Release Note -
Restrictions in Energized to Trip Applications

1 Relevant Versions

- CPU OS release <= **06.05** for central modules of the H41q/H51q product family

2 Restriction in Energized to Trip Applications

If F 3349 output modules are not wired as recommended in connection with a H 4135 and under additional conditions, the relay could be activated when the PADT logs into the controller. By this, devices connected to the relay might be activated causing shut-down of the concerned plant component.
The additional conditions are:

– H41q, H51q HRS system

– Two redundant F 3349 switch a non-redundant H 4135 relay

– Energized-to-trip application

– In HB-BLD-4 function block,
the input "Max. Time Inrush current in ms,.." is set to a value > 0

See Figure 1:

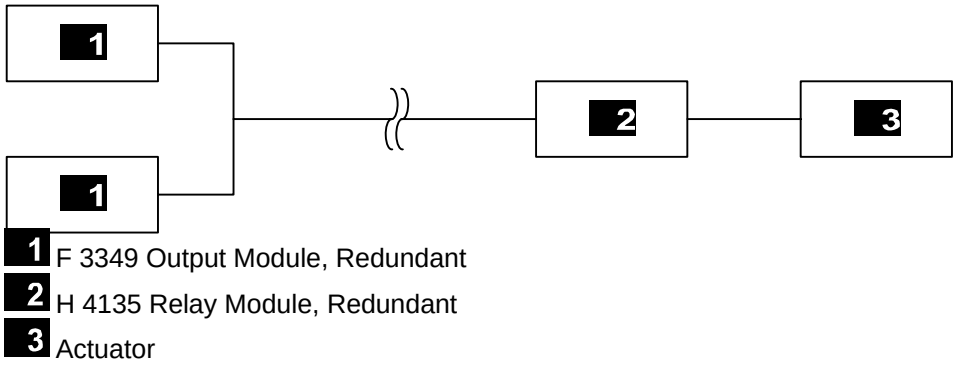
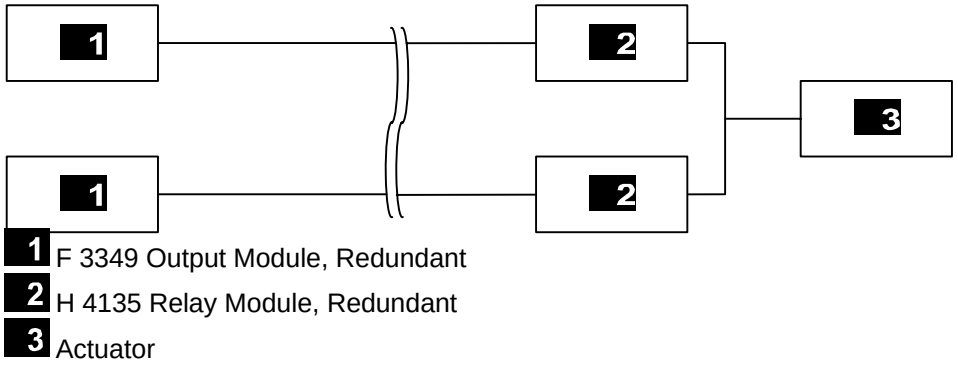


Figure 1: Non-Recommended Wiring

Combined with a prolonged waiting time at the function block HB-BLD-4's input "Max. Time Inrush current in ms,..", the asynchronous test pulses of the two output module's line monitoring may add and therefore activate the relay input up to the waiting time.

3 Workaround

Use redundant H 4135 relay modules and wire them as specified in Figure 2:



1 F 3349 Output Module, Redundant
2 H 4135 Relay Module, Redundant
3 Actuator

Figure 2: Recommended Wiring

Set the input "Max. Time Inrush current in ms,.." of the HB-BLD-4 function block to 1 ms.
This wiring prevents the test pulses from overlapping and ensures the wished functionality.

By making the relay H 4135 redundant, the required SIL can be guaranteed for energizing to trip applications.