DATASHEET
Soft-Starter



Main Features

Reference	: SSW900A0010T5E2
Product code	: 12955638
Product family	: SSW900

Basic data

Power	
- Rated current	: 10 A
- Power supply	: 220-575V
- Power supply type	: TT / TN / IT
- Frequency	: 50/60Hz
- Number of controlled phases	: 3 phases
- Integrated bypass	: Yes
Motor power - standard connection (cv/kW)	
- 220/230V	: 3 / 2.2
- 380/400V	: 6 / 4.5
- 440/460V	: 7.5 / 5.5
- 575V	: 10 / 7.5
- 690V	: No
Motor power - delta inside connection (cv/kW)	
- 220/230V	: No
- 380/400V	: No
- 440/460V	: No
- 575V	: No
Electronic and fan	
Supply voltage (control)	: 110-240V
Supply voltage (cooler)	: 110-240V
Connection to the motor	
- Standard (3 leads)	: Yes
- Inside delta (6 leads)	: No
Duty cycle	
- Standard [1]	: AC-53b 3-30:330
- With ventilation kit [2]	: No
Digital inputs	
- Quantity (standard)	: 6
- Type	: DC NPN / PNP
- Voltage	: 24 Vdc
- Minimum high level	: 18 Vdc
- Maximum low level	: 3 Vdc
- Maximum voltage	: 30 Vdc
- Input current	: 11 mA @ 24 Vdc
- Function	: Programmable
- Reading via communication	: Yes
Input for motor thermistor	
- Quantity (standard)	: 1
- Activation	: 3k9 Ohms
- Deactivation	: 1k6 Ohms
- Minimum resistance	: 100 Ohms
Analog outputs	
- Quantity (standard)	: 1
- Level	: 0 to 10 Vdc and 0 to 20 mA
- Resolution	: 10 bits
- Function	: Programmable
- Write via communication	: Yes
Digital outputs	
- Quantity	: 3
- Type	: 2 x NO relay, 1 NO/NC relay
- Maximum voltage	: 250 Vac
- Maximum current	: 1 A
- Function	: Programmable
- Write via communication	: Yes
Functions and Features	
Control type start and stop	
- Voltage ramp	: Yes
- Voltage ramp and current limit	: Yes
- Current limit	: Yes

- Current limitation ramp	: Yes
- Pump control	: Yes
- Torque control	: Yes
- Direct on line start	: Yes
Functions/Features	
Specials functions	
- Torque pulse at start (kick start)	: Yes
- Jog	: Yes
- DC braking (with contactor)	: Yes
- Optimal Braking (without contactor)	: Yes
- Reverse braking	: Yes
- Changing of the rotation direction	: Yes
- Multimotor application	: No
- Emergency start (Fire Mode)	: Yes
Diagnosis	
- Latest faults	: Yes, LOG
- Starting and cycle diagnosis	: Yes
- Last previous faults	: Yes
- Last previous alarms	: Yes
- Last previous events	: Yes
Others	
- Set-up of the programmable fan	: Yes
- Copy of the parameters via keypad	: Yes
- User 1 and user 2	: Yes
- Oriented Start-up	: Yes
- Protections actuation in errors and alarms	: Yes
- Fault auto reset	: Yes
- Real time clock (RTC)	: Yes
- SoftPLC (ladder programming)	: Yes, 4K bytes
Slots (para accessories options)	
- Quantity	: 2
- Digital inputs and outputs expansion	: No
- PTC inputs	: No
- Pt-100 inputs	: Yes
- Current sensor (by extern bypass)	: No
Comunications (see Comunication)	
Protections	
Voltage	
- Power supply phase loss	: Yes
- Overvoltage and undervoltage	: Yes
- Voltage imbalance	: Yes
- Electronic undervoltage (control)	: Yes
Current	
- Overcurrent and undercurrent	: Yes
- Current imbalance	: Yes
Torque	
- Overtorque e undertorque	: Yes
Power	
- Overpower and underpower	: Yes
Temperature	
- Thyristor overheating	: Yes
- PTC thermistor motor overheating	: Yes
- PT100 thermocouple motor overheating	: Available with optional
Overload	
- Motor overload (thermal class)	: Yes
- Thyristor overload	: Yes
- Inverted phase sequence	: Yes
- External fault	: Yes
- Not connected motor	: Yes
- Wrong motor connection	: Yes
- Frequency out of range	: Yes
Ground fault	
- Ground fault	: No
Bypass	
- Bypass not opened	: Yes
- Bypass not closed	: Yes
- Overcurrent before closing the bypass	: Yes
- Undercurrent before closing the bypass	: Yes
Time	
- Time before starting	: Yes
- Time after starting	: Yes
- Time between starting	: Yes
- Locked rotor at start	: Yes
Communications	

- Programming error	: Yes
- Communication faults	: Yes
Power	
- Power short circuit with motor switched off	: Yes
- Thyristor fault	: Yes
- Hardware self-diagnosis	: Programmable via optional
Parameterization	
- Parameterization via trimpots and dip switches	: No
- Parameterization via keypad	: Yes
- Parameterization via software	: WPS
Local HMI	
- Type	: Yes, removable
Remote HMI	
- Type	: Local removable
- Frame for HMI	: Optional
- HMI degree of protection	: IP56
- Maximum cable length	: 20 m / 65.6 ft
Local or remote HMI data	
- Display	: LCD graphic
- Keys	: 12 keys
- Password	: Yes
- Language	: Yes
- Help	: Yes
- Copy function	: Yes
- Status graphic (read)	: Yes
- HMI USB	: Yes
Communication	
- Modbus-RTU RS-232	: No
- Modbus-RTU RS-485	: Available with optional
- Modbus-RTU USB	: Yes
- WEG Bus	: No
- Modbus-TCP	: Available with optional
- Profibus-DP	: Available with optional
- Profibus-DPV1	: Available with optional
- Profinet	: Available with optional
- DeviceNet	: Available with optional
- EtherNet/IP	: No
- EtherNet/IP 2P	: Available with optional
- Profinet IO 2P	: Available with optional
- CANopen	: Available with optional
Ambient conditions	
- Enclosure	: IP20
- Pollution degree (UL 508)	: 2
Temperature	
- Minimum	: -10 °C / 14 °F
- Rated	: 55 °C / 131 °F
- Current reduction factor above nominal [3]	: 2% for each degree
Relative humidity (non-condensing)	
- Minimum	: 5 %
- Maximum	: 90 %
Altitude	
- Under rated operating conditions	: 1000 m (3281 ft)
- Maximum allowed with reduction factor [4]	: 4000 m (13123 ft)
- Current reduction factor above 1000 m [5]	: 1 % for each 100 m (328 ft)
- Voltage reduction factor above 2000 m [6]	: 1.1 % for each 100 m (328 ft)
Dimensions	
- Frame	: A
- Height	: 200 mm / 7.9 in
- Width	: 127 mm / 5.0 in
- Depth	: 203 mm / 8.0 in
- Weight	: 1,93 kg / 4.25 lb
Sustentability Directives	
- RoHS	: Yes
- Conformal coating	: 3C2
Standards Compliance	
- Safety	: UL 508
- Low voltage	: EN 60947-4-2
- Overvoltage category	: III (UL508 / EN61010)
- EMC	: Directive 89/336/EEC
Certifications	
- Product certification	: UL, CE and EAC

Notes
1) Starting duty cicle AC-53b 3-30:330:

- 3 x Rated current of the SSW900 during 30 s;
- 10 starts per hour;
- 100% of the time with rated current;
- With bypass;
- from 0 to 55 °C without current derating

3) For temperature over the rated value;
4) With reduction factor;
5) For altitude above 1000 m (3281 ft);
6) For altitude above 2000 m (6562 ft);
7) Image merely illustrative;
8) For further information consult the product manuals SSW900.