Siemens 7UT5121-4CB01-0AA0/LL

Transformer Differential Relay

A legacy Siemens 7UT512-family transformer differential relay. The /LL suffix remains part of the exact identity because the reviewed catalog does not decode that option.

Job objective

Replace, install or verify the exact module without changing unrelated wiring, configuration, dimensions, weight or other stored product data.

Safe-work boundary

Identify Match the complete model and every suffix or secondary code.	**Isolate** Apply the plant-approved electrical and process isolation procedure.
Preserve Back up configuration and photograph all connections.	**Control** Use ESD protection and revision-controlled documentation.

Required evidence before work

Nameplate photo; slot/rack record; connector map; project backup where applicable; fault history; approved acceptance procedure.

Verification focus

- Siemens
- 7UT5121-4CB01-0AA0/LL
- 7UT512 transformer protection family
- Exact /LL suffix retained

Readiness checklist

Exact identity	Siemens 7UT5121-4CB01-0AA0/LL matches the work order and physical unit
System position	Rack, slot and functional assignment are recorded
Configuration	Parameters, firmware or project data are backed up when applicable
Connections	Every cable, terminal, jumper and shield is labeled
Condition	Connector, board and packaging condition are inspected
Test plan	Expected states and acceptance evidence are agreed

Interface preparation

CT inputs	Verify ratio, polarity, phase assignment and secondary grounding
Trip outputs	Check the approved breaker and lockout trip matrix
Binary inputs	Reconcile blocking, reset and interlock assignments
Alarm outputs	Confirm annunciation and supervisory circuit mapping
Auxiliary supply	Read the installed nameplate rating before energization
Test circuit	Use the station secondary-injection and trip-test procedure

Interface acceptance record

- CT inputs: Verify ratio, polarity, phase assignment and secondary grounding
- Trip outputs: Check the approved breaker and lockout trip matrix
- Binary inputs: Reconcile blocking, reset and interlock assignments
- Alarm outputs: Confirm annunciation and supervisory circuit mapping

03 / INSTALLATION SEQUENCE

Controlled replacement workflow

1	Confirm isolation and absence of hazardous energy
2	Compare old and replacement identities and revisions
3	Photograph and label all connections
4	Remove the existing module using ESD-safe handling
5	Inspect slot, connector, grounding and cooling path
6	Install the exact replacement without forcing connectors
7	Restore cables, jumpers and settings from the controlled record
8	Perform a final visual and continuity check before energization

STOP POINT

Do not energize if the model, slot, connector orientation, grounding, jumper state or documented system assignment is unresolved.

Configuration control

- Protection duty: Transformer differential protection
- Catalog status: Earlier product family
- Catalog successor family: 7UT612
- Order suffix: /LL

Staged return to service

Stage	Action	Acceptance
Stage 1	Visual inspection and isolation release	Expected controlled result
Stage 2	Apply control power under observation	Expected controlled result
Stage 3	Confirm module recognition or status	Expected controlled result
Stage 4	Verify communication and affected signal paths	Expected controlled result
Stage 5	Exercise the documented function	Expected controlled result
Stage 6	Archive measured results and as-left configuration	Expected controlled result

Product-specific acceptance focus

1

Do not infer terminal equivalence from another 7UT512 order code.

2

Confirm every blocking, interlock, alarm and lockout path before energization.

3

Use controlled secondary injection to prove operating and restraint behavior.

4

Record as-left settings, test currents, trip times and restored indications.

Release evidence

- Do not infer terminal equivalence from another 7UT512 order code.
- Confirm every blocking, interlock, alarm and lockout path before energization.
- Use controlled secondary injection to prove operating and restraint behavior.
- Record as-left settings, test currents, trip times and restored indications.

Fault isolation and final record

1	Unexpected state: stop and capture evidence
2	Recheck identity, power, slot and connectors
3	Compare configuration and revision records
4	Test surrounding system before condemning the module
5	Restore a safe state and document the outcome

Apter Power handover record

Model identity	Keep the complete Siemens model code and every suffix in purchasing, installation and acceptance records.
Verification boundary	Confirm the physical nameplate, installed position and revision-controlled project documents before field work.
Apter Power support	Use the contact details and Apter Power website links in this document for product and sourcing support.

Related Apter Power products	Exact product page
Siemens 7VE5120-4CA10-0A/FF	View Siemens 7VE5120-4CA10-0A/FF
Siemens 6DD1681-0AE2	View Siemens 6DD1681-0AE2
Siemens 6DD1681-0AG2	View Siemens 6DD1681-0AG2
Siemens 6ES5928-3UB21	View Siemens 6ES5928-3UB21

Commissioning support sales13@apterpower.com +86 180 3023 5313 www.apterpower.com

Source and identity trace

- Exact identity: Siemens 7UT5121-4CB01-0AA0/LL
- Siemens SIPROTEC 4 Catalog, Edition No. 8, product-assignment appendix: 7UT512 transformer differential relay; later family 7UT612
- Siemens Protective Relays and SCADA Systems selection guide: 7UT512 transformer protection