

1MRK002239-BBR03

Relion 670 Series Power Supply Module

INSTALLATION, INTERFACE AND VALIDATION WORKBOOK

ABB 1MRK002239-BBR03 is a Relion 670 Series power supply module based on the documented 1MRK002239-BB 90-250 V DC execution. It supplies the installed protection-and-control IED hardware through the approved terminal arrangement.

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 ABB article.

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1MRK002239-BBR03

Installation Readiness Gate

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

- 1

Confirm ABB 1MRK002239-BBR03 and base ordering number 1MRK002239-BB.
- 2

Place the protected primary equipment and IED in the approved maintenance state.
- 3

Isolate the auxiliary supply and prove the module terminals de-energized.
- 4

Record every supply conductor, terminal designation, polarity and protective-earth connection.

Pre-Work Evidence

EVIDENCE ITEM	RECORDED VALUE
Complete article marking	1MRK002239-BBR03
Host / carrier	ABB Relion 670 protection and control IED
Primary system role	Supplies the installed Relion 670 IED
Acceptance boundary	Complete a controlled protection-system functional check before return to service.
Source record	Relion 670 Series product guide and hardware ordering information

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

Match 1MRK002239-BBR03 to the installed Relion 670 hardware execution and record supply conductors, terminal style, protective grounding and module position before removal. Restore the approved wiring and verify IED startup and power diagnostics before protection release.

- 1 Confirm the installed Relion 670 hardware position and terminal execution.
- 2 Restore the documented conductors and approved IED hardware arrangement.
- 3 Energize under control and review IED power, self-supervision and communication diagnostics.
- 4 Complete a controlled protection-system functional check before return to service.

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 ABB 1MRK002239-BBR03, base order 1MRK002239-BB, Relion 670 host, 90-250 V DC supply, terminal execution, polarity, grounding, hardware position and controlled startup diagnostics before commissioning.

Interface Acceptance Criteria

ACCEPTANCE ITEM	REQUIRED EVIDENCE
Identity	1MRK002239-BBR03
Host match	ABB Relion 670 protection and control IED
Connection proof	Restore the documented conductors and approved IED hardware arrangement.
Configuration proof	Energize under control and review IED power, self-supervision and communication 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 a controlled protection-system functional check before return to service.

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

ACCEPTANCE AND RELEASE EVIDENCE

Relion 670 IED power restoration

Restores the documented power-supply position in a protection IED.

Substation protection maintenance

Supports controlled replacement without changing the IED function configuration.

Bay-control hardware service

Preserves auxiliary power and terminal identity during planned maintenance.

Protection-panel recommissioning

Provides the exact module identity for startup and diagnostic verification.

Maintenance Verification and Closeout

Relion 670 IED power restoration

Restores the documented power-supply position in a protection IED.

Substation protection maintenance

Supports controlled replacement without changing the IED function configuration.

Bay-control hardware service

Preserves auxiliary power and terminal identity during planned maintenance.

Protection-panel recommissioning

Provides the exact module identity for startup and diagnostic verification.

Related Engineering Pages

MODEL	ENGINEERING ROLE	APTER POWER PAGE
ABB RPBA-01-3ABD64606859	Related Apter Power product	View ABB RPBA-01-3ABD64606859 page
ABB RDCO-02C-3ABD64606956	Related Apter Power product	View ABB RDCO-02C-3ABD64606956 page
ABB 3BHE022294R0101-GFD233-A101	Related Apter Power product	View ABB 3BHE022294R0101-GFD233-A101 page
ABB DSTD110A	Related Apter Power product	View ABB DSTD110A page
ABB DSQC346G	Related Apter Power product	View ABB DSQC346G page
ABB RRIA-01	Related Apter Power product	View ABB RRIA-01 page
ABB INTKM01	Related Apter Power product	View ABB INTKM01 page
ABB PFTK101A-YM222001-UC	Related Apter Power product	View ABB PFTK101A-YM222001-UC page

MANUFACTURER SOURCE RECORD

Relion 670 Series product guide and hardware ordering information
Hitachi Energy Relion 670 Series

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