ABB TU835V1 3BSE013236R1

01 Work boundary

1 Identify the station

Match both TU835V1 and 3BSE013236R1. Record the fitted I/O module, station position, key settings and all field-terminal assignments before removal.

2 Separate the supplies

Identify the two isolated process-power groups and their returns. Put affected loops into the approved maintenance state and isolate field power before touching connections.

Required record	Purpose
I/O module type	Confirm AI810, AI815 or AI845 and the intended single-I/O arrangement
Power-group allocation	Preserve group separation and field return paths
ModuleBus position	Restore the same station location and neighboring connections

TU835V1 3BSE013236R1 / Prepare wiring and keys

02 Prepare wiring and keys

1 Match the mechanical code

Set both six-position keys to the coding required by the fitted I/O module. The 36 possible combinations are mechanical interlocks, not software range settings.

2 Prepare the conductors

Check conductor construction and cross-section, remove damaged ends and prepare the specified stripped length. Keep copper strands within the intended terminal.

Solid conductors	0.2–4 mm²
Stranded conductors	0.2–2.5 mm²
Strip length	7 mm
Terminal torque	0.5–0.6 N·m

TU835V1 3BSE013236R1 / Install the termination unit

03 Install the termination unit

1 Secure the mounting

Seat the unit on the standard DIN rail and engage the latch. Confirm the grounding path before restoring field power.

2 Reconnect by recorded function

Restore each signal, fused supply and return connection to its original group. Fit the compatible I/O module only after confirming both mechanical keys.

Eight channel positions	One signal and one fused transducer-power connection each
Process-power terminals	Four supply and four 0 V terminals
ModuleBus connections	Maintain the onward connection to the next MTU
Mechanical resistance	Stop and correct coding or alignment instead of forcing the module

TU835V1 3BSE013236R1 / Energize and verify

04 Energize and verify

1 Check electrical loading

Assess the current in every channel and each shared process connection before energizing. Channel limits and common-terminal limits apply simultaneously.

2 Verify the complete signal path

Restore power under the site procedure, then check field values through the fitted I/O module. Confirm station addressing, supply grouping and the intended controller channel mapping.

Maximum rated voltage	50 V
Per-channel current	2 A maximum
Process connection	8 A maximum
Environmental acceptance	Non-condensing; suitable enclosure for IP20

TU835V1 3BSE013236R1 / Troubleshooting and handover

05 Troubleshooting and handover

1 Separate the fault domains

For a missing value, distinguish a transducer-supply or terminal fault from a ModuleBus or I/O-module fault. Check the relevant group and channel instead of disturbing all eight circuits.

2 Retain the configuration

Record final key positions, module type, terminal assignment, supply-group separation and successful channel checks. Preserve the test results with the station maintenance record.

Technical basis: ABB TU835V1 Data Sheet, article 3BSE013236R1.

Related product navigation

- ABB TU842 3BSE020850R1
- ABB TU845 3BSE021447R1
- ABB TU810V1 3BSE013230R1

These are related references, not confirmed substitutes or an automatically approved assembly.