

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS SINAMICS

A5E03915589

PSBC2 POWER BOARD

Used with the applicable SINAMICS drive electronics configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens manufacturer documentation

1.3 Where can the various topics be found?

Software		Manual
Alarms	Described in order of ascending numbers	SINAMICS S120/S150 List Manual
Parameters	Described in order of ascending numbers	SINAMICS S120/S150 List Manual
Function block diagrams	Sorted according to topic	SINAMICS S120/S150 List Manual
	Described in order of ascending numbers	
Drive functions		SINAMICS S120 Function Manual Drive Functions
Communication topics		SINAMICS S120 Function Manual Communication ²⁾
Safety Integrated	Basic and Extended Functions	SINAMICS S120 Safety Integrated Function Manual
	Basic Functions	SINAMICS S120 Function Manual Drive Functions
Commissioning	Of a simple SINAMICS S120 drive with STARTER	Getting Started ¹⁾
Commissioning	With STARTER	SINAMICS S120 Commissioning Manual ¹⁾
Commissioning	Of a simple SINAMICS S120 drive with Startdrive	Getting Started ²⁾
Commissioning	With Startdrive	SINAMICS S120 Commissioning Manual ²⁾
Web server		SINAMICS S120 Function Manual Drive Functions

Hardware		Manual
Control Units and expansion components		SINAMICS S120 Equipment Manual for Control Units and Supplementary System Components
Booksize power units		SINAMICS S120 Equipment Manual for Booksize Power Units
Chassis power units		SINAMICS S120 Equipment Manual for Chassis Power Units, Air-cooled
		SINAMICS S120 Manual for Chassis Power Units, liquid cooled
		SINAMICS S120 Equipment Manual for Chassis Power Units, Water-cooled for common cooling circuits
AC drive components		SINAMICS S120 Equipment Manual for AC Drives
S120 Combi components		SINAMICS S120 Equipment Manual Combi
Diagnostics via LEDs	STARTER	SINAMICS S120 Commissioning Manual ¹⁾
	Startdrive	SINAMICS S120 Commissioning Manual ²⁾
Meaning of the LEDs		Equipment Manuals
High Frequency Drive components		SINAMICS S120 System Manual High Frequency Drives

¹⁾ Up to firmware version 5.1 SP1

²⁾ From firmware version 5.2

1.8 General Data Protection Regulation

Compliance with the General Data Protection Regulation

Siemens respects the principles of data protection, in particular the data minimization rules (privacy by design).

For this product, this means:

The product does not process neither store any person-related data, only technical function data (e.g. time stamps). If the user links these data with other data (e.g. shift plans) or if he stores person-related data on the same data medium (e.g. hard disk), thus personalizing these data, he has to ensure compliance with the applicable data protection stipulations.

Characteristics of Power Modules

- Design for 3 AC 380 bis 3 AC 480 V from 210 A to 490 A
- Suitable for TN, TT, and IT supply systems
- Liquid cooled or water cooled
- Short-circuit/ground-fault-proof
- Electronic nameplate
- Operating status and error status via LEDs
- DRIVE-CLiQ interface for communication with the Control Unit and/or other components in the drive line-up.
- Integration in system diagnostics
- The Power Modules communicate with the higher-level Control Unit via DRIVE-CLiQ. The Control Unit in this case could be a CU310-2, CU320-2 or a SIMOTION D Control Unit.
- An external 24 V DC power supply is required to operate liquid-cooled/water-cooled Power Modules.
- The correct line reactor must be connected in series to achieve a Category C3 radio interference suppression according to IEC 61800.

The volumetric flow of the coolant is monitored by the software. If the volumetric flow is continuously lower than the setpoint, an alarm (A5005) is first displayed. If this alarm remains active continually for the next 5 minutes, a fault message (F30047) is activated which shuts down the unit.

The fans for the internal electronic circuitry are only switched on when required.

The fans are switched on and off as a function of several factors (e.g. heat sink temperature, ambient temperature, output current, duty cycle, ...) which means that fan operating cycles cannot be calculated directly.

5.2 Safety information



WARNING

Not observing fundamental safety instructions and residual risks

Not observing fundamental safety instructions and residual risks listed in Chapter 1 can result in accidents with severe injuries or death.

- Comply with the fundamental safety instructions.
- When assessing the risk, take into account residual risks.