



WEG SSW05 Series Compact Soft Starters

Overview

The WEG SSW05 Soft Starter is a compact, fully digital soft starter with a state-of-the-art DSP (Digital Signal Processor) controller. Its digital construction provides optimum operation, diagnostics capability and full motor protection.

Simplicity in set-up and operation is assured since all parameters and set-up selections are made via DIP switches and potentiometers. Status LEDs alert the user of the operational status of the SSW05. Simplicity, ease of set-up, and the small panel assure quick and easy installation and operation.

Features

- 208-480 VAC, 50/60 Hz input power supply
- Duty cycle: 300% rated current for 10 seconds, 4 starts per hour
- Built-in bypass contactor
- One digital input for Start/Stop (90-250 VAC)
- One digital input for Fault Reset (90-250 VAC)
- One relay output for Run indication (1A, 250V)
- RS-232 serial port for HMI connection only
- Adjustable acceleration and deceleration ramps (1-20 sec)
- Adjustable pedestal voltage (30-80% of line voltage)
- Protective features:
 - Motor overload
 - Overcurrent and locked rotor
 - SCR overload
- Phase loss and phase sequence
- DIN rail or direct mount
- Ambient:
 - 0°C [32°F] to 55°C [131°F]
 - 3300ft (1000m) altitude
 - 90% non-condensing humidity
- Remote keypad (optional)
- For high inertia loads, see the SSW07 product line



Advantages

- Reduction of stress on couplings and other transmission devices during starting (gearboxes, sheaves, etc.)
- Extended lifetime of motor and mechanical components due to reduced mechanical stress
- Easy operation, programming and maintenance
- Simple electrical wiring
- Operation in ambient temperatures up to 55°C [131°F]

Optional Accessories

- Remote HMI module

Applications

- Centrifugal pumps
- Roller tables
- Piston compressors
- Mixers
- Fans
- Roller tables (no load starting)
- Axial fans (low inertia – light load)

Certifications





WEG SSW05 Series Compact Soft Starters

Selecting the Right Soft Starter

SSW05 Soft Starters – Selection – Steps 1 & 2 (of 4)						
Step 1: Select the application from the list and follow that column down.	<i>Typical Applications</i>					
	<i>Standard Duty</i>		<i>Medium Duty*</i>		<i>Heavy Duty*</i>	<i>Light Duty</i>
	Default Agitator Bow Thruster - Zero Pitch Compressor - Rotary Vane Compressor - Scroll Conveyor - Unloaded Fan - Low Inertia < 85A Feeder - screw Lathe machines Mixer - Unloaded	Molding Machine Plastic and textile machines Pump - Submersible Centrifugal Pump - Submersible Rotodynamic Saw - Band Transformers, voltage regulators	Ball mill Bow Thruster - Loaded Compressor - Loaded Centrifugal Compressor - Reciprocating Compressor - Rotary Screw Conveyor - Loaded Grinder Hammer mill Mills - Flour, etc. Mixer - Loaded Pelletizers	Pump - Positive displacement Reciprocating Pump - Positive displacement Rotary Pump Jack Rolling mill Roots Blower Saw - Circular Screen - Vibrating Tumblers	Centrifuge* *For centrifuges make selection at I(A) = motor FLA x 2.3 Crusher Fan - High Inertia > 85A Shredder Wood chipper Press, flywheel	Unloaded / Very lightly loaded motor Commercial applications Centrifugal pump Screw compressor (no load starting) Vane vacuum pump Light duty lathe Light duty mixer (no load starting)
Step 2: Confirm the rated starting capability of the soft start against the application.	<i>Trip Class</i>	The SSW05 is for Light Duty only. *	The SSW05 is for Light Duty only. *	The SSW05 is for Light Duty only. *	5	
	<i>Rated Starting Capability</i>	The SSW05 is for Light Duty only. *	The SSW05 is for Light Duty only. *	The SSW05 is for Light Duty only. *	3x Motor Current - 10s	
	<i>Max Starts per Hour</i>	4 starts/hr Index Rating Standard (Class5) AC53b: 3-10:890; Overcurrent = 3 x soft starter rated current for 10 seconds Warning: Applying more starts per hour than the specified 4 starts/hr will cause the starter to overheat and fail.				

* For Standard, Medium or Heavy Duty applications, consider the SSW07 family or the SR33 or SR55 Stellar family soft starters.



SSW05 Soft Starters – Selection – Step 3 (of 4)	
Step 3: Consider the operating environment and make the model selection based on a higher horsepower rating.	
<i>Height Above Sea Level</i>	Standard operating height is 3280ft. For every 328ft, increase motor HP by 1%, up to 13,200ft. Example: For a 100HP motor at 4900ft, make model selection based on 105HP (5% higher).
<i>Operating Temperature</i>	Standard operating temperature is 55°C [122°F].
<i>Increased Starts per Hour</i>	See SSW07 model for more than 4 starts/hr



SSW05 Soft Starters – Selection – Step 4 (of 4)					
Step 4: Select SSW05 model based on your motor voltage and horsepower					
<i>Motor Size</i>			<i>Soft Starter Size</i>		
<i>In-Line Connection</i>			<i>Application Trip Class</i>		<i>Maximum Starts Per Hour</i>
<i>I (A)</i>	<i>HP @</i>		<i>Class 5</i>		
	<i>230V*</i>	<i>460V*</i>			
10	3	5	1	SSW050010T2246TPZ	4
16	5	10	1	SSW050016T2246TPZ	4
23	7.5	15	1	SSW050023T2246TPZ	4
30	10	20	1	SSW050030T2246TPZ	4
45	15	30	2	SSW050045T2246TPZ	4
60	20	40	2	SSW050060T2246TPZ	4
85	30	60	2	SSW050085T2246TPZ	4

* 230V=208-240V, 460V=440-480V

WEG Soft Starter Selection Tool Software is available online at automationdirect.com/selectors/softstarters



WEG SSW05 Series Compact Soft Starters

WEG SSW05 Compact Soft Starters Selection Chart ^{1, 2, 3}							
Part Number	Price	Motor Volts	Motor HP	Soft Starter Amps	Frame Size	Dimensions (HxWxD) (in [mm])	Approx. Weight (lb [kg])
Input Power Supply: 3-Phase, 230VAC							
SSW050010T2246TPZ	\$324.00	230VAC	3	10	1	5.1 x 2.3 x 5.7 [129.5 x 58.4 x 144.8]	3 [1.4]
SSW050016T2246TPZ	\$368.00		5	16	1		
SSW050023T2246TPZ	\$423.00		7.5	23	1		
SSW050030T2246TPZ	\$460.00		10	30	1	7.3 x 3.1 x 6.8 [185.4 x 78.7 x 172.7]	6 [2.7]
SSW050045T2246TPZ	\$575.00		15	45	2		
SSW050060T2246TPZ	\$693.00		20	60	2		
SSW050085T2246TPZ	\$843.00		30	85	2		
Input Power Supply: 3-Phase, 460VAC							
SSW050010T2246TPZ	\$324.00	460VAC	5	10	1	5.1 x 2.3 x 5.7 [129.5 x 58.4 x 144.8]	3 [1.4]
SSW050016T2246TPZ	\$368.00		10	16	1		
SSW050023T2246TPZ	\$423.00		15	23	1		
SSW050030T2246TPZ	\$460.00		20	30	1	7.3 x 3.1 x 6.8 [185.4 x 78.7 x 172.7]	6 [2.7]
SSW050045T2246TPZ	\$575.00		30	45	2		
SSW050060T2246TPZ	\$693.00		40	60	2		
SSW050085T2246TPZ	\$843.00		60	85	2		

Notes:

1) "HP" rating based on Table 430-150 of the NEC. 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 other technical data, please refer to WEG product manual

WEG SSW05 Compact Soft Starters Specifications		
Power supply	Main Voltage	220-460 VAC (+10%, -15%)
	Control Voltage	90-250 VAC
	Frequency	50/60 Hz (+/- 5Hz)
Enclosure	IPOO protected chassis	
Duty cycle	300% rated current during 10 seconds, 4 starts per hour	
Digital control inputs	One input for Start/Stop (90-250 VAC) One input for Fault Reset (90-250 VAC)	
Communication	N/A	
Safety protections	Motor overload* Locked rotor* Overcurrent* Phase sequence* Phase loss* SCR overload	
Control features	Pedestal voltage	30-80% of line voltage
	Accel ramp	1-20 seconds
	Decel ramp	Off-20 seconds
	Motor current	30-100% of SSW05 rating
	Fault reset	Manual or automatic
Ambient	Temperature	32-131°F [0-55°C]
	Humidity	0-90% non-condensing
	Altitude	0-1000 m [0-3300 ft] - standard operation at rated current Up to 4000m [13,200 ft] - with current derating (1% per 100m [328ft] above 1000m [3281ft])
Conformities	Low voltage	UL508 - Industrial Control Equipment IEC60947-4-2
	EMC	EMC Directive 89/336/EEC - Industrial Environment, Class A

* Can be disabled



WEG SSW05 Series Compact Soft Starters

SSW05 Max UL Overcurrent Protection

UL Maximum Overcurrent Protection Devices ^{1, 2}				
Soft Starter Model Number	Voltage	Max Current	Standard Fault	Fuse
<u>SSW050010T2246TPZ</u>	220-460 VAC	10A	5kA	Bussman, 170M1563D, 40A, 690V, gr
<u>SSW050016T2246TPZ</u>	220-460 VAC	16A	5kA	Bussman, 170M1563D, 40A, 690V, gr
<u>SSW050023T2246TPZ</u>	220-460 VAC	23A	5kA	Bussman, 170M1563D, 40A, 690V, gr
<u>SSW050030T2246TPZ</u>	220-460 VAC	30A	5kA	Bussman, 170M1565D, 63A, 690V, gr
<u>SSW050045T2246TPZ</u>	220-460 VAC	45A	5kA	Bussman, 170M1566D, 80A, 690V, gr
<u>SSW050060T2246TPZ</u>	220-460 VAC	60A	10kA (≥440VAC)	Bussman, 170M1569D, 160A, 690V, gr
<u>SSW050085T2246TPZ</u>	220-460 VAC	85A	10kA (≥380VAC)	Bussman, 170M1569D, 160A, 690V, gr

1) Maximum trip ratings are for non-time-delay overcurrent protection devices.

2) 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.)

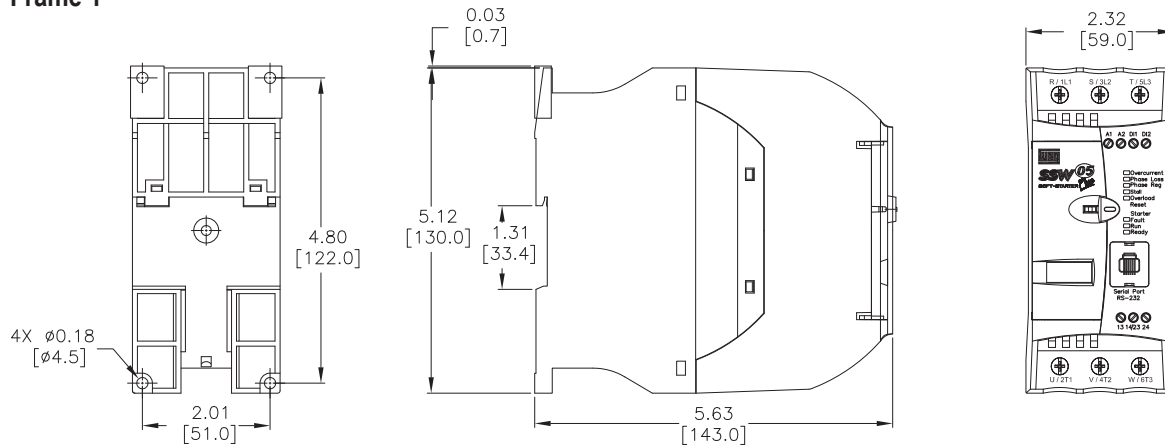


WEG SSW05 Series Compact Soft Starters

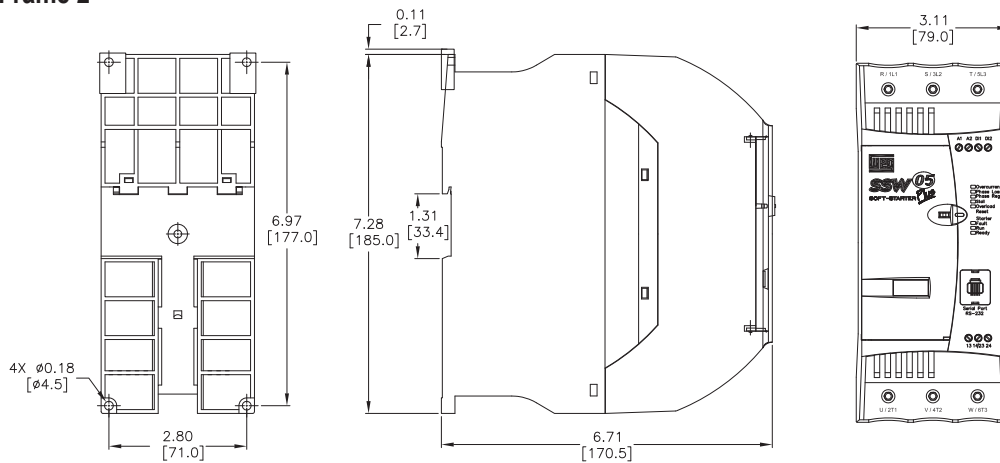
SSW05 Series Dimensions

Inches [mm]

Frame 1



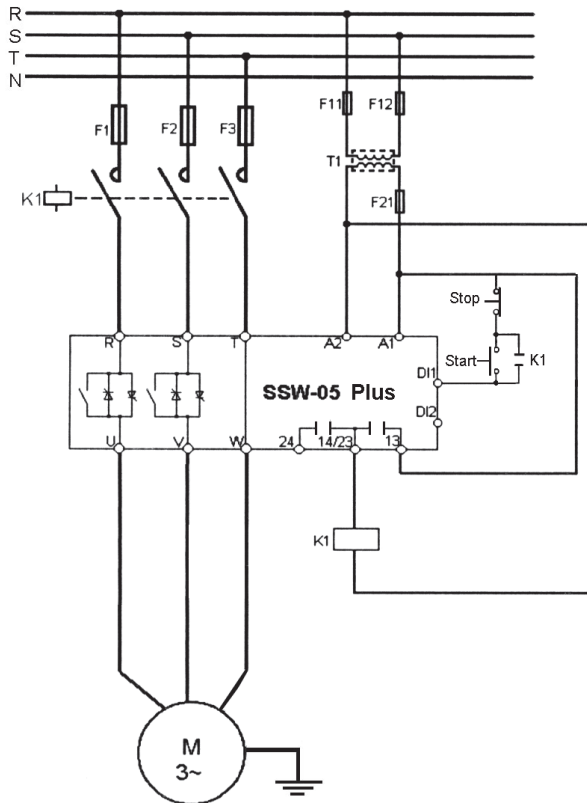
Frame 2





WEG SSW05 Series Compact Soft Starters

Starting and Stopping Using Contactor and Push Buttons



For further information, please reference additional diagrams available in the SSW05 User Manual.



WEG SSW05 Series Compact Soft Starters

Accessories

Accessories		
Part Number	Price	Description
<u>SSW05-HMI-RS</u>	\$73.00	Remote HMI module
<u>SSW05-07-08-CRS-3M</u>	\$25.00	3m [9.84 ft] cable for serial remote HMI
<u>SSW05-07-08-CRS-5M</u>	\$31.00	5m [16.40 ft] cable for serial remote HMI



[SSW05-HMI-RS](#)



[SSW05-07-08-CRS-3M](#)



[SSW05-07-08-CRS-5M](#)



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)
- SuperDrive G2 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.	<i>Typical Applications</i>				
	<i>Standard Duty</i>		<i>Medium Duty</i>		<i>Heavy Duty</i>
	Default Agitator Bow Thruster - Zero Pitch Compressor - Rotary Vane Compressor - Scroll Conveyor - Unloaded Fan - Low Inertia < 85A Feeder - screw Lathe machines Mixer - Unloaded	Molding Machine Plastic and textile machines Pump - Submersible Centrifugal Pump - Submersible Rotodynamic Saw - Band Transformers, voltage regulators	Ball mill Bow Thruster - Loaded Compressor - Centrifugal Compressor - Reciprocating Compressor - Rotary Screw Conveyor - Loaded Grinder Hammer mill Mills - Flour, etc. Mixer - Loaded Pelletizers	Pump - Positive displacement Reciprocating Pump - Positive displacement Rotary Pump Jack Rolling mill Roots Blower Saw - Circular Screen - Vibrating Tumblers	Centrifuge* *For centrifuges make selection at I(A) = motor FLA x 2.3 Crusher Fan - High Inertia > 85A Shredder Wood chipper Press, flywheel
Step 2: Confirm the rated starting capability of the soft start against the application.	<i>Trip Class</i>	10	20	30	5
	<i>Rated Starting Capability</i>	3x Motor Current - 30s 3.5x Motor Current - 15s	4x Motor Current - 20s	4.5x Motor Current - 30s	3x Motor Current - 5s
	<i>Max Starts per Hour</i>	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.	
<i>Height Above Sea Level</i>	Standard operating height is 3280ft. For every 328ft, increase motor HP by 1%, up to 13,200ft. Example: For a 100HP motor at 4900ft, make model selection based on 105HP (5% higher).
<i>Operating Temperature</i>	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]. Example: For a 100HP motor at 55.6°C [132°F], make model selection based on 122HP (22% higher).
<i>Increased Starts per Hour</i>	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							
<i>Motor Size</i>					<i>Soft Starter Size</i>		
<i>In-Line Connection</i>					<i>Application Trip Class</i>		
<i>I (A)</i>	<i>HP @</i>				<i>Class 10</i>	<i>Class 20</i>	<i>Class 30</i>
	<i>230VAC*</i>	<i>460VAC*</i>	<i>575VAC*</i>	<i>Size</i>			
17	5	10	15	1	SSW070017T5SZ	SSW070017T5SZ	SSW070017T5SZ
24	7.5	15	20	1	SSW070024T5SZ	SSW070024T5SZ	SSW070024T5SZ
30	10	20	25	1	SSW070030T5SZ	SSW070030T5SZ	SSW070045T5SZ¹
45	15	30	40	2	SSW070045T5SZ¹	SSW070045T5SZ¹	SSW070061T5SZ¹
61	20	40	50	2	SSW070061T5SZ¹	SSW070085T5SZ¹	SSW070085T5SZ¹
85	30	60	75	2	SSW070085T5SZ¹	SSW070130T5SZ²	SSW070130T5SZ²
130	50	100	125	3	SSW070130T5SZ²	SSW070171T5SZ²	SSW070171T5SZ²
171	60	125	150	3	SSW070171T5SZ²	SSW070200T5SZ²	SSW070200T5SZ²
200	75	150	200	3	SSW070200T5SZ²	SSW070255T5SH1Z	SSW070255T5SH1Z
255	100	200	250	4	SSW070255T5SH1Z	SSW070312T5SH1Z	SSW070312T5SH1Z
312	125	250	300	4	SSW070312T5SH1Z	SSW070365T5SH1Z	SSW070412T5SH1Z
365	150	300	350	4	SSW070365T5SH1Z	SSW070412T5SH1Z	-
412	150	350	400	4	SSW070412T5SH1Z	-	-

* 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



WEG SSW07 Series Soft Starters

WEG SSW07 Compact Soft Starters Selection Chart ^{1, 4}

Part Number	Price	Motor Volts	Motor HP	Soft Starter Amps	Frame Size	Dimensions (HxWxD) (in [mm])	Approx. Weight (lb [kg])
Input Power Supply: 3-Phase, 220/230VAC							
<u>SSW070017T5SZ</u> ²	\$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]
<u>SSW070024T5SZ</u> ²	\$757.00		7.5	24	1		
<u>SSW070030T5SZ</u> ²	\$782.00		10	30	1		
<u>SSW070045T5SZ</u> ²	\$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]
<u>SSW070061T5SZ</u> ²	\$1,004.00		20	61	2		
<u>SSW070085T5SZ</u> ²	\$1,215.00		30	85	2		
<u>SSW070130T5SZ</u> ²	\$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]
<u>SSW070171T5SZ</u> ²	\$1,938.00		60	171	3		
<u>SSW070200T5SZ</u> ²	\$2,297.00		75	200	3		
<u>SSW070255T5SH1Z</u> ³	\$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]
<u>SSW070312T5SH1Z</u> ³	\$3,045.00		125	312	4		
<u>SSW070365T5SH1Z</u> ³	\$3,164.00		150	365	4		
<u>SSW070412T5SH1Z</u> ³	\$3,714.00	150	412	4			
Input Power Supply: 3-Phase, 440/460VAC							
<u>SSW070017T5SZ</u> ²	\$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]
<u>SSW070024T5SZ</u> ²	\$757.00		15	24	1		
<u>SSW070030T5SZ</u> ²	\$782.00		20	30	1		
<u>SSW070045T5SZ</u> ²	\$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]
<u>SSW070061T5SZ</u> ²	\$1,004.00		40	61	2		
<u>SSW070085T5SZ</u> ²	\$1,215.00		60	85	2		
<u>SSW070130T5SZ</u> ²	\$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]
<u>SSW070171T5SZ</u> ²	\$1,938.00		125	171	3		
<u>SSW070200T5SZ</u> ²	\$2,297.00		150	200	3		
<u>SSW070255T5SH1Z</u> ³	\$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]
<u>SSW070312T5SH1Z</u> ³	\$3,045.00		250	312	4		
<u>SSW070365T5SH1Z</u> ³	\$3,164.00		300	365	4		
<u>SSW070412T5SH1Z</u> ³	\$3,714.00	350	412	4			
Input Power Supply: 3-Phase, 575VAC							
<u>SSW070017T5SZ</u> ²	\$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]
<u>SSW070024T5SZ</u> ²	\$757.00		20	24	1		
<u>SSW070030T5SZ</u> ²	\$782.00		25	30	1		
<u>SSW070045T5SZ</u> ²	\$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]
<u>SSW070061T5SZ</u> ²	\$1,004.00		50	61	2		
<u>SSW070085T5SZ</u> ²	\$1,215.00		75	85	2		
<u>SSW070130T5SZ</u> ²	\$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]
<u>SSW070171T5SZ</u> ²	\$1,938.00		150	171	3		
<u>SSW070200T5SZ</u> ²	\$2,297.00		200	200	3		
<u>SSW070255T5SH1Z</u> ³	\$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]
<u>SSW070312T5SH1Z</u> ³	\$3,045.00		300	312	4		
<u>SSW070365T5SH1Z</u> ³	\$3,164.00		350	365	4		
<u>SSW070412T5SH1Z</u> ³	\$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		
Power supply	Power	220-575 VAC (-15% to +10%) or 187-632 VAC
	Control Voltage	For models from 17A to 200A: 110-240 VAC (-15% to +10%, or 94-264 VAC) For models from 255A to 412A: 110-130 VAC (-15% to +10%, or 94-143 VAC)
	Frequency	50/60 Hz +/- 10% (45 to 66 Hz)
Enclosure	Injected plastic. IP20 in models from 17A to 85A; IP00 in models from 130A to 412A (IP20 as an option)	
Control	Method	Voltage variation over the load (3-phase induction motor)
	CPU	DSP type microcontroller (Digital Signal Processor)
	Types of Control	Voltage ramp, current limit
Capacity	Max Number of Starts Per Hour (Without Ventilation)	10 (1 every 6 minutes; models from 17A to 30A 3 (1 every 20 minutes; models from 45A to 200A 10 (1 every 6 minutes; models from 255A to 412A)
	Max Number of Starts Per Hour With Optional Ventilation Kit	10 (1 every 6 minutes; models from 45A to 200A)
	Start Cycle	3 x In of the SSW07 during 30 seconds
Trip Class	10-30	
SCCR Rating	See SSW07 Max UL Overcurrent Protection table	
Inputs	3 isolated digital programmable inputs	
Outputs	2 relay outputs with NO contacts, 240VAC, 1A, programmable functions	
Safety Protections	Standard	Overcurrent Overcurrent before bypass Phase loss Inverted phase sequence Overtemperature in power heatsink Motor overload (class 5 to 30)
	With Accessory	Undercurrent Current imbalance Subcurrent before bypass External defects
Standard Functions		Locked rotor Excess starting time Over/under frequency Bypass contact open Undervoltage in control supply
		Programming error Serial communication error MMI communication error Overtemperature in motor PTC
Programming	Command	On, Off / Reset and Function programming
	Additional functions	Current limitation (30-500% of SSW07 rated current) Motor and SSW07 current relation (30 to 100%) Starting time up to 999s Deceleration time up to 240s
Accessories and Options	Supervision (Reading)	Motor current (%Soft-Starter In) Motor current (%motor in) Motor current (A) Current indication in each phase R-S-T Supply network frequency Apparent power supplied to load (kVA)
		Soft-Starter status Digital input and output status Back-up of 4 last errors Soft-Starter software version Heatsink temperature Motor thermal protection status
Finishing		Plug-in type local HMI HMI remote kit 3 and 5m [9.84 and 16.40 ft] cable for remote HMI interconnection RS-232 communication kit SSW07 interconnection cables (PC Serial (RS-232) 3m [9.84 ft] and 10m [32.81 ft]
		RS-485 communication kit Motor PTC kit Ventilation kit for size 2 (45-85 A) Ventilation kit for size 3 (130-200 A) IP20 kit for size 3 (130-200 A)
Conformities and Standards	Safety	Lid: gray ultra matte; cabinet: blue ultra matte
	Low Voltage	UL 508 Standard - Industrial Control Equipment
	EMC	EN60947-4-2; LVD 2006/95/EC Standard - Low Voltage Directive
	UL (USA)/cUL (Canada)	EMC 89/336/EEC Directive - Industrial Environment
	CE (Europe)	Underwriters Laboratories Inc. - USA 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)
<u>SSW070017T5SZ</u>	5kA	$\leq 30A$	6.6URD30TTF0050	65kA	WEG ACW125W-FTU25-3 or UBW225H-FTU30-3A or HFD3030L	18kA	UBW225H-FTU40-3A or HFD3040L
<u>SSW070024T5SZ</u>	5kA	$\leq 40A$	6.6URD30TTF0080	65kA	WEG ACW125W-FTU30-3	18kA	UBW225H-FTU40-3A or HFD3040L
<u>SSW070030T5SZ</u>	5kA	$\leq 40A$	6.6URD30TTF0080	65kA	WEG ACW125W-FTU40-3	18kA	kA UBW225H-FTU40-3A or HFD3040L
<u>SSW070045T5SZ</u>	5kA	$\leq 150A$	6.6URD30TTF0100	65kA	WEG ACW125W-FTU60-3 or UBW225H-FTU150-3A or HFD3150L	18kA	UBW225H-FTU40-3A or HFD3040L
<u>SSW070061T5SZ</u>	5kA	$\leq 150A$	6.6URD30TTF0125	65kA	WEG ACW125W-FTU60-3 or UBW225H-FTU150-3A or HFD3150L	18kA	UBW225H-FTU150-3A or HFD3150L
<u>SSW070085T5SZ</u>	10kA	$\leq 150A$	6.6URD30TTF0200	65kA	WEG ACW125W-FTU60-3 or UBW225H-FTU150-3A or HFD3150L	18kA	UBW225H-FTU150-3A or HFD3150L
<u>SSW070130T5SZ</u>	10kA	$\leq 225A$	6.6URD31TTF0325	65kA	WEG ACW250W-FTU250-3 or UBW225H-FTU225-3A or HFD3225L	18kA	UBW225H-FTU150-3A or HFD3150L
<u>SSW070171T5SZ</u>	10kA	$\leq 250A$	6.6URD32TTF0450	65kA	WEG ACW250W-FTU250-3 or UBW250H-FTU250-3A or HJD3250	30kA	UBW225H-FTU225-3A or HFD3225L
<u>SSW070200T5SZ</u>	10kA	$\leq 250A$	6.6URD32TTF0500	65kA	WEG ACW250W-FTU250-3 or UBW250H-FTU250-3A or HJD3250	30kA	UBW250L-FTU250-3A or JDC3250
<u>SSW070255T5SH1Z</u>	18kA	$\leq 400A$	6.6URD32TTF0400	65kA	WEG ACW400W-FTU400-3 or UBW400H-FTU400-3A or HKD3400	30kA	UBW250L-FTU250-3A or JDC3250
<u>SSW070312T5SH1Z</u>	18kA	$\leq 400A$	6.6URD33TTF0500	65kA	WEG ACW400W-FTU400-3 or UBW400H-FTU400-3A or HKD3400	30kA	UBW400H-FTU400-3A or HKD3400
<u>SSW070365T5SH1Z</u>	18kA	$\leq 600A$	6.6URD33TTF0550	65kA	WEG ACW800W-FTU800-3 or UBW600H-FTU600-3A or HLD3600	42kA	UBW400H-FTU400-3A or HKD3400
<u>SSW070412T5SH1Z</u>	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.)

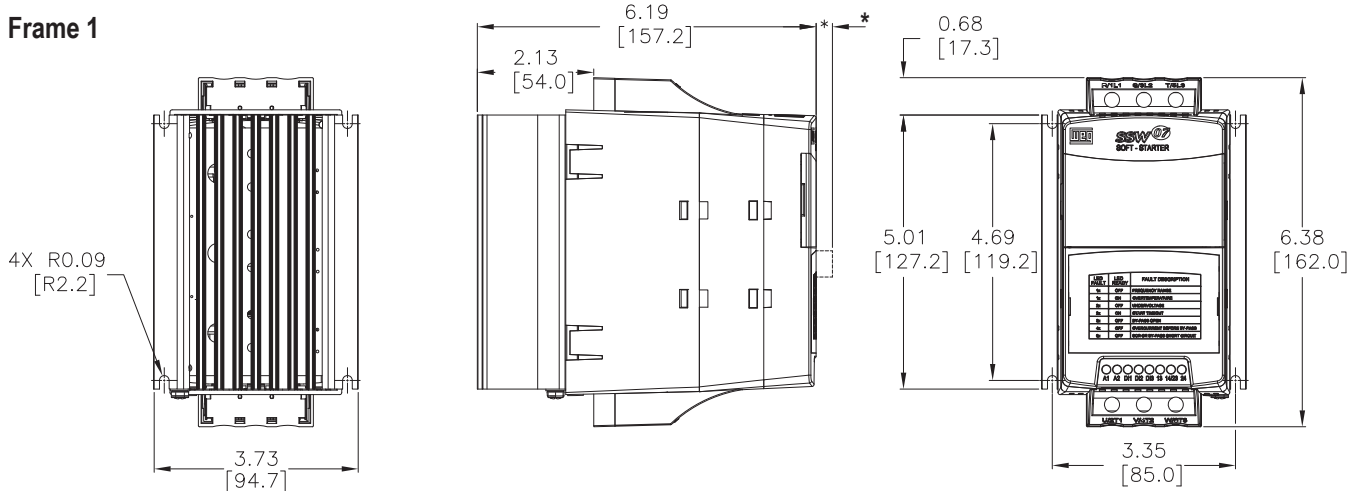


WEG SSW07 Series Soft Starters

SSW07 Series Dimensions

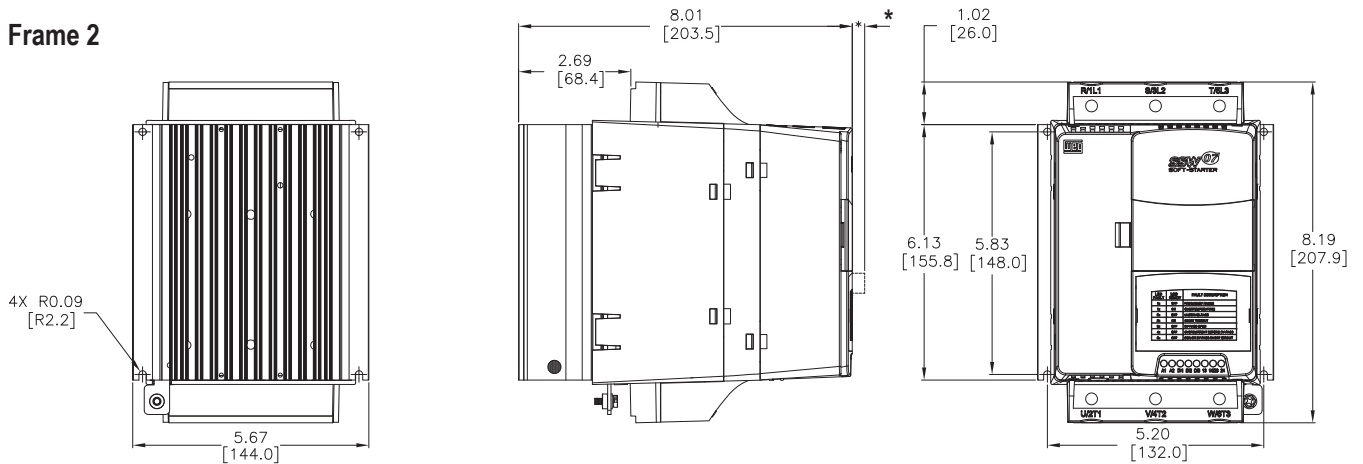
Inches [mm]

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]

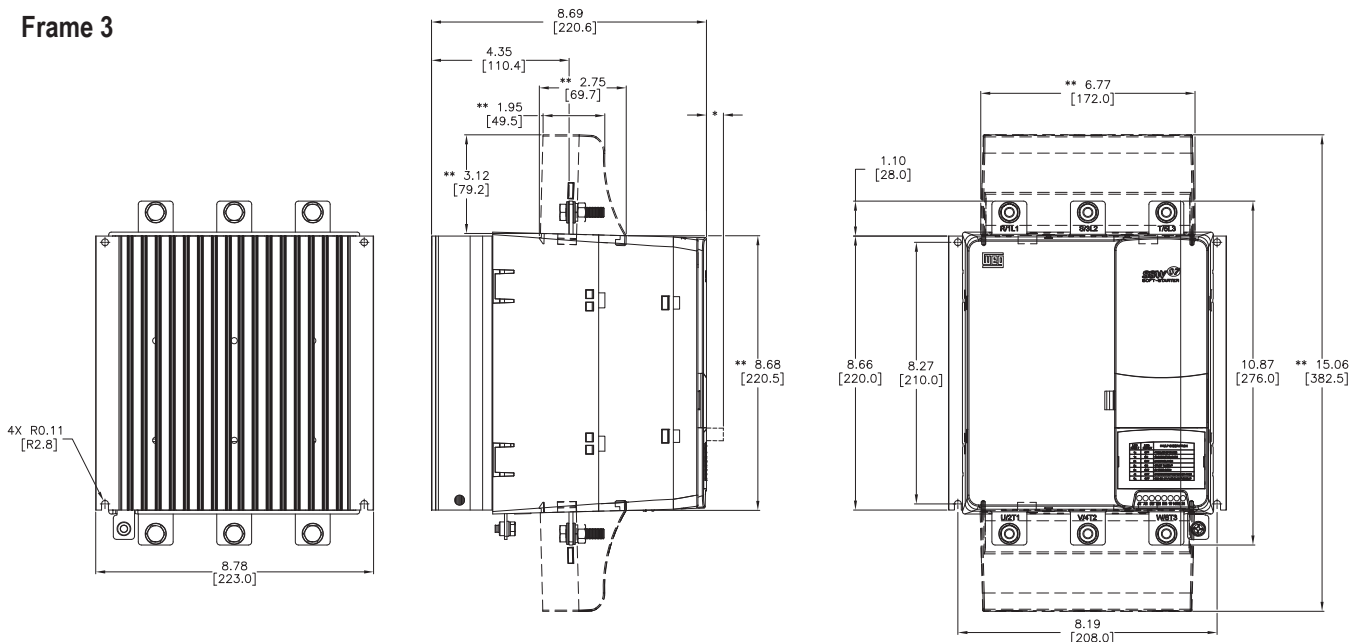


WEG SSW07 Series Soft Starters

SSW07 Series Dimensions

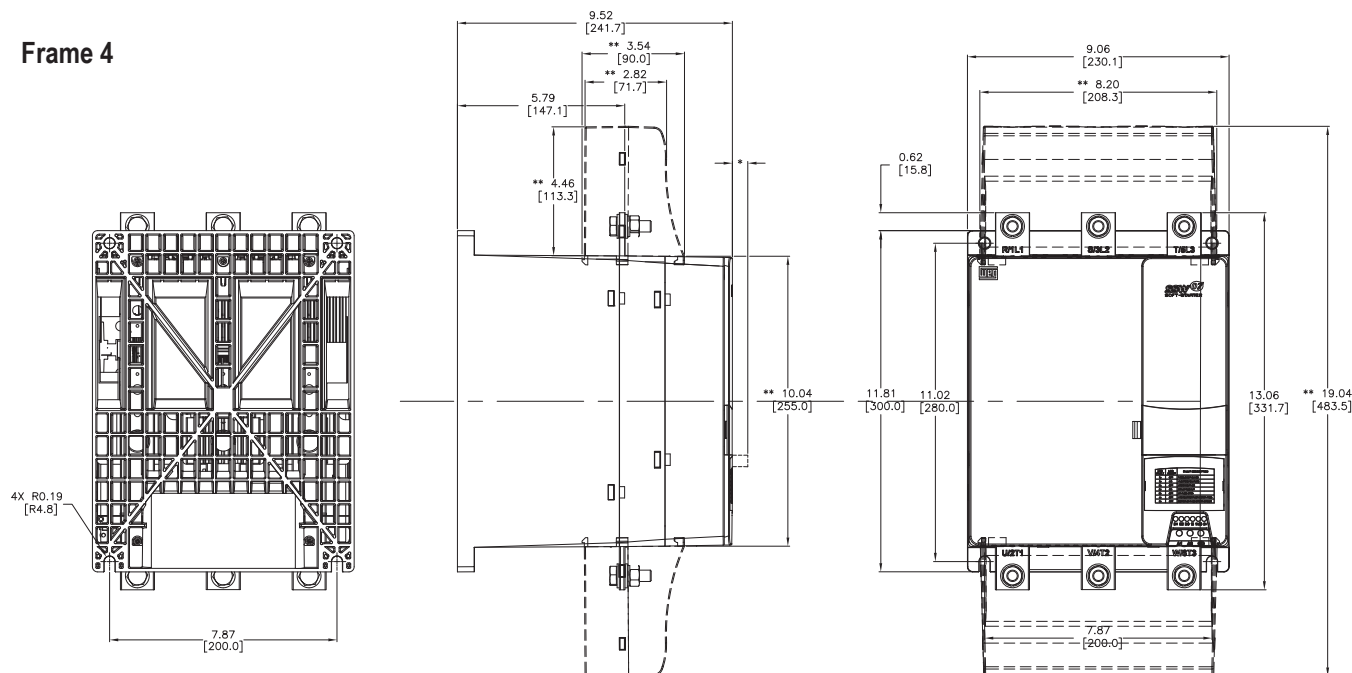
Inches [mm]

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

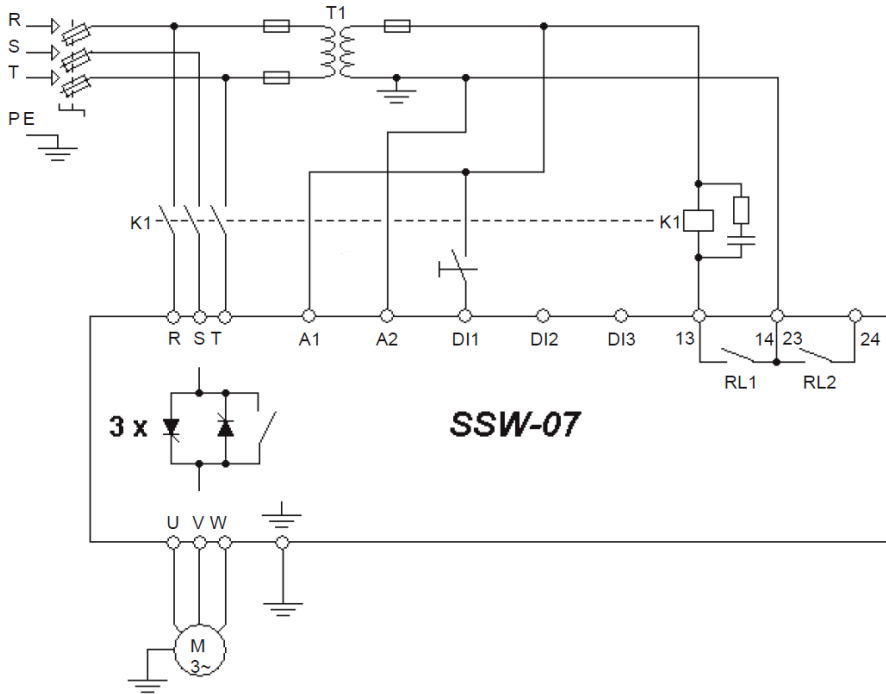


***Optional modules add depth to dimension as follows:**
SSW07-08-KRS-485 and SSW07-08-KRS-232 add 5mm [0.2 in]
SSW07-08-KPTC-MTR adds 5mm [0.2 in]
****Indicates dimensions with optional [SSW0708900-IP20-4D](#)**



WEG SSW07 Series Soft Starters

SSW07 Series Recommended Setup With Command Via Two-Wire Digital Inputs and Isolation Contactor



For further information, please reference additional diagrams available in the SSW07 User Manual.



WEG SSW07 Series Soft Starters

Accessories

SSW07 Series Accessories			
Part Number	Price	Type of Accessory	Description
<u>SSW07-08-HMI-LOC</u>	\$106.00	Keypad	SSW07 keypad HMI
<u>SSW07-HMI-REM</u>	\$208.00		SSW07 remote serial HMI. Remote keypad interface module included.
<u>SSW07-HMI-REM-485</u>	\$261.00		SSW07 remote serial HMI. Remote keypad interface with additional RS485 port module included.
<u>SSW07-08-KRS-485</u>	\$123.00	Communication	SSW07 series communication module, 1 RS-485 (5-pin) port.
<u>SSW07-08-KRS-232</u>	\$73.00		SSW07 series communication module, 1 RS-232 (RJ11) port.
<u>SSW0708900-KVT-2B</u>	\$40.00	Kits	SSW07 series main cooling fan. For use with WEG SSW07 series 45-105A soft starters. Electrical connector included.
<u>SSW0708900-KVT-3C</u>	\$57.00		SSW07 series main cooling fan. For use with WEG SSW07 series 130-200A soft starters. Electrical connector included.
<u>SSW07-08-KPTC-MTR</u>	\$75.00		SSW07 series PTC module, for use with WEG SSW07 series soft starters.
<u>SSW0708900-IP20-3C</u>	\$38.50		SSW07 series touch shield, for use with WEG SSW07 series 130-200A soft starters. Mounting hardware included. Provides IP20 protection rating.
<u>SSW0708900-IP20-4D</u>	\$80.00		SSW07 series touch shield, for use with WEG SSW07 series 255-412A soft starters. Mounting hardware included. Provides IP20 protection rating.
<u>SSW-SDG2</u>	\$9.50		Software



SSW07-08-HMI-LOC



SSW07-08-KRS-485



SSW07-08-KPTC-MTR



SSW07-08-KRS-232



SSW0708900-KVT-2B



SSW0708900-KVT-3C



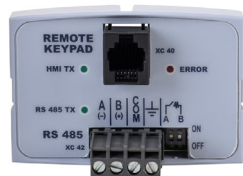
SSW0708900-IP20-3C



SSW0708900-IP20-4D



SSW07-HMI-REM-485



SSW07-HMI-REM



SSW-SDG2

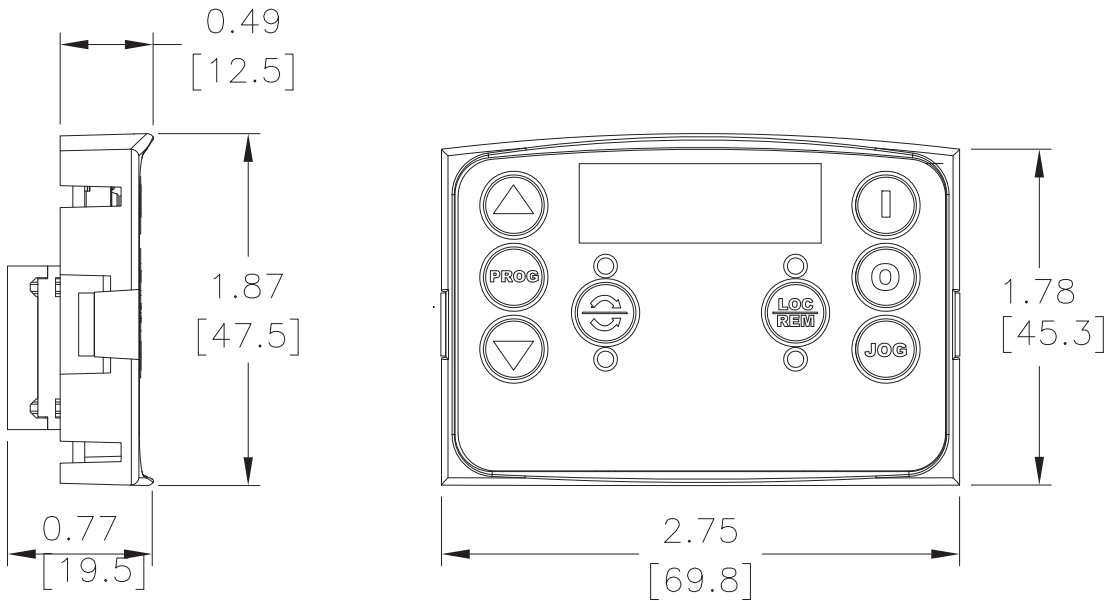


WEG SSW07 Series Soft Starters

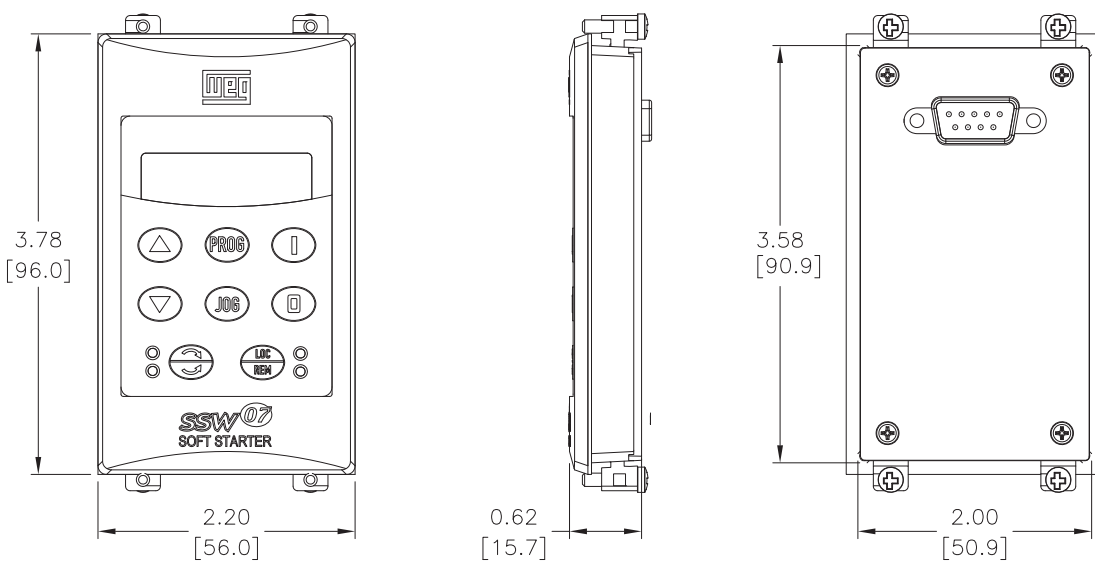
Accessories Dimensions

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
SSW070017T5SZ	5kA	$\leq 30A$	BW125JAGU-3P030SB -	TJS30-1	T60030-1SR
SSW070024T5SZ	5kA	$\leq 40A$	BW125JAGU-3P040SB -	TJS40-1	T60060-1CR
SSW070030T5SZ	5kA	$\leq 40A$	BW125JAGU-3P040SB -	TJS40-1	T60060-1CR
SSW070045T5SZ	5kA	$\leq 150A$	BW250JAGU-3P150SB F3P-150	TJS150	T60200-1C
SSW070061T5SZ	5kA	$\leq 150A$	BW250JAGU-3P150SB F3P-150	TJS150	T60200-1C
SSW070085T5SZ	10kA	$\leq 150A$	BW250JAGU-3P150SB F3P-150	TJS150	T60200-1C
SSW070130T5SZ	10kA	$\leq 225A$	BW250JAGU-3P225SB F3P-225	TJS225	T60400-1C
SSW070171T5SZ	10kA	$\leq 250A$	BW250JAGU-3P250SB K3P-250	TJS250	T60400-1C
SSW070200T5SZ	10kA	$\leq 250A$	BW250JAGU-3P250SB K3P-250	TJS250	T60400-1C
SSW070255T5SH1Z	18kA	$\leq 400A$	- L3P-400	TJS400	T60400-1C
SSW070312T5SH1Z	18kA	$\leq 400A$	- L3P-400	TJS400	T60400-1C
SSW070365T5SH1Z	18kA	$\leq 600A$	- L3P-600	TJS600	T60600-1C
SSW070412T5SH1Z	18kA	$\leq 600A$	- L3P-600	TJS600**	T60600-1C

* 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.