

6DD1682-0CC0

SIMADYN Subrack

INSTALLATION AND COMMISSIONING GUIDE

It is a twelve-slot, fan-cooled 24 VDC SIMADYN D rack with SP22 power supply and integrated L-bus and C-bus backplanes.

- Provides twelve SIMADYN D slots
- Includes forced-air cooling
- Uses a 24 VDC SP22 power supply
- Distributes power and data on L and C buses

VERIFIED IDENTITY

Order number	6DD1682-0CC0
Subrack designation	SR12.1
Supply voltage	24 V DC
Cooling fan	Provided
Power-supply type	SP22
Module slots	12

Official source: Siemens SIMADYN D Hardware Manual
Publication: Edition 04.2011 / 12.2004

APPLICATION SNAPSHOT

Twelve-slot control assembly	Houses a complete twelve-slot digital control assembly.
SIMADYN multi-module integration	Links installed modules through the two backplane buses.
Fan-cooled controller rack	Maintains cooled operation of the documented module set.
SR12.1 subrack replacement	Restores the exact 24 VDC rack and power architecture.

01 PRE-INSTALLATION PLAN

Step 1	Verify the complete 6DD1682-0CC0 marking and the assigned SIMADYN D digital control system position before work.
Step 2	Place the connected twelve-slot control assembly process in the approved maintenance state.
Step 3	Isolate all applicable power and rack power and I-bus/c-bus data for twelve simadyn d slots field energy before disconnection.
Step 4	Record every connector, conductor, address, jumper and project identity before removal.
Step 5	Use ESD controls and protect keyed interfaces, exposed contacts and electronic assemblies.
Step 6	Confirm the installed 24 VDC cabinet supply and protection and SP22 power supply and cooling fan against the approved system record.
Step 7	Restore power in a controlled sequence and review module, rack and host diagnostics.
Step 8	Prove the intended simadyn multi-module integration function and retain the final acceptance result.

MATCHED HARDWARE

- 24 VDC cabinet supply and protection
- installed SIMADYN D modules
- SP22 power supply and cooling fan
- L-bus, C-bus and backup-battery arrangement

02 WIRING & INTERFACE CHECKS

Exact model	6DD1682-0CC0
Installed system	SIMADYN D digital control system
Controlled signal	rack power and L-bus/C-bus data for twelve SIMADYN D slots
Connector record	Capture terminal, plug, jumper and cable identities before removal
Shield and reference	Restore only the documented as-found termination arrangement
Supply isolation	Verify all module, field and stored-energy sources are safe
Configuration record	Save addresses, ranges, parameters, software and project revision
Pre-energization gate	Complete continuity, polarity, supply and protective-device checks



03 COMMISSIONING & RETURN TO SERVICE

1 — Identity	Reconfirm 6DD1682-0CC0 and the assigned system position
2 — Mechanical	Verify seating, retaining hardware, airflow and connector protection
3 — Electrical	Verify supply, polarity, references, shields and field protection
4 — Configuration	Restore only the approved addresses, parameters and project
5 — Controlled power	Energize with the connected process in the maintenance state
6 — Diagnostics	Review module, rack, network and host diagnostic indications
7 — Function	Exercise the documented twelve-slot control assembly function
8 — Acceptance	Record the final response and release authorization

APPLICATION-SPECIFIC TESTS

Twelve-slot control assembly	Houses a complete twelve-slot digital control assembly.
SIMADYN multi-module integration	Links installed modules through the two backplane buses.
Fan-cooled controller rack	Maintains cooled operation of the documented module set.
SR12.1 subrack replacement	Restores the exact 24 VDC rack and power architecture.

RETURN-TO-SERVICE RECORD

Identification accepted	Complete model and installed marking verified
Connections accepted	All conductors, connectors, shields and jumpers reconciled
Configuration accepted	Addressing, parameters and project revision confirmed
Diagnostics accepted	No unexplained module, rack, network or host faults
Function accepted	Documented controlled response proved
Record retained	As-left evidence and approval stored with the maintenance record



MODEL-SPECIFIC FAQ & RELATED PRODUCTS

1	What rack configuration identifies Siemens 6DD1682-0CC0?	It is the SR12.1 SIMADYN D subrack with twelve module slots.
2	Which supply and power module are used by 6DD1682-0CC0?	The exact subrack uses a 24 VDC input and the SP22 power-supply type.
3	Does 6DD1682-0CC0 include a cooling fan?	Yes. Siemens identifies SR12.1 as the fan-equipped 24 VDC twelve-slot version.
4	Which backplane buses are provided by 6DD1682-0CC0?	The integrated rack distributes module power and data through both the L bus and C bus.
5	What do the front LEDs mean on 6DD1682-0CC0?	The green LED indicates error-free operation and the red LED indicates a fault condition.
6	How is backup power arranged on 6DD1682-0CC0?	The rack has an internal battery compartment and an optional external backup-battery connection at X3.
7	What reset method is documented for 6DD1682-0CC0?	A cold restart can be initiated by the reset button or the documented X4 jumper method; follow the Siemens procedure exactly.
8	What must be verified before releasing 6DD1682-0CC0 to service?	Confirm the twelve-slot map, fan, SP22 voltages, battery, L/C bus diagnostics and every installed module before controlled startup.

RELATED PRODUCTS ON APTER POWER

01	Ics Triplex TC 301 02 4M5	Related industrial automation product
02	Ics Triplex T8431C	Related industrial automation product
03	Ics Triplex T9300	Related industrial automation product
04	Ics Triplex T3481A	Related industrial automation product
05	Ics Triplex T9852	Related industrial automation product
06	Ics Triplex T9802	Related industrial automation product
07	Ics Triplex T8110B	Related industrial automation product
08	Ics Triplex T3420A	Related industrial automation product

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6DD1682-0CC0 | PAGE 4



6DD1682-0CC0