01 / Job scope and preparation

ABB

3BHE014557R0003 UN1000B-Z,V3

Voltage Regulator

Controlled maintenance scope

Plan installation or replacement of 3BHE014557R0003 UN1000B-Z,V3 against the actual installed UNITROL 1000-15 arrangement. Qualified personnel must use the applicable manufacturer instructions and approved site procedure.

Retain the complete identity

Keep 3BHE014557R0003 UN1000B-Z,V3, the actual serial label and control-software identity together. A similar UNITROL family name does not establish version equivalence.

Separate supply circuits

Identify auxiliary electronics supply and excitation-stage supply in the machine wiring. Apply the ratings printed on the actual unit and its applicable original instructions.

Work boundary

Qualified personnel must isolate the excitation system and manage stored energy before service. Restore operation under the applicable ABB instructions and approved machine commissioning procedure.

02 / Readiness checks

Review	Acceptance relationship
Retain the complete identity	Keep 3BHE014557R0003 UN1000B-Z,V3, the actual serial label and control-software identity together. A similar UNITROL family name does not establish version equivalence.
Separate supply circuits	Identify auxiliary electronics supply and excitation-stage supply in the machine wiring. Apply the ratings printed on the actual unit and its applicable original instructions.
Preserve machine measurements	Confirm voltage and current measurement connections against the installed excitation drawing. Correct signal scaling and polarity are part of the complete machine configuration.
Control operating-mode changes	Voltage, power-factor, reactive-power and manual-current control have different purposes. Use the approved machine procedure and installed parameter set when changing operating mode.
Confirm enabled options	Check synchronizing, rotating-diode monitoring and expansion functions against the actual configuration. Platform optional functions do not establish what is included in the offered unit.

Record before disturbance

Retain the complete unit marking, connection photographs and approved system configuration. Resolve a mismatch before carrying over wiring or settings.

03 / Integration sequence

Identify
Unit and installed system

>

Prepare
Connections and configuration

>

Restore
Controlled verification

1. Establish the installed system

Associate the complete V3 unit marking with the machine, exciter and control-software identity. Preserve the active parameter file before replacement.

2. Identify separate circuits

Trace the electronics supply, excitation-stage supply and measurement circuits in the machine drawings. Check the actual unit ratings rather than applying later UNITROL specifications.

3. Restore the correct configuration

Match control software, operating modes and enabled options. RS-232 commissioning, RS-485 load sharing and CAN expansion serve different platform functions.

4. Verify under machine control

Use the applicable ABB commissioning procedure to establish measurement scaling, excitation response and permitted mode transfers before releasing the machine.

04 / Acceptance and system review

Area	Relationship to verify
Generator excitation control	The UNITROL 1000-15 platform adjusts excitation for synchronous-generator voltage control. Match the machine measurements, exciter and active parameter set to the installed unit.
Synchronous-motor excitation	Excitation control also applies to synchronous motors. Select the required operating mode and machine settings within the approved motor and excitation-system design.
Parallel-machine operation	Reactive-current droop and platform load-sharing functions support coordinated operation. Apply the installed communication arrangement and control-software configuration.
Commissioning and maintenance	CMT 1000 provides the platform commissioning interface. Preserve the existing parameter set and match the installed software before replacing or adjusting a regulator.

Acceptance evidence

Retain the complete offered and installed identities, final configuration and functional verification results. A common product family or similar connector does not independently establish an approved replacement.

05 / Service handover and reference basis

Support and service planning

Keep the installed configuration with the maintenance record. Obtain current ABB lifecycle and replacement guidance using the full unit marking; quoted availability is separate from the manufacturer support phase.

Reference basis

ABB UNITROL 1000-15 / UNITROL 1000-40 technical presentation, 11 December 2008.

Apter Power technical summary, not an ABB-issued manual. UNITROL 1000-15 base-design functions are described separately from the supplied V3 marking. Match hardware, control software and enabled options to the installed machine.

Related ABB products

Navigation only; no substitution or compatibility claim.

ABB HIEE205014R0001 UNC4673A V1

ABB HIEE305114R0001 UNS4684A-P

Discuss your installed configuration

Send the full unit marking and connection details.

sales13@apterpower.com | +86 18030235313