SSW04

WEG SSW04 Soft Starters are built to match the ruggedness and reliability of WEG motors, providing a complete and cost effective solution.

Full microprocessor based control allows easy adjustment through the keypad during start-up and complete motor protection. A specific pump control feature prevents running pumps at no load and eliminates pipeline water hammer.

APPLICATIONS

- Pumps
- Fans
- Blowers
- Compressors
- Conveyors
- Crushers
- Saws
- Grinders
- Escalators

STANDARD FEATURES

- 220–440V and 460–575V, 50/60Hz input power supply
- Duty cycle: 300% of full load current during 20 seconds every 6 minutes
- Keypad with LED display
- Four programmable isolated digital inputs (24VDC)
- Two programmable relay outputs (1Amp–250V)
- One programmable analog output
- Protective features: Motor overload (TIMP), under and over current, power supply phase loss, motor phase loss, thyristor fault, phase sequence, soft starter over temperature and external fault
- Control features: Pump control, acceleration and deceleration independently adjustable ramps, kick start, pedestal voltage, voltage ramp start, constant current start, bypass relay, JOG, DC braking, energy saving, auto-reset and fault history
- Display readings: Motor Amps (A and %), kW, kVA, PF and V
- Ambient: 32°F (0°C) to 104°F (40°C), 3300 ft (1000m) altitude, 90% non-condensing humidity

OPTIONAL FEATURES

- Remote Keypad
- PC Programming Software

SSW04 – IP20 PROTECTED CHASSIS ENCLOSURE

Motor Volts	Motor HP	Soft Starter Nominal AMPS	Soft Starter Max. Cont. AMPS	Catalog Number	Frame Size	Dimensions (in.) H x W x D	App. Shpg. Wt. (lbs.)	List Price	Multiplier Symbol
230V	**INPUT POWER SUPPLY: THREE-PHASE - 230V**								
	5	16	17.6	SSW040163D1	1	11 X 6 X 8	12	$ 1,373	E1
	10	30	33	SSW040303D1	1	11 X 6 X 8	12	$ 1,456	E1
	15	45	49.5	SSW040453D1	1	11 X 6 X 8	12	$ 1,602	E1
	25	60	68	SSW040603D1	2	11 X 6 X 11	20	$ 1,890	E1
	30	85	96	SSW040853D1	3	12 X 6 X 11	20	$ 2,238	E1
460V	**INPUT POWER SUPPLY: THREE-PHASE - 460V**								
	10	16	17.6	SSW040163G1	1	11 X 6 X 8	12	$ 1,373	E1
	20	30	33	SSW040303G1	1	11 X 6 X 8	12	$ 1,456	E1
	30	45	49.5	SSW040453G1	1	11 X 6 X 8	12	$ 1,602	E1
	50	60	68	SSW040603G1	2	11 X 6 X 11	20	$ 1,890	E1
	75	85	96	SSW040853G1	3	12 X 6 X 11	20	$ 2,238	E1
575V	**INPUT POWER SUPPLY: THREE-PHASE - 575V**								
	15	16	17.6	SSW040163G1	1	11 X 6 X 8	12	$ 1,373	E1
	30	30	33	SSW040303G1	1	11 X 6 X 8	12	$ 1,456	E1
	40	45	49.5	SSW040453G1	1	11 X 6 X 8	12	$ 1,602	E1
	60	60	68	SSW040603G1	2	11 X 6 X 11	20	$ 1,890	E1
	75	85	96	SSW040853G1	3	12 X 6 X 11	20	$ 2,238	E1

Notes: 1) "HP" rating based on "average FLA values". Use as a guide only. Motor FLA may vary with speed and manufacturer.
ALWAYS compare motor FLA to Nominal AMPS and Max Continuous AMPS of starter.
2) 120V Control and Blower Power Supply required.
3) For other technical data please refer to WEG product manual.

SSW04 – ACCESSORIES

Description	Catalog Number	List Price	Multiplier Symbol
Keypad with LED display without cable	IHM-3P	$ 67	E1
Kit for Remote Keypad (Cable and Dummy Cover) 3.3 ft. (1 m.)	IHM-3P.1	$ 111	E1
Kit for Remote Keypad (Cable and Dummy Cover) 6.6 ft. (2 m.)	IHM-3P.2	$ 190	E1
Kit for Remote Keypad (Cable and Dummy Cover) 10 ft. (3 m.)	IHM-3P.3	$ 268	E1

SSW04 – TECHNICAL DATA

POWER SUPPLY	Main Voltage	Model D: 230 / 220 / 240 / 380 / 400V (+10%, -15%) Model G: 460 / 480 / 575 (+10%, -15%) 50 / 60 Hz +/- 5Hz	
	Control Voltage	115Vac	
ENCLOSURE	Metallic Cabinet	IP-20	
	Color	Cover: Opaque Gray, Cabinet: Opaque Blue	
CONTROL	Method	Motor Voltage Variation	
	Power Supply	Switched mode Power Supply	
	CPU	16 bit Microprocessor	
STARTING DUTY CYCLE (10 Starts / Hour)	Normal	300 % (3 x Rated) for 20 s (10 starts/ hour)	
INPUTS	Digital	4 X 24 VDC programmable isolated inputs	
	Relay	2 programmable outputs 250 VAC / 1A Form A Contact (NO)	
	Analog		
OUTPUTS	Analog	1 Output (Reversing (NO NC) : 250 V / 1 A -- Fault Indication	
	Senal Interface	RS 232	
SAFETY	Protections	Power supply phase Loss	Programming Error
		Motor Phase Loss	Motor locked rotor
		Motor Overload – i2t	CPU Error
		External Fault	Motor Immediate Over current
		Phase sequence	Motor Over temperature (via Thermistor Input)
		Motor Immediate Under Current	Self Diagnosis error
		Thrystor Fault	Thrystor's/Heatsink Over Temperature
		Serial Communication Error	
FUNCTIONS / FEATURES	Standard	Built-in operator interface, detachable with dual display LED + LCD	
		Programming enabling password	
		Fault Auto Diagnosis	
		Local / Remote operation selection	
		PUMP CONTROL function (Water hammer protection for pumps)	
		ENERGY SAVING Feature	
		BYPASS RELAY	
		FWD / REV Feature via Digital Input (Needs External Contactor)	
		RS-232 Serial Interface	
		Motor PTC thermistor input	
		Programmable IPedestal Voltage 25 . . . 90 % of Rated Voltage	
		Programmable acceleration ramp	1 . . .240 Seconds
		Programmable deceleration ramp	OFF, 2 ... 240 seconds
		Programmable step down voltage for deceleration	100 ... 40 % of line voltage
		Programmable starting current limit	OFF, 150 ... 500 % of motor rated current
		Programmable immediate motor over current	105 ... 200 % above rated current
		Programmable immediate over current time	OFF, 1 ... 20 seconds
		Programmable immediate motor under current	25 ... 95 % below rated current
		Programmable immediate under current time	OFF, 1 ... 30 seconds
		KICK START	Level: 70 - 90% of line voltage
			Duration: 0.1 - 2 seconds
		DC Braking (DC Current Injection)	Level: 30 . . . 50% of Rated Voltage
			Time 1 . . . 10 Seconds
		Programmable Motor Overload Protection	OFF, 50 . . . 120% of rated content
		JOG Function	25 . . .50% of Rated Voltage
		Programmable Fault Auto Reset	OFF, 10 . . .600 seconds
		Programmable Motor Thermal Memory Auto Reset	OFF, 1 . . . 600 seconds
		Motor Thermal Overload Protection Class	5, 10, 15, 20, 25, 30
		Motor service Factor	0.80 . . . 1.50
		Programmable Line Voltage	220 . . . 440 V and 460 . . .575 V
	Optional	Remote Operator Interface (LEDs)	
OPERATOR INTERFACE (KEYPAD)	Command	Start, Stop/ Reset and Programming	
		Increment and Decrement Parameters Content	
	Display readings	Output Current (Motor) - [A]	Output Voltage - [0 . . .100% Rated Voltage]
		Output Current (Motor) - [% of Related]	Motor Output Factor - [0.00 . . . 0.99]
		Load Active Power [kW]	4 Last Faults Back-up
		Load Apparent Power [kVA]	Soft Starter Software Version
		Thermal Protection Statue [0 . . .250%]	Heatsink Temperature - [Celsius]
AMBIENT	Temperature	0. . . 40º Celsius(32 . . . 104º F)	Standard Operation at Rated Current
		40 . . .55º Celsius (104 . . .131º F)	Without Output Current Derating
	Humidity	0 . . . 90% Non Condensing	
	Altitude	0 . . . 1000 m (3,300 ft) Standard operation at Rated Current	
		Up to 4000 m (13,200 ft) - With Current Derating (1%/100 m (328 ft) above 1000m (13,200 ft)	
COLOR	Color	Cover: Light Grey RAL 7032	Cabinet: Dark Grey RAL 7022
CONFORMITIES	Safety	UL 508 Standard - Industrial Control Equipment	
	Low Voltage	EN 60947 -4-2 Standard ; LVD 73/23/EEC - Low Voltage Directive	
	EMC	EMCDirective 89 / 336 /EEC - Industrial Environment (with Additional Filter)	
CERTIFICATIONS	UL (USA) / cUL (Canada)	Underwriters Laboratories Inc. - USA	
	CE (EUROPE)	Certified by ITS - UK	