

Applications Note

Validating 157 relay expansion operation

The 157 relay expansion module is used to provide output expansion to many of the DSE 500 series of controllers. Although this expansion is primarily for providing volt free contacts for use in monitoring systems, it can be used to provide control outputs for use within the control panel. However, should the DC supply or data cable to the expansion relay module be interrupted, it may be desirable to provide indication of this on the control module, or even to stop the engine. This document describes how to utilise one of the relay output channels to provide operating status of the expansion module that can be monitored to ensure correct operation by the 500 series controller.

DETAILS

As shown in the diagram, the data link cable is connected as normal to the 157 relay expansion.

- Configure one of the expansion outputs to be "De-energise", "Unused". This output will be active so long as the controller and expansion module are both fully operational.
- Connect this expansion output to an auxiliary input of the controller.
- Configure this input is configured to be "Open to activate", "Shutdown", "Always active". This will cause the set to stop (or prevent the set from starting) if it 's control input is not present.



ANOTE:- If the relay expansion module is not being used to control critical parts of the control system, then the monitoring auxiliary input can be set to "Warning" to allow the set to start, or continue running, should the expansion data link, or DC supply be interrupted, while still generating an alarm condition.

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