

6SE7090-0XX87-4AH0

T300 Technology Board Retrofit Kit

INSTALLATION, INTERFACE AND VALIDATION WORKBOOK

Siemens 6SE7090-0XX87-4AH0 is a T300 technology-board retrofit kit supplied with SC58 and SC60 connection cables, the SE300 terminal block and hardware operating instructions. It adds the documented T300 technology function to the matched drive system.

STEP	GATE	ENGINEERING PURPOSE
01	IDENTIFY	Confirm article, host and hardware
02	ISOLATE	Secure power and stored energy
03	CONNECT	Restore documented interfaces
04	VALIDATE	Prove diagnostics and function

WORKBOOK PURPOSE

Field-ready identity, isolation, connection, commissioning and closeout records for this exact Siemens article.

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6SE7090-0XX87-4AH0

Installation Readiness Gate

Complete the identity, host-system and isolation checks before disturbing the installed hardware.

- 1

Confirm 6SE7090-0XX87-4AH0 and the T300 marking before work.
- 2

Place the drive and associated machine in the approved maintenance state.
- 3

Isolate incoming power and prove all stored energy discharged.
- 4

Record the installed board position, SC58/SC60 routing and SE300 terminal assignments.

Pre-Work Evidence

EVIDENCE ITEM	RECORDED VALUE
Complete article marking	6SE7090-0XX87-4AH0
Host / carrier	SIMOREG DC-MASTER 6RA70 and compatible Siemens drive option system
Primary system role	Provides the T300 technology-board function
Acceptance boundary	Complete controlled technology-function and machine-interlock tests before service release.
Source record	SIMOREG DC-MASTER Operating Instructions

WORK AUTHORIZATION RECORD

Work order: _____

Drawing / revision: _____

Checked by: _____

Date: _____

Isolation and Access Register

CONTROL POINT	ENGINEER RECORD
Incoming supply	Isolated / proved
Stored energy	Discharged / proved
Field connections	Identified / protected
ESD control	Established / recorded

Pre-Work Documentation

DOCUMENT	ENGINEER RECORD
Connection photograph	Reference / file
Configuration backup	Reference / revision
Diagnostic baseline	Reference / result

Connection and Installation Sequence

INSTALLATION PRINCIPLE

Before removing 6SE7090-0XX87-4AH0, record the complete marking, installed position, mating hardware, connectors, wiring and configured function. Restore the documented Siemens arrangement, review diagnostics and complete a controlled functional test before release.

- 1 Use ESD controls and inspect all board, cable and terminal interfaces.
- 2 Restore the T300 board, both connection cables and terminal block exactly as documented.
- 3 Restore the approved drive and technology configuration and review diagnostics.
- 4 Complete controlled technology-function and machine-interlock tests before service release.

Connection Record

CONNECTION GROUP	AS-FOUND / AS-LEFT RECORD	STATUS
Power / field connection	Reference / terminal	Checked
Signal / interface	Reference / connector	Checked
Ground / shield	Reference / point	Checked
Accessory / carrier	Reference / part	Checked

MODEL-SPECIFIC RELEASE LIMIT

Confirm 6SE7090-0XX87-4AH0, T300 board, matched SIMOREG/DC drive host, hardware revision, SC58 and SC60 cables, SE300 terminals, wiring, grounding, firmware, software configuration and controlled technology-function test results before commissioning.

Interface Acceptance Criteria

ACCEPTANCE ITEM	REQUIRED EVIDENCE
Identity	6SE7090-0XX87-4AH0
Host match	SIMOREG DC-MASTER 6RA70 and compatible Siemens drive option system
Connection proof	Restore the T300 board, both connection cables and terminal block exactly as documented.
Configuration proof	Restore the approved drive and technology configuration and review diagnostics.

Commissioning and Acceptance Record

Record each controlled verification step before the equipment returns to automatic operation.

NO.	ACCEPTANCE CHECK	RESULT	RECORD
1	Article and host identity	PASS / FAIL	Initial / date
2	Mechanical installation	PASS / FAIL	Initial / date
3	Power and field wiring	PASS / FAIL	Initial / date
4	Grounding and shielding	PASS / FAIL	Initial / date
5	Configuration restoration	PASS / FAIL	Initial / date
6	Signal or power-path response	PASS / FAIL	Initial / date
7	Diagnostics and alarms	PASS / FAIL	Initial / date
8	Final functional release	PASS / FAIL	Initial / date

Engineering Notes

RECORD AREA	ENGINEER ENTRY
As-found condition	
Corrective action	
As-left configuration	
Outstanding restriction	
Release authorization	

CONTROLLED COMMISSIONING

Complete controlled technology-function and machine-interlock tests before service release.

Diagnostics and Release Log

EVENT	ENGINEERING RECORD
Initial energization	Result / observation
Interface or signal response	Result / observation
Alarm and diagnostic review	Result / observation
Functional release	Name / date

Maintenance Verification and Closeout

SIMOREG technology-function retrofit

Adds the documented T300 board and companion hardware to the matched drive.

Drive control modernization

Restores an existing T300 execution with the exact retrofit-kit identity.

Terminal and cable renewal

Replaces the associated SC58, SC60 and SE300 connection set under controlled conditions.

Technology-board recommissioning

Provides the exact kit record used during drive diagnostics and functional acceptance.

Related Engineering Pages

MODEL	ENGINEERING ROLE	APTER POWER PAGE
6SE7041-8HK85-1HA0	PER2 interface	View 6SE7041-8HK85-1HA0 page
6SE7041-8EK85-0HA0	PER3 interface	View 6SE7041-8EK85-0HA0 page
6SE7041-8GK85-0HA0	PER3 interface	View 6SE7041-8GK85-0HA0 page
6RA8075-6DS22-0AA0	SINAMICS DC converter	View 6RA8075-6DS22-0AA0 page
6ES7314-6BH04-0AB0	S7-300 CPU	View 6ES7314-6BH04-0AB0 page
6ES7223-1BL22-0XA0	S7-200 I/O module	View 6ES7223-1BL22-0XA0 page
6AU1455-2AD00-0AA0	SIMOTION controller	View 6AU1455-2AD00-0AA0 page
6SL3120-2TE21-0AA4	SINAMICS Motor Module	View 6SL3120-2TE21-0AA4 page

MANUFACTURER SOURCE RECORD

SIMOREG DC-MASTER Operating Instructions
Siemens 6RX1700-0AD76, edition 05/2007

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