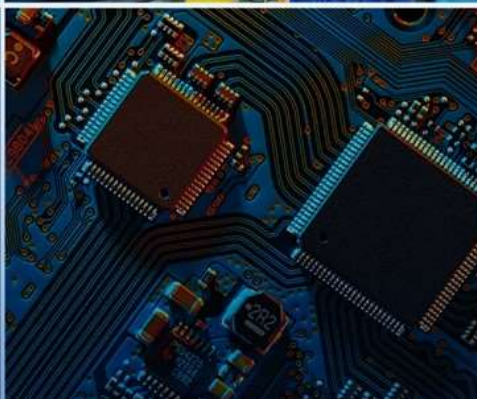# SSW900 Advanced Soft Starters

Driving efficiency and sustainability

WEG

N a m e
D a t e

Overview

- 10.0 to 1400A (6 to 1000 HP @ 380V)

- Power supply: 220 to 575 V

- Inputs and outputs with programmable functions

  - 5 isolated digital inputs

  - 1 analog output 0-10 V DC/4-20 mA

  - 1 input for thermistor

  - 1 relay output 1.0 A/240 V AC

- Lead free – RoHS, conformal coated circuit boards

- Real time clock

- (3) Braking Methods: reverse, optimal, DC braking

- Fire mode (emergency start)

Navigation through menus

Easy installation

Easy operation

Easy monitoring
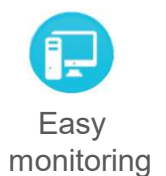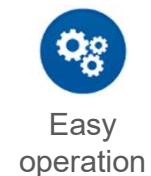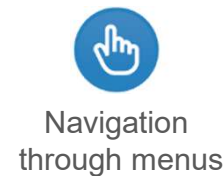
Overview

- Modern, flexible and easy to use

- (3) Selectable Languages

- Oriented Start Up and Help Options

- 2 independent slots to connect plug-in modules

- Advanced, Detachable HMI offering copy and download of parameters, Bluetooth, and USB connectivity

- Ambient temperature up to 55°C without current derating

- Directly mounted on DIN rail or with screws (frames A and B)

- Embedded SoftPLC capability

- Utilizes WEG's no cost WPS configuration and SoftPLC programing software

Common Applications and Industries

Cement and Mining

Chemical and Petrochemical

Wood Processing

Plastic and Rubber

Water & Wastewater

Food and Beverage

Ceramic

Steel and Metallurgy

Glass

Textile

Standard Features and Ratings

- Advanced, Solid-State Soft Starter

- Internal AC1 Run Bypass Standard

Standard Features and Ratings

USB PORT
Easy monitoring via PC or firmware updating

DETACHABLE KEYPAD
Option of installation on machine or panel door

EASY ACCESS TO THE CONTROL TERMINALS Digital and analog inputs and outputs

RTC
Real time clock with battery to save events with date and time

GRAPHIC DISPLAY
Customization of the home screens

Independent electronics power supply

Standard Features and Ratings

WEG

- Advanced Graphical Keypad

- Embedded Bluetooth Communications

- Front access USB Port

Enter key
Save change. Enter the menus.

ESC key
Return to the previous menu.

Navigation keys
In the menu system.

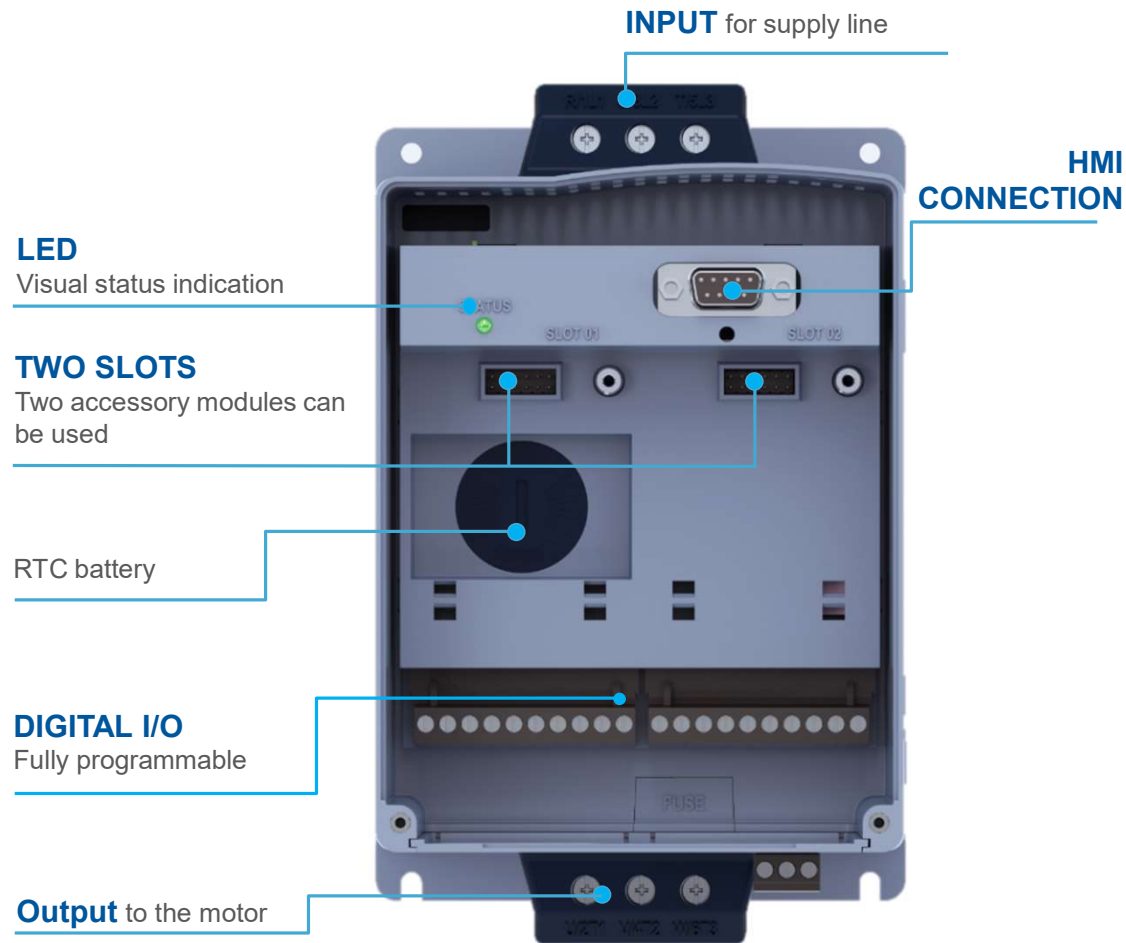**HELP key**
Shows help text about the displayed parameter.

FORWARD/REVERSE selection key
Control of the motor speed direction with command via HMI activated.

LOCAL OR REMOTE key
If command via HMI.

START key

JOG key

STOP key

Display:
Pronta ⟲ Loc   0.0A 11:53
Status
1 Medições
2 I/O
3 SSW900
4 Temperaturas
5 Comunicações

Standard Features and Ratings

INPUT for supply line

HMI CONNECTION

LED
Visual status indication

TWO SLOTS
Two accessory modules can be used

RTC battery

DIGITAL I/O
Fully programmable

Output to the motor

Standard Features and Ratings

G — 1,100 to 1,400 A

F — 820 to 950 A

E — 480 to 670 A

D — 255 to 412 A

C — 130 to 200 A

B — 45 to 105 A

A — 10 to 30 A

Standard Features and Ratings

WEG

| Frame size	Height (H) mm (in)	Width (W) mm (in)	Depth (P) mm (in)	(A) mm (in)	(B) mm (in)	(C) mm (in)	(D) mm (in)	Fastening screw	Weight (kg) (lb)	Degree of protection
A	200 (7.87)	127 (5)	203 (7.99)	110 (7.33)	175 (6.88)	8.5 (0.33)	4.3 (0.16)	M4	1.93 (4.25)	IP20
B	208 (8.18)	144 (5.66)	260 (10.23)	132 (5.19)	148 (5.82)	6 (0.23)	3.4 (0.13)	M4	4.02 (8.86)	IP20
C	276 (10.86)	223 (8.77)	261 (10.27)	208 (8.18)	210 (8.26)	7.5 (0.29)	5 (0.19)	M5	6.55 (14.44)	IP20[1]
D	331 (13.03)	227 (8.93)	282 (11.10)	200 (7.87)	280 (11.02)	15 (0.59)	9 (0.35)	M8	12.83 (28.28)	IP20[1]
E	575 (22.63)	390 (15.35)	260 (10.23)	270 (10.62)	480 (18.89)	56 (2.20)	10 (0.40)	M8	38 (83.75)	IP00
F	760 (29.92)	464 (18.27)	316 (12.44)	320 (12.60)	625 (24.61)	72 (2.83)	10 (0.39)	M8	75.40 (166.23)	IP00
G	914 (35.98)	539 (21.22)	316 (12.44)	369 (14.53)	732 (28.82)	85 (3.35)	12 (0.47)	M10	107.20 (236.34)	IP00

Note: IP20 with optional kit.

Standard Features and Ratings

Ratings for standard connection with three cables (typical WEG motor ratings):

Part number	Rated current (A)	Motor voltage 220/230 V		Motor voltage 380/400 V		Motor voltage 440/460 V		Motor voltage 525 V		Motor voltage 575 V	
	A	cv	kW	cv	kW	cv	kW	cv	kW	cv	kW
SSW900A0010T5E2	10	3	2.2	6	4.5	7.5	5.5	7.5	5.5	10	7.5
SSW900A0017T5E2	17	6	4.5	10	7.5	12.5	9.2	15	11	15	11
SSW900A0024T5E2	24	7.5	5.5	15	11	15	11	20	15	20	15
SSW900A0030T5E2	30	10	7.5	20	15	20	15	25	18.5	30	22
SSW900B0045T5E2	45	15	11	30	22	30	22	40	30	40	30
SSW900B0061T5E2	61	20	15	40	30	50	37	50	37	60	45
SSW900B0085T5E2	85	30	22	60	45	60	45	75	55	75	55
SSW900B0105T5E2	105	40	30	75	55	75	55	75	55	100	75
SSW900C0130T5E2	130	50	37	75	55	100	75	125	90	125	90
SSW900C0171T5E2	171	60	45	125	90	125	90	150	110	175	132
SSW900C0200T5E2	200	75	55	150	110	150	110	200	150	200	150
SSW900D0255T5Ex[1]	255	100	75	175	132	200	150	250	185	250	185
SSW900D0312T5Ex[1]	312	125	90	200	150	250	185	300	220	300	220
SSW900D0365T5Ex[1]	365	150	110	250	185	300	225	350	260	400	300
SSW900D0412T5Ex[1]	412	150	110	300	220	350	260	440	315	450	330
SSW900E0480T5Ex[1]	480	200	150	350	260	400	300	500	370	500	370
SSW900E0604T5Ex[1]	604	250	185	450	330	500	370	600	450	650	485
SSW900E0670T5Ex[1]	670	250	185	500	370	550	410	650	485	750	550

Notes: 1) To select a SSW900 model with control voltage 110-130 V, replace "x" by 3 and to select a model with control voltage 220-240, replace "x" by 4;
Models ≤412 A: AC-53b 3-30:330, ambient temperature of 55 °C;
Models ≥480 A: AC-53b 3-30:690, ambient temperature of 40 °C;
Models of 45 A to 200 A: with ventilation kit;
WEG motors Premium or Plus, IV poles.
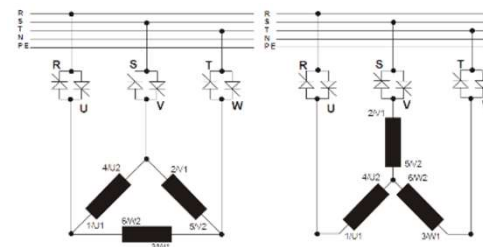
Standard Features and Ratings

Ratings for standard connection with six cables (typical WEG motor ratings:

| Model SSW900	Rated current (A)	Maximum applicable motor									
		Motor voltage 220/230 V		Motor voltage 380/400 V		Motor voltage 440/460 V		Motor voltage 525 V		Motor voltage 575 V	
	A	cv	kW	cv	kW	cv	kW	cv	kW	cv	kW
SSW900C0130T5E2	225	75	55	150	110	175	132	200	150	250	185
SSW900C0171T5E2	296	125	90	200	150	200	150	250	185	300	220
SSW900C0200T5E2	346	150	110	250	185	300	220	300	220	350	260
SSW900D0255T5Ex[1)	441	175	132	300	220	350	260	400	300	450	330
SSW900D0312T5Ex[1)	540	200	150	350	260	450	330	500	370	550	410
SSW900D0365T5Ex[1)	631	250	185	450	330	500	370	600	450	650	485
SSW900D0412T5Ex[1)	713	250	185	500	370	600	450	700	525	800	600
SSW900E0480T5Ex[1)	831	350	260	600	450	700	525	800	600	900	670
SSW900E0604T5Ex[1)	1,046	450	330	750	550	850	630	1,050	775	1,150	820
SSW900E0670T5Ex[1)	1,160	500	370	850	630	950	700	1,150	820	1,250	920

Notes: 1) To select a SSW900 model with control voltage 110-130 V, replace "x" by 3 and to select a model with control voltage 220-240, replace "x" by 4;
Models ≤412 A: AC-53b 3-25:335, ambient temperature of 55 °C;
Models ≥480 A: AC-53b 3-25:695, ambient temperature of 40 °C;
Models of 130 A to 200 A: with ventilation kit;
WEG motors Premium or Plus, IV poles.
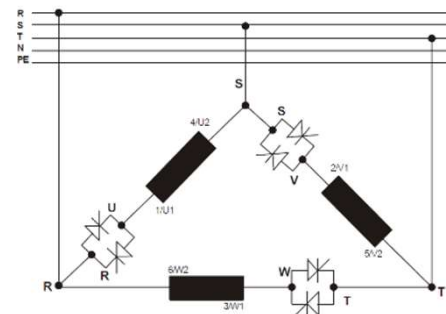
Sizing and Selecting

WEG

Consider the following when Sizing WEG Soft Starters:

- Application (load type)

- Motor nameplate data

- "Torque x speed" load curve

- Load inertia

- Supply voltage

- Operating conditions (maximum number of starts per hour)

- Installation environment conditions

- Control voltage

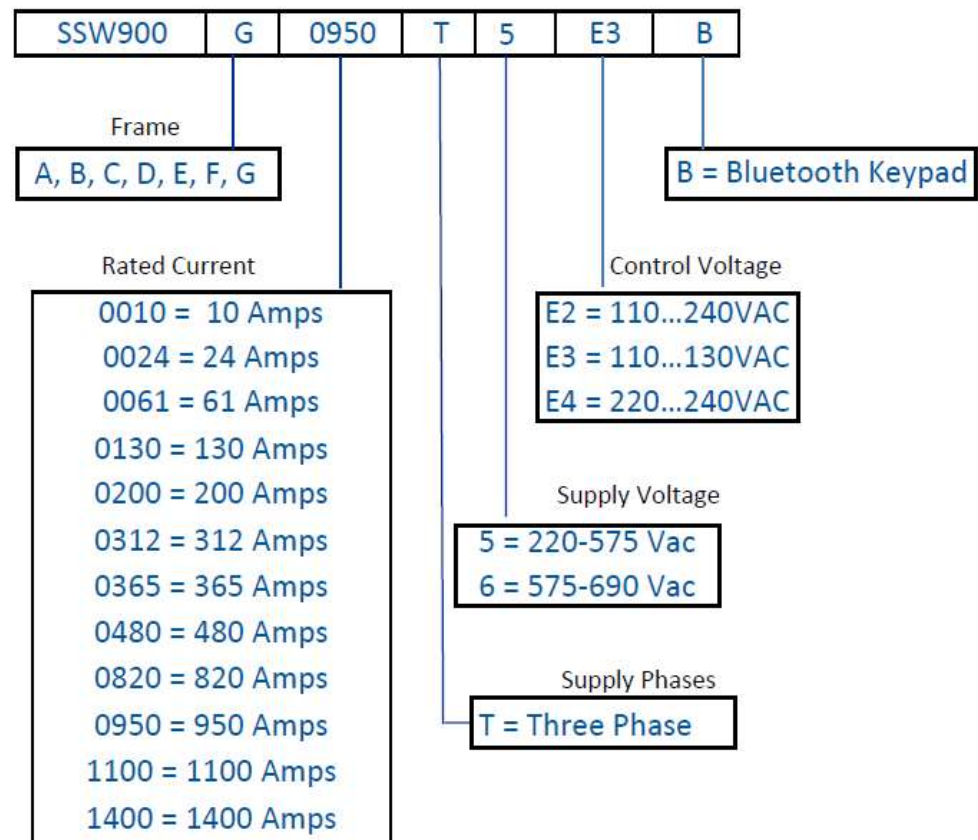**Use the WEG on-line [Soft Starter Sizing Assistant](#)**

Sizing and Selecting

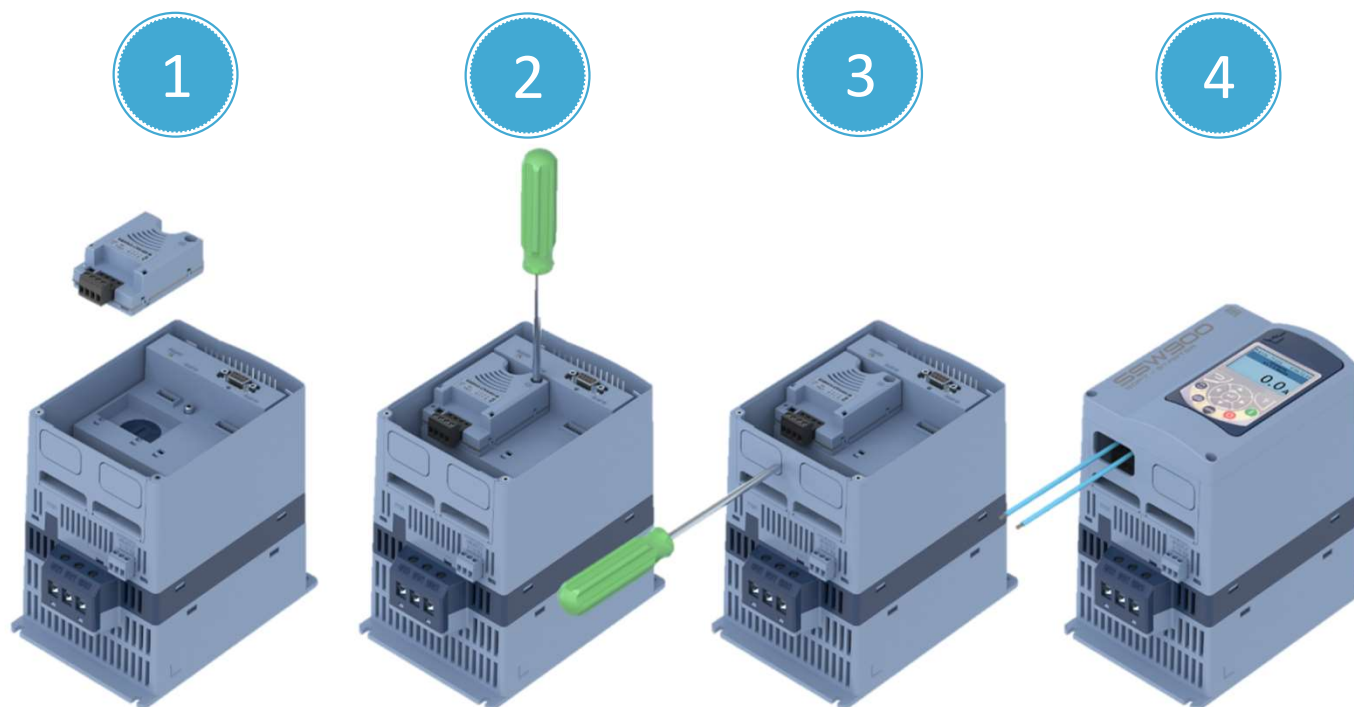
Access our Interactive Catalog on-line

SSW900 Catalog Number Sequence

SSW900	G	0950	T	5	E3	B

Frame

A, B, C, D, E, F, G

B = Bluetooth Keypad

Rated Current

0010 =	10 Amps
0024 =	24 Amps
0061 =	61 Amps
0130 =	130 Amps
0200 =	200 Amps
0312 =	312 Amps
0365 =	365 Amps
0480 =	480 Amps
0820 =	820 Amps
0950 =	950 Amps
1100 =	1100 Amps
1400 =	1400 Amps

Control Voltage

E2 = 110...240VAC
E3 = 110...130VAC
E4 = 220...240VAC

Supply Voltage

5 = 220-575 Vac
6 = 575-690 Vac

Supply Phases

T = Three Phase

Accessories and Options

Quick and Easy installation!

Accessories and Options

Communications Options

RS485

Anybus DeviceNet

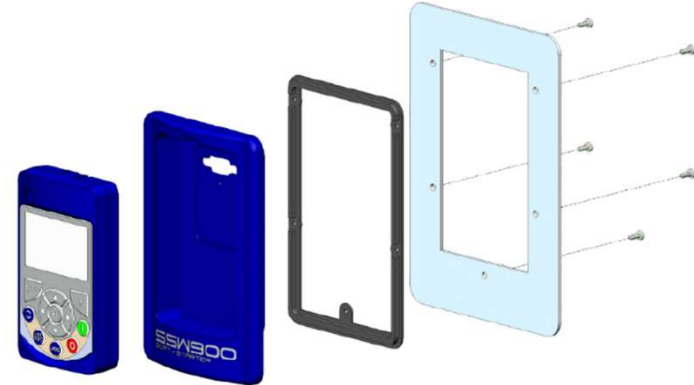Anybus Profibus-DP

Anybus EtherNet/IP

Anybus Modbus-TCP

Anybus Profinet IO

Accessories and Options

Additional Accessories Include:

- Remote Keypad Kit and Cables

- IP20, Power Terminal Cover, and Ventilation Kits

- Optional External Current Transformers

- Busbar Extension Kits

- SSW06 to SSW900 Adapter Plates

Enclosed Solutions

WEG

APS9 – All Purpose Soft Starter utilizing the SSW900 Soft Starters:

- Utilizes SSW900 Soft Starter with integrated AC1 by-pass

- 65KA SCCR, Circuit Breaker, Through-Door Rotary Handle

- Service Entrance Rated

- Application Rated – able to be used for Normal Duty (350% for 30s 1.00 SF) or Heavy Duty (450% for 30s. 1.15 SF) based on Selection

- UL 3R/4/12 Heavy Duty Enclosure

- Compact Solution, Frames 1, 2 and 3 Wall Mountable (Optional Floor Mounting Kits Available)

- Full HP rated AC3 emergency bypass contactor with Class-30 overload relay helps to start and run

- "Soft Starter-off-Bypass" selector switch mounted inside an enclosure

- Fused Multi-tap Control Power Transformer (208/230/460VAC - 120VAC).

- Terminals for customer remote Start/Stop, External Interlock, "Motor running", and "System Fault" Dry Contacts

- Enclosure door mounted Bluetooth Enabled Graphical Keypad and Extensive Array of Operators and Pilot Lights

Advanced Monitoring and Diagnostics

- Graphical and Statistical Monitoring of System, Soft Starter, and Motor information

- Accessible via Graphical Keypad, WEG WPS PC Software, or WEG WPS Mobile App
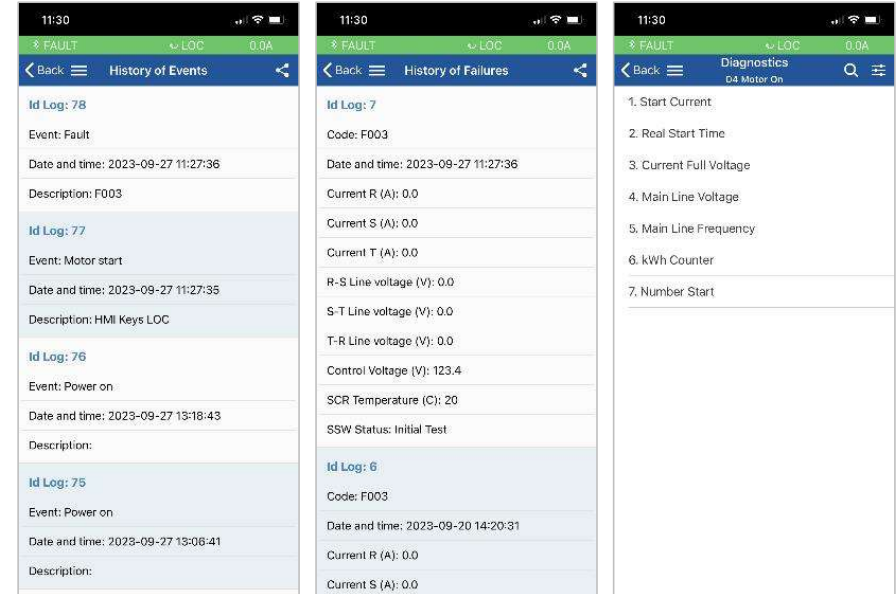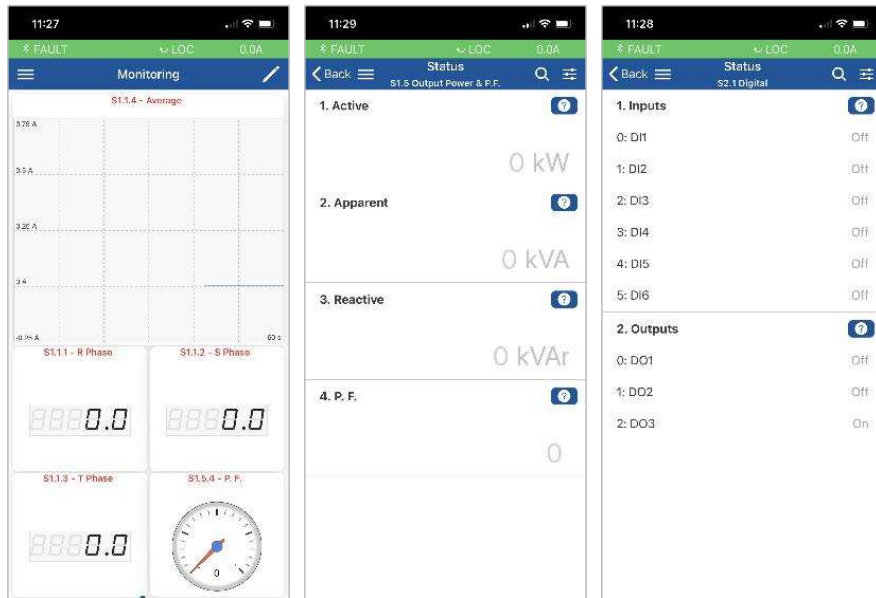
- Event and Fault logging with time noted

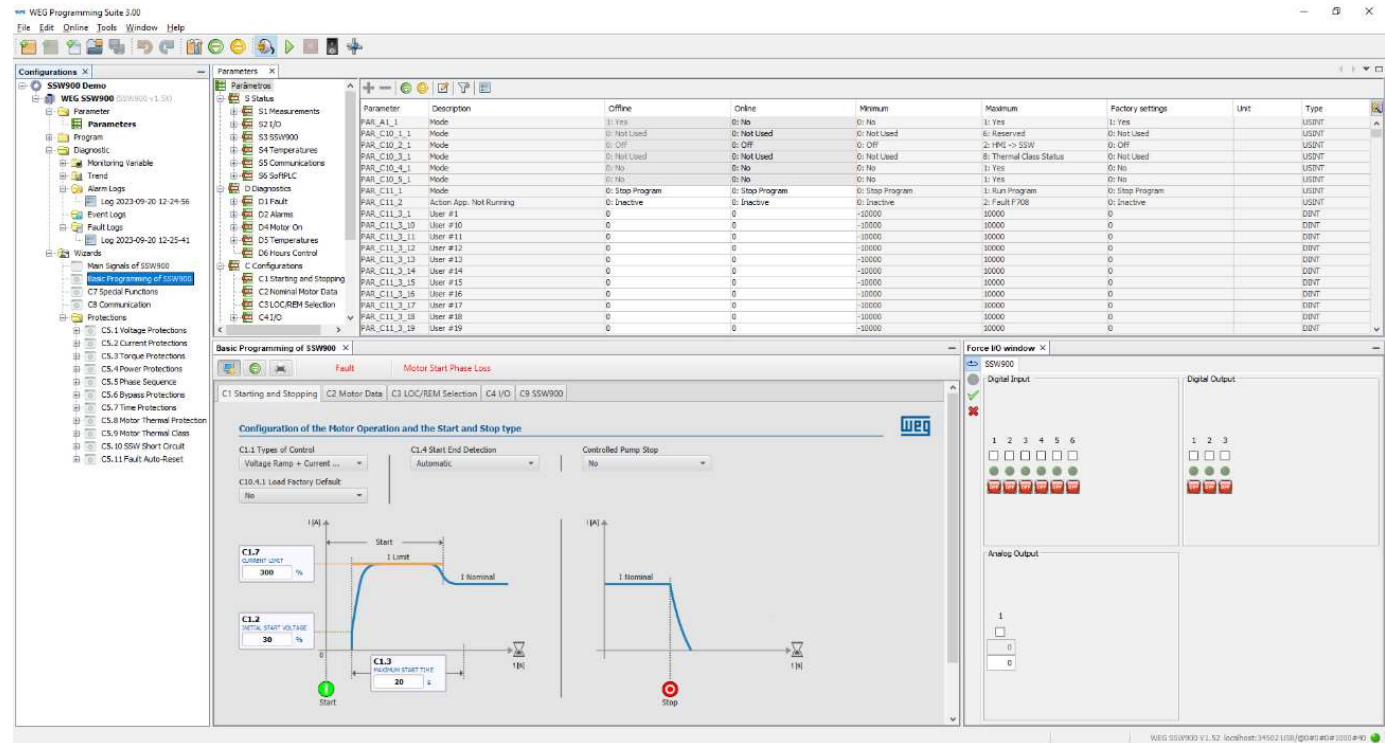- Ability to export and save logged data

- On-board Diagnostics

Advanced Monitoring and Diagnostics

WEG WPS PC Software

Provides access to:

- All parameters and settings

- I/O Simulators

- Diagnostics and Trending

- Configuration Guides

- Firmware Updates

- SoftPLC Programing

- Available at no charge!