01 / Product and system dashboard

SIEMENS

6DD1601-0AE0

Processor Module

Product role

Siemens 6DD1601-0AE0 is a SIMADYN D PG16 processor module for numerical processing and drive-level control of line-commutated converters.

Program memory
Installed MS submodule

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PG16
Drive-level processing

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SITOR arrangement
Converter pulse control

Engineering scope

Detailed PG16 design data apply to SWE type 4656019004.01, product version higher than M and software from V2.3. Match the actual version before applying those values.

02 / Verified identity and technical relationships

Property	Applicable fact	Property	Applicable fact
Module designation	PG16	Reference binary inputs	4, non-isolated, interrupt-capable
System	SIMADYN D	Reference binary outputs	4, non-isolated, 24 V, 50 mA nominal
Control application	Line-commutated converters	SITOR connection	50-pin X7
Reference processor	16-bit 80C186, 16 MHz	Service interface	X01; Hex monitor with applicable hybrid
Reference RAM	64 KB; backup from power supply	Rack allocation	2 slots
Program memory	MS-series plug-in submodule at X50	Reference applicability	SWE 4656019004.01, version > M, software ≥V2.3

Configuration boundary

Detailed PG16 design data apply to SWE type 4656019004.01, product version higher than M and software from V2.3. Match the actual version before applying those values.

03 / Applications and system integration

Converter regulation

Use PG16 in its configured SIMADYN D application for line-commutated converter control.

Processor synchronization

Use the configured binary interfaces for fast processor-to-processor exchange while preserving signal levels and interrupt allocation.

SITOR integration

Match X7 wiring, the power section and the retained firing configuration before releasing converter operation.

Diagnostic service

Use processor-number and fault-code indications together with the appropriate Hex-monitor service arrangement.

Functional context

The reference design provides 64 KB RAM with battery backup from the power supply and a socket for an MS-series program-memory submodule. User code executes under the SIMADYN D real-time operating system, with configuration-dependent interrupt-controlled cycles of at least 1 ms. Four non-isolated binary inputs can trigger process-interrupt jobs, and four non-isolated 24 V binary outputs support fast exchange with another processor.

04 / Service and installation decisions

Verify the version

Match the full order code, SWE type and product revision against the applicability of the PG16 instructions.

Preserve software

Record the installed MS memory submodule and retain the controller program before replacement.

Remove power

Never insert or withdraw PG16 under power; isolate the converter and control system using the approved procedure.

Check signal levels

The reference binary interfaces are non-isolated. Verify common potentials and actual wiring before reconnection.

Preserve SITOR connections

Check X5 and X7 connections and synchronization arrangements against the approved drive drawings.

Release after tests

Confirm processor indication and controlled converter response before restoring the normal operating sequence.

05 / Reference basis and related portfolio

Lifecycle and supply

End of product lifecycle. Request current support and replacement guidance using the complete 6DD1601-0AE0 identity. Apter Power availability is confirmed separately in the quotation.

Reference basis

Siemens PG16 User Manual, Dk-Nr. 222142, Edition 05.95.

Apter Power technical summary; not a manufacturer-issued manual. Apply the original instructions for the actual installation.

Related industrial automation products

Navigation only; no substitution or compatibility claim.

Siemens 6DD1606-3AC0

Siemens 6DD1607-0EA1

Siemens 6DD1611-0AD0

Discuss your installed configuration

Send the full unit marking and connection details.

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