

6DD1607-0AA2

SIMATIC S7-400 FM458-1 DP Application Module

Siemens 6DD1607-0AA2 is an FM458-1 DP application module for SIMATIC S7-400 arithmetic, closed-loop and open-loop control tasks. It provides PROFIBUS DP, eight digital inputs, backed

PRODUCT SNAPSHOT

BRAND
Siemens

FAMILY
SIMATIC FM458-1 DP / D7-SYS

PART
6DD1607-0AA2

DOCUMENT STATUS
Controlled engineering copy

APTER POWER

WHATSAPP / PHONE

+86 180 3023 5313

WEBSITE

www.apterpower.com



PRODUCT OVERVIEW

Siemens 6DD1607-0AA2 provides high-performance arithmetic and configurable closed-loop or open-loop control with PROFIBUS DP in an S7-400 station in a documented SIMATIC FM458-1 DP / D7-SYS installation.

 FM458-1 DP application module

 Arithmetic and control processing

 PROFIBUS DP for I/O and drives

 Eight 24 V digital inputs and backed SRAM

RELATED APTER POWER PAGES		
1 Bently Nevada 330903-00-07-10-01-CN	2 Bently Nevada 330903-00-07-10-01-00	3 Bently Nevada 330162-03-45-45-05-05-94-01-02
4 Bently Nevada 330101-00-60-90-01-05	5 Bently Nevada 330104-11-25-10-02-00	6 Bently Nevada 330102-04-25-10-02-00
7 Bently Nevada 330910-00-07-05-02-CN	8 Bently Nevada 330910-00-07-05-02-05	9 Bently Nevada 330102-00-20-10-02-00

SYSTEM COMPONENTS

DOCUMENTED COMPONENT	ROLE IN SYSTEM
Proximity probe	Matched extension cable
Proximitor Sensor	AISI 4140 target

ENGINEERING CONTEXT

The component remains matched to its documented cabinet position, power source, interfaces and approved engineering configuration. Commissioning restores that architecture and verifies the affected control or communication function under controlled conditions.

TECHNICAL DATA

PARAMETER	VALUE
Product designation	FM458-1 DP application module
Host system	SIMATIC S7-400
Primary tasks	Arithmetic, closed-loop and open-loop control
PROFIBUS DP	Provided
Distributed-I/O and drive connection	Supported
Digital inputs	8 on connector X2
Rated digital-input voltage	24 V DC

PARAMETER	VALUE
Memory backup	SRAM backup provided
Backup battery current	15 microampere maximum
Required rack slots	1
Hardware clock	Provided, 500 ms resolution
Typical current consumption	1.5 A
Maximum current consumption	3 A
Expansion design	Supports I/O and communication expansion

RELATED PRODUCT PAGES

- 1

Bently Nevada
330903-00-07-10-01-CN
- 2

Bently Nevada
330903-00-07-10-01-00
- 3

Bently Nevada
330162-03-45-45-05-05-94-01-02
- 4

Bently Nevada
330101-00-60-90-01-05
- 5

Bently Nevada
330104-11-25-10-02-00
- 6

Bently Nevada
330102-04-25-10-02-00
- 7

Bently Nevada
330910-00-07-05-02-CN
- 8

Bently Nevada
330910-00-07-05-02-05
- 9

Bently Nevada
330102-00-20-10-02-00

TECHNICAL NOTE

Install 6DD1607-0AA2 only in the documented SIMATIC FM458-1 DP / D7-SYS position and preserve its exact wiring, interfaces and configuration. After controlled energization, verify diagnostics and high-performance arithmetic and configurable closed-loop or open-loop control with PROFIBUS DP in an S7-400 station before service release.

APPLICATIONS & PRECAUTIONS

COMMON APPLICATIONS

High-performance control algorithms

Executes configured arithmetic and closed-loop control tasks.

Drive and I/O coordination

Uses PROFIBUS DP to exchange data with documented devices.

D7-SYS application module

Runs the approved application configuration and function-block structure.

FM458 replacement commissioning

Preserves SRAM, battery, expansion modules and controlled functional proof.

PRODUCT PRECAUTIONS

1

Confirm the complete 6DD1607-0AA2 marking and the documented SIMATIC S7-400 FM458-1 DP Application

2

Place the machine, controller and affected process in the approved maintenance state.

3

Isolate all hazardous energy and prove the safe state before disconnecting hardware.

4

Record the installed position, every terminal or port, and the active engineering configuration.

5

Verify the exact electrical, interface and environmental limits in the manufacturer evidence.

6

Restore protective earth, shielding, wiring, communications and the approved project or

7

Energize under control and review all device, rack, network and process diagnostics.

8

Complete a controlled functional test of high-performance arithmetic and configurable

RELATED APTER POWER PAGES

1

Bently Nevada
330903-00-07-10-01-CN

2

Bently Nevada
330903-00-07-10-01-00

3

Bently Nevada
330162-03-45-45-05-05-94-01-02

4

Bently Nevada
330101-00-60-90-01-05

5

Bently Nevada
330104-11-25-10-02-00

6

Bently Nevada
330102-04-25-10-02-00

7

Bently Nevada
330910-00-07-05-02-CN

8

Bently Nevada
330910-00-07-05-02-05

9

Bently Nevada
330102-00-20-10-02-00

ENGINEER FAQ

Q1 Why must the exact product designation value be confirmed when commissioning 6DD1607-0AA2?

The official exact-article record identifies 6DD1607-0AA2 as FM458-1 DP application module; match the full marking before installation.

Q2 Why must the exact host system value be confirmed when commissioning 6DD1607-0AA2?

For 6DD1607-0AA2, the official exact-article evidence specifies host system as SIMATIC S7-400. Record the installed condition and test the affected function before release.

Q3 Why must the exact primary tasks value be confirmed when commissioning 6DD1607-0AA2?

For 6DD1607-0AA2, the official exact-article evidence specifies primary tasks as Arithmetic, closed-loop and open-loop control. Record the installed condition and test the affected function before release.

Q4 Why must the exact profibus dp value be confirmed when commissioning 6DD1607-0AA2?

For 6DD1607-0AA2, the official exact-article evidence specifies profibus dp as Provided. Record the installed condition and test the affected function before release.

Q5 Why must the exact distributed-i/o and drive connection value be confirmed when commissioning 6DD1607-0AA2?

For 6DD1607-0AA2, the official exact-article evidence specifies distributed-i/o and drive connection as Supported. Record the installed condition and test the affected function before release.

Q6 What field-signal arrangement digital inputs documented for 6DD1607-0AA2?

For 6DD1607-0AA2, the official exact-article evidence specifies digital inputs as 8 on connector X2. Record the installed condition and test the affected function before release.

Q7 How must technicians verify applies to 6DD1607-0AA2 for rated digital-input voltage?

For 6DD1607-0AA2, the official exact-article evidence specifies rated digital-input voltage as 24 V DC. Record the installed condition and test the affected function before release.

Q8 Which software constraint must be preserved for 6DD1607-0AA2 regarding memory backup?

For 6DD1607-0AA2, the official exact-article evidence specifies memory backup as SRAM backup provided. Record the installed condition and test the affected function before release.

RELATED APTER POWER PAGES

1 Bently Nevada
330903-00-07-10-01-CN

2 Bently Nevada
330903-00-07-10-01-00

3 Bently Nevada
330162-03-45-45-05-05-94-01-02

4 Bently Nevada
330101-00-60-90-01-05

5 Bently Nevada
330104-11-25-10-02-00

6 Bently Nevada
330102-04-25-10-02-00

7 Bently Nevada
330910-00-07-05-02-CN

8 Bently Nevada
330910-00-07-05-02-05

9 Bently Nevada
330102-00-20-10-02-00

SOURCE Siemens ST 400 catalog exact-article technical specifications for 6DD1607-0AA2 | Official manufacturer evidence verified 28 September 2026

+86 180 3023 5313 | sales13@apterpower.com | www.apterpower.com