record-USA
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Series 6100 / 8000 Status Monitor

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The Series 8000 control includes a set of dry contacts at terminals 16 (NO), 17 (COM), and 18 (NC), rated 1A @ 24vdc, to support remote monitoring of the operator status. In normal operating mode, with no errors, terminals 17 and 18 are connected. When specific abnormal conditions occur, the contacts change state, connecting 16 and 17.

The following is a list of conditions which would cause the state change

1. Actuating device (pushplate, sensor, etc.) remaining actuated for more than 60 seconds. When the device clears, the contacts will return to normal mode (17 and 18 connected).
2. Safety device (mat, sensor, etc.) remaining actuated for more than 60 seconds. When the device clears, the contacts will return to normal mode.
3. Opening of the Fire Alarm circuit (terminals 14 and 15). Restoration of the circuit will return the monitor contacts to normal mode.
4. Failure of an electric lock status switch (terminal 23) to change state when requested. This will clear upon the next successful unlocking and opening of the door.
5. Excessive current load on the +24vdc auxiliary power. This will clear when the excessive load is removed. Note: If a dead short is present, the control power supply will shut down to prevent damage, and in this case, the monitor contacts 16, 17, and 18 will not change state.
6. If the operator cannot complete an opening cycle in 3 sequential attempts, or cannot close the door within 60 seconds of first attempting to close. This will clear when the cycle is completed.
7. A loss of communication between the controls on a simultaneous pair will cause an alarm. It will clear when the communication is restored.
8. Loss of encoder pulses will change the alarm monitor status. Note the operator will shut down when this occurs as door position cannot be reliably identified. To clear both conditions, either the operator will have to be reset at the rocker switch control panel, remove power from the control for 15 seconds.
9. Initiating an operator calibration run will momentarily change the monitor state, and the contacts will return to normal state upon completion of the calibration cycle.
10. A complete reset of the operator, using either the FPC 902 Programmer or holding the control's blue pushbutton down for 8 flashes of the red LED will change the monitor contacts state.
11. Excessive motor current will initiate a monitor state change. It will also cause the operator to shut down, requiring a reset to restore operation.
12. A simultaneous pair of operators with different software versions will initiate a state change. Note, the units will not operate in synchronous mode with differing software. The units can be operated independently, and actuated with common sensors to provide similiar functionality.
13. Certain component failures within the control will cause a state change. These include the EEPROM, watchdog circuit, and motor control relay.

A simultaneous pair of operators, using the CANbus communication for synchronous operation, has a set of contacts on each control, and only monitor the operator it is connected to. A door-mounted sensor connected to the slave operator control that remains actuated for more than 60 seconds will cause the slave monitor contacts to change state, but not the master controls contacts.

The monitor status contacts provide a method to monitor the operator and determine when an abnormal condition exists. For additional detail on the abnormal condition, the Display Control Panel provides specific error messages, as well as provides operator mode control. Consult the technical data sheet on the Display Control Panel for more information.