup>2</sup>   | \$782.00   |             | 10       | 30                | 1          |                                          |                          |
| <a href="#"><u>SSW070045T5SZ</u></a> <sup>2</sup>   | \$891.00   |             | 15       | 45                | 2          | 8.2 x 5.6 x 7.9 [208.3 x 141.5 x 201.7]  | 7.28 [3.3]               |
| <a href="#"><u>SSW070061T5SZ</u></a> <sup>2</sup>   | \$1,004.00 |             | 20       | 61                | 2          |                                          |                          |
| <a href="#"><u>SSW070085T5SZ</u></a> <sup>2</sup>   | \$1,215.00 |             | 30       | 85                | 2          |                                          |                          |
| <a href="#"><u>SSW070130T5SZ</u></a> <sup>2</sup>   | \$1,526.00 |             | 50       | 130               | 3          | 10.9 x 8.8 x 8.7 [276.9 x 223.5 x 220.0] | 16.8 [7.6]               |
| <a href="#"><u>SSW070171T5SZ</u></a> <sup>2</sup>   | \$1,938.00 |             | 60       | 171               | 3          |                                          |                          |
| <a href="#"><u>SSW070200T5SZ</u></a> <sup>2</sup>   | \$2,297.00 |             | 75       | 200               | 3          |                                          |                          |
| <a href="#"><u>SSW070255T5SH1Z</u></a> <sup>3</sup> | \$2,805.00 |             | 100      | 255               | 4          | 13.0 x 9.0 x 9.6 [330.2 x 228.6 x 243.9] | 25.4 [11.5]              |
| <a href="#"><u>SSW070312T5SH1Z</u></a> <sup>3</sup> | \$3,045.00 |             | 125      | 312               | 4          |                                          |                          |
| <a href="#"><u>SSW070365T5SH1Z</u></a> <sup>3</sup> | \$3,164.00 |             | 150      | 365               | 4          |                                          |                          |
| <a href="#"><u>SSW070412T5SH1Z</u></a> <sup>3</sup> | \$3,714.00 |             | 150      | 412               | 4          |                                          |                          |
| <b>Input Power Supply: 3-Phase, 440/460VAC</b>      |            |             |          |                   |            |                                          |                          |
| <a href="#"><u>SSW070017T5SZ</u></a> <sup>2</sup>   | \$706.00   | 440/460VAC  | 10       | 17                | 1          | 6.4 x 3.7 x 6.2 [162.1 x 95.0 x 157.0]   | 2.9 [1.3]                |
| <a href="#"><u>SSW070024T5SZ</u></a> <sup>2</sup>   | \$757.00   |             | 15       | 24                | 1          |                                          |                          |
| <a href="#"><u>SSW070030T5SZ</u></a> <sup>2</sup>   | \$782.00   |             | 20       | 30                | 1          |                                          |                          |
| <a href="#"><u>SSW070045T5SZ</u></a> <sup>2</sup>   | \$891.00   |             | 30       | 45                | 2          | 8.2 x 5.6 x 7.9 [208.3 x 141.5 x 201.7]  | 7.28 [3.3]               |
| <a href="#"><u>SSW070061T5SZ</u></a> <sup>2</sup>   | \$1,004.00 |             | 40       | 61                | 2          |                                          |                          |
| <a href="#"><u>SSW070085T5SZ</u></a> <sup>2</sup>   | \$1,215.00 |             | 60       | 85                | 2          |                                          |                          |
| <a href="#"><u>SSW070130T5SZ</u></a> <sup>2</sup>   | \$1,526.00 |             | 100      | 130               | 3          | 10.9 x 8.8 x 8.7 [276.9 x 223.5 x 220.0] | 16.8 [7.6]               |
| <a href="#"><u>SSW070171T5SZ</u></a> <sup>2</sup>   | \$1,938.00 |             | 125      | 171               | 3          |                                          |                          |
| <a href="#"><u>SSW070200T5SZ</u></a> <sup>2</sup>   | \$2,297.00 |             | 150      | 200               | 3          |                                          |                          |
| <a href="#"><u>SSW070255T5SH1Z</u></a> <sup>3</sup> | \$2,805.00 |             | 200      | 255               | 4          | 13.0 x 9.0 x 9.6 [330.2 x 228.6 x 243.9] | 25.4 [11.5]              |
| <a href="#"><u>SSW070312T5SH1Z</u></a> <sup>3</sup> | \$3,045.00 |             | 250      | 312               | 4          |                                          |                          |
| <a href="#"><u>SSW070365T5SH1Z</u></a> <sup>3</sup> | \$3,164.00 |             | 300      | 365               | 4          |                                          |                          |
| <a href="#"><u>SSW070412T5SH1Z</u></a> <sup>3</sup> | \$3,714.00 |             | 350      | 412               | 4          |                                          |                          |
| <b>Input Power Supply: 3-Phase, 575VAC</b>          |            |             |          |                   |            |                                          |                          |
| <a href="#"><u>SSW070017T5SZ</u></a> <sup>2</sup>   | \$706.00   | 575VAC      | 15       | 17                | 1          | 6.4 x 3.7 x 6.2 [162.1 x 95.0 x 157.0]   | 2.9 [1.3]                |
| <a href="#"><u>SSW070024T5SZ</u></a> <sup>2</sup>   | \$757.00   |             | 20       | 24                | 1          |                                          |                          |
| <a href="#"><u>SSW070030T5SZ</u></a> <sup>2</sup>   | \$782.00   |             | 25       | 30                | 1          |                                          |                          |
| <a href="#"><u>SSW070045T5SZ</u></a> <sup>2</sup>   | \$891.00   |             | 40       | 45                | 2          | 8.2 x 5.6 x 7.9 [208.3 x 141.5 x 201.7]  | 7.28 [3.3]               |
| <a href="#"><u>SSW070061T5SZ</u></a> <sup>2</sup>   | \$1,004.00 |             | 50       | 61                | 2          |                                          |                          |
| <a href="#"><u>SSW070085T5SZ</u></a> <sup>2</sup>   | \$1,215.00 |             | 75       | 85                | 2          |                                          |                          |
| <a href="#"><u>SSW070130T5SZ</u></a> <sup>2</sup>   | \$1,526.00 |             | 125      | 130               | 3          | 10.9 x 8.8 x 8.7 [276.9 x 223.5 x 220.0] | 16.8 [7.6]               |
| <a href="#"><u>SSW070171T5SZ</u></a> <sup>2</sup>   | \$1,938.00 |             | 150      | 171               | 3          |                                          |                          |
| <a href="#"><u>SSW070200T5SZ</u></a> <sup>2</sup>   | \$2,297.00 |             | 200      | 200               | 3          |                                          |                          |
| <a href="#"><u>SSW070255T5SH1Z</u></a> <sup>3</sup> | \$2,805.00 |             | 250      | 255               | 4          | 13.0 x 9.0 x 9.6 [330.2 x 228.6 x 243.9] | 25.4 [11.5]              |
| <a href="#"><u>SSW070312T5SH1Z</u></a> <sup>3</sup> | \$3,045.00 |             | 300      | 312               | 4          |                                          |                          |
| <a href="#"><u>SSW070365T5SH1Z</u></a> <sup>3</sup> | \$3,164.00 |             | 350      | 365               | 4          |                                          |                          |
| <a href="#"><u>SSW070412T5SH1Z</u></a> <sup>3</sup> | \$3,714.00 |             | 400      | 412               | 4          |                                          |                          |

Notes: 1) "HP" rating based on UL508. Use as a guide only. Motor FLA may vary with speed and manufacturer. ALWAYS compare motor FLA to Nominal Amps of starter.

2) 90-250 VAC control power supply required.

3) For models from 255A to 412A: 110-130 VAC (-15% to +10%, or 94-143 VAC) .

4) For other technical data, please refer to WEG product manual.



# WEG SSW07 Series Soft Starters

## Specifications

| WEG SSW07 Compact Soft Starters Specifications |                                                                    |                                                                                                                                                                                                                                     |                                                                                                                                                                                |
|------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Power supply</b>                            | <b>Power</b>                                                       | 220-575 VAC (-15% to +10%) or 187-632 VAC                                                                                                                                                                                           |                                                                                                                                                                                |
|                                                | <b>Control Voltage</b>                                             | For models from 17A to 200A: 110-240 VAC (-15% to +10%, or 94-264 VAC)<br>For models from 255A to 412A: 110-130 VAC (-15% to +10%, or 94-143 VAC)                                                                                   |                                                                                                                                                                                |
|                                                | <b>Frequency</b>                                                   | 50/60 Hz +/- 10% (45 to 66 Hz)                                                                                                                                                                                                      |                                                                                                                                                                                |
| <b>Enclosure</b>                               |                                                                    | Injected plastic. IP20 in models from 17A to 85A; IP00 in models from 130A to 412A (IP20 as an option)                                                                                                                              |                                                                                                                                                                                |
| <b>Control</b>                                 | <b>Method</b>                                                      | Voltage variation over the load (3-phase induction motor)                                                                                                                                                                           |                                                                                                                                                                                |
|                                                | <b>CPU</b>                                                         | DSP type microcontroller (Digital Signal Processor)                                                                                                                                                                                 |                                                                                                                                                                                |
|                                                | <b>Types of Control</b>                                            | Voltage ramp, current limit                                                                                                                                                                                                         |                                                                                                                                                                                |
| <b>Capacity</b>                                | <b>Max Number of Starts Per Hour (Without Ventilation)</b>         | 10 (1 every 6 minutes; models from 17A to 30A<br>3 (1 every 20 minutes; models from 45A to 200A<br>10 (1 every 6 minutes; models from 255A to 412A)                                                                                 |                                                                                                                                                                                |
|                                                | <b>Max Number of Starts Per Hour With Optional Ventilation Kit</b> | 10 (1 every 6 minutes; models from 45A to 200A)                                                                                                                                                                                     |                                                                                                                                                                                |
|                                                | <b>Start Cycle</b>                                                 | 3 x In of the SSW07 during 30 seconds                                                                                                                                                                                               |                                                                                                                                                                                |
|                                                | <b>Trip Class</b>                                                  | 10-30                                                                                                                                                                                                                               |                                                                                                                                                                                |
| <b>SCCR Rating</b>                             |                                                                    | See SSW07 Max UL Overcurrent Protection table                                                                                                                                                                                       |                                                                                                                                                                                |
| <b>Inputs</b>                                  |                                                                    | 3 isolated digital programmable inputs                                                                                                                                                                                              |                                                                                                                                                                                |
| <b>Outputs</b>                                 |                                                                    | 2 relay outputs with NO contacts, 240VAC, 1A, programmable functions                                                                                                                                                                |                                                                                                                                                                                |
| <b>Safety Protections</b>                      | <b>Standard</b>                                                    | Overcurrent<br>Overcurrent before bypass<br>Phase loss<br>Inverted phase sequence<br>Overtemperature in power heatsink<br>Motor overload (class 5 to 30)                                                                            | Locked rotor<br>Excess starting time<br>Over/under frequency<br>Bypass contact open<br>Undervoltage in control supply                                                          |
|                                                | <b>With Accessory</b>                                              | Undercurrent<br>Current imbalance<br>Subcurrent before bypass<br>External defects                                                                                                                                                   | Programming error<br>Serial communication error<br>MMI communication error<br>Overtemperature in motor PTC                                                                     |
| <b>Standard Functions</b>                      |                                                                    | Voltage ramp (initial voltage: 30-90%)<br>Current limitation (150-450% of SSW07 rated current)<br>Starting time (1-40 seconds)<br>Kick Start (Off-0.2 to 2 seconds)<br>Deceleration ramp (0-40 seconds)                             | Motor and SSW07 current relation (50 to 100%)<br>Faults auto-reset<br>Thermal memory auto-reset<br>Factory Standard reset<br>Soft-started built-in bypass                      |
| <b>Programming</b>                             | <b>Command</b>                                                     | On, Off / Reset and Function programming                                                                                                                                                                                            |                                                                                                                                                                                |
|                                                | <b>Additional functions</b>                                        | Current limitation (30-500% of SSW07 rated current)<br>Motor and SSW07 current relation (30 to 100%)<br>Starting time up to 999s<br>Deceleration time up to 240s                                                                    | Program enabling password<br>Selection for Local/Remote operation<br>Programmable rated voltage                                                                                |
|                                                | <b>Supervision (Reading)</b>                                       | Motor current (%Soft-Starter In)<br>Motor current (%motor in)<br>Motor current (A)<br>Current indication in each phase R-S-T<br>Supply network frequency<br>Apparent power supplied to load (kVA)                                   | Soft-Starter status<br>Digital input and output status<br>Back-up of 4 last errors<br>Soft-Starter software version<br>Heatsink temperature<br>Motor thermal protection status |
| <b>Accessories and Options</b>                 |                                                                    | Plug-in type local HMI<br>HMI remote kit<br>3 and 5m [9.84 and 16.40 ft] cable for remote<br>HMI interconnection<br>RS-232 communication kit<br>SSW07 interconnection cables (PC Serial (RS-232)<br>3m [9.84 ft] and 10m [32.81 ft] | RS-485 communication kit<br>Motor PTC kit<br>Ventilation kit for size 2 (45-85 A)<br>Ventilation kit for size 3 (130-200 A)<br>IP20 kit for size 3 (130-200 A)                 |
| <b>Finishing</b>                               |                                                                    | Lid: gray ultra matte; cabinet: blue ultra matte                                                                                                                                                                                    |                                                                                                                                                                                |
| <b>Conformities and Standards</b>              | <b>Safety</b>                                                      | UL 508 Standard - Industrial Control Equipment                                                                                                                                                                                      |                                                                                                                                                                                |
|                                                | <b>Low Voltage</b>                                                 | EN60947-4-2; LVD 2006/95/EC Standard - Low Voltage Directive                                                                                                                                                                        |                                                                                                                                                                                |
|                                                | <b>EMC</b>                                                         | EMC 89/336/EEC Directive - Industrial Environment                                                                                                                                                                                   |                                                                                                                                                                                |
|                                                | <b>UL (USA)/cUL (Canada)</b>                                       | Underwriters Laboratories Inc. - USA                                                                                                                                                                                                |                                                                                                                                                                                |
|                                                | <b>CE (Europe)</b>                                                 | Conformity test conducted by EPCOS                                                                                                                                                                                                  |                                                                                                                                                                                |

\* For the 45-200 A current models using the ventilation kit



# WEG SSW07 Series Soft Starters

## SSW07 Max UL Overcurrent Protection

| SSW07 Series Soft Starters UL Maximum Overcurrent Protection Devices * |                                                 |                                       |                                                          |                                             |                                                       |                                             |                                 |
|------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------|----------------------------------------------------------|---------------------------------------------|-------------------------------------------------------|---------------------------------------------|---------------------------------|
| Soft Starter Model Number                                              | Standard Fault Short Circuit Rating $\leq 600V$ | Circuit Breaker (CB) - UL489 Any MCCB | Ultra-fast Fuses Fenaz Shawmut/Mersen Flush End Contacts | High Fault Short Circuit Rating $\leq 480V$ | Circuit Breaker (DIVQ)                                | High Fault Short Circuit Rating $\leq 600V$ | Circuit Breaker (DIVQ)          |
| <a href="#"><u>SSW070017T5SZ</u></a>                                   | 5kA                                             | $\leq 30A$                            | 6.6URD30TTF0050                                          | 65kA                                        | WEG ACW125W-FTU25-3 or UBW225H-FTU30-3A or HFD3030L   | 18kA                                        | UBW225H-FTU40-3A or HFD3040L    |
| <a href="#"><u>SSW070024T5SZ</u></a>                                   | 5kA                                             | $\leq 40A$                            | 6.6URD30TTF0080                                          | 65kA                                        | WEG ACW125W-FTU30-3                                   | 18kA                                        | UBW225H-FTU40-3A or HFD3040L    |
| <a href="#"><u>SSW070030T5SZ</u></a>                                   | 5kA                                             | $\leq 40A$                            | 6.6URD30TTF0080                                          | 65kA                                        | WEG ACW125W-FTU40-3                                   | 18kA                                        | kA UBW225H-FTU40-3A or HFD3040L |
| <a href="#"><u>SSW070045T5SZ</u></a>                                   | 5kA                                             | $\leq 150A$                           | 6.6URD30TTF0100                                          | 65kA                                        | WEG ACW125W-FTU60-3 or UBW225H-FTU150-3A or HFD3150L  | 18kA                                        | UBW225H-FTU40-3A or HFD3040L    |
| <a href="#"><u>SSW070061T5SZ</u></a>                                   | 5kA                                             | $\leq 150A$                           | 6.6URD30TTF0125                                          | 65kA                                        | WEG ACW125W-FTU60-3 or UBW225H-FTU150-3A or HFD3150L  | 18kA                                        | UBW225H-FTU150-3A or HFD3150L   |
| <a href="#"><u>SSW070085T5SZ</u></a>                                   | 10kA                                            | $\leq 150A$                           | 6.6URD30TTF0200                                          | 65kA                                        | WEG ACW125W-FTU60-3 or UBW225H-FTU150-3A or HFD3150L  | 18kA                                        | UBW225H-FTU150-3A or HFD3150L   |
| <a href="#"><u>SSW070130T5SZ</u></a>                                   | 10kA                                            | $\leq 225A$                           | 6.6URD31TTF0325                                          | 65kA                                        | WEG ACW250W-FTU250-3 or UBW250H-FTU225-3A or HFD3225L | 18kA                                        | UBW225H-FTU150-3A or HFD3150L   |
| <a href="#"><u>SSW070171T5SZ</u></a>                                   | 10kA                                            | $\leq 250A$                           | 6.6URD32TTF0450                                          | 65kA                                        | WEG ACW250W-FTU250-3 or UBW250H-FTU250-3A or HJD3250  | 30kA                                        | UBW225H-FTU225-3A or HFD3225L   |
| <a href="#"><u>SSW070200T5SZ</u></a>                                   | 10kA                                            | $\leq 250A$                           | 6.6URD32TTF0500                                          | 65kA                                        | WEG ACW250W-FTU250-3 or UBW250H-FTU250-3A or HJD3250  | 30kA                                        | UBW250L-FTU250-3A or JDC3250    |
| <a href="#"><u>SSW070255T5SH1Z</u></a>                                 | 18kA                                            | $\leq 400A$                           | 6.6URD32TTF0400                                          | 65kA                                        | WEG ACW400W-FTU400-3 or UBW400H-FTU400-3A or HKD3400  | 30kA                                        | UBW250L-FTU250-3A or JDC3250    |
| <a href="#"><u>SSW070312T5SH1Z</u></a>                                 | 18kA                                            | $\leq 400A$                           | 6.6URD33TTF0500                                          | 65kA                                        | WEG ACW400W-FTU400-3 or UBW400H-FTU400-3A or HKD3400  | 30kA                                        | UBW400H-FTU400-3A or HKD3400    |
| <a href="#"><u>SSW070365T5SH1Z</u></a>                                 | 18kA                                            | $\leq 600A$                           | 6.6URD33TTF0550                                          | 65kA                                        | WEG ACW800W-FTU800-3 or UBW600H-FTU600-3A or HLD3600  | 42kA                                        | UBW400H-FTU400-3A or HKD3400    |
| <a href="#"><u>SSW070412T5SH1Z</u></a>                                 | 18kA                                            | $\leq 600A$                           | 6.6URD33TTF0700                                          | 65kA                                        | WEG ACW800W-FTU800-3 or UBW600H-FTU600-3A or HLD3600  | 42kA                                        | UBW600L-FTU600-3A or LDC3600    |

\* Maximum trip ratings are for non-time-delay overcurrent protection devices.

\* Motor branch circuit protection must be based on MOTOR Full Load Current, and must comply with applicable local electrical codes. The 2008 NEC section 430.52 recommends a maximum of 175% (up to 225% absolute maximum) of motor FLC for time-delay fuses. (Class CC time-delay fuses are permitted up to the non-time-delay fuse maximum rating.)

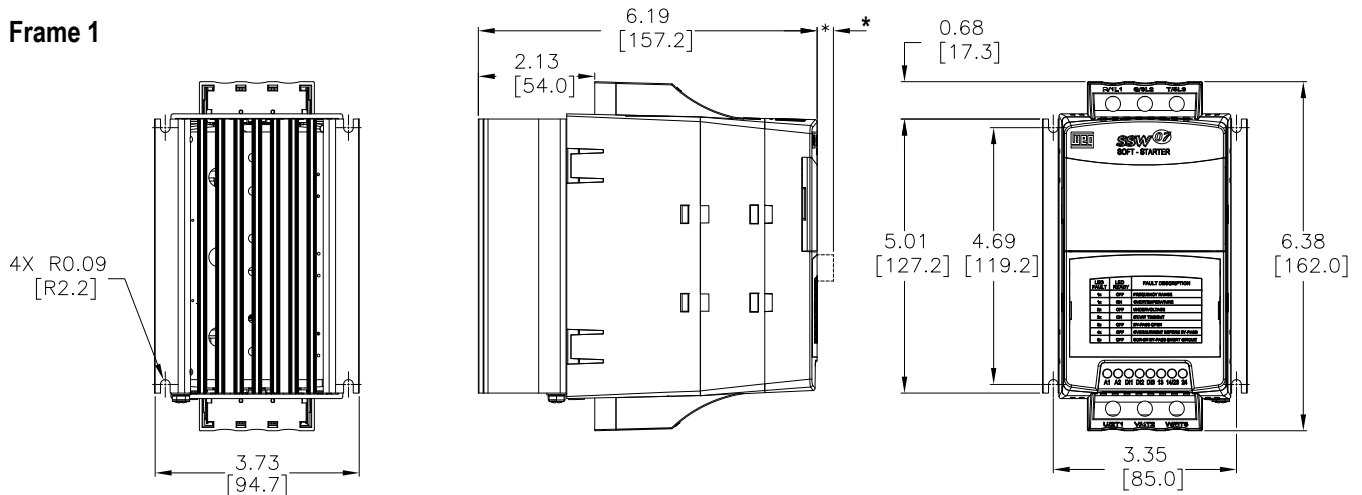


# WEG SSW07 Series Soft Starters

## SSW07 Series Dimensions

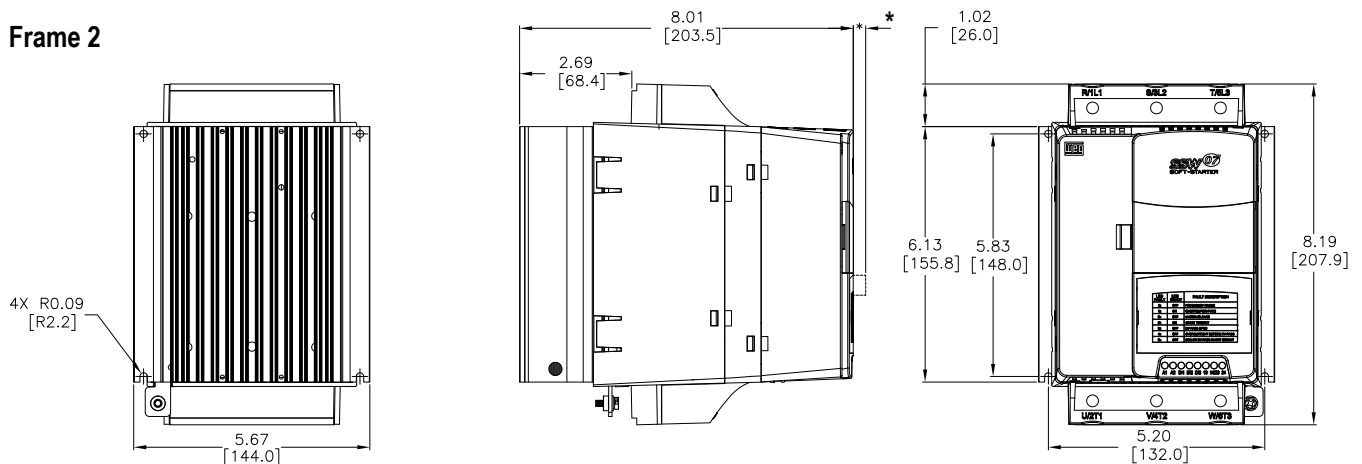
Inches [mm]

### Frame 1



**\*Optional modules add depth to dimension as follows:**  
**SSW07-08-KRS-485 and SSW07-08-KRS-232 add 5mm [0.2 in ]**  
**SSW07-08-KPTC-MTR adds 5mm [0.2 in ]**

### Frame 2



**\*Optional modules add depth to dimension as follows:**  
**SSW07-08-KRS-485 and SSW07-08-KRS-232 add 5mm [0.2 in ]**  
**SSW07-08-KPTC-MTR adds 5mm [0.2 in ]**

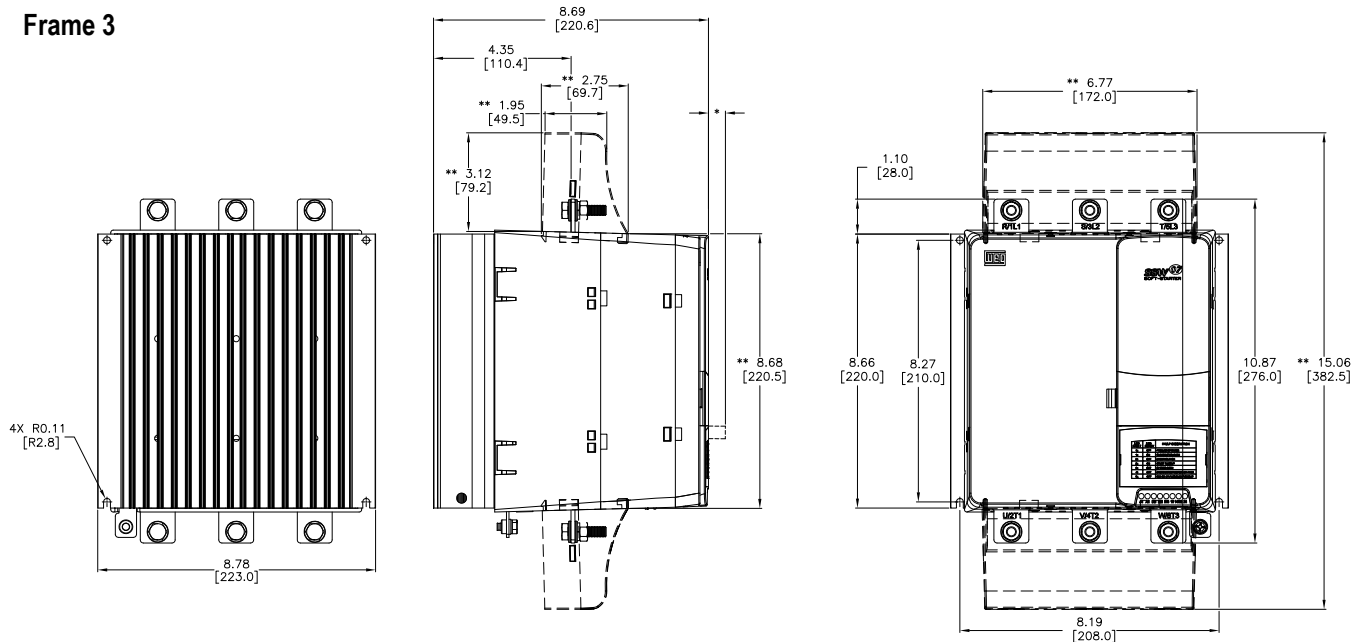


# WEG SSW07 Series Soft Starters

## SSW07 Series Dimensions

Inches [mm]

### Frame 3

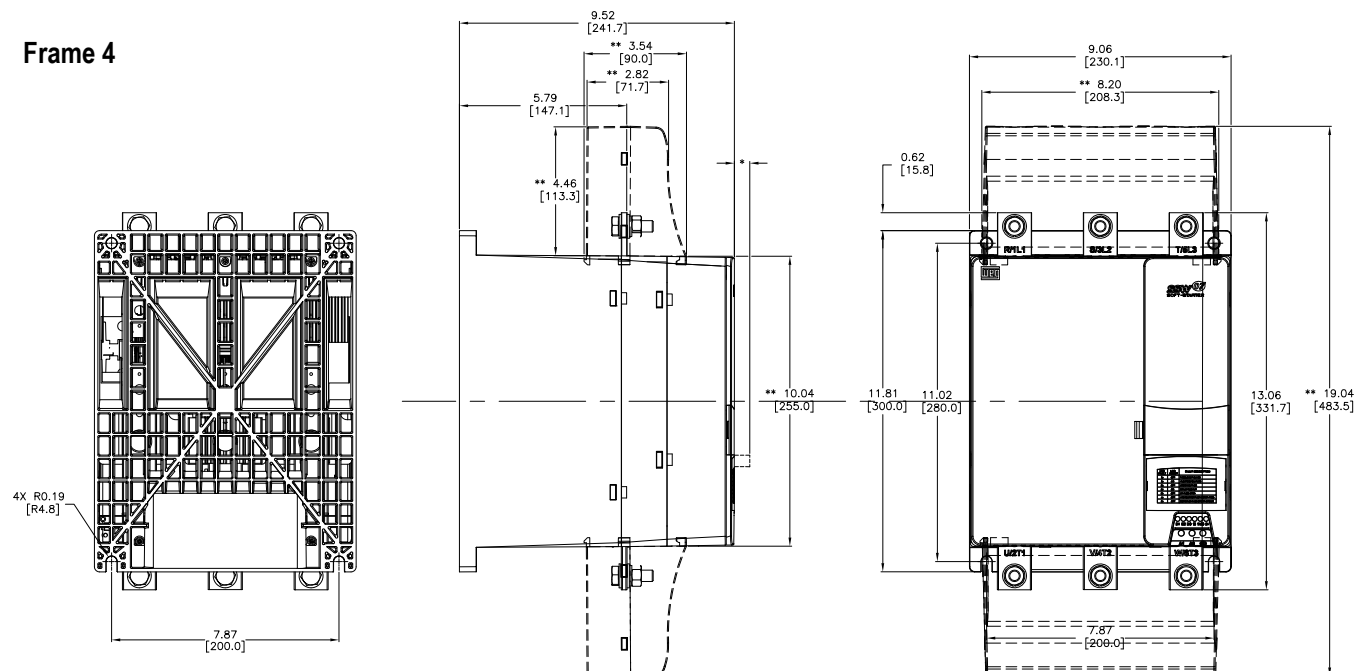


**\*Optional modules add depth to dimension as follows:**  
**SSW07-08-KRS-485 and SSW07-08-KRS-232 add 5mm [0.2 in ]**

**SSW07-08-KPTC-MTR adds 5mm [0.2 in ]**

**\*\*Indicates dimensions with optional SSW0708900-IP20-3C**

### Frame 4



**\*Optional modules add depth to dimension as follows:**  
**SSW07-08-KRS-485 and SSW07-08-KRS-232 add 5mm [0.2 in ]**

**SSW07-08-KPTC-MTR adds 5mm [0.2 in ]**

**\*\*Indicates dimensions with optional SSW0708900-IP20-4D**

tSSW-15



# WEG SSW07 Series Soft Starters

## Accessories

| SSW07 Series Accessories                  |          |                   |                                                                                                                                               |
|-------------------------------------------|----------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Part Number                               | Price    | Type of Accessory | Description                                                                                                                                   |
| <a href="#"><u>SSW07-08-HMI-LOC</u></a>   | \$106.00 | Keypad            | SSW07 keypad HMI                                                                                                                              |
| <a href="#"><u>SSW07-HMI-REM</u></a>      | \$208.00 |                   | SSW07 remote serial HMI. Remote keypad interface module included.                                                                             |
| <a href="#"><u>SSW07-HMI-REM-485</u></a>  | \$261.00 |                   | SSW07 remote serial HMI. Remote keypad interface with additional RS485 port module included.                                                  |
| <a href="#"><u>SSW07-08-KRS-485</u></a>   | \$123.00 | Communication     | SSW07 series communication module, 1 RS-485 (5-pin) port.                                                                                     |
| <a href="#"><u>SSW07-08-KRS-232</u></a>   | \$73.00  |                   | SSW07 series communication module, 1 RS-232 (RJ11) port.                                                                                      |
| <a href="#"><u>SSW0708900-KVT-2B</u></a>  | \$40.00  | Kits              | SSW07 series main cooling fan. For use with WEG SSW07 series 45-105A soft starters. Electrical connector included.                            |
| <a href="#"><u>SSW0708900-KVT-3C</u></a>  | \$57.00  |                   | SSW07 series main cooling fan. For use with WEG SSW07 series 130-200A soft starters. Electrical connector included.                           |
| <a href="#"><u>SSW07-08-KPTC-MTR</u></a>  | \$75.00  |                   | SSW07 series PTC module, for use with WEG SSW07 series soft starters.                                                                         |
| <a href="#"><u>SSW0708900-IP20-3C</u></a> | \$38.50  |                   | SSW07 series touch shield, for use with WEG SSW07 series 130-200A soft starters. Mounting hardware included. Provides IP20 protection rating. |
| <a href="#"><u>SSW0708900-IP20-4D</u></a> | \$80.00  |                   | SSW07 series touch shield, for use with WEG SSW07 series 255-412A soft starters. Mounting hardware included. Provides IP20 protection rating. |



**SSW07-08-HMI-LOC**



**SSW07-08-KRS-485**



**SSW07-08-KPTC-MTR**



**SSW07-08-KRS-232**



**SSW0708900-KVT-2B**



**SSW0708900-KVT-3C**



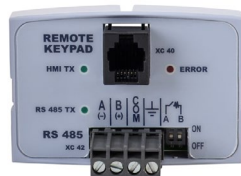
**SSW0708900-IP20-3C**



**SSW0708900-IP20-4D**



**SSW07-HMI-REM-485**



**SSW07-HMI-REM**



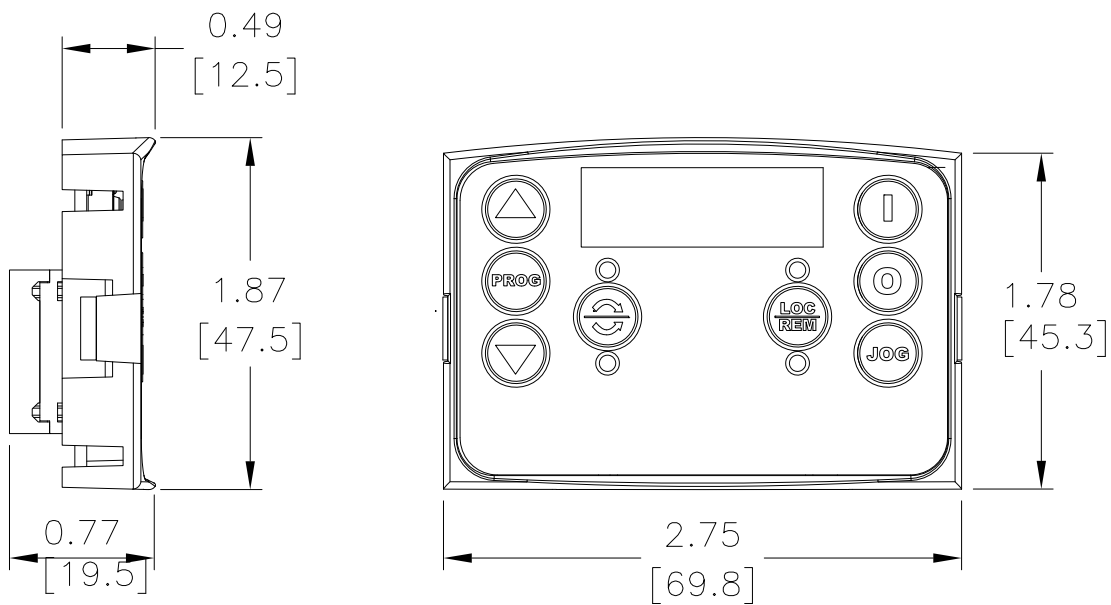


# WEG SSW07 Series Soft Starters

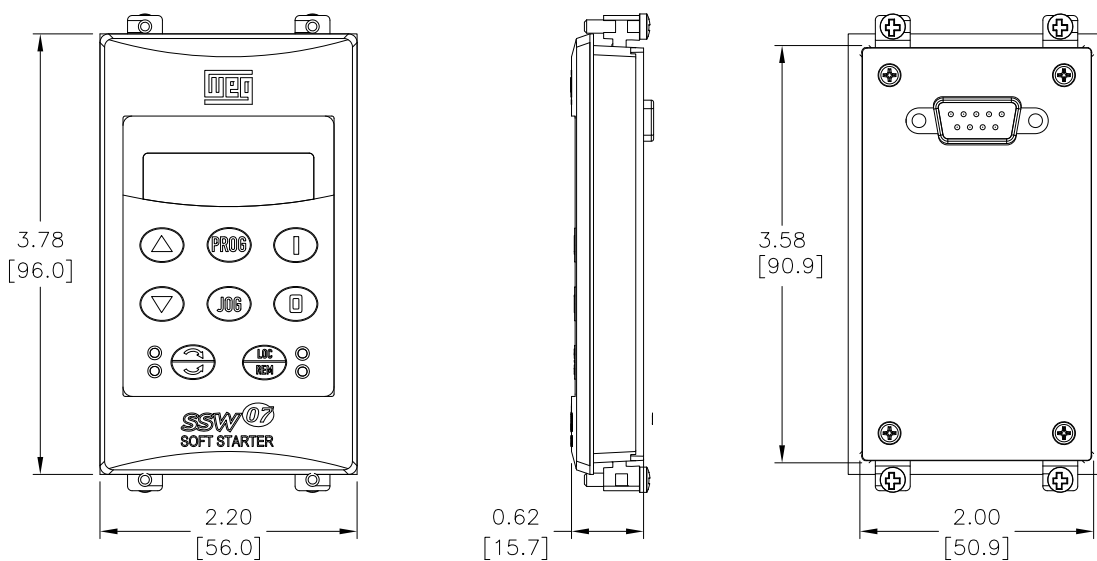
## Accessories Dimensions

Inches [mm]

### SSW07-08-HMI-LOC



### SSW07-HMI-REM





# WEG SSW07 Series Soft Starters

## SSW07 Overcurrent Protection

| Additional Accessories Recommended For Use With WEG SSW07 Series Soft Starters* |                                                 |                                       |                                              |                          |                            |
|---------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------|----------------------------------------------|--------------------------|----------------------------|
| Soft Starter Model Number                                                       | Standard Fault Short Circuit Rating $\leq 600V$ | Circuit Breaker (CB) - UL489 Any MCCB | Circuit Breaker – Fuji ADC                   | Class T Fuse             | Class T Fuse Holder        |
| <a href="#">SSW070017T5SZ</a>                                                   | 5kA                                             | $\leq 30A$                            | <a href="#">BW125JAGU-3P030SB</a><br>-       | <a href="#">TJS30-1</a>  | <a href="#">T60030-1SR</a> |
| <a href="#">SSW070024T5SZ</a>                                                   | 5kA                                             | $\leq 40A$                            | <a href="#">BW125JAGU-3P040SB</a><br>-       | <a href="#">TJS40-1</a>  | <a href="#">T60060-1CR</a> |
| <a href="#">SSW070030T5SZ</a>                                                   | 5kA                                             | $\leq 40A$                            | <a href="#">BW125JAGU-3P040SB</a><br>-       | <a href="#">TJS40-1</a>  | <a href="#">T60060-1CR</a> |
| <a href="#">SSW070045T5SZ</a>                                                   | 5kA                                             | $\leq 150A$                           | <a href="#">BW250JAGU-3P150SB</a><br>F3P-150 | <a href="#">TJS150</a>   | <a href="#">T60200-1C</a>  |
| <a href="#">SSW070061T5SZ</a>                                                   | 5kA                                             | $\leq 150A$                           | <a href="#">BW250JAGU-3P150SB</a><br>F3P-150 | <a href="#">TJS150</a>   | <a href="#">T60200-1C</a>  |
| <a href="#">SSW070085T5SZ</a>                                                   | 10kA                                            | $\leq 150A$                           | <a href="#">BW250JAGU-3P150SB</a><br>F3P-150 | <a href="#">TJS150</a>   | <a href="#">T60200-1C</a>  |
| <a href="#">SSW070130T5SZ</a>                                                   | 10kA                                            | $\leq 225A$                           | <a href="#">BW250JAGU-3P225SB</a><br>F3P-225 | <a href="#">TJS225</a>   | <a href="#">T60400-1C</a>  |
| <a href="#">SSW070171T5SZ</a>                                                   | 10kA                                            | $\leq 250A$                           | <a href="#">BW250JAGU-3P250SB</a><br>K3P-250 | <a href="#">TJS250</a>   | <a href="#">T60400-1C</a>  |
| <a href="#">SSW070200T5SZ</a>                                                   | 10kA                                            | $\leq 250A$                           | <a href="#">BW250JAGU-3P250SB</a><br>K3P-250 | <a href="#">TJS250</a>   | <a href="#">T60400-1C</a>  |
| <a href="#">SSW070255T5SH1Z</a>                                                 | 18kA                                            | $\leq 400A$                           | -<br><a href="#">L3P-400</a>                 | <a href="#">TJS400</a>   | <a href="#">T60400-1C</a>  |
| <a href="#">SSW070312T5SH1Z</a>                                                 | 18kA                                            | $\leq 400A$                           | -<br><a href="#">L3P-400</a>                 | <a href="#">TJS400</a>   | <a href="#">T60400-1C</a>  |
| <a href="#">SSW070365T5SH1Z</a>                                                 | 18kA                                            | $\leq 600A$                           | -<br><a href="#">L3P-600</a>                 | <a href="#">TJS600</a>   | <a href="#">T60600-1C</a>  |
| <a href="#">SSW070412T5SH1Z</a>                                                 | 18kA                                            | $\leq 600A$                           | -<br><a href="#">L3P-600</a>                 | <a href="#">TJS600**</a> | <a href="#">T60600-1C</a>  |

\* Maximum trip ratings are for non-time-delay overcurrent protection devices.

\* Motor branch circuit protection must be based on MOTOR Full Load Current and must comply with applicable local electrical codes. The 2008 NEC section 430.52 recommends a maximum of 175% (up to 225% absolute maximum) of motor FLC for time-delay fuses. (Class CC time-delay fuses are permitted up to the non-time-delay fuse maximum rating.)

\* These products are available at AutomationDirect.com.

\*\* WEG allows maximum 700A fuse rating. 600A is the maximum fuse rating available from AutomationDirect.com.



# CFW/SSW Series Software

## CFW-WPS Software Package

WEG WPS is the versatile configuration software for all WEG products. The software is compatible with all CFW series AC drives and SSW07/SSW900 soft starters. Powerful features include:

- Configuration and Monitoring Wizards
- Custom Variable Monitoring Windows
- IEC 61131 Ladder Programming
- Advanced Trending & Diagnostics
- FW updates
- Automatic online software updates

And MORE!

WEG WPS requires a PC USB port or RJ45 port and appropriate cables or USB-485M kit. Each drive or softstarter series can connect to the software, through the methods noted below:

### CFW100:

- USB via the CFW100-CUSB module
- RS485 via the CFW100-CRS485 module

### CFW300:

- USB via the CFW300-CUSB module
- RS485 via the CFW300-CRS485 module
- RS232 via the CFW300-CRS232 module

### CFW320:

- USB via the CFW320-CUSB module
- Ethernet via the CFW320-CETH module
- RS485 via the CFW320-CRS485 module
- RS232 via the CFW320-CRS232 module

### CFW500:

- RS485 via the included CFW500-IOS module or optional CFW500-CRS485-B module.
- USB via the CFW500-CUSB module
- Ethernet via the CFW500-CETH-IP or CFW500-CEMB-TCP module
- RS232 via the CFW500-CRS232 module

### SSW07:

- RS485 via the SSW07-08-KRS-485 module
- RS232 via the SSW07-08-KRS-232 module

### SSW900:

- USB with integrated USB port.
- Ethernet via the SSW900-CETH-W module
- RS485 via the SSW900-CRS485-W module

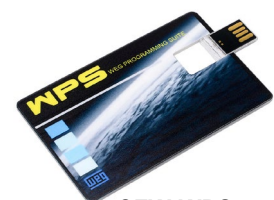
See the **WPS quick start videos for more information:**

- Drive Parameters:  
<https://www.automationdirect.com/VID-DR-0071>

- Configuration, Diagnostics, and Wizards:  
<https://www.automationdirect.com/VID-DR-0074>



| WEG CFW500 Configuration Software |          |         |                                                                                                                                       |                                                                                                            |              |
|-----------------------------------|----------|---------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|--------------|
| Model #                           | Version  | Price   | Description                                                                                                                           | Features/Specifications                                                                                    | CFW500 Drive |
| <b>CFW-WPS</b>                    | USB Card | \$10.50 | WEG Electric Windows Configuration Software: for all WEG CFW series AC drives and SSW07 and SSW900 series soft starters (PN# CFW-WPS) | USB card containing WEG WPS software.                                                                      | All          |
|                                   | Download | Free    |                                                                                                                                       | Download software for free through the AutomationDirect.com website:<br>• <a href="#">CFW-WPS Software</a> |              |



**CFW-WPS**  
USB Installation Card