Woodward 8237-1246

01 Plan the protection-system outage

1 Record the complete protection design

Capture the 8237-1246 hardware revision, bulkhead arrangement, HV/LV supply feeds and voted-trip wiring. Retain each module configuration, speed scaling and trip settings. Coordinate the outage with the machine protection owner; removal of one protection element changes the available protection arrangement.

2 Define the approved test state

Establish isolation, trip management and the permitted test sequence before work. Identify who authorizes overrides and who restores them. A manual test or bypass must not become an undocumented operating condition, and an ordinary process-control test does not replace protection-system validation.

Configuration	All three module settings retained
Wiring	HV/LV and voted-trip circuits mapped
Responsibility	Isolation, testing and release assigned

8237-1246 / Verify the independent supply circuits

02 Verify the independent supply circuits

1 Check the HV/LV assignment

Identify the HV and LV input at each module and compare the actual source with its permitted range. Preserve separate input protection and the required protective-earth connections. Either input can sustain a module, but both should be considered in availability and alarm checks.

2 Do not assume internal load sharing

Size and protect the supply circuits for their individual requirements. Verify polarity where DC is used and retain the intended source separation. A missing supply alarm must be explained rather than disabled merely because the module continues to operate from the other input.

HV	Correct AC or DC source and PE
LV	Correct DC source and polarity
Protection	Independent disconnect/protection

8237-1246 / Restore the speed-sensing channels

03 Restore the speed-sensing channels

1 Keep probes independent

Map one speed probe to each module input. Do not parallel one pickup across the three inputs, because that compromises the sensing and diagnostic arrangement. Preserve shield routing and inspect cable condition in accordance with the manufacturer wiring instructions.

2 Match active or passive mode

Confirm the configured probe mode, signal amplitude and frequency range before testing. Verify tooth-count or other speed scaling against the machine. An accurate frequency signal with incorrect scaling can still produce the wrong speed value and trip point.

Module A/B/C	Separate probe assignment
Probe mode	Active or passive as installed
Scaling	Matches the machine target

8237-1246 / Check the voted shutdown path

04 Check the voted shutdown path

1 Retain the relay configuration

Trace both voted output channels to their assigned shutdown circuits. Verify contact loading against current, voltage and switching-power limits together. The two channels actuate simultaneously; they must not be treated as independent freely programmable process outputs.

2 Test the required protection functions

Follow the approved functional test procedure for each module and the final voted trip path. Include the configured speed-failure and alarm functions where applicable. Record expected and observed behavior and investigate any discrepancy before restoring the machine to service.

Output wiring	Both voted channels traced
Load	All contact limits satisfied
Test result	Module and final trip response recorded

8237-1246 / Close the protection handover

05 Close the protection handover

1 Restore normal operating configuration

Remove test states and overrides through the authorized procedure, verify final settings and confirm all intended supply and sensing channels. Obtain the responsible protection engineer approval before release. Keep the tested hardware revision linked to its saved configuration.

2 Retain a complete maintenance record

Archive the module settings, probe mapping, supply checks, trip results and unresolved issues. When a future replacement or upgrade is proposed, compare its relay and power architecture with this record. A newer ProTech reference must not be accepted solely because it shares the family name.

Technical basis: Woodward ProTech-GII Overspeed Protection Device Manual 26545, Revision G.

Related product navigation

- Woodward 9905-096
- Woodward 9905-969
- Woodward 9905-021

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