DATASHEET
Soft-Starter



Main Features

Reference	: SSW050016T2246TPZ
Product code	: 10413821
Product family	: SSW05

Basic data

Power	
- Rated current	: 16 A
- Power supply	: 220-460V
- Power supply type	: TT / TN / IT
- Frequency	: 50/60Hz
- Number of controlled phases	: 2 phases
- Integrated bypass	: Yes
Motor power - standard connection (cv/kW)	
- 220/230V	: 5 / 3.7
- 380/400V	: 7.5 / 5.5
- 440/460V	: 10 / 7.5
- 575V	: No
- 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)	: 90-250V
Supply voltage (cooler)	: 90-250V
Connection to the motor	
- Standard (3 leads)	: Yes
- Inside delta (6 leads)	: No
Duty cycle	
- Standard [1]	: AC-53b 3-10:890
- With ventilation kit [2]	: No
Digital inputs	
- Quantity (standard)	: 2
- Type	: AC
- Voltage	: 110 up to 240 Vac
- Minimum high level	: 93 Vac
- Maximum low level	: 10 Vac
- Maximum voltage	: 264 Vac
- Input current	: 1.1 mA @ 220 Vac
- Function	: Programmable via optional
- Reading via communication	: No
Input for motor thermistor	
- Quantity (standard)	: No
- Activation	: No
- Deactivation	: No
- Minimum resistance	: No
Analog outputs	
- Quantity (standard)	: No
- Level	: No
- Resolution	: No
- Function	: No
- Write via communication	: No
Digital outputs	
- Quantity	: 2
- Type	: NO relay
- Maximum voltage	: 250 Vac
- Maximum current	: 1 A
- Function	: Programmable via optional
- Write via communication	: No
Functions and Features	
Control type start and stop	
- Voltage ramp	: Yes
- Voltage ramp and current limit	: No
- Current limit	: No

- Current limitation ramp : No
- Pump control : No
- Torque control : No
- Direct on line start : No

Functions/Features

Specials functions

- Torque pulse at start (kick start) : No
- Jog : Yes
- DC braking (with contactor) : No
- Optimal Braking (without contactor) : No
- Reverse braking : No
- Changing of the rotation direction : No
- Multimotor application : No
- Emergency start (Fire Mode) : No

Diagnosis

- Latest faults : No
- Starting and cycle diagnosis : No
- Last previous faults : No
- Last previous alarms : No
- Last previous events : No

Others

- Set-up of the programmable fan : No
- Copy of the parameters via keypad : Yes
- User 1 and user 2 : No
- Oriented Start-up : No
- Protections actuation in errors and alarms : No
- Fault auto reset : Yes
- Real time clock (RTC) : No
- SoftPLC (ladder programming) : No

Slots (para accessories options)

- Quantity : No
- Digital inputs and outputs expansion : No
- PTC inputs : No
- Pt-100 inputs : No
- Current sensor (by extern bypass) : No

Comunications (see Comunication)

Protections

Voltage

- Power supply phase loss : Yes
- Overvoltage and undervoltage : No
- Voltage imbalance : No
- Electronic undervoltage (control) : Yes

Current

- Overcurrent and undercurrent : No
- Current imbalance : No

Torque

- Overtorque e undertorque : No

Power

- Overpower and underpower : No

Temperature

- Thyristor overheating : No
- PTC thermistor motor overheating : No
- PT100 thermocouple motor overheating : No

Overload

- Motor overload (thermal class) : No
- Thyristor overload : No
- Inverted phase sequence : Yes
- External fault : Programmable via optional
- Not connected motor : Yes
- Wrong motor connection : No
- Frequency out of range : Yes

Ground fault

- Ground fault : No

Bypass

- Bypass not opened : No
- Bypass not closed : Yes
- Overcurrent before closing the bypass : No
- Undercurrent before closing the bypass : No

Time

- Time before starting : No
- Time after starting : No
- Time between starting : No
- Locked rotor at start : No

Communications

- Programming error	: Yes
- Communication faults	: Yes
Power	
- Power short circuit with motor switched off	: No
- Thyristor fault	: No
- Hardware self-diagnosis	: No
Parameterization	
- Parameterization via trimpots and dip switches	: Yes
- Parameterization via keypad	: Available with optional
- Parameterization via software	: Superdrive G1
Local HMI	
- Type	: No
Remote HMI	
- Type	: No
- Frame for HMI	: No
- HMI degree of protection	: IP54
- Maximum cable length	: 3 m / 9.8 ft
Local or remote HMI data	
- Display	: LED numeric
- Keys	: 6 keys
- Password	: Yes
- Language	: No
- Help	: No
- Copy function	: Yes
- Status graphic (read)	: No
- HMI USB	: No
Communication	
- Modbus-RTU RS-232	: Yes
- Modbus-RTU RS-485	: No
- Modbus-RTU USB	: No
- WEG Bus	: Yes
- Modbus-TCP	: No
- Profibus-DP	: No
- Profibus-DPV1	: No
- Profinet	: No
- DeviceNet	: No
- EtherNet/IP	: No
- EtherNet/IP 2P	: No
- Profinet IO 2P	: No
- CANopen	: No
Ambient conditions	
- Enclosure	: IP00
- Pollution degree (UL 508)	: 2
Temperature	
- Minimum	: 0 °C / 32 °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	: 1
- Height	: 130 mm / 5.1 in
- Width	: 59 mm / 2.3 in
- Depth	: 145 mm / 5.71 in
- Weight	: 0,74 kg / 1.63 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, CS, IRAM and C-TICK

Notes
1) Starting duty cicle AC-53b 3-10:890:

- 3 x Rated current of the SSW05 during 10 s;
- 4 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 SSW05.