

Fault Class Definitions

Centurion® and TTD™ Series

Fault Type

Fault events are typically categorized by a letter class to describe when the condition is monitored and when the condition is not monitored by the controller or annunciator. Refer to the definitions below for each class type.

Monitored

When the fault event is monitored/armed, it triggers a controller shut-down response if configured as a shut-down type. If the fault event is Not monitored/Not armed, it will not trigger a shut-down action, even if configured as a shut-down type.

Example:

Fault event is configured as a shut-down type, and controller is armed = event would trigger a controller shutdown.

Fault event is configured as a shut-down type, and controller is NOT armed = controller has no response to event.

Test

FW Murphy products typically have a time-limited test mode that can be enabled while the system is in condition to allow periodic maintenance testing of the end-device operation and wiring without causing shutdown.

Pressing the test button while running will enable the test mode. A test mode timer will be seen on the controller and faults that are testable, when tripped, will show on the display but will not cause a shutdown. Faults must then be cleared by returning the end-device to normal operation, and the reset button pressed before test mode expires to avoid a shutdown. Pressing the test button a second time while test mode is active will end/disable the test mode.

C5 Configurable Controller - Fault Classes

Class	Description of Action	Test
ESD	Monitored at all times.	Non-testable
A	Monitored at all times.	Testable
B1	Monitored when run lockout delay timer B1 expires (0-999 seconds).	Testable
B2	Monitored when run lockout delay timer B2 expires (0-999 seconds).	Testable
S1 thru 4	Monitored when run lockout delay timer S expires (0-999 seconds).	Testable
C1	Monitored when condition has been in normal condition (for 2 consecutive seconds) and state > PANEL READY and state <= COOLDOWN state.	Testable
C2	Locked-out/Not monitored until C2 Timer (0-999 seconds) starts in the LOADED STATE and C2 timer expires. Will then be monitored when condition has been in normal condition for 2 consecutive seconds. If condition never meets normal condition, it will not be monitored and will not shutdown.	Testable
P	Timer starts at LOADED STATE and monitored when lockout delay timer P expires (0-999 seconds).	Testable
NF	Monitored after individual pulse timer expires (specific to digital inputs) and after Global NF delay common to all pulse inputs expire (this function is globally locked out by the B1 lockout).	Testable

C4 Controller - Fault Classes

Class	Description of Action	Test
ESD	Monitored at all times.	Non-testable
A	Monitored at all times.	Testable
B1	Monitored when run lockout delay timer B1 expires (0-999 seconds).	Testable
B2	Monitored when run lockout delay timer B2 expires (0-999 seconds).	Testable
S1 thru 4	Monitored when run lockout delay timer S expires (0-999 seconds).	Testable
C1	Monitored when condition has been in normal condition (for 2 consecutive seconds) and state PANEL READY thru COOLDOWN state.	Testable
C2	Locked-out/Not monitored until C2 Timer (0-999 seconds) starts in the LOADED STATE and C2 timer expires. Will then be monitored when condition has been in normal condition for 2 consecutive seconds. If condition never meets normal condition, it will not be monitored and will not shutdown.	Testable
NF	Monitored after individual pulse timer expires (specific to digital inputs) and after Global NF delay common to all pulse input expire (this function is globally locked out by the B1 lockout).	Testable

TTD Annunciator - Fault Classes

Class	Description of Action	Test
ESD	Monitored at all times.	Non-testable
A	Monitored at all times.	Testable
B1	Monitored when run lockout delay timer B1 expires (0-300 seconds).	Testable
B2	Monitored when run lockout delay timer B2 expires (0-600 seconds).	Testable
C	Monitored when condition has been in normal condition for 2 consecutive seconds. If condition never meets normal condition, it will not be monitored and will not shutdown.	Testable
NF	-L models only: Monitored after individual channel pulse timer expires and delay before No-Flow timer Start-Run Lockout timer has expired. Applies to channels 41-44 models only. See Timer 7 setting and Setup 4 for individual no-flow proximity switch time settings. If needed, refer to the TTD Installation and Operation Manual.	Testable